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WORK STRESS
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Work Stress and Organisational Justice

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Ph.D. dissertation

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1. Introduction: societal context, inspiration and goals of the research

*“They talk as if ten miners had run a race,
and one of them became the Duke of Northumberland
They talk as if the first Rothschild was a peasant
who patiently planted better cabbages than the other peasants.”*

Gilbert Keith Chesterton

Outline of Sanity

In the introductory chapter of my doctoral dissertation I present to my readers the social and scientific context of my research, describing in detail my arguments for the relevance and importance of this work. Following this, I outline to my readers the new methodological approaches and results that can be expected from my inquiry into Hungarian stress discourse. Finally, I give a brief description of my personal life-experiences that inspired me to do this research and formed my personal biases. I close this chapter with an introduction to the structure of the thesis.

1.1. Social and scientific context of the research

In order to substantiate my arguments for the social necessity of this research, I start out by introducing my interpretation of the most relevant societal tendencies of the two decades following the 1989-1990 political-economic transition in Hungary. This includes a description of the main problem areas of working life and the currently established stress discourse in Hungary.

1.1.1. Relevant societal tendencies - Hungary

Hungary, similarly to the rest of the central and eastern European countries, has gone through dramatic and radical changes over the last twenty years. Due to the collapse of the soviet bloc, Hungary has regained its independence and a major transition towards market-economy and multi-party democracy has taken place.

As the dictatorial one-party system was axed, the Hungarian population had good reason to believe that this marked the beginning of a brighter future. Most people hoped that the formation of a democratic constitutional state and the introduction of a market-economy would result in prosperity and a higher level of societal well-being. However in the first years of transition these expected outcomes failed to realize and deep disappointment shook the country. It became clear that independence from the Soviet Union did not mean leaving behind all the structures of dependence. There were many Hungarians who were surprised that the newly evolving forms of capitalism did not result in a higher standard of living and did not guarantee a happier living for all.

This disappointment has increased greatly the uncertainty and division about how to rebuild our country. The difficulties faced during the transition revealed the true scale of societal, political, economic and moral destruction which took place during the forty years of soviet influence. Social tension, already present during the end of the so called “socialist era”, dramatically changed over the following few years. The transition to a market-economy caused unemployment to rocket, a massive increase in living costs which proved unbearable for less well off families and the beginning of the degradation of the social welfare system. As a consequence of all these changes, the gap between those who could benefit from the new opportunities and those who were merely struggling for survival grew enormously.¹

The idea of the “unfettered free-market” was utilised by the remnants of the previous political circles of power and their successors but resulted in a spiritually and mentally traumatised and broken society. The enthusiasm and hopefulness for an age of positive change met with the reality of human selfishness and greed and created the new social-economic system of Hungary; the most poignant feature being the accumulation of wealth by some. While a significant part of society has enjoyed rapid development, prosperity and an increase in wealth, this tendency took place in parallel with the impoverishment, growing defencelessness and hopelessness of many Hungarian citizens, a phenomenon that has resulted in an overwhelming disillusionment with the social justice of the “new system”.

The rather difficult historical situation described briefly above transformed itself into a chronic crisis in Hungary that can be characterized by significant tensions between social groups and a feeling of decreased solidarity for others. The opposing power-circles capable of influencing societal, political and economic development in Hungary failed to implement lasting changes that could have served the common good of the country and the interests of future generations. The newly-established democratic order was not successful in providing truly responsible and lasting state leadership. Due to scandals concerning large scale corruption and dubious privatization and public procurement procedures the level of trust in the state and politicians became difficult to underestimate, and even the remnants of any credibility were lost. Consequently, Hungary had to face the financial crisis which escalated in 2008² not just with a crumbling economy, but also with a country where a state of

¹ This tendency can be considered to be a global trend, but it is noteworthy that, according to data from the Hungarian Central Statistical Office (KSH), by 1995 the difference between the living conditions of the richest and the poorest in Hungary was larger than that in Western Europe - 3,5 million people out of 10 million were living below subsistence level.

² The apparent financial crisis which is influencing both the developed and developing of the world reached Europe in 2008 and has lead to an overall state of recession in the economies of the continent. A lack of transparency in financial transactions and the misconduct of government and corporate leaders has inspired many citizens, politicians and social scientists to harshly criticize the current economic order. However, the interpretations, evaluations and proposed solutions which have emerged are very diverse in nature. Some analysts emphasize the role of natural economic cycles, some suggest further liberalization of the markets (Acton Institute), others call for more control and regulation by state and international organizations (Zamagni, 2009). A significant number of scholars highlight the fundamentally moral roots of the crisis (Zamagni, 2009) and economic thinkers who warn about the deep and structural problems of the European economy have their findings confirmed by the ongoing Euro-crisis. This topic, being constantly on the agen-

seriously weakened social cohesion and compromised morality characterized the second decade of the 21st century.

At the time of finishing my thesis the financial crisis and its treatment are still an ongoing reality, and the route and timing out of it cannot yet be clearly seen. It would therefore be too early to measure or predict its consequences.³ The reliable data that we have available only reflects the state of the Hungarian society before the emerging crisis and these burning issues that are not expected to ease due to recent events. Among these issues we can include widespread corruption⁴, rejection and instability of the “political class”, glaring social inequalities, an increase in permanent unemployment, massive poverty, weakening social networks, a deterioration in Hungarian educational and health services, a decaying state of citizens’ health, a short life expectancy and decreasing birth rates and a decreasing population (KSH, 2008; Kopp, 2008; Lukács, 2006). We may consider the (stereotypically labelled ‘pessimistic’) “state of mind” of Hungarian people to be a root cause, a consequence or a main component in the construction of social reality; however, it is beyond doubt that it is inseparable from these negative tendencies.

A great overview of the startling state of Hungarian minds is provided in a book edited by Mária Kopp (Kopp, 2008) from Semmelweis University. Based on a longitudinal and large sample size representative study by Mária Kopp and her colleagues⁵ we know that 71% of Hungarians can be characterized as being in a state of **anomie**.⁶ The tragically **low level of social capital**⁷ is indicated by 70% of Hungarians claiming that it is better not to **trust** anyone. Knowing this, it may not be surprising that 17,3 % of our countrymen suffer from serious or close to serious **depression**. The concerning spiritual and psychological state of Hungarian citizens is most

da of EU meetings, appears primarily in the enormous budget deficits and national debts of periphery European Union member states. The series of inefficient measures taken by the European Union have increased tensions between EU member states and fundamentally questioned the structure of economic cooperation. Tackling the “trust” aspect of the crisis proves to be particularly difficult living in a postmodern age of moral pluralism (MacIntyre, 1985).

³ The economic crisis has resulted in a close-to-7% decrease in the GDP of Hungary, and thus has pushed the already struggling Hungarian economy into a deep recession. The Hungarian state could only escape full bankruptcy and defend its currency with a credit package from international financial institutions (IMF, World Bank). As a condition for receiving these loans, the IMF and World Bank have imposed strict budgetary restriction conditions that have primarily affected the Hungarian social welfare system. The Hungarian government also had to resign as a consequence of this in April 2009 and a new transitory government was formed to handle the crisis until the next parliamentary elections that were held in 2010 April. In the 2010 elections the former opposition party celebrated a sweeping win, gaining an unprecedented 2/3 majority in the Hungarian Parliament for one single party-alliance. The new government introduced radical changes to economic policy, which targeted primarily increasing the number of taxpayers in Hungary, increasing the burden on large multinational corporations and on earners with a small income. At the same time, taxes for citizens with high incomes and those who are raising three or more children have decreased sharply. These often referred to as “unorthodox” economic measures have significantly decreased the budget deficit but have raised concerns about social justice and the overall trustworthiness of the Hungarian state.

⁴ Based on the Corruption Perception Index 2009 of Transparency International Hungary

⁵ Hungarian Health Panel (Hunگارostudy 2006)

⁶ The term **anomie**, primarily attributed to Émile Durkheim, can be defined as a personal condition in which one either has a lack of norms or of norms that are too rigid.

⁷ The term **social capital** has various definitions, one of them describes it as being the network of relationships of trust, dependability, and respect for rules.

likely one of the reasons why male life expectancy in Hungary has decreased to the levels of the 1930's (Kopp, 2008).

In their search for explanations to the above-described burdens of the Hungarian society, professional researchers (Stauder, 2009; Kopp, 2008), similarly to the media and public discourse, put the topic of **stress** and in particular **work stress** high on the agenda. Another concept appearing often directly or indirectly in the context of discussing these societal problems is **injustice**, with its far-reaching consequences and various possible manifestations. A large number of Hungarians perceive themselves as being “losers” of the socio-economic transition. At the same time, “winners” of the new system (those who gained power and wealth) are often seen as being able to make their advances due to their good connections with circles of power and through their unscrupulous characters, instead of their talent, diligence and hard work. This overwhelming feeling of social and organizational injustice and the perceived separation of merits and rewards goes hand in hand with an immense amount of experienced stress. Over the last twenty years Hungarians have taken another strong hit to their already tenuous belief in a “just world”. I consider the dominance of a “sense of injustice” in Hungarian social discourse to be a monumental problem. A strong belief in a “just world” is an invaluable resource for coping with demands and challenges which emerge from different spheres of life⁸; however, the absence of these convictions strengthens particularly disruptive and counterproductive patterns of coping in stressful situations.

1.1.2. The current discourse on stress

In connection with various social, organizational, family and personal problems it has become natural to employ the word **‘stress’**. The term stress itself has been overused in Hungary (and also elsewhere in the world) to such an extent that one may ask whether it has already become too vague to be used in formal discussion at all. It is an abstract concept that crops up continuously in magazine articles, newspaper headlines and TV-shows. Nonetheless, there is major concern and frustration about the ambiguity of the term “stress” itself (Harkness et al., 2005). It is due to the abstract nature of the term that the social discourse on stress is unable to give a detailed and precise explanation of the contexts that result in physiological, psychological or spiritual consequences. People who try to cope with problems associated with ‘stress’ do not receive adequate answers to or guidance in their struggles (Harkness et al., 2005; Kinman and Jones, 2005). Seeing these seemingly hopeless efforts, it is fully legitimate to ask if it is meaningful at all to add another doctoral thesis to the endless list of often fuzzy and idle publications on the theme of workplace problems and the construct of ‘workplace stress’.

⁸ A “sense of injustice” has remained a key theme in Hungarian public life into the year 2011. The new tax system introduced by the newly-elected government has induced strong feelings of injustice among the Hungarian population. The reason for this is that the new flat rate income system has significantly improved the situations of people with high incomes; however, those with the lowest incomes have seen their burden increased in the middle of an economic crisis. At the same time, the often unfounded and non-factual criticism of the Hungarian government from abroad, especially arising from some non-defendable dictates of the European Union, have induced further general feelings of injustice in the Hungarian population and have resulted in revulsion and protests against Brussels as well.

In spite of all these concerns about the ambiguity of the term stress, I firmly hold to my belief that the current **workplace discourses on stress** is highly momentous from a research perspective. It is exactly through the investigation of the often vague stress discourse that one can get closer to understanding workplace problems and exposing the overwhelming feelings of social and organizational injustice and the related social power structures in Hungary. Thus the mental framework the stress discourse provides us with has grown in importance beyond the soundness and clarity of the original abstract concept of **stress and the theoretical constructs build out upon it**. During my research I investigate workplace stress and organizational justice through reports about workplace problems shared by members of a particular organization. This approach unfolds the stress discourse through exploring worker's interpretations of "*environmental events that induce personal consequences*" (Kahn and Byorsiere, 1992).

1.2. Arguments for the significance of the research

In the forthcoming few pages four main arguments will be presented that explain to the reader the significance of this thesis work.

1. The academic and public interest directed at the phenomenon of workplace stress has reached an overwhelming magnitude.

Firstly, academic research (Cooper et al, 2009; Kopp, 2008; Barling et al, 2005), self-help literature and popular media coverage on the topic of workplace stress is flourishing keeping it continuously on the agenda and inspiring ongoing research into the topic of stress. The roots of this great interest most probably lie in the growing concerns of people about their own and their loved ones' health. Another important influence are the UN⁹ and EU¹⁰ organizations' increasing awareness and interest in stress-related problems and the ever growing striving of business enterprises for competitiveness, productivity and commitment.¹¹ Hungarian legislation, in accordance with international guidelines, now includes new laws and regulation that obligate employers to regularly measure and decrease the physical and psycho-social stressors of the workplace.¹² The topic of stress has been a permanent part of academic discourse for more than fifty years now, which makes it impossible to simply demean it as a passing science or management fad (Jackson, 2001). The persistence and prevalence of interest in the topic of stress is the source of my hope and conviction that my work will be comprehensible and appealing to read not just to a relatively small community of researchers, but a larger group of thoughtful thinkers who

⁹ ILO / WHO Committee on Occupational Health

¹⁰ EU Advisory Committee for Safety, Hygiene, and Health Protection

¹¹ These interests of business enterprises are often seriously damaged by the negative consequences of work stress. As an argument for the importance of battling workplace stress many scholars refer to the negative consequences of decreases in worker performance, increasing sick leave and worker fluctuation rates.

¹² XXX Law of Hungary, 2008 – see Makó (2009). In spite of the new law and regulations coming into effect in 2008, there is still a significant uncertainty associated with the required application of these regulations and the rights of authorities to monitor their implementation.

represent the best chance for the thesis to receive extensive reflection and constructive critique from multiple perspectives in order to further develop its thinking and conclusions.

2. The constructs and discourse on stress have become a general label and framework with which to express concerns, anxieties and suffering related to work and workplace problems.

It is not merely the sensible and immense interest in stress that indicates the need for further research in this field. Stress construct and discourse has become a legitimate (and one of the culturally dominant) ways of understanding and explaining the problems in the world around us and particularly significant for dealing with the different sources of strain experienced at the workplace (Harkness et al., 2005; Kinman and Jones, 2005; Newton, 1995). The discourse around work stress has built up a historically, socially and institutionally specific structure of statements, terms, categories and beliefs (Scott, 1990) that is widely accepted and cultivated across society. Although there is significant ambiguity associated with the term stress, it can be used for tracing the discourse and using it as a framework of investigation, according which environmental events (“stressors”) through certain mediators (e.g. cognitive interpretations and coping strategies) induce consequences (“strain”) on individuals (Kahn and Byosiere, 1992).

Applying the framework provided by the stress discourse allows for the inclusion of various dimensions of the perception of organizational justice in my exploration of reports on workplace problems. This way I can unfold the characteristics of the stress-inducing organizational processes and reach to the heart of some major and often hidden social structures (Cropanzano et al, 2005). The multiparadigm methodological approach used in my research makes it possible to expose some of the deeply-suppressed miseries of working life in Hungary. It becomes possible to delve into the heart and development of unnecessary suffering that agonizes our societies, communities, personal character and integrity (Harkness et al., 2005; Kinman and Jones, 2005; Newton, 1995). I am convinced that this research into reports on workplace problems using the framework of the stress discourse can be used to explore significant issues in organizational and societal change and development and can identify potential alternative discourses that are worthy of being strengthened in order to improve organizational and societal well-being.

3. There is a strong need for multidisciplinary approaches in Hungarian stress research.

As could be seen in the previous statements, I do not consider the construct and discourse of workplace stress to be a well-defined phenomenon but much rather a frequently applied way of interpreting and giving meaning to a series of complex and diverse societal problems and personal suffering. As a consequence of this, it is highly important to apply a multidisciplinary perspective when researching the stress discourse. The relevant and often separated scientific disciplines need to be connected, as has been done in the leading stress research work in Hungary by employees of the Institute of Behavioural Sciences of Semmelweis University (Kopp, 2008;

Fujishiro and Heaney, 2007). In researching the workplace stress discourse the scientific disciplines of medicine, occupational psychology, management, ethics, communication science, sociology and political science can all play a significant role.¹³ It is desirable that workplace stress research is carried out by research teams that are able to create a synthesis of these specific perspectives. For individual researchers¹⁴ this goal can be reached through a conscious effort to engage in an active dialogue with the representators of specific disciplines and by creating a framework of investigation that is able to integrate the unique perspectives and way of thinking of these disciplines. In order to meet these requirements, I have supplemented my first university degrees in economics and management with a degree in mental health from Semmelweis University and have chosen a research methodology and analytical repertoire which originates from the discipline of communication theory.¹⁵ Due to the fundamental significance of ethical considerations, I chose organizational justice as one of the main foci of my research on the workplace stress discourse. Consequently, I will strongly rely and build on the work of scholars who have emphasized the organizational justice perspective of work stress research (Cropanzano és Goldman, 2005; Greenberg, 2004; De Boer at al, 2002; Elovainio at al, 2002; Kivimäki at al, 2002; VanYperen, 1998; Van Dierendonck, Schaufeli és Buunk, 1996; Zohar, 1995).

4. There is a strong need for multiparadigm and qualitative approaches in Hungarian stress research.

Leading stress researchers of the last decades have attempted to develop new research frameworks and methodologies that can supplement traditional quantitative methods with in-depth, longitudinal, contextual and qualitative approaches (Makó, 2010; Ádám, Payne and Cooper, 2001; Sommerfield and McCrae, 2000; Dick, 2000; Perrewé and Zellars, 1999; Newton, 1995). These have tried to overcome earlier approaches that had a tendency to represent a highly individualized perspective, emphasizing the employee's personal responsibility in coping with stress (Wainwright and Calnan, 2002; Parker, 1999). It is important that workplace stress research explores and unveils the suppressing social structures which contribute to its development and expose the dominant constructions of reality and structures of power (Newton, 1995). When researching the workplace stress discourse we have to pay special attention to those "medicalizing" tendencies (Kovács, 2007) that declare consequences induced by common, everyday problems to be precipitately abnormal or morbid. The person affected by medicalization is forced into the role of a diseased person.¹⁶ This approach considers the very person and his/her lack of coping skills to be the root of the problem and omits consideration of the societal, political or workplace conditions which contribute to these problems (Kovács, 2007).

I see an opportunity in multiparadigm workplace stress research to expose the responsibility of all stakeholders, to unveil the dominant Hungarian stress discourse and to lay the ground for ideas for interventions that

¹³ This listing of relevant scientific disciplines does not claim to be complete.

¹⁴ As it is usually expected of a doctoral dissertation.

¹⁵ This is the CMM (Coordinated Management of Meaning) methodology developed by Barnett W. Pearce.

¹⁶ Correspondingly, the most common treatment for sick people is then the prescription of drugs.

can lastingly contribute to the well-being of employees (Coope, Dewe and O'Driscoll, 2000). There is a strong need for research in Hungary that includes in its analysis the influences of societal level structures and an understanding of local processes that create the social world. Applying the multiparadigm research methodology that will be introduced in detail in the Chapter 5, I use qualitative research tools to create a critical reading and a post-modern reading of a case. With this approach I aim to fulfil seemingly contradictory research requirements in one single piece of doctoral research.

The arguments above substantiate the fact that my research, focusing on the stress discourse on workplace problems and organizational justice, can significantly contribute to the academic work related to this phenomenon and to practical interventions from multiple perspectives.

I am convinced that the significant academic and public interest directed at workplace stress will be helpful in understanding the stress discourse on workplace problems, and thus will be useful in exploring and unveiling those deep societal structures and organizational processes that play an important role in the development of non-desired consequences. By focusing on the organizational justice aspects of workplace stress I can also bring to the surface those “suppressed miseries” and the unnecessary suffering in Hungarian work life that are the results of personal choices and actions and thus can be changed through the more responsible attitudes of stakeholders.

With the help of the multidisciplinary methodology used in my research I seek to address the requirements for solving problems that emerge out of the complex and diverse field of workplace stress and organizational justice. I believe that the qualitative and multiparadigm research methodology I employ can contribute greatly to the existent Hungarian stress research and can provide a novel way to present at the same time the influences of suppressing social structures and the local creation of social reality through the workplace stress processes and discourse. The application of the Coordinated Management of Meaning (CMM) methodology developed by Pearce (2004) for the investigation of the workplace stress discourse is a new approach that has high potential for identifying alternative discourses that may lead towards more humane conditions at the workplace.

1.3. *My inspiration and personal ambitions for this research*

*“The poet only asks to get his head into the heavens.
It is the logician who seeks to get the heavens into his head.*

And it is his head that splits.”

Gilbert Keith Chesterton

Orthodoxy

In order to improve the credibility of my thesis work, in this chapter I introduce those personal experiences that had major influence on the starting point and goals of my research in brief and I also reflect on how these could contribute to any bias in my work.

1.3.1. Personal experiences, and the researcher’s goals

Before my doctoral studies I worked for four years in the HR department of a large multinational corporation where I gained plenty of first-hand experience of workplace stress and organizational justice.¹⁷ It has taken years to comprehend and digest all these experiences and my thesis work partly serves this purpose as well.

As a new entrant to working life I experienced how the corporation attempted to direct discourses around the most important organizational events and I suffered the personal consequences of initially identifying with my managers’ interpretation without criticism. However, this was only a transitory period for me, as great differences in interpretations of corporate events which later arose induced in me strong feelings of injustice and stress. As the most severe consequence of this, I experienced alienation from my work and a state close to serious burn out. The situation threatened me with a massive corrosion of my character and work morale. I can only thank my family and friends for their continuous support in helping remove me from this vicious cycle.

It is these strong personal experiences that have formed my strong emancipatory drive (Habermas, 1972) in research, a cognitive interest that has ”quasi-transcendent” roots and which is socially and historically embedded (Willmott in Tsoukas and Knoulsen, 2005). Through the investigation of workplace stress discourse and organizational justice perceptions my intention is to contribute to a radical change in the relationships between Hungarian employers and employees and to help eliminate those structures that are causing unnecessary suffering to people and do not serve to further human development.

I am sceptical as a researcher about the possibility of carrying out “value-neutral” research. Therefore at the centre of my investigation is my belief in the desirability of human physiological, mental and spiritual health, a value that I consider to be generally acceptable and guiding for human intentions and actions and which does not

¹⁷ In the final version of my thesis work I have limited personal references to the necessary minimum.

require any justification due to its generality (Tomcsányi, 2002). The general acceptance of the value of “health” is also manifested in the fact that the great attention directed to workplace stress is primarily concerned with damages to health and a lot less with the moral dilemmas associated with it (Kopp, 2008).

Investigating the stress discourse about workplace problems and perceptions of organizational justice from the perspective of the universal value of health gives me the opportunity to partly avoid the paralysis observable in several fields of social science (MacIntyre, 1985). I will primarily build my research on the personal and collective perception and meaning given to the organization being researched and the consequences of these. At the same time, my conclusions certainly do not omit judgments based on philosophical and ethical standpoints (Cropanzano et al., 2005). It is the critical reading of the dissertation that builds the most significantly on personal judgments in connection with social structures and leadership responsibility (Vermunt and Steensma, 2005); however, this perspective will be enriched with another, postmodern reading of the case. This will give me the opportunity to also apply a less normative, descriptive research attitude that also fits the ethical pluralism which dominates the discourse of the 21st century. In this postmodern reading I concentrate on the creation of a local reality and my observations and recommendations have an imminent critical nature, always relating to the professed goals and intentions of the stakeholders.

In connection to the ultimate goal of my research I find it important to note that I do not believe that scientific ambitions should ever have as their target the goal of attaining full knowledge about a subject. The very moment we believe our knowledge is full and complete, or that it will ever be in our earthly life, can be considered a sign (hopefully only one!) of madness. It is important to remember this in order to practice the virtue of humility, without which no research can be carried out. One has to be ready to stop at the point which is already “incomprehensible to us” and one needs to be able to accept this state. Our desire to know more of the world and ourselves than we knew yesterday is only a means to an end; namely the becoming of a more “whole” person, by finding the meaning in our lives and ultimately serving others through this. Research for the sake of research is then worthless, unless we are also open to let it change our character for the better, or unless we desperately seek to understand how it can contribute to the common good. After testing whether our research has brought any new understanding into the world of science and arts, another test of time will be when we find out what person we as researchers have become and whom, if anyone, our research has served.

1.3.2. Possible bias in my research

Based on my experiences of suffering at the workplace and my personal beliefs and preconceptions about the ultimate goals of research, there are a number of potential biases that might influence my attitudes as a researcher, the research questions asked, methodologies chosen and interpretations and conclusions made in the thesis. I find it particularly important to be aware of these possible distortions and take them into consideration already ahead of carrying out my research work.

Without claiming the completeness of the identified potential biases below, I consider at the moment the following elements to have had the most significant influence:

- my general disillusionment with the corporate practices of multinational companies and in particular, with their rhetoric and communication of their integrity, ethical and responsible operation;
- my increased sensibility to unbalanced power-relations in employer-employee relationships, and a strong bias in favour of organizational members in dependent positions;
- my strong distaste for managerial attitudes of shareholder mentality and using employees as mere means to business driven ends;
- a tendency to put the blame primarily on management and not employees for workplace stress; and
- my presumption that enduring distress at work is likely to be associated with some form of organizational injustice.

I consider these potential biases to be very important and I prepared for their potential influence before launching my research and reduced their impact with the help of regular self-reflection, since the fundamentally qualitative and subjective nature of my chosen research methodology requires this¹⁸ (Miles and Huberman, 1994). I needed to be particularly careful to design my research plan in a way that was truly open to exposing the development of the discourse on workplace problems and avoided the desire to find work stress discourse and organizational injustice perceptions in all of the communications and actions of organizational members. I had to keep remember that due to my personal experiences I have a tendency to be sensitive to this matter and to the noticing of forms of injustice and the exploitation of employees. Therefore special emphasis was laid in my research towards being open towards the perspectives of management and their versions of interpreting workplace problems. During the analysis and interpretation phase of the research work I continuously needed to remind myself that this case and organization was potentially different from the multinational corporation I used to work for. I needed to stay clear of any prejudgment of corporate communications and supervisor interpretations and avoid an instinctive disillusionment with organizational rhetoric.

1.4. The structure of the thesis

In this introductory chapter so far I have described the main motivations and goals behind my research. This included a short description and interpretation of the social and economic context in Hungary and the current workplace discourse on stress. I highlighted the tendencies and directions of work stress research that indicate a strong need for and significance to my research approach. I have also outlined how a multidisciplinary,

¹⁸ A detailed description of the research methodology can be found in Chapter 5.

multiparadigm perspective, qualitative piece of research can contribute to knowledge about the workplace stress discourse and organizational justice.

Following this, I share briefly my personal workplace experiences that inspired my research and I describe the main goals of the thesis work. Finally, an overview of my potential biases that might have affected my research approach, interpretations and conclusions was presented. I close the first chapter by introducing the main structure of the thesis and the aim of each chapter.

The aim of Chapter 2 is to provide a consistent grounding for my research work based on scientific theory, organization science and methodological considerations. I start off from the seminal work of Burrell and Morgan (1979) and emphasize my research interests as being primarily emancipatory (Habermas, 1972). After this, I introduce general assumptions about the nature of social science and make a distinction between subjectivist and objectivist approaches to work stress research. Finally, my personal position in this debate is demonstrated and explained in detail, which includes my arguments for the possibility of a parallel form of multiparadigm research (Hassard, 1991).

Chapter 3 presents the reader with a general introduction to the topic of work stress, without aiming to provide a classic review of the enormous and multi-faceted field of work stress research. My aim is to clearly define the most important terms and concepts used in the field and briefly introduce those significant workplace stressors, personal qualities and momentous work stress models that I considered as starting points of my research work and which had a major influence on my thinking. At the end of the chapter some exemplary qualitative studies of subjectivist work stress research will be presented (Harkness et al., 2005; Kinman and Jones, 2005).

Following this, Chapter 4 is designed to give an introduction to the development of the organizational justice research field. Starting with the equity theory of Adams (1963), I shed light on the various distinctions that have been made between different forms of organizational justice, such as distributive justice, procedural justice and interactional justice (and within this, interpersonal and informational justice). In the second part of this chapter I review those recent research approaches that have made an attempt to connect the fields of work stress with organizational justice.

Chapter 5 of my thesis contains the methodological framework of my research. I introduce my readers in detail to my research goals, questions and chosen methodology. In doing so I discuss my role as a researcher, the questions of sampling, making contact with the research field, collecting and analysing data. I also outline the concrete steps used in executing the empirical research. Since I have chosen a multiparadigm research methodology, in this chapter I describe the methodology used for the critical reading and the postmodern reading as well.

The actual analysis of research data and presentation of research results takes place in Chapter 6. Firstly, I present the critical reading of the case of Factory X through the surface and deep structures explored by the

reports on workplace problems. Following that, in the postmodern reading of the thesis I use the methodological repertoire of CMM to analyse some critical organizational processes based on the same reports.

In the closing Chapter 7 of the thesis I summarize my findings and conclusions and further develop them. According to the principles of parallel multiparadigm research, I present my recommendations which emerge from the critical and postmodern perspectives alongside each other and do not attempt to integrate them. Finally, I outline to my readers the potential development opportunities for my research.

2. The scientific foundation of the research

“What is in a name? That which we call a rose by any other name would smell as sweet.”

William Shakespeare
Romeo and Juliet

2.1. Preface: A classic analogy to the methodological choice

János Selye’s initial choice of analogy and wording of the phenomenon he had discovered (Cooper, 2000), has led to decades-long confusion around the precise meaning of the term stress. The Hungarian Selye was not a native English speaker, which is the most likely explanation of his unfortunate selection of words. When Selye was looking for a suitable term for the phenomenon, he intended to choose an analogy from engineering; namely the tension in the girders of a bridge when trains (or lorries, cars) cross the bridge. This tension is called *strain* in English, but Selye believed the phenomenon was called *stress* and therefore gave the somewhat misleading name *stress* to the phenomenon he had discovered. In this way understanding of the initial definition became cloudy (Cooper, 2000)

In spite of this confusion, Selye’s abstract and difficult-to-define term has resisted all scientific attempts to abandon it (Briner, Harris and Daniels, 2004). At the same time, reviews of the relevant literature consistently indicate that scholars utilize distinct and different definitions of stress in their publications. Furthermore, a significant number of articles do not contain an explicit definition of stress, or their usage of the term cannot be fitted into any recognizable theoretical framework (Jex, Beehr and Roberts, 1992)

I see Selye’s controversial decision to choose “stress” as the suitable term for the phenomenon not just as being the origin of the confusion which has resulted, but also as a key event in the establishment of the ongoing flourishing discourse around it. The hypothesis that it may be exactly the non-specificity of the term “stress” and its resulting broad-based explanatory value that attributes to its popularity in the general public and in distinct fields of science has considerable empirical support. The flexible framework of the work stress construct has proved to be convenient for a wide range of researchers for fitting with their interests and conceptions about social relations (Barley and Knight, 1992).

This argument is further supported by research by Kinman and Jones (2005), whose results suggest that the stress concept may be widely utilized to “*express dissent or distress whilst avoiding the overt expression of more complex emotions and feeling states that may be perceived as pathological*” (Kinman and Jones, 2005 p.117.). In another study, Harkness et al. (2005) found that being stressed was considered to be the normal state at work. On the other hand, they found that showing the emotional struggles associated with stress was perceived to be unacceptable, since appearing to be vulnerable, weak or incompetent had to be

avoided at the workplace. Thus stress can be considered to be an openly discussable metaphor for suffering, misfortune and dissatisfaction, while the mentioning of other themes and usage of other terms is frequently silenced (Helman, 1997 and Mulhall, 1996 in Kinman and Jones, 2005).

Given the extensive after-life and controversial consequences of Selye's naming of the term, this event can be considered as a metaphor for all research attempts planned in the field of stress. A warning sign, that is definitely worth contemplating before deciding on any concrete research question, research plan or methodological approach. Concerning the analogy of Selye's choice of names, which has resulted in confusion between stimulus (stressor) and personal response (stress), my own main research dilemma has also emerged out of the contradictions between an objectivist approach to investigating cause-effect relationships associated with work stress and a subjectivist approach to exploring the social construction of the stress discourse (Harkness et al, 2005; Kinman and Jones, 2005; Mumby, 2004).

2.2. Social theory and organizational theory foundations

In the following chapter - continuing by using the steps of our classic analogy - I provide a taste of the distinct streams of research which currently dominate the work stress field. I argue that the methodological choices and preferences made by scholars are deeply rooted in some basic assumptions related to social science and organizations. A massively influential meta-model of social theory paradigms from Burrell and Morgan (1979) will be applied to illustrate and explain these differences, and is used as a starting point to demonstrate my own research position, which in turn leads us to the possibility of utilising a multiparadigm approach to work stress.

Beyond doubt, there exists a clear dominance of functionalist, quantitative and causal process oriented research in the field of work stress. This is represented by the numberless publications that focus on the relationships between work stressors, individual coping and their personal and organizational consequences (Barling et al, 2005). This is not surprising when one is aware of the origins and close connection of work stress research to medical sciences. However, the last decade has brought to life a new wave of scientific urge, as influential scholars have encouraged the application of new contextual, in-depth qualitative methods, which are also capable of exploring the diverse meanings associated with the stress process (Payne and Cooper, 2001; Dick, 2000; Folkman and Moskowitz, 2000; Perrewé and Zellars, 1999; Newton, 1995; Meyerson, 1994).

The different nature of research carried out currently in the work stress field and the conclusions formulated from these distinct approaches have high relevance and impact in both the understanding of the phenomenon of work stress and the informing of interventions aimed at improving working conditions for individuals and/or organizations. In spite of the growing amount of stress research which is designed and carried out qualitatively (Harkness et al, 2005; Kinman and Jones, 2005), there is still significant academic and practical work

needed to achieve critical advancement in the design of more effective interventions targeting stress at the workplace (Randall, Cox and Griffiths, 2007; Cooper, Dewe and O'Driscoll, 2000).

An influential meta-model of occupational stress from Beehr (2000) nicely indicates how scholars who belong to one paradigm only consider those existing research approaches of the phenomenon that are forming their conclusions based on the same set of assumptions on researching organizations and work stress. At the same time, multidisciplinary approaches to work stress research are well established and encouraged (Fujishiro and Heaney, 2007; Cropanzano et al, 2005). However the sharp distinction and lack of communication between different research paradigms remains an unsolved and acute reality. In order to better understand the grounds of these distinctions and the missing cooperation between various streams of work stress research, I will introduce and apply Burrell and Morgan's (1979) four paradigm model developed for the analysis of social theory.

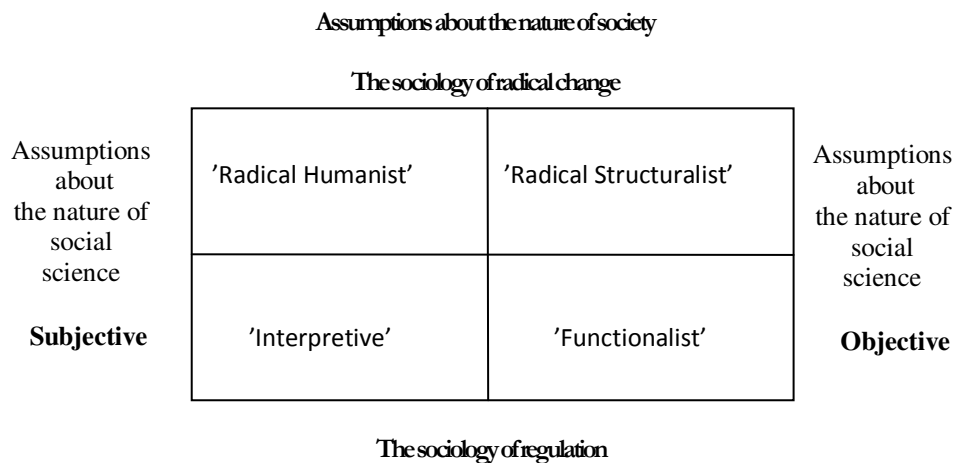


Figure 2.1 Four paradigms for the analysis of social theory (Burrell and Morgan, 1979, p.22.)

Burrell and Morgan (1979) identify in their analysis two independent dimensions of distinctions used in social science. One of them reflects a fundamental philosophy of science which can be labelled subjective or objective. The other dimension distinguishes between an approach that concentrates on regulation (social order) and one that emphasizes conflict and change.

When combining the endpoints of these dimensions we can identify four distinct paradigms (radical humanist, radical structuralist, interpretive, functionalist) that can be followed in the field of social or organizational research. Paradigms describe distinct assumptions and beliefs of researchers regarding the purpose of research and on how scientific knowledge can be created. Burrell and Morgan (1979) argue that the personal assumptions and beliefs underlying these two dimensions will only be consistent with certain methodological choices associated with the paradigms. This is the reason why we have an abundance of promising but distinct methodological approaches in the field of work stress research. The choices which researchers need to make represent a complex and deep-reaching dilemma, which supports one's inner drive for clarifying basic philosophical assumptions about science and society through self-reflection.

At the same time, the tensions and lack of constructive communication between the different paradigms and methodological approaches urges me to investigate the possibility of applying a multiparadigm approach to work stress research. There are a number of scholars who see in multiparadigm approach a possibility to advance the understanding of organizational phenomenon such as work stress in their wholeness (Primecz, 2008; Hassard and Kelemen, 2002; Lewis and Grimes, 1999; Schulz and Hatch, 1996; Gioia and Pitre, 1990) or argue against the artificial separation of paradigms and call for their interconnectedness (Willmott, 1993; Lee, 1991). In spite of this, we also need to be aware of the concerns and problems associated with the multiparadigm approach that are also significant and by all means worthy of consideration, as argued by leading scholars (Scherer and Steinmann, 1999; Jackson and Carter, 1993; Burrell and Morgan, 1979).

Another source of doubt is that, in the field of work stress, there is a lack of robust and reliable guidance on how to execute research when walking the very promising but difficult path of multiparadigm research. Therefore, before taking a personal position in the multiparadigm debate, the next chapters employ Burrell and Morgan's model (1979) as a starting point for describing my fundamental beliefs in the purpose of scientific research and my position on the possibility of creating subjective and objective knowledge.

2.3. Personal position about the purpose of social research and scientific interests

Very similarly to Burrell and Morgan's (1979) distinction of regulation and radical change, Habermas (1972) in his earlier work also analysed the role of science. He based his analysis on the human condition of world-openness, the transcendental capacity of the human species that is not bounded by the interests of particular social groups. In this sense, according to Habermas, we can speak about the existence of three 'quasi-transcendental' cognitive interests that constitute scientific knowledge and which are 'historically and culturally mediated within immanent social institutions' (Willmott, 2003 p. 94). These distinctive cognitive interests (named technical, practical and emancipatory by Habermas) support the creation of various forms of knowledge that differ in their purpose, focus, orientation and projected outcome - as depicted in Table 2.1.

Cognitive interest	Type of science	Purpose	Focus	Orientation	Projected outcome
Technical	Empirical-analytic	Enhance prediction and control	Identification and manipulation of variables	Calculation	Removal of irrationality within means-ends relationships
Practical	Historical-hermeneutic	Improve mutual understanding	Interpretation of symbolic communication	Appreciation	Removal of misunderstanding
Emancipatory	Critical	Development of more rational social institutions and relations	Exposure of domination and exploitation	Transformation	Removal of relations of domination and exploitation that repress without necessity

Table 2.1 Habermas's three knowledge-constitutive interests (Willmott, in Tsoukas-Knudsen, 2003 p. 95.)

The uniqueness of the emancipatory cognitive interest lays in one hand in the stimulation that it gains from ideas and their consequences originating from technical and practical cognitive interests (Willmott, 2003) and On the other in the critical tradition associated with the emancipatory cognitive interest which depends on the positivist and interpretative research, but “adds the important corrective of attention to power relations” (Prichard et al, 2004 p. 218.). Critical scholars with emancipatory interests explore the power relations involved in the construction of meanings and expose how these can be connected to forms of domination and exploitation in organizations. Their main orientation is towards the transformation of social institutions and relations, guided by an attitude “which is formed in the experience of suffering” (Habermas, 1986, p. 198) and a wish to throw off something man-made that can be and should be abolished and call into question “relations which repress you without necessity” (Habermas, 1972, p. 198).

My research interests definitely fit the description of Habermas’s emancipatory cognitive interests, as I am concerned with revealing the structures and relations that unnecessarily contribute to human frustration and suffering at the workplace, and which are potentially open to challenge and transformation. The emancipatory interest in organizational research leads to the development of questions that bring to the surface the interconnectedness of organizational practices and human sufferings that can find a legitimate form of expression in the discourse on workplace problems and work stress (Willmott, 2003). Thus, the desired outcome of this kind of research is not merely the reduction of work stress and suffering experienced, but the exploration and removal of repressive social relations and the re-creation of organizational power structures and relationships that foster autonomy, responsibility and the common good.

2.4. Personal position about the philosophy of science and creating knowledge

From the description of my primarily emancipatory cognitive interests in the previous chapter, it can be concluded that these interests represent a favourable attitude towards conflict and change in my assumptions about the nature of society. This is reflected as being “the sociology of radical change” in the classic model of Burrell and Morgan (1979). However, the second dimension of the model constitutes a far greater dilemma to me, since an evident choice in the subjective-objective dimension related to the nature of social sciences does not follow from my mainly emancipatory interest. In order to form a personal stance about these perspectives it is worthwhile analysing in detail all four sets of assumptions that Burrell and Morgan (1979) discuss in their seminal work.

2.4.1. Assumptions about the nature of the social world

In the table below, we find depicted the four basic sets of assumptions about the nature of social science that are related to ontology, epistemology, human nature and methodology (Burrell and Morgan, 1979).

The subjective-objective dimension		
The subjectivist approach to social sciences		The objectivist approach to social sciences
Nominalism	←ontology→	Realism
Anti-positivism	←epistemology→	Positivism
Voluntarism	←human nature→	Determinism
Ideographic	←methodology→	Nomothetic

Table 2.2 A scheme for analysing assumptions about the nature of social science (Burrell and Morgan, 1979, p.3.)

The major dilemma associated with the subjectivist-objectivist distinction of social sciences is already expressed in Burrell and Morgan's work (1979) when they refer to the extreme positions of "sociological positivism" and "German idealism" and argue for treating the four sets of assumptions as being analytically distinct. They also highlight the fact that these positions can vary considerably; assumptions do not necessarily go hand in hand with each other, and furthermore it is possible for researchers to take a less polarized perspective about any of the four assumptions. In the next section I will go through these four sets of assumption and formulate my personal position about each in light of the work stress research.

The **ontological debate** and the positions taken in relation to this field have probably the most significant impact on the specific research approaches taken in work stress research. The basic ontological question of whether reality is external and is "out there", or is a product of individual consciousness (Burrell and Morgan, 1979), is translated in work stress research into the dilemma of whether objectively identifiable stressors (Holmes and Rahe, 1967) or individual interpretations and appraisals of work stress should be placed in the focus of investigation (Lazarus and Folkman, 1984). My personal perspective on the ontological debate is a less polarized, intermediate standpoint as I consider both of these statements to be true. In my view, there exists an external social reality for organizations but organizational members are also important creators of this reality, since they interpret it through individual cognitive processes, and through collective discourse they give meaning to it, and with their actions they also react to it.

The **epistemological debate** is closely connected to the ontological debate, as it centres around the issue of acquiring, creating and sharing knowledge. Positivist epistemology is engaged in the search for a general causal relationship that can be verified and transmitted in a tangible form, whereas the anti-positivist position emphasizes the relativistic nature of the social world and the individual point of view in the creation of knowledge (Burrell and Morgan, 1979). My stance is once again less extreme, even though this time I rather disagree with the polarized positions of the subjectivist-objectivist debate. Particularly from the perspective of radical change in organizations, neither the exclusive search for general causal relationships, nor the solitary creation of relativistic individual understanding and local truth serves adequately to improve the quality of workplaces.

The third debate concerning assumptions about **human nature** is between those with a determinist and those with a voluntarist view of man. The first model of man (determinist) regards man and his activities to be determined completely by the situation or the environment. The second model of man (voluntarist) considers man to be completely autonomous and free-willed. Burrell and Morgan (1979) explicitly admit the possibility of taking an intermediate standpoint in this debate and once again I can not identify with any of these extreme positions. The key term in my perspective is the free will of man, who is able to retain his dominant quality even under the most extreme organizational situations and influences. Work stress is fundamentally about the processes of how environmental factors can induce consequences for the human person. At the same time, I hold firmly to my belief that whatever “inhuman” conditions are present in the environment, the human person remains human in his freedom to choose his reaction to these. Nobody can be fully deprived of his ability to choose his or her own reactions (Frankl, 2004). The freedom of humans in choosing their attitudes and reactions to the environment does not necessarily mean a power of independence from the environment or the power to create the environment, but it always represents an indestructible hope for transforming the environment for the better.

The above-discussed three sets of assumptions all influence directly any decision about research **methodology**. One extreme methodological position is the nomothetic approach to social sciences, which focuses on regularities in cause-effect relationships that can be tested using systematic protocols and quantitative techniques, and leads to the formulation of universally applicable laws. The other extreme methodological position is the ideographic approach to social sciences which emphasizes the subjective accounts and experiences of individuals, the relativistic nature of the social world and focuses on how the individual interprets, creates and modifies the reality he lives and works in (Burrell and Morgan, 1979). Given my paradoxical standpoint, that holds true seemingly contradictory positions in the ontological, epistemological and human nature debate, it follows logically that as a researcher I do not feel comfortable being locked in any of the paradigms defined by Burrell and Morgan (1979) and thus my methodological choice is can not be classified as being fully ideographic or nomothetic (Mullins, 2010). This is one main reason why I have opted for a multiparadigm research approach that includes a critical reading and a postmodern reading of organizational reality as well. The primary methodological assumption of my research includes ideographic influence as I apply qualitative methodological techniques (deep interviews, focus-groups, non-participant observation) and rely mainly on the accounts of organizational members about workplace problems. At the same time, some nomothetic influences can also be identified in my research approach, as in the critical reading I also analyse deep social structures that form the basis of surface structures¹⁹ observable in organizations and in the postmodern reading I concentrate on the interconnectedness of subjective accounts and the process of how these create social reality.

¹⁹ The detailed explanation of deep structures and surface structures will be included in the critical reading of the case in Chapter 6.1.

2.4.2. Work stress research from the perspective of the subjectivist-objectivist debate

The diversity related to the four sets of fundamental assumptions about the nature of social science described in detail above is a major contributor to the immense amount and multifarious nature of studies available on work stress. In the next few pages I wish to decrease this diversity through simplifying the differences between various work stress focused research attempts to the underlying basic attitudes about the philosophy of science and their consequent methodological choices. Two main streams of work stress research (labelled objectivist and subjectivist) will be identified and compared based on this fundamental and simplifying division. Subsequently, I explain my personal position towards these.

The objectivist stream for explaining work stress

As already noted before, the basic position behind doing research in the field of work stress is a positivistic approach. This is historically deeply rooted in the dawn of the stress concept and its strong association with the medical and biological sciences (Selye, 1936). As a consequence of this, work stress research has long been dominated by experimental approaches and quantitative analysis built on acquisition of large samples of data, frequently supported and further strengthened by the high objectivity and explanatory claims of medical and biological research measures.

The focus of work stress research was initially put on exploring and explaining the physical and psychological consequences of work stress, and thus emphasis was mainly put on the cause-effect relationships between different factors (stressors and strains). Despite recognizing early the importance of subjective appraisals in the stress process (Lazarus and Folkman, 1984), the mainstream direction of research has always targeted the creation of general explanatory models of work stress that have been increasingly expanded by theoretical concepts which bear a relation to individual and contextual differences. The increasing complexity of the tested models (through inclusion of moderating and mediating relationships (Frone, 1999) and tackling reverse causality problems by introducing longitudinal studies (Kopp, 2008)) has not resulted in a deflection from causal relationships as the core item of investigation into the phenomenon).

This stream of research strongly relies on statistically relevant large samples and claims that, due to the general validity and reliability of its results, conclusions and recommendations formulated based on these can be widely applied and should inform a large spectrum of interventions, both individual and organizational.

The subjectivist stream for exploring work stress

During the last two decades the shortcomings inherent to the objectivist stream for explaining work stress have been increasingly criticized and scholars have called for more in-depth qualitative studies (Payne and Cooper, 2001; Dick, 2000; Folkman and Moskowitz, 2000; Perrewé and Zellars, 1999; Newton, 1995; Meyerson, 1994). They have urged a new approach to research that does not aim to provide a broadly applicable general

explanation and causal model for work stress. On the contrary, the new approach offered a more contextual, local understanding of the phenomenon, one that would be capable of grasping the social creation of meanings associated with work stress (Harkness et al, 2005; Kinman and Jones, 2005; Mumby, 2004).

The subjectivist stream for understanding work stress abandons the use of large, statistically representative samples and does not use quantitative analysis for reaching generally applicable conclusions. Instead of a positivistic approach rooted in medical sciences, this stream focuses on exploring and understanding the social creation and interpretation of the phenomenon called work stress. This stream is not dominated by predefined theoretical concepts of the stressor-strain causal relationships, but rather focuses on the vocabulary and language used by organizational members. The research is typically carried out in one or few organizational entities where a large number of cases are investigated in order to reach a maximum of local understanding and explanation. The subjectivist stream methodologically usually prefers personal deep-interviews, focus-group interviews, critical incident diaries or observations and avoids the usage of large sample questionnaires.

A major advantage of this approach is its capability of thoroughly investigating and understanding the locally relevant social and power structures in the organization that can play a decisive role in the creation and dissemination of the discourse on workplace problems and work stress. Thus the subjectivist stream of work stress research has the potential to reveal new organizational themes inherent in work stress rhetoric and discourse. Even more importantly, this approach can inspire and inform organizational development initiatives that go beyond the current moderately successful work stress interventions and reach to the heart of the related workplace problems (Randall, Cox and Griffiths, 2007; Harkness et al, 2005; Kinman and Jones, 2005; Mumby, 2004).

Personal stance on the debate

It is beyond doubt that both the objectivist and the subjectivist stream of researching work stress has contributed greatly to our understanding of the phenomenon and informed interventions that aim to reduce distress in organizations. The results originating from these streams should by no means be neglected in any particular work stress research attempts. At the same time, the researcher's personal choice between the two work stress research streams has to follow from and be appropriate to his/her main research questions, which have originated from his fundamental motivation for the research; in other words the purpose he/she sees in carrying out his piece of scientific work.

My personal drive for doing this research feeds on a desire to foster a radical change in current employment relationships in Hungary, the ambition of contributing to the improvement of present working conditions and the creation of better workplaces for employees in my home country. In order to achieve this, it is needed to reach to the heart of the sufferings and agonies of organizational members that partly come to the surface through the legitimate and accepted discourse about workplace problems and work stress. Even though there

are numerous country-wide programs in Hungary which target best practices of good workplaces and aim to support the improvement of working conditions²⁰, it is only a minor fraction of these that use contextual, in-depth qualitative methods in their research (Primecz et al, 2008). It is also remarkable that hardly any of this research attempts to explore the potentially hidden themes behind the stress discourse and take a truly critical stance about the status quo of organizational power relations. Subsequently, there is a great need for research work which particularly focuses on the understanding of social processes that contribute to the creation of discourses on workplace problems and work stress at the, and studies that uncover the diverse meanings that workers associate with the concept of work stress.

Based on the above-described personal motivations and current necessities and development opportunities in the Hungarian work stress research, I have decided to carry out my thesis work essentially according to the principles and expectations of the subjectivist stream. It is my conviction that this approach will enable me to contribute most to the development of the Hungarian work stress research. However, this choice does not indicate neglecting through my research results stemming from the objectivist research stream. On the contrary, the conclusions of nomothetic approaches to work stress, which come to their conclusions by using large, representative samples and validated international questionnaires, will be taken into consideration. Their concepts will be used as significant starting points for designing my research plan.

Thus my choice of research stream and methodology will primarily be driven by contemporary research needs in the Hungarian work stress research field. A critical, subjectivist approach and qualitative methodology will be employed in the case of a Hungarian organization in order to explore the deep social structures workplace problems are based on and the interpretation of the work stress and organizational justice constructs and discourse associated with these. My research can be considered to be a parallel multiparadigm piece of research (Primecz, 2008; Lewis and Grimes, 1999; Hassard, 1991), since I will present a critical reading and also a post-modern reading of the investigated organization, which will be introduced and explained from an organizational theory perspective in the next chapter (2.5).

2.5. The possibility of multiparadigm research about work stress

In their seminal book, Burrell and Morgan (1979) argued very convincingly against the possibility of a synthesis between paradigms in social studies. Their strict notion of paradigm incommensurability ruled out any integration due to the mutually exclusive assumptions accepted in any two paradigms (Burrell and Morgan, 1979). Their smart reasoning was at that time a significant contribution to the avoidance of a hegemonic dominance of the functionalist paradigm in organizational studies. However the dominance of the functionalist paradigm is no longer a realistic threat in European organizational studies and this has opened up the way to the

²⁰ For example Hewitt Best Employer Survey, Family Friendly Organization Survey.

employment of very different responses to the paradigm debate. According to Hassard and Kelemen (2002), these responses can be grouped into five main camps: 1. ‘non-consumers’, 2. ‘integrationists’, 3. ‘protectionists’, 4. ‘pluralists’, 5. ‘postmodernists’. In the following paragraphs I will unfold in more detail some of those main positions of the ‘postmodernists’ and ‘pluralists’ camps that promote the application of multiparadigm research.

A prominent member of the postmodernist camp (Deetz, 1996) has denied that the main differences in research originate from the researcher’s different ontological and epistemological assumptions. Instead, he draws attention to the way research concepts emerge and to the relation of research practices to the dominant discourses in organizations and the research community (Hassard and Kelemen, 2002). Deetz (1996) shifts attention to the various forms of knowledge consumption by organizational researchers and identifies four discourses that are available to them.

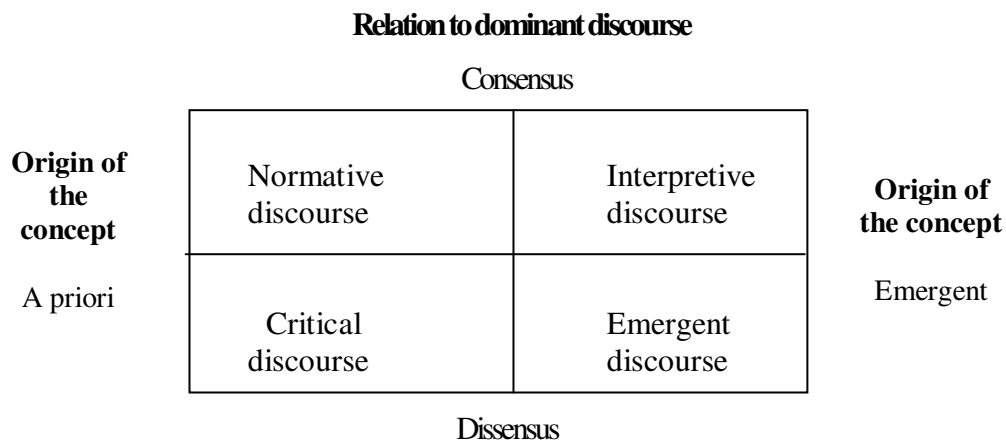


Figure 2.2 Postmodernist discourses (based on Deetz, 1996. in: Hassard and Kelemen, 2002, p.348)

According to his model, fundamental differences in research approaches arise from the fact that researchers can consume the a priori definitions of the research community and/or the local and emergent concepts stemming from the contact with their research subjects. Another distinction is created through the production of knowledge and the way it is consumed. When knowledge production supports the existing scientific and social order Deetz calls this ‘consensus’ type, on the other hand the production that problematizes the existing order is considered to be a ‘dissensus’ type (Hassard and Kelemen, 2002).

In my research I intend to use the concepts and definitions of the work stress field as a significant starting point. At the same time, I limit my knowledge consumption of this art to a moderate level, which will allow me to remain open to reinterpret specific terms and phenomenon. Through exploring the prevailing power relations and dominant discourses in the organization, I will constantly challenge and redefine the original concepts based on their relation to reports of the field members.

The pluralist position about the paradigm debate questions the incommensurability thesis and advocates various forms of multiparadigm research (Hassard and Kelemen, 2002). These scholars encourage communica-

tion between paradigms (Weaver and Gioia, 1994) or argue for the existence of common concepts, constructs and practices and emphasize the importance of exploring these ‘transition zones’. Following this logic, it is indeed through the possibility of multiparadigm research that we are able to reflect on different facets of complex social phenomenon (Hassard and Kelemen, 2002). The art of multiparadigm research proposed by pluralist researchers is particularly close to my preferred research approach, as during the exploration of the discourse on workplace problems I also analyse the social structures, power relations, ethical dilemmas connected with organizational justice perceptions and the social creation of local reality.

Regarding the realization of multiparadigm research it is possible to identify several distinct approaches, as were reviewed and categorized by Lewis and Grimes (1999) and Primecz (2008), depicted in Table 2.3. below.

Groups of multiparadigm research		
Multiparadigm review	Multiparadigm research	Multiparadigm theory building
Bracketing Morgan (1997)	Parallel Hassard (1991)	Meta-theory building Gioia and Pitré (1990)
Bracketing and Bridging Gioia and Pitré (1990)	Sequential Lee (1991)	Interplay Schultz and Hatch (1996)
Bridging Willmott (1993)		Meta-triangulation Lewis and Grimes (1999)

Table 2.3 Groups of multiparadigm research (Lewis and Grimes, 1999 in: Primecz, 2008 p.21)

Among the above-listed multiparadigm approaches, due to the space constraints of the thesis proposal, I only describe in detail the approach that I will apply in the methodological framework of my research introduced in Chapter 5. This approach is parallel multiparadigm research (Hassard, 1991), the principles of which I will base the two separate analysis of the critical and postmodern readings of my thesis on. I expect the parallel usage of different ontological and epistemological assumptions to be helpful in making the contrast between the different organizational theory paradigms more fruitful. This can open up room for investigating organizational dilemmas of an ethical nature and also make my research more relevant in terms of practical interventions (Wicks and Freeman, 1998).

The critical reading of my thesis considers the concepts and definitions of work stress and organizational justice research fields as being starting points, and at the same time concentrates on the social structures and relations that lead to the sufferings of employees and the hindering of integral human development. In this critical reading I openly declare my commitment to healthy working conditions and the well-being of employees. I target conclusions that can be helpful in unveiling suppressing social systems and deep social structures, eliminate unnecessary suffering and provide the basis for creating alternative structures.

In the postmodern reading of my thesis I explore how the members of an organization create and maintain their social reality through their individual and collective meaning-giving and discourses. In this reading I rely

less on using the pre-existing, a priori concepts of work stress and organizational justice but instead I analyse a critical series of organizational events with the help of Pearce's CMM methodology. My aim is not to define general laws or provide a critique of the social system, but to explore the processes that create the local interpretations and discourses. Based on these findings it will become possible to develop immanent critical observations and recommendations for strengthening alternative discourses.

The essence of parallel applied research readings can be best explained with the help of Frankl's (1953) dimensional ontology and the figures he developed for this purpose. The figure below is meant to express that complex systems, like humans or social reality, can only be grasped in a reductionist way by individual scientific disciplines or paradigms (Frankl, 1965). My academic ambitions coincide with Frankl's ideas in the sense that I would also like to understand their complexity by parallel presentation of the different readings of my research.

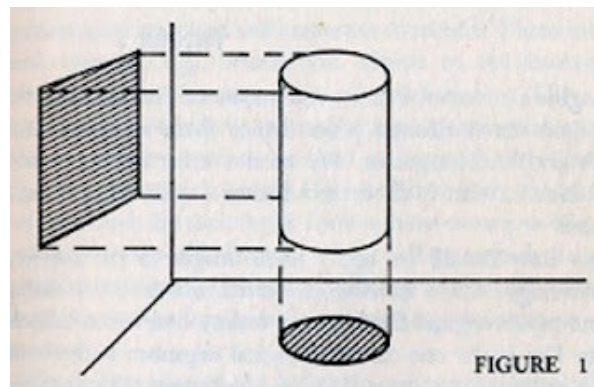


Figure 2.3 The first law of dimensional ontology (Frankl, 1953, p. 186)

In this figure above we can see that if an object is projected from its own dimension into lower dimensions, than even a correct projection will create contradicting images (Frankl, 1965). I consider the study of complex social systems such as organizations to include a projection into lower dimensions as well. According to this, we are not able to grasp the complexity of higher dimensions; however with the help of several parallel research readings (lower level projections) we can make an attempt to decrease the distortion caused by the reductionism of individual projections. In my doctoral thesis I use a parallel introduction of a critical reading and a postmodern reading to better understand the complex local reality of the investigated organization and its societal context.

3. Work stress

*„Whether 'tis nobler in the mind to suffer
The stings and arrows of outrageous fortune
Or to take arms against a sea of troubles
And by opposing end them.”*

William Shakespeare
Hamlet

The following chapter on work stress does not aim to provide the reader with a broad overview of the complete work stress literature. Due to the volume constraints on my dissertation, my primary aim is to provide the necessary theoretical foundation for my empirical research. The objectives of reviewing the relevant concepts, theories and studies of work stress in this chapter can be summarized in the following points:

- Introducing the main terms and constructs of work stress studies and giving a clear definition of the concepts that serve as starting points for my research;²¹
- Providing a classification and description of the most important stressors at the workplace;
- Indicating the most important aspects of individual coping with stress and related important personal characteristics;
- Providing a short overview of those momentous general stress and work stress models that are sources of the concepts used in this research and which inspired and shaped the design of my research;
- Introducing some exemplary and thought provoking qualitative work stress studies which influenced my research plan (described in detail in Chapter 5).

3.1. Clarifying the concept of work stress

3.1.1. Origins of the concept of stress

The first major discussion of the concept of stress came from a Hungarian medical doctor, János Selye (Selye, 1936). Selye was born under the Austrian-Hungarian Monarchy, conducted his first research in Vienna and Prague and later moved to the University of McGill in Montreal, Canada. He was the first person to describe stress as the **“non-specific response of the biological body to various different stimuli”** (in other words the lowest common denominator in the organism’s reaction to any conceivable kind of stressor exposure (Cooper, 2000)). Following in the steps of Selye’s biological studies, scientists have found that this generality holds true

²¹ This will also include the clarification of some ambiguous terms

for a series of chemical, biological and physical stimuli, like cold, heat, X-rays, noise, pain, bleeding and muscular work (Selye, 1956).

It is important to highlight at this point, that according to the definition provided by Selye that the concept of *stress* only stands for the *non-specific part of the response*, which must be differentiated from both the stimulus-response interaction and the complete response. Even at the birth of this new abstract concept we can recognize the difficulties in defining the phenomenon (as previously indicated through Selye's unfortunate selection of wording for the term). Selye's choice of name has caused considerable confusion ever since in medical sciences, since the term stress is still used according to two interpretations. One of them covers the external effects on the biological body, the other is used to describe the internal changes of the biological body as a response to the external factors (Juhász, 2002). Over the last decades of stress research, distinct definitions of stress have been used in publications which has contributed to the ambiguity of the term itself (Le Fevre and Kolt, 2010; Jex, Beehr and Roberts, 1992; Kahn and Byorsiere, 1992). However, the term stress has resisted all attempts against its abandonment (Briner, Harris and Daniels, 2004; Izsó, 1995).

Kahn and Byorsiere (1992) have suggested several usages of term stress which can bring about more clarity in the field of stress research. This thesis proposal starts off from one of the most widely spread, general definitions of the stress concept, based on the propositions of Cropanzano et al. (2005), Juhász (2002) and Kahn and Byorsiere (1992). Stress is considered in this work to be: ***an interactive process in which conditions and events of the environment (stressors) induce consequences (physical, psychological, mental or social) for individuals.*** I consider the interpretation of these stressors as being a decisive phase of the process, in line with the cognitive appraisal approach to stress (Devenport and Lane, 2006; Greenberg, 2004; Lazarus and Folkman, 1984). Therefore I will emphasize the psychological aspect of the stress process (Juhász, 2002), concerning the individuals perceptions of being threatened by a situation that is overwhelming in light of his or her available resources (Cropanzano et al., 2005, Juhász, 2002).

The sense of feeling overwhelmed is highly stressful (Cropanzano et al., 2005; Pihulyk, 2001), but stressors can induce both negative and positive consequences for the individuals (Szondy, 2010, Fogarasy, 2010, Csík-szentmihályi, 1997). According to Selye (1956), these outcomes depend on the rate and length of the required adaptation, therefore he firmly believed in the distinction of ***eustress*** and ***distress***. When there is no opportunity to use extant capabilities (Juhász, 2002) or deleterious and unpleasant consequences come into existence, we talk of ***distress*** (Salavecz, 2008; Grote and Clark, 2001). On the other hand, when external demands on the individual contribute to self-fulfilment and application of important personal capabilities (Juhász, 2002), or subsequently lead to favourable or pleasant consequences, we talk of ***eustress*** (Le Fevre et al., 2006).

The fundamental motivation for this thesis work is of emancipator. It is designed to expose those sufferings and agonies of organizational members which are caused by suppressing social structures. Therefore the

focus of the research is on investigating the organizational processes of “distress”. However, in line with the everyday usage of the term stress, I will not differentiate and explicitly use the word distress. Instead I consistently use the term stress in starting off this work, and infer the primarily negative connotation of the word.

I find it important to highlight that I consider the academic terminology of work stress research, established by the scientific community, to be a starting point which can be challenged and redefined during empirical research (Hassard and Kelemen, 2002). I will keep an open attitude towards the “multiplicity of language games” when engaged in the interplay with field members (Hassard and Kelemen, 2002, p.347). Consequently, during the exploration of the stress discourse I will keep an open attitude towards those interpretations which emphasize eustress, the positive stress process that drives increased individual effort and contributes to personal growth.

3.1.2. Sources of stress

Along the lines of the original analogy of stress that Selye identified in the field of engineering (as strain in the girders of a bridge), it needs to be recognized that the sources of stress can be very diverse and, even more importantly, multiple stressors can put demands on individuals at the same time. Just like a bridge or any piece of technical equipment that breaks down when stress passes a certain breaking point, different stressors from various spheres of life can accumulate and lead to the collapse of human beings.²²

This idea was further developed by Holmes and Rahe (Holmes and Rahe, 1967), who developed their classic concept of stressful life events. These are events that either signal or initiate a significant life change in an individual’s life. Their scale contains 43 very different life events from all spheres of life,²³ and to each of these a specific number of “life change units” are assigned. These positive or negative events represent a demand on the person to make a change in their lives, and according to Holmes and Rahe, it is the accumulation of these life events that contribute to a significant increase in stress.

Holmes and Rahe’s model of accumulating stressful events in life has been the subject of significant criticisms over the years. Critiques of the model have pointed out problems with the data-collection methods, highlighted unanswered dilemmas concerning cause-effect relationships and questioned the possibility of measuring the stressfulness of life events (Paykel, 1983). Concerning the data collection methods related to life events, Oei and Zwart (1986) have shown that questionnaires and interviews based on self-reporting have contrasting results. The oversimplifying assumption that life events create the same level of life change in each individual, and therefore stress effects can be measured with the same “life change units” was strongly denounced. According to a

²² It was Adolf Meyer who first suggested that physicians should collect information from patients about major previous illnesses, changes in life situations (eg. deaths of close family members, loss of jobs) in order to identify events that could have made the patients susceptible to diseases.

²³ For example divorce, losing a job, pregnancy, vacation, Christmas, moving to a new house, loss of a family member are among them.

research review of Zimmerman (1983) in 16 out of the 19 studies they investigated, the weighted scores of life events did not improve the correlation between stress and illnesses. This has fundamentally questioned the possibility of ascribing weights to specific life events beforehand - hence most of the time simply counting life events has proven to be enough to predict the strength of correlation between illness and stress (Zimmerman, 1983). Another weakness of Holmes and Rahe's method is that it cannot eliminate those life events that are consequences of illness and not causes of it (Paykel, 1983). Concerning this methodological problem, depressive illnesses are particularly important since they can typically be both causes and consequences of these critical life events (Tennant, Bebbington and Hurry, 1981).

In spite of its deficiencies, the results of Holmes and Rahe (1967) have clearly indicated that with an increase in number of life events negative health effects also increase significantly (Holmes and Masuda, 1974). At the same time, the data collection and evaluation methods they suggest are scientifically not well founded. Work stress research needs to take into consideration the uniqueness of people and their personal perceptions and coping with stress. It is important to notice, however, that the interest in researching life events is increasing under specific social and economic circumstances. As a consequence of the European economic crisis a significant number of people lost their jobs in Hungary and many of them could not pay their debts and therefore lost their homes and cars. Life events of this kind may lead to serious depressive illnesses which can damage marriages and partnerships that can coincide with the sicknesses of loved ones. The latest global economic crisis has often contributed to series of negative life events in people's lives and explains well the growing interest in life event research (Utsey, Giesbrecht and Hook, 2008; Glover and Parry, 2008; Martos, 2008; Totten and Kennett-Hensel, 2008).

The work of Holmes and Rahe was an important step towards recognising stressors which emerge from different spheres of life (Ross and Altmaier, 1994). It is particularly important to acknowledge this when our objective is to explore a specific field of stress (in the case of this thesis, work stress). Thus I need to emphasize that workplace stressors make their impact simultaneously and potentially in combination with other types of stressors in life (Martos, 2008). The strict separation of different life-spheres goes directly against my personal assumptions and beliefs about human nature. My beliefs centre around the importance of being and becoming a "whole person"; integrating different segments and roles of life under a fundamental calling in life (Beck-Bíró, 2009; Alford and Naughton, 2004). In this sense, personal integrity can thrive through the development of multiple but compatible identities (for example national, professional, religious), but requires the following of the same set of values in private and professional lives. One of the primary principles of my research is the understanding that researching work stress independent of other sources of stress is an artificial separation and categorization which only serves the interests of our limited human understanding. However, I have to consider the constraints and possibilities of my thesis research, and in order to carry out focused scientific work I consider this approach to work stress to also be acceptable. Nevertheless, through my research I will also consider the social

relations and institutions that influence the stress process and consider the political, cultural and economic contexts. Thus I will be receptive to ideas of those critics of mainstream stress research who would like to overcome the dominance of individual based stress research and interventions (Harkness et al., 2005; Newton, 1995; Fine-man, 1993).

Consequently, the concept of work stress will be used in my research as one of the starting points and be defined as: **the interactive process in which workplace conditions and events induce consequences (physical, psychological, mental or social) for employees.** Similarly to the earlier definition of the stress concept, the interpretation of workplace conditions and events and the interaction of these with characteristics of the employees will be emphasized. A focus will be put on situations where workplace demands exceed the worker's capabilities to cope with them (Santora and Esposito, 2010; Bolino and Turnley, 2005; Ross and Altmaier, 1994).

In the course of my research different synonyms for work stress will be often used. Occupational stress and workplace stress are slightly different in that they emphasize stress connected to the individual profession or the physical workplace. However, these concepts are only starting points of my work, and I will remain open to their reinterpretation during my research. Thus at the beginning of the research no conscious distinctions will be made between the concepts of work stress, occupational stress and workplace stress. Concerning the labels of the researched phenomenon, it is particularly interesting to look at the linguistic differences of the use of the term 'stress' in English and in Hungarian. Surprisingly, in the Hungarian language and discourse we can only find the concept of "workplace stress". Since the original language of the dissertation is in Hungarian, this is going to be the way I will usually refer to the phenomenon. Therefore the frequent application of the term in the English version of the thesis does not indicate an an priori researcher preference or interest in 'physical' conditions but in reality it originates from the everyday Hungarian usage of the term, which might be good food for thought for experts in linguistics and culture.

3.2. Models and sources of work stress

After clarifying the concepts of stress and work stress my aim will be to introduce the main models and sources of work stress. To explain these best, I start with a description of the fundamental general stress models and then review and discuss the most significant models of work stress. Following that I use the work stress model of Palmer et al. (2004) as a basis from which I will provide an overview of the sources of work-related stress.

3.2.1. General models of stress

In the following chapter I provide a short review of those significant general stress models that have fundamentally shaped the research on work stress and the influence of which was very substantial in the formulation of major work stress models. All the general stress models introduced contain concepts and conclusions that will inform the starting points of my research design.

From the GAS model towards a “dynamic equilibrium”

It is important to note that from the beginning Selye’s concept of stress generally built on previous work done by Walter Cannon (Cannon, 1935) who developed the notion of **homeostasis**.²⁴ The General Adaptation Syndrome model developed by Selye (1946) applied his fundamental belief in the “non-specific component” of the stress response. Selye named this universal pattern General Adaptation Syndrome, as depicted in Figure 3.1.

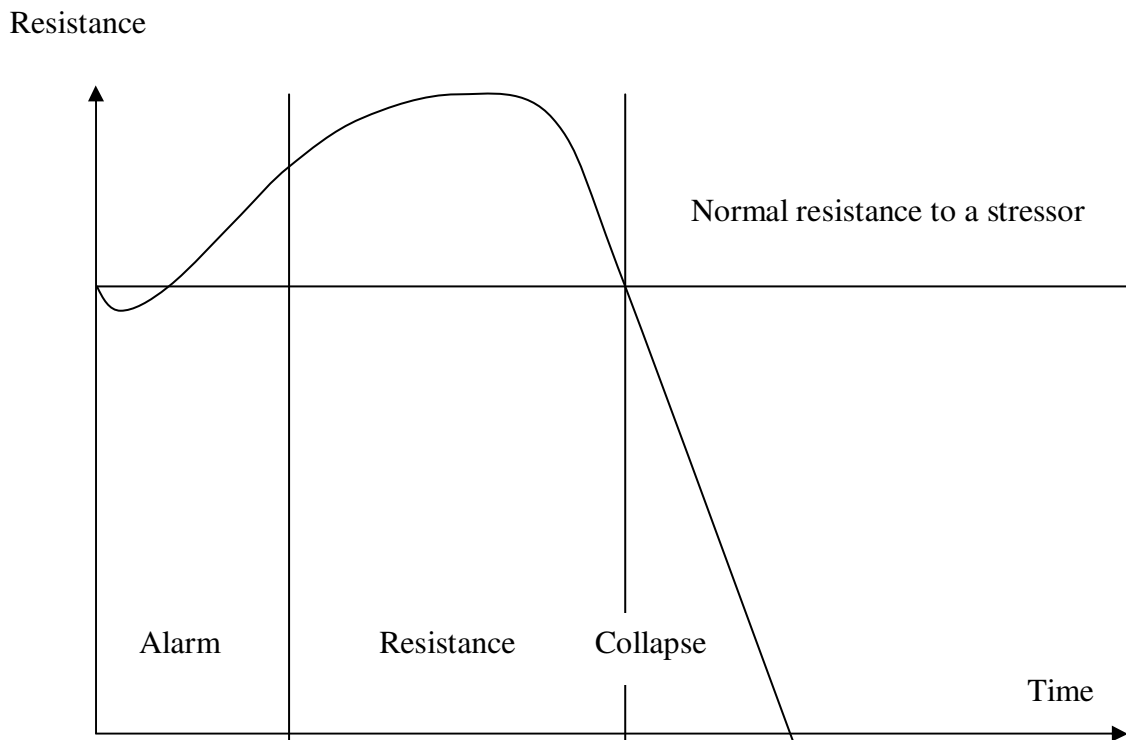


Figure 3.1 General Adaptation Syndrome (Source: Selye, 1964, p.102)

The first stage of the model (*alarm*) indicates the initial reaction of the body to the stressor, which consists of a brief period of lowered resistance followed by a time of heightened resistance. With a prolonged stressor the

²⁴ Although Selye uses Bernard and Cannon’s view of an individual’s internal system that should ideally remain constant despite external demands, his approach also opens the way to a very different understanding of humans and their personal reaction to stress; namely that of advancing to a higher level of equilibrium.

second stage of the model follows (*resistance*), which stands for responses that support long-term adaptation. At this stage the individual makes a continuing effort to adapt to the stressor. We reach the third stage of the model (*collapse*), when the stressor lasts longer than it is bearable for the person. As a result he or she becomes exhausted and depleted from the continued adjustment (Selye, 1946).

The initial GAS model of stress has been widely criticized as it is very difficult to accept that every individual follows the same pattern in his/her responses to stressors. Research has indicated that the body's response can vary greatly and has shown that the model is not applicable for all kinds of demands people experience²⁵ (Kopp, 2008; Ross and Altmaier, 1994). Although these criticisms are valid, the GAS model of Selye needs to be acknowledged because this was the first systematic attempt to describe the human body's response to stress and explain the relationship of human mind and body in industrial civilization and highlight the link between stress and illnesses. Besides the weaknesses of the GAS model, it also has to be remembered that Selye himself had defined the concept of *eustress* and thus a potentially very different direction and result of responses (Szondy, 2010; Fogarasy, 2010; Carmichael, 2009; Csikszentmihályi, 1997). The idea of adaptation to stressors and strain in order to regain equilibrium has remained a dominant element in later developments of stress theories, and another long lasting contribution of Selye's work is an indication of the temporal nature of the stress process. Among the later development of this model is the cybernetic theory of stress that is explained among work place stress models later presented (Edwards, 1992).

The transactional model of stress

Probably the most influential general stress model of our times on stress is that of Richard Lazarus (Lazarus, 1991; Lazarus and Folkman, 1984; Lazarus and Launier, 1978), who instead of focusing on processes internal to the individual (Selye, 1956) or external events (Holmes and Rahe, 1967), emphasize the ongoing nature of imbalance between demands and resources.

According to Lazarus, during the *primary appraisal* of a situation the individual decides whether the event represents an *harm, a threat* or a *challenge* which has already occurred (in this case the individual believes he or she can achieve a positive outcome). After this follows a *secondary appraisal*, in which the individual attempts to define the coping options available to him or her. The coping responses can be *resources* or *responses*, and may also be *internal* or *external* in their nature (Lazarus and Folkman, 1984). The model is called *interactional* or *transactional* as the available coping options have a strong influence on the future appraisal of situations as stressful and can cause the individual to think differently about it - as is depicted in Figure 3.2 (be-

²⁵It was argued that this model can be more widely used to describe responses to the physical stressors of occupational stress (e.g. light or noise) but is less accurate in explaining responses to more complex factors like role ambiguity or job insecurity (Ross and Altmaier, 1994).

low). In this model, stress occurs when demands are greater than available resources; in the reverse case, however, the situation is more likely to be appraised as a challenge by the individual (Lazarus and Folkman, 1984).

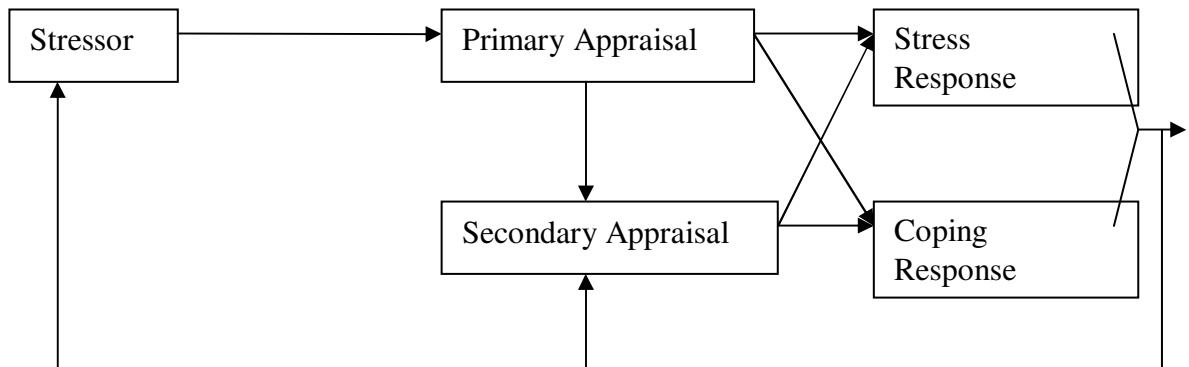


Figure 3.2 Interactional model of stress and coping (Ross and Altmaier, 1994, p. 6)

In the transactional model by Lazarus, individual coping is a combination of all the cognitive and behavioural efforts that a person is making to manage the demands of a stressor which can be directed towards the problem itself or towards ourselves and our feelings about the situation (Ross and Altmaier, 1994). Independent of what kind of coping action we take, the process is transactional as it will have an effect on our appraisal of the stressor. Thus an interaction of the person and the environment will create stress for the individual. The investigation of subjective appraisals of stressors is emphasized, based on Lazarus' model. Individually attributed meanings to events were found in a series of studies to be greatly affected by the individual stress experience (Perrewé and Zellars, 1999, Sager and Wilson, 1995).

The transactional model has been criticized for its narrow focus on the person-environment interaction and several authors have called for a less individualistic approach in stress research that is also capable of incorporating social relations and contextual factors (Harkness et al., 2005; Fineman, 1993). It is largely a consequence though of Lazarus' work and the critique it has received that a series of researchers have urged for more in depth, longitudinal and contextual investigations (Sommerfeld and McCrae, 2000; Folkman and Moskowitz, 2000). The mainstream concentration of stress research using traditional quantitative methods has also been challenged and a demand for complementary qualitative methods that can give insight into meanings central to the stress process has arisen (Payne and Cooper, 2001; Dick, 2000; Perrewé and Zellars, 1999; Newton, 1995; Meyerson, 1994). The importance of the transactional model of stress is also reflected in the fact that several organisation justice researchers have found this model a great basis to expend upon in their attempts of connecting the constructs of work stress and organisational justice (Spell and Arnold, 2007; Greenberg, 2004). Consequently, this general model of stress is of prime importance in my research design, as this has already emerged in my emphasis of defining stress as an interactive process.

3.2.2. Models of work stress

During the latest decades of stress research, numerous models were developed to specifically describe work-related stress. The main objective of these models is to reveal the relationship between work characteristics and the health and well-being of employees (Palmer et al, 2004; Siegrist, 1996; Karasek and Theorell, 1990; Baker, 1985; Karasek, 1979). In the following a brief overview the most influential work stress models and research approaches will be presented to the reader with the intention of showing the main conceptual constructs of work stress models. Particular emphasis will be placed on those models which have a significant potential for connecting up with organisational justice theories. The models described below are not just important because of their influence on the academic discourse about stress, but also due to the opportunity they provide as starting points for a critical exploration of workplace problems, organisational processes and imbalances in power.

The Demand-Control-Support model

One of the most frequently applied work stress models was developed by Karasek (1979), which is also known as the job strain-control (Juhász, 2002) or demand-control (Salavecz, 2008) model. The contribution of Karasek's demand-control model (Karasek, 1979) to the work stress field was that instead of examining the effect of different characteristics of work in themselves, he also took into consideration their relationships between these factors (Salavecz, 2008; Szilas and Csillag, 2008; Juhász, 2002). The model assumes that work stress is generated by the relative strength of two basic characteristics of work (demand and control). Accordingly, work-related factors were classified into two groups (Juhász, 2002):

- *Job strain/psychological demand:* These are psychological stressors, like working pace, the pressure of time, stressful work, personal conflicts, fear of losing a job or different and contradicting demands.

- *Autonomy, control (decision latitude):* There are two components of this factor. One of them is the employees' autonomy in utilising their abilities and skills. The other factor refers to the degree the employee may exert control over the method of executing their work. The two components can potentially intensify each other.

The demand-control model suggests that the level of work stress depends on the connection and interaction between these two distinct groups of work-related factors. Subsequently, different combinations of low and high values of these factors contribute to the development of four distinctive working situations, as depicted in Figure 3.3. (Juhász, 2002):

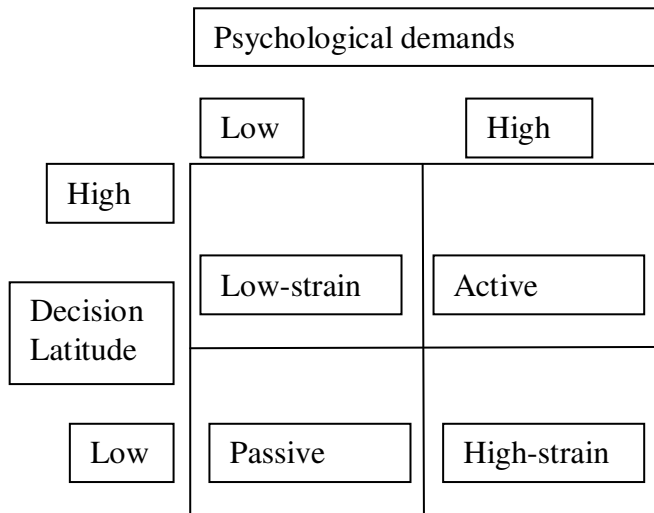


Figure 3.3 Types of jobs according to the demand-control model of Karasek (Salavecz, 2008, p. 290)

The four possible work situations can be described as following:

1. *High strain*: Low level of autonomy and limited use of personal skills are coupled with high levels of psychological strain in these jobs. This work can become harmful to employees because they do not have the opportunity to give an optimal answer to the demands of work (examples of this type of job are assembly-lines, in call-centres or fast-food restaurants).

2. *Active*: In this case, high levels of psychological strain from the job are combined with a high latitude of decision-making for the employee and the opportunity to use a great variety of skills at work. These types of jobs offer the best opportunity for learning and development and they can lead to high levels of achievement and personal growth. (Examples of these types of jobs are usually prestigious, associated with high levels of job satisfaction and are financially better rewarded. Lawyers, medical doctors and university professors often have jobs of this type).

3. *Low strain*: In these jobs a low level of strain is combined with a high level of authority and the possibility to use of a wide variety of skills. (These jobs are usually very difficult to find, but some of them are available in the creative and knowledge industries.)

4. *Passive*: In this case, a low level of demand goes together with limited autonomy and low opportunity to use skills. (Examples of these types of jobs in Hungary include simple administrative work, night-watchmen, security guards and public transport ticket checkers).

The model outlined by Karasek (1979) has inspired and still inspires a lot of studies in work-related stress research. The most important supplement to the model was added by Johnson and Hall (1988) by introducing a new variable, **social support**, at work. Their definition suggests two types of work-related social support: (1) social-emotional support (e.g. trust or solidarity) and (2) help from colleagues to complete a work task (Juhász,

2002). The upgraded **demand control support model** assumes the highest level of work stress when the psychological demands are high and both autonomy and social support are low at the workplace (Salavecz, 2008). The demand-control-support model is significant for my effort to connect work stress with organisational justice as it identifies a fundamental discrepancy (between levels of demand and levels of control) as the centre of its theoretical construct and research investigation. The extension of the model with the element of social support very clearly indicates the social nature of the work stress process and highlights the importance of stress research that focuses not just on job characteristics and individual coping but also on social structures and discourses in the organisation.

The Effort-Reward Imbalance Model

This model, developed by Siegrist (1996), is very likely the most significant theory of work stress that emerged in the 1990's. This model has great relevance for my research, since it resembles equity theory (Adams, 1963), the forerunner theoretical construct to organisational justice theories (Greenberg and Colquitt, 2005). According to this model, work related-stress is the result of situations where the ratio of efforts made at work and rewards received are perceived as being incommensurate by employees. This lack of reciprocity or non-compliance with social norms and expectation is then the reason for increased levels of work stress.

The model created by Siegrist (1996) contains three factors. The factor of *effort* and *reward* refer to the organisational and employment situation, while the factor of *over-commitment* concerns the personality of the individual. The effort component of the model includes work characteristics (such as like time pressure, responsibility, overtime work and physical effort), while the three potential sources of organisational rewards in the model are monetary compensation, recognition and career promotion. The third factor (that is, the dimension of over-commitment) reflects the employees' personality and attitudes manifested in work situations. The tendency to over-commitment is a specific personal pattern of coping with the demands of work (Szilas and Csillag, 2008).

Employees have several strategic choices for resolving the effort-reward imbalance described in this model. (e.g. decreasing efforts, and/or maximizing rewards), but if the imbalance persists for a longer time then under certain conditions (e.g. lack of alternative employment opportunities during an economic crisis, low levels of qualifications) chronic stress may develop (Salavecz, 2008).

The cybernetic model of stress

Among the later-developed models of work stress, a very influential one is the **cybernetic theory of stress** (Edwards, 1992), which places adaptation in an organizational context at its centre. The Cybernetic theory describes self-regulating systems, which minimize discrepancies between environmental inputs and internal standards through a negative feedback loop. This can take the form of adjusting the standards, changing the environment, or both of these. Edwards (1992) has developed a theory of stress, coping and well-being in which

discrepancies damage well-being and stimulate coping responses to resolve this problem. The concept of discrepancies will be one of the important starting points for my research.

The person-environment fit model

The person-environment fit model has been developed during the 1970's and its importance concerning work stress and organisational justice research also lays in its focus on discrepancies. One of these discrepancies emerges because of a misfit between personal needs, motivation and opportunities at the workplace; the other discrepancy is between the abilities of the person and the demands from work. A very important aspect of the person-environment fit model is the distinction of objective and subjective environment and respectively, objective and subjective person. The subjective environment is how the person perceives it and the subjective person is how the person perceives him or herself. This is a very important idea for my work stress research that is primarily concerned with subjective appraisals of the work stress process and discourses on work stress in the organisation. The person-environment fit model indicates that serious physical and mental consequences can also occur when these misfits exist primarily according to the interpretations of employees (Salavecz, 2008; Juhász, 2002, Edwards, 2000).

Palmer and Cooper's Models of Work Stress

This model of work stress was primarily developed with the intention of practical implementation in workplace risk assessment and education (Palmer et al., 2004). It delineates a simple, process-based model of work stress, highlighting the relationships between work-related stress hazards, organisational and individual symptoms and negative outcomes of stress. The model depicted in the figure below differentiates six specific hazards of stress at work and includes culture as an influence being a part of all these hazards. The six main hazards are the following: (1) Demands: includes workload, work patterns, work environment; (2) Control: includes involvement in decisions about own work and autonomy; (3) Support: includes encouragement provided by the organisation; (4) Relationships: includes promoting positive working; (5) Roles: refers to people understanding their roles; and (6) Change: how is organisational change managed and communicated in the organisation (Palmer et al., 2004). Based on the assessment of these hazards there is also a five-step risk assessment and framework for intervention available to organisations. The five steps are the following: (1) Looking for the hazards; (2) Decide who might be harmed and how; (3) Evaluate the risk and decide whether enough is being done; (4) Record your findings; (5) Monitor and review (Palmer et al., 2004). This model of work stress is particularly close to my conceptualisation of stress for a number of reasons. Firstly, it shares my values of human health at the workplace and the importance of responsibility taken by the stakeholders of the organisation. Secondly, it draws a process model of stress, where early symptoms are indicated and suggests a continuous development of harmful outcomes. Finally, the hazards of work-related stressors in this model greatly overlap with the organisational factors I will discuss as stressors in the following chapter.

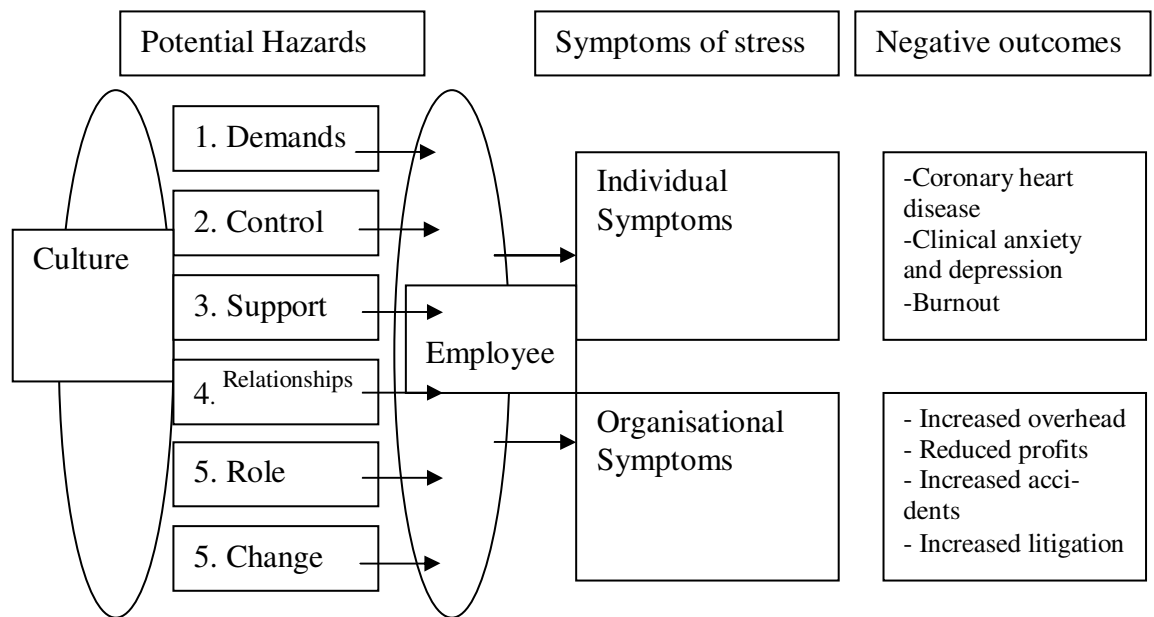


Figure 3.4 The Palmer & Cooper Model of Work Stress (Palmer et al., 2004, p3)

3.2.2. Sources of work related stress

This chapter provides an overview of those work-related factors that, according to the literature, can be considered as potential sources of stress for most employees, and those that therefore stand at the focus of work stress research (Salavecz, 2008; Palmer et al., 2004; Szilas and Csillag, 2008; Barling et al., 2005; Juhász, 2002; Ross and Altmaier, 1994; Cooper and Davidson, 1982). In this sense, at the starting phase of my research I refer to work stressors as: **the stimuli that have proven to have or are assumed to have harmful consequences on people at the workplace** (Juhász, 2002; Kahn and Byosiere, 1992). The Model of Work Stress developed by Palmer and Cooper is particularly useful in creating this overview, as it attempts to include a great number of potential factors/stimuli (emphasized in different work stress models introduced earlier) in a model framework that shares my perspective of looking at work stress primarily as a process.

The sources of work related stress specified and discussed in the following pages greatly overlap with the hazards identified in the Palmer and Cooper model of work stress. There are however some differences in my grouping of the stressors compared to that of Palmer and Cooper. In the category **characteristics of work task** I include the hazards of both demands and control. My category of **relationships** covers also the closely related hazard of support. **Roles** are their own category in both groupings, however I have an independent category for **physical work environment and technology** as well. Palmer and Cooper have identified change as a hazard and culture as an influence for all hazards. According to my grouping such a category influencing all hazards should not just include **culture but also organisational structure, change and human resource practices**.

Characteristics of work tasks

- *Working schedule*: One of the most frequently studied areas within the work stress field is the issue of shift work and overwork. A series of investigations found that certain stressors present considerable risk to the health of employees. These could be particularly damaging in the case that the work schedule does not fit the employees' biological clock and personal preferences (Ross and Altmaier, 1994). This could result in the subject's exclusion from social life (Juhász, 2002), and provide no opportunities for physical and mental recuperation between work sessions. Numerous pieces of research have focused on the consequences of overwork; for example a linear relationship was found between the risk of myocardial infarction and the number of working hours a week (László and Ádám, 2008, Juhász, 2002). Undesirable lifestyles (smoking, unhealthy dietary habits, inactivity) have shown similar correlation with work overload. Work schedules demanding 24-hour duty or availability hold similarly high risks and show an increasing prevalence (Szilas and Csillag, 2008).

- *Repetitive, monotonous work tasks*: Employees performing work characterized by repetitive monotony may experience significant stress. Besides employees working literally on assembly-lines, other groups are also affected; as the number of so-called virtual assembly-line workers is rapidly increasing (Taylor and Bain, 1999). These dehumanizing work conditions (Juhász, 2002) are commonly experienced by employees who take call centre jobs, who may have to deal with more than 100 calls a day and apply strict protocols to their interactions (Csillag et al., 2008).

- *Lack of control over work*: Another extremely important stressor associated with work-related tasks is the amount of influence people have on the way their work is done (Juhász, 2002). This relates to situations when employees are not allowed to choose the tools appropriate for a job, do not have an influence on the pace of their work (Ross and Altmaier, 1994), or may not decide which skills to use for solving workplace problems (Salavec, 2008).

- *Part-time work and telework*: The previously-mentioned uncertainty particularly often affects employees who work part-time or from their homes (Ross and Altmaier, 1994). On the one hand, some work stressors may be decreased (e.g. time spent with travelling is reduced, and employees may choose the timing and conditions of their working sessions). On the other hand, these work schedules constitute a considerable risk of weakening work group relationships and impairing information flow. The chance of isolation and carrier blocks also increases.

Stressors of personal work relationships

The quality of work-related personal relationships is closely associated with the level of work stress. Personal relationships with immediate colleagues, management and clients can all play a significant role at the work-

place. The social support of colleagues is an important resource for coping with the various forms of organizational stressors.

- *Impaired collegial relationships:* These work relationships can be described as having a lack of trust, solidarity, support and interest. Instead of supporting each other, employees are working potentially against each other (Juhász, 2002). These relationships create a hostile atmosphere at the workplace, and might create destructive forms of conflicts within working teams. An extreme form of this phenomenon is called workplace psycho terror or mobbing when employees pick out, despise and threaten their fellow employees (Juhász, 2002; Csillag et al, 2008).

- *Impaired leader-employee relationship:* The leader's style and methods may be a strong source of stress in the case that they do not match the employee's personality, expectations and the nature of the work. An inadequate leader-employee relationship might amplify the employee's sense of being threatened by the supervisor (Juhász, 2002). Aggressive, passive, and laissez-faire-style leadership or a lack of leadership skills clearly increases the risk of stress, since they are significant stressors themselves and at the same time they also enhance the effects of other organizational stressors (Csillag et al, 2008).

Role stressors at work

Stressors associated with roles enacted by employees are among the most significant psychosocial factors which trigger work stress. The role expectations and role interpretations of our work environment (supervisors, colleagues, subordinates and clients) directed towards our behaviour (towards a particular person in a work position) include much more than the formal content of the work contract and the job description. Besides our work-related roles there are several other roles to fulfil within private sphere of our lives; this includes being a child, father, mother, wife, husband, brother or friend. It is important to accentuate that the intensity of experienced stress is determined by the perceptions and interpretations of role expectations. Stressors associated with work roles are closely connected to stressors related to work-related tasks (Beehr and Glazer, 2005; Csillag et al, 2008).

- *Role-ambiguity:* Tasks and responsibilities of the employee are not clean-cut and predictable in these job situations (Csillag et al, 2008; Kahn, 1980 in Beehr and Glazer, 2005; Juhász, 2002). These roles are characterized by inadequate, limited or misleading flows of information. It is not evident for the employee if their work and/or behaviour is acceptable or not. Role-ambiguity is common in case of organizational, technologic and personal changes.

- *Role-conflict*: There are at least two mutually incompatible role expectations the employee may suffer from in this situation.²⁶ One example is when the parent role needs the child to be picked up before 5 pm from the kindergarten, while the manager expects the employees to work at the office even after 5 pm whenever it is necessary to finish the daily tasks (Csillag et al, 2008).

- *Role overload and role underload*: Role overload means that there are impossible-to-accomplish demands for the employee within the available time.²⁷ In case of role underload, stress is caused by the lack of any opportunity to apply knowledge or skills during work (Csillag et al, 2008; Beehr and Glazer, 2005; Juhász, 2002).

Stressors associated with the physical work environment and technology

The majority of work stress investigations focuses on the psychosocial context of work (Cooper and Cartwright, 1997); however, organizational stress effects related to the physical environment and technology are of high significance (McCoy and Evans, 2005). These stressors are also called “blue collar stressors”, named after the group of employees who most frequently (but not exclusively) are affected by physical stressors (Ross and Altmaier, 1994). Since my proposed research will be conducted in an organization where a considerable proportion of the employees are doing physical work, the physical stressors may obviously not be neglected. The most important factors are the following:

- *Environmental conditions*: There are significant individual differences in perceiving and tolerating unpleasant stimuli from the physical environment; however getting used to disturbing stimuli does not mean that they are not harmful any more (Juhász, 2002). The most frequently reported troublesome stimulus is undesired *noise*. Its role as a stressor and potential harmful consequences are indicated in numerous studies (McCoy and Evans, 2005). These conditions, besides damaging the organ of hearing, may also impact vegetative and psychological functioning (Juhász, 2002). Problems with *lighting* may also be interpreted as stressors. Glaring light may obviously lead to work-related problems (Veitch, 2001 in McCoy and Evans, 2005), while too strong or too weak and artificial lighting also influences the behaviour of employees (Quick et al, 1997). The *air quality* of the interior of work places is affected by temperature, humidity, air movement and the presence of pollutants (McCoy and Evans, 2005). These stressors can endanger the employees’ health and may also negatively influence work performance. The importance of *temperature* depends on the other conditions of working, and has a complex effect on the employees’ behaviour and performance (McCoy and Evans, 2005; Ross and Altmaier, 1994). For example, too warm a work environment may induce a sense of crowdedness (Ruback and Pandey, 1992).

²⁶ Role conflicts can take the form of person-role conflict, intra-sender role conflict, inter-sender role conflict, or inter-role conflict (Beehr and Glazer, 2005).

²⁷ In case of quantitative role overload, the time available is not sufficient for performing the tasks; in case of qualitative role overload the individual does not possess the resources or capabilities independent of time to perform the tasks (Ross and Altmaier, 1994).

- *(Lack of) environmental resources:* Beyond the previously-listed stimuli, additional important elements of the physical work environment are the resources, available tools and services that are at the disposal of the employees (McCoy and Evans, 2005). Such examples are the technical equipment and the quality of its operation (computers, printers, photocopier machines, phones), opportunities for eating, sports facilities and available parking places. A lack of ergonomic furniture and other equipment or spaces for relaxation can also be considered work-related stressors.

- *Spatial organization:* The spatial organization of the working area determines the available area and the distance between two employees. This is closely related to the frequency of interruptions at work and the quality of social connections at the workplace (Ross and Altmaier, 1994). A loss of control over social interactions is associated with stress and anxiety (Griffin et al., 2002). When investigating the “open office” concept Oldham and Rotchford (1983) found that this kind of spatial organization negatively affects the experience of meaningful work and encourages frequent abandonment of the work site.

- *Technology used at work:* The technology used at work is a decisive stressor, as was mentioned before during the analysis of the work-task characteristics. The adequate planning of the relationship between humans and technology is of primary significance (Ross and Altmaier, 1994). The initial Tavistock studies in relation to the design of work systems (Gelei, 2004) emphasized that social and technological factors have a similarly high influence (Mumford, 1994 in McCoy and Evans, 2005). Workplace communication based on internet technologies (intranet, e-mail, chat) may result in frequent work interruptions, unnecessary and uncontrolled information flow and the depersonalization of occupational relationships (Csillag and Szilas, 2008). The issue of work safety is closely connected to the technology of work; its insufficiency or absence may be regarded both as a stressor or in certain cases as a consequence of work stress (Barlow and Iverson, 2005).

Organizational structure, culture, change and human resource management as all influencing factors for the above stressors

- *Centralization and hierarchy:* Strongly centralized organizational structures often increase the stress perceived by employees. These solutions limit employee control over their own work and their participation in decision making (Ross and Altmaier, 1994). It can be particularly stressful when employees' rights are impaired, regarding the influence on work conditions or the resolution of workplace conflicts (Csillag and Szilas, 2008). Members of organizations with strong hierarchy report a higher level of stress than employees working in flat organizations (Ivancevich and Donnelly, 1975).

- *Organizational culture:* Internal competition and rivalry can be significant stressors which cause considerable employment uncertainties in times of cut-backs (Ross and Altmaier, 1994). A further stressor associated with

organizational culture is induced by inner power struggles and political games, which can be intensified at the higher levels of the hierarchy (Ross and Altmaier, 1994). These factors are closely connected to the level of trust between employees and the existence of supportive social relationships at the workplace, which will be discussed in detail later.

- *Changes at work:* The growing rate and intensity of adjustments regarding workplaces and work tasks may also become stressors for employees. These changes require new knowledge, skills and attitudes, which may undermine the employee's confidence in his own expertise and competence (Juhász, 2002). The expectance of a flexible adaptive attitude towards changes is often threatening to employees, and enhances fears related to uncertainty and losses of jobs.

- *Human resource management practice:* A univocal sign of management responsibility is the fact that nearly all the previously presented organizational stressors relate to HR systems. To avoid the repetitive reporting of factors, at this point only the most important stressors related to previously unmentioned HR systems will be highlighted. *Recruitment and selection* is an extremely important HR process and a potential source of stress from the perspective of person-organizational fit. Appropriate orientation programs may relieve the stressful effects associated with the onboarding to the new organizations. A lack of a proactive mentality in *training and development* may profoundly hinder the individual's preparation for organizational changes, causing a significant burden on employees during times of change. Related to *career management* systems, career blocks should be noted as important stressors. In *performance management* the inaccurate and ambiguous phrasing of objectives and demands, and/or the lack of consistency may be considered a stressor. With regard to *compensation and benefits* the absence of fairness and the lack of internal or external equity may generate a notable stress effect. During the *outflow* process the uncertainty and the loss of roles and identity should be considered as extremely powerful stressors (Szilas and Csillag, 2008).

3.3. *The role of personal characteristics and coping methods in the process of work stress*

In the previous chapter I reviewed in detail the potential stressors related to work. The personal characteristics and coping methods of employees have a similarly great importance in the stress process (Juhász, 2002; Ross and Altmaier, 1994). Since the focus of the present study is not the individual coping effort, these aspects will only be indicated and briefly discussed. From the perspective of the work stress discourse I especially emphasize the importance of the individual and collective perception and appraisal of various workplace problems and stressful situations at work (Lazarus and Folkman, 1984).

3.3.1 The importance of employees' personal characteristics

Research on the perception and appraisal of and effective coping with work stress most frequently highlight the influence of employees' personality traits (Booth-Kewley and Vickers, 1994). Examples for this are flexibility-rigidity, introversion-extroversion, self-esteem, self-control, or emotional sensitivity (Salavecz, 2008; Juhász, 2002). These individual characteristics may render someone more susceptible to work stress and/or may lead to the development of inadequate coping strategies and habits (e.g. chronic hostility and incapacity). For example, in submissive subjects with an external locus of control, the blood concentration levels of the immunosuppressive cortisol has been recorded as being elevated in response to stress (Pruessner et al, 1997)

Certain features of employees also increase the probability of insufficient or even unhealthy behaviours as a reaction to stress (Juhász, 2002). With impulsive individuals with low self-control several pieces of research have found that the risk of smoking, irregular eating and inactivity increases (Roskies, 1993). On the other hand the conscientiousness of employees has been found to have a beneficial effect on their coping with stress. This proves to be a good predictor of health-protecting and risk avoiding behaviours, both in traffic and at work (Booth-Kewley and Vickers, 1994).

The individual ability to identify and realize objectives is a very important subsystem of self-regulating behaviours and coping with stress (Martos, 2008). The significance of the conscious formulation of goals is illustrated by the results of the Hungarostudy 2006. This study indicates that the selection of **intrinsic goals** (e.g. development, relationships) increases stress resistance and the life expectancy of employees, as opposed to the exclusive preference of external life goals (e.g. richness, fame) (Martos, 2008).

The **sense of coherence** described by Antonovsky (1987) is another personal characteristic that supports successful coping with work stress (Ross and Altmair, 1994). The essence of Antonovsky's salutogenic approach is that, instead of concentrating on the factors endangering human somatic or mental health (a pathogenic view), this approach focuses on factors protecting and improving health in difficult life situations (Konkoly Thege, 2008). The most prominent propagator of the salutogenic view is Aaron Antonovsky, though the search for understanding survival in extremely difficult situations goes back in Western medicine much earlier (Konkoly Thege, 2008). Perhaps the most widely known work in this field is that of Victor Frankl (1947). The sense of coherence construct of Antonovsky consists of three main general, persistent and still dynamic senses of certainty (based on Konkoly Thege, 2008, p.61):

- **Comprehensibility:** challenging stimuli coming from the outside world are predictable and understandable
- **Manageability:** adequate resources for the requirements demanded by these stimuli are available for the person in question

- **Meaningfulness:** emerging challenges make sense and are worth the required energy investment

Currently, there is a clear tendency within the diverse research field of work stress to study special employee groups. Since my proposed research does not focus on any specifically-defined employee group, only a brief description of the most essential differentiating factors will be presented.

In work stress research employee groups are perhaps most frequently separated based on *gender* (László and Ádám, 2008; Desmarais and Alksnis, 2005; Juhász, 2002). Regarding *female* employees, sexual harassment at the work place, the difficulty of balancing work and private life (Juhász, 2002) and the problem of career blocks or the glass ceiling phenomenon (Primecz and Nagy, 2010; Bokor et al., 2007) have earned particular attention (Bowes-Sperry and Tata, 1999). These stressors, however, have an increasing impact on male employees as the employment of females is becoming more prevalent.

Work stressors also have a different influence on the distinct employee *age groups* (László and Ádám, 2008; Loughlin and Lang, 2005; Barnes-Farell, 2005). Employment at a young age and the dilemmas of career entry (Loughlin and Lang, 2005) are associated with very different stressors than those during the mid-life stages or close to retirement (Barnes-Farrell, 2005; Schabracq and Winnubst, 2000).

It is also worth differentiating between work stressors that mainly affect *leaders* and those that are more significant for *subordinates* (László and Ádám, 2008; Juhász, 2002). The situation of mid-level managers is especially burdensome, as they are often caught in the cross-fire of the demands and attacks from top management and their subordinate employees. As for employees, the most frequently reported stressor is a low level of control over their work activities (Ross and Altmaier, 1994).

Special stressors are also expected to emerge with the employment of *disabled people*. The uncertainty of employment and work tasks which underestimate employees' capabilities are the most significant among these stressors (Juhász, 2002). Disabled employees often face rejection from colleagues and they may need special programs which support their (re)integration into work, especially following a longer period of unemployment (Szilas and Csillag, 2008).

The distinctions made regarding the typical forms of work stress for white collar and blue collar workers are also highly relevant for my proposed study, since I will have participants from both of these groups of employees. Regarding blue collar workers, the literature highlights the importance of the following stressors: unrealistic demands, a lack of job security, a lack of understanding from management and low control over work processes. White collar workers report that the greatest burdens are related to demands of interpersonal relationships, family problems and lifestyle (Juhász, 2002).

3.3.2. Personally coping with work stress

Coping with work stress refers to the employee's conscious and continuously changing, cognitive and behavioural efforts to overcome those threats at work that are considered to exceed their resources (based on Lazarus and Folkman, 1984). According to Lazarus' view, personal perception, appraisal and decisions have particular importance in coping with stress. Chapter 3.2. thoroughly discusses this cognitive-transactionalist model of stress (Lazarus and Folkman, 1984). The model suggests that the employee applies the available coping strategy (a collection of cognitive processes, behaviours and skills) that is appropriate for his or her personal appraisal. According to Lazarus and Folkman (1984) these may be classified as follows:

- *Problem-based coping strategy*: Choosing this strategy the employee aims his personal coping efforts at the stressor causing the demand. A potential way to do this is by identifying the problem, developing alternative courses of action and executing the selected solution. This coping may be directed inwardly when there is an intention to change something in oneself (Juhász, 2002).

- *Emotional-based coping strategy*: In choosing this strategy the employee concentrates his personal coping efforts towards altering his own emotional reactions. In cases when the situation is unchangeable (e.g. the bankruptcy of an employer), the employee may try to modify his personal interpretation of the situation. The goal of coping in this case is to attenuate the unpleasant feelings associated with the situation (Juhász, 2002).

Lazarus' studies (1993) show that while the distinct coping methods may become characteristic habits of people, work-related situations have a much greater significance in the decision-making process (Juhász, 2002). In work stress situations, employees typically use both presented coping strategies, but specific coping strategies may be associated with certain stressors. For example, when work conditions seem to be unalterable, employees tend to respond with passivity and emotional-based coping. This approach is completely understandable, since the problem-based coping strategy can only reduce work stress when it is successful.

Based on my practical experiences in coping with work stress I want to highlight another important group of coping strategies, which may be called the enhancement of social relationships at work. The significance of this is also supported by some of the most influential work stress theories (Karasek, 1979; Johnson and Hall, 1988). During the last decade a new training program of developing personal coping competencies was successfully adapted in Hungary by the employees of the Institute of Behavioural Sciences of the Semmelweis University (Stauder, 2008; Williams and Williams, 1997), which also proved to be effective in managing work stress situations.²⁸ This program develops (besides problem-based and emotion-based personal skills) so-called relationship-building skills. Empathy with colleagues, attentive listening and the practice of honest and positive communication (Stauder, 2008) may be regarded as proactive coping strategies which are capable of increasing social support among colleagues in work stress situations. The strengthened solidarity and trust between fellow

²⁸ Williams Life Skills Program

workers is considered to be an extremely powerful, general protective factor (Juhász, 2002; Johnson and Hall, 1988; Cohen and Wills, 1985). A colleague's support may be material (e.g. a loan or a tool), may be manifested in psychological acts (like assistance in overcoming a stressful situation or event) or may be take the form of expressing unconditional support for a colleague.

3.4. The critical and qualitative aspects of work stress research

The previous chapters introduced the most relevant basic concepts of work stress. I have differentiated and classified the most frequently examined work stressors and special employee groups. Following that, the leading general stress and work stress models were presented containing the main constructs and conclusions that constitute the starting points for my proposed research. To sum up, we can say that mainstream work stress research is dominated by research which examines causal relationships, exploring the individual and systemic consequences of different stressors and the characteristics of coping with them. Qualitative studies have gained only a limited ground in this research field as yet, perhaps the most typical proof of this being that hitherto only a few such studies have been published in the leading journal in the field 'Work & Stress' (Harkness et al, 2005; Kinman and Jones, 2005). However, the editors of the journal acknowledge this deficiency and they encourage authors to publish studies of this kind which use well established methodology (Cox, 2006).

Researchers have been drawing attention for almost 20 years to weaknesses in the approaches of objective work stress studies which are designed to examine causal relationships. Consequently they call for the implementation of more thorough research (Dick, 2000; Payne and Cooper, 2001; Folkman and Moskowitz, 2000; Perrewé and Zellars, 1999; Newton, 1995; Meyerson, 1994). These indicate a need for research which does not exclusively emphasize the subjectivity of perception and appraisal of stress on an individual level (Lazarus and Folkman, 1984), but directs attention to collective interpretations influenced by social relations and institutions (Fineman, 1993; Newton, 1995). The new approach to work stress research places therefore into its centre a dynamic interpretation process embedded in a political, social, cultural and economic context (Newton, 1995). Thus the aim of this research is not the creation of generally applicable theories, but the exploration of local truth and local interpretations that also include the investigation of social relations and organizational power dynamics. The aims of studies from a critical approach is to expose repressive modes of operation that cause suffering to employees (Habermas, 1972) and the initiation of emancipating organizational changes. In the following paragraphs I briefly review the studies of Harkness et al. (2005) and Kinman and Jones (2005) as outstanding exemplars of the new wave of work stress research.

In the research of Harkness et al. (2005) the authors interviewed 22 Canadian female clerical-workers by means of focus group interviews. During the conversations the subjects spoke about their own interpretations of

work stress, which the authors later analysed with the help of discourse analysis. The authors came to the conclusion that talking about work stress is a socially accepted form of expressing discomfort and gives an opportunity for employees to partly regain their sense of own importance. However, during these conversations it was not accepted to express not being able to cope with stress. The sense of helplessness of employees was increased by failing to recognize the influence of external factors on their stress experiences (like their positions in the power structure of the organization). Regarding the solution to workplace problems, interviewees also spoke about their very limited circle of influence and low capability to effect changes.

Kinman and Jones (2005) carried out semi-structured interviews with 45 employees in different occupations. The subjects of their research were not experts in the work-stress field, so they could provide lay representations of the phenomenon. During the interviews they asked their participants about the interpretations, causes, consequences and possible solutions to work stress. The authors used thematic content analysis to establish the dominant factors. The results of the research showed great diversity in lay representations of work stress. The interpretation of the concept was very far from consensual; subjects mentioned several different types of environmental, social and personal factors. The subjects perceived the source of work stress as mainly being organizational; however, regarding the effects they emphasized individual consequences. Those with line management responsibility emphasized the responsibility of the individual in stress management, while other subjects underlined the collective responsibility of the individual and the organization.

The conclusions of the above-described studies both indicate that the flexible and diverse definitions of work stress applied by employees necessitate nomothetic methodological approaches in work stress research (Harkness et al., 2005; Kinman and Jones, 2005). This will allow the potential exploration of individual and collective construction of work stress. My research is designed to walk this route by investigating exactly those alternative discourses that Harkness et al. (2005) suggests are related to workplace problems.

Discourses about workplace problems may open the way for or bring to the surface several alternative discourses at work. Along with discourse on work stress a discourse about organizational injustice might be the other dominant form of understanding workplace problems. A further objective of the investigation could be to support those discourses at work that may support the recognition of opportunities that employees have in initiating resolutions to organizational problems and also encourage them to actively participate in these processes.

3.5. Summary

In this chapter on work stress I have introduced to readers the most important concepts and definitions (stress, work stress, stressor, coping) that serve as a starting conceptual constructs for my research.

After defining the work stress concept, the most important occupational stressors were reviewed, based primarily on the works of Szilas and Csillag (2008), Barling et al. (2005), and Ross and Altmaier (1994). According to these classifications the following groups of stressors were identified: (1) work task stressors; (2) stressors associated with the physical work environment and technology; (3) stressors related to the organizational structure, culture, and human resource management practices; (4) role stressors at work; and, (5) stressors of personal work relationships.

This was followed by a brief review of the personal characteristics which play a significant role in the process of work stress, the most important special employee groups, and the different coping strategies available to employees. In the next part of the chapter general stress models (Selye, 1936; Lazarus and Folkman, 1984) and work stress models (Karasek, 1979; Siegrist, 1996) that contain the most important starting points for my proposed research were introduced.

Finally, using the earlier stress-models as starting points, I defined the research direction I have chosen based on a critical and qualitative approach, illustrated by the presentation of the methodological approach and conclusions from two exemplary studies (Harkness et al. 2005; Kinman and Jones, 2005). This direction urges the exploration of new alternative discourses from which I would like to investigate and discuss the discourse related to workplace problems and their solutions. With the help of this approach I expect to gain deeper local knowledge about the relationship between work stress and organizational justice within a given social and organizational context.

4. Work Stress and Organizational Justice

*„What could be more glorious than to brace one's self up to discover New South Wales
and then realize, with a gush of happy tears, t
hat it was really old South Wales.
This at least seems to me the main problem for philosophers...
How can we contrive to be at once astonished at the world and yet at home in it?“*

Igazságot!

Gilbert Keith Chesterton

The close connection between the fields of work stress and organizational justice can be best illustrated by the moment when Adams (1963) created the theoretical construct of his famous equity theory. Adams has since then been considered to be the scholar who basically established the grounds for the field of organizational justice. In his equity theory he describes the emotional reaction to inequitable decisions as “psychological distress” (Adams, 1963). Adams’ selection of wording for the construct indicates that he had been building on the conceptualization of Selye (Vermunt and Steensma, 2005).

In the later years – as will be discussed in detail in this chapter – the organizational justice field has grown to become an independent large research field, which had not put emphasis on work stress in the mainstream of its research (Colquitt et al., 2005). Although influential scholars have long ago indicated that the reactions to unjust distributions can be interpreted as coping with stress (Greenberg, 1984 in Vermunt and Steensma, 2005), it was not until the 90’s that the integration of the two research fields became the centre of some empirical research (Zohar, 1995). The connection of organizational justice with work stress currently can be considered as one of the most exciting development opportunities of both research fields (Cropanzano et al., 2005).

In the following subchapter I present the historical roots and development path of the organizational justice research field according to the perspective of Colquitt et al. (2005). After this, I introduce research approaches (from those that attempt to connect organizational justice and work stress) that contain the theoretical constructs and concepts applicable as starting points in my research (Greenberg, 2004; Vermunt and Steensma, 2001).

4.1. Roots of organizational justice theories

The questions and concepts associated with *justice* have interested scholars since the ancient times. *Plato* wrote about justice in his *Republic* and *Aristotle* analysed what could be considered fairness in terms of the distribution of resources among individuals. Later, Christian theology integrated these ideas into religious faith, since concerns over fairness have been long manifested in both the Torah (Old Testament) and the Gospels (New Testament). The teaching of Saint Thomas of Aquinas is probably the most eminent of these works and has dominated our European cultures and thinking for centuries, while still retaining a great deal of influence today (Alford and Naughton, 2001).

During the seventeenth century, the theme of fairness once again provoked interest, as we can see in the works of Hobbes and the writings of Locke on human rights. Later on, Mill revisited the topic of justice in his work about utilitarianism (Colquitt et al, 2005). Even though there are significant differences between these philosophical and religious approaches they share a common orientation: they are all normative and prescriptive in their nature. They conceive justice to be a normative ideal when they explicitly refer to *what is fair* and what people *should do* (Colquitt et al, 2005). This orientation survives in contemporary philosophy and constitutes an important cultural and intellectual foundation for different ways of doing research, as is described later in this chapter (Cropanzano et al, 2005).

The concept of justice appeals to our moral sentiments as we encounter organizational events that need elucidation: layoffs after decades of employment, creations of large personal wealth after privatization, immense differences in compensation levels, etc. (Cropanzano et al, 2001). The at-least passing interest of classical management theorists such as Frederick Winslow Taylor and Mary Parker Follett have also been attracted to justice (Colquitt et al, 2005).

It was only in the second half of the 20th century that these social psychological processes were studied in an organizational context (Colquitt et al, 2005). At the same time, the inherently normative and prescriptive approach of ethics (Greenberg and Bies, 1992) faced unavoidable difficulties due to the moral pluralism of our age, in which the possibility of objective moral judgments is often denied (MacIntyre, 1985, Chesterton, 2004). The social scientists of the twentieth century have supplemented this 'handicapped' scholarly discourse on justice with a descriptive approach; one which concerns how a person reacts to a given outcome, procedure or interpersonal interaction. Thus the majority of contemporary theories about justice focus on how individuals perceive justice, how they consider and investigate the subjective and phenomenological appraisal of a given stimulus or situation. Within this approach something is considered to be "fair" not because it should be, but because some person perceives it to be (Cropanzano et al, 2005; Greenberg and Bies, 1992).

This descriptive orientation of social scientists about justice is reflected in a series of different disciplines. The dominant discipline is organizational psychology with an interest in workplace justice. This perspective has the potential to answer dilemmas arising from conflicting objectives in organizations, related to the tension between a concern for business and a concern for people (Barley and Kunda, 1992 in Cropanzano et al., 2001). The fields of organizational behaviour and human resource management found conceptual tools here suitable for further analysing various aspects of justice at the workplace. Employee concern about the fairness of resource distribution (such as promotion, rewards and pay) became known as **distributive justice** (Leventhal, 1976; Deutsch, 1975; Adams, 1963; Homans, 1961). The fairness of the decision-making procedures (leading to the outcomes) were referred to as **procedural justice** (Leventhal, Karuza and Fry, 1980; Thibaut and Walker, 1975). Another major concern of individuals is the nature of the interpersonal treatment received from others, was called **interactional justice** (Bies and Moag, 1986). Distributive justice, procedural justice and interactional justice were all considered forms of **organizational justice**, a term that was first used by Greenberg (Greenberg, 1987) to describe individuals' perceptions of organizational justice (Greenberg and Colquitt, 2005). In the following subchapter I will introduce the theoretical and research development of the organisational justice field based on the interpretation of Colquitt et al. (2005).

4.2. A historical perspective of organizational justice theories

According to Greenberg—often referred to as the “founding father” of the organizational justice field—a historical perspective lets us identify four waves of contribution in research and theorizing about organizational justice (Colquitt et al., 2005):

1. **Distributive Justice Wave:** In this first wave scholars focused on the subjective process of judging equity and other allocation norms;
2. **Procedural Justice Wave:** The second wave reflected scholars interest in rules that foster a sense of fairness of process;
3. **Interactional Justice Wave:** During the third wave the main attention was paid to the fairness of interpersonal treatment as a unique form of justice;
4. **Integrative Wave:** The fourth wave has includes scholars' attempts to provide frameworks that can integrate various dimensions of justice.

The following section will introduce each dimension of the organizational justice concept through some of the most significant theoretical approaches (that also reflect the field's historical development).

4.2.1. Distributive Justice

Since workers are routinely differentiated at the workplace, it can be considered inherent in the nature of the employment relationship that not all employees are treated alike. Thus it is not surprising that a concern for distribution fairness was the first that was addressed. Social scientists from the 1950s to the 1970s have investigated concerns about the distribution of rewards (eg, promotion, pay and status).

Relative deprivation

The concept of **relative deprivation** was developed by Stouffer and his colleagues based on their research on U.S. troops in World War II (Stouffer et al, 1949). They described this phenomenon based on their data about the attitudes of military personnel to promotion opportunities in the U.S. army. According to their results members of the AirCorps (who had a 56% chance of promotion) felt less special when promoted and a denial of promotion caused more frustration for them than for soldiers in the Military Police (who had a 34% chance of promotion). Building on these and some other research results, Stouffer and colleagues concluded that people's reactions to outcomes depend less on the absolute nature of the outcomes than on how they compare to the outcomes of others against whom they compare themselves. The notion of relative deprivation continued being used in Festinger's social comparison processes and was further developed by scholars (Martin, 1981).

Social exchange

Homans' concept of **social exchange** (Homans, 1961) has built on the notion of relative deprivation theory and has highlighted the importance of a rational choice by the individual. According to Homans, an actor's behaviour influences the activities of other individual(s), thus a person's help to another might be in exchange for his social approval. People over time develop exchange histories that form normative expectations that can guide decisions about the extent of help that is considered to be fair in a relationship. If these expectations are not met in a relationship, this is perceived to be unfair and will cause dissatisfaction.

Equity theory

The **equity theory** of Adams (Adams, 1963) has more fully developed the ideas in social exchange theory and became the dominant approach for analysing justice issues at the workplace over the next two decades. According to this classic theory, distributive justice is framed in terms of a ratio of inputs (eg, effort, time, cognitive resources, education, experience etc.) relevant to outputs (eg, pay, benefits, job status, promotions, opportunities for development, rewards intrinsic to the job etc.) and then a comparison of this ratio to the outcome / input ratio of some comparison others or to themselves at an earlier time (Bakacsi, 2004).

This element of comparison of other is taken from relative deprivation theory and indicates that different frames of reference will also result in different fairness judgments. When a person's outcome / input ratio ex-

ceeds that of the comparison that is made with the other, overpayment inequity is experienced (which results in feelings of guilt). In the case of underpayment inequity, feelings of anger are experienced, while both type of inequities have the common tendency to create a sense of psychological tension (distress) in the individual. The tension and dissonance created is proportional to the amount of inequity experienced and motivates the individual to fight this tension. This fundamental aspect of judging fairness using equity theory became widely known as the “equity rule” (Colquitt et al, 2001).

Adams considered his theory to be a special case of Festinger’s cognitive dissonance theory and described potential mental and behavioural reactions to inequality, all of which aim at restoring the balance in the outcome / input ratio comparison. This can be done behaviourally by altering one’s own outcomes or inputs, acting on the comparison other to change his or her outcomes or inputs or stepping out of the relationship. Re-evaluation of outcomes and inputs and choosing a different comparison other are considered to be the cognitive solutions (Bakacsi, 2004).

A later version of equity theory introduced by Walster and colleagues (Walster et al., 1973) distinguished between two forms of inequity restoration: 1) restoring “actual equity” (true modifications to outcomes and inputs) and 2) restoring “psychological equity” (involving cognitively distorting reality). Walster et al. (1973) claimed that overpaid employees prefer psychological equity restoration while underpaid people opt for actual equity restoration. Although there is evidence that both ways of equity restoration occur among these groups of workers (Greenberg, 1989), the work of Walster et al. has raised issues that proved to be significant for later research investigating the reactions of victims of organizational injustice. Particularly relevant is research which explores reactions to injustice by victims of exploitative relationships in organizational settings (Colquitt et al., 2005). Several studies have shown links between perceived inequity and negative behaviours - such as employee theft or software pirating (Glass and Wood, 1996).

Although equity theory has contributed greatly to research about organizational justice, it has received a considerable amount of criticism over time. Definitions of outcomes and inputs were argued to be too vague, since some variables (e.g, work responsibility) could fall into either category (Pritchard, 1969). The theory only considers the outcomes people receive, which are typically economic or material in their nature (Folger and Cropanzano, 2001). Adams is also criticized for neglecting the discussion on how precisely the individual chooses the comparison other or how many referent others will be chosen.

Despite criticism, equity theory has inspired a large amount of research and has become a well-established theory for evaluating distribution fairness and has brought unquestionable visibility to the concepts of justice and fairness. Earlier reviews of equity theory have investigated various dimensions of the comparison process, but the aspects have been developed in detail by Kulik and Ambrose (1992).

In general, a comparison is made on likeliness, though Kulik and Ambrose (1992) have found that sometimes dissimilar referents are chosen, representing what the individual would like to become (those referents are referred to as “standard setters”). In the self-comparison dimension, comparisons to self-present, self-future and self-past are made. Kulik and Ambrose consider self-referents as the most likely to satisfy all dimensions of the comparison process and thus refer to them as the “default referent” (Kulik and Ambrose, 1992).

Research inspired by equity theory has its primary focus on the concept of distributive justice, though it has contributed greatly to the inclusion of fairness perceptions of procedures in the literature (Colquitt et al, 2005).

Multiple allocation norms

The theory of **multiple allocation norms** has shifted interest from perceived inequity and the reactions to that by focusing on the behaviour of the reward allocators (Leventhal, 1976). Leventhal concludes that during the attempt to divide rewards, fairly different allocation norms may be followed. Depending on the primary goal of an exchange relationship it is not always appropriate to use the equity norm as the prime allocation norm. Deutsch (1975) has claimed that in the case of promoting personal welfare and development the need-based allocation rule should be applied, while the focus on harmony and solidarity should be supported by the usage of the equality allocation norm. Leventhal and Deutsch have successfully broadened the scope of distributive justice with alternative allocation norms and research supports the assumption that reward allocators combine multiple allocation norms in practice (Greenberg and Leventhal, 1976).

To sum up, we have the perceived unjust outcomes in the focus of distributive justice. Workplace outcomes that are only unpleasant or unfavourable, but do not contravene any standards or rules of justice are not a subject of the field of distributive justice (Cropanzano et al., 2005).

4.2.2. Procedural Justice

Immense interest in the concepts of fairness and justice raised by equity theory has resulted in new research in the field organizational justice and by the 1970's, studies expanded away from the traditional distributive perspective to include themes of procedural justice. **Procedural justice can be defined as the perceived fairness of process or methods that are used to decide allocation of outcomes** (Korsgaard and Roberson, 1995). Both distributive and procedural aspects of organizational justice are considered important in justice perceptions, though the latter has gained popularity due to a better ability to predict different outcomes (Cropanzano et al, 2001).

Fairness in dispute procedures

Investigating **fairness in dispute procedures** has been the primary research field that introduced the concept of procedural justice to the literature (Thibaut and Walker, 1975). The early work of these authors concentrated on legal settings and investigated the reactions of the involved parties at different stages of the dispute resolution. Thibaut and Walker emphasized the role of perceived control and distinguished between two types of this:

1) **process control** refers to the extent disputants are allowed to control the development, selection and presentation of the evidence used to resolve the dispute (before the decision is made)

2) **decision control** indicates the degree to which a disputant can unilaterally determine the outcome of a dispute (Greenberg and Colquitt, 2005).

As a consequence, two factors have been considered when investigating behaviour and justice perceptions: 1) the ability of affected parties to present evidence; and, 2) effects of this evidence on the decision stage. Based on results of their laboratory studies on hypothetical disputes Thibaut and Walker (1978) found that as long as disputants received control at the process stage they were willing to give up control in the decision state. Consequently, persons affected by the decision are more accepting of the decision if they are allowed process control (Folger and Cropanzano, 1998; Williams, 1999). Thibaut and Walker (1978) concluded that the optimal dispute resolution model places process control in the hands of disputants whereas decision control should be put in the hands of a neutral third party. The concepts of **process control** and **decision control** were introduced later to organizational studies, building on Folger's earlier concept of "fair process effect" (Folger et al, 1979) and were applied widely in the literature of participatory management and leadership. These two concepts were often referred to as "**voice**" and "**choice**" (Folger and Cropanzano, 1998).

Later researchers have recognized (Korsgaard and Roberson, 1995) that various forms of **voice** need to be differentiated in organizations; these include: 1) external (e.g, lawsuits); 2) internal (e.g, grievance procedures); 3) preventive (e.g, feedback, employee involvement programs); 4) remedial (e.g, recourse, appeals); 5) instrumental (feeling a chance of influencing the decision); and, 6) non-instrumental (having the intrinsic value of simply being heard). Research indicated, for example, that voice introduced at different chronological points positively influenced perceptions of justice (Paese et al, 1988) and that non-instrumental voice was also valued as an appreciation of input, positively influencing attitudes towards supervisors (Korsgaard and Roberson, 1995).

Fairness in allocation procedures

The findings above have been found relevant for **fairness in allocation procedures**, as was already noted by Leventhal who criticized equity theory for not dealing with issues of procedural justice (Leventhal, 1976). According to Leventhal, procedural rules are the second category of justice rules that hold in the allocation

context of organizational settings as well (Leventhal, 1980). Leventhal concluded that fairness of allocation procedures can be judged on the basis of seven distinct procedural components and speculatively derived from these components six rules of fair procedures: 1) procedures should be consistent across persons and time; 2) procedures should be free of bias; 3) procedures should be based on the collection and application of accurate information; 4) procedures should include mechanisms to correct flawed or inaccurate decisions by allowing for appeals and grievances; 5) procedures should conform to personal or prevailing values, standards of ethics and morality of individuals and subgroups involved; and, 6) procedures should ensure that basic concerns and opinions of people impacted by the allocation are taken into account. Despite spelling out these procedural rules, Leventhal insisted that due to the complexity of understanding procedures it is likely that procedures are only secondary compared to distributive concerns which arise concerning perceptions of justice, which in general may be of lesser importance than other forces motivating perception and behaviour (Leventhal, 1980).

The concepts and procedural rules of Leventhal were first been applied in later research about human resource management practices, such as performance evaluation and compensation (Folger and Greenberg, 1985). Leventhal's procedural rules were confirmed to affect perception of fairness in an array of different situations from performance evaluations to editorial review processes (Gilliland and Beckstein, 1996). Much of the early empirical testing though was to ensure that the distinction of distributive and procedural justice was not just a scholarly construct but to determine if the two actually differed in people's justice perceptions. In a piece of research by Konovsky et al. (1987), distributive justice proved to be a good predictor of job satisfaction, while procedural justice better predicted organizational commitment.

The landmark book of Lind and Tyler (1988) on procedural justice described the works of both Thibaut and Walker (1975) and Leventhal (1980) while concentrating on the effects of procedural justice on organizational outcomes like job satisfaction, job performance and compliance with organizational rules. These findings were since supported by a series of studies which investigated the effect of procedural justice perception on factors like turnover, appraisal of supervisors, trust and organizational commitment (Dulebohn and Martocchio, 1998; Sweeny and McFarlin, 1993). It was found that not only satisfaction of allocation rules but also their violation influences perceptions of justice, and that individuals at different times place more or less emphasis on different rules (Gilliland, 1993).

4.2.3. Interactional Justice

The amount and diversity of research on distributional and procedural justice has inspired researchers to investigate new aspects of the fairness phenomenon. At the end of the 1980's, scholars labelled their work as the "enactment of procedures" "interpersonal context of procedural justice" or the "human side of procedural justice" (Tyler and Bies, 1990). This indicated a rise in interest towards the social aspect of organizational justice which became widely known as **interactional justice**. This controversial component **involves the way indi-**

viduals are treated during the allocation process and how the rationale behind the process and the decision is communicated to them (Greenberg, 1993; Williams, 1999).

Fairness in Interpersonal Treatment

It was Bies and Moag (1986) who first introduced this new advance to the justice literature by focusing on the importance of the quality of interpersonal treatment. They were interested in the implementation of procedures beyond simply the way these procedures are structured. Bies and Moag (1986) developed interactional justice rules that proved to be relevant in any decision-making setting and which were clearly distinct from the procedural justice rules identified earlier by Leventhal (1980). Bies and Moag's (1986) originally formulated interactional justice rules included: 1) truthfulness (open, honest and candid communication and avoidance of any deception); 2) justification (providing adequate explanation about the outcome of the decision-making process); 3) respect (treating individuals with sincerity and dignity, refraining from deliberately being rude to or attacking others; and, 4) propriety (refraining from making prejudicial statements or asking improper questions).

Subsequent research, however, has often divided interactional justice into two specific types of interpersonal treatment. The first is labelled interpersonal justice (including justice rules of respect and propriety) and stands for the degree people are treated with politeness, dignity and respect during the execution of procedures. The second is labelled informational justice (including justice rules of truthfulness and justification) and stands for the degree people are provided information and explanation about why certain outcomes were distributed and why certain procedures were implemented (; Colquitt et al, 2001; Colquitt, 2001; Cropanzano et al, 2001; Greenberg, 1990). There is also uncertainty over the distinctness of interactional justice, procedural justice and organizational justice as a whole, as some scholars emphasized that aspects of interactional justice are only a component of the procedural justice dimension (Tyler and Bies, 1990).

Some expansions of Bies and Moag's interactional justice rules into managerial responsibilities have also indicated that these were combined with interactional justice rules at the level of practical implementation (Folger and Bies, 1989; Greenberg et al, 1991). Most of the earlier research has investigated interactional justice as a subset of procedural justice (Gilliland and Beckstein, 1996; Cropanzano and Greenberg, 1997).

An increasing amount of research, however, supports the original differentiation of Bies and Moag (1986) and investigates the independent effects of interactional justice (Bies, 2001; Donovan et al, 1998). Other studies suggest that interactional justice perceptions affect an employee's reactions to his / her supervisor, whereas procedural justice perceptions affect the employee's reactions towards the organization (Folger and Cropanzano, 1998; Masterson et al, 2000). This indicates that individuals identify the source of power and can direct different attitudes and behaviours towards different parties accordingly.

On the whole we can argue that starting with Bies (1987), much research has indicated that interactional justice has a significant effect on perceptions of fairness.

4.2.4. The integrative approach of organizational justice

In the previous sub-chapters those approaches to the organizational justice research field that aim the separation and differentiation of the various organizational justice dimensions and their respective effects were reviewed. However, a significant number of scholars have made attempts to create models that are capable of describing the integrative effects of these dimensions (Tyler and Blader, 2003; Folger and Cropanzano, 2001). According to Colquitt et al. (2005), these approaches can be grouped into three distinctive groups of conceptualizations: (1) counterfactual conceptualizations; (2) group-oriented conceptualizations; and, (3) heuristic conceptualizations. In the following pages I describe those approaches within these conceptualizations that contain particularly relevant theoretical concepts related to the exposure of the discourse on organizational justice.

Fairness Theory

Fairness theory attempts to give an explanation to those situations when an authority (supervisor) is held accountable for an injustice (Folger and Cropanzano, 2001). According to this theory, blame will be put on the supervisor when three counterfactual questions (from the perspective of the subordinate) are answered with a yes (Colquitt et al., 2005; Cropanzano et al., 2001).

1. **“Would condition”**: Would I be in a better position if a different decision had been made or if the decision process was different? (There exists a more beneficial alternative.)
2. **“Could condition”**: Could the supervisor have made another decision? (The supervisor had other alternative courses of action.)
3. **“Should condition”**: Should the supervisor have behaved differently? (Moral and ethical standards were violated.)

Group Engagement Model

The group engagement model looks for the answer to the fundamental question of why individuals make efforts that help groups reach their goals. Tyler and Blader (2003) have found, based on their research, that psychological engagement towards the group is to a great extent determined by the perception of organizational justice. Group engagement is an intrinsic motivation that is strongly influenced by both forms of distributive justice and procedural justice. The forms of these justice aspects originate and manifest through supervisors and the organization and can drive the identity judgments of group members. These forms of justice can determine for example prime in the group or identification with the group. According to the main statement of the model,

cooperation within the group deepens on the “identity information” received from the group. However, this “identity information” can be derived from an appraisal of procedural justice within the group (Colquitt et al. 2005).

Uncertainty Management Theory

One of the most significant directions of organizational justice research over the last years has emphasized the simplifying nature of psychological justice judgments. Lind (2001) conclude from their research that the acceptance of management instructions is based on justice judgments determined by heuristics.

Uncertainty about trust is placed in the centre of investigations within this approach; however, studies have shown that organizational justice supports coping with other forms of uncertainty as well. Laboratory experiments indicate that the consequences of violating justice are more severe in the case of uncertainty. From another perspective, we can sum up the main argument of uncertainty management theory in the statement that employees use fairness as a shoulder to manage their reactions to uncertain situations (Colquitt et al., 2005).

4.3. Models which concern the relationship of work stress to organizational justice

The portrayed approaches to organizational justice either emphasize the separation of justice dimensions and the differentiation of the particular effects of these aspects or place conceptualizations in the centre of their investigation that can be explained and understood through the integration of justice dimension and the exposure of their combined effects. The new wave of integrative organizational justice research has provided an opportunity for researchers to follow in the steps of Adams (1963) and connect the research fields of work stress and organizational justice.

In the new wave of linking organizational justice to work stress Zohar’s (1995) paper was a significant milestone. Zohar extended role stress theory with the concept of role justice and, despite a significant amount of criticism his theoretical concept has received (Cropanzano et al., 2005), was successful in raising awareness and inspiring a series of scholars to continue research in this direction. Within a few years, efforts (and their results) to link the two theoretical concepts showed great diversity. In the following paragraphs I will apply the classification of Cropanzano et al. (2005) to illustrate the most significant approaches that aim to connect work stress and organizational justice. After introducing these models to the reader I evaluate them also from the perspective of how much they are appropriate to become starting points for exposing the discourse on workplace problems and the related power structures, social relations and suffering of employees and to initiate emancipatory organisational interventions.

One of the most frequently applied linkages between organizational justice and work stress is to consider organizational injustice a stressor itself. According to this approach, organizational injustice is just like any other stressors (e.g. noise or overwork) and thus it can directly cause stress (Cropanzano et al., 2005). De Boer et al. (2002) found for examples in his research on safety guards that distributive justice and procedural justice predicted equally well some physiological consequences.

Another approach looks at organizational justice differently, and considers all different stressors as subjects of organizational justice perceptions. In this sense organizational justice is a mediator in the work stress process (Cropanzano et al., 2005). In line with the transactional model of Lazarus and Folkman (1984) they emphasize the importance of individual appraisals and especially the individual justice judgments. This approach has empirical support as well, since Elovainio et al. (2001) have found that employees' control over work evokes some justice judgments, which eventually determines the level of strain the employees experience.

The third major model and approach for explaining the relationship between organizational justice and work stress considers organizational justice to be a moderator in the stress process. The practical message of this model is that stressors hurt more and have more negative consequences if they are also perceived to be unjust by the employees. This argument was only partially supported through the empirical studies of Zohar (1995).

The differences between these conceptualisations become easy to grasp with the help of simple flowcharts, often used in the explanation of the relationship of work stress to organisational justice.

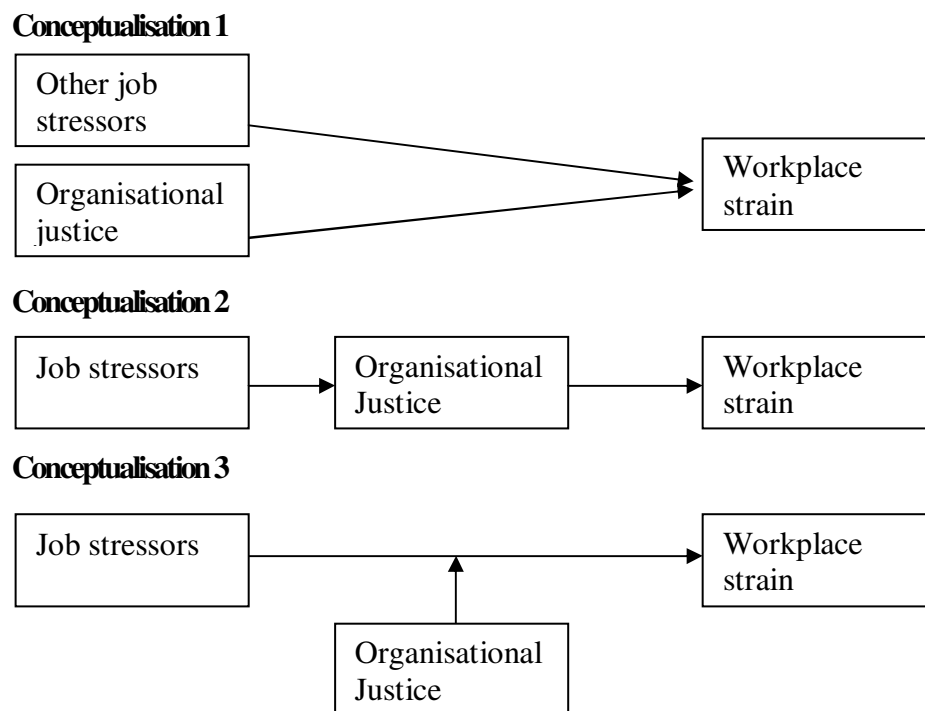


Figure 4.1 Different conceptualisations of the relationship of work stress to organisational justice (based on Cropanzano et al., 2005 pp. 66-69.)

Thus we can conclude that the investigation of the relationship of work stress to organisational justice is carried out according in accordance with various logical postulates (Cropanzano et. al, 2005), in which organisational justice can take the role of a stressor itself (Conceptualisation 1), a mediator (Conceptualisation 2) or a moderator (Conceptualisation 3).

In Chapter 3 of the thesis I have explained in detail that one of the starting points for my research is to define work stress as an interactive process and therefore the cognitive appraisal model of Lazarus (1991) is the most suitable for understanding the connection to organisational justice. For this reason, from among the various theories and models which strive to connect the two concepts, I investigate in detail the ones that also use Lazarus' theory of stress as the basis. There are two significant models of this kind which connect Lazarus' theory to organisational justice. One of them is the very influential model of Greenberg (2004) conceptualizing organisational justice as a moderator, while the other one is that of Spell and Arnold (2007) which conceptualises different dimensions of organisational justice as both mediators and moderators Greenberg's model (2004) is depicted in the figure below:

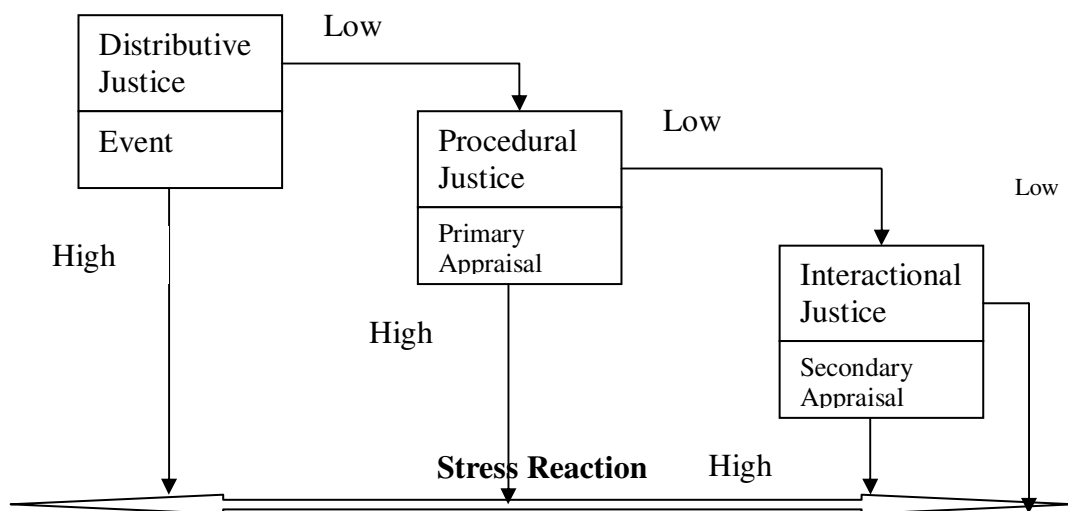


Figure 4.2. Summary of relationship between organizational justice and stress (Greenberg, 2004, p. 358)

As explained earlier, Greenberg (2004) uses the interactional model of Lazarus as a basis for his combined model. He connects the two cognitive appraisal phases of Lazarus with his own conception of organisational justice, in which he differentiates between distributive, procedural, and interactional justice dimensions. The main point of his theory is that the level of stress (reaction) is determined by all three aspects of justice. Greenberg (2004) emphasizes the importance of procedural justice concerning the phase of the primary appraisal, while he connects the secondary appraisal to the aspect of interactional justice. At the same time, he points out that all these are only relevant if there is an organisational event that is considered to be unjust from the distributive perspective.

In contrast to the model suggested by Greenberg, Spell and Arnold (2007) hypothesize in their research that within the stress process different stressors or hazards that can cause stress (Palmer et al., 2004) may take the role of moderators. According to their model, presented below, different dimensions of organisational justice function as mediators, or respectively, moderators:

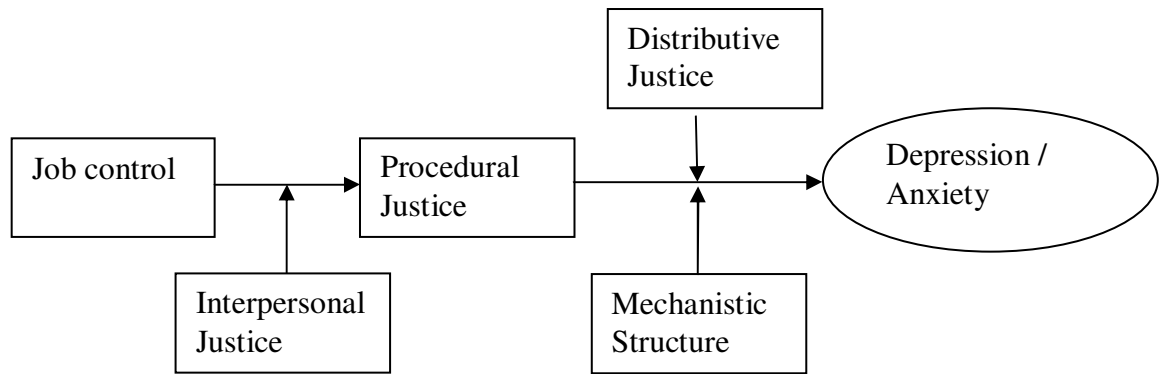


Figure 4.3 The hypothesised relationship of justice, job control and organisational structure to the psychological well-being of employees (Spell and Arnold, 2007, p.732.)

Spell and Arnold (2007) were able to convincingly prove, with the application of cognitive appraisal theory, that procedural justice could minimize psychological distress in the primary appraisal role. In this model we clearly see a difference to the conceptualisation of Greenberg (2004), since procedural justice does not remain in a moderator role but in a mediating role instead.

As we can see from the descriptions above, several alternative models aim to explain the relationship of organizational justice to work stress with the help of cognitive appraisal theory. However, none of these models can be generalized in this way, as most likely different stressors form different relationships with organizational justice (Cropanzano et al., 2005). I consider this relationship to be much more complex than that described with the help of the cause-effect model used by Greenberg (2004) and Spell and Arnold (2007). One of the main deficiencies of these models is their conceptualisations of justice as a multiple dimension phenomenon and the separate investigation of the role of these distinctive dimensions.

This is the mainstream quantitative approach of organisational justice research and we can find several other studies that argue for this. Lambert, Hogan and Griffin (2007), for example, investigated the distinct dimensions of distributive justice and procedural justice and came to the conclusion that both of these affect job stress negatively, while it is only procedural justice that can impact job satisfaction positively. In a later study Lambert et al. (2010) attempted to explore the relationships of these dimensions to life satisfaction, burnout and turnover intent. Once again they found that both of these dimensions are inversely associated with negative organisational consequences (burnout and turnover intent), while procedural justice influences life satisfaction positively (Lambert et al., 2010).

Considering the limitations of studies that only look at the distributive and procedural dimensions of organisational justice, it can be seen as a significant improvement in the research approach that other aspects of justice are also included. Greenberg himself, as already indicated in his earlier model (Greenberg, 2004), did not neglect the dimension of interactional justice for understanding the relationship of justice to adverse health effects. In his research on nurses, he found a strong buffering effect of interactional justice on reactions to underpayment and insomnia (Greenberg, 2006). An even more holistic approach was implemented in the research of Judge and Colquitt (2004) who investigated four aspects of organisational justice (distributive, procedural, interpersonal and informational) and found that it is the procedural and interpersonal dimensions of justice that have the strongest relationship with stress and these are mediated by the effects of work-family conflict (Judge and Colquitt, 2004).

All these studies which explore the connections of work stress to organisations justice seem to have some significant limitations. They strive to understand the various dimensions (the parts of the whole), but in some way seem to lose their ability to grasp the whole in the end. For this reason I find integrative approaches to organisational justice (Folger and Cropanzano, 2001) to be particularly promising, as they do not distinguish between dimensions of the phenomenon but conceptualize in their fairness theory justice perceptions as cognitive answers to the “would have”, “could have” and “should have” questions. The approach of fairness theory harmonizes nicely with the cognitive appraisal theory of Lazarus, as both of these conceptualize processes (namely the work stress process and the organisational justice perception process).

Another aspect of work stress and organisation justice research I would like to further develop in my dissertation is the capability to reach into the heart of organizational problems, the collective construction of work stress or the dependence of organizational justice perceptions on power structures in organizations. This is the reason why I utilise a qualitative research approach, using focus group and in-depth interviews that are able to explore individual interpretations and organisational discourses (Vicsek, 2008; Harkness et al., 2005).

Summarizing my conclusions about different theories, models and studies of the relationship of work stress to organisational justice, I decided to proceed with my research as follows:

- Using the cognitive appraisal model of Lazarus as the main work stress model element of my research conceptualisation - similarly to the research of Greenberg (2004) and Spell and Arnold (2007).
- Exploring the relationship of work stress to organisational justice, not through distinctive dimensions of organisational justice, but according to the integrative approach of fairness theory (Folger and Cropanzano, 2001).
- Building the research design not on large representative samples and quantitative research methodology, but developing instead a qualitative research approach that is able to explore the local realities of

making social worlds and the developing organisational discourses related to work stress (Harkness et al., 2005).

4.4. Summary

In the chapter on work stress and organizational justice I have described the **philosophical roots** of organizational justice and reviewed the most important approaches in the research field.

During my review I have given an extensive introduction to the theoretical constructs of **distributive justice** through the model of relative deprivation (Stouffer et al., 1949), the theory of social exchange (Homans, 1961) and equity theory (Adams, 1963). Following this I described the main aspects of the **procedural justice** dimension based on the works of Thibaut and Walker (1975) and reflected on the considerations of Leventhal (1976) and Lind and Tyler (1988) regarding fairness in allocation procedures. Regarding **interactional justice** I highlighted the distinction of **interpersonal justice** and **informational justice** (Bies and Moag, 1986).

In the next part of the chapter I portrayed the intention of various scholars to integrate the different dimensions of organizational justice. Discussing the integrative wave of organizational justice research I touched on **fairness theory** (Folger and Cropanzano, 2001) and **supervisor accountability**. I highlighted the **group engagement model** (Tyler and Blader, 2003) and the **identity forming** role of justice perceptions in the group. After this I used the **uncertainty management theory** (Lind, 2001) to show those research results that find in organizational justice a coping resource to fight against uncertainty at the workplace.

In the final section I reviewed the new approaches aimed at **connecting the concepts of organizational justice and work stress**, which currently address this relationship in very diverse ways, portraying organizational justice as **stressor, mediator or moderator** in the work stress process. I have described some concrete examples of models which are designed to connect the two concepts based on the cognitive appraisal model of Lazarus (Greenberg, 2004; Spell and Arnold, 2007) and I argued that there are deficiencies in the approaches that investigate the dimensions of organisational justice separately (Lambert et al., 2010; Lambert, Hogan and Griffin, 2007; Judge and Colquitt, 2004)

As a conclusion, I have indicated that I will build my research design partly on the cognitive appraisal model, just like Greenberg (2004) and Spell and Arnold (2007) did, but apply to this model of stress the integrative approach of fairness theory (Folger and Cropanzano, 2001) and use a qualitative research methodology capable of exploring the creation of social worlds.

5. Methodological framework of the research: presentation of the research plan and the applied data collection and analytical methods

In the next chapter I present my research plan and the applied research methodology following the recommendations of Miles and Huberman (1994) and Maxwell (1996). According to these I introduce step by step each element of the research structure to my readers. The theoretical frameworks of the research, the research objectives and research questions, the detailed elaboration of the data collection and analytical methods are the results of an iterative process. The elements of the research plan are not built onto each other according to linear cause-effect logic. They can instead be described by a mutual and multiple interdependency as found in Maxwell's interactive model (1996) and so they make up together an integrated whole.

Before presenting the research plan and methodology of my doctoral dissertation I consider it important to mention that my research carried out at the chosen organisation (from now on called Factory X) is not without premises. Two years before the current collection of data the company was part of a quantitative research conducted by a research team I was also part. At the focus of our research done in cooperation with the colleagues of the Institute of Behavioural Sciences, Semmelweis University, stood the quality of life and health of workers. The methodology of this research was largely built on data collection through questionnaires, although some interviews were also conducted at selected organisations.

The original intention of my thesis was to combine the advantages of the objectivist and quantitative methodology of this earlier research with my own subjectivist, qualitative research approach through a sequential multiparadigm research methodology (Lewis and Grimes, 1999; Lee, 1991). However, when I got in touch repeatedly with the research field, I have recognized that another form of multiparadigm approach could be the more suitable to my research goals. This approach handles parallel the critical and postmodern readings of the research (Alvesson and Deetz, 1996) and therefore is referred to as a parallel multiparadigm research (Hassard, 1991). This methodological approach was already broadly introduced in the second chapter of my thesis.

I was affirmed by two opponents of my dissertation proposal, Dr. Howard Kahn and Dr. Árpád Baranyi that the multiparadigm analysis of workplace stress and organisational justice is a valuable research initiative. However, the re-examination of my original research plans became necessary since the data collected at the end of 2008 through questionnaires filled out by workers of Factor X was not sufficient on the level of this organisation for a proper statistical analysis that would meet the reliability and validity standards of a doctoral dissertation.

Accordingly, the results of the earlier research conducted in Factory X cannot be considered as a part of the research presented in my doctoral dissertation. At the same time my first experience with this research field

was undisputedly the most important inspiration for my doctoral research. It has also enriched me with a series of important methodological insights, that I have used through self-reflection to design the specific elements of my research plan introduced below.²⁹

At the beginning of the presentation of my research plan I find it important to summarize how my methodological choice fits the theoretical framework applied in my research. This will be followed by a detailed description of the *research goals*, which I have already briefly mentioned in the first chapter, and the *initial research question* which follows from my research aim. After this I will cascade my initial research question into sub-questions fitting the applied multiparadigm approach.

Given the iterative characteristics of my qualitative research the repeated visit of the research field had a significant impact on these research questions. I have found out only in the research field that a part of my originally formulated research questions were built upon false assumptions on the past period of the factory. As a consequence these questions became impossible to apply for the case of Factory X. In the largest part of this chapter, which presents the methodology of the research, I outline the characteristics of the *qualitative case study method*, discuss the features of my role as a researcher, and describe in detail the methodology of the critical and postmodern reading. Afterwards I present the principles of sampling in the research, the way of selecting the research unit and introduce my readers to the research field and the subjects of the research. After a review of the different channels of collecting data I will move on to the empirical methods chosen for data analysis. I will also discuss the various methods applied to ensure the validity, reliability and, to a certain extent, generalizability of my qualitative research. In the final part of this chapter I will show some important practical details about the execution of my empirical research, which are meant to help the readers in judging the validity and usability of the thesis results.

5.1. Summary of the theoretical frames of the research

In the second chapter of my dissertation I have already presented my arguments for the multiparadigm approach of my research. The aim of the next subchapter is primarily to summarize the applied theoretical framework containing critical and postmodern approaches and connect these to the chosen research methodology.

The main point of my empirical research approach is that with the help of the chosen research methodology I intend to draw on considerations and findings derived from both the critical and the postmodern reading

²⁹ Due to space restrictions of the final thesis work I do not have the opportunity to describe in detail all the methodological learnings from the previous study. Without any intention to provide a complete listing, I provide here the main areas in which it helped me to develop my research plan: (1) identifying the most important organizational members to ensure support of the research, (2) timing of the data collection, (3) sampling of deep interviews and focus groups, (4) application of semi-structured interview outline, (5) most important organizational stressors and health hazards.

of organisational theory (Primecz, 2008; Alvesson and Deetz, 1996). My personal conviction as a researcher striving for truth, leads me into the direction of not combining or integrating these two approaches, but rather keeping the tension between them by trying to handle them at the same time. As a consequence of this approach, and following the recommendations of Alvesson and Deetz (1996) I leave the tension between the two readings unresolved and intend to create a richer understanding of reality this way. The critical and postmodern approaches are similar in being sensitive to problems of social relations and to the birth and subsistence of the modern forms of workplace dominance. They both criticize the kind of arguments that place the means before the ends. At the same time the two readings also give some very different answers. Critical theory urges for planned, collective actions against the power structures and dominance manifested in large social systems. In contrast to this, the postmodern approach places the local action, the ability to respond and „the philosophy of the presence” in its centre (Alvesson and Deetz, 1996).

This form of research motivation is reflected in both the specific research goals and research questions, which are presented in detail below. Due to the duality of the multiparadigm approach, the research goals and questions of the critical and postmodern readings require and build on to a different extent the preliminary theoretical concepts and constructs (Alvesson and Deetz, 1996):

- In the critical reading of my research, I would like to strongly build on the theoretical definitions, constructions of the already available functionalist and objectivist research, and use as starting points the concepts of key work stress and organizational justice models. With the help of these, I try to identify the important elements of a mind map, which describes the connections of work stress and organizational justice. According to my understanding these are portrayed more as embedded organizational processes and thus I will make an attempt of exposing the factors leading to the suppression, distress and unnecessary suffering of workers. In the critical reading the personal consequences of these power structures and organizational process are placed in the centre. I will focus on the existential defencelessness of the workers, the hindrance of human development in multiple dimensions (Alford-Naughton, 2004) and the corrosion of character (Sennett, 1998).
- At the same time in the postmodern reading of my research, I will be a „moderate consumer” of the above-mentioned theoretical concepts and constructs of work stress and organizational justice. My attention will be geared towards the generative power of thinking and linguistic expressions. I will focus on the organizational discourse that comes into being through communicative actions of the organizational members (Hassard and Kelemen, 2002; Alvesson and Deetz, 1996, Pearce, 2004). Thus, I will search for the kind of answers that help us understand how the different actors in the organization create their own social reality through their communicative actions, individual and social ways of giving meaning to events.

5.1.1. Critical theory: work stress and organisational injustice, as the apprehensible forms of the oppressive social structures causing suffering in society

The starting points of the critical reading of my research are those workplace problems, which the employees of the studied organisation frequently perceive as dominated by workplace stress and injustice, and which are sources of daily suffering for them. In this approach I focus mainly on the manual workers and to some extent on the middle managers, because they represent that most defenceless layer in the organisation that suffer the harmful consequences of workplace problems to the highest degree. With the help of the qualitative methodological approach, among the effects of workplace stress mainly the damages in physical and mental health and the undesired emotional states of the workers are the effects that can be best captured.

In the critical reading of my thesis I explore the patterns of these harmful consequences and try to unveil the deep structures relevant in their development. I pay special attention to the understanding of social relations and to the exploration of power relations and contingent oppressive mechanisms. Examining a local reality experienced by people working at Factory X, I also try to develop conclusions about how the social tendencies, recognized and accepted roles, modes of exercising power and attitudes effect the situation, including the physical and mental health of the workers. From the scientific field of workplace stress research I use the terms stress, stressor and coping and their earlier presented definitions (Kahn and Byosiere, 1992) as a theoretical starting point (Kahn and Byosiere, 1992). From the previously presented workplace stress models I will build mainly upon the cognitive appraisal theory of Lazarus and Folkman (1984) which fits particularly well with my research approach considering workplace stress primarily as a process. Beside this I will also base my work upon the job control concept which was originally formulated by Karasek and Theorell (1990).

In my thesis I will proceed from the developments of the integrative approaches to organisational justice in approving the importance of the distributive, procedural, interactional, interpersonal and informational dimensions and conceptual constructions identified in the scientific field of organisational justice. Thus I will emphasize the interaction and the combined effects of the justice dimensions (Colquitt, Greenberg and Zapata-Phelan, 2005). Among the models reflecting the integrative approach of organisational justice, in my thesis I build mostly upon the fairness theory developed by Robert Folger, at the centre of which stand the moral principles and responsibility taken for the action (Folger, Cropanzano and Goldman, 2005).

Among the different theoretical approaches that combine the themes of workplace stress and organisational justice (Cropanzano et al, 2005) two models have given important inspiration for me. One of these is the model found in the classic article of Greenberg (2004) and the concept of Spell and Arnold (2007). Both models explain the formation of the workplace stress based on the cognitive appraisal theory of Lazarus. Another shared characteristic of the two models is that they connect the different dimensions of organisational justice to the primary and secondary appraisal stages of Lazarus' theory. According to these two models the primary appraisal

in the model of Lazarus is connected to the procedural and distributive dimensions of justice, while the secondary appraisal is relevant for the interactional and interpersonal dimensions of justice (Spell and Arnold, 2007; Greenberg, 2004). Contrary to these approaches, in this thesis I will emphasize the problems associated with the separation of organisational justice dimensions. Thus I will search for the possibilities of connecting the integrative approaches to organizational justice to the process perspective appearing in the cognitive appraisal theory of stress (Lazarus, 1984), primarily by building on the results of the fairness theory (Folger and Cropanzano, 2001). In connection to the consequences of workplace stress and organizational justice processes I also use the ideas of Sennett (1998) on the corrosion of the character and the integral human development model of Alford and Naughton (2004).

The exposure and unveiling of factors causing physical and mental health damages, suffering and anxiety of the workers, built upon models and concepts of organisational justice and workplace stress, did not prove to be fully satisfactory in my attempt to get an exhaustive understanding of the local social reality and development of social relations. Those important perspectives of the developing reality, which were not efficiently explorable in this way, directed my attention towards the meaning-giving processes of organisational members and to the organisational discourses, embedded in which the series of communicative actions take place.

5.1.2. Postmodern reading: workplace stress and organisational justice, as social reality created by series of communicative actions

The examples of qualitative research, like those carried out with the help of discourse analysis on work stress (Harkness et al, 2005, Kinman and Jones, 2005) and my experiences collected in the research field, inspired and affirmed my ambition that in order to reach to a deep understanding of organisational reality it is necessary to explore the series of communicative actions influenced by organisational discourses and meaning giving. In contrast to the critical reading of my thesis, the postmodern reading will not be built on a priori theoretical constructs like the stress concept, justice theories, personality theories or ideas about suppression and power. In this reading I concentrate on the communicative action itself, as a part of existing reality that creates the social world around us. In order to accomplish this I invoke the research methodology and ideas of Pearce (2006), who defined communication as the “two-sided process of coordinating actions and making/managing meaning” (Pearce, 2006, p.8). Meaning making and meaning management takes place in the world of stories, while the coordination of actions is part of the world of the events (Pearce, 2006). The methodology of Coordinated Management of Meaning,³⁰ created by Pearce, has the uniqueness compared to other communication perspectives that it considers the coordination of actions also a part of the communication. Furthermore CMM often investigates the actions first in the course of the research and only then the stories and interpretations concerning them (Pearce, 2006). The postmodern analysis and reading of my thesis will be largely built on the perspective of CMM, and

³⁰ From now on abbreviated in the thesis as CMM.

therefore I will next briefly sketch the origins, evolution and connections of CMM to my organisational theory assumptions and research objectives. In later subchapters of research methodology and empirical results, I will also present the research framework and analytical repertoire provided by CMM. Pearce (2006) demonstrates the connection of CMM to other methodological approaches using the figure below:

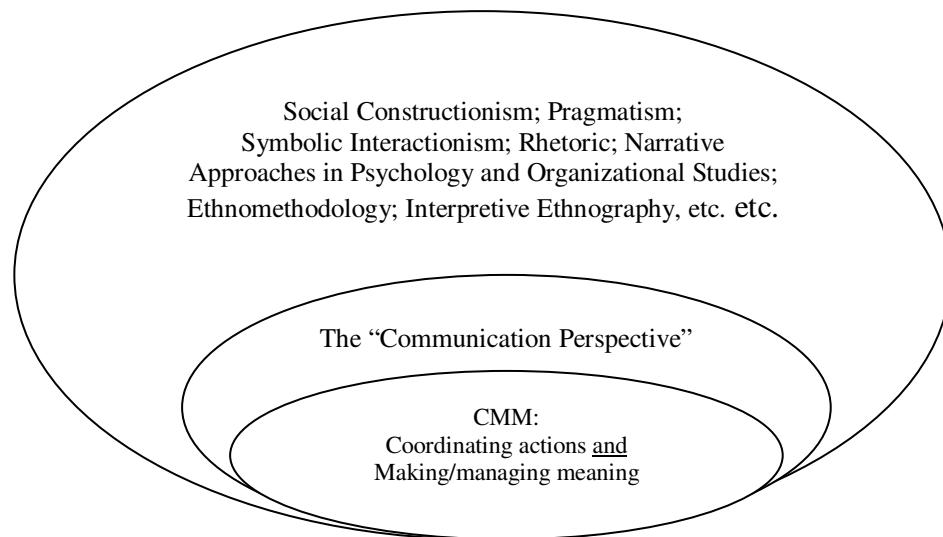


Figure 5.1 CMM and its conceptual cousins (Pearce, 2006 p.5)

The methodological approach of the CMM is built mainly upon the ideas of Barnett Pearce and Vernon E. Cronen (Pearce, 1989; Pearce and Cronen, 1980) who were looking for the answer to the question of why undesired negative events recur in personal relationships (Cronen, Pearce, Snavely, 1979). In the course of the continuous development of the approach Pearce and Cronen developed their idea in different directions (Cronen, 2004). Throughout the years several researchers and practical experts enriched the methodology with new approaches and tools. In my dissertation I would like to join the group of researchers and consultants who use the methodology of CMM, who are inspired by Barnett Pearce and whose research results connect to the line of thought lead by him (Pearce, 2006).

Originally CMM was formulated as a theoretical and methodological approach, which was designed to understand complex family systems as the main application field. The authors did not develop a systematic model adapted to the world and discourses of organisations; though the approach of CMM has been applied increasingly in this context over the last decade (Broadfoot, Deetz and Anderson, 2004). Pearce and his co-workers believe that the cultural diversity deriving from the characteristics of the postmodern era, the differences in convictions, value-systems, lifestyles affect all societies and communities. Communicational patterns have to adapt to the challenge deriving from this pluralism. Out of this "wonderfully chaotic" period (Pearce, 2004 p.36) it is not only relativism and fanaticism that offer a way-out, but also increasingly significant real dialogues (Berger,

2001 in Pearce, 2004). For the difficult dialogues within societies of our era, new communication forms are needed and CMM tries to help in finding these by the perspective and methodological tools it offers.

It can be concluded from the above that although CMM started as a descriptive research methodology in the area of interpersonal communication, thanks to the development of its analytical tools a new side of it has developed. This enabled the research applying CMM to develop a specific, “immanent critic” based on the values and goals of the participants in the communication events and not based on external, or normative ideas (Pearce, 2004, p.37). This has developed the research perspective and methodology of CMM into a practical theory and methodology that can be applied for improving personal and organisational communicational patterns (Pearce, 2004).

This way the methodology of CMM fits perfectly with my chosen multiparadigm organisational theory approach, as it is suitable for the parallel presentation of findings and conclusions deriving from the critical reading and the postmodern reading of the research. This research approach is recommended by Alvesson and Deetz (1996) and I also agree with their arguments that critical approaches should be considerate to the findings of postmodern readings (e.g. the importance of cultural conditions), while the postmodern approaches need to be sensitive to conflicts and critical conclusions that are indispensable in terms of practical application.

My goal with the postmodern reading of the research is not to relativize the results and statements of the critical reading; on the contrary I would like to contribute to a deeper understanding of the development of suppressing social relations and suffering at the workplace. It is my conviction that the two readings together can be a better basis for developing improvement initiatives and change interventions than any of them on their own. The linguistic, concrete and local orientation of CMM, concentrating on the series of communicative actions in the organisation, represent the postmodern approach in my thesis.

5.2. Research goals

I have already presented my research goals in the first chapter of my doctoral dissertation and in the summary of the theoretical frameworks above. In the second chapter of the thesis, introducing the organizational theory background of my research work, I have given a detailed explanation of how the practical and emancipatory forms of cognitive interests in scientific work identified by Habermas (Habermas, 1972 in Willmott, 2003), provided a driving force for my research. These researcher motivations and ambitions— among which we can distinguish **personal, scientific and practical** goals according to the classification of Maxwell (1996) — drive the choice of the theoretical background, the formulation of research questions and emphasize the importance of specific research results both concerning the development of new theoretical models and practical applications.

The **personal research goals** and intentions concerning the research topic and applied methodology are very significant in the early phase of the research work, and the researcher must commit oneself to them. In

terms of the successful execution of the research it is a prominent and important moment when the researcher transcends himself and instead of doing the research for himself, he or she commits to a research project that serves others by implementing a kind of self-transcendent act (Frankl, 1989). Making this conscious choice is a crucially important point, because finding the personal research goal and commitment develops moral responsibility and emotional obligation in the researcher that strongly influences all elements of the research process.

My initial personal intentions were dominated by the emancipatory interests deriving from my own negative work and life experiences. In the beginning I wanted my research to contribute to the unveiling of workplace domination and exploitation, so that the sufferings of employees can be decreased. After repeatedly getting in touch with the research field and the stakeholders of the investigated organization the strong critical edge of my research interests became slightly more moderate. Thus the **scientific goal** of my thesis work is to create an organisational study which contains a critical reading and a postmodern reading of the dominating social structures, their development and suffering at the workplace, and this way provide a better understanding of the work stress process, discourses and perceptions of justice. My initial ambition to reveal domination at the workplace and improve the situation of suffering and defenceless workers was supplemented with the increased interest in understanding how the members of the organization create the structures of social reality through their own communicative actions and meaning making. Looking at the research from this perspective, instead of victims and perpetrators, I also became able to see people not understanding the actions and communications of others, imperfect humans, who together create a social reality that none of them really desired. My dissertation is also meant to decrease the shortcomings of the Hungarian work stress and organizational justice research carried out with qualitative methodology. This multiparadigm thesis work, looking at the themes of both work stress and organizational justice and containing a critical and postmodern reading, will also be a unique research approach from an organisational theory perspective in Hungary. Among the analytical tools of the dissertation the application of CMM methodology is also a novelty both in the field of work stress and organisational justice research and among organisational studies in Hungary.

The **practical goal** of my research, however, exceeds the scientific ambitions of my thesis, because I clearly want to support members of the investigated organization in their efforts to develop and improve communication with each other. I would like to contribute to the process in which the possible intervention points of the organizational structure, culture, technology, and constructed social reality are identified for these changes and developments. Based on these experiences my long term practical goals also include the establishment of civil organisations or institutions that foster improved cooperation between managers and workers.

Based on the above descriptions the primary goals of my research can be summarized as follows:

Scientific (research) goals:

1. Exploration of the relationship between the work stress process and the organizational justice perceptions.
2. Unveiling the social structures at the workplace that are oppressive and causing sufferings and revealing the communicative actions and meaning-giving that create them.

Practical goals:

1. The identification of development points and opportunities in the investigated organisation, that can become the starting points of changes and interventions that eliminate unnecessary suffering and negative consequences on health at this workplace.
2. Collection of the basic knowledge and experiences needed for the establishment of civil organisations or institutions that foster improved cooperation between managers and workers.

5.3. Research questions

In the previous subchapters I have presented the theoretical framework of my research, research interests and intentions together with the fitting scientific and practical goals. I consider the specification of well-defined research questions based on these ambitions and goals a very important step in the development and concretization of my research plan.

Firstly I will formulate the primary research question of my thesis, then I will share with my readers further sub-questions based on the principles of the different research paradigms (critical and postmodern). All these sub-questions point in the direction of answering the fundamental research question and meeting the scientific and practical goals of my research. The primary question of my doctoral thesis is the following:

How are workplace stress processes and organisational justice perceptions connected to each other in the case of Factory X, and how are the “deep structures” of society and the series of communicative actions in the factory contributing to the development of these?

Based on this central question of my thesis, first I will formulate those sub-questions inspired by the critical reading of the research, which intend to serve the defenceless workers of Factory X:

C1: How are work stress processes and organisational justice perceptions affecting the physical and mental health of workers?

C2: Which accepted and never questioned deep structures, determine the work stress processes and organisational justice perceptions and how?

Looking at the questions of the critical reading above (C1 and C2), it is striking that they build very strongly upon the theoretical concepts known by me, my personal assumptions and my external critical perspective formulated outside of the investigated organisation.

In the course of conducting my research I was convinced that by answering these questions with the critical perspective I can only grasp one specific aspect of the local reality of Factory X. In order to enrich this understanding, I turn for help to the communicational perspective of the “linguistic turn” which is applied in postmodern research approaches. The second reading of my thesis was inspired by this perspective, and instead of building on *a priori* concepts I have formulated research questions directed at the developing organisational discourse and the creation of the social world in Factory X.

PM1: How do the decisions and actions of Factory X stakeholders and the different interpretations and meanings given to these create the undesired social world of suffering?

PM2: What role do organisational discourses play in the creation of the social reality and the series of communicative actions in Factory X, and how could these be used to improve work stress processes and local social relations?

In order to formulate the best fitting questions to my research goals I have applied the principles and ideas of two different research paradigms. Thanks to this multiparadigm approach and the different kind of research questions we can hopefully reach a richer understanding of Factory X. Analysing the case from more perspectives serves the purpose of making each research reading more fruitful by the other, and at the same time improving the chances of developing more relevant, practical and concrete interventions at social, organisational or personal levels.

5.4. The research methodology

5.4.1. The Case study method

Interestingly, Harkness et al. (2005) writing about work related stress, while Colquitt et. al. (2005) writing about organizational justice both reach to a very similar conclusion, namely that during the **discussions about workplace problems**, sooner or later we always get to these theoretical constructs. Trusting these conclusions, the wisdom and experience of these researchers and following the specific proposal of Harkness et. al. (2005), I

have decided to carry out my research with case study methodology and to place in the focus of my research those stories, narratives and personal consequences that the members of the organization define for themselves as **workplace problems**.

It is characteristic of the case study methodology that it can be used for the achievement of different research objectives, because it is capable of both theory-building and deeper understanding of local reality (Yin, 1994 In: Gelei, 2002). In connection to the different approaches using the case study method Maaloe (2010) has identified three basic approaches: Theory Testing, Grounded Theory and the Explorative-Integration.

The research which is done by the case study method can be aimed at the exploration of one or more cases, while choosing the case and the interpretation of the case is an extremely important research decision. The case can be looked at as a system which has clear boundaries in time and space, and it is chosen by a researcher because he believes that his research question could be answered through that case (Stake, 1994 In: Beck-Biró, 2009). According to the holistic approach, due to the broad interpretation of the case, it can be understood as a location, as an action or even as an individual person (Creswell, 1998 in: Beck-Biró, 2009). The case study method provides an opportunity to explore the relationship between the cases and also between the case and the context. It also gives us the opportunity to handle cases as embedded analytical units (Yin, 1994 in Beck-Biró, 2009; Maaloe, 2003). Accordingly, in the field of organisational research the application of the case study methodology can be classified as follows (Maaloe, 2010):

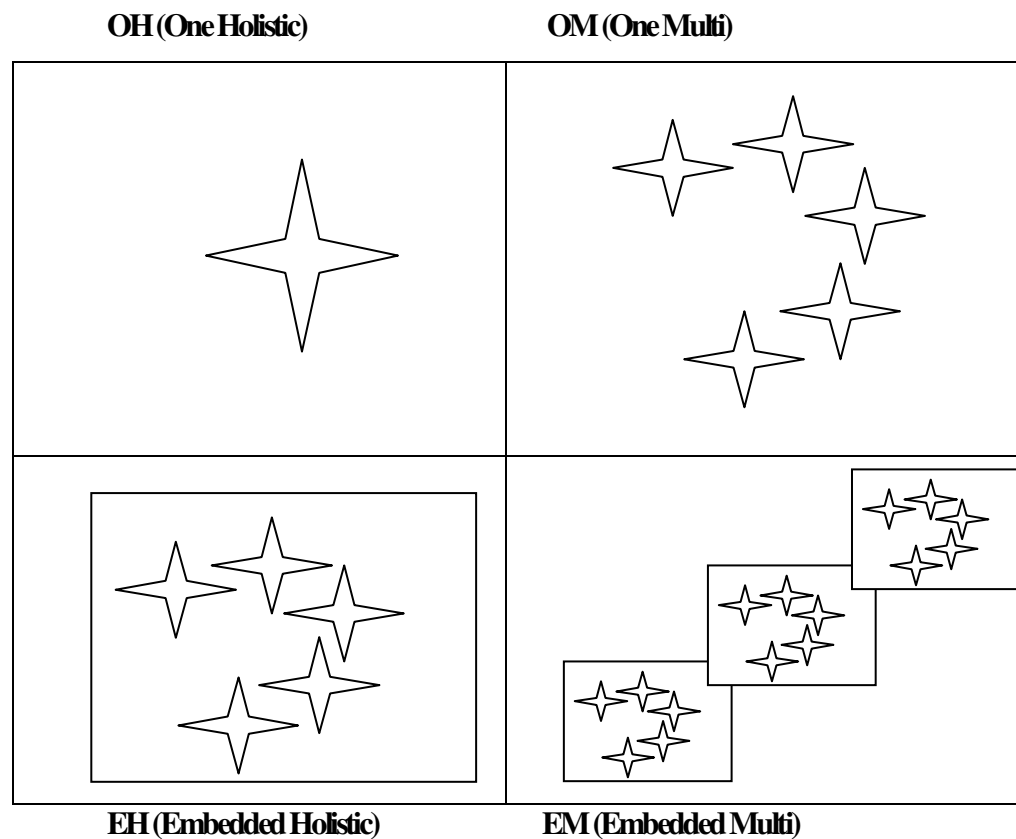


Figure 5.2 The classification of case study applications (based on Maaloe, 2010 p.3.)

According to the classification of Maaloe (2010) those case study approaches are considered One-Holistic (OH) studies which aim at the full exploration of one individual or group, while the exploration of common patterns among more such cases and the comparative research of these are considered One Multi (OM) methods. The Embedded Holistic (EH) case study method typically focuses on one or more departments in a larger organization, while the Embedded Multi (EM) case study method uses more of those for comparison.

Thus my thesis research can be classified as an Embedded Holistic (EH) case study method, because I analyse a multinational company's single manufacturing plant. Due to the small size of the factory I have the opportunity to explore the organizational members' thinking and interpretations from multiple perspectives and in a very thorough way. At the same time Factory X is part of a large corporation and the understanding of its operation can be substantially improved by also analysing characteristics emerging out of its embeddedness in the multinational organisation. Due to the limitation of the thesis research I had very limited opportunities to include the analysis of this embeddedness in my research.

On the ground of the research objectives and research questions identified in the previous chapters, and considering the connection of research methodology and the application of theory, I think the best way to follow is the Explorative-Integration approach, which Maaloe (2010) distinguishes from 'Theory Testing and the Grounded Theory.

This research method is based on case study research and is particularly sensitive to the self-reflection of the researcher and also takes into consideration the constraints of the researcher. At the same time this approach pays great attention to the different interpretations of organizational situations and to the differences between individual and social self-presentations and manifestations (Maaloe, 2010). The *explorative – integrative approach* is simultaneously trying to explore the reality and verify the correctness of initial assumptions based on the theories and knowledge of the researcher. This method compares research results to the way researchers belonging to other research approaches would interpret them. During the research the *explorative – integrative approach* emphasizes the importance of creating a continuous dialogue, in which the researcher contrasts his impressions of the field with his personal and theoretical predispositions and assumptions (Maaloe, 2010). Thanks to this perspective, the explorative-integrative method is able to fulfil the researcher's ambitions towards explanation, interpretation and understanding. It is explanatory, because we can use it to verify the strengths of our theories in the forecasting of actions and organizational situations. At the same time our observations and conclusions with the explorative-integrative method are seen as conscious interpretation and the life-words of other people is approached with an open-mindedness, in order to understand the realities hidden beneath the spoken words (Maaloe, 2010).

The *explorative-integrative method* is particularly appropriate for research, where the integration of several theories is needed to grasp reality. From this point of view this method is a great match to my research goals, namely the exploration of the connection of the work stress processes and organizational justice perceptions. Maaloe (2010) also highlights the potential of explorative-integrative method in studies, where the cooperation of the research participants is inevitable and the researcher has the opportunity to work freely with an experimental attitude and especially if the researcher is assisted with the reflections of internal supporters in the field. These criteria almost perfectly match my research aims, conditions and opportunities, and therefore greatly strengthen the correctness of applying the explorative-integrative method in my research.

In the centre of applying the *explorative - integrative case study method* is a cyclical approach, which uses the facts and interpretations found during the field work as a guide to plan the next step of the research. This is coupled with a constant curious, self-reflective researcher attitude that handles theories also with great respect (Maaloe, 2010). The following figure presents very well the cyclical nature of the method:

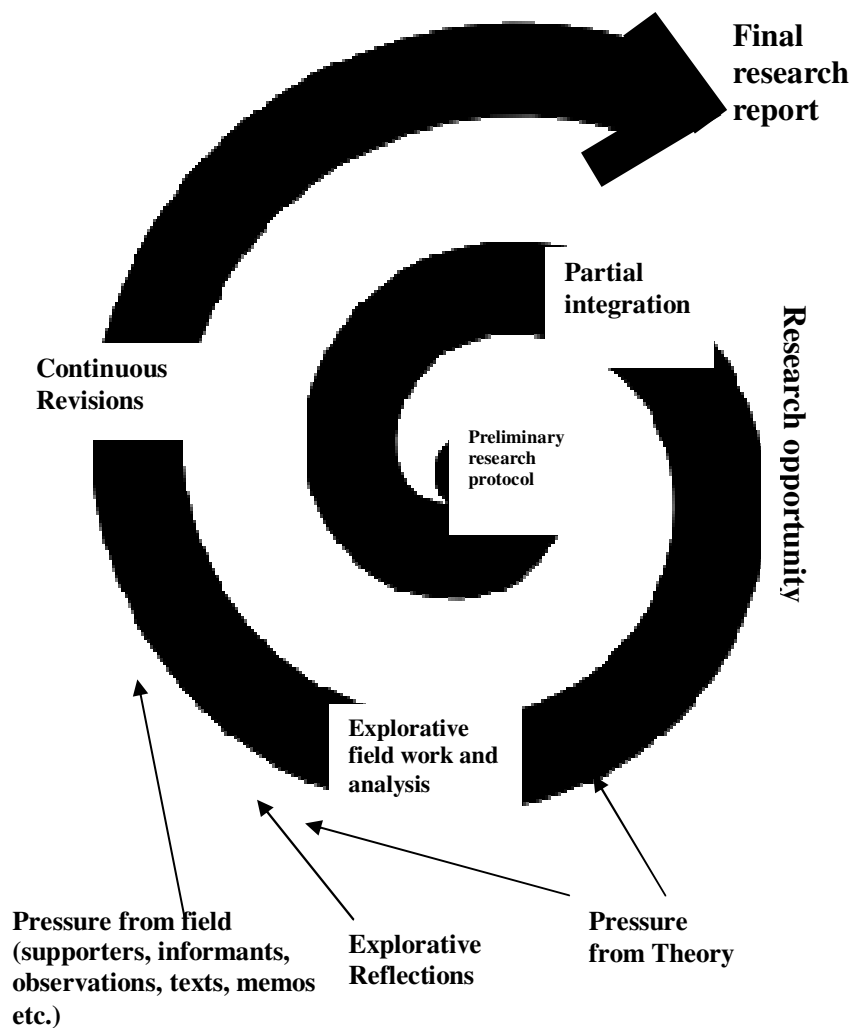


Figure 5.3 The cyclic approach of the explorative – integrative case study method (based on Maaloe, 2010 p. 26)

In accordance with the cyclical model in the beginning of my research I created a research protocol appropriate for my research aims and possibilities, which covers the data collection, the data analysis process and the most important topics to be explored. However this protocol is continuously reviewed and revised taking into consideration the impulses from the research field, self-reflection and the newly discovered theoretical connections.

Studies using the explorative–integrative case study method are typically working with multiple information sources and assume a deeper level of the data collection. During my research I will carry out field work with the help of focus group interviews, in-depth interviews and personal non-participant observations, however more details about the data collections of my research are available in Chapter 5.6.

5.4.2. The researcher's role

The chosen qualitative research methodology and the above-described explorative-integrative case study method both emphasize greatly the role of the researcher. Within these approaches the researcher has a very strong impact on the full process of the research (Maaloe, 2010; Maxwell, 1996). The researcher does not only influence the design of the research goals, research questions and the basic research protocol, but also plays an important role later on during the continuous review of the investigated topics, data sources and collection methods and during the ongoing self-reflective interpretation of the research results.

From the above it follows that as a researcher I must strive to be conscious about the mental filters I use during my work. The research efforts for the exploration of reality should exceed the simple collecting and recording of the different perspectives of the interviewed members of the organisation. The researcher should also continuously reflect on how personal involvement, partiality or deficient/one-sided theoretical knowledge might influence the understanding of reality and different interpretations.

Maaloe (2010) draws attention to the important responsibility of the researcher, that fieldwork research and the people working and living there should not be used to confirm and recreate our own worldview and convictions. For this reason it is important to realize as a researcher what are those theories, concepts or interest areas that are the most important for us and which we are most likely discover during the fieldwork. Therefore it is important to break out from the slavery of our own perspectives and to make a sincere effort to grasp interpretations of others in a way which can support their honest self-reflection as well. In this way we can get closer to the issues, that really mean suffering and struggling for the stakeholders of the organisation and there could be a real chance that the research opens up new ways for solutions (Maaloe, 2010).

Therefore during the research process the relationship between the researcher and the people living/working in the research field always carries a high importance (Maaloe, 2010). Thus we should always look at the organisational stakeholders as persons first, and only after that begin to treat them according to their roles as

workers, managers or others. It is the basic ethical expectation from every research, that the research should at least not worsen the situation of the involved stakeholders. Of course this moral expectation can be interpreted in many different ways as well, but the respect of the research participants' personal dignity is a core value. All of these are essential in order to create a high level of trust between the researcher and the other participants of the research and hereby the reliability and validity of the research results can also be increased. For building up trust the researcher needs to have such a predictable, transparent and honest operation that the stakeholders of the research do not feel threatened; on the contrary, they open up for the research initiated dialogues, reflections and collective thinking. During my own research I have applied the following solutions in order to develop a trusting atmosphere for the fieldwork:

- I was able to find strong internal supporters for my research, and thanks to an open and transparent communication towards them, they could make sure that the goals of my research do not hurt the interests of the factory's stakeholders; on the contrary the research might contribute to solutions to the organisational problems.
- The data collection was subordinated to the everyday operation of the factory so that it would in no way impede its operation. (For example in choosing the early morning or late night interview times and various locations I showed a complete flexibility, expressing this way that I do not like to and will not hinder the effective functioning of the factory.)
- Tolerant and accepting attitude of all conditions of the field and participants of the research. (For example I was working naturally during the focus group interviews and deep interviews by sitting at an unkept beer bench or the executive office and I also bravely accepted responses in obscene language.)
- The privacy and confidentiality of the collected information was realized in a way that no data sources or identifiable information was shared with anyone else.
- The results of the research, including my interpretations and conclusions were shared regularly with the participants of the research and they have been invited to discuss and reflect on them.

5.4.3. The methodology of the critical reading

In connection to critical theory it can be stated that its criticism is much more stressed on other approaches than its methodological and empirical orientation (Bourdieu et al, 1991 In: Alvesson and Sköldbberg, 2000). It can be observed in several researches inspired by critical theory, that the authors elaborate secondary empirical materials in terms of their own research questions, since the wide and complex questions examined by

them are difficult to apprehend with an autonomous research (Lasch, 1978 and Sennett, 1980, In: Alvesson and Sköldberg, 2000).

In the recent years a few researchers attempted to counterbalance this recognised deficiency with primary data collection and thus they tried to prove that practical methodological recommendations can be formulated based on a critical perspective as well. At the same time, even in case of empirical work entailing primary data collection, the critical researches emphasise the evaluation and interpretation that are aiming at the effects of the social context, over the empirical material itself, for the support of which the critical researchers basically apply three arguments (Alvesson and Sköldberg, 2000 p. 134-135):

- Only a limited amount of phenomena can be revealed in research, and these are also examinable only from a limited amount of viewpoints.
- The social conditions, ideologies, communicative processes strongly affect the subconscious and therefore the empirical results may be questioned in regards to how much they express the reality and the real opinion and how much a subconsciously accepted ideology or manipulation. Hence it is more important to understand what standpoint means, where it comes from and what are its consequences. The subjects of the social sciences clearly express that they are only parts of a social context.
- Too strong a reliance on the empirical material focuses on the existing reality in contrast to the one that could be. In case of the strictly empirical approach there is a risk that we examine phenomena according to currently used categories, social systems and we do not consider the historical (dialectical) contexts and other possible social structures and categories.

In terms of my research Alvesson's and Sköldberg's (2000) recommendations are particularly important. By applying the above arguments less sharply, they make proposals for the strengthening of the empirical side of the research with critical perspective. They do all this by emphasizing a reflexive methodological approach that best accommodates the explorative-integrative case studies recommended by Maaloe (2010). Alvesson and Sköldberg consider three methodological opportunities achievable for increasing the role of the experience in the critical research. They illustrate these by the presentation of the *critical ethnography*, the *intensive critical interpretation* and the *theoretical research complemented with experience*. The methodological approach of the *intensive critical interpretation* suits greatly to my research questions and topics in many ways.

On the one hand it is part of the *intensive critical interpretation* that the researcher either focuses on one or on a few topics within a broader social context (in my case the workplace stress and organisational justice), and it makes these the object of the critical analysis. On the other hand this methodology accepts that the empirical data collection is also focused and it does not reach the level of a complete organisational ethnography. Finally, the

method assumes thorough theoretical knowledge related to the topic which leads both the critical interpretation and the focus on the topic and on the empirical data collection (Alvesson and Sköldbörg, 2000).

It follows from all this that the theoretical framework used by the researcher has a big significance in terms of the research with critical view and accordingly, I tried to present this in point of my research in the earlier chapters. These frameworks help the researcher not to fall in to the trap of the empirical data, not to get stuck at the research subjects' interpretations and judgements connected to this, but to continuously keep in mind the whole which these data and interpretations are part of. This form of the research approach will result in the researchers carrying considerable theoretical weight. It is tempting to project the categories and statements of the theories favoured by them into the empirical results. However, this is also true of other research methods. The researcher's interpretation of empirical results never springs from reality directly, but it always reaches the surface through a researcher's own understanding. In case of critical research, these blinkers could be particularly obfuscating. At the same time, such kind of approach of the empirical material involves greater openness, and can also contribute to conclusions that are significantly beyond the possible results of other research methods (Alvesson and Sköldbörg, 2000).

Considering the direction and methodological focus of the critical interpretation of my research, it is an additional important aspect that one part of the researchers distinguishes the *surface structures* and the *deep structures* (Deetz and Kersten, 1983). By surface structures people mean conscious life, where things are natural, rational and understandable. Contrarily, the deep structures are those unquestioned beliefs and values on which the surface structures (treated as givens) are being built (Alvesson and Sköldbörg, 2000). In this approach, the aim of the research is exactly the exploration of the deep structures, the identification of those convictions and choices of value from which the rigid social institutions, mentality and action patterns follow.

This research approach can follow two directions. The first one is trying to reveal the source of distorted and oppressive ideas and to identify communication structures and processes that distort the understanding and self-knowledge or that provide asymmetric communication space for organisation members according to the hierarchy and the available resources. The other direction of the approach examines the content of the conception in question, the convictions of the organisational members and it makes its acceptability the subject of extensive and critical analysis.

It follows from this that there is a need for the critical interpretations especially in those cases when some sort of distortion can be discovered. Those cases can be considered like this where the ideas dominating in the organisation are false, misleading or when the source of these is unilaterally defined by a dominant person or manipulated by other means (Alvesson and Sköldbörg, 2000). The essence of the critical research is that it provides a content and sense to the organisational phenomena, so understanding and explanation are equally important elements, and it formulates exactly such problems that seem to be natural and evident.

The additional important tool of the critical research is that it applies some kind of dialectical way of thinking, in which the researcher stresses the existing and realised experience and reality against the possible alternative that would not even exist empirically. This way the researcher calls into question the common and seemingly self-evident ideas and institutions, recognising that the future does not necessarily have to be the reproduction of the present (Adorno and Horkheimer, 1979, Alvesson and Skoldberg, 2000).

Alvesson and Skoldberg (2000) broadly describe the critical research and the interpretative activity as a *triple hermeneutics*. While the simple hermeneutics concerns the persons' interpretations and their 'making sense' about themselves and their inter-subjective reality, the double hermeneutics is the sociologists' activity, the interpretation of the beings interpreting themselves. The triple hermeneutics includes the double hermeneutics and completes it with a third element. This third element contains the critical interpretation of the subconscious processes, ideologies, power relations and oppression (Alvesson and Skoldberg, 2000). At the same time for the realisation of the triple hermeneutics, much a deeper and broader reflection is needed than in case of the majority of mainstream research. The researcher must not only reflect on social and ideological structures that are considered to be given, but he or she has to perform an exceptionally strong, continuous personal self-reflection as well. The value of the critical research is the free and independent researcher and the attempt not to reproduce the existing social structures. However we must not forget that we all live in a one political and ideological space. So it is important to rationalise these kind of preferences of ours; and furthermore, reflecting to the aspects, organisational and political interests of the concerned persons approving, supporting and ordering the research also belongs to the basic expectations of the critical reflection.

In summary, it can be concluded that according to the principles and considerations described above in detail, the methodological approach of the critical reading of my research can be considered *intensive critical interpretation*. I will present its implementation method - based on Alvesson's and Skoldberg's (2000) recommendations - in the following diagram.

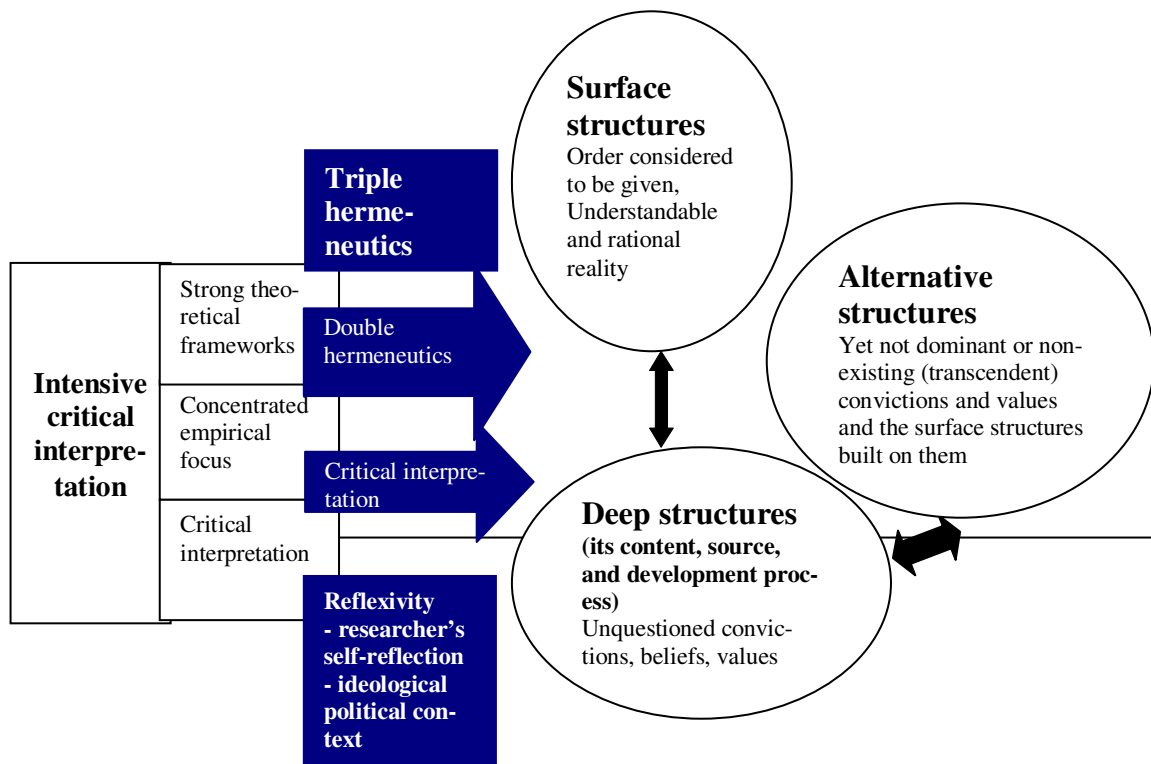


Figure 5.4 Intensive critical interpretation with reflexive triple hermeneutics (Alvesson and Sköldbberg, 2000 based on pp. 130-145)

The previously introduced theories of the workplace stress and organisational justice mean the *stable theoretical framework* required by the intensive critical interpretation. I focus my empirical data collection on the research made by focus-groups, interviews and personal observation conducted within the broader social context at one factory of a multinational corporation. The most emphasised roles in my *critical interpretation* are Alford's and Naughton's (2004) ideas about the complete human development and Sennett's thoughts about the corrosion of character. According to the principle of *triple hermeneutics* the critical interpretation completes the sociological double hermeneutics with a new element that aims at the subconscious processes, ideologies and power structures. In this regard I put great emphasis on the exploration of the *deep structures* (the unquestioned convictions and values) that are substantiating the *surface structures* (the order and reality that is considered to be natural, given and rational). I am intent on making the critical interpretation of both the content of the deep structures revealed in the factory I have examined and the procedures and sources that created them. The rationalisation of the self-reflexion and my own political, ideological motivation has outstanding significance in terms of my critical interpretation; which was largely presented in the second chapter on the scientific basis of the research. Even the ideas raised in the first chapter indicate the significance of the social context of the empirical examination, at the same time I try to reflect on this in the critical reading of the dissertation and to set possible but yet not considerable or non-existent alternatives against the rigid social structures.

5.4.4. The methodology of the postmodern reading

Despite all the advantages of the critical reading of my research, I still felt this approach was only partly able to grasp and express the complexity of the local reality of the studied factory and it had significant limitations concerning the exploration of the social construction process. This had an important role in the development of a second postmodern reading of my research. I consider the postmodern reading as a step towards enriching the understanding of Factory X, in which we explore the social reality, series of communicative actions and organisational discourse with the help of the analytical tools provided by CMM methodology (Pearce, 2006).

CMM emphasises the importance of internal interactions rather than external, contextual factors and its analytic tools are not determined by external critical beliefs. The method focuses on examining the consecutive communicative actions and interpretations and thus has considerably helped me to understand the extremely hostile social structures existing in the factory.

As an antecedent for the CMM model, Pearce and Cronen began to develop a communication theory, although they did not know how to use it (or whether it would be useful at all) for the improvement of communicative actions. They wanted to understand “*what people do, when they communicate in a certain way*” and “*why they do it*” (Pearce, 2005 p. 39). Thus, they concentrated their study on the *performative* aspect of communication. The social reality created by the participants was emphasised, and concerning the motives, they have investigated the communicative actions and their characteristics instead of the participants’ personalities (Pearce, 2005). The objective of my dissertation’s postmodern reading, using the methodology of CMM, is to facilitate a better understanding of the complexity of social reality and its development. I will carry out this with the aid of a thorough inspection of some communicative processes bearing key importance according to the members of the examined organisation. The research method and analytic framework created by Pearce (2006) and that I have applied in this postmodern reading can be best grasped by the introduction to the *Hierarchy Model of Meanings* and the *Model of Four Aspects of Logical Forces*.

The Hierarchy Model of Meanings

Pearce discusses the Hierarchy Model of Meanings as the central model and framework of a CMM-based research approach (Pearce, 2004 p. 39). He differentiates in the model several levels of asymmetrically embedded contexts, which give meaning to a certain communicative act. Pearce views these contexts as **resources**, which the acting person may utilise in the process of decision-making and meaning giving. The participants’ stories may have varying patterns, and the methodological approach of CMM emphasises the equivalence of resources rather than defining any kind of constant order among the embedded contexts. This equivalence and flexibility of the embedded contexts is important in the process of coordinating meanings and actions. CMM does not necessarily strive to conciliate the discourses incompatible with each other, but rather supports

their simultaneous emergence in order to create a coherent meaning of reality (Broadfoot, Deetz and Anderson, 2004). Pearce's model identifies four repeatedly emerging stories of the embedded contexts (Pearce, 2004 p. 40):

1. **Stories of self-concept, self-image, and identity** are about the acting person him/herself, including definitions and identifications of the self and of others. This requires the definition of systems containing the co-participants and the relationships to them as well;
2. **Stories of relationships** are about the existing or non-existing relationships between participants, which include the rights and obligations belonging to these different levels of relationships;
3. **Story of the episode** describes "*what is it that we do*", and includes the series of events with a beginning, plot or narrative development and conclusion;
4. **Story of the culture** represents the complex and often contradicting ideology, system of assumptions, moral values and mode of action considered as right, which characterises a certain culture, institution or organisation, regarded as valuable or rewarding.

The Model of Four Aspects of Logical Forces

Pearce links the asymmetrically embedded contexts (that may follow each other in different orders) to the communicative action itself. These actions are located, according to the CMM approach, amid colliding "*logical forces*". Actions are performed in the intersection of logical forces determined by social systems and transmitted towards the actors. Actions, therefore, cannot be understood without the relevant discursive forces and contextual resources, which may support certain forms of action, and may also strongly limit others (Broadfoot, Deetz and Anderson, 2004). This might either mean, for example, that the logical repertoire available for the acting participant is incomplete, or that a certain and frequently reproduced logical conclusion is easier to reach. The sum effect of opposing, even incompatible, crossing logical forces will have a major influence on the actors' interpretation of their situation and their choice of actions. The discourses constantly reproduce and evoke these logical forces, thereby influencing the final outcome of the action. The magnitude and way of influence by these different logical forces vary for each actor or group of actors. These differences make the coordination of actions and communication difficult between different actors (Pearce, 2004). The figure below illustrates the Model of Four Aspects of Logical Forces developed in the CMM methodology:

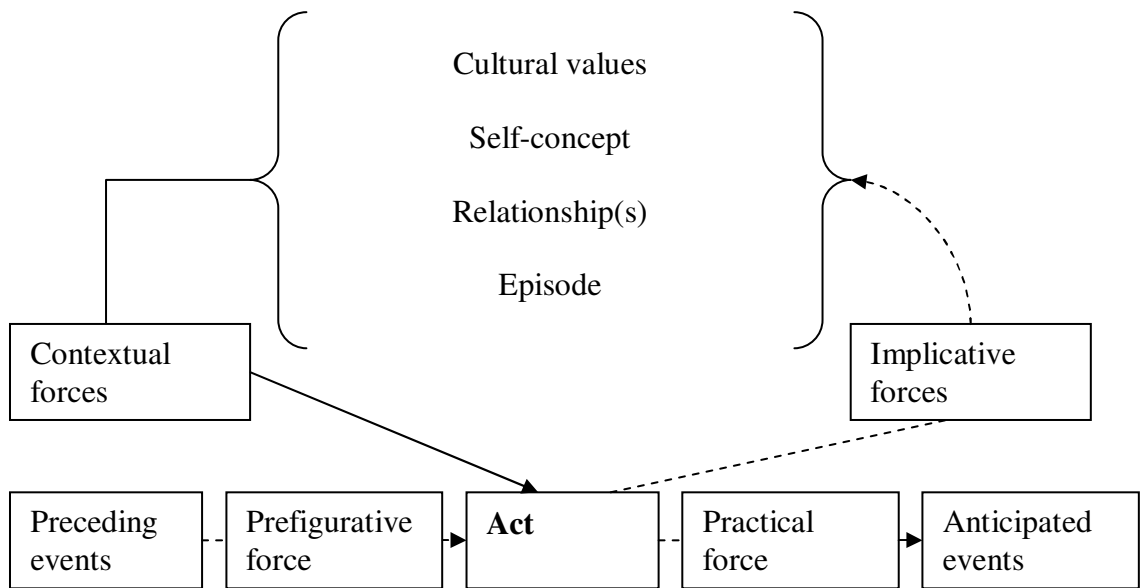


Figure 5.5 CMM's Model of Four Aspects of Logical Forces (Broadfoot, Deetz and Anderson, 2004 p. 205)

The logical forces influencing the actors introduced and depicted in Figure 5.2 are the following: *contextual forces*, *prefigurative forces*, *practical forces* and *implicative forces*. The influence and choice of the actors can be manifested in the selection between various alternatives or creating a combination of different alternatives (Broadfoot, Deetz and Anderson, 2004). Actions can be reactions to preceding actions or can be oriented towards anticipated events in the future (see prefigurative and practical forces). According to Pearce's concept the different forces can be interpreted as follows:

1. **Contextual forces** are the expressions of those "senses of obligation" that emanate from the conditions and resources utilised by the actor in the meaning giving process of choosing between alternatives. The stories introduced in the *Hierarchy Model of Meanings* may be used to identify the four determinant resources, which can become contextual forces according to Pearce. These are the story of *self-concept*, the story of *relationships*, the story of the *episode*, and the story of the *culture*. These hierarchically embedded stories may be regarded as resources that each actor may apply in different order and with the respective asymmetry, in which the contingency of the coordination of meaning is expressed (Broadfoot, Deetz and Anderson, 2004). These resources cannot be grasped as a uniform element of knowledge detached from the acting person, since they are expressed and reproduced in the interactions between the actors, and therefore can be regarded as the results of discursive processes. For example, the values belonging to cultures are such discursive resources that contain justifying and legitimating obligations, and it is because of this strength that they are evoked when deciding and performing actions (Broadfoot, Deetz and Anderson, 2004).

2. **Prefigurative forces** are expressions of those “*senses of obligations*”, that trace back their power to the perception and evaluation of preceding events and actions of other parties. For example, when in a given situation an acting person calls up a logical connection that may be expressed as “*aggression must be answered with aggression*”, then an action interpreted as aggressive will induce a sense of obligation to respond with aggression (Broadfoot, Deetz and Anderson, 2004). It is important to underline that, according to the approach of CMM, the effect of evoked logics and preceding actions is far from being deterministic. All we can say is that they feed these prefigurative forces, but the acting person does not lose the freedom of choice (Pearce, 2006, Broadfoot, Deetz and Anderson, 2004).
3. **Practical forces** may be considered as the contrasts for prefigurative forces, as they represent exactly those “*senses of obligations*” that are associated with the aims, future objectives wished to be reached or realised. These forces arise from the kind of beliefs that concern the type of actions required to achieve the acting person’s desired/hoped goals and objectives. For example, if the logical force “*hard work will yield results*” is dominant, then the obligation for hard work for the sake of the desired result will be amplified. On the contrary, an opposing logical force, which could be expressed as “*hard work yields no results*”, will eliminate the sense of obligation for hard work in order to reach a desired goal.
4. **Implicative forces**, similarly to the contextual forces, are related to the stories (contexts) introduced in the *Hierarchy Model of Meanings* (Pearce, 2004) as resources. They include those “*senses of obligations*” that refer to the consequences of chosen action alternatives on these resources. These “*senses of obligations*” may manifest in thoughts and sentences like the following: “*What will people think about me?*” or “*Men don’t cry!*” (Broadfoot, Deetz and Anderson, 2004, p.206). These forces may also develop from the actors’ intentions to deliberately create a particular context, like an episode, identity, or a culture (Pearce, 2004).

In the postmodern reading of my dissertation, I will apply this methodological approach to examine the series of events bearing key importance in the creation of the social reality of the organisation. This includes a sequence of communicative actions and meaning giving by the organisation members. Through the analysis I will attempt to explore each participant’s hierarchically embedded contextual resources (cultural values, self-concept, relationships, episodes) and those critical moments and decision points where certain logical forces (contextual, prefigurative, practical and implicative) influence actors’ choices. The analytic tools of CMM applied for the postmodern, process perspective approach of investigating the construction of social reality will be introduced and described later in Chapter 6.2.

Instead of an external critique of the organisation (characteristic of the critical reading), I will rather put more effort to reveal those series of communicative actions, through which the different organisational members create together the mutually unwanted (even burdensome) social structures. In this way immanent critical observations and recommendations can be developed, which are based on the organizational members’ goals.

5.5. *Sample selection and the research field*

During my qualitative and multiparadigm research, the sample selection was not determined by random choice and statistical representativeness but purposefulness. This aids me in providing relevant information regarding my research objectives and questions, based on which important recognitions and conclusions can be developed (Maxwell, 1996). Accordingly, this research approach implies great significance of researcher's assumptions, background theories used as starting points for the research, and last but not least of all my personal experience about the research theme and questions.

5.5.1. The principles of sample selection

Based on the ideas presented above, the recommendation concerning qualitative studies guided me in the sample selection as well (Beck-Bíró, 2009; Gelei, 2002; Bokor, 1999). The sample, mainly based on my previous empirical research, was selected *consciously and in a targeted way*, not following the rules of random selection. The selection of the sample and the research site is theoretically oriented, instead of representativity, it focuses on a **critical case**, which is particularly rich in information and portrays the investigated phenomenon in an **intensive and concentrated form** (Miles and Huberman, 1994). A further important consideration in the sample selection was to work at a site where the **research could** at least minimally **contribute to the development of the organisation and to the improvement of the situation and well-being of its stakeholders and those involved** in the research. The step by step formation is a further important characteristics of the sampling, since it is influenced by the information acquired during data collection and the operation of the organisation during the research may also uncover new possibilities or set new limitations to the investigation. Finally, as it is expected from a qualitative research, I work with a **small sample**, where the two readings of my multiparadigm research approach rely to a different extent and way on the **contextual embeddedness of the research field**.

5.5.2. The analytical unit

Since the basic research framework of my thesis is provided by case study methodology, it is important at this point to define the analytic unit, which had already been partly discussed previously in Chapter 5.4.1. According to Maaloe's (2010) classification, my research is an Embedded Holistic case study, because I examine one small size factory from multiple perspectives and through interviewing as many stakeholders as possible, while this organisational unit is embedded very strongly in the Hungarian social context and the operation of a multinational corporation. Therefore, the **research site I chose (Factory X³¹)** is the main analytic unit of my work. At the same time the definition of the analytic unit requires more precision in line with my research goals and questions. From this different perspective, it is possible to highlight **critical organizational processes** as another

31 From now on I will refer to my research site factory as Factory X (fictional name).

level of analytical units, since I will primarily investigate through these the workplace stress process, the work stress discourse and the organizational justice perceptions. These themes are very difficult to investigate directly; therefore I will explore them in my research through analysing the **reports of organizational members on workplace problems**. In summary, it can be concluded that Factory X is the main examined unit of the Embedded Holistic case study method chosen for my research, However embedded into this analytical unit the critical organizational processes and the reports about the problems at the workplace are going to be the main channels through which I will explore the work stress process, discourse and justice perceptions. According to the recommendations of Yin (1994) I will continuously consider the connections and complexity within this analytical unit structure.

5.5.3. The subjects of the research

It remained important for me all through the sample selection, that the operation of the factory should be investigated considering as many perspectives as possible. For this reason the data collection was extended to all activities and hierarchical levels within the factory. My research goes beyond the participants' individual interpretations and opinions, since it includes the exploration of interactions between organisational members, social expressions and manifestations. Therefore, my research plan included deep interviews and focus group interviews with the manual workers, interviews with the group leaders selected from the manual workers, managers of specific areas, the union leader and the factory director. The most relevant problem areas identified during the focus group interviews with the manual workers and the interviews with the managers, had a major influence on the further formation of the interview sample. Consequently, the senior clerk, the deputy-manager of the factory, the product vendor, and the laboratory manager were subsequently included in the interview sample. These members of the organization had essential information regarding those problem areas that mean an utmost importance for the study. In order to understand a certain problematic situation, it proved invaluable that I could obtain information using several data collecting methods (focus group interviews, deep interviews, and non-participant observation).

5.5.4. The research field

The organisation selected for the research is a Hungarian manufacturer plant of a larger multinational corporation. I have previously explained that my choice of the research field was strongly driven by the appalling experiences of a former research conducted partly in this factory. Our earlier study revealed extreme manifestations of work stress and organisational injustice in the plant, which induced a very intense research motivation in me for a deeper understanding and potential improvement of the situation. At the same time, some members of the organisation showed considerable support for the continuation of this kind of work.

Due to the sensitive nature of the experiences at organisation and my confidential liabilities, I will expose only that information related to the organisation to my readers that is essential to the understanding of the dissertation. I believe this does not limit the understanding of my thesis work significantly, while the situations and processes we may gain insight into will generously compensate for this.

The Factory X under study is a Hungarian manufacturing unit of a multinational corporation, which became the property of this company through privatisation. The multinational corporation has been present on the Hungarian market for more than 15 years and has operated several manufacturing plants in the country. In the first half of the 2000s, the corporation expanded considerably due to the prosperity in its industry. However, because of the recession starting in 2006, its position of orders had been reduced so much by 2009 that it was forced to close several manufacturing units as well as dismiss nearly half of its employees.

The studied factory has survived the period of factory shut-downs, although it was also forced to suspend manufacturing for months in 2009 while keeping the employees at the same time. From several aspects, the extremely critical situation that had developed in the factory is absolutely crucial in revealing to us the intensive and concentrated forms of work stress processes and organisational justice perceptions. The case study thus may considerably improve our understanding and yield a number of conclusions with relevance worth of further examination in other contexts as well. In the following section I briefly summarise in five points why I found Factory X a good choice as a research field.

1. Size: The company has several manufacturing units in Hungary, although, as a consequence of the operational profile, the units usually have a small work force. The number of members at the studied organisation is only 44; therefore, the organisational discourses are generated within a workplace community, where every employee knows each other.

2. Operational profile: The company is active within an industry, which requires an extremely demanding physical, often unhealthy and monotonous work. Thus, the employees are continuously exposed to exceptionally strong stress effects.

3. Critical, threatening situation: The economic crisis had a great impact on the industry of the company. A peculiarity of the critical situation is that the rationalisation was achieved in this company through the total shut-down of certain factories, while nearly no one was dismissed at the remaining factories. In the last couple of years employees left the researched factory only due to disciplinary offence, retirement, or one's own motion.

4. The role of the union: A considerably well organised union operates at the company, mostly regarded as partners by the management, even though their relationship is far from being free of conflicts. On the one hand, this is promising from the aspect of generating constructive organisational discourses. On the other hand, the research is also strongly supported by the union. Thanks to the support of the union, I also originally intended to include those employees in the data collection who were dismissed from the company as a result of the financial

crisis. When I revisited the site, however, it became apparent that this goal of mine will not be realised, since this factory has not been impacted directly by the rationalisation (for the time being), except for the constant sense of being threatened by it.

5.6. Data collection and data analysis

In the course of the previous chapters, I have touched on multiple times on the forms of data collection in my multiparadigm qualitative research, containing a critical and a postmodern reading and I went into details about some of the applied analytical methods as well. I find it important to emphasize both the iterative nature of qualitative research, in which the data collection and data analysis are not rigidly separated, and the specificity of the applied explorative-integrative case study method, according which the researcher creates a continuous dialogue between the theoretical preconceptions and the impressions revealed in the research field (Maaloe, 2010).

During my research, I continuously aimed at collecting adequate quantity and quality of information in order to meet my research goals. I therefore had to constantly respond to new opportunities and potential barriers noticed or appearing in the research field. As a consequence of this the initial research protocol and my data collection plans were revised multiple times. In the process of my research usage of some planned data sources were cancelled, the role of other methods of collecting data have gained increasing importance and I have also made unplanned, extraordinary efforts in order to ascertain the perspective of some critical organisational members.

As explained above, in the course of the research, data analysis was already started in parallel with the data collection. Within the framework set by the examined organisation data collection lasted until I – as a researcher – was able to declare confidently that newer data and information will no longer contribute substantially to the understanding of the phenomena I have examined. In other words, I have collected data in the field to the point where, in my judgement, the research had reached the level of “theoretical saturation”.

5.6.1. Data collection methods

In my preliminary research protocol, the methods of personal in-depth interviews and focus group interviews appeared with nearly the same emphasis as the primary sources of data collection. However the originally planned three to four focus group interviews proved to be more difficult to organize than expected. As already noted before, it was not possible to talk to dismissed employees during the research, since the factory was not directly affected by the lay-offs. At the same time, the only suitable opportunity for conducting focus groups interviews in the factory has been the period when production was temporally suspended and general maintenance work was carried out. During this period, the manual workers worked only in one shift and the maintenance work they have done was not significantly disrupted when seven or eight employees were out of work for

a few hours. On the contrary it was not possible for me to organise a managerial focus group interview. This would have required the complete factory management simultaneously out of work for two hours, which was not seen as realistic by either the factory director or the labour union. The two focus group interviews I had the chance to conduct among manual workers proved to be an exceptionally rich information source. Through these, I could capture extremely well the problem areas identified by the workers, their interpretation and discourse on work stress, organisational justice and injustice. From a quantitative perspective and in terms of its coverage the data collection derived from the focus group interviews was less extensive than my preliminary plans. This pointed out two main directions for the continuation of my work.

First, by the means of in-depth interviews I could reach the intellectual and managerial workers that had been completely left out from the focus group interviews. The circle of organisational members included in the research through in-depth interviews expanded step-by-step, in accordance with my knowledge of the critical problem areas in the factory and how these informed me on and indicated the employees holding key information on these problems. Besides the originally planned in-depth interviews (factory director, technical director, production director, trade union leader, group leaders) I made additional in-depth interviews with other employees (office manager, lab manager, deputy factory director). Altogether 11 in-depth interviews were prepared. In terms of their lengths, the shortest interview took one hour and the longest was two and a half hours long.

During the research process the non-participant observation method became an important complementary data collection method. This channel of information had great importance since the other data sources I had available on and from the factory management were not very helpful in understanding the different perspectives of interactions at this level of organizational members. Thanks to the extensive research opportunity provided to me by the factory management, I could move around the factory's site completely freely. I had the chance to observe the work and the communication between the colleagues in the office and in the production hall while I was waiting several hours to conduct the aligned in-depth interviews. However I had made only personal notes and no sound or video recordings about these observations. In these instances I had also noted my personal impressions and reflections related to these events. Due to these non-participant observations, I could witness several extremely problematic situations - critical moments that were later exposed from different perspectives in the course of the in-depth interviews and focus groups. A good example of this was the dispute between the factory director and the union leader regarding the regulation of the start of work shifts or a major technical breakdown during the evening shift, the handling of which caused considerable damage in factory machinery.

Below, I briefly summarise the most important characteristics of the applied data collection methods and to present the nature of the information that can be obtained through them.

1. Focus group: The dominant data collection method of my research is the focus group interview. The explicit advantage of this method over group interviews is that it is particularly suitable to explore the participants' social relations, communication patterns and jointly constructed interpretations. The researcher, as the moderator of a focus group interview, will not take up the role of the continuously questioning interviewer, but rather aims to start and keep a conversation on track within certain boundaries. In the course of the focus group data collections, the focus is exactly on exposing common or different interpretations of participants and bringing potential conflicts to the surface. The participants are continuously responding to each other's thoughts and they can even ask one another during the focus group interviews (Vicsek, 2008).

During the focus group interview the researcher gets into a more passive role, and concurrently has an greater responsibility, since he has to support the proper management of the emerging conflicts within the group. The focus group interview is a data collection method that can have a significant influence on the interpretation and meaning given of organisational members. It is important that the researcher recognise the characteristics of the group dynamic processes, which requires organisation development competencies from the researcher (Primecz, 2010).

The focus group method is extremely resource-intensive and in case of a single organisation it can be quite complicated to organise it. The number of participants in a focus group considered ideal can be between six and twelve people, however we must proceed very carefully when selecting the participants. In case of research in a single organisation it is almost inevitable that the participants would know each other, but it should be certainly avoided that a direct manager and a subordinated employee would be put into the same group. The heterogeneity of focus groups is beneficial, while at the same time the moderator has to handle the consequences resulting from the status differences (Primecz, 2010). The selection of the location is also important. In particular it is most crucial to seat the participants in a way that they could all see each other face to face. It is also worth considering other alternatives in connection with the manner of the data recording, since it can prove very difficult to prepare a transcript from a focus group interview with a large number of participants. Instead of just relying exclusively on an audio recording of the interview, it is worth considering the possibility of visual recording and assessing the risk of this technical solution disturbing and annoying the participants.

2. Personal in-depth interview: The advantage of the *semi-structured in depth interview* used in my research is that it is able to both expose and emphasize the topics that are considered to be the most important ones by the interviewees. Concurrently it provides a framework for the researcher with the help of which the interview can be properly conducted and an appropriate connection can be created between the data obtained from the different interviews (Kvale, 1996). By using semi-structured interviews (also in accordance with the recommendations of the explorative-integrative case study method) an opportunity opens up to include new topics and problem areas (indicated by interviewees) in the interview outline and the researcher can even return with these topics to previous interviewees.

With the help of in-depth interviews, in addition to the interviewees' experiences, thoughts, opinions and values, it is also possible for the researcher to explore their particular individual interpretations, emotions and attitudes related to the examined topics and phenomena. This method may also be suitable for the researcher to reveal those *deep structures*, subconscious or unquestioned beliefs, from which the activity patterns that can be observed on the surface derive.

In the course of in-depth interviews we certainly have to deal with the opportunity of distortion. This may follow from the specific individual interpretations, from the declaration of acknowledged values that are not congruent with the lived values or even from deliberate efforts of distorting information by interviewees, which often highlight the very characteristics of power and social structures in the organization. In connection with all this, it is especially important to implement a research approach that establishes a trusting and accepting attitude between the researcher and the interviewees. At the same time, the research approach shall include the possibility for the researcher to also ask about deeper relationships and understandings through pointing at contradictions and different readings in the organization.

3. Non-participant observation: From among the different types of observations (participant observation, non-participant observation and direct observation), this method implicitly includes an activity in the course of which the researcher is on the site, but does not interfere with the activities neither actively nor through questions. The researcher takes position in a less prominent place and somehow records the information that is important and relevant to him. This can happen in the form of taking notes, drawing or taking pictures. The visual representation - primarily the photographs, - can play an important role in using this method, but the distorting and influencing effects of the visual recording has to be taken into consideration as well (Primecz, 2010).

The recommended time-period of the non-participant observation depends on the object of the observation, since it may be aimed at the full duration of an event or at a full workday. At the same time, it is important to take into account that the observation of a short period does not necessary reflect on the operation of the organisation realistically. The non-participant observation may be considered as a slow method, yet it carries exceptionally valuable information about those implicit, not realised or not confessed individual beliefs, values and organisational relational and communicational patterns that could be exposed by other data collection methods only in an extremely difficult way.

5.6.2. Methods of data analysis

The process of the data analysis is carried out in my research parallel with data collection. The researcher's interpretation, reflection and synthesis may thus refine the research objectives and influence the research questions, but most importantly, it can modify the sample selection and the choice of data collection methods. In

order to improve the quality of the data analysis it is extremely important to minimise the loss of information in the course of the data collection. This can be ensured primarily by audio and video recording (using a Dictaphone or video camera) of the in-depth and focus groups interviews. It is highly recommended to create a word-to-word transcript of these recordings and to note down the researcher's personal observations, impressions, and reflections of the interviews as soon as an opportunity arises. It is important that the note-taking techniques would not only be applied in case of non-participant observation, but also in the case of in-depth and focus group interviews. The most important "work tool" of the researcher is herself - he or she is able to capture messages and impressions that cannot be recorded by any audio or video devices.

According to the recommendations of the explorative-integrative case study method, in the course of my data collection, I simultaneously examine the correctness of the research ideas and categories regarding the process of workplace stress and organisational justice. At the same time, I explore the local reality containing new interpretations and categories emerging from the research field, which go beyond or contradict my preconceptions on the phenomenon. Using the data collection methods of the semi-structured in-depth interviews and focus group interviews it is possible to both organise the information according to preliminary categories and to expand, enrich and revise them with new categories, interpretations and patterns obtained through fieldwork. In both readings of my qualitative multiparadigm approach the researcher's interpretation is especially important since even in the course of accepting, creating and organising the analytical categories, the meaning and significance attributed to them play a significant role.

In the course of the data analysis related to the critical reading I will apply the previously described intensive critical interpretation which can be characterised as reflexive triple hermeneutics. This triple hermeneutics points beyond both the examined organisation's members' interpretation and the categories of work stress and organisational justice theories that are considered as starting points of this reading. It puts specifically those *deep structures* into the centre of the analysis that are the carriers of the unquestioned convictions and the sources of the power and oppressive structures in the organization and society. In the intensive critical exploration and interpretation of these, I was primarily inspired by the thoughts of Alford and Naughton (2004) and Sennett (1998).

The introduction and development of the postmodern reading of my dissertation is in its own already the outcome of the first stage of data collection and data analysis, since it was at this point when I realised that through my critical reading I will not be able to capture the complexity of the phenomenon of workplace stress and organisational justice in the factory to the desired extent. It was primarily because of the importance of the exposed social construction of local reality in the factory, that I found it necessary to create a reading of the organization that focuses on and analyses in structured form the organisational members' sequence of communicative actions instead of external critical judgement.

For this purpose, I have found most appropriate the already briefly introduced data analysis method of Coordinated Management of Meaning (CMM). This approach is suitable to give an answer to the kind of research questions that refer to “*what the organisational members and stakeholders are creating together*” (Pearce, 2004) through their communicative actions. This analytical method focuses on the performative aspect of actions, and through its analytical tools stresses the importance of all communicative actions being social thus directed towards, for or against somebody. Furthermore, CMM emphasises that communicative actions do not stand on their own but are rather preceded and followed by communicative actions carried out by others. The communicative actors create the events, objects, social worlds together, through their collective and coordinated communication and actions (Pearce, 2004).

In the postmodern reading and analysis of research data, which follows the instructions of CMM’s methodological instructions, my starting points will be CMM’s *hierarchical model of actor’s meaning* and the model of *four aspects of logical forces* (Pearce, 2004). At the same time, I will use CMM’s serpentine model as the main analytical tool, complementing it with other elements of CMM’s analytical repertoire called the daisy and the LUUUUUT models. The brief description of these analytical tools will be presented to my readers in Chapter 6.2 together with the demonstration of the specific research analysis results.

The creation of analytical categories is an important part of the data analysis process. As indicated before, I have created these categories by using work stress and organisational justice theories and concepts as starting points, on the one hand, and by the application of CMM’s analytical framework on the other hand. In addition, after making contact with the research field, and in the course of the data collection and researcher interpretation, I have continuously created new categories and units of analysis. According to the explorative-integrative case study method I tried to create a dialogue between my theoretical preconceptions and my impressions I made as a researcher. The creation of the analytical units and categories is the result of an iterative process, since during the processing and coding of the research data I have repeatedly revised these. This was also followed by a corrective phase of my previous coding work. I have created my stepwise-refined hierarchical code structure technically with the help of NVIVO software. This computer application accessible at Corvinus University Budapest provided a significant help in the data analysis process, primarily in its coding phase. This application made it much easier to handle together and manage the extremely large amount (more than 200 pages long) word-to-word transcripts of in-depth and focus groups interviews. NVIVO has also allowed me to get a very user-friendly overview of the coded passages. I have summarised my interpretations, reflections and conclusions regarding the connections between the analytical categories in two different readings (critical and postmodern), which can be found in Chapter 6, presenting the detailed analysis and results of my research.

5.6.3. Validity, reliability and generalizability

Regarding the methods and results of my research work, I find it important to address the questions of validity and reliability, as they are valid concerns for all research. However in the case of qualitative research the judgement of these questions differs considerably from the judgement we are used to in the case of quantitative studies. In the following comparative table we can learn about the interpretation and meaning of validity and reliability applied to qualitative research:

	Traditional conception	Qualitative conception
Validity	Does the study measure what it has to measure?	Has the researcher explored and is familiar with the local knowledge and meanings as much as possible?
Reliability	Would the measurement ensure the same results in other occasions as well (assuming the consistency of the research object)?	Could other researchers make similar observations on other occasions?
Generalizability	What is the (statistical) probability for the identified characteristics of the sample to be valid for the wider population?	What is the likeliness of the conclusions and theories derived from the given context to be applicable to other contexts as well?

Table 5.1 The interpretation of validity, reliability and generalizability (based on Gelei, 2002, Bokor 1999 In: Beck-Bíró, 2009, p. 101; Easterby-Smith et al, 1993, p. 41.)

Based on the table above, we can clearly state that the criteria of validity, reliability and generalizability are not less relevant for qualitative research, but they are formulated in different ways and in different stages of the research process. Therefore, in case of qualitative research, it is particularly important for the researcher to keep in mind and strive for the academic expectations and standards of his research approach all through the research process. Regardless of the common focus of qualitative studies on the local interpretations, the validity of the qualitative research cannot be considered as given. The researcher's sampling and data collection methods, analytical tools, lack of personal reflections and biased conclusions may weaken or discredit the research results at several stages of the study.

It is also important to differentiate two different forms of research carried out with case study methodology: the studies aiming for general conclusions and the studies targeting specific conclusions, which from some reason are based on a particularly important case. In terms of generalizability, qualitative research using case studies are often regarded with scepticism, especially in instances when the researchers generalise based on one single case (Gummesson, 1991). On this issue, it is important for us to recognise the opportunities for using case studies beyond the classification of Yin (1984)³². According to Kjellen and Sodeman (Kjellen and Sodeman, 1980 In: Gummesson, 1991) these opportunities can be found whilst creating theories and initiating change. One of the most important values of my research can be found in these as well. I examine themes that could be revealed in

³² According to Yin (1984) the three types of case studies are the explorative, descriptive and explanatory case study.

their complexity very difficultly with the help of other research methods; however I hope to reach conclusions that are at least partially comprehensible and admissible for organisational members of Factory X. In this way my research can contribute to changes in a very critical and difficult period of the factory.

However, it does not follow from these that I should fully renounce the opportunity of generalisation in my thesis. Generalisation does not only have forms based on a large number of observations typically related to the questions of 'how much' and 'how often'. The multiparadigm case study method applied to one organisation in my dissertation is suitable for the thorough examination and exhaustive analysis of certain themes, phenomena and processes that are likely to occur in other organisations as well (Gummesson, 1991). According to the ideas of Glaser and Strauss's (1967), even a single case can be suitable for substantiating new categories or concepts. At the same time I have to note that these conclusions do not contain the claim of finality, on the contrary, they emphasise the continuous nature of social science research. I take as my base previous studies and theories, however, I push the research in new directions by examining unique, unrepeatable business situations and people. Therefore, my conclusions and results will be likely to contain new elements compared to the previous studies, at the same time in the light of future research they will probably prove to be insufficient (Gummesson, 1991). This way of looking at my research does not aim to excuse the particularity of my dissertation, but it draws the attention to the idea of Argyris, according which it is possible to simultaneously emphasise the creation of local theories and generalisation as a type of work-hypothesis (Argyris, 1985 In: Gummesson, 1991).

In connection to the validity criteria of case study methodology, Maaloe's (2010) thoughts provide further extremely important guidance for me. Maaloe, as the creator of the explorative-integrative case study methodology, particularly emphasises that researchers have to concentrate their efforts on different validity requirements in the different stages of their research. My readers can see Maaloe's classification in the following table:

	Orientation	
Research stages	Theoretical orientation	Connection to other areas
1. Research stage Obtaining unique impressions	<p>Emphasis on the important questions</p> <ul style="list-style-type: none"> - The examined topics can be subjectively chosen, but they should be rooted in the developments/ occurrences in the field <p>Credibility and consistency</p> <ul style="list-style-type: none"> - The research should cover the experiences and views of the persons on the field - The researcher should show his preconceptions 	<p>The relevance and curiosity of the topic</p> <ul style="list-style-type: none"> - The data analysis method should be capable of throwing a different light on the data <p>Dependability</p> <ul style="list-style-type: none"> - The research should present the changing circumstances of the research field and must refer to the modifications in the research plan
2. Research stage Synthesis, Search for completeness and / or creating meaning	<p>Transparency</p> <ul style="list-style-type: none"> - The logic of the investigation and analysis should be completely transparent <p>Transferability</p> <ul style="list-style-type: none"> - The format of the research report should be suitable for other researchers to decide about their usability in their research 	<p>Usefulness</p> <ul style="list-style-type: none"> - The research should increase availability of alternative interpretations by the help of credible results <p>Demonstrability</p> <ul style="list-style-type: none"> - The research background should be presented adequately to ensure that research results can be used and tested in other areas

Table 5.2 Validity criteria in case of case study methodology (based on Maaloe, 2010, p. 85-86)

Given that Maaloe's (2010) summary captures and summarises very well the perspectives and research techniques that a researcher working with qualitative case study has to be attentive to; I will apply this framework below to introduce the efforts I have made for the sake of the validity, reliability and generalizability of my research:

	Orientation	
Research stages	Theoretical orientation	Connection to other areas
1. Research stage Obtaining unique impressions	Emphasis on the important questions - I approach the investigated phenomena indirectly, through the organisational members' reports and interpretations of problems Credibility and consistency - Transparent and self-critical research approach. - Emphasising the researcher's self-knowledge and self-reflection - Exposing the research objectives with the participants - Presenting researcher's value choices and presuppositions in the report	The relevance and curiosity of the topic - Multiparadigm approach, critical and postmodern reading of the case - Novel data analysis method (CMM) in the field of organisation research Dependability - Presentation of the changes applied to the research plan, primarily concerning the sample selection and analytical methods chosen (new postmodern reading using CMM)
2. Research stage Synthesis, Search for completeness and/or creating meaning	Transparency - Detailed and accurate presentation of the research process. - Multiple, independent investigation of the observed phenomena with different data collection methods (triangulation) Transferability - Requesting feedback from research colleagues concerning methodology and results of the research - Examination of the factors influencing the generalizability of the observed phenomena and results. - Detailed presentation of research methodology and research results to support the reader in forming an independent opinion.	Usefulness - Increasing the credibility of the results by searching for contradictory data, cases and explanations, tracing these to increase credibility of conclusions - Requesting feedback from organisational member concerning the correctness, relevance, applicability and generalizability of research findings. Demonstrability - Giving detailed description of the background of the research within the limits of anonymity and confidentiality. - The clear presentation of the uniqueness of the research field.

Table 5.3 Researcher efforts toward validity expectations (based on Maaloe, 2010, pp. 85-86 and Beck-Bíró, 2009, pp. 102-103)

Beyond the efforts of the researcher presented in the previous table and concerning my research inspirations that are primarily emancipatory in nature, I also find Maaloe's (2010) opinion extremely important regarding the extension of the traditional validity expectations that can make a research really valuable. I will present these extended expectations for my readers in the following Table 5.4 below. Throughout my research I have kept these expectations in mind and I will evaluate my work accordingly to these in the final chapter of my dissertation.

Expanded validity scheme	
Fairness	All the stakeholders of the research field had the opportunity to express their opinions and these were taken into consideration. The researcher proved to be ready to receive objections concerning the results of the research.
Educational authenticity	At least a part of the research objects managed to find out or to learn something new about himself or his situation.
Catalytic aute	The research actually helped its participants to change their situation.
Tactical authenticity	The research participants' situation actually improved.

Table 5.4 Expanded validity expectations (Maaloe, 2010 p. 87)

5.7. The steps of executing the empirical research

In the previous chapter on validity, reliability and generalizability criteria, I have referred multiple times to the importance of transparent and thorough introduction of the research field characteristics, the particular execution of the research and reporting any changes made to the original research plan. The aim of the next subchapter is to reveal the important details about these to the readers. This will foster the development of a transparent research report, by the help of which the target audience of the thesis will be able to form a personal opinion on the research and can decide about the usefulness and transferability of the results.

In order to improve transparency, firstly I would like to present the timeline of the research process execution with the help of the flowchart below:

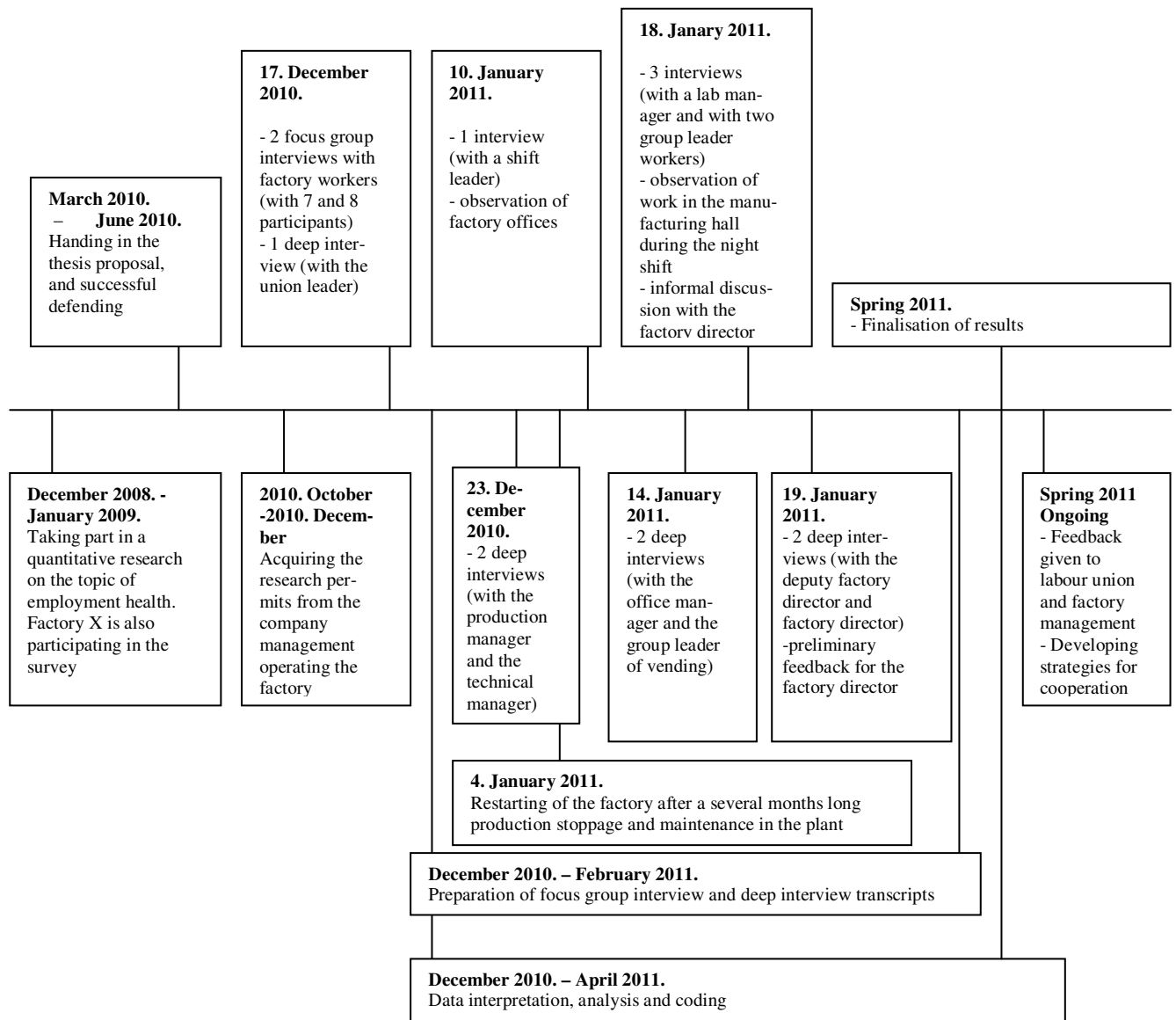


Figure 5.6 The timeline of the execution of the research plan

In the above timeline all the important, practical details of significant research steps and events are available. Next, I will explain these steps in a chronological sequence, sharing the practical details of the research in order to improve credibility and the applicability of its results. First I will go into details about the choice of the specific case and research field, and then I will briefly touch on the phase of making contact with the organisation and the internal supporters of the research. After this, I will explain the implementation of sample selection and data collection, with a special emphasis on the elements that were modified compared to the original research plans. Finally, I will discuss the methods of data analysis, describing the development of my particular research approach up to the finalisation of the research results.

1. The choice of the case and the research field: In the previous chapters I have already noted that the choice of the research field was primarily connected to my experiences with research undertaken previously. The operation of the chosen factory made a massively negative impression on me concerning the topic: workplace stress processes and organisational justice; therefore I found it important to understand this situation better and make an effort towards possible improvement. I have not chosen this factory, because I think it represents the situation well and also the employment relations of Hungarian manufacturing plants. My choice has rather fallen on this factory, because I have discovered such exceptionally harmful tendencies in this specific research field, which may appear to some extent at other Hungarian organisations as well. The investigation and better understanding of Factory X might help preventing or reducing these harmful consequences in other sites as well.

Furthermore, the selection of the research field is strongly related to the relevant socio-economic context, especially the global economic crisis that hit Europe strongly in 2009, and the precursors to which had already seriously affected this sector of the Hungarian economy since 2006. From this point of view the results of the research can be considered particularly important, since I had the opportunity to investigate the case of a Hungarian factory which had had already been crisis-ridden for years by the time of the research. Thus the research can explore the social world the members of the organisation created under these circumstances.

2. Making contact with the research field and supporters of the research: The choice of the research field did not automatically translate into permission from managers of the organisation to execute the planned research. The aforementioned research on employment health was primarily the initiative of the union and as researchers we were able to develop a particularly cooperative relationship with the trade union leader of Factory X. Therefore I have asked for his help in acquiring the approval for this research on work stress processes. Besides the union leader's maximal and efficacious support, I also had to address my official application with the short draft of the research to the company's central HR manager, who gave his approval for the execution of the research a week later. I have very limited information about the background motivation of the local corporate HR manager in approving my research. From this moment on, I was affiliated solely with representatives of Factory X workers and managers. The permission to undertake research was great and partly unexpected news for me, since the relations between the trade union and the central HR became more tense in the years preceding the research. I assume that the country HR department agreed to the trade union's request in order to improve their relationship in a question not entailing any financial expenses. However, there is also a chance that the country HR management had also realised the operational problems and difficulties prevailing in the factory, and therefore considered this research as an initiative that may bring about positive change. This assumption is confirmed by the fact that during the time of the research the country HR manager had also made a request to an organisational development expert to work on some of the problems of the factory. The country HR manager did not inform the union leader or me about this request and therefore I can not share more details about it.

Interestingly, the factory director's support proved to be only formal. According to my judgement, given the support of the trade union and the country HR manager, the factory director did not really have any other choice but to allow me to execute the research. Consequently, he treated the research from the very beginning with some kind of reservation and suspicion. Moreover, he refused the earlier promised personal interview in the middle phase of the research. At the same time, I found the factory director's opinion extremely difficult to be dispensed. Therefore in the course of my work on the research field, I was consciously looking for the opportunity of developing a relationship with him. At the end of a long day of research, very late in the evening, we had an informal conversation, during which I clarified the aims of the research and we managed to create an atmosphere of trust between us. As a consequence of this, he decided to be available for an interview the next evening.

To sum it up the research had some strong supporters, while other stakeholders have simply accepted that research will be carried out in the plant. However these attitudes have also changed drastically during the course of the research. I consider one of my most important responsibilities as a researcher was to ensure that I did not make the organisational members' life worse. At the same time, I also find it extremely important to decrease my personal biases as much as possible in the course of my research work. Therefore I consciously admit to my bias in favour of the manual workers, which becomes obvious primarily in the critical reading of the thesis. In order to decrease this bias, I tried to learn about the aspects of organizational members on all levels, and made a special effort to receive these with openness (especially in case of the managers). I think that my endeavour in doing this was successful, which is also manifested in the revision of my initial research plan. Besides the critical reading of the research I have also chosen to create a postmodern reading of my analysis, which emphasises the significance of the joint-responsibility of workers and managers and the importance of creating social worlds.

3. Sample selection and data collection: According to the chosen explorative-integrative case study methodology, I have aimed at doing research that explores the most important aspects amongst colleagues working in different organisational units, jobs and managerial levels of the factory. In the organisation of the in-depth interviews and focus group interviews I have been able to greatly rely on the union leader's support, connections and familiarity with the research field, which provided invaluable help for me. In Chapter 5.5 I have already reported the changes made to my initial research plan. Concerning the successful execution of the data collection, it was extremely important that in December 2010 production was stopped in the factory due to a sharp decrease in demand for the products crisis. For this reason the organisation of focus groups interviews with workers did not cause any disruption in the maintenance work that was carried out in only one shift. Until the restarting of the factory in early January, we were successful in organising two extremely valuable focus groups interview with manual workers. The successful focus group interviews took place on the cosiest field for the manual workers, at beer benches situated near their rest area in the factory. The two focus group discussions were about the same length (1 hour 45 minutes on average), concerning the participants I have worked with: 7

and 8 persons. I have considered video equipment completely extraneous to the research field, therefore I have only recorded these with a Dictaphone. As a researcher, I found astonishing the workers' straightforwardness and harshness that was sometimes extremely hostile towards factory management. However I have also received the explanation for this attitude even without asking for it. The workers expressed to me that they can be honest with me, because they could hardly get into a worse situation than this. They had basically not much to lose. The discussions and opinions in the two focus groups interviews confirmed each other to a large extent, and I was confident that I managed to collect as much data as needed with this data source. Therefore, in terms of the research goals, it did not cause any significant losses that after restarting the factory it became impossible to organise any new focus group interviews.

The second important tools of my data collection were the in-depth interviews made members of the organisation. I have altogether prepared 11 in-depth interviews of different lengths compared to the originally planned 6-7 in-depth interviews. All this happened primarily, because in the course of the data collection several colleagues were named as significant, concerned persons of the workplace problems and work stress processes. Originally I did not plan to interview these people, however I have changed the research plan and due to the failed focus groups, I also had extra research time to conduct these interviews. I have already prepared the majority of the in-depth interviews in January, after the restart of the factory, which proved to be an extremely turbulent period. This was itself, a very critical experience, it was highly exciting to see that – despite all the difficulties – the factory workers truly enjoyed seeing the machines running again. Using the semi-structured in-depth interviews, and through reports on the largest workplace problems, I tried to expose the workplace stress process and organizational justice perceptions of the organisational members. After the starting open questions of the interview I have tried to understand the interviewees' viewpoints regarding the already reported workplace problems. The length of the interviews fluctuated between 1 hour 15 minutes and 2 hours 30 minutes. I have recorded all of the interviews on a Dictaphone.

Due to the weaker organisation of in-depth interviews³³ and the organisational context (restart of the factory), I have spent significant time in Factory X waiting for my interviewees. Altogether I have been on the field 8 times and it was not uncommon for me to be waiting for an interview for 2 or 3 hours; however I did not mind this at all, since this had given me a great opportunity to observe really thoroughly the office and the production-hall of the factory. During my waiting times I could freely move around the factory, I tried to observe the operation and technology of the factory, the social relations and communicative actions without creating the smallest stir, usually just showing up to work on my researcher notes. In the office space of the factory for example, I had the chance to take place in a central lobby, a kind of waiting room, from which I had an overview of all the offices with an open door and thus I could observe how the colleagues were doing their work or having arguments

³³ While the trade union leader was on holiday, the office manager helped me in this activity.

in a loud voice. In the production-hall, I had the possibility to observe all the phases of the production process and the related employee tasks. Moreover, while waiting for an interview scheduled for a night shift, I could also watch the introduction and training of a new colleague and a long-drawn troubleshooting.

For the sake of transparent sample selection and data collection within Factory X, in the next figure I will present an organisational chart for my readers, in which I marked those organisational members that I could reach through focus group discussions or in-depth interviews.

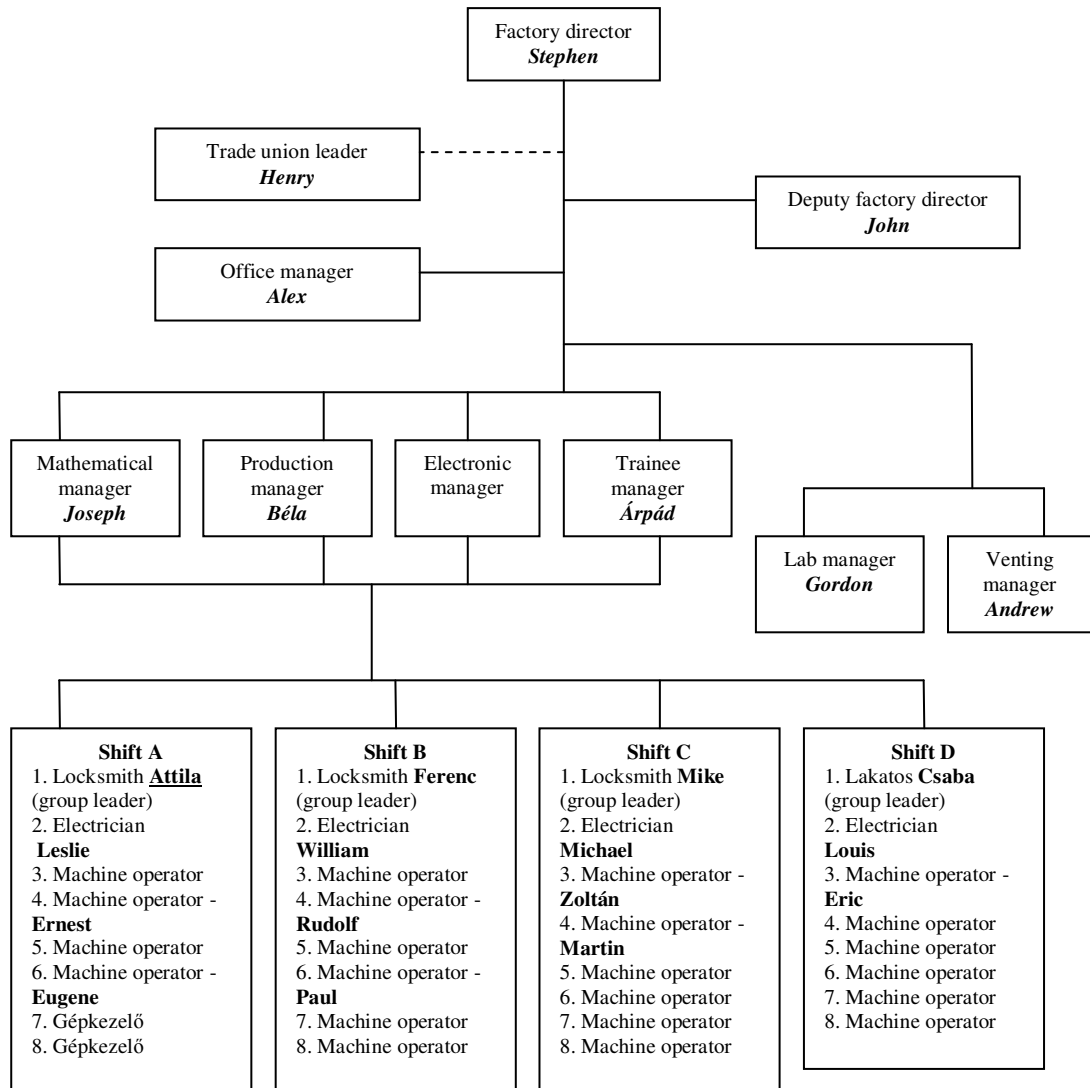


Figure 5.7 The organisation chart of Factory X and the indication of employees taking part in the focus group discussions and the in-depth interviews

In the figure above I have indicated the first names of interviewees that I will be using in the course of the analysis and when sharing quotes of the discussions and interviews based on the transcripts. Of course these names are not the real names of the employees, these have been modified to ensure anonymity. The organisation chart represents all the employees working at Factory X, however I have indicated with a first name only those, who participated in a focus group discussion or in-depth interview. In the case of white-collar workers this

represents, without exemption in-depth interviews; while in case of blue-collar workers in boxes of A, B, C and D shifts it refers mostly to focus groups. I have underlined one of the group leader employee's names since he took part in both a focus group discussion and an in-depth interview. It can be seen from the chart that I could speak with all of the office workers, except with the electronic manager, who had a surgery during at the time of the research. I could reach roughly half of the manual workers with the focus groups.

The non-participant observation method was not included in my initial research plan, but during my day? on the field, it became obvious that I can collect numerous invaluable and in other ways not obtainable information this way. The initial spontaneous observations were followed by conscious observation periods in the production-hall and in the central office waiting room. Most importantly I have tried to observe the social relations and communication between the employees, at the same time besides verbal information, the different visual elements carried a lot of significant information as well about the relationships and the operation of the factory. The visual (photograph or video) recording of this visual information could have been an obvious solution to capture these. However in the course of the interviews and focus group discussions it became clear that employees of the multinational corporations' centre regularly prepare photo reports of the factory and document mistakes and deficiencies this way. Thus in Factory X there is an exceptionally strong aversion against taking photos, and this is especially true for manual workers. Therefore I have decided not to even mention the possibility of taking photos. I consider the maintenance of a trustful atmosphere more valuable in terms of the research, than the data loss suffered because of not using video recording and photographs.

4. Data analysis and research results: In accordance with the principles of the parallel multiparadigm research, my data analysis serves the purpose of revealing the case of Factory X in two different readings. Both of these research readings are based on my impressions and notes made in the field and the word-to-word transcripts prepared from the recorded audio materials. These transcripts were made by experienced typists following my exact instructions. By the help of my notes prepared in the course of the data collection I have corrected the finished transcripts or asked for their corrections.

In the course of the analytical research phase, I have started my work on the critical reading, which is strongly influenced by my favour of workers' life quality. Hence, the most distressing and oppressive organisational practices are in the centre of my intensive critical interpretation. I was trying to capture the organisational factors leading to the employees' physical and mental illnesses and to explore the related process of workplace stress and organisational justice perceptions through reports on workplace problems and a few critical organisational processes (perola introduction, headcount decisions).

In the process of data analysis, the development of the postmodern reading was the next phase, which was built on the methodology of CMM. The necessity and excellent fit of this research approach and methodology was not part of the original research plan, it was a result of a discovery I have made during data collection.

Thus, the postmodern reading has been created with the intention of unveiling organisational processes from a perspective, that the critical reading was not able to capture. In order to practice virtues and utilize the advantages of the multiparadigm research approach the best, I have aimed at analysing series of communicative actions in the postmodern reading, that my readers have already familiarized themselves with in critical reading.

In one of the previous subchapters I have already written in detail about the validity, reliability and generalizability of my research results and conclusions. Concerning this I find the feedback that I gave to the trade union and factory management especially important. All these are extremely important controlling tools of the accuracy of the explored phenomena and conclusions; however they are even more important in terms of the possible changes and improvements to the critical organisational situation in Factory X. Based on the dialogue with trade union and factory management I hope that the research can contribute to the improvement of the employees' situation. The research can help important actors in the plant to recognise new perspectives, it can point towards destructive and tragic organisational outcomes and processes, for the avoidance of which all stakeholders of Factory X have a responsibility and an opportunity to act.

6. The analysis and results of research data

The analysis of research materials made available through the process of empirical data collection was conducted via two readings according to the principles of the multiparadigm research approach. The approach has already been thoroughly described and explained in chapter 4 of this thesis. In the first section of this chapter, a critical reading of the case of Factory X is presented to the reader, which largely corresponds with my original (scientifically-based) motivations. In the second part of the chapter, I introduce a postmodern reading which focuses on the organisational members' concrete series of communicative actions and meaning giving and the local, social reality created this way (Pearce, 2004).

In the critical reading of the reports about work place problems, the severe distress and the related physical and mental sufferings experienced by the employees serve as important starting-points. In relation to these, the deep structures containing the unquestioned basic assumptions and beliefs of the employers have been explored. The stress discourse has a central role in the analysis, in which the employees link the events of Factory X to the changes of their own mental and physical condition. In my analysis I both attempt to critically examine the beliefs of the members of the organization and to explore the development processes of these beliefs. In this part of the analytical work I concentrate on the communicational structures, political and manipulative social processes which characterise the organization. There is a special emphasis put on the role of the factory management and the influence of the Hungarian socio-economic context.

During my work in the research field it eventually became evident to me that the assumptions of the critical reading and methodological approach are less suitable for uncovering some aspects of social reality in Factory X. Without refusing to acknowledge the validity of the critical approach and its conclusions, I recognised the need for another methodological perspective which could emphasise the significance of the social construction of local reality related to work stress processes and perceptions of organisational justice. This dimension can be grasped excellently through the communication perspective, which focuses on the series of communicative actions and meaning giving of participants, as suggested by Pearce (2004). Accordingly, the postmodern reading in the second part of the chapter attempts to avoid the priori and external critical beliefs and assumptions and analyses communicative actions in a way that aims immanent critical observations originating from the local reality (mainly from observing the conflicts between the confessed goals and lived actions of stakeholders), instead of external critical judgements (Pearce, 2004).

I present two different readings of the analysis in order to enrich the understanding of research results gained from the use of two contrasting methodological approaches and to enable the findings to be explored interactively. I formulate conclusions and recommendations from two perspectives, so that these can serve as a good foundation for an effective organisational intervention. During the analysis of the deep interview and focus

group interview transcripts, I look for answers to two different kinds of questions. When I look for the answers to the questions related to the first, critical reading, the available text is a *reference unit* referring to what the organisation members talk about. Their reports on workplace problems tell us about their personal sufferings, basic assumptions and beliefs, and we may expose how employees connect the events in the factory to these consequences (*What are people talking about?*).

In the second, postmodern reading of the analysis I will examine the available texts containing descriptions of communicative actions as reports about *acts* carrying a *creative/constructive* power. (*What do people create through their actions and communication?*). I think both approaches as exemplified through the stated questions are necessary in order to explore and understand the unnecessary suffering of employees, the process of their evolution and to move towards the improvement of social reality.

6.1. The critical reading of the case of Factory X

„One Ring to rule them all,
One Ring to find them,
One Ring to bring them all,
And in the darkness bind them.”

J. R. R. Tolkien

The Lord of the Rings

In Chapter 5, containing a detailed description of empirical research methods, I have introduced the methodological model of *intensive critical interpretation*, according to which I analyse the reports about workplace problems at Factory X. This way I have aimed at exploring the connections between the work stress process, organisational justice perceptions and the work stress discourse.

A principal starting-point for the analysis presented in the critical reading of the research is the concept of workplace stress as experienced by employees. This is defined as a *process* in Chapter 3, ***in which conditions and events related to the workplace environment (stressors) induce consequences (physiological, psychological, mental or social) for individuals.*** The **phenomenon of workplace stress discourse** is built upon this concept, which, in my interpretation, is **the way the employees connect (in their reports and communications) work-related events with their (physiological, psychological, mental or social) consequences in their lives.** The second definite starting point for the critical analysis is the concept of **organisational justice**. The most famous integration of this concept with work stress theories was developed by Greenberg (2004). Based on the integrative approach of Folger (2005) to organisational justice, described in his works on **fairness theory**, we can identify a very significant potential direction for improving our understanding of the connection of workplace stress process, organisational justice and the stress discourse.

The results of the *intensive critical interpretation* I conducted are presented in four sections that correspond to the elements of this research model. First, the *surface structures* will be presented which articulate the connection between perceptions of organisational justice and workplace stress process as rational and comprehensible. This section emphasises that part of the workplace stress discourse which addresses the physiological, psychological, mental and social consequences that the employees connect with workplace problems and events, and primarily consider as given.

Afterwards, I extend my analysis to those *deep structures* that include employees' unquestioned beliefs and unconscious convictions and values that form the foundations of the previously described *surface structures*. In the critical reading of my research I separate the content analysis of these deep structures from the analysis of the processes and structures that contribute to their development. In this phase of the critical analysis I also attempt to contrast these prevailing *surface and deep structures* with *alternative structures*, that locally do not exist or which do

appear in the ideas, reports and conversations of organisation members. The contrast provided by these alternative structures assist in carrying out a more elaborate analysis of the existing structures and the challenging of the identified evident social order in Factory X. I find it important to emphasise that our imagination of the future cannot remain at the level of reproducing an already existing reality. At the same time I also do not aim to enforce some ideology or utopia (Alvesson and Sköldberg, 2000). In the critical reading of my dissertation, a *self-reflexive interpretation* has a particularly important role; I therefore strive to make real my knowledge about personal ambitions, motives and values presented in the second chapter of the thesis through a process of continuous self-reflection.

6.1.1. The *surface structures* of reports about workplace problems

Through the *intensive critical interpretation*, the physiological, psychological, mental and social consequences that workers associate with workplace problems and events can be considered to be important starting points for exploring *surface structures*. These consequences become parts of the workplace stress discourse and are strongly connected to perceptions of organisational justice. The inhuman working conditions and obvious physical-mental suffering discovered during the observation of Factory X were shocking to me. However, according to the reports and interpretation of the factory workers, these were part of a deeply unjust system, that they had no other chance but to accept them and take them as being practically unchangeable.

6.1.1.1. Physiological consequences (illnesses and health impairment)

In the following section of this chapter I introduce those physiological effects, illnesses and health impairments that were identified during the process of data collection and which were rationally regarded by factory workers as being the consequences of the working conditions and events which occur at the factory. In the quotes provided, taken from supporting in-depth interviews and focus group discussions, we can often find expressions of unquestioned beliefs and values that I consider to be part of the deep structures described earlier. These will be analysed in more detail in chapter 6.1.2.

Continuous colds and diseases of the upper airway tract

In the course of the conversations with employees, colds were mentioned as being an absolutely natural thing associated with everyday work. These are so frequent and long-lasting that most workers do not even consider the possibility of recovering during sick leave. This fact is supported by the following quotes from the focus groups:

*Eugen: So, quite sh*ity³⁴.*

Leslie: It's a miracle we are still here. And all of us could have gone on sick leave with a cold. (FG1)

William: That one feels threatened in every way. I don't have such a big problem now; but let's say I have a cold, and it will cease. Still, I don't dare take sick leave, just to play it safe.

Ernest: No wonder that someone or everyone has a cold since we have to work under these conditions every day, even for ten hours, and what's this tepid juice, this tea, this protective drink. (FG1)

As we can see, employees blame the extreme temperatures (both heat and cold) for the colds and the diseases of the upper airway tract and in regard to preventive measures they refer to the inadequacy of the supposedly protective effects of drinking tea. They cannot take advantage of recovering at home because the factory is undermanned (as the management replaces a sick worker by calling someone back from his day off).

Skin diseases, skin irritations

Employees working in certain areas complain about skin irritations that they attribute to be the consequences of hazardous agents used during certain work processes.

Zoltán (taking the lead aggressively): that's ok, that's ok, but me, when I was put there, in William's place, it [the skin irritation—RS] appeared here on my arm after one week. it may not be visible so much now...

*Mike: But that was the plum schnapps
(everyone laughs)*

Zoltán: You can see it here. Here, red blotches all over here.

Interviewer: Mhm...

Erik: It was full of those ones then.

Interviewer: And it appeared after... what?

Zoltán: When I was put to work on the dryer; the dryer.

Interviewer: Where this perola can be found?

*Erik: Well, there is still some there, yes maybe it is still there.
(many begin to talk heatedly)*

Zoltán: Eczema or what I don't know, I did not show it to the doctor. I try to treat it at home. But it's here, in the same place on my other hand, too. (FG2)

Atila: And your skin? Mine is allergic for example. I got eczema from it. (FG1)

Only a few factory employees have developed eczema so far, so workers have been trying to treat themselves. Before the research they did not discuss with each other the appearance of skin symptoms despite the fact that they assumed that one of the agents used in the course of production activities induced the exceptionally unpleasant allergic reactions.³⁵

³⁴ Potentially offensive expressions of factory workers are edited to remain recognisable but at the same time not be insulting or offensive to readers.

³⁵ In the course of the data collection process it became obvious that employees working in the same working areas were affected by certain diseases. I felt it was my responsibility as a researcher to confirm with employees the possibility that the eczema-related complaints could be related to this working process and the agents that were used there.

Movement disorders and the risk of accidents (due to physical overload)

According to the factory workers they were extremely overburdened quantitatively in terms of the physical work that had to be done. Regarding this sense of being overloaded I identified several moments when a sense of injustice arising from managerial decisions could be perceived. Among these instances can be mentioned badly determined performance targets in the first place, which are, of course, linked to the poor headcount planning and the unsolved matter of substitution during holidays or sick leave.

Eugen (takes over the conversation directly): Effectively, during production it is like that the products must be made consecutively, which requires a hundred per cent, so it is simply impossible to accomplish the goals of the plan. So, there is no way that when something interrupts, or even without interruption, according to the norm, according to the technology that it can be done. And this is the requirement. (FG1)

Rudolf: And then they instantly press us about why have we stopped; why have we stopped?

Attila: ... the machine cannot. ... this is obvious.

Rudolf: Simply, there is not even a shift change for that, and now we are back again.

Attila (interrupts irritably the other's speech): There is no shift change because there aren't enough staff for that (FG1)

Eugen: Regarding determining the norm, the norm was set according to the best machine. They didn't use the weakest link for determining the norm, but the best one and the worst one has to adapt to the best. So that's a fact. (FG1)

Rudolf: Yes. Before it was the case that if someone went for a holiday or was on sick leave there was someone who could substitute him.

Attila: Yeah.

Rudolf: Not now. (FG1)

The conversations with the trade union leader and several other mid-level managers confirmed that the headcount is poorly planned in Factory X to such an extent that by simply permitting the taking of legal holidays it would be impossible to **make** up the workforce required for the shifts.

The workers primarily mention regular back pain as a consequence of the intensive physical work in the factory, which often requires extremely demanding lifting. Without a more precise definition, this can refer to muscle strain, joint wear or spinal complaints.

Martin: It's alright, but let's not forget that when you throw out five hundred, then you begin to... a little...

Mike: Yeah. (confirming Martin's words)

Zoltán: Yeech. (confirming Martin's words)

Martin: A bit harsh, I'm also thirty-two, but I also go to bed with my back aching. So...

(The group gets excited, everyone talks at the same time, only fragments of words can be heard: You will get crippled, you see. Participant 2: It is not the same when you do.) (FG2)

William: One must throw tons (interrupts, giggles)

Attila: One must throw tons and if [the weight] has to be grabbed by hands. One piece weighs six kilos. But when one throws the hundredth, then that's... (FG1)

Martin: Now, if one can call it stressful, for example, that we throw hundreds of units per day, then yes, one is stressed, 'cause I'm thirty two and my spine hurts, my knees hurt, and it's not nice, that when after one goes home, he doesn't go happily, 'cause he is dead tired.

In connection with the physical overload and insufficient number of workers, participants did not mention any accidents at the workplace that had ended with serious injury of any employees. With a knowledge of Hungarian occupational accident statistics, this can be seen as positive, although the below-mentioned quotations

suggest that management occasionally expects hazardous work to be performed by employees. It is remarkable that the stress which arises from hazardous work is further strengthened by the fact that the workers don't know the reasons behind managerial decisions.

William: Because, if he said that HQ is pushing it, but it turned out that HQ didn't force such a thing, yet, he would still force it. Why is this good? It's not good for him either. I don't get it. It's not good for him either.

Attila: One person is not even allowed to work. And who will help him if he suffers an accident, or? (FG1)

Leslie: Returning to this, it has been discussed before. It is around five hundred meters from here. And that day... one man here, over there and down there. Well, interesting.

Attila: It's against the law for sure. Because, if an accident happens to him...

Leslie: One man, (FG1)

Apart from the performance targets that were considered unrealistic, the workers connected work overload with the setting up of the shifts. Due to this, their chances of recreation and relaxation at home are severely harmed. It is remarkable that the unbearable effects of the working shifts mostly came to the surface when work schedules were changed without consulting the workers – according to the management – ‘in order to reduce the workload’.

Martin: And last time, when they made that 'reasonable' schedule, right? We did six nights.

Louis: Yeah, that was 'nice'.

Martin: And he said we were doing it this way so that we wouldn't be so tired.

Louis: On the sixth morning you couldn't even talk to me (interrupts)

Martin: 3 days free...

Louis: I slept. (he is not bothered that participant Martin is speaking continuously)

Martin (outraged): For this the human body cannot adapt to this, because one sleeps at night. The body's system cannot adapt to become fresh during the day or at night, especially, if you do six nights in a row. This is a lot. And with this motto, that this is not so tiring. For who? For him it's not so tiring at home for sure, so. (FG2)

Here, we should mention that in relation to fatigue, the workers did not mention or refer to any part-time jobs and other casual jobs which also play a significant role in their recreation and the work schedules which they find to be acceptable. Managers take it for granted that the employees work somewhere else on their days off. Managers are very much aware of their fundamental existential problems and that the workers are bound to undertake other jobs because of the low salaries they receive.

Hearing impairment

The most likely work-related long-term health damage to the manual workers affects their hearing (although this is not confirmed by official medical examinations). It may seem surprising, but workers did not even mention this being a problem in any way. As a researcher, I did not notice it either, although when observing the production process I had the opportunity to experience the loud, constant noise. These hearing impairments were indicated to me by white collar office workers:

Alex: In the hall everyone is somehow a bit deaf.

The company supplies technically appropriate noise protection equipment, but during my research I did not see any worker using it, and nor was any of this equipment taken out of the personal closets. Off the record,

however, two manual workers told me, that during a work safety audit the authorities fined them for failing to wear the noise protection equipment. The workers were irritated by the fine³⁶ but they still don't comply with this working safety regulation.

At this point, the question emerges as to why management does not make employees comply with the working safety regulations. As a researcher working in the production hall I was also not asked or expected to wear protection equipment; in fact on these short visits in the production hall, the managers did not wear such noise protection equipment themselves either. In connection to complying with work safety regulations I could observe the consequences of worker mentality and value choices that will be presented in detail in the chapter which discusses deep structures.

The workers had not mentioned the problem of their hearing impairment, possibly because their own responsibility is obvious in this case and it cannot be persuasively passed on to others. Concerning workplace stress discourses, it is important to notice that the manual workers do not mention the consequences of that very problem which they could most positively influence.

Chronic illnesses

From the chronic illnesses that can be connected with continuous workplace stress, during my data collection I found references primarily to gastroenterological, vascular and cancer-related diseases. Workers talked only about their own less serious illnesses which did not affect their working abilities seriously. However, they did refer to more serious illnesses when they referred to other colleagues (often to those who had already passed away).

*Eric: ... that I have already had an ulcer... and I know that when it starts to come out, then from that point you should not bother about anything. Because it either comes out, and no, that isn't worth it. It isn't worth it at all, so I rather don't give a d*mn. He is talking. He is talking I just listen, because I know I did it. (Referring to managerial control)(FG2)*

From the quotation above we can understand, that according to the interpretation of the given employee, his gastric ulcer can be connected to the unfair and demanding behaviour of the managers. It is embarrassing to talk about these illnesses in front of their colleagues. It is "inappropriate" to disclose such "weaknesses" to their colleagues, even if the primary cause of illness is considered to be the attitudes of management. Participants of the focus group knew about this specific case of illness which is why the worker might have had the courage to talk about it. On the other hand, in accordance with the experiences of Harkness (2005), I did not find the focus group methodology suitable for establishing a dialogue between employees about these serious illnesses, as workers were ashamed of them or considered them to be weaknesses.

³⁶ Employees were fined 5,000 or 10,000 HUF, depending on their positions.

Employees talked about other serious (e.g. tumours or vascular) illnesses only in reference to others (mostly already retired or dead colleagues).

Quite a few of them died. They should be asked what stressed them... Some of them left since I came here, I say not many of them, there wasn't fluctuation here. Eleven people left in order to retire, and out of those eleven people, five died, so that they could not even be retired. Out of the five, one that retired, one was retired only for one month... The rest of them could not even retire. They died before they retired, eleven people in ten years. Sure, there is stress, but I do not blame the workplace. This is our environment, and the entire rushing world messes up things, and this so desired capitalism.
Joseph, middle manager

As a researcher I was shocked to hear how negative the factory workers life perspectives are. In the eyes of the workers in Factory X there are practically no better job opportunities in the area, they do not have any useful qualifications or experiences and most of them will retire from this factory. The factory workers, of course, are aware of the fact that working conditions do not have a favourable effect on their life expectancies. Early deaths of their colleagues are a sign that causes them constant anxiety, but they do not exclusively connect it to work conditions alone. Based on the focus groups and the interviews I concluded that the workers accepted their conditions and that they had given up hope that their situations could be improved.

Summary of workplace stress processes and perceptions of organizational justice from the perspective of physical consequences

In the following table I provide a summary of workers' reports concerning the connections of the previously identified physical illnesses and health damages to workplace events and perceptions of organizational justice. The interpretations and opinions of the employees, portrayed in earlier sections of the thesis, are complemented with aspects and information gained from interviews and focus group discussion (that due to the limitations on length it is not possible to provide here).

Workplace environment and events	Organizational (In)Justice Perceptions	Physical consequences (health damages and illnesses)
Extreme/changeable conditions of heat Lack of physical resources (e.g. protective drinks) (for prevention and control) Deficiencies of the applied technology (e.g. harmful materials) Overtime, night shifts No usage of protective equipment appropriate to the noise level	Badly planned headcount Over ambitious targets Lack of understanding of the decision making process Lack of opportunity to participate in the decision making process Expectations and inquiries of management Fear of the managerial reprisals (the sense of being threatened)	Cold, respiratory illnesses Skin diseases, skin irritation Physical overload (motor diseases, risk of accidents) Damage to hearing Chronic diseases (enteric, vascular or cancer-related)

Figure 6.1 Summary of workplace stress discourse and the perception of organizational justice from the perspective of physical consequences

At this stage of the analysis, my starting points were those negative physiological consequences that were reported by the factory workers in connection with work place events and working conditions. As important part of the workplace stress discourse, for the time being, I present the key moments of the organisational justice

perception separately. However due to the strong interconnections this separation is largely artificial, and at this stage of analysis it primarily provides a more transparent introductory explanation. The key objective of the final part of this section is to present a synthesis of the workplace stress discourse and the perceptions of organizational justice in Factory X.

6.1.1.2. Damages to psychological and mental health

The damages to physical health and illnesses presented earlier are inherently easier to grasp due to their physiological concrete appearances than the mental health damages which are discussed next. The methodology for my research is not based on psychological questionnaires or professional psychiatric diagnosis but on in-depth interviews and focus group discussions. With these I try to identify unwanted emotional states and mental suffering – reported by the factory workers in connection to their work – which (if persisting) can lead to serious mental illnesses. Similarly to the exploration of physical consequences, in the course of this analysis I will also mainly focus on the workplace stress discourse and on the surfaces structures and reports of organisational members on organizational justice perceptions. Thus deep structures, containing unquestioned convictions and values, will be discussed in Chapter 6.1.2.

Uncertainty, unpredictability

The employees' attitudes to life and work are pervaded by a general uncertainty and a feeling of hopelessness. They not only feel that the future of the factory is totally uncertain³⁷, but many of them report that they also find the course of their personal tasks to be fully unpredictable.

Frank: I do not know what will happen next week or tomorrow.

Attila: Tomorrow, one cannot plan from one day to another. (FG1)

Louis: Not only that, but the stress is greater, I think, from one year to the other, every year, as the factory operates, isn't it? I think

Martin: Bosses change here and there. I think people are more tense, a lot more.

Zoltán: Much more tense. Me, who has only been here for half a year.

Martin: You're tense already. (Jokingly)

(Laugh)

Zoltán: I've been here for half a year, I don't know either what I'll find when I arrive, so one comes in having the jitters. I, who really have been here for just half a year. (FCS2)

Workers typically have real difficulties with dealing this unpredictability. Even though at the time of the interviews and focus-groups the factory was just about to restart after a several-month long stand-down (for maintenance), workers are still afraid their situation will worsen. Several employees expressed their worries, should they lose their jobs they can hardly imagine that they will find a new one in their late fifties. According to the reports of employees, the reasons for the uncertainty go far beyond the organizational context since they are rooted to a

³⁷ Uncertainty regarding the future of the factory is understandable, because the company has already shut down more than half of their manufacturing sites in Hungary. There could be, however, also a possible understanding of the situation in which where workers appreciated that Factory X might not be shut down even in this difficult situation and take hope for this in looking to the future.

large extent in the characteristics of the Hungarian social and economic environment and reflect the helplessness of manual workers in the Hungarian workforce market. The constant emotional connection with negative future events which were foreseen approximated a state of anxiety in some cases.

Hopelessness, lack of goals and direction

Anxiety caused by general uncertainty and unpredictability strengthens the feeling of hopelessness for some of workers. These workers find it increasingly difficult to set and accept realistic goals; they are overwhelmed by the feeling of not having any direction and an absence of perspective in their lives. In this situation there is an increasing need for a 'true leader' to show them the way.

Eugene: You can get over that. But you cannot get over it by being on the same treadmill every day and we don't see it getting any better. They don't set the goal for us that it will be better, one can't set a goal for himself, that it will be better or something or that we can develop, and I think it also... (FCSI)

Eugene: The problem is that you can point to it separately, the whole thing is a procedure...

Ernest: The whole thing is connected. Each one of us is involved. (interrupts, talks over)

*Eugene: It is like when one sits into a car, starts the engine, changes gear and goes and goes, and he either goes straight into the wall or tries to slalom and avoid the obstacles, but there's no one to help, no one to tell where to go. **Here, you need to stop and do this, so there's simply no one who can act as a leader. So, the leader, in the real sense of the word, leader: I don't mean the position as leader, rather...***

William: Yeas (quietly approves)

Eugene: ... someone who is able to lead the factory, lead the shift leaders, the shift leaders are able to lead the groups, this is simply missing.

William: That's what I said (interrupts quietly) (FCSI)

The workers hold mainly their incapable leaders responsible for their current situation and think that the solution lies in their hands too. They are in a need of a leader who is credible based on his competencies and behaviour and not by his hierarchical rank. In their view, finding and setting the right target is not their responsibility but they expect a 'true leader' to show the way.

In this regard it is worth thinking about how much this attitude relates to the fact that the majority of the workers are in their forties or fifties. It is possible that this attitude might be observed mainly among the workers who were socialised before the economic transformation. However, in the last few years a number of studies in social science and politics show that a considerable part of Hungarian society favours the authority of a 'true leader' who just needs to be followed, and wishes to decrease their personal responsibility this way.

Helplessness, disillusionment

The interviews in Factory X made it clear that the workers do not expect their or the factory's situation to become any better through their own efforts. Referring to the constant opposition and negative consequences of their initiatives at work, they have given up the prospects of making such attempts.

*Eugene: They make the people frustrated. It's like, that one doesn't give a sh*t about anything. That it doesn't matter now. It isn't worth it basically, even what one can do well, it's just not worth it. (FG1)*

*Louis: It doesn't matter now Frank. It doesn't matter. I stopped the machine to make it available for the repairing of cars, then I was told off. From this point on I let him honk. Who cares if the product gets f*cked up? (FG2)*

Attila: It's not appreciated at all.

Eugene: They are not partners, and if one...
 William: The most annoying thing recently was that if I had any suggestion in my field, they were all stuck down.
 Attila: Not only yours, everyone's
 William: I know
 Leslie: We should give our opinion, what can be done better, how...
 William: **He annoys me, and now he comes over to ask something... and I don't care, I don't care.**
 Leslie: As if someone was talking to the wall. (FG1)

The continuous negative effects and the non-controllable events had taken the workers into a state of learnt helplessness. As a result, some of them are totally indifferent to their own work and results. Consequently, these workers show clearly the signs of alienation from their work.

Losing the meaningfulness of work

The loss of direction, failure of personal efforts and initiatives and the resulting helplessness makes the work absolutely meaningless for a significant part of the workers in Factory X.

William: He transforms the system, I say that in theory it can be good, only it doesn't fulfil the purpose. So it will remain just as useless as before, but it will be fancier, a newer and a different one, only it won't meet the target. And when I said that we should concentrate on the goal...
 Leslie: This is a planned thing and the practice is not the same (interrupts)
 William: ... and it's done that way. **So then why should someone... ah... It's annoying even to talk about it, seriously (becomes upset).** (FG1)

Martin: Going back to this point, it's not that one doesn't want to work, but it's not the same what you do. 'Cause me for example, I did not sign up for this, to like throw products day and night. Because then I could have gone to work as a mason or what do I know. (giggles) (FG2)

Attila: It's got so far, that **when something stupid must be done, I do that stupid thing, even though I know, it's stupid...** I do it, I know that the whole thing I do is stupid, that it doesn't make any sense, but I rather do it. (FG2)

William: Two men, we were shovelling with my colleague out below the band, this is like, well, an almost two hundred meters long, its like, lots of cubic meters, we shovelled it for one and a half week. **And when we shovelled out, the director came with an entrepreneur, that it should be taken out by using the machine. Is this animal really a human?** (laugh) (FG1)

The workers had given up on trying to influence decisions that were made related to their jobs, so to avert continuous conflicts they just simply executed the orders of the management. Previously, the workers had lots of ideas for initiatives about how to run the factory more efficiently; however, the management actually deprived them of all power and did not want to build on those ideas. Nevertheless, faulty management instructions and meaningless tasks dramatically decrease the factory's productivity (and the chance of survival) while employees lose the meaning of their work which increases their negative and impetuous emotions. Inner tension bursts out towards the management and the workers themselves as well.

Anger, fury, aggression

The personal tension employees feel and the insults they repeatedly suffered have shifted their emotional attitudes about the management of the factory towards an extremely negative direction. During the interviews and focus group discussion the employees expressed strong hostility towards management and their emotions were largely defined by rage and anger. These are recognizable in their opprobrium, verbal aggression directed to

management. In some cases there are indications that they believe management should even deserve some physical punishment.

Eugene: And with this motto, that this is not so tiring. For who? For him it's not so tiring at home for sure, so (indignantly). (FG2)

*William: He came over, that here is the entrepreneur. Scr*whim. I say, I can only swear. (FG1)*

William: Is this animal really a human? (FG1)

Mike: Punch him in the face (about the managers) (Big laugh) (FG2)

Martin: That they would need only a whip. And it was also said a bit higher. (Laughing)

Csaba: He said it. He was the same one who said that man doesn't matter.

*Zoltán: Whip. Into his a'se, f*ck him*

*Martin: S*cker animal. (big laugh) (FG2)*

Attila: They are evil (interrupting)

William: ... that they are evil, literally evil. (FG1)

We can see from the explicit verbal aggression that in the eyes of the workers the general image of the management is based on incompetence, negligence, inhumanity and malevolence. Thus, the aggression of the workers is primarily targeted at management level; however, the seemingly good relationships which exist between workers are also characterized by 'whooping', teasing and bantering. Some employees tolerate this well (or at least claim to), but there are others who suffer severely from it.

Erik: Joking with each other. And one must get used to it, because without joking you can really go (crazy):

Martin: This is the stress release, this is how it is, I think, yeah. (interrupts)

Erik: So, if a think tank comes here and enlightens you that you're a complete idiot, then I also turn away, and an hour later, not even an hour, ten minutes later I go up to a colleague and I start to tease him. Why? Just because. Because I don't care what he said, but without this, this teasing each other is constantly going on and on. (FG2)

Eric: The ones who don't like it will let you know anyway, or you can see it on him that he is offended, this way he will be left out of the gang and usually he will get used to it. There was, there is a colleague, the thing, the penguin.

Lajos: He didn't get used to it.

Eric: Even this is bothering him, that we are calling him penguin. (Laugh)

Eric: However, if you've ever seen a penguin moving, well, he walks exactly like a penguin. Therefore he is the penguin.

Mike: Toddler. (Laugh)

Eric: Now, he's been mad because of this for a long time. But even he's getting used to it.

Zoltán: Now, he even signs the text messages as penguin.

Interviewer: Really?

Michael: No. He either gets used to it or he leaves. (FG2)

Self-destructive behavioural patterns

The built-up frustration and tension of employees is not only released through aggression towards others. Workers do not speak much of what they do to release it, although it comes to light that a few of them do physical exercise regularly. What is mentioned or referred to much more frequently in conversations is alcohol abuse as the 'solution'. Employees referred to the excessive drinking of alcohol, almost always with self-criticism wrapped in irony.

William: You see, that is why I use the pub as a pharmacy. (interrupts) FG1

Martin: I am thirty two, working at the draining machine. No girlfriend, no child. That's it.

Zoltán: Don't say what happened yesterday. (big laugh)

Interviewer: Don't? Did something good happen here in the factory?

Zoltán: With him yes. (laugh)

Mike: We can remember, but he can't. (big, long-lasting laugh, in the meantime Martin: Ohhh.) (FG2)

Eugene: When one is in this whole thing the entire day, what can he do, he is going to get drunk and switch off, the image fades, but this remains. This cannot be digested, this stress cannot be released that way, I know this is going to come on me tomorrow at work again... (FG1)

Martin: He has to. What can he do? (laugh)

Zoltán: It is a life now. (laugh)

Martin: Since then a decline comes to you. (laugh)

Eric: Well, what can I do, shall I go crazy? (FG2)

Eric: Nothing is getting better. I don't know, maybe if I drink more wine, maybe then (breaks out in laughter)

Zoltán: Then you will be brave, Ric! (FCS2)

The above-mentioned quotes show clearly that employees are aware of the fact that turning to alcohol is not the solution to their problems in work and life in general. At the same time they see no other way to cope with their work; moreover, in some cases they identify the 'relief' won by alcohol as an escape route from going mad.

Unwanted emotional states and potential damages to mental health

Previously, I identified the most common emotional states that are unwanted by the workers in Factory X and which entail the danger of damage being caused to workers' mental health if they continue to persist. In the first line of Figure 6.2 I indicated those emotional states that the workers primarily relate to the social-economic context in Hungary and in the second line those emotions that they connect with organisational influences. In comparison to the physical consequences that were presented in the previous sub-chapter, concerning the emotional states there is a less direct connection to factory related events. We can observe the 'mediatory effect' of certain unwanted emotional states towards more seriously damaging emotional states. As depicted in the figure below, the order (from left to right) of the unwanted emotional states and potential emotional damage expresses more severe negative states, which are also indicated with different shades. According to reports about the problems at the workplace, these emotions and states of mind have a typical interdependence. The sequence and transitions/borders between these stages are not usually sharp but they do have significant overlap with each other. This can be interpreted in the way that emotions and damage to mental health – indicated in the table – in most of the cases contain the (quasi-preceding) emotional states and mental injuries (indicated on the left in the table).

Unwished permanent emotional state	Primarily attributed to environmental effects	Insecurity, Unpredictability		Hopelessness Lack of goals Loss of direction	Rage, Hostility, Anger
	Primarily attributed to organisational influence	Helplessness, Disillusionment	Losing the meaningfulness of work		
Potential damage to mental health		High level of distress Anxiety	Alienation from work, Loss of identity	Mood disorders Burnout Depression	Aggression towards managers, colleagues, themselves (self-destructive behaviours)

Figure 6.2 The most important unwanted emotional states that can cause damage to mental health

The employees' general emotional state is, of course, an extremely complex phenomenon, since relationships with their families and the public-social environment have a significant impact on them as well. At the same time, in the case of Factory X I have found that the emotional attitudes developed as a reaction to work-related events play a crucial role in the workers' general emotional states and mental health. The crisis, causing a considerable decline in the economic sector that fundamentally defines the operation of Factory X, the high level of unemployment and the threat of factory closure all cause insecurity and unpredictability for the workers, the majority of whom are close to retirement. The extremely poor performance of the factory³⁸, the series of management changes and the decisions that were considered irresponsible and the workers' deprivation of power can all be blamed for the workers' feelings of helplessness and disillusionment. The intensification of these feelings makes their labour seem meaningless for a significant number of employees and causes complete hopelessness and a loss of direction. All this increases the chances of angry, hostility and even aggression towards managers, colleagues and even towards themselves in the form of self-destructive behaviour.

In the next table, similarly to for physical illnesses and health damages, I summarize the connections between unwanted emotional states and potential mental health damage from the working conditions and events, as well as the most important organisational justice perceptions.

³⁸ Low efficiency and high wastage ratio compared to the company's other factories in the latest financial year.

Working Conditions and events	Organisational justice (injustice) perceptions	Personal consequences I. Unwanted emotional states	Personal consequences II. Potential damages to mental health
<p>Socio-economic</p> <ul style="list-style-type: none"> • Significant decline in the economic sector • Unemployment and serious difficulties in finding a job <p>Corporate</p> <ul style="list-style-type: none"> • Factory closures and layoffs • Changing expectations deriving from management changes • Leadership skills and style • Quality of employee relations 	<ul style="list-style-type: none"> • Managerial decision-making • Task distribution and work organisation • Managerial (lack of) information • (Lack of) taking responsibility on the managers' part • Handling (striking down) of employee initiatives • Managerial reprisals 	<ul style="list-style-type: none"> • Insecurity • Unpredictability • Anxiety • Disillusionment • Helplessness • Losing the meaning of work • Hopelessness • Lack of goals • Loss of direction • Hostility (primarily between the manual workers and managers) • Anger • Fury 	<ul style="list-style-type: none"> • Distress • Alienation • Loss of identity • Burn out • Long-lasting gloominess • Depression • Aggression towards managers and colleagues • Self-destructive behaviour

Table 6.1 Summary of the workplace stress and organisational justice processes and the unwanted emotional states and potential damage to mental health.

6.1.2. The deep structures of workers' reports on workplace problems

Through the presentation of the surface structures of worker's reports on workplace problems we familiarised ourselves with the stress discourse in which the factory workers associate various physical and psychological consequences with the company and with work-related events. These surface structures are based upon unquestioned convictions, values and beliefs that the factory workers themselves are typically not aware of. In the next section, I firstly investigate the typical examples of the social and work processes that play a significant role in the development of these deep structures, and later on I undertake content analysis of these deep structures as well.

In the course of Factory X interviews and focus-group discussions I became familiar with a series of important events (that could be considered even to be symbolic) from the perspectives of different actors and stakeholders. Discovering the key events in terms of the development of the deep structures led me to the decision to modify the research concept according to the principles of the explorative-integrative case study methodology, and thus I made these dominant processes into the focus of the next research phase. During subsequent interviews I always asked respondents about the thoughts and emotions that were related to these key events. I did so even if the interviewees did not mention them in their responses to general questions. As a result, besides a multi-perspective cognitive evaluation of the events, I was able to collect data that makes it possible to explore the various actors' emotional attitudes.

As a researcher, one of the most powerful and unexpected experiences I had was associated with the questions of the equipment utilised and the fundamental importance of technical conditions for the employees of the factory (and manual workers in particular). This is probably less surprising for my factory-experienced readers; at the same time compared to my previous research work (carried out in an office environment), it was shocking to see how workers' problems, physical-mental suffering, personal tragedies, illnesses, and conflicts could be related to technological changes, modifications or other related decisions. On the basis of my research at Factory X I had to completely give up the illusion that the technological developments of the 21st century in Europe provide adequate working conditions for employees. Accordingly, I paid particular attention to technology-related events in my research.

Due to the limitations on the length of my dissertation I do not have the opportunity to present to readers a detailed analysis of all major technological modifications; hence in my thesis I will present only those critical events in detail that had the most serious physical and psychological consequences according to employee reports. In the next table I list all the major technological events of the last two years of the factory and I evaluate the strength of their effects from the perspective of physical health, mental health, the quality of manager-worker relations and factory performance.

Technological event	Effects on workers' physical health	Effects on workers' mental health	Effect on manager-worker relations	Effects on factory performance
Introduction of perola burning	---	---	---	-
Starting of sandmix process	-	-	-	-
Decreasing the size of the gravel storage	0	-	-	-
Takeover of used modules	-	-	--	---
Technological modification of the mixer	-	-	-	---
Storage of old gravel	-	-	---	---
Commissioning of grinding machine	---	-	-	-
Stoppage of perola burning	+++	+	+	+
Temporary shutdown of the factory	0	-	-	NA
Technological restoration of the mixer	+	+	0	+++
Increasing the capacity of gravel storage	0	0	0	+
Manufacturing and installation of the new modules	+	+	0	+++
Storage of the closed factory's gravel stock	+	+	0	+++
Restarting the factory	+	+	+	NA

Table 6.2 Effects of the most important technology-related events in Factory X³⁹

The technology related events presented in the table above are strongly linked together, forming a series of events in which a (mostly) technological decision and event with an adverse outcome were followed by some

³⁹ I have changed the name of each technological event in order to avoid identification of Factory X.

form of corrective measure.⁴⁰ The listed technological events and modifications often happen simultaneously or significantly overlap in time. Moreover, due to the technological context it is difficult to separate the effects of each event related to the effectiveness of the factory. From all these methodological difficulties it follows that the ratings portrayed in the above table above are not meant to provide an objective evaluation of the events. This kind of artificial isolation of the technological events shows what opinions the employees of Factory X have about different technological changes and their various effects.

In the next phase of the thesis, from amongst the technological events I analysed, I will only present the introduction *process of the perola burning* in detail due to the limitations on the length on the dissertation. In my opinion this process had the most significant effect on the lives of Factory X employees. It is also the most typical pattern for the different technological events which occurred in Factory X. In the course of the analysis of the organisational processes that played a significant role in the development of the deep structures, besides analysing the technological modifications, based upon the employee reports I intend primarily to explore the topics of headcount planning, work schedule and micromanagement. From these topics I chose to give a detailed exploration of the *headcount planning process*, since this procedure shows interesting differences in terms of responsibility compared to the introduction of perola burning. Also, in the course of my data collection I managed to gather enough information to do an analysis for a postmodern reading of the same process.

6.1.2.1. Analysis of the processes creating the *deep structures* of the critical reading

In the next subsection of my work I will investigate the two organizational procedures that are most suitable for the understanding the processes of developing the *deep structures* at Factory X. In the course of listening to and analysing reports about the problems at the factory, I came to understand the series of events and communicational procedures (from employees working on various hierarchical levels of the organization) that are suitable for exposing the distorted organizational communication, repressive tendencies, asymmetrical power relationships and communicational space. However - due to the reasons explained previously - I will focus my analysis on the processes of introducing perola burning and headcount planning. It is due to these choices that my readers will have the chance to compare the critical reading of these two processes with their subsequently presented postmodern reading and analysis.

⁴⁰ Examples of these are the reduction and the expansion of gravel storage, the introduction of the used modules and then manufacturing of the new modules or the introduction and stoppage of perola burning – these are presented in this work in detail.

The process of introducing perola burning

The technological change related to the burning of perola was the topic which caused the most intense emotions at Factory X during the period of my research. Through detailed examination of this procedure the most oppressive, severely unbalanced social relationships and communication techniques can be exposed.

The initiation of the modification process and the decision-makers

According to the factory workers' reports, the starting point of the process was the beginning of 2008, just before the economic crisis started to have significant effects on Hungary. According to the employees, the actor responsible for the modification was most likely the firm's international headquarters (Mirdor). Based on employee reports it can be clearly stated that nobody in Factory X was able to clearly identify who personally made this decision. Thus the key decision that fundamentally determines the factory's working conditions was made in a fully **impersonal** way; no identifiable manager was mentioned who could take personal responsibility for this decision. The management and the manual workers of the factory consistently and generally refer to the Mirdorians as the decision-makers responsible for the introduction of perola burning.

"Somebody has brought this technology here, the Mirdorian brought this here".
Leslie, locksmith

"Well, that a Mirdorian came... that there is this and that... it's done"
Árpád, middle manager

"We have a production director; there is a management board that has its members as well, and they inform Mirdor. If they decide something else there, then they sent that young engineer, John, and he came here and he does it. And just went (he said), it cannot be stopped".
Joseph, middle manager

"Not the local management, not even the Hungarian management, here everyone knows what kind of substance it is. But this was invented in Mirdor; that what an energy saving... that what a high cost... and if it can work like this, then let's try it".
Árpád, middle manager

The necessity and aim of the modification process

Although neither level of Hungarian management openly opposed⁴¹ the commencing of perola burning, the management did not show any identification with the decision either, and in the course of their conversations with their employees they practically looked at it as a diktat that had to be implemented. The single argument for the introduction of perola burning was that necessary cost reduction was needed to survive, which won over all technological, legal, health and safety concerns.

*Martin: "Of course, everything is about the money. There is no money; there is no money; that is why they are trying to save money. The perola back then, how did everything look like. And this is f*cking not healthy at all" (speech is very frank)*
FG2

"This, this was an economic question in Mirdor. So this, this is because this needed to go, they made up that this was good, this worked. This works in Normandy, a lot of things like this works there, and with this, so much, so much gas can be saved with this, the perola has such high heat value that we can save a lot of gas with it. And that is cheap. So then, it has such heat power; such heat value that, that, that it is very, very high".

Interviewer: Yeah. But only...

Alexander: "Well, but yes, in every, every war there are losses".

Alexander, vending

⁴¹ At least during my research (or towards employees) not one single manager openly expressed his opposition.

“Because of energy saving, so this way the money... this was the point of it.”
Arpad, middle management

Primarily in the course of the reports collected during the managerial interviews an even darker aspect of the introduction of the perola technology in Factory X emerged. Namely, this is the only factory from all the sites of this multinational company where this kind of cost-cutting technological change was made.

“Wisely the Mirdorican did not try it at his place; he made us try it”.
John, top manager

“I say that you should not do experiments with a factory operating 24/7...”
Joseph, mid-level manager

This interpretation was intensified by my discussion with the union leader made during the final section of my research. He considered Factory X to be an experimental factory for the central management of the company, where one can experiment with yet new, untried and unpermitted technologies most efficiently and with the smallest risks. This is due to the low costs related to weak regulatory controls in Hungary and the good geographical position of the plant. The aim of the technological modification process is not simply cost reduction at Factory X, but effective experimentation with dangerous technologies that could not be tested in an operating factory in Mirdor.

“But they were operating completely against the rules, there wasn't and maybe there is still no permission for that. Even that was ordered by one of them from Normandy, and there the law is different, the regulations are different. Here perola was flying in the air; wherever possible. And we ground it locally with a sort of rattling mill, which is full of such cut pieces of concrete iron, and that rolls, and we let it down into it”.
Joseph, mid-level manager

“... I was at a training event abroad, or they sent me there... and there it occurred... such things were brought up, things of importance and basically, oh, yeah, and there we were together with factory directors from Mor and from Mirdor... and there the employees' health and safety was one of the first priorities”

Interviewer: Compared to the Hungarian?

Answerer: “Like generally. Probably there are either bigger penalties abroad for the failure of observing H&S regulations, or this is like a basic claim. Obviously, it would be here as well, but it is bloody big dough to implement it so that everything would be quasi-sterile”.

Arpad, middle manager

The method for introducing the technological changes, and compliance with Hungarian laws

According to the employees' reports, when introducing the perola technology Hungarian regulations did not constitute a real constraint on the company. It was communicated to the workers that the technology meets the minimum standards of Hungarian regulation; however, this assessment was fully distrusted by the workers, who presumed that some bypassing of the rules by management or some sort of manipulation of the measurements had occurred.

“They came with a paper; that oh (very cynical), that is not harmful... We have our permission to operate it, the pilot-production will be carried out... We were operating for a few months with perola”.

Leslie, locksmith

“No, because it was tested, it is not harmful to health, therefore as a matter of fact, certain, supposedly, certain laws were obeyed. So, it was not harmful to health. That it is dirty, nobody really dealt with that”.

Interviewer: Yeah. And was this considered genuine? These results of the measurements?

“Not exactly. What I am saying again, that gossip came up”.

Thomas, locksmith

Thus according to the workers' reports, company management was trying to maintain a respectable face and say that the production was in compliance with the laws when the new technology was introduced. At the same time, the factory management had minimal input, even in regard to the implementation of the modification.

"Nobody was asked here about the perola. They said here, that there will be an investment, they started the planning, someone signed the contracts".

Joseph, middle manager

"Nowhere. Here down, there could be opinions, and people could grumble. The truth is, as far as I saw, basically there wasn't anyone at a factory level, even the factory director had no voice. A Mirdorian – I don't know now what was his name and status – he tried it towards the end. But even the factory director did not have a voice about what he wanted, how he wanted to change it".

Thomas, locksmith

According to the employees' reports, the proceedings of the Mirdorian parent company reflect strong colonialist views, since the Hungarian laws and regulations were not truly respected by the company, and the management and workers of the factory were deprived of influence regarding the introduction of the new technology. The factory workers' disenfranchisement and defencelessness created a humiliating situation for them; at the same time, in order to keep their workplace - in spite of all their inner anguish - they were willing to endure all of this and they would not undertake any initiative to start open, organized protests.

The effects of introducing the perola burning equipment

According to workers' reports, the forced introduction of perola burning equipment had an exceptionally big effect on employees' physical, mental health and their convictions.

"Well, I have only one problem with that. So this, I am interested in this as well, because, like for three years there has constantly been a medical examination. There has never been any problem at all, because I was doing sports, and I am still doing sports. So, there was no problem with anything. But for quite a few people, Steve Labaki for example, and for me as well, the cholesterol level was so high, that the factory doctor said, that it needed to be checked immediately. And the perola container is here, just opposite to us. That it is a bio-plant, the perola, right. Almost, well, yes, almost bio-plant since it is flowing here everywhere".

Alexander, vending

"... what kind of technology is this, and the equipment that was built in it, they are suitable for this, nay, theoretically they are not suitable... The problem is, that everybody was - let's say - sniffing it, nobody liked it. Moreover, this substance is not too good for the health".

Arpad, middle management

Zoltan: "There were those who got sick from it effectively, because he went into the breaker... then he needed to be pulled out of there, I remember that".

Louis: "I came out of there as well".

Eric: "The kid outside got sick twice".

Zoltan: "Then, probably, it does no good to the health". FG2

The above quotations confirm employee opinions - that can be considered a general belief - that the perola technology is not only against the rules and dangerous to health, but has already caused serious health impairments within a relatively short period of time. Workers primarily note sicknesses, skin irritation and metabolic disturbances; furthermore they presume that in the long term perola exposure may lead to the development of cardiovascular diseases and cancer. In the course of my data collection in the factory, regarding the reports about perola, I experienced a sense of strong anxiety and often angry reactions from employees. This anxiety was taken over to some extent by me as well, as in the view of the concordant reports, I spent time feeling anxious in the factory hall in the knowledge of the potential dangers of perola - I was reluctantly spending time there necessary for my research.

Employees' everyday lives are pervaded by a feeling of insecurity related to their health and a fear of illnesses; at the same time, what really makes the situation of workers unbearable is a feeling of complete helplessness. On the one hand, they do not trust the Hungarian authorities to protect them (i.e. do not believe that they are capable of proving any illegality and causing the health damaging equipment to be shut down); on the other hand, the financial situation of the company without the perola allegedly threatens their jobs. This potential outcome might be even more threatening to the workers than the current situation as they belong to age groups for whom the employment opportunities in Hungary are bleak. By accepting the current situation, however, they are forced to reconcile themselves even to damaging their health and lives in general. I sensed that some of the Factory X workers have lost their faith in the preciousness of their lives, or at least they have become highly insecure in their ability to effectively do something about changing them. This helplessness and prevailing "passive mentality" is connected to worker negligence of the use of health and safety devices and various other forms of self-harming behaviour.

Employee activities against the introduction of the perola equipment

Apart from attitudes of complete resignation and helplessness, a few desperate attempts from workers to influence the factory management to act against the usage of perola in the factory were recorded:

"Some spoke up, some said there was no problem here, there was no dust here. Right, the perola dust was just flying. It was Vastag who said that there was no perola dust in the dryer... You ran your finger through it and showed it...".

Interviewer: But he has not seen it?

"He hasn't! (ironic)"

Leslie, locksmith

William: "I was telling it to the director that this is not good this way. So what? So what?" .FGI

However these few attempts to highlight the potential problem by employees were completely unsuccessful, since the introduction of perola technology is not under the competence of Factory X management. Although the factory management does not identify itself with the decision, they did not express their opinion about it openly either in front of the employees nor during my period of research – potentially, they can not express open opposition as this would probably cost them their jobs.⁴²

"Everyone knows here what kind of substance it is... what its effects are like. So, you can imagine, that if it is like that, what can it do to the human organism, no one likes even to look at it, even to hear the word 'perola'. Neither the factory director, nor the Hungarian management, I think".

Arpad, middle manager

"But even the factory director could not have a voice in what he wanted, how he wanted to change it".

Thomas, locksmith

"The perola would be really used for fire control and for err... energy savings or for lowering utilisation of gas. Opinions differ very much here, the perola is, basically, it should be dealt with carefully, let's put it this way. Otherwise, but otherwise it works well, so you can make quite significant savings with it. Here there is still quite a serious aversion to the perola, which still have to be overcome. I think we will be able to overcome the aversion. Right, basically, well, what caused the problem, besides the bad quality, or inadequate quality of the raw material, was that the additive materials were put on through not adequately prepared equipment".

Stephen, factory director

⁴² The threat to the factory director's position is proven by the fact that there were two changes of Director within two years in Factory X. The current (third) factory director was moved here from a factory closed in a Hungarian city hundreds of kilometres away from Factory X.

Consequences of introduction of the perola technology

From all of this it follows that both the factory workers and the director of the factory are working in a defenceless and threatened situation. Due to the parent company's power diktats, they are faced with being deprived of their own power and confronted with their own helplessness every day. However, we may also observe that, in the situation that has evolved, tension between the management and the workers of Factory X has increased to the point where they fully mistrust each other.

Ernest: Well yes, if you tell your opinion...

Rudolf: "if you don't like it, you can go somewhere else, done" (interrupts)

Ernest: "you are fired easily". (interrupts) FGI

Martin: "It did not depend on us. I mean we may give it a notice, but well..." (Michael and Eric interrupt)

Louis: "Like talking to a wall, we speak in vain".

Interviewer: If you said something? It would be like?

Eric: "Hm".

Louis: "Hopeless".

Nicholas: "They would tell us anyway that we have no idea about it".

Eric: "Yeah".

Nicholas: "We are stupid". FG2

Attila: "What, to the bosses? Of course not, well, I am not stupid".

William: "I personally, I do not really dare to anymore".

Attila: "I am not so stupid; they would fire me". FGI

The introduction of the perola burning equipment is a good example of the extremely unequal power structures and the oppressive social relations of the factory. The arrogant logic of Mirdorian headquarters' power diktats leave their mark on every manager-subordinate relationship and turn them into a fundamental characteristic of the organisation's culture and choices of value. Thus a vicious cycle is created in Factory X that is dominated by instructions and obedience, a lacking of responsibility and generally hostile relationships. Directly prior to the data collection for this research, perola burning was suspended because of previous accidents and other damage to factory infrastructure damage. This was done in spite of considerable investments by the company. During the several month-long experimental introduction period workers health was seriously damaged, the manager-subordinate relationship degenerated into hostility and the factory endured significant financial losses due to unutilized investments and extraordinary amortisation at the plant.

"... the way it went to the tubes, it grouted out from the inside, like it would have been covered with plastic and I think this could have burst in twice because of the static charge."

Joseph, middle manager

Despite the failure of the technological modification, the participants of the process are not able to learn from the series of events. Instead of learning, they are concentrating on averting responsibility. There is not a single concerned party who feels responsible for the outcome, which was from all perspectives a failure. According to employee reports, it is even entirely unclear as to why use of the perola equipment was suspended or stopped in the factory.

"No. Well, that this is already a plan, they are paying attention to whether it is profitable, not profitable, they will see. So there is no news about it. I think quite simply; the one who was pushing it so much out there in Mirdor, might have already retired..."

Thomas, locksmith

Leslie: "That I do not know; but what I know... it stood there the entire time... this is all I know... the environmental measurement car; it stood over the factory".

Interviewer: Yes? Environmental measurement car?

Christian: "...how we closed it, that... since then, on the next day, on the third day the car has disappeared. It has not been there since".

Leslie: "...like all kinds of probes were hanging out of the car". FGI

"...something could be saved, but from the other side it amortised a few things... that is expenditure again".

Arpad, middle manager

"I am the dealer... and I say, that we have a product—because now it is a product, not wastage—that can be utilised the same way as the gas, it has the same energy in it and the... factories can operate with them well. Then how much will one unit of energy cost from the perola and how much will it cost from natural gas, measured in MJ? He would be stupid not to raise the price as much".

John, senior manager

"...but the perola was low, so now the perola was raised as well. There started to be demand for it, right, they increased the price and then they calculated the expenditures to see whether it was worth it or not worth it, and it was not worth it this way. Until the price goes back up, this equipment will remain stopped".

Joseph, middle manager

In the absence of direct guidance, clear information and responsible actors, gossip and hearsay are spreading between workers in the factory about the existence of an environmental measurement car around the factory before the suspension of the perola burning, and about the Mirdorian sponsor of the technology that may have retired. At the same time, mainly in managerial circles, the most commonly-held opinion is that the higher price and operational costs of perola made the introduction of the equipment inefficient. However, there has been no official communication about the technological modification that was created the greatest tension and anxiety in the factory. The management would not admit in any way that the technology used was damaging to health; therefore it did not confirm or give any feedback that the concerns and fears of employees were based in fact. The possible re-introduction of the technology remains there as a threat for the workers; at the same time we do not know anyone who would take responsibility for the obvious failure.

The workforce planning process

The workforce planning process of Factory X stands out in terms of its impact on the workers⁴³ and at the same time it offers a remarkable opportunity for comparison with the introduction of the perola burning process. The significance of responsibility for decision-making clearly appears in the workforce planning process as well; however with the difference that in this case workers see greater freedom of choice for the factory director. As a consequence of this, the workforce planning process has had an even more powerful impact on manager-subordinate relationships and means that Mirdorians are being blamed to a lesser extent.

⁴³ Primarily because of an overload of work and insufficient opportunities for recreation resulting from head-count planning

Starting points and the decision makers of the workforce planning process

The starting point for the latest workforce planning events in Factory X – just like perola burning – can also be dated to the period before the outbreak of the crisis in 2008 when in order to reduce costs and improve efficiency, out of the ordinary changes were carried out at all of the company's factories. Workforce directives about annual production volumes were centrally assigned from which the factories could only minimally diverge due to the specificities of the unique technologies. A common form of cost reduction was outsourcing. Activities that were connected, but could be hived off easily were handed over to sub-contractors so that factories were able to reduce the corporate workforce this way.⁴⁴

Due to the considerable economic downturn which started in 2008⁴⁵ and due to a decline in orders, the company was forced to take additional drastic measures. First, it suspended temporarily, then closed down permanently about half of its production facilities in Hungary. The company's strategy for survival in Hungary and also in other countries was to completely shut down some of its factories, while maintaining production at the remaining factories (including Factory X) at maximum capacity.⁴⁶ In order to understand the context it is very important to take into account that the workforce planning of Factory X happens in this exceptionally depressed economic environment. In terms of decision-making it is evident to workers that the Mirdorian centre plays an important (although in their understanding, not quite clear) role. At the same time they believe that the director of Factory X also plays a very significant role in the workforce planning process.

Eric: "Basically the workforce is very small. Well, they don't let more. Probably the company doesn't allow more workforce, but well..."

Csaba: "That is all... the factory, it was counted and..."

Louis: "Until the string extrudes on the seat⁴⁷, there won't be more. When the string won't extrude, there will be more". FG2

William: "It's not enough that we are few in number, but they cut even this few and the strange thing is that this reflects again that this is crazy that no one forced him to do this. So he comes up with this nonsense on his own".

Interviewer: Who, the shift leader?

Everyone: "The director".

William: "Because if he said that the centre forced him, but it turned out that the centre did not force anything like this and he still forced it. Why is this good? It is not good for him either. I don't understand. It is not good for him either". FG1

The above quotation clearly shows how intensively the workers are concerned about responsibility – and beyond that, of course, the underlying goals and intentions of each decision interests them highly as well.

The goals of and explanations for the workforce planning decisions

⁴⁴ Most of the logistical activities were outsourced this way. In terms of overload and physical exhaustion it is important to note that, according to company employees, the outsourced workers work for lower wages in more adverse working conditions and with a less favourable work schedule (severe overload).

⁴⁵ The decline is steady in the economic sector that is dominant for Factory X; in 2012 there are still no significant signs of recovery.

⁴⁶ This was the first major surprise in terms of my original research goals and plan, since I was originally prepared to analyse the processes and effects of a considerable number of lay-offs. Contrarily, the company-level reduction of capacity affected the factory in a completely different way, and entirely different types of problems occurred at factory X - which I will present in detail hereafter.

⁴⁷ Factory X slang, meaning "until we have the warehouse full of our products we will have no more head-count".

The factory workers and managers are fully aware of the critical situation of the company. This became evident to them because of the accumulation of extensive amounts of unsold warehouse stock and became especially clear after factory closures in Hungary. Thus the workers are ready to accept that exceptional measures are needed in order to stabilise the company's situation. They believe that the goal of workforce planning decisions at Factory X (a facility that continues its operations in principle at maximum capacity) is to reduce operational costs to the level necessary for survival. At the same time, the workers consider the decisions taken by factory management to be unreasonable and distinctly counterproductive, since a decline in qualitative indicators and the efficiency of the plant will increase operational costs in the end.

"... everywhere, they closed down a lot of factories, and they stabilised the financial situation by issuing stocks that could be sold, so now the company does not have financial problems. The company's situation is stable, and they already gave dividends to the stockholders this year, since they did not pay last year... They laid off approximately twenty people—let me add that this was not a group dismissal, so from several factory units, so a few people were laid off from three-four factory units, and from the centre unit—, so now it seems like that we can stay here for two years with this structure, independent of the product selling or not selling".

Harry, middle manager

"And we didn't get a new person for the new equipment, although one person cannot operate it. Now the people who were plant locksmiths and electricians, they go there when we are making this kind of product, and till then they cannot go to other sections. This is also a problem. This is already the fourth thing of this kind".

Joseph, middle manager

It turns out from the middle level management's reports that the decisions about the workforce at Factory X are more desperate measures taken in order to survive, rather than well-thought, prudent and conscious considerations about business perspectives and the efficient organisation of work. In the completely insecure economic environment, the company is trying to create a temporarily sustainable situation that, however, seems to be an unrealizable goal and irrational expectation in the eyes of Factory X employees.

The implementation method of workforce decisions

Regarding employee workforce decisions it is important to make clear that, despite general corporate-level layoffs, the primary threat for the workers of Factory X during the research period was not the risk of losing their jobs, but the increasing performance-related requirements related to the stagnant workforce at the factory. When defining the expectations for performance and size of workforce in Factory X the workers' opinions were not taken into consideration at all. It was the growing workload in particular which caused extreme frustration for the manual workers, as they simultaneously witnessed an unproductive increase in the number of white collar workers at the plant. According to the company decision the directors of the closed down factories were transferred—almost without exception—to managerial posts at the remaining factories.⁴⁸

Atilca: "And it is not that that the size of workforce of the manual workers decreases, but that the number of clerks and the entourage up there is increasing". (They get agitated. Everybody talks at the same time)

William: "There are five people in the shift and there are seven bosses for them".

Atilca: "...so that one shift is taken by six people..." (interrupts)

⁴⁸ Taking or being pushed into early retirement rarely occurred with the directors of the closed down factories, but most of them were transferred to deputy factory manager positions that burdened the central salary budget.

William: "And then it is like, that attendance is registered on the computer and everything, well it's nonsense. They want to introduce, let's say a fingerprint entry system, well, if there are seven bosses and five people in the shift, my God, what else do they want to control?"

Attila: "Don't they want to put a camera in the toilet?"

William: "Horror" FGI

Csaba: "There were fewer bosses in the other factory. There was only one director and one shift leader".

(Nicholas chuckles, his words are not understandable)

Martin: "Now there are already seven of them here".

Louis: "They would make up a shift very easily".

Nicholas: "There are seven of them, the factories close down, all of the bosses are brought here".

Martin: "Yeah".

Nicholas: Thus far three factory directors have come here". FG2

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Ernest: "Closed factories, the directors remained. The directors remained from the closed factories... The workers left and here are the directors from the operating factories. There was a period when three, four directors were here from closed factories".

William: "Here. And there are five people in one shift".

Eigene: "He doesn't really have any position, only now, what was before, he just receives his salary and what can he do? Simply saying, he is picking on people" (interrupts)

William: "Nothing else". FGI

In the workers' opinions the number of white-collar workers in the factory exceeds by far the necessary level. According to these reports, the directors of the closed factories received preferential treatment compared to the manual workers, since they were employed in the remaining factories even if no real tasks could be given to them. The workers find the managers' continued employment unjust and completely pointless in terms of cost effectiveness. In terms of their own work they see this solution as increasing the level of control over them, and they complain about being over-managed. The workforce decisions and the increasing workload which affects the manual workers are in direct contrast to the managers' situation and are the main sources of perceived injustice.

Csaba: "The workforce has been cut quite a lot. There is no one who would do the preparation, there is nothing, because the shifts are barely enough, everything is narrowed down".

Louis: "There is absolutely no substitute". (intervenes)

Csaba: "There is no substitute, there is no one who could work or do the preparation". FG2

Attila: "Because if someone gets sick or takes a day off, they don't really substitute him with another person".

Rudolf: "Yes. Before, it was really so that, if someone took a day off or was on sick leave, then there was someone to substitute him".

Attila: "Yeah" (interrupts)

Rudolf: "Not now". FGI

"...when we look at our technological workforce, we are not even as many in number as the holidays which could be given out. If we look at the holidays and the technological workforce, there are one thousand days of legal holiday for which four more people would be needed to cover in order to be able to give out the holidays. Only the holidays. And there isn't any word yet about spare locksmiths for sick leave or anything else".

Joseph, mid-level manager

Frank: "Overtime cannot be taken as a day off; if you do that, then one person is missing again here in this section, therefore this is a vicious circle". FGI

The above quotations show that it is obvious for both the manual workers and the managerial circle that the employee workforce required to meet performance expectations does not suffice to meet the legal annual leave entitlements. This situation is worsened by problems of illnesses and in some cases long-term sick leave. The reduction of substitute workers made the system practically unsustainable, since there is no opportunity to take days off as compensation for overtime due to the lack of necessary workforce.

The effects of workforce planning decisions

According to the employee reports, the primary effects of the workforce decisions become apparent in the growing intensity of their work; moreover the employees' recreational opportunities are reduced since they

may get fewer days of holidays than they are legally entitled to. Workforce planning decisions also have an exceptionally unfavourable impact on factory workers in terms of performance expectations and related bonuses.

Louis: "Until the product is coming out from there in any sort of quality".

Interviewer: Until then they won't do anything?

Erik: "Of course not... Until then we should try to divide it up so that one will be put here, the other will be put there; there are always that many people who can do the four shifts, done". FG2

Martin: "It takes so long till they realise a car and after that he yaps there, why we have not met our production targets? They create such production targets that cannot be accomplished".

Louis: "even if it is a hyper super (machine), it is nonsense". (he speaks over Martin)

Nicholas: "It is impossible to do that thing that they prescribe". FG2

Rudolf: "Well, compared to the workforce, the truth is that the workforce is not large enough for there to be someone to take over the shifts. So it often happens at the unloading machine as well, that simply there is no one who could take over the shift".

Atila: "Slowly, like the conveyors". (interrupts nervously)

Rudolf: "... because one of them is sent here, the other one is sent there, the third one is working there, the fourth one is given the order to do this. And the one at the unloading machine is sometimes almost alone in the back. And it is not only me who sees this, but a bunch of my colleagues".

Atila: "It's like this at almost every machine". FGI

Production targets that are considered impossible to meet by the workers and the apparently inadequate working facilities have led to a situation where Factory X continuously misses its performance targets. Therefore the workers have not received any performance-related bonuses for months. In my opinion, the marginalisation of quality aspects has an even more devastating impact on workers and the factory as a whole. This is connected – apart from the reduced workforce – to extensive usage and preference for low quality raw materials⁴⁹. On the one hand, the extremely large amount of waste created raised the workers' physical workload beyond endurance⁵⁰; on the other hand it also undermines their self-esteem. As much as they are aware of the external causes for quality problems, the constant production of waste causes permanent frustration; their efforts seem pointless, and this persistent feeling of helplessness undermines their faith in themselves. The factory director partly acknowledges this unfair situation, at the same time he does not see any opportunity to change this.

Stephen: "Yes, when they work the most they get the least money".

Interviewer: That is right. Exactly.

Stephen: "That is right... Yes. This is quite a difficult thing... This is a difficult thing. This is a difficult thing, because the game rules, as I said, they are described precisely. And they do not measure how Mr. Perás⁵¹ works here, but they measure the performance of the factory".

Stephen, factory director

The factory director's words reflect well the fact that while the factory employees believe that it is within the factory director's competence to resolve the apparently unfair situation, the director himself does not consider this his personal responsibility, and refers to impersonal "precisely described game rules".

⁴⁹ The management decided in favour of using unused, poor quality raw materials in Factory X in order to reduce costs.

⁵⁰ The workers have to lift and remove shoddy products from the production line manually.

⁵¹ Mr Perás is the engineer at the Mordorian centre; he did a test-run for the new (and the mostly disapproved of) machines.

Employees' actions and ways of coping

In connection with decisions related to the workforce, the employees of the factory have been offended frequently. We may observe with this example – similarly to with the introduction of the perola burning equipment – that after all this the workers still bow to decisions that violate even their statutory rights. It shows their defencelessness and helplessness that they neither trust the ability of labour unions nor government authorities to defend their rights and represent their interests. Protesting through labour unions or turning to government authorities are seen as more threatening to them than bearing the current situation; however this resignation comes together with a strengthening hostility towards factory management. They occasionally still give notice to the factory management about the perversity of the performance expectations, but instead of this creating reasoned discussions, it rather creates disappointing debates and offence.

Rudolf: "I say no. How many cars should be made from that? No - he says - how many cars have to be made. And we are arguing there, whether they have to be made or it should be made... So, simply he is busy with the work time".

Interviewer: So you were arguing about whether you have to or you should make that much and he could not accept that it is not possible to make that much.

Rudolf: "Yes, yes".

William: "The sad thing is that he has worked at the factory for a hundred years, so it is nonsense that he can not estimate it".

Interviewer: And then he placed the responsibility on your shoulders that it could not be made?

Rudolf: "No, he turned and left, well..."

FGI

As a way to avoid the great overloading of workers in Factory X, the recruitment of new employees appears to be a forward looking solution, according to the factory workers themselves. They think of potential new colleagues with hope, quite interestingly they are particularly looking forward to meeting young people. This was especially surprising for me, since the majority of the workers are over 50 and I had initially assumed that they may have more difficulty in getting along with younger colleagues. This, however, has not been justified in any way. Just to the contrary, they truly miss and would like to see a new generation of workers coming, who would take over the operation of a factory of this kind. It is also important to recognise that physically stronger young adults who have greater ability to carry the products about the factory would be a great help to the current workers during the physically intensive working periods. This became evident through my research, although employees rarely speak openly about the problem of the decreasing carrying capacity of aging workers.

Attila: "There is no new recruitment. So there are not even any new young people".

Eugene: "There was a little layoff in the centre... Four, five people retired and were there any new workers to replace them? Well, tomorrow we are going to go as well". (interrupts)

Frank: "Today's young people will not come to work at places like these".

FGI

Eugene: "Because on Saturdays, Sundays, in the night, there isn't any... the factory should operate daily, three hundred sixty-five days a year. They come here, they find out there is a night shift. They look around and they turn back right away".

FGI

In terms of the employees' actions and way of coping, unfortunately we can see once again helplessness and hopelessness. The workers of Factory X do not see how they could do something about changing their fates for the better; hence, they turn aside all possible responsibility for resolving the evolving situation.

The consequences of the workforce decisions

Regarding the effects of the workforce decisions, I have previously reported on the growth in intensity of work, worker overload and the persistent quantitative and qualitative problems with production in Factory X. This situation is clearly unsustainable in the long run and since no stakeholders from the factory are ready to take responsibility for it, the current actors with their current attitudes do not seem to be able to resolve their fossilized problems.

However, there are some signs that point in the direction of a possible solution of both the constant struggle with the lack of workforce and the suffering resulting from this. During the last phase of the research the factory director finally decided to employ five new specialists.

"Because somebody else could be in our position as well, since there are quite a few... now, we were looking for some new colleagues. Well twenty-some people applied, and then, five stayed here".
Stephen, factory director

The factory workers did not receive transparent information about the reason for this recruitment decision. They do not know whether the factory manager – in accepting their arguments – intends to permanently increase the manual workforce of the factory, or whether the newly arrived employees are meant to substitute for soon-to-retire and permanently ill workers. At the same time, other intentions can also be discovered from the factory manager's words. In one of our non-interview conversations he explained that due to arrival of new employees he expected that the older employees would pull themselves together, since they could see that they were dispensable, and then the inadequately performing workers could be dismissed.

So, very similarly to the case of the introduction of the perola burning equipment, no one has admitted to making a mistake regarding the workforce decisions. A managerial decision was made which seems to be connected to the workers' requests, but this was not confirmed. Despite possibly solving the workforce-problem, this decision will further strengthen the workers' feelings of helplessness and deprive them of their power. Considering the factory director's intentions, threatening job losses and increasing the defencelessness of the workers seems to be further increasing.

The analysis of common patterns in the development of deep structures

Framing the context

A common feature of the problem areas reported by workers of Factory X is that among the contextual factors the effects of the economic crisis (hitting the sector very strongly) became dominant. The information about the dramatic consequences and prospects of the crisis affected the workers through multiple channels.

The media's daily reports of the economic downturn and the accumulated, enormous amounts of unsold inventory on the factory's storage area made the seriousness of the very obvious. The significantly increasing national unemployment rate and the company's decisions to close down some of its factories in Hungary did not leave any doubts about the seriousness of the threat to the existence and jobs at Factory X.

At the same time, my analysis has revealed an interesting duality and asymmetry in the corporate communication related to the crisis. The corporate leadership was trying to convey the message towards the employees that the financial situation is stabilised with the factory closures and other crisis-measures. At the same time they were also continually sending powerful messages to the employees, that in order to cope with the extreme economic difficulties and threats they also need to increase their efforts and make some sacrifices for the survival of the company and Factory X. I have discovered a particularly strong informational asymmetry concerning the decisions on factory closures and specific crisis measures of the company. Neither the workers nor the managers of Factory X had substantive information on the criteria the company used to decide about closing down or maintaining manufacturing capacities in Hungary. This contributes to a great sense of insecurity in Factory X, especially concerning the fact, that one of the factories closed down by the corporation in Hungary (Factory Y) was best of class in terms of efficiency, technology and human centred management practices. The workers have not received any official information about reasons why the company had to close down that plant, which has remained incomprehensible to them. This has further strengthened the feelings of helplessness and hopelessness in workers of Factory X, since the only thing they could see and understand is that Factory Y, a technologically much more up-to-date and outstandingly efficient factory was shut down.⁵² As a consequence of these events the workers receive two messages from corporate leadership. First they are expected to make sacrifices for the survival of the factory and their jobs, and then they are confronted with the experience that even the greatest efforts and most outstanding performance may lead to a closure of a factory.

Managerial enhancement of increasing feelings of being threatened

The corporate answers given to the crisis both concerning the decisions and communication have clearly increased the employees' feelings of being threatened. The risk of physical illnesses is associated with the technological change (introduction of perola burning) described in detail previously; while the employees' fears of overload and overwork are connected to the workforce planning process. Based on the employees' reports I could

⁵² There is strong uncertainty among both managers and physical workers in the factory in concerning the reasons for closing down Factory Y. This opens up the room for the formation of various rumours and speculations on the decision. One of the opinions is about the unfavourable geographical location of Factory Y; however this is doubted by others due to the proximity of the motorway to the factory site. Another gossip is linked to the director of Factory Y, who has a legendary reputation among Hungarian employees. This is grounded in his human centred management style, clear personal responsibility and readiness to conflict with the international headquarters. There is a widespread belief among both factory workers and managers, that in spite of the outstanding results, the alternative managerial approach represented by Factory Y and its director was in the way of the corporate headquarters.

clearly identify a characteristic management approach that attempts to enforce the adverse crises measures by threatening the workers with the danger of an even more disadvantageous outcome.

The most threatening outcome for the workers is obviously the closure of Factory X and the possibility of their losing their jobs, since most of them are in their fifties and have worked in this factory for decades. The workers of Factory X give no value their own work experiences and labour-market opportunities and do not expect to find work elsewhere if they end up losing their jobs. As a consequence of the existential vulnerability and defencelessness of the workers, they do not see a way to survive even a shorter period of unemployment. This is especially through for workers who have large amounts of loans taken.

In spite of this situation management of Factory X seems to consciously strengthen the feelings of defencelessness in the workers. The complete disregard of workers' technological recommendations, the exclusion from the decision making processes does not only deprive the employees of all of their power, but it also undermines the workers' self-esteem and their sense of professional competence. The management constantly blames the workers and holds them responsible for the inefficient operation of the factory, and as a solution they constantly strengthen the means of monitoring and control.⁵³ The factory management tries to get round the indignant employees with the argument *'who does not like it, can leave'* and this is usually combined with comments saying that *'hundreds of people queue at the reception'* for the position of a leaving worker. Therefore, the workers feel like that their knowledge and their experience is not really valuable for the factory, that they can be substituted any time, thus the workers themselves tend to underestimate their possibilities, and the feeling of helplessness and hopelessness intensify in them inevitably. Lazarus's transactional stress model proved to be exceptionally suitable to the understanding of the development of feeling of threat. At the analysis of the common patterns of the development of deep structures, we could clearly see how do the event of the economic crisis and its effects become an extreme threat for the workers, interacting with the managerial measures and the decrease of personal self-esteem. In the employee reports I have found almost no trace of that interpretation that would look at the company's situation or problems as a challenge, having a chance for a positive outcome. The workers rather reported about their offences and about measures threatening their physical-mental health, against which they could not act due to their fear of an even bigger threat (unemployment) and due to lack of alternative opportunities.

The alternatives (the 'would have' condition)

When analysing reports of managers and workers and the key processes, I paid special attention to the kind of alternatives employees of Factory X suggest as solutions for the evolved problems and situations. Possible alternatives are particularly important from the perspective of the intensive critical interpretation method since

⁵³ During the data collection in Factory X, that can hardly be called a modern plant in terms of technology and especially not in terms of working conditions, the introduction of a fingerprint detecting entry system was in process.

contrasting the taken for granted processes and structures with alternatives make them easier to explore and unveil. The integrative approaches of organisational justice offer good connection points as well, since (for example) one main focus area of Folger's model is exactly the alternative opportunities perceived by the stakeholders.

According to employees' reports, one of the most determining consequences of the economic crisis is the narrowing down of opportunities. This is particularly true for exit opportunities, since employees consider their chances of finding a job outside the factory to be exceptionally hopeless. Therefore, I could explore in my research primarily the alternatives voiced within Factory X. The majority of these alternatives were related to managerial decisions and measures, which the employees referred to as "would have been possible to do" (equivalent to Folger's would have condition).

The perola burning equipment was introduced in a unique way and presumably with an experimental intent only to Factory X. A similar type of technology was introduced to another factory as well; however that solution involved burning another substance which could be fed in through a closed and tested technological process. According to the factory workers it would have been possible, in spite of the crisis, to implement the technological modification in an entirely different way. Employees believe that perola burning is economically ineffective and its impacts on the employees were particularly harmful. Among the alternatives mentioned by employees included the usage of another substance for burning purposes and the preliminary testing of the technology under laboratory conditions, but undoubtedly the strongest of all alternatives is the complete abandonment of this kind of technological modification. In terms of the workforce planning process, the alternative desired that would have been possible according to employees is hiring the technologically required minimum number of workers. Workers believe that, despite the crisis and the cost reduction constraints, this would have resulted in higher efficiency at the factory than the implemented practice of cutting back on legal holidays and sick-leave.

Based on the employee reports, and as emphasised by the critical examples, it can be clearly stated that according to Factory X employees (even in the threatening situation caused by the economic crisis), alternatives to perola burning could have been used that could have simultaneously improved the efficiency of the factory and been more favourable to the physical and mental health of employees. With this in mind, the question arises: why were these alternatives not implemented? It becomes particularly interesting how employees judge the responsibility associated with these decisions.⁵⁴

Responsibility (the could have condition)

In the course of my discussions with Factory X workers and managers, the shifting of responsibility by all stakeholders was clearly recognizable. The company's employees acknowledged significant problems; however

⁵⁴ Considering this question, Factory Y is once again a remarkable possible alternative. According to the interpretation of some employees in Factory X, this outstandingly efficient factory was closed down because the decision-making practices of the factory director were considered an undesired alternative by the corporate headquarters.

all of them blamed others for creating them. The factory manager saw the primary problem as being worker attitudes, the workers blamed the middle-level managers and the factory director while the middle managers were concerned about the responsibility of both the factory director and the workers. From all this it can be seen that in Factory X taking personal responsibility for decisions and mistakes was almost entirely absent behaviour pattern. In the procedures described in detail earlier, we do not find any taking of personal responsibility, despite the fact that there were significant corrections to the technological modification and the workforce planning as well. The lack of responsibility taking is especially striking in the case of the factory director, since he is the one, who is forced to make corrective decisions. Based on the conversations I had with him, the factory director believes that he did not make any poor decisions, but that new and changed circumstances or the workers' negative attitudes forced him to change. The lack of managerial responsibility deprives employees of the opportunity to see their professional and technical standpoints or recommendations confirmed. All this fundamentally undermines the possibility of a trustful relationship existing between employees and managers (especially the factory director) in Factory X and makes employee initiatives, feedback and or taking responsibility meaningless.

The other important issue, besides the lack of taking of personal responsibility, is to explore who the workers hold responsible for the decisions leading to adverse or harmful physical and mental consequences. We can see in the processes described above in detail that there is a significant information shortage concerning these, and in the absence of accurate information employees find it difficult to judge who could be responsible for decision-making. Regarding the introduction of perola burning the employees refer primarily to the responsibility of the Mirdorian centre and they assume that the management of Factory X had no room for decision-making. In contrast to this, they consider workforce planning and hiring to be below the technological minimum within the competence of the factory director. In terms of the outcome, both of these processes enhance conflicts and misunderstanding between workers and management. Highlighting the responsibility of the different levels of the management, the workers' overall perception and interpretation (determining the stress discourse) is that they have to bear the negative consequences of bad management decisions.

We may observe that, while in case of workforce planning the workers identify the factory director as the responsible person, there is hardly a chance to attach responsibility outside of the factory to any specific person. In case of the introduction of perola burning, a decision which affected the employees extremely unfavourably, the decision was made at the corporate centre, from a power that is actually indefinable and impersonal (Mirdor). This is very similar to how the workers interpret the economic crisis. In this case there is also only a perceived threat; neither the responsible person nor the exact source of the threat can be identified. The impossibility of identification and the impersonality of the threat both increase the workers' feelings of helplessness, defencelessness and the negative consequences of the workplace stress to the extreme.

Moral and legal requirements (should have condition)

Through the exploration of processes which develop the deep structures of Factory X we can discover that in all of the critical procedures described earlier there can be found some sort of serious violation of moral or legal requirement. Concerning the commencement of perola burning, we can conclude from the employees' reports that the employees' rights to health and healthy working conditions were clearly violated. In my opinion, the company management subordinated the health of the employees in Factory X to a decision to cut costs through the introduction of the new piece of technology. In terms of the workforce planning process, employee reports consistently point to the direction that, besides breaking Hungarian law, the principles of fairness in expected and possible performance and just wages have also been severely violated.

The seriousness of the violation of moral requirements reported by the employees is seen in the fact that the company and the management of Factory X took advantage of their positions of power to such an extent that even Hungarian law did not limit them in their decision-making. In the case of perola burning, the employees had to work with technologically inadequate, unauthorized technology. In order to keep the workforce plans below the technological minimum, part of the legal annual holidays were taken away from the workers (who were called in to work even on their days off, or were required to work overtime to cover the sick-leave of others).

Based on these observations it can be concluded that in order to reduce costs the company, Factory X has consciously broken and circumvented Hungarian laws and regulations that were designed to protect employees. The violation of law is clear to both the management and the employees of Factory X. It is therefore particularly interesting to examine why the workers and the unions have not taken any steps against these more forcefully. Based on the analysis of the workers' and the union's reports I found two explanations for this. According to one of the explanations, the Hungarian authorities are not able to discover these violations, or in order to maintain the workforce the regulators apply to companies insignificant sanctions. According to the other, complementary explanations the unveiling and oppressive sanctioning of the violations could lead to the closure of Factory X, which according to the workers would be worse for them than the current immoral and threatening situation.

The absence of powerful, straightforward employee action against the immoral and lawless behaviour of employers, in my opinion strongly erodes the Hungarian legal system, rule of law and expected ethical norms in society. From a pragmatic and short term perspective, the behaviour of the workers and their resignation to the situation is completely understandable. In the long run, however, these practices are extremely dangerous to their physical and mental health and the managerial decisions used in Factory X humiliate them continuously. In my opinion, the workers' permanently degraded situation, the relativisation of work safety regulations and ethical norms are a greater harm to Hungary than a possible loss of certain workplaces. Thus we have explored a situa-

tion in which a seriously humiliated group of citizens believes it will get into an even worse situation if they stand up for their own rights. This is an unacceptably vulnerable state, which undermines the rule of law and threatens employees with the state of being in ‘quasi-slavery’.

For transparency and summary purposes I present the main themes of the work stress process, the work stress discourse and perceptions of organisational justice unveiled through analysis of the development of deep structures in a visual form that shows their interaction and main patterns as well. I capture these in a way that goes beyond traditional models and figures of cause-effect relationships. This depiction allows a broader interpretation, which can express the connection of cognitive appraisals, emotional and moral processes and is not limited to strictly defined timelines or rigid hierarchies. Accordingly, in the illustration below I have depicted a mind-map of the interpretation process concerning workplace conditions and events and their physical and mental consequences. This mind-map was constructed based on employees’ reports about workplace problems.

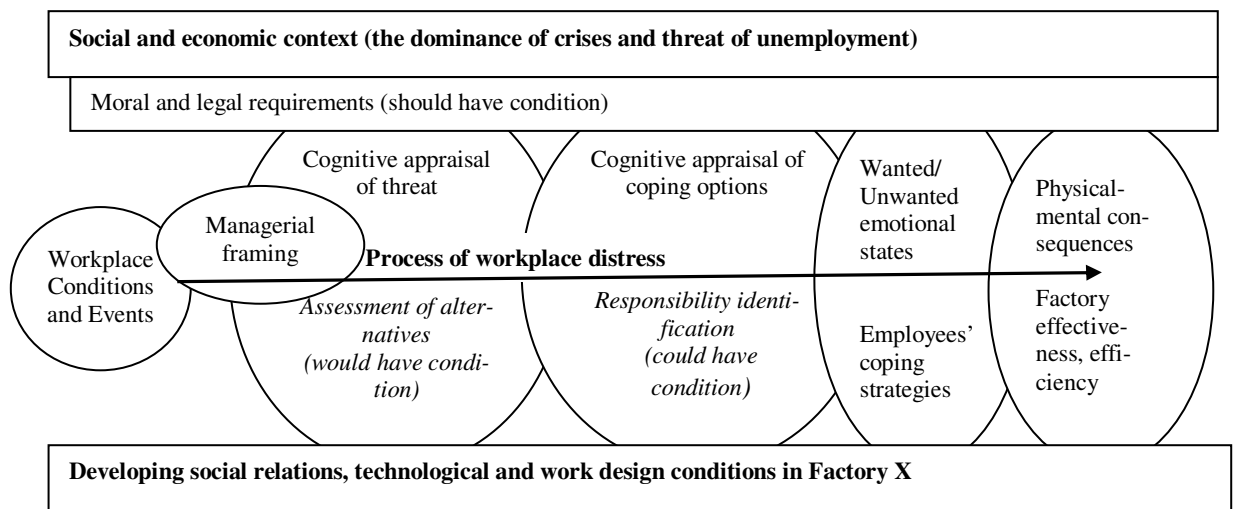


Figure 6.3 The mind map of the workplace stress process and its interpretation in Factory X

Based on the critical analysis of the processes developing the deep structures of the organisation and the stress discourse in Factory X, it can be concluded that the perception and interpretation of critical workplace events cannot be understood independent of the social and economic context, and the relationship, technology and working design conditions in the factory. I have to highlight the moral and legal requirements (should have conditions) that are very important reference points for employees. These are in continuous interaction with the workers’ perceptions, influencing them, and in case of Factory X causing a massive erosion and loss of significance. The managers of the factory play a crucial role in this process as they are frame the context and the events of the factory in a way that aims to improve results by taking liberties with employees. The managers did not even try to frame the critical events of the factory as challenges that could have a positive outcome. On the contrary, they made these threats to employees very explicit, and pressed the need for the making of some sacrifices in order to avoid an even more threatening outcome.

In terms of the stress process at the workplace, the primary appraisal of critical workplace events as threats is very significant. The appraisal in the critical processes examined in Factory X showed a very strong correlation with the appraisal of possible alternatives (would have condition). Going beyond Folger's theoretical framework, the employees in Factory X had to live simultaneously with the existence of known (would have) more favourable alternatives for processes in Factory X, the hopelessness of making changes to them and their own lack of exit opportunities. The combined effect of perceived injustice and helplessness increased the stressful effects of defencelessness in the factory to the extreme.

The analysis has also revealed, strongly connected to the findings above, that the workers perceive their coping opportunities within the factory to be extremely unfavourable. They therefore reject the possibility of taking any sort of personal responsibility or initiative in changing the situation developed by the critical events. The perceived meaninglessness of active search for coping strategies is strongly connected to the emphasis on managers' responsibility. The most adverse processes in terms of stressors are those which are fully impersonal (concerning responsibility taking). In these cases the employees do not even have information on who exactly could have made a different decision (could have condition).

Considering the consequences of the stress process, the employees' unwanted emotional states proved to be also extremely important. Among these, feelings of insecurity, disappointment and helplessness were the most characteristic of the investigated critical processes. The lasting survival of these undesired emotions generated further and even more destructive emotions (feelings of meaninglessness, wrath, hostility, anger) and behavioural responses (hostility and aggression against the managers, self-harming behaviours) in employees. As a result of this, employees of Factory X report very severe physical and mental health damage, while the factory's efficiency and efficiency is harmed. These consequences, however, react with the social and economic context, the relationship, technology and work design systems developing in the factory. Thus they significantly influence the critical events evolving in the future, the managerial framework and their perception and interpretation by employees.

6.1.2.2. Content analysis of the deep structures in the critical reading

In the final part of my critical reading, applying the intensive critical interpretation model, I summarize and visualise those surface structures (explored through the investigation of the work stress discourse) that are accepted as unchangeable conditions by the employees of Factory X. I will also indicate the deep structures on which surface structures are based, and which contain unquestioned beliefs and convictions. In order to facilitate the exploration of these surface structures and deep structures, I will (as a kind of contrast) also display those alternative structures that contain possible solutions and ideas which are considered insignificant or non-existent in Factory X.

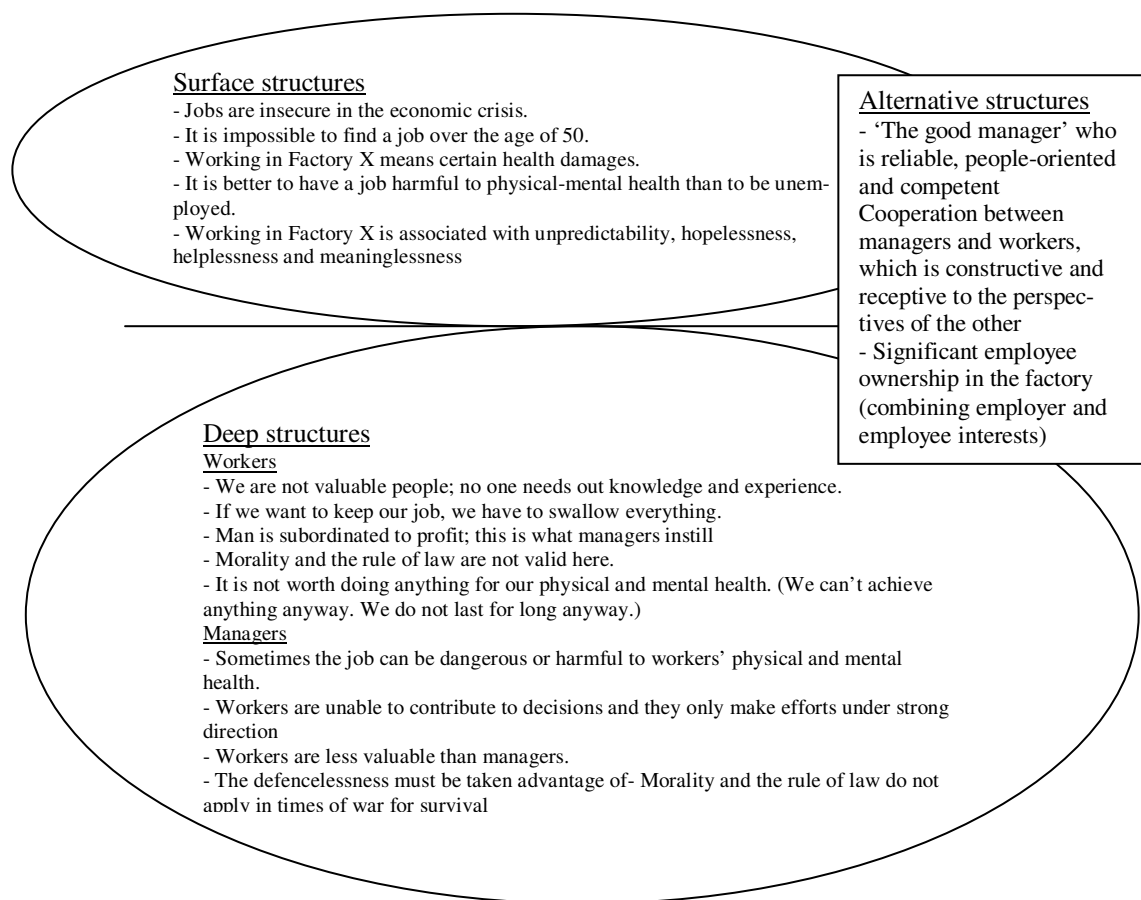


Figure 6.4 Surface and deep structures explored in Factory X

In the course of the presentation of the results of my critical analysis we may have recognised those structures considered to be given, which the workers reckon as part of a system considered to be rational and which we could get to know directly from the reports and stress discourses about the problems at the workplace. That peculiarity of the capitalism developed in Hungary is part of the surface structure, which is that for the employees over the age of 50 it is almost impossible to find a job, the labour market does not appreciate their knowledge and experience. The crisis exacerbates the situation, since the insecurity of the finding a job increases further due to the growing unemployment. It rationally follows from all this for the employees that it is worthy to make an effort to keep a workplace even if the working conditions are exceptionally adverse. According to the workers' reports the continuous respiratory diseases, the skin irritation, the back pain and hearing impairment are the natural concomitants of the work carried out in Factory X. The workers simply have to live with the feeling of unpredictability, hopelessness, helplessness and senselessness in order to keep their jobs.

At the same time, these surface structures were not built on the deep structures that can be revealed with the help of the detailed analysis of the unconscious and critical processes. At the presentation of the often hidden, deep convictions and beliefs I segregate the deep structures revealed in connection with the workers and the

managers. As shown in the above figure, one of the most important among these concerns the workers' self-conception. Based on the employees' reports it can be declared, that in connection to their work, their self-esteem is very seriously damaged, their faith in their own value is shaken. This manifests itself in the disappointment at the efficiency of their own efforts and at their coping abilities. They do not believe that they could do anything that could influence their situation positively. The moral rules and the validity of the laws became uncertain for the people working in Factory X, since they feel like that they are forced to work in a situation that continuously breach these.

The Factory X managers' decisions indicates that the validity of the controlling moral rules ceases rather increasingly in the struggle of the company's survival and in the vulnerable position of the workers. In this situation even the serious jeopardising of the physical-mental health is permissible and just as well, dangerous 'experimental' measures can be undertaken in the workers' vulnerable position. All this made the workers devalue the appreciation of their health, a significant part of the workers does not do anything to protect their own physical-mental health. In the battle fought for the survival one becomes completely subordinated to the efficiency and to the profit, especially the group of manual workers that are deprived of all of their power and are living in entire defencelessness.

The alternative that was accomplished by the director of Factory Y and is also known by the workers, stands out among the alternatives exposed in Factory X that can be contrasted with the surface and deep structures. In Factory Y the director established every technological modification in a people-oriented way and he took all-inclusive personal responsibility for the accomplishment. The 'good leader' means the number one alternative for the Factory X workers; the 'great man' who is competent, who is able to show the direction in this uncertain environment, and who the workers can follow unreservedly. At the same time we can still find the lack of personal responsibility in this idea. In contrast, the relationship between managers and workers where instead of hostility, a confidential relationship based constructive cooperation receives a role, may give an additional alternative. Finally, in order to strengthen the contrast we shall show alternatives where the employees have significant share in the factory, thus the wall springing from conflict of interest, standing between the managers representing the owners interests and the manual workers, can be broken down. I will write about the possible alternatives in my paper's final chapter that consists my conclusions and my suggestions.

6.2. *The postmodern reading of Factory X*

*„All the worlds a stage,
And all the men and women merely players;
They have their exits and their entrances,
And one man in his time plays many parts,
His acts being seven ages.”*

William Shakespeare

As you like it

In the previous subchapter of the thesis I presented the study and analysis of the case of Factory X to the readers through a critical reading. These findings helped to explore and uncover the oppressive control structures and asymmetric communicational processes that lead to the employees' physical and mental sufferings and negative health outcomes. The work-related stress discourse was explored through the employees' reports on workplace problems, which refers to the way the workers think and talk when they link their mental and physical impairments to the events taking place in the factory. Next, I investigated the deep structures, upon which the stress discourse prevailing in Factory X is founded. A detailed analysis was made of the relevant work processes that reflect the characteristic patterns inducing these consequences. Concerning the processes developing the deep structures in Factory X, I have identified and introduced the critical moments of employees' organisational justice perceptions. These were primarily related to more favourable potential alternatives, to the question of taking and avoiding responsibility, and the increasingly ambiguous moral and legal norms and regulations.

The critical reading of the research provided strong evidence of the employees' deprivation of power in Factory X. Furthermore the explored helplessness and defencelessness of workers drew our attention to the significance of managerial decisions and actions. The managers' lack of responsibility taking and the phenomenon of increasingly depersonalised authority stood out as extremely powerful sources of distress. The disappointing findings concerning the workers' mental and physical health also made it clear that the workers' self-concept, self-esteem, and the social structures influencing the employees' interpretations are extremely important elements of the stress processes. The workers of Factory X, through their perspectives and understanding of social structure and self-concepts, are active participants of their own oppression and exploitation. The undesired emotional states (hatred, anger or fury), activated by the sense of social and organisational injustice, do not point in directions that might foster the improvement of the workplace situation. Typically, rather than striving for effective representation of their interests and mutual support, we have seen examples of deterioration and destruction of human fates and relationships.

As already discussed in previous sections of my dissertation, my research was initially motivated primarily by emancipative interest, i.e. to unveil the oppressing nature of work stress processes and organisational injustice and to decrease the unnecessary sufferings of employees. Closer examination of the research field and the process of data collection revealed to me an aspect of workplace processes that I could not successfully explore with the help of the critical reading. Typical examples for this were those critical managerial decisions and actions that significantly contributed to the development of the local reality in Factory X, however resulted in outcomes fully contradictory to the reported intentions of managers.

The postmodern reading of the Factory X case aims to better understand this seeming contradiction. I recognised the need for a research reading and methodological approach that acknowledges the relevance and significance of the local participants' social construction of workplace stress processes and organisation justice perceptions. The second reading of my research is introduced to the readers with the objective of enriching the understanding of the Factory X case through exposing the concept of workplace stress and organisational justice from multiple perspectives,⁵⁵ and thereby improving the chances of interventions aimed to improve the situation.

The series of communicative actions are in the focus of the analysis in my postmodern reading, and these acts are construed as independently existing entities, through which the participants create their own social world. In Chapter 5 of the thesis the Coordinated Management of Meaning (CMM)⁵⁶ was already introduced to my readers as a method of the communication perspective, which has a speciality in considering each participant's actions as part of the communication process as well. The analysis of the communicative events following each other and the meaning giving and coordination by participants may help to explore the process in which the organisational members create their own social reality. In contrast to the analytic method of the critical reading, which intended to reveal the oppressing social and control structures and expose the employees' sufferings, the postmodern reading focuses on the creation of the local reality and aims at **immanent critical reflections**. These may help identify the tensions and contradictions between the declared intentions and the performed actions chosen by the organisational members. A broad analytical repertoire of the CMM method will be applied in order to develop the postmodern reading of the thesis. In the next subchapter the most frequently used analytical tools will be introduced to the readers.

⁵⁵ The detailed discussion of this multiparadigm research approach is presented in the second chapter of the dissertation.

⁵⁶ Coordinated Management of Meaning (Pearce, 2006)

6.2.1. Analytical Repertoire of the CMM Model

In Chapter 5, introducing the methodological framework of my thesis my readers have already been acquainted with the basic model of CMM and through that I already provided an overview of the key terms and concepts of the methodology. For a detailed analysis of specific interpersonal or organizational cases, however, we will need some more practical analytical tools, that are also available to us in a thoroughly elaborated form, thanks to Barnett W. Pearce and his colleagues (Pearce, 2007).

A common basic question of all research using the analytical tools of CMM is: “*What are they making together?*”. What are the participating members of the organization creating together through their actions, talks and other communicative activities (Pearce, 2004). Besides focusing on the performative aspect of the communicative activity, through its analytical tools CMM also emphasizes, that each communicative action is a social action, meaning that it always points to, for or against someone. Furthermore, CMM underlines that communicative actions are usually not standing alone, but preceded and followed by some communicative activity of others. Events and social worlds are created by the communicative actors through communication, actions and coordinated management of meaning (Pearce, 2004). Analytical tools of CMM build on these characteristics of communicative actions, and according to this I will use the *Hierarchy Model of Meanings* and the *Model of Four Aspects of Logical Forces*, introduced in Chapter 5 and the analytical tools introduced as follows: **Serpentine Model**, **Daisy Model** and the so called **LUUUUTT Model**. To help the essential understanding of the analytical tools, I will present and demonstrate the application of these tools through a simple example taken from the daily reality of Factory X, and only after that will I apply these analytical tools of CMM in the postmodern reading of those critical organizational processes that have been also analyzed in the previous critical reading of my thesis.

The Serpentine Model of CMM

The Serpentine Model of CMM depicts timeliness of the communicative actions and their orientation towards other actor(s) in a very expressive way. Using the model communicative actions are placed beside each other (from left to right) in a timeline, then each action is analysed further with the *Hierarchy Model of Meanings*. Through this we explore what the actions “are making” - first by analysing the actor’s meaning giving, then the meaning making of those participants whom the activity is oriented at (for or against), and who also interpret and react on it. The Serpentine Model, originally applied to the communication of two persons was named like this because of the way the meaning giving of the participants is graphically depicted. The communicative actions are shown in a chronological order and we write typically the analysis of the meaning given by the one actor (based on the Hierarchy Model of Meanings) above these series of actions. At the same time a similar analysis of the

other actor (**reactor**) is written underneath the series of communicative actions. As we proceed in time, analysis is done by upward, downward and side movements. In the following figure I will demonstrate all this through a practical example of the series of communicative actions by Jim (employee) and Bill (line manager) related to a machine failure.

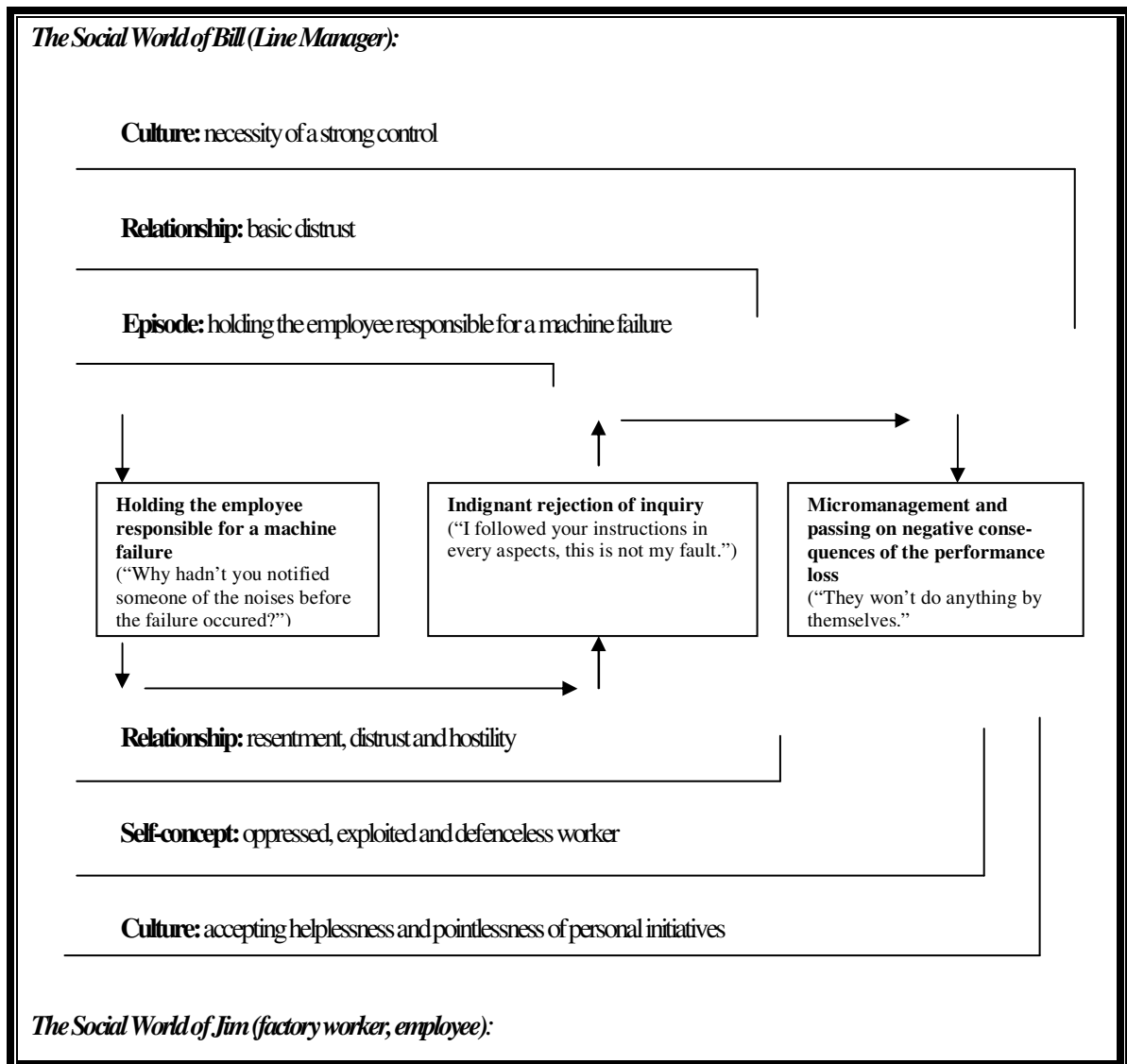


Figure 6.5 The Serpentine Model of CMM for two actors (based on Pearce, 2006, p. 20)

With the help of the hierarchically embedded meaning giving of the Serpentine Model it is easy to describe the process, in which the manager of Factory X (Bill) interprets the failure of one of the machines primarily based on stories about the culture. The distinctive characteristic of the culture he regards as a resource is the necessity of a strong control, the manager-employee relationship is mainly about a basic distrust in each other. Accordingly, the manager interprets the failure of the machine as an episode, in which the involved worker (Jim) needs to be strongly held accountable.

For the employed worker (Jim), on the other hand, in the course of giving meaning to the events the distinctive element is an interpretation of himself as an oppressed and exploited worker - a story of a culture, characterized by the helplessness of the workers and pointlessness of personal initiatives. In this situation the managerial inquiry regarding the failure of the machine is perceived by him as unjust, since it is the lack of initiatives that the oppressed worker is held accountable for. For the worker this flow of events reinforces the distrust that dominates the manager-employee relationship and points explicitly towards resentment and hostility.

Using the Serpentine Model we can observe how the communicative actions of the participants succeed each other. In this case - as depicted in Figure 6.5. - the strict inquiry triggers a resentful rejection from the worker (Jim). The worker perceives the inquiry to be unjust, as during his work he had fully followed his line manager's (Bill) instructions. Jim makes it clear that his responsibility does not exceed the fulfilment of the received tasks, his managers can not expect any other initiatives or notifications from him and he does not even have any intention to change in such direction. This kind of obvious rejection of **proactivity** and taking personal responsibility triggers a reaction from the manager (Bill) that points towards strengthening practices of micromanagement and direct control. It calls for finding managerial solutions that force Jim to take his share from the negative consequences of similar failures.

The **Serpentine Model of CMM** enables us to reveal topics and aspects the actors themselves are not aware of, since we simultaneously examine the stories of both parties and also how these stories mutually effect each other and develop together. We may observe how - using the Serpentine Model - **the intrapersonal senses of obligations introduced earlier turn into interpersonal senses of obligations** (Pearce, 2004). The individual centred morality is replaced by the questions of social and systemic morality and the dynamic patterns of taking responsibility (Pearce, 2004). We might expose this way those strategies for action that only blame others for the repeatedly occurring undesired patterns of social interaction, and which are not willing to take any part in the responsibility for creating these. Through the case observed in Factory X and described above we might explore a process in which the participants jointly create the distrust and hostility based, unproductive organizational culture and do not recognize their co-dependency and mutual responsibility.

The above illustrated simple version of the Serpentine Model of CMM can of course be applied also to sequences of communicative actions where there are more than two actors whose hierarchically embedded meaning giving needs to be analysed. In case of the examined Factory X we might observe how communicative actions and meanings given of several actors' influence each other. Factory workers, middle management, senior management of the factory and the corporate centre of the company often appear as distinctive participants in the series of communicative events. Despite this I will simplify the use of the Serpentine Model in my thesis to the interaction of two main groups of actors - the employed workers and the factory management (white collar workers). The reason for this is on the one hand, that I did not make any interviews with employees of the corporate centre, therefore I only have presumptions of their meaning giving processes. On the other hand the

most distinctive separation in the organizational culture of Factory X can be found between the manual workers and the white collar workers. The “workers” and the “management” are separated not just by physical location of the work (manufacturing hall and office), but they also interpret each other and each other’s actions as coming out of distinct, homogeneous groups. Obviously the manual workers and white collar workers do not form such homogeneous groups in Factory X, however it can be clearly stated that in the constructed reality of Factory X organisational members, these two groups of employees form the most important distinctive subsystems.

Daisy Model of CMM

I will use the above introduced Serpentine Model primarily to analyse communicative actions and interpretations with two actors. There is however a tool in the CMM repertoire that was explicitly created to reveal the variety of those stakeholders affected by the communication event and thus the importance of other participants might get disclosed during the analysis. The **Daisy Model of CMM** makes it obvious for the analysts that a communication event is not only part of the relationship of the actors that directly communicate and interpret each other, but might also be an important event in other communicative relationships and dialogues, even concerning participants that are not present when the event occurs (Pearce, 2004).

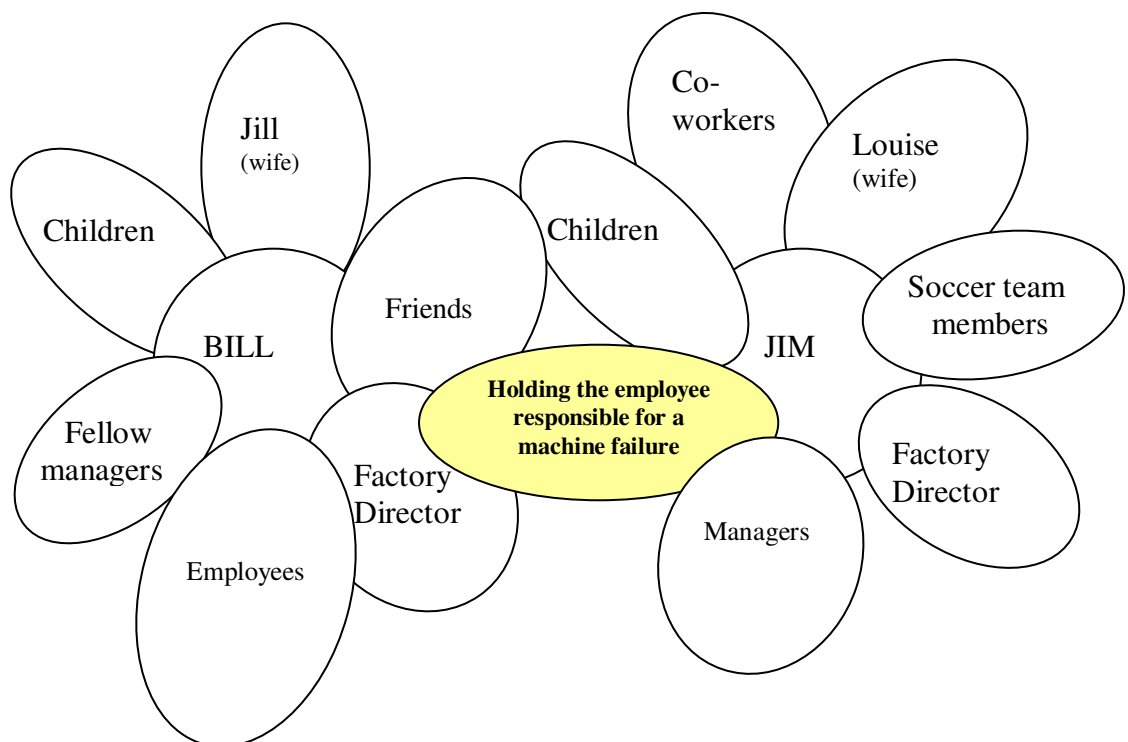


Figure 6.6 An example of applying the Daisy Model of CMM (based on Pearce, 2004, p. 47.)

Using the **Daisy Model of CMM** it can be revealed that the inquiry after the machine failure (as a communicative action) becomes part also of other dialogues and meaning giving processes. It affects those communicative relationships within the company where organizational members talk about the technical condi-

tions of machines with each other and where for example manual workers blame factory management for the absence of regular maintenance and lack of spare parts. Similarly the inquiry about the machine failure also becomes part of the white collar workers' conversations about the manual workers, where the main element is the managers' conviction of the total lack of responsibility taking and **proactivity on the side of the workers.**

The analysed communicative action, however, goes beyond the company's social structure, because the events also become part of those dialogues between Jim and Bill and their families, friends or even the company soccer club members, which can have a significant effect on their identity and social roles. In the soccer team of the company workers, for example, Jim might achieve significant respect and a strong status through tough resistance to the accusation of the manager and to the articulated managerial expectations.

Thus the interpretation of the communicative actions related to the inquiry about the machine failure at Factory X is largely influenced by other affected persons and by the indirectly connected meaning giving processes. Considering these we can understand the logical forces that influenced the actors and formed their senses of obligations and decisions in the given situation (Pearce, 2004).

The LUUUUTT Model of CMM

The rather strange name of the LUUUUTT Model of CMM is an acronym of the English name of its elements. The elements of the LUUUUTT Model are the so called *lived stories (L)*, *untold stories (U)*, *unheard stories (U)*, *unknown stories (U)*, *untellable stories (U)*, *stories told (T)*, *storytelling (T)*. Confronting these elements CMM can be especially effective in exploring contradictions of the lived stories and the stories told or even of the declared purposes and the realized results of actors and organizations (Pearce, 2007). This analytical tool can enrich the understanding of the actual communicational event in not just research applying CMM, but also during consultation, organizational development or mediator roles, as demonstrated below in a summarizing figure.

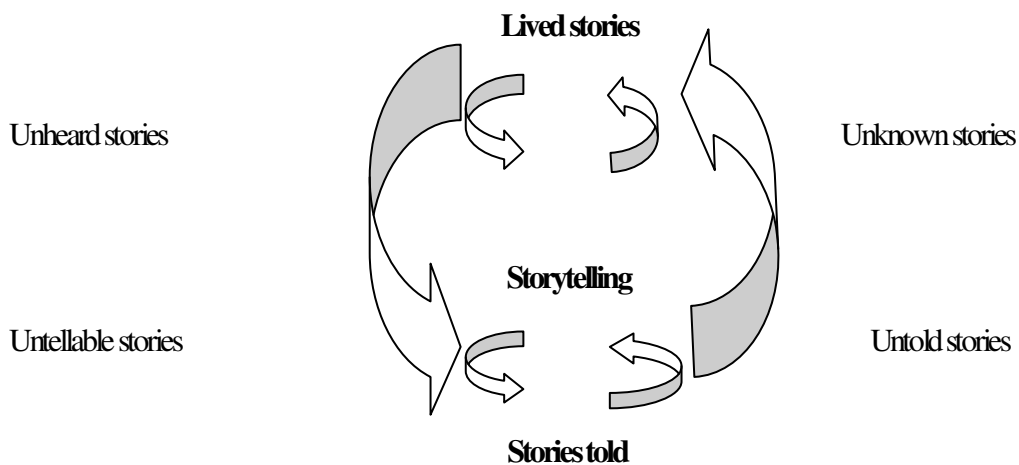


Figure 6.7 The LUUUUTT Model of CMM (based on Pearce, 2006, p.20)

Using the tool it is advisable to start from the elements called the *stories told (T)* and the *way of the storytelling (T)*, and to observe the extent to which the difference of other participants is taken into account and the willingness to adapt to this appears in the stories told. From the way of the *storytelling (T)* it will reveal how accusing the communication is or on the contrary, how much is the actor able to share responsibility and express his/her own doubts and uncertainties (Pearce, 2004). While analysing the communicative actions of the inquiry about the machine failure, it is for example worth focusing on how Bill is talking about the event of the inquiry. Does the storytelling include some uncertainty regarding whether there were any warning signs at all (like unusual noises) that Jim could have reported to the management. It is important to examine whether the storytelling of the manager (Bill) is basically accusing or whether it is somewhat open to accept the perspectives of others. In this case for example, to accept that proper and timely maintenance is basically impossible, if only the most necessary spare parts can be procured in Factory X.

In case of an accusing, closed storytelling the researcher and the consultant both have the opportunity to slow down the process with clarifying questions to decrease the chances of the development of a series of communicative events leading to negative results, and to try to disclose those uncertainties that could help *unheard stories (U)* or *untold stories (U)* to emerge. From a pragmatic point of view, beside a more comprehensive understanding, the usage of this method aims also to change the art of *storytelling (T)* and thus to influence the effects of the communicative actions in a more positive and constructive way (Pearce, 2004).

6.2.2. Analysing organizational processes containing critical events with CMM tools

In the next analytical part of my research, in order to best utilize the advantages of a multiparadigm research approach, I will make a detailed analysis of those organizational processes that I have already investigated from a critical perspective in Section 6.1. I have selected series of communicative actions for which the data available to me is suitable for a detailed and accurate analysis with CMM tools. The chosen processes can be interpreted as workplace stress processes, that play an important role in the life of the employees. These series of events contain critical moments from the perspective of the social construction of organizational reality.

Through my research I have collected information with a retrospective method about a reasonably long, 2 year period of events in Factory X. Among the organizational processes that I could explore, those series of communicative actions fitted the above criteria the best, which had their key events occurring close to the time of data collection. These events could be recalled relatively accurately by the persons involved. Another unconcealed intention of mine was to present series of communicative actions that do not only show an example of a social reality full of suffering, but to be able to present - at least as a glimmer of hope - possible ways to a more cooperative social world and organizational reality.

It was based on these considerations that I chose the two organizational processes, already thoroughly analysed in the critical reading of the study: the process of **introducing perola burning** and the process of **headcount planning**. Both processes stand out in terms of the harmful physical and psychological consequences of the workplace stress associated with them, and also in terms of the organizational injustice perceived by the employees. I expect a significant enrichment of the critical analysis' research results from applying a postmodern perspective and using the analytical tools of CMM. In order to develop the postmodern reading of the organizational processes and social reality of Factory X, I will use among the models and tools of CMM the Hierarchy Model of Meanings, the Model of Four Aspects of Logical Forces, the Serpentine Model, the Daisy Model and the so called LUUUUTT Model.

6.2.2.1. The analysis of the introduction process of perola burning

In the critical reading of my thesis we got to know in detail the physical and mental consequences related to the introduction process of perola burning and I have shown how this process contributes to the development of the determining deep structures in the organisational reality of Factory X. The perola burning related events arose during all the focus group interviews and personal in-depth interviews, since the introduction of this technology triggered the most significant aversions from the factory's employees. Recognising the importance of this technology-modification process; already from the early stages of data collection on, I tried to **reveal at large** the interpretations of the employees working on the different hierarchical levels of Factory X concerning the critical moments connected to the introduction of perola burning. For the development of the postmodern

reading of my analysis, according to the CMM methodological guidelines, I first collected the communicative acts connected to the introduction process of perola burning. These have been the critical moments of the process, following each other in a chronological order and also having a considerable effect on each other.

The introduction process of perola burning started with the Mirdorian decision of introducing the technology of perola burning to Factory X. The technological introduction of the burning of this new material was carried out and supervised by Mirdor. The management and the workers of Factory X had no voice in its implementation. In connection with the perola burning, many problems have arisen from the start of using the material. Although indicated to the managers, workers of Factory X still felt like as if they were 'talking to a wall'. Following this there were some minor accidents (implosions) in the factory due to the burning of perola. The factory workers prevented the dangerous situations successfully. Then, the middle managers put the problems regarding the usage of the technology into writing for the Mirdorian centre. At this time the Mirdorian management has sent a young engineer to Factory X (permanently) in order to solve the encountered technological problems. Simultaneously, the rumours among the workers strengthened that this form of burning of the perola was a serious health risk. Following this the factory was temporarily shut down for a few months due to the decreasing demand for the products on the market. After this factory production was restarted without perola burning, restoring the usage of the original burning substance.

During the initial demonstration of the Serpentine Model of CMM, I have already mentioned that in the course of the data collection of my research I had no opportunity to familiarise with the series of events from the perspectives of organisational members working in the Mirdorian centre. Thus, my analysis aims at the communicative processes only within Factory X and it can only reconstruct and examine how the participants of the Hungarian factory (the manual workers and factory management) implemented the Mirdorian decision, exploring what kind of social reality they created through their inner communications and actions. The workers clearly emphasise the responsibility of the Mirdorian centre for the introduction of the perola burning; at the same time the director and middle managers of Factory X never officially stood up against this decision. Although through informal signals the middle managers of the factory express their aversions towards the perola burning technology, formally they still execute and have the Mirdorian decisions done. Thus locally they turn into the representatives of the central authority. The new technology related forceful and hostile emotions from workers are taken out on the middle managers, even though these managers would also like the most to forget about this new technology and material for good.

So by the means of the Serpentine Model of CMM and the Hierarchy Model of Meanings, at first, I will depict the critical moments and communicative actions related to the introduction process of perola burning in Figure 6.8.

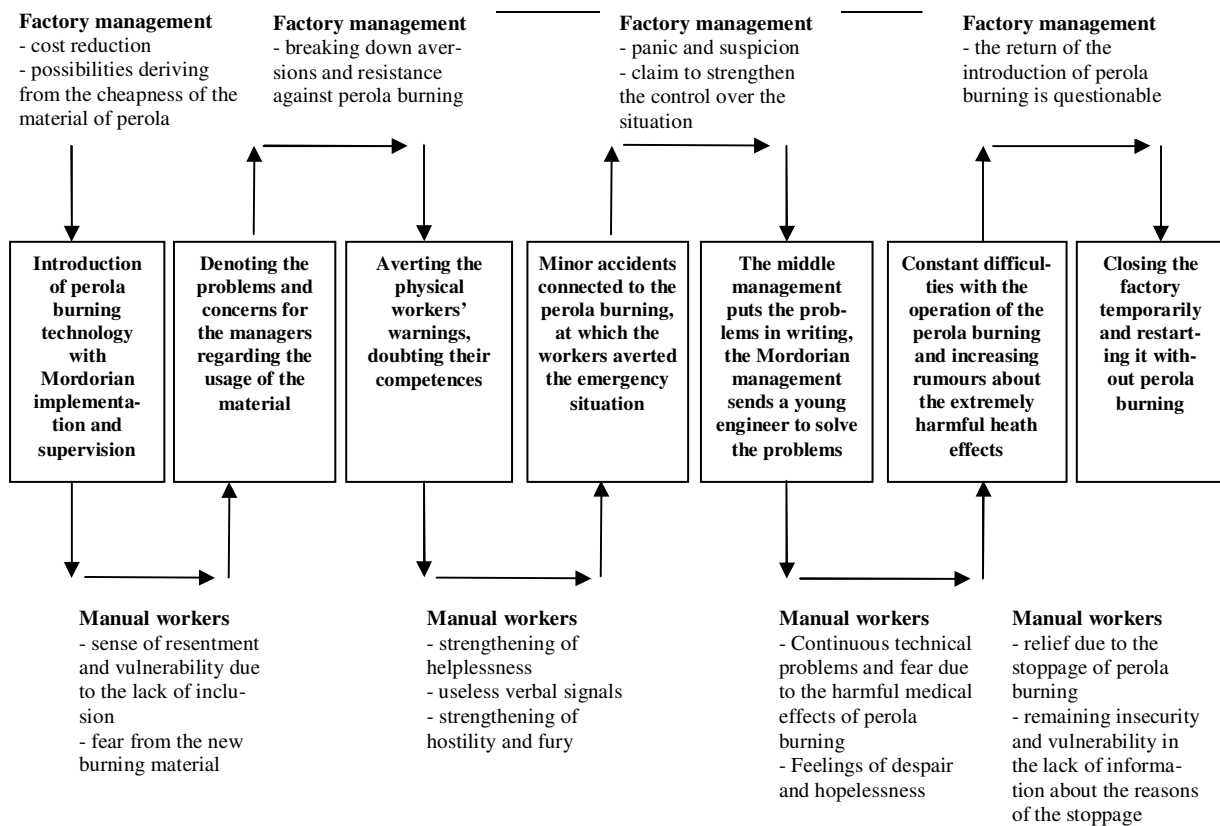
FACTORY MANAGEMENT

Culture: Culture of performance, efficiency and cost reduction are core values

Episode: By the introduction of perola burning significant expenses can be saved

Relationship: Fundamental distrust (the workers resist all changes)

Self-concept: My task is the implementation of the Mordorian decision



Relationship: Humiliation, helplessness, hostility and fury

Self-concept: We have to achieve the extraction of the perola burning

Episode: By introducing the perola burning they are experimenting on us and they jeopardise our health

Culture: Vulnerability and helplessness, every modification happens at our expense

MANUAL WORKERS

Figure 6.8 Analysis of the communicative actions related to the introduction of perola burning by the means of the Serpentine Model of CMM and the Hierarchy Model of Meanings

With the application of the two integrated models of CMM we can examine the meaning giving of the internal stakeholders of the factory embedded in each other, and the stories having hierarchical relations with

each other concerning the series of events of the perola burning. For both the factory management and the manual workers their own culture is going to be the top-level story that will determine the possibilities of the lower-level meaning giving. For the factory management the dominant culture is forcing the efficiency and the cost reduction at all hazards, while for the manual workers it is the 'suffering' of the changes and the vulnerability deriving from these. The stories and meaning giving levels shown in Figure 6.8 can be captured more in detail from the factory management's and the manual workers' perspective the following way:

Factory management:

Culture: During the period of the economic crisis and factory closures the culture of efficiency and cost reduction achieved by technological modification is dominating. In certain situations, everyone must be prepared to take losses for this.

Episode: In case of successful introduction, extraordinary savings can be achieved by the technology of perola burning which can even mean the survival of the factory. The new technology has not been tested elsewhere with perola, however the foreseen benefits explain the risks undertaken with the pilot project.

Relationship: You cannot take the workers' opinion seriously regarding any technological modifications. They resist any initiative indiscriminately.

Self-concept: As a manager my task is to reduce the operational costs of the factory to the lowest level and for this it is necessary to implement the Mirdorian decision concerning the introduction of perola burning.

The meaning giving and the stories embedded in each other can be revealed for the manual workers' perspective in a very similar way to the above described viewpoint of the factory management.

Manual workers:

Culture: The factory's operation and the technological modifications always happen at our expense. We are helpless against the exploitation; we struggle for survival in an exposed situation.

Episode: By introducing the perola burning they want to reduce costs by experimenting on us and by putting our health in jeopardy.

Self-concept: We are helpless and vulnerable, but our sheer survival can depend on whether we could achieve the stoppage of perola burning.

Relationship: The management humiliates and disregards us, our words are no longer worth anything, it is as if we were talking to a wall; we can only make them understand the seriousness of the situation in a different manner.

The factory management's and the manual workers' sharply different interpretations lead to the critical events of the extremely unsuccessful technological modification— that is, unsuccessful in terms of its costs and

results as well. We could see this through the stories explored as embedded contexts for each other. All this jeopardised the health of the workers working in the factory to an extreme manner, and it eroded even further the already extremely low-level of trust in Factory X. Through a thorough examination of the series of events and the manual workers' stories embedded in each other it can be revealed that in their desperate situation the workers were seeking for the possibility of a communicative action, that would "force" Factory X management to pay attention to their concerns. It is possible that part of the minor accidents connected to the perola burning could have been avoided or prevented. At the same time, these little accidents became the communicative actions, that even the Mirdorian decision makers had to respond to.

In the following, I will examine those resources inducing 'senses of obligation', which influence the acts and the decisions of the organisational members playing a dominant role in the process of introducing the perola burning. I will use the *Model of Four Aspects of Logical Forces* among the CMM analytical tools to thoroughly examine the manual workers' actions, while I will use the *Daisy Model* in order to understand the particular situation of the middle managers better. Thus first, we shall have a look at what kind of forces had the strongest influence on the workers' communicative actions:

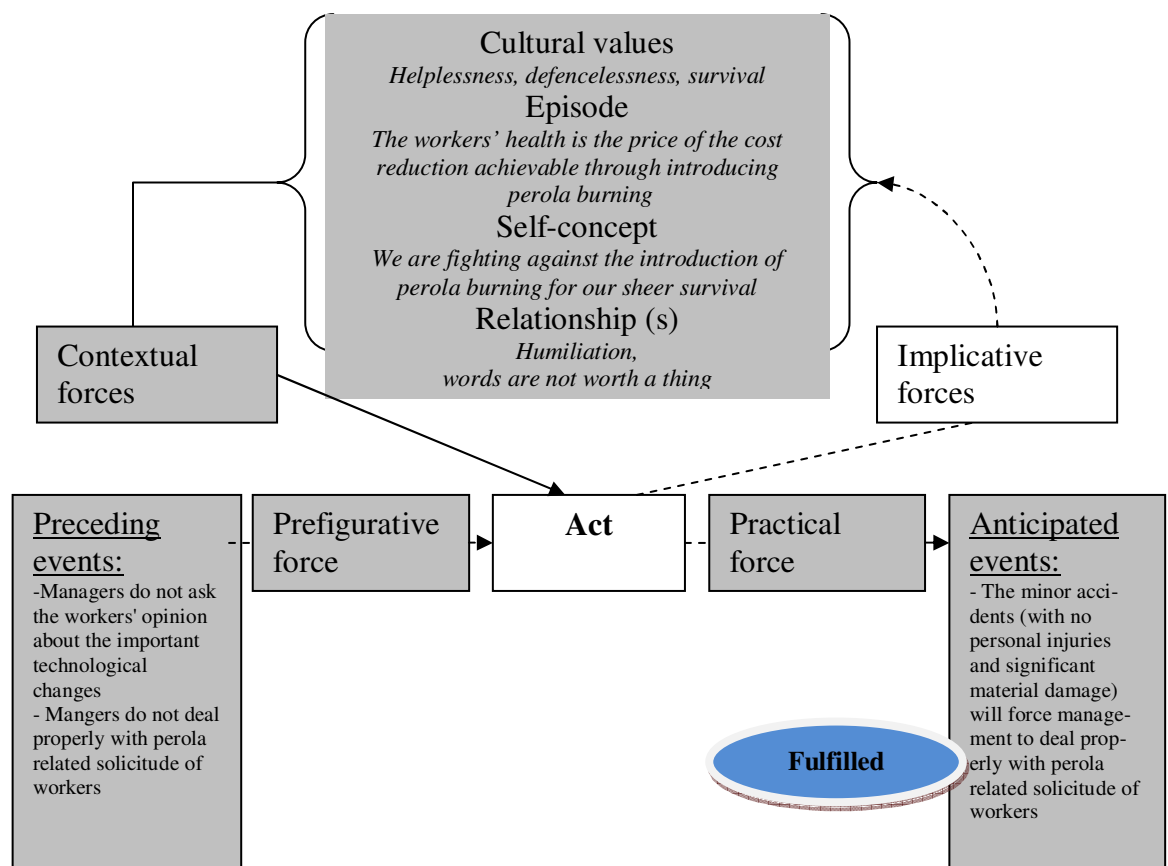


Figure 6.9 Applying the Model of Four Aspects of Logical Forces to the manual workers.

In case of the introduction of perola burning the prefigurative and contextual forces clearly stand out from the forces aiming at the manual workers. The preceding experiences related to the technological modifications corresponded with the experiences at the introduction of perola burning, since the management of Factory X does not take the workers' opinion and solicitudes into account and does not consider the workers competent in this question. Furthermore, the contextual forces are extremely powerful, since the workers, in terms of their actions, primarily build on the stories of helplessness, humiliation and fight for the survival. These stories are dominating the workers' 'sense of obligation', which is also influenced by a practical force; namely, for their sheer survival the workers find it necessary (by any means) to make company management deal seriously with the problems of introducing perola burning. These practical forces can be considered significant, at the same time they remain within the framework defined by the prefigurative and contextual forces. It can be concluded that in case of the introduction of perola burning the weakest forces are the implicative forces. The motivation for survival drives the manual workers much stronger than their desires to strengthen their available resources through actions. Among the targeted resources however the decrease in the sense of helplessness can be accentuated.

Previously, I have already mentioned the controversial situation of the middle managers, who by representing the management of the factory concerning the introduction of perola burning, got into a serious conflict with the manual workers. At the same time they consider themselves the usage of this new material extremely distressing as well. Using the *Daisy Model* of CMM we can graphically depict the relationships that indirectly become part of this conflict between the middle managers and the workers in Factory X.

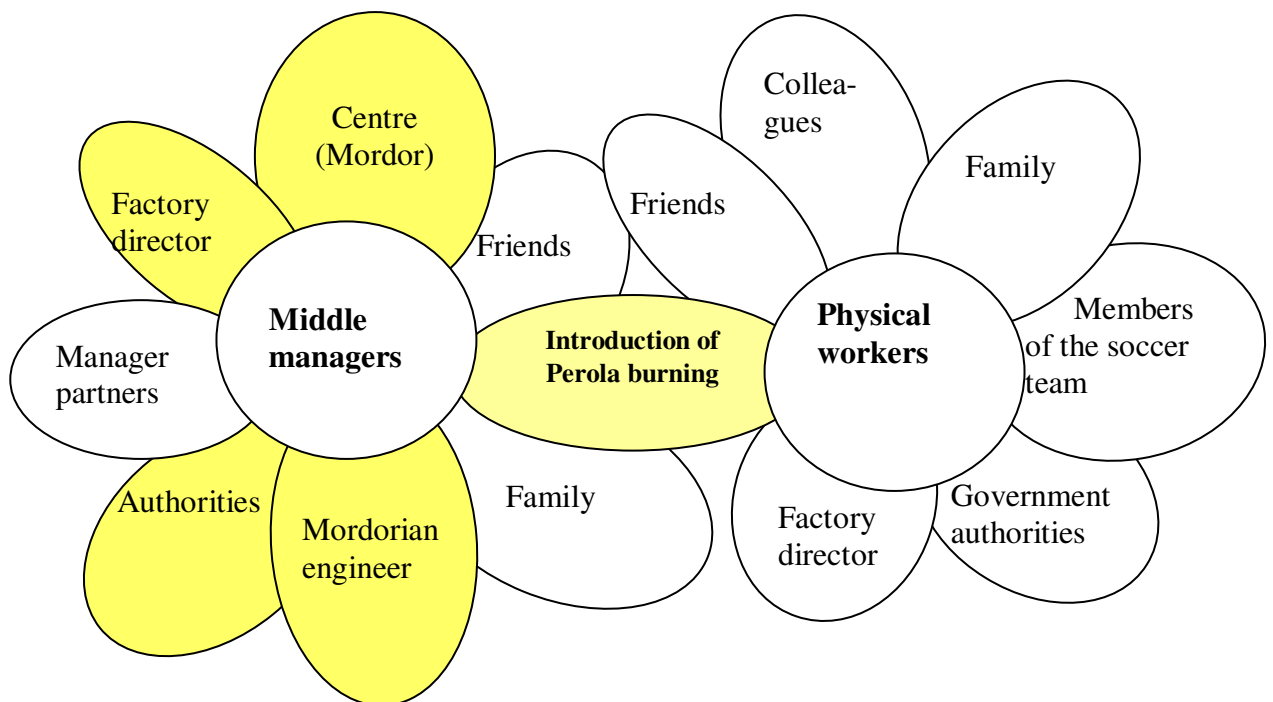


Figure 6.10 Applying the Daisy Model of CMM to the conflict between the middle managers and the manual workers in connection with the introduction of perola burning

With Figure 6.10 it can be well illustrated that the conflict between the middle managers and the manual workers is part of a significantly more complex relationship- and conflict system. The middle managers receive the instructions as a dictate from the representatives of the Mirdorian centre and the factory director to implement the introduction of perola burning. Fearing for their jobs, the middle managers do not go against these instructions, even in spite of being aware of the incomplete official authorisation of the technology, some significant technical issues and serious health hazards to the workers. Besides the conflict deriving from the contradictory role-expectations aimed at the middle managers, an inner personal struggle and value conflict could be revealed from the in-depth interviews as well, which was considerably strengthened by the dialogues with family members and friends. The confessed personal values (respecting human life) and the actually lived values (deliberate endangering of human health) in this case are clearly in conflict with each other. Nevertheless, it did not come to cooperation between the middle managers and the manual workers in the interest of extracting the perola burning from Factory X. Although the middle managers compiled the technological problems for the Mirdorian centre after the accidents, at the same time they did not openly join forces or cooperate with the workers and did not start a conflict with the factory director or with the central decision makers of the company.

The defencelessness of the manual workers is in many ways very similar to the defencelessness of the middle managers, who are fundamentally led by their fears and anxieties and proved to be unable to openly represent their interests. The **extraction** of perola burning cannot be considered the result of the initiatives of Factory X, as it was also shown in the previous Serpentine Model as well. After the restarting of the factory, the perola burning is no longer applied. At the same time there is no official communication or explanation concerning this decision and the workers continue to live with uncertainty on this matter. According to certain rumours in the factory, the technology is unprofitable with the increased price of perola and the amortization costs are also too high. Other organisational rumours say that the company bought up and ploughed down whole strawberry fields in the surrounding areas of the factory in order to avoid environmental scandals. Indeed some of the workers supposed they discovered environmental measurement cars around the factory. At the time of my research they did not use perola for burning in Factory X, at the same time, the material itself and the related fear remained a determining part of the factory's life. Since the workers do not have any clear and definite information on why perola is not used any more in the factory, the possibility of re-introduction is a constant threat for the manual workers and the middle managers as well.

6.2.2.2. The analysis of the shift scheduling process

In the next analytical part of the postmodern reading I assess the process and its critical points (similarly to with the analysis of the introduction of perola burning equipment) of the shift scheduling process, which is a key phase in headcount planning. I have not assessed in detail the series of communicative actions related to shift scheduling so far; however, the actual process of the field work and my observations as a researcher enable me to

thoroughly explore this process by using tools of CMM, and thus enhance our understanding of how the social reality of Factory X is formed.

Following the Serpentine Model of CMM, I first collected those communicative events related to shift scheduling that (following each other in time) could have an effect on each other. As a starting point I took the arrival of a new machine (hereinafter the “shredder”), that was installed shortly before my phase of data collection began.⁵⁷ This change made a basic rethink of the headcount directive and performance targets necessary. This was followed by the first working period of the shredder which was characterised by an unusually high scrap rate and an extraordinary physical load on employees. This was followed by a change in the shift scheduling, resulting in a period of work of 6 successive nights. The tiredness and indignation of the employees grew further, and then the shift schedule was set back to the original 12 hour shifts of 3 successive days and nights, divided by resting days.

From the time of the winter maintenance there was a new series of activities related to the shift scheduling because at that time there was no need for a night shift and a different schedule was utilized. Just before the factory restart took place in January, the factory director announced that the shifts would last from 6 am to 6 pm, and from 6 pm to 6 am. This announcement was followed by the general objection of employees and the representative of the trade union actively demanded that the shift start at 5.45 am. The director announced a vote and the workers voted for a 5.45 start, except for one department which works separately, and could start their work at 6 o'clock, independently from the other workers. In Factory X the shift schedule was created and followed according to the results of the vote.

During the introduction of the Serpentine Model of CMM I showed, through a simple example, that this analytical tool is suitable for giving a clear overview of organizational processes containing a series of critical events and connecting these. For Factory X, it is primarily the factory management and the manual workers that can be identified as the main actors who interpret the communicative actions of one another and react to them. This is why, according to the detailed reasoning in Section 6.2.1, I prepared my analysis in two-pars. In this analysis, factory management refers primarily to the factory director, the vice-director and the technological manager.

As a first step, using the Serpentine Model and the Hierarchy Model of Meanings I analyse the first phase of the series of activities (including the installation of the new shredder and the total change of the shift schedule), which is presented in the following figure:

⁵⁷ In reality the new machine was not a shredder, I have changed all the names of the equipment to make identification of Factory X impossible.

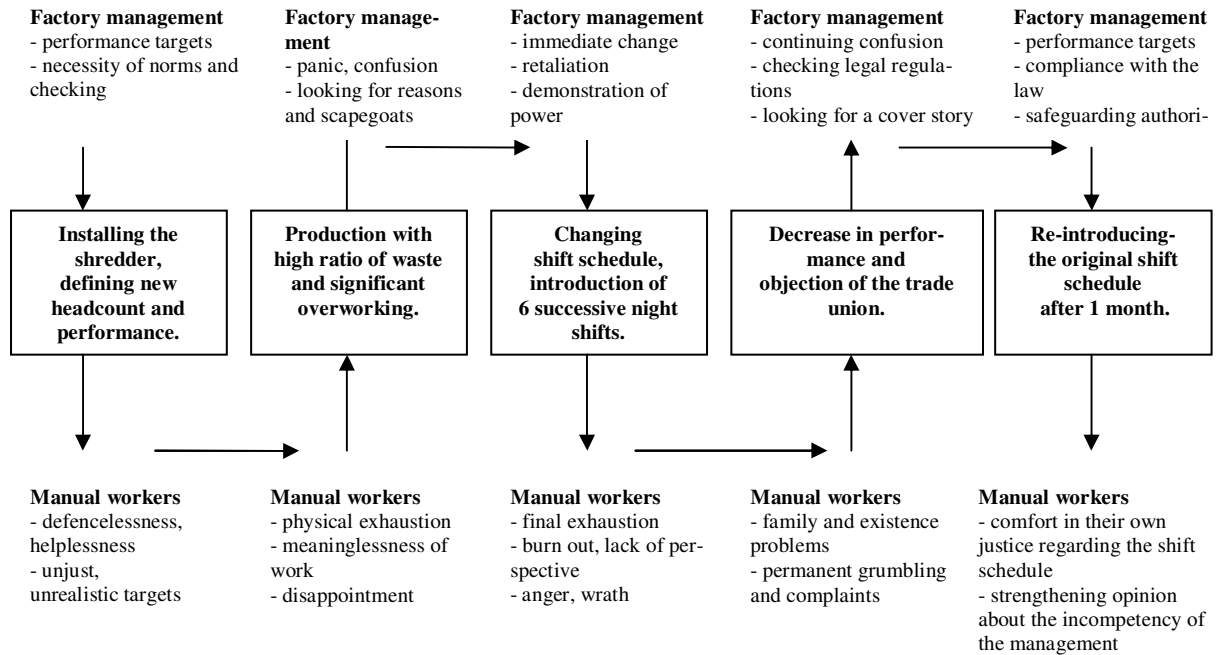
FACTORY MANAGEMENT

Culture: Culture of performance, the enforcement of efficient working practices

Episode: To maximise the new equipment's performance with a minimum of headcount

Relationship: Basic distrust

Self-concept: My task is to ensure an intensive rate of work



Relationship: Distrust, resentment and anger

Self-concept: We will show them that there's no way without us.

Episode: The new technology/machine is only good, to make us work harder and earn less

Culture: Exposure and helplessness, minimum efforts for the survival

MANUAL WORKERS

Figure 6.11 Analysis of the communicative activities of the roster using the Serpentine Model and the Hierarchy Model of Meanings of CMM (1st phase)

Through the integrated use of the two models of CMM there is a graphic representation given of the stories and meanings that show us why the actors in these events - the management and workers of Factory X - interpret the events so differently, and we can also get closer to understanding how the successive events are connected to each other.

From the factory management point of view we can have a more detailed presentation of the meaning giving shown only briefly in the previous figure. The first level of meaning giving will fundamentally determine the interpretations possible for the next level.

Factory management:

Culture: Dominant elements in the relevant culture are a focus on performance and efficiency. Compared to the business results that can be achieved using the available human and technical resources, any consequences that affect the workers are considered less important.

Episode: Technological development resulting from the installation of the new shredder must be implemented in a way that we provide for and require the highest level of performance that is possible from employees, accompanied with the minimum headcount.

Relationship: Workers do not care about anything they are unable to take responsibility. Nothing can be trusted about them and it is impossible to trust them.

Self-concept: I, as a leader, have the task of demanding and strictly overseeing intensive work, thus ensuring performance is efficient.

Similarly to the factory management, the **manual workers'** understanding of communicative actions can also be explored through presenting the stories and their meanings, embedded in one another. Also for the employees it is culture that presents the highest, most characteristic level of meaning giving; however, we can find significant differences in the content of these meanings.

Manual workers:

Culture: The working process is dominated by defencelessness and helplessness. Any kind of initiative or effort is totally useless. It is only worth making a minimum level of effort in order to survive and avoid getting fired.

Episode: Together with the introduction of the new equipment, the management sets targets that are far from realistic. They define headcount and performance targets that increase work intensity to an insufferable degree and the impossible targets become prerequisites for bonuses.

Self-concept: We are suppressed workers whose opinion was again not asked and who have been mistreated again. No matter what, we will show them that this change in equipment and modification of shift schedule cannot be done without us.

Relationship: The management does not consider us human beings, we can not trust them, they deserve our anger and rage.

After having explored the embedded contexts of actors' stories and meanings, the series of events can be further analysed with the *CMM Model of Four Aspects of Logical Forces*. With this analytical tool we seek the answer to the question: what were the most important forces inducing a "sense of obligation" in the decisions and actions of the individual actors?

For the management, based on my analysis I conclude that prefigurative and contextual forces are the determining ones, although practical and implicative forces related to performance and efficiency are also not to be neglected. The activities of management are strongly influenced by the fact that they use as a resource a culture which views the human person as being subordinate to productivity and technology, and their relations to the workers are also pervaded with distrust and bitter experiences of the past.

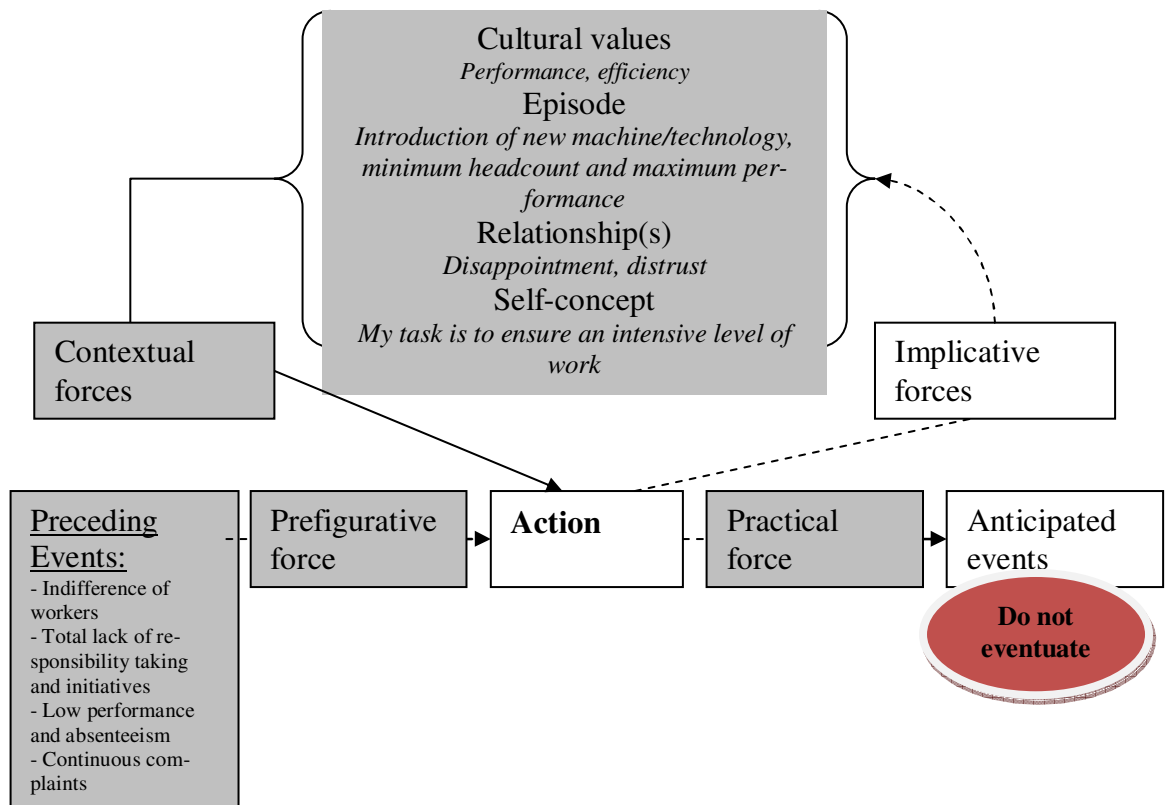


Figure 6.12 Model of Four Aspects of Logical Forces applied to the management

The detailed analysis of the forces highlights the very important result that performance-related practical forces strongly affect managerial decisions and actions. At the same time, in the course of the examined series of events, these practical goals do not transpire at all; on the contrary we can witness inverse consequences to the intended effects. This result, revealed by CMM, is very important in terms of the proposals to be made for Factory X stakeholders. These are exactly those easily recognisable internal contradictions which when pointed out can help both managers and workers to recognise the necessity of an entirely different attitude; communication and action pattern. It is possible to learn from these failures. The practical forces resulting in a sense of obligation for the management and the implicative forces centred around cultural values and identity make it also possible for managers to change their way of making decisions and communicating.

In contrast to the forces identified as being important to managers, or the manual workers, the contextual and prefigurative forces dominate fully and the practical and implicative forces barely appear at all. Employees do

not have any definite future perspective: due to their general feeling of helplessness, they have practically given up on managing their own lives and working actively. This is probably strongly related to the intensely reactive action and decision-making train of thought we can see in case of the manual workers. Accordingly, we can see in Figure 6.11 that the senses of obligation created by the contextual and prefigurative forces rooted in the past are determining for employees and that a complete absence of future-oriented thinking can be considered typical.

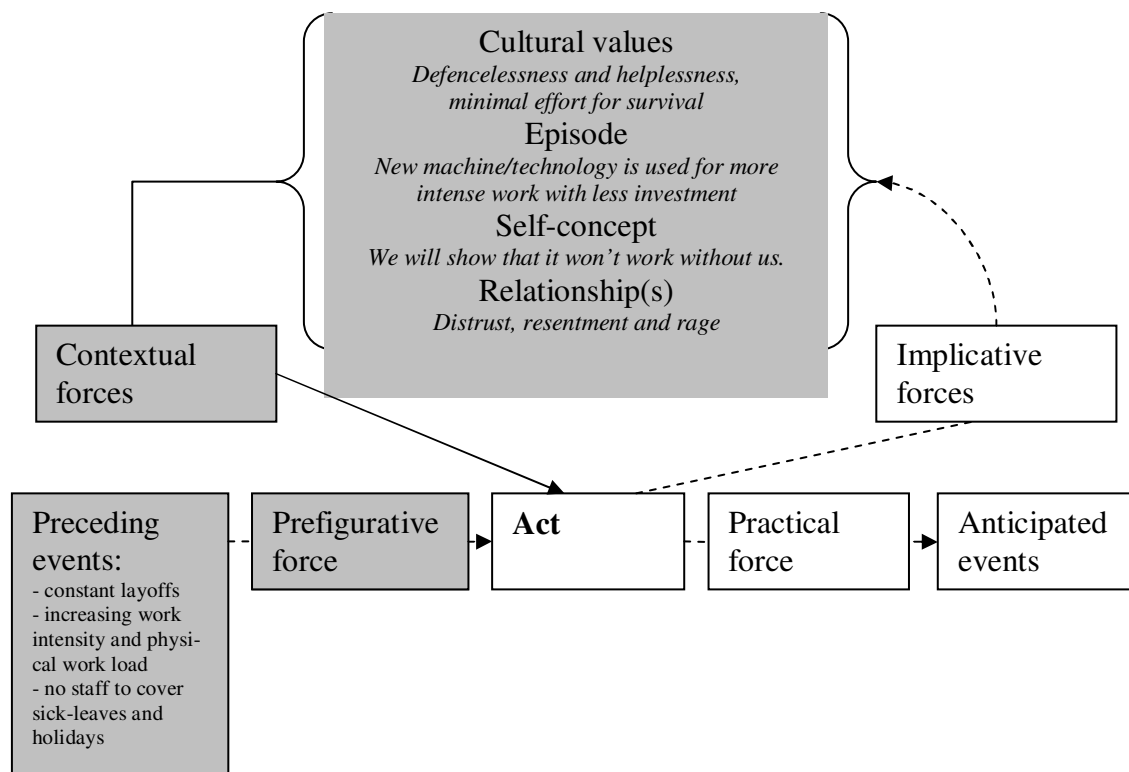


Figure 6.13 The Model of Four Aspects of Logical Forces (manual workers)

One important conclusion of the analysis conducted using the Model of Four Aspects of Logical Forces is that implicative forces, which may be future-oriented resources, are typically imbued with highly negative and destructive content. We encounter particularly discouraging meaning associations on the level of the context of relationships, as they are characterized generally by distrust and, in fact, antagonism; neither affected party displays any intention to improve relations. Accordingly, it is not surprising that personal relations between the management of Factory X and blue-collar workers employed there undergo a continuous and significant worsening.

Out of the CMM methodological apparatus, the so-called LUUUUTT model may help us explore in greater detail the process of giving meaning that certain participants of the series of communicative events use. The model, which was broadly described earlier, calls attention primarily to *stories told* and the *method of storytelling*. Stories told by blue-collar workers clearly show that they believe that the management made decisions which affect staff numbers and performance targets without any rational reasons. In connection with the scheduling of

shifts, they see the management as having made spur-of-the-moment decisions, without considering important factors which have a particularly detrimental effect on all their lives.

Márton: So, when they came up with those rational assignments last time, right? Well, we ended up coming in to work nights.

Lajos: Yeah, that was just great.

Márton: And he said that we will work nights so that we don't end up being so exhausted.

Lajos: By the sixth day, in the morning, I was practically falling asleep. (interjects)

Márton: Three days off.

Lajos: I slept. (not bothered by Márton's constant commentary)

Márton: There's just no way your body can adjust, just because you sleep at night. Your body can't adjust to being ready to go during the day or at night. Especially if you come to work six nights in a row; that is a lot. And to say that that will be less exhausted? Less exhausted for whom? Not for him at home, right.

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As far as the workers are concerned: they do not display the kind of openness which would allow them to move closer to understanding the perspective of the management. In reality, it never occurs to the workers that their managers might be following some kind of rational thought process when making decisions regarding the changing of shift assignments. With no hesitation whatsoever, they completely exclude this possibility, and instead blame what they presume to be their managers' incompetence and indifference for decisions they believe to be wholly unacceptable. When evaluating the new shift schedule, as a consequence of these actions, they place all blame squarely with the management and reject the possibility that they themselves may have played any kind of role in the introduction of this modification.

These stories are told in an angry, hurt and outright accusatory manner; the emotions are elicited from the workers primarily because managers make their decisions about employee numbers, performance norms and shift schedules without consulting the parties affected and without considering their perspectives in the least. For the workers, these events confirm the sense that the management looks down on them and does not consider them to be human beings, and that they are, in fact, viewed simply as "moving parts" which can be disposed of when no longer needed. Using the LUUUUTT Model, stories which are sometimes not recounted directly, but are nonetheless important in terms of exploring interpretations, can be illustrated as follows:

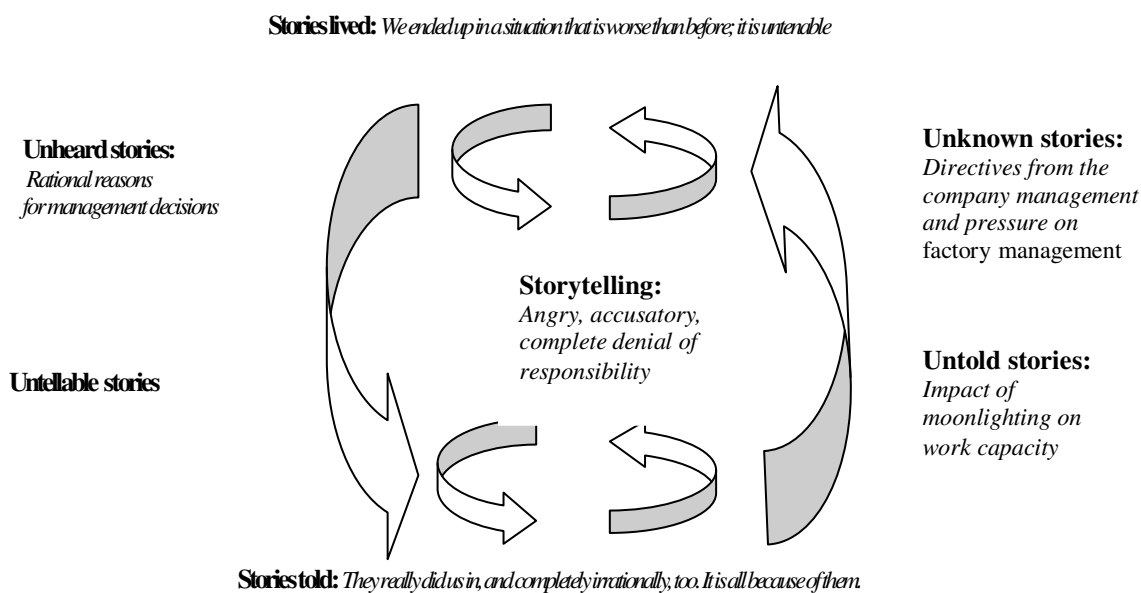


Figure 6.14 The story of shift scheduling at Factory X, as reported by blue-collar workers

The LUUUUTT Model calls attention to the important phenomenon that the management's explanations regarding important decisions either do not reach factory workers at all, or that the explanations communicated by the management have become a subject of ridicule between workers due to their inexplicable or unacceptable nature (*unheard stories*). For instance, regarding employee numbers and performance norms, workers did not receive any information whatsoever about the extent to which it is company management which dictates these figures to the factory management; as a result, these are to be considered *unknown stories*.

One additional story, although *untold by the employees* is the matter of part-time jobs worked while moonlighting in addition to their regular jobs at Factory X. It is often mentioned in connection with other topics that many are forced to take on part-time jobs on their days off as a result of the low wages they receive from the factory. This is not something that is mentioned by employees in their stories when discussing shift assignments and exhaustion as this would be an element which raised the question of responsibility on the part of workers themselves – and it would do so in connection with an opportunity that, officially, should not even be available to workers on their days off.

The series of communicative events (connected to shift scheduling and changes in performance targets necessary because of a change in equipment at the factory) described above serves to demonstrate how giving meaning is rooted in contexts differing from one another and how this can create a workplace stress process that affects everyone involved negatively, and is perceived by all actors as being unjust. This situation is further aggravated by the fact that, in reality, neither party realizes their goals: they are unable to make progress compared to their point of departure, and simply end up physically overstressed and emotionally hurt. At the same time, we may conclude that what is most seriously damaged in this process is the relationship between the factory man-

agement and the manual workers: by the end of this series of events, any trace of trust between the two parties is eradicated. Instead of jointly finding a solution to the problem at hand, the parties involved demonstrate a complete lack of constructive, open and cooperative attitudes and contribute to establishing an atmosphere of hate and antagonism at Factory X.

In this phase of the process, the question of shift schedules seemed to come to a hiatus with the restoration of the status quo which came about at the cost of serious damage to the relationships and social capital in the factory. At the same time, problems related to production remained, prompting the factory management to take further action related to shifts. This second phase in the series of events was also of special interest to me as it took place precisely during my phase of data collection, allowing me to personally witness several instances of communicative acts connected to it. Communicative actions in this phase took a different turn from several perspectives and as far as their outcome is concerned; they also contain certain positive, forward-looking elements. These provide reason for hope that similar workplace problems associated with stress process and injustice perceptions can also be handled differently in Factory X. Below, in Figure 6.15, I present the second phase of the communicative actions of the shift scheduling process using the Serpentine Model and the Hierarchy Model of Meanings.

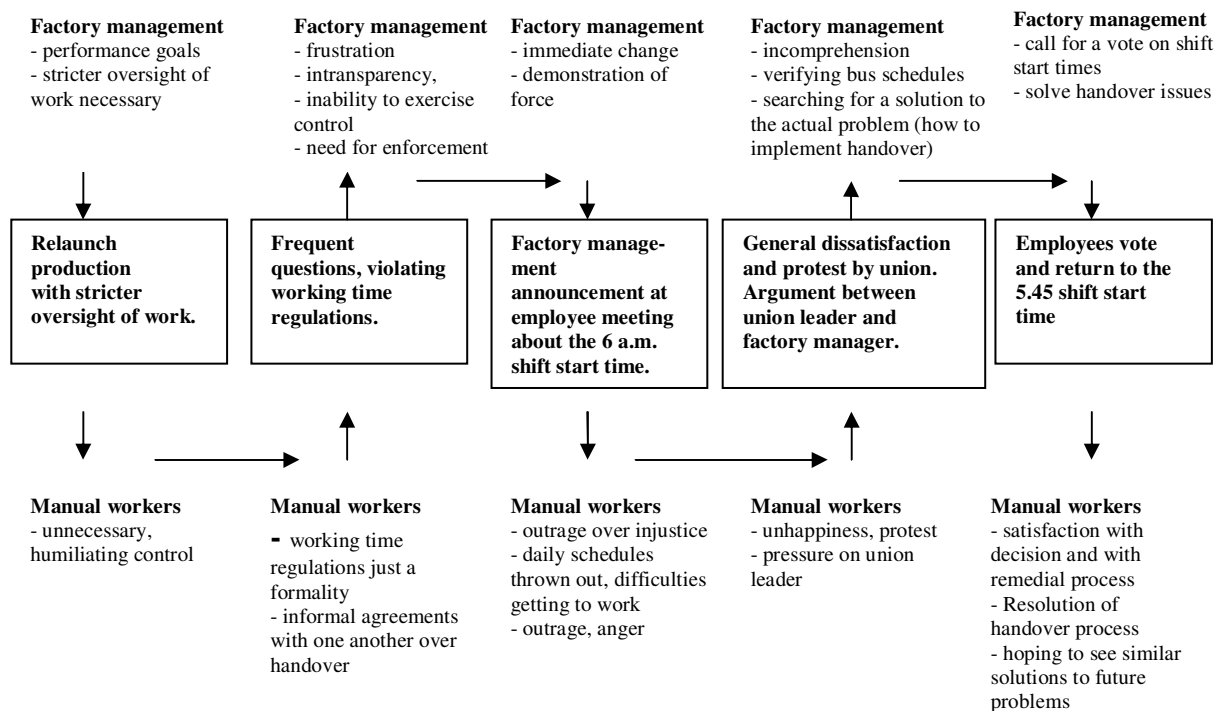
FACTORY MANAGEMENT

Culture: Performance culture; demanding efficient work

Episode: Relaunching production through more stringent control of work

Relationship: Fundamental distrust, but recognition of being dependent on one another

Self-concept: My task as a supervisor is to demand intense and disciplined performances



Relationship: Distrust, a sense of hurt, anger and a ray of hope appearing

Self-concept: We will show that this cannot be done without us

Episode: The new equipment will mean we work harder but earn less

Culture: Vulnerability and powerlessness; minimal efforts for survival

MANUAL WORKERS

Figure 6.15 An analysis of the series of communicative actions related to shift scheduling using the CMM Serpentine Model and Hierarchy Model of Meanings (second phase)

The unilateral modification of shift starting and ending times by the factory director is the focus of the second phase of events related to the process of shift scheduling. This critical incident is very close, in terms of meaning giving and logical forces which impact decisions, to what I have already identified in the first phase of

the series of actions. At the same time, the concluding events of the process go further than a repetition of the typical patterns in the factory described earlier.

The factory manager's own personal decision to modify the start of the morning shift to 5:45 from 6 o'clock elicited general outrage and protest on the part of the workers. This took place exactly during the time I was collecting my data for this research, allowing me to witness a heated exchange of words between the union leader and the factory director. I was able to observe exactly the critical incident in which the value of cooperative problem-solving appeared in the middle of a culture ruled by tension and hostility.

The factory manager, in contrast to his previous series of activities, did not insist on defending his own earlier decisions at any cost. Instead of displaying a stubborn defence of his managerial authority, he appeared to be ready to seek solutions to real problems in a cooperative and constructive manner. Instead of arguing over the departure and arrival times of buses, a thought process which was focused on the actual problem was initiated, with a view to mutually finding a disciplined method of handing over shifts. The factory manager realized that this problem could simply be solved by unilaterally modifying the starting time of the shift. The contextually-embedded meaning giving of factory management shown in Figure 6.15. ended up transformed in such a way as to allow for a more favourable outcome for the parties affected.

Factory management:

Episode: A solution has to be found to the discipline issues related to handover between shifts. The specific handover time between shifts can be determined so as to be optimal for factory workers.

Culture: The dominant elements are performance-orientation and efficiency. The optimum results should be achieved using available human and technical resources.

Relationship: Workers are unable to assume responsibility for the performance of the factory; at the same time, they may be given options in matters which do not impact production.

Self-concept: As a supervisor, my job is to demand whatever is necessary for factory performance and to strictly enforce related decisions.

In terms of the embedded contexts of meaning giving, the most significant change on the part of the factory management lies in the fact that it is the episode itself (seeking a solution to the problem of handover between shifts) which becomes the highest-level context (which fundamentally defines meaning giving opportunities for lower-level contexts). This interpretation, focused on the episode and being largely problem-oriented, makes it possible for the affected parties to separate off the factors deemed critical from the factory management perspective (which need to be strictly enforced), from decisions that are less important to management. This way it becomes clear to all stakeholders that a disciplined handover between working shifts of 12 hours is of critical importance to the management, while the exact starting and ending time of shifts is actually not as relevant from the perspective of the performance of this 24/7 operating factory.

This way, factory management recognized that while it remains impossible to expect workers to assume responsibility for performance, it is still possible to leave certain decisions up to them without endangering the efficiency of production. It is a critical communicative action on the part of the management that it does not proceed to withdraw its decision of shift starting and ending times in the same way that it had tended to do in the past. Instead of the tactics used in processes described earlier, such as inventing a cover story or unilaterally “undoing” its actions, the factory management acknowledged that it had made a mistake when changing the starting and ending times of shifts. It then empowered workers to vote on whether they wish to start their shift at 5.45 a.m. or at 6.00 a.m.

For Factory X, this was the first instance when workers had such an opportunity to influence their work and their own fates. This event, although it may seem minor from an external perspective, played an extremely important role as far as the embedded contexts of meaning giving for workers. Recognizing that the interests of all the employees of Factory X did not necessarily coincide is an important event, as is the fact that it is possible to find solutions which allowed all parties to emerge victorious. As far as handing over between shifts is concerned, the workers of one organizational unit⁵⁸ operating rather independently, opted to begin their shift at 6 o'clock as opposed to the 5.45 start time that the rest of the workers preferred. In this organizational unit, which can easily be separated from the core activities of the factory, it was possible to introduce this new handover time, different from the one used in the rest of the factory, without any problems whatsoever.

The most important effect, however, of providing workers with an opportunity to decide relates to the self-concept of workers and with their relationships to management. Workers' feeling of powerlessness and defencelessness decreased, and in contrast to previous instances of humiliation, in this process they felt that at least in this one small matter they were able to decide themselves how they wanted to work. When workers described this episode during the interviews and in their focus group sessions, they demonstrated a very clear reduction in their anger as far as their story telling was concerned. This was the incident related to which each employee appeared to show signs of hope and expectation. Several employees commented that they very much hope to see a similarly open attitude on the part of the management toward such decision-making in the future, adding that they believe the current management of the factory is doing a better job in this respect than its predecessors. Accordingly, the transformation that blue-collar workers experienced in the embedded contexts of meaning giving can be summarized as follows.

Manual workers:

Episode: The factory management demands a disciplined handover between shifts; we are however given an opportunity to determine the specific starting and ending times of the shifts.

⁵⁸ I refer to the employees in this organizational unit as “stokers;” I wish to point out to my readers that this is not their actual responsibility: to preserve workers' and factory anonymity, I have changed all technological terms.

Culture: Defencelessness and powerlessness are dominant; minimal effort. A glimmer of hope is there - that after all, there is still an opportunity to influence decisions in some matters.

Self-concept: We are oppressed blue-collar workers, but at least the management has realized that in some questions we know what the solution is and they cannot be implemented without involving us.

Relationship: The relationship to the management is dominated by distrust, but there is hope that in some issues they will be willing to give us the chance to make decisions.

Analysis of the meaning of the different embedded contexts clearly shows that providing workers with an opportunity to make decisions led to an entirely new situation in which, unlike previously, workers did not feel that they are being humiliated. The management was successful in avoiding the creation of a feeling of injustice resulting from the offending of workers' personal dignity. We could see that earlier, in the first phase of the series of communicative actions related to shift scheduling, the introduction of a six-day work schedule (inducing a sense of humiliation and injustice) elicited from workers responses which showed that it is impossible to execute such major decisions in Factory X without consulting them. The opportunity to make decisions, as far as the starting time of shifts is concerned, transformed workers' self-concepts in a clearly positive manner and also represented a glimmer of hope also in their relationship with factory management.

Next, let us examine what kind of logical forces were at play during this series of events – far more forward-looking than previous ones – and how managerial decisions were influenced at this critical moment:

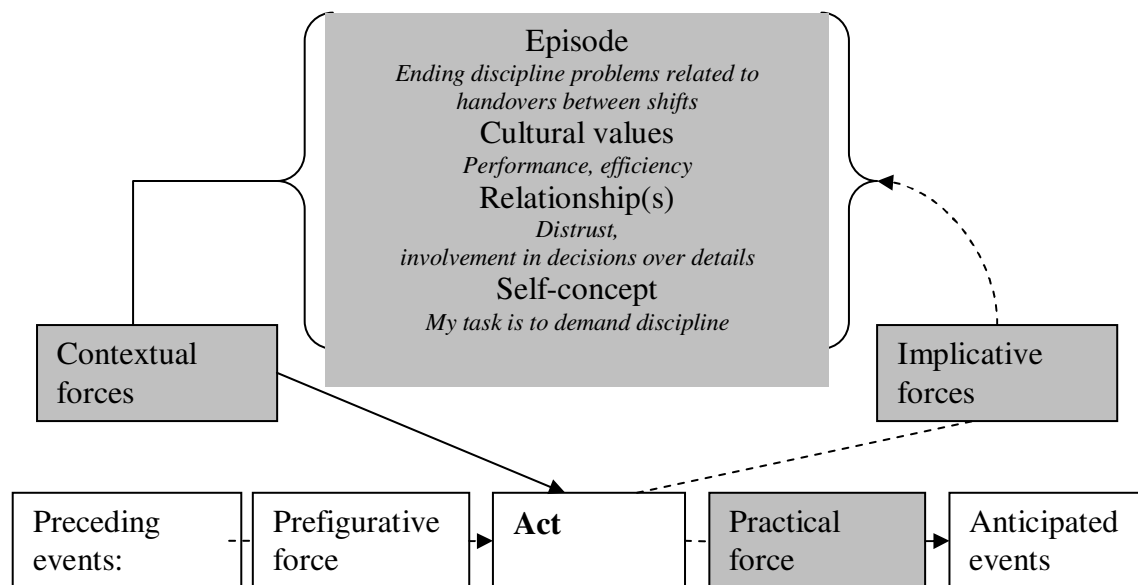


Figure 6.16 Applying the Model of Four Aspects of Logical Forces to management concerning the announcement of the vote related to the starting time of work shifts

Analysis using the Model of Four Aspects of Logical Forces clearly shows that in this decision situation, the management was able to mitigate the forces resulting from experiences with previous events, leading to negative outcomes. The desired results – a disciplined handover between shifts – proved to be stronger than other, prefigurative forces which pertained to workers' prior unwillingness to assume responsibility. Nonetheless, contextual forces – the performance-oriented culture, values of efficiency and distrust – remained influential, as the management only empowered the workers to make decisions within a very narrow scope of issues and only between two alternatives. At the same time, implicative forces also appeared very markedly in this situation: a desire for change toward accessible resources (self-concept, relationship, culture and episode) on the part of the management is palpable.

Through its decision-making and communications, the management initiated a move toward the establishment and development of resources which, instead of being a demonstration of force, represented a demand for discipline, and instead of distrust and anger focused on cooperation about details and on the involvement of stakeholders.

Although my analysis closes with the hopeful conclusion of the series of events related to shift scheduling, I believe it is important to note that in the spirit of CMM, and looking forward, we still cannot suggest that this breakthrough will lead to some deterministic relations, and thus we will surely witness an improvement in the general conditions at Factory X. Each decision by the management and by employees plays an important role either in strengthening or, on the other hand, hindering this process aimed at cooperation and constructiveness. For the workers at Factory X, the opportunity lies in whether they demonstrate a disciplined handover between shifts at the time of day which they themselves determined. The management of Factory X retains the possibility of viewing the new process of handover between shifts with trust – or, alternatively, of introducing the previously-planned and procured fingerprint-based access-control system.

Based on my analysis to date, I believe it is likely that these communicative actions will not remain unanswered by the other party: it is my hope, therefore, that stakeholders at Factory X will choose to focus on goals and contextual resources for the future, as opposed to dwelling on injuries of the past or concentrating on short-term advantages. In the next chapter of the thesis, I will describe conclusions which carry within them opportunities, as well as my recommendations for improving the social reality at Factory X. As an introduction to these conclusions, I would like to refer finally to the Daisy Model of CMM in this chapter, detailing the postmodern reading of Factory X, to discuss what role personal relations (and other stakeholders indirectly related to the life of the factory) play in the development process.

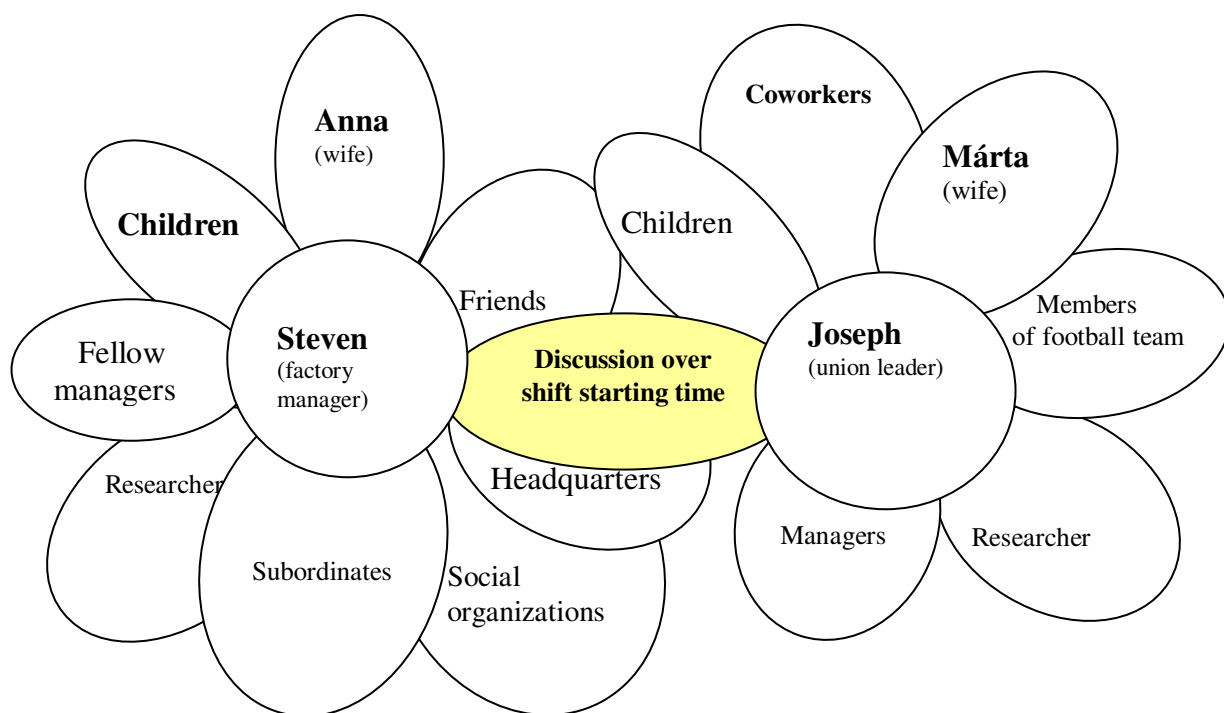


Figure 6.17 Applying the Daisy Model of CMM to the discussion of shift starting times

The Daisy Model can be used to clearly show that the argument, as a communicative activity between the factory manager (Steven) and the union leader (Joseph), becomes a part of other dialogues and meaning giving processes. One notable example of this is that at the time of the argument, I happened to be waiting for my next interviewee in the same room where the communication between these two people took place. I did not participate in their discussion but was able to hear every single word of the argument. I later took notes of both the details of the communication which had taken place and my experiences associated with it as a researcher. In my view, it is very likely that my presence in the room influenced the behaviour and communication of the two parties. I conducted detailed interviews prior to this discussion with both the factory manager and the union leader. In both cases, we formed our own images of one another, and it is my belief that in such a case neither the union leader nor the factory director wanted to change this image and self-concept by displaying a role radically different from the one they had evinced earlier. Thus, my conversations with the factory manager and the union leader may have become a part of the communicative actions of the discussion between the two of them; the factory manager may have been more cooperative during the discussion, while the union leader may have been more assertive than usual.

I do not wish to exaggerate the possible significance of this incident or of my presence; at the same time, I believe this is an especially good example to illustrate how our relationships to others may influence our communicative actions vis-à-vis a third person. In this case, the factory manager and the union leader tried, to a certain

extent, to bring the self-concept they displayed when dealing with me and the cultural resources available to them into harmony with the characteristics of the communicative actions of this argument. Naturally, this effect is not only present if the individual concerned is present at the time of the activity. The Daisy Model shows precisely that in the discussion of the factory manager and the union leader, their relationships to co-workers, professional organizations, friends and family members, and their dialogues with these individuals, also play a role. Having a beer after the football game in the evening and discussions over the dinner table with family are all reflected in what is said during such an argument.

Certainly, important ethical questions can be raised about the extent to which individual dialogues are authentically translated into dialogues of other relationships. We must also reflect on ourselves in this matter: are we truly behaving in our workplace relationships in the way we show ourselves to be toward friends and family? In my view, in the case of Factory X, it would have a profound effect on social structures, the quality of relationships and communicational processes if the individual stakeholders were to display a broader range of public, civic, professional and interest-representation activity: as a result, their discussions in these capacities would be translated to some extent to the social reality at Factory X.

6.2.3. The common patterns of the series communicative actions analysed with the help of the CMM tools and the social reality created through these actions

In the previous section the *introduction of perola burning* and *shift scheduling* were analysed in detail. These are examples for series of communicative actions that were perceived as significant stress processes and manifestations of organisational injustice by the employees of Factory X. By the means of the analytical tools of CMM, I have previously presented to my readers how the communicative actions (deriving from the organisational members' (management and manual workers) distinct interpretations and different forces shaped decisions) have had their impact on each other and created the social reality of Factory X.

Using a postmodern reading and analytical framework I have identified the critical moments of the examined organisational processes, which showed various similarities to each other. With the help of these critical moments typical patterns of communicative actions can be revealed and demonstrated, which are characteristic to Factory X. In the following table, I examine these moments or phases including the related the stress processes and perceptions of organisational justice.

Communicative event characteristic of Factory X	Examples in the introduction of perola burning and shift scheduling	Work-related stress process	Organisational justice and fairness perception
<p>1. Authoritarian decision: An important decision is made in Mirdor (HQ of the company) that has a significant influence on the work and life of Factory X employees (the decision is typically made in the centre without consulting workers of Factory X).</p>	<ul style="list-style-type: none"> - Decision (in Mirdor) concerning the introduction of perola burning in Factory X. - Decision (in Mirdor) concerning the test-run of the new chopper machine and the connected new headcounts and performance norms at Factory X. 	<ul style="list-style-type: none"> - <i>The management of Factory X tries to interpret the decisions as opportunities or challenges.</i> - The Mirdorian decisions are interpreted by the workers as authoritarian dictates, increasing threat and defencelessness. 	<ul style="list-style-type: none"> - The changes affect workers of Factory X extremely negatively and both the decisions and their consequences are considered unjust. - The decision-making process is perceived as unjust because it was carried out without involvement of the workers. - Unfairness is perceived since other known and more favourable possible alternatives were dropped by the decision makers.
<p>2. Dismissing worker reservations: In the course of implementing the decision of the centre workers of Factory X indicate the emerging problems and concerns, which are dismissed and ignored by the factory management (they follow the Mirdorian instructions).</p>	<ul style="list-style-type: none"> - The workers of Factory X indicate the technological and health hazards of perola burning, but the factory management dismisses these concerns. - The workers of Factory X indicate the insufficient number of people working in the new shifts and the impracticability of the newly set performance norms. Factory management dismiss their concerns. 	<ul style="list-style-type: none"> - <i>Management of Factory X considers workers' concerns and propositions as an excessive resistance to change, which needs to be overcome.</i> - Unsuccessful coping of employees with the threatening situation. Factory management dismisses employee proposals concerning changes in execution of the decision. 	<ul style="list-style-type: none"> - <i>Factory management considers emerging worker concerns and misgivings as unfair because workers insist on the impracticability of the decision and do not aim to solve the problems constructively.</i> - The factory management rejects the workers' initiatives in a humiliating manner. - Complete rejection of worker involvement in the decision making process is perceived highly unfair because it undermines feelings of competence among workers.
<p>3. Emergence of problems: The first major problems and difficulties occur during the implementation of the decision. The targeted aims of efficiency and cost reduction are not achieved.</p>	<ul style="list-style-type: none"> - Minor accidents in the manufacturing hall connected to the usage of perola. - Increasing ratio of waste (faulty products) in the manufacturing process and problems arising from physical overload of workers after starting up the chopper machine. 	<ul style="list-style-type: none"> - Significant and harmful physical overload of workers. - Workers' coping strategy changes to minimizing efforts and holding back individual initiatives. 	<ul style="list-style-type: none"> - Factory workers perceive the excessive workload and threatening work conditions as health hazards, which are seriously unjust and violate fundamental moral laws and norms (respect of human life).
<p>4. Blaming and increasing control: Factory management blames the workers for the emerging problems and tries to solve these by strengthening its control over the workers.</p>	<ul style="list-style-type: none"> - Sending a list of problems to Mirdor about the technological introduction of perola burning. Arrival of a Mirdorian engineer to Factory X with the mission to solve these problems. - Immediate modification of shift schedules (without consultation and blaming tiredness of workers) to 8 hours long shifts on 6 consecutive nights and 6 consecutive days. - Changing starting time of the shifts, from the original 5.45 to 6.00. 	<ul style="list-style-type: none"> - <i>Emerging problems are perceived as serious threat for factory management and workers' attitude is identified as the main source of the problems.</i> - <i>The basic managerial strategy for coping with the threatening and stressful situation is strengthening control over working conditions, overseeing execution of work and expressing managerial power and authority over workers.</i> 	<ul style="list-style-type: none"> - <i>Factory management considers the workers' languid approach as flagrant unfairness, and the suspicion awakens that factory workers deliberately fail to do anything to improve the performance of Factory X.</i> - Factory workers perceive the increased control and supervision, the adverse and authoritarian changes in working conditions as severe unfairness and consider it as a personal humiliation by management.

<p>5. Failure: The targeted aims of efficiency and cost reduction prove to be unachievable on the long run. Adverse consequences are realized concerning employee health, social structures of the organisation and factory productivity as well.</p>	<ul style="list-style-type: none"> - Persistent technological issues, the perola burning-related costs are increasing. - Workers of Factory X face serious health problems likely related to perola burning. - The qualitative and quantitative productivity measures of Factory X deteriorate further. - Factory workers demand revision of new shift assignment through the trade union. - There is no improvement in workers' discipline concerning starting time of work, on the contrary resistance of workers is substantiated. 	<ul style="list-style-type: none"> - <i>The terrible efficiency measures of Factory X are unsustainable for the company; the mere existence of the factory becomes threatened. Managers feel threatened of losing their jobs.</i> - The terrible efficiency measures of Factory X threaten workers with the shutting down of the plant and losing their jobs. - Various adverse physical, psychological and mental consequences of the stress process to workers are realized. 	<ul style="list-style-type: none"> - <i>Factory management does not take responsibility for the failure of implementing the central decisions in Factory X. Management considers the failure a consequence of workers' resistance and devolves responsibility for workers.</i> - Factory workers believe that management ruins the factory by forcing impractical and pointless decisions and technical modifications and at the same time neglecting the core issues in the Factory X.
<p>6. Restoring the state before the decision: When failure becomes evident factory management restores the state prior to the decision. Workers do not receive information about reasons for withdrawing the decision. Management either looks for a cover story or does not share any information at all. (In some cases the alternative of increased worker inclusion appears as a possibility to solve situations.)</p>	<ul style="list-style-type: none"> - Restarting Factory X without perola burning (original technology). There is no official information about the reasons for revising the decision. Various related rumours are spreading in the factory. - Restoring the original shift schedule without official information or explanation about the revision of the decision. - Restoring the original shift starting time based on employee voting and preferences, including a differentiation between workers. 	<ul style="list-style-type: none"> - <i>Management authority is seriously damaged. Low efficiency of factory persists similarly to the situation before the changes.</i> - <i>Material investments into the technological changes are a significant loss to the factory. Social structures and relationships are severely eroded.</i> - The adverse physical, psychological and mental consequences of the stress process to workers persist. Workers are alienated from their work; their relationship towards management is mistrustful and often hostile. - The exceptional managerial decision to call for a voting (about shift starting time) represents a glimmer of hope to workers. 	<ul style="list-style-type: none"> - Factory workers see in the restoration of the original situation and revisions of previous central managerial decisions a confirmation that their sense of unfairness was right. - The workers do not receive detailed, official information about the reasons for restoring the previous situation. The workers consider the lack of information as humiliating and unfair. - In the absence of official communication on the revised decisions, a sense of insecurity and threat still reigns among workers of Factory X. It continues to be unpredictable for them when and for what reason to expect similar authoritarian dictates of central management.

Table 6.3 The characteristic patterns of the critical moments (phases) of the examined organisation processes and the related processes of workplace stress and organisational justice perceptions.

The most conspicuous among the common patterns described in the table above is the similarity of the well identifiable, chronologically subsequent events (process phases) that I explored in connection with the most significant organisational processes from the perspective of workplace stress and organisational justice. I could identify these critical momentums using the reports of Factory X management and workers, whose different interpretations and actions constituted each phase and the critical processes themselves in Factory X. The common starting point of the work processes entailing strong distress in the factory is a Mirdorian (central) decision made without workers' inclusion and having a significant effect on the work process and working conditions in Factory X. In the second phase workers indicate their concerns concerning the decision on changes, however

factory management does not take these into consideration appropriately.⁵⁹ The third critical momentum, spanning the different organisational processes, is the appearance of the specific (critical decision related) problems in Factory X, on which the management reacts in the fourth phase in an accusing, blaming manner and strengthens its control over the work process and working conditions. In the course of the fifth critical phase it becomes apparent that the efficiency objectives cannot be reached with the introduced modifications, at the same time serious adverse physical, psychological and mental consequences of the decisions **realize to the workers**. The common momentum of closing the organisational processes is some form of restoration of the original situation. This revision of the previous decision usually does not happen through a transparent communication in Factory X, but via the application of a cover story. Therefore, it is explicitly promising a true glimmer of hope, that concerning the modification of the shift starting times, factory management admitted its mistake and the correction is implemented based on employee preferences and votes.

In the second column of Table 6.3 I reveal to my readers the examples of the typical critical moments in Factory X, while in the third and fourth column I examine the related workplace stress process reported by the workers and management of Factory X and their perception of organisational justice. Overall, it can be concluded that for both the management and the workers of Factory X, the examined organisation processes become a series of events resulting in seriously negative physical, psychological and mental consequences. The central decisions and related change processes constitute an extreme threat to workers from the beginning which they do not have the sufficient recourses to cope with. We can describe their situation as a sense of defencelessness and humiliation, which results in extremely hostile worker attitudes towards management and desperate or completely resigned actions. The management of the factory initially considers the decisions and changes as opportunities and looks at the emerging difficulties as a problem that could be solved by strengthening control in the factory. As **the events progress**, it becomes gradually clear that the implementation of the decisions and the management of changes is a failure. This becomes increasingly threatening and uncontrollable for the management. In the final phase the factory management tries to minimize damage and losses by returning to the original situation. However, the already invested material resources and the heavily deteriorated personal relationships, trust and social capital constitute a serious damage to Factory X and the company overall.

In terms of perceiving organisational justice and fairness it can be observed that from the starting moment of these critical series of events workers of Factory X continuously felt that management treats them unfairly. They considered the direction of the central decisions and changes unacceptable (would have condition); according to the workers management could have chosen differently as well (could have condition); and they have seen the decisions as violations of moral values (respect of human life, right to healthy work conditions) and

⁵⁹ Of course this appears differently in the interpretations of the management and the workers. According to the workers of Factory X the managers did not care about their opinions, while according to the management of Factory X, they did not get any real room for manoeuvre from Mordor.

adversely influencing productivity of the factory (should have condition). Simultaneously, reports of the managerial side show, that they have also suffered from increasing perceptions of unfairness experience through workers' actions. According to the interpretations of factory management unfairness of workers manifested first with the non-constructive resistance to central decisions and change. Factory management ascribes the failure of the implementation processes mainly to this worker attitude and the lack of responsibility taking on the workers' side.

My previous analyses made with the analytical tools of CMM also confirm the above conclusions based on the common patterns of critical processes. Most importantly these examples have confirmed that the examined critical organisational processes are series of distressful events that can also be described as **actions of mutually perceived unfairness**. Both the management and workers of Factory X are convinced that the other party has treated them unfairly. The close examination of the consecutive critical momentums clearly shows that both the management and the workers reacted similarly, their actions were increasingly unfair as a response to communicative actions of other organisational members judged as unfair by them.

This mentality and way of acting, 'this coordinated management of meaning' clearly shows the dominance of the prefigurative and contextual forces in the case of Factory X employees. In terms of the communicative actions chosen, the preceding acts will be particularly significant. The participants respond to these past actions by looking at their own culture and self-concepts as the main resources for their decisions. All this leads to the formation of a social world full of increasingly strengthening mutual sense of unfairness, distrust, shifting responsibility and unnecessary suffering. The results of my research is **consonant** with the findings of Pearce (2004), who generally considers communicative situations and actions more favourable when *practical and implicative forces* are dominating *prefigurative and contextual forces*. In these future-oriented situations, the participating actors can respond to each other and to the current situation (even in the case of significant differences) more freely, more openly and with a bigger chance for success, as their decisions and actions are not determined by pre-written, reactive scenarios (Pearce, 2004).

In case of Factory X exactly those communicative actions are missing, which are future-oriented and primarily influenced by implicative forces. My postmodern analysis using the methodology of CMM did not aim at developing an external critique of Factory X. On the contrary, its objective was to demonstrate according to the internal stakeholders' perspectives the situations in which a dissonance could be found between confessed goals of organisational members and their communicative actions. This immanent critique aims to explore what the participants of Factory X's social world create together in spite of their original intentions. With the help of the examination of the series of events, I have chosen a research approach that diverts our attention from a single organisational member's one time decision and action. In the postmodern analysis, the interaction and coordination of different actions and meaning giving related to organisational processes were emphasised (Pearce, 2004). This way the process of work-related stress and perceived unfairness are interpreted in a dynamic social pattern. The task of organisational members is to find the possibilities of their personal and mutual responsibility taking in

this social moral system. Built on these findings, I will present in the final Chapter 7 my proposals for the stakeholders of Factory X from a postmodern perspective parallel with the proposals build on the critical reading of the dissertation.

7. Summary, recommendations and further research

„Trust as if everything depended on God,

But act as if everything depended on you.”

Saint Ignatius of Loyola

„Dum spiro, spero”

Seneca

In the previous chapters of my doctoral dissertation I argued that twenty years after the transition period (also referred to as the “system-change”), those procedures could still not be fully explored that resulted in Hungary in the domination of widespread disillusionment from the politics, the public life and the prevailing socio-economic settlement. The research of the workplace stress and the organisational justice processes can help us to understand why people living in Hungary have had such extremely bad physical and mental health and why there has been such a significant erosion of social capital. The studies examining the local reality and the social processes in depth are essential and give important contribution to the analysis and understanding of these social phenomena. My current doctoral dissertation can be included in these studies as well. These approaches, that are also suitable for capturing the highly complex local processes and social structures, have a fertile and inspirational effect on the broader, large-scale studies aiming at the explanation of social phenomena.

My research that uses the exploratory-integrative case study method (Maaloe, 2010) undertakes simultaneously to examine the correctness of the initial theoretical constructions and beyond these to explore the local reality. I found the realisation of this dual purpose, the exploration and understanding of the deeply lying problems and the foundation of the practical interventions with corrective intention possible mostly with a multi-aspect, multi-paradigmatic researcher approach. My choice did not fall on Factory X examined in the course of my research because it well represents the Hungarian employees’ general situation, but because I wanted to thoroughly reveal and understand the operation of an organisation that was significantly affected by the economic crises and about which I already knew from a previous research that it offers extremely vigorous examples for the organisational and social problem areas characteristic of Hungary. My methodological approach in many ways can be considered special in the field of workplace stress and organisational justice studies in Hungary since, from among the small amount of qualitative studies, the application of the analysis toolbar (CMM) I used and a multi-paradigmatic research in this topic has not yet been applied in Hungary.

With my multi-paradigmatic research approach I have revealed for my readers two significantly different readings of the case of Factory X. In the critical reading of the thesis I have strongly built on the conceptual struc-

tures and models of previous research in the topic of workplace stress and organisational justice. However I focused on the unveiling of the power structures and the oppressive social relations that show strong connection with the employees' sufferings and the damage to their physical and mental health. At the same time, in the postmodern reading of the dissertation I was only a 'moderate consumer' of the theoretical structures connected to workplace stress and organisational justice. In this approach I primarily aimed at revealing and understanding the communicative series of actions in the development of which the participants' meaning-giving influenced by various contexts is determining. I analysed series of actions that could be interpreted as workplace stress and that showed how the participants jointly created a social reality filled with misery – a situation not desired by any of them.

The critical and postmodern readings presented in the previous chapters in detail have revealed a completely different light on the social reality and processes of Factory X. Due to this, based on the analysis of the research results I could draw different conclusions in the two interpretations. The different conclusions seem to contradict each other at times, similarly to the quotation from St Ignatius found in the beginning of this chapter. At the same time, after thoroughly and intensively thinking over the seemingly contradictory statements, we can discover that here we can face such paradoxes that simultaneously contain true statements. According to the approach of the parallel and multi-paradigmatic methodology I have also tried to introduce my conclusions drawn from the two readings in the same time and side by side. It is not my aim, and therefore I did not intend to synthesize my conclusions drawn from the two readings or to integrate my suggestions in some sort of unified action plan. I am convinced that I can make the most valuable work if I present my conclusions and suggestions simultaneously and my readers can make sure that these are concurrently true in spite of their differences and that we need both of them in order to improve the social reality of Factory X.

7.1. Conclusions

In Chapter 6 of the thesis I explained my conclusions based on the critical and postmodern analysis of the research results for my readers in details. Due to space limitations I can present only the most important and novel elements of my conclusions in a summary in the final chapter of the dissertation. Adhering to the previous structure I will discuss the critical and the postmodern reading parallel when summarizing the conclusions.

7.1.1. The most important conclusions of the critical reading

By the help of the critical reading of my research I managed to outline a mind map of the relationship between the workplace stress process and the organisational justice perceptions, which includes the social-economic, the social relation and the technological context in the workplace. When preparing the mind map I

basically relied on the stress discourse in the workplace, in the course of which the Factory X workers connected the organisational events to the physical and mental consequences that affected them; which with I could familiarise myself from their reports about the problems at the workplace. The important feature of the model presented again is that it stretches the point of the cause-effect relationships and the chronology; leaving room for parallel events, cognitive processes and free decisions:

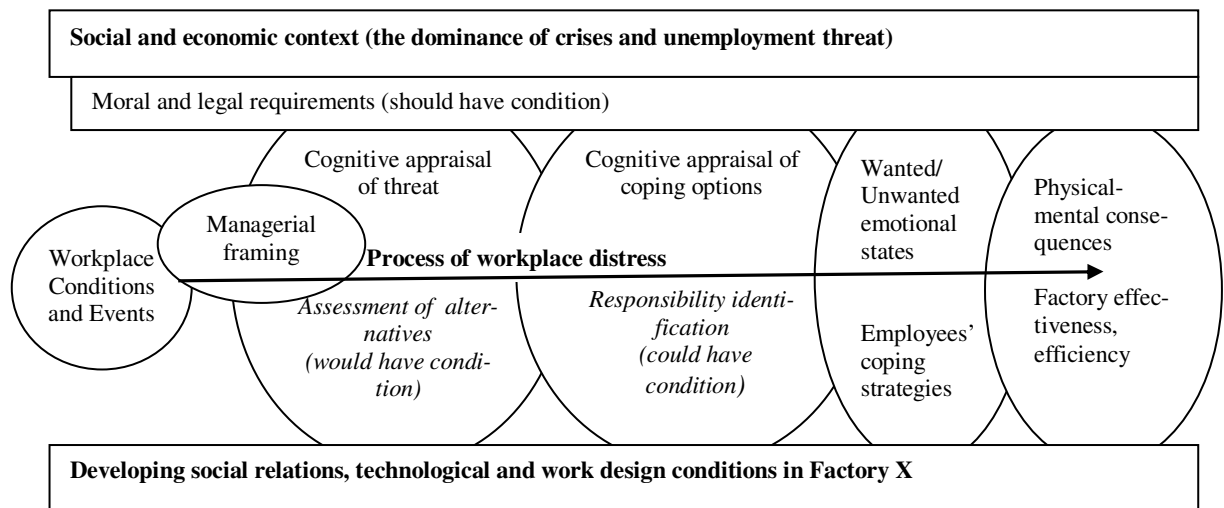


Figure 7.1 The mind map of the workplace stress process and its interpretation in Factory X

Strengthening the workers' sense of vulnerability due to the crisis

An important result of my critical analysis – that can be captured by the help of the mind map of the stress process at the workplace – is that it highlighted how difficult it is to overestimate the effect of the managerial framing on the employee interpretation of certain corporate events. The factory and the managers of Factory X responded to the crisis affecting the industry, the decline in demand and the factory closures with a framing that has a dominating element of strengthening the workers' sense of vulnerability. By questioning the workers' value and with the lack of transparency in the important decisions the managers were trying to strengthen the feeling in the employees that under such circumstances they must accept every instructions and conditions. All this brought the workers to an extreme state of the deprivation of power. This resulted in that they quasi-renounced the possibility of individual initiatives and control over their work - along with becoming uncertain about their own employee competences.

The discrepancy between the managerial expectations and the conditions provided by the managers

The connection point of the workplace stress and organisational justice research is that they focus on capturing the dissonance and the discrepancy between two factors, which appear in both different theoretical approaches and models (Cropanzano, 2005). These include the person-environmental fit, the demand-control and

the effort-reward imbalance workplace stress models. My research results have confirmed that the various discrepancies are playing a key role in terms of the workplace stress process. At the same time these are the manifestations of organisational justice (injustice).

From among the above mentioned theoretical structures I found examples for almost all of them when examining the workplace stress processes. Yet, in case of Factory X, a special discrepancy emerged in connection with the stress processes, which did not exactly link to any of the previous theoretical constructions. In the interpretations of the employees the biggest internal stress was caused by the lack of harmony in the **managerial expectations and the conditions provided for them by the managers**. Thus, for the Factory X workers one of the main stressors is the **discrepancy of the expectations and the provided conditions**, which of course can include the low level of the available control (decision making and used skills) or the absence of the necessary resources.

The speciality of this interpretation of workplace stress and organisational justice is that the employee is not in the centre,⁶⁰ since both factors of the discrepancy is within the competence of the manager's decision. **Therefore the manager can be held responsible** for it. At this point the connection of the workplace stress theories to fairness theory (Folger and Cropanzano, 2001) from among the organisational justice theories seems clear.

The significance of having a share from the bad according to merits

The representatives (Folger and Cropanzano, 2001) of the integrative approach of organisational justice emphasize the importance of overlapping topics, such as the **question of responsibility** in contrast to the separations of the distributive, procedural, interactional, interpersonal and informational dimensions of justice. Due to the economic crisis the workplace stress processes and the organisational justice perceptions connected to the responsibility received higher significance. The classic justice concept according to which *everyone should get what he deserves*, received a special interpretation in Factory X, since in the period of factory closures and lay-offs the question stressed by the employees changed in the following way: *'everyone should get from the bad according to his merits'*. Hence, the Factory X workers believe it is a fundamental injustice that the directors of the factories that were shut down elsewhere were transferred to other factories. Thus, the **ex-factory directors did not have the same consequences** as the manual workers. They consider this an important part of the workplace stress process, also in the sense that due to the 'unnecessary' factory directors their overload cannot be reduced by hiring new workers and they blame the 'dawdling' ex-directors for the overgrowth of micromanagement. The Factory X workers are much more concerned about the 'missed bad fate' of the directors of the

⁶⁰ For example in the effort-reward imbalance model, where the effort is what I give and the reward is what I get.

closed factories, than the layoffs of the employees working there. This is a finding of the critical reading that points out to the hostile attitude towards the managers and the vulnerability of the workers. I have not met any manifestation of compassion towards the workers of Factory Y, that operated excellently and still got shut down. From this I gather that despite the crisis situation the workers' solidarity towards each other is at an extremely low level in the examined factory.

The damages of the mental and physical health and the value of the workplace

I consider the consequences of the workplace stress process and the organisational justice perceptions manifesting in the damages of mental and physical health an outstandingly significant indicator of the 'sharing of the bad'. In terms of unveiling the oppressive structures causing suffering for the workers the understanding of the development processes of the physical and mental illnesses proved to have a crucial significance. Therefore I presented these in the subchapter 6.1 of the dissertation.

In the case of Factory X the physical and mental health appeared as a value that can be played down if necessary. The organisational members treat health as a 'reserve' that can be taken from constantly and for the augmentation of which no one takes real responsibility. The workers, the managers and presumably the regulatory bodies as well are actively taking part in the creation of the social structure that considers job retention more important than a healthy workplace. The essence of the interpretation can be captured in the belief that it is better for everyone to keep their workplace that is to a certain extent a health hazard, than losing the workplace and, due to this, becoming unemployed. From a research perspective the most shocking in all this is that the workers of Factory X did not question this state in any sort of way. On the contrary, their psychological coping strategy manifests itself in that they identify themselves with the thought of worthlessness of their health and life. The disregard of the occupational safety rules and the alcoholism at a drastic level is not a sort of Hungarian and masculine bravado, but a screaming sign of the hopelessness that the workers accepted their startling life prospects and they do not want to do anything about it.

I managed to understand all the beliefs revealed in Factory X and the surface structures that were considered immutable with the method of the **intensive critical interpretation**. In order to illustrate the connections, I collected my most important results in the following model. In Figure 7.2 I will simultaneously show the surface structures and those not-questioned deep structures onto which the surface structures are being built. I will elaborate more on the alternative structures – also appearing in the figure – in chapter 7.2 which contains my proposals.

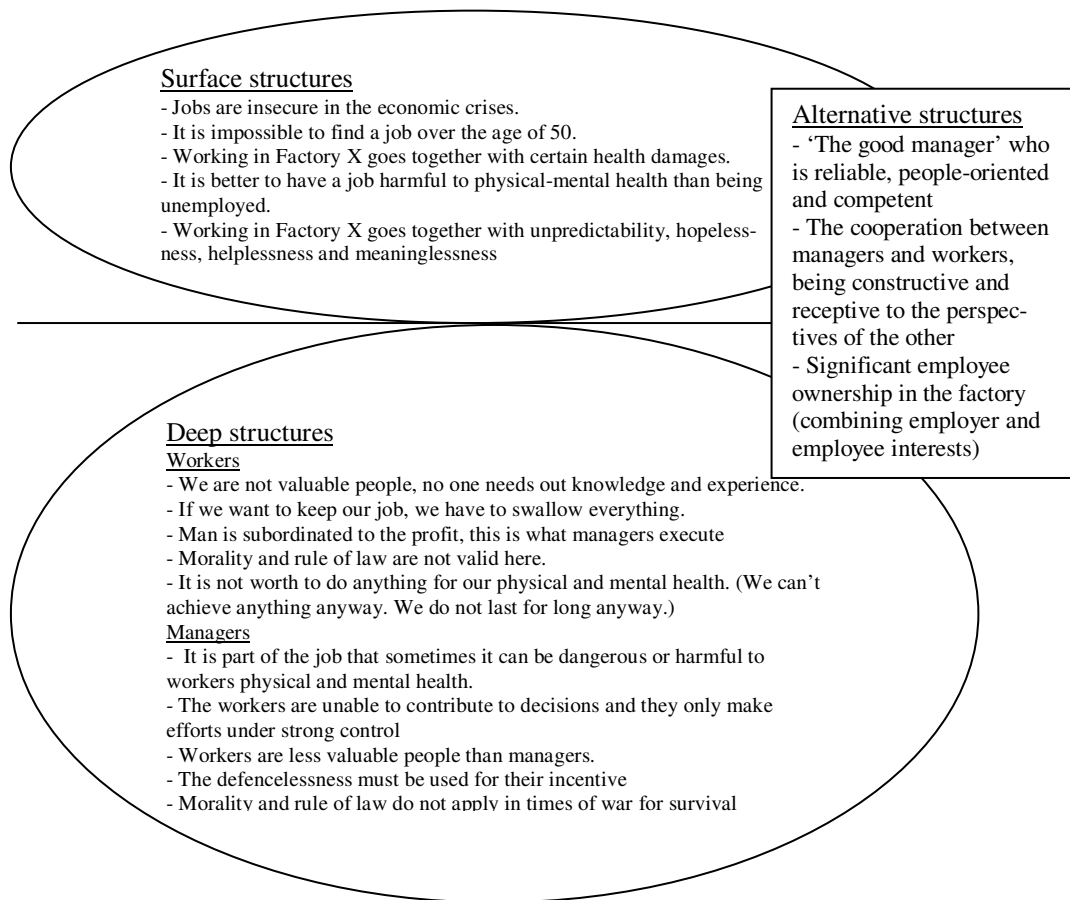


Figure 7.2 Surface and deep structures explored in Factory X

The weakening and relativisation of the moral values and rule of law

Among the unquestioned convictions of the deep structures I ascribe prominent importance to the beliefs appearing by both employees and managers that question the persons' value; with special regard to the value of the workers over 50 years old. This is such an inhuman and destructive thought, that even the seed of this thought should not have been allowed to settle in an organisation; yet, in the case of Factory X it became part of the everyday life. At the same time, in view of the decisions and technological modifications experienced in Factory X it would be surprising if the traces of this could not be found at the level of values and convictions. The weakening of the belief in the value of any person can be connected to the eroding ethical values and legality, and even more so due to the crisis. There are no safe benchmarks for the managers and workers of Factory X, since they face with a strong violation of human life, dignity and health day after day. The legal regulations and the controlling authorities could mean another borderline, but even in connection with these only the uncertainty is certain. The concerned persons regularly violate the occupational health, safety or even the labour law rules; and the strength of the law relativised in Factory X and the consequences of their violation are completely unclear.

7.1.2. Key conclusions of the postmodern understanding

In the postmodern reading of my study I tried to explore the miserable social reality in Factory X, which I examined through work place stress processes and perceptions of organisational justice, to show how the communicative acts and meaning creations of the concerned parties in Factory X created these structures. For the postmodern analysis I found an enormous support in the methodological tools of Coordinated Management of Meaning (CMM) created by Pearce (2004). With the help of the Serpentine Model, as a starting point, I could thoroughly examine the series of events, related to the critical processes of Factory X. As an example I present my findings concerning the shift scheduling:

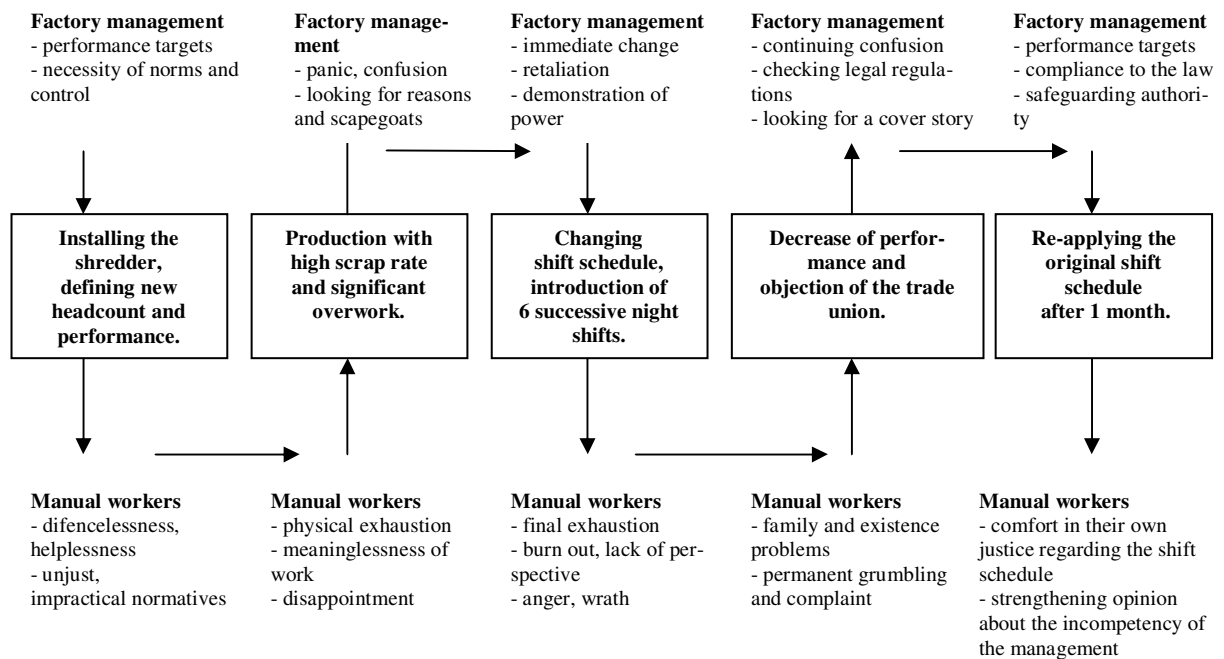


Figure 7.3 Analysis of the communicative actions related to shift scheduling using the Serpentine Model and the Hierarchy Model of Meanings of CMM

Processes of the mutual feeling of unfairness

With the help of the reports on the problems of Factory X and the Serpentine Model, I managed to reveal several critical organizational processes and to discover that these follow a very similar pattern - consequent events repeat the logic of previous processes. It was clear from both the reports of the workers and the managers that the key points of the processes were understood by both parties as being unfair. This was crucial in forming their responding actions - also creating a feeling of unfairness. As a result, the concerned parties of Factory X created **processes of the mutual feeling of unfairness**; that is, work place stress processes that created social relationships and structures in the workplace, which were undesired by all of them. Through the reports I met during the research I could identify the following typical phases of these stories:

Phases of typical stories at Factor X
1. Authoritative decision: A significant decision has been made concerning the work and life of Factory X employees (the decision is typically made in Mirdor without consulting with the workers of Factory X).
2. Dismissing reservations: In the course of the implementation of the decision the workers indicate the emerging problems and concerns, which are dismissed and ignored by the factory management (they follow the Mirdorian instructions).
3. Emergence of the problems: The first problems and difficulties occur in relation to the implementation. The efficiency targets and cost reduction could not be achieved.
4. Blaming and increase of control: The factory management blames the workers for the emerging problems and tries to remedy the problems by strengthening control over the workers.
5. Failure: The efficiency targets and cost reduction prove to be unachievable in the long term.
6. Restoring the state before the decision: The management restores the state prior to the decision due to the unambiguous failure. They do not inform the workers about the real reasons of the decision. They look for a cover story or do not share any information at all. The alternative for solving the situation by inclusion appears.

Table 7.1 Typical phases of the stories about processes of the mutual feeling of unfairness

Resources, forces and discourses forming interpretations of the events

The analysis of the postmodern reading of my study also helped to answer the questions, how and through what interpretations and meaning creation processes these sequences of communicative actions that were undesired and unintended by the concerned parties of Factory X were created. The Hierarchy Model of Actor's Meaning of CMM for example reveals that for the process of shift scheduling, the managers and the workers create a meaning from different, hierarchically embedded contexts (as resources), thus creating the stories about the events for themselves:

FACTORY MANAGEMENT

Culture: Culture of performance, enforcing efficient working

Episode: To assign maximum performance to the new technology, with a minimum of headcount

Relationship: Basic distrust

Self-concept: My task is to enforce intensive work

MANUAL WORKERS

Culture: Exposure and helplessness, minimum efforts for the survival

Episode: The new technology/machine is only good, to make us work harder and earn less

Self-concept: We will show them that there's no way without us

Relationship: Distrust, resentment and anger

Figure 7.4 Stories that were created from embedded contexts by the factory management and the manual workers

A common feature of the stories composed by the factory management and the manual workers, that the participants always use the highest level resource to create the critical story, and thus the stories that feed from the lower level contexts (as resources) can only fit to those as subordinated stories. Interpreting the events this way, however, does not give a fully satisfying answer to the question of why the individual participants decide to choose certain answers or actions. We can have a better understanding by using CMM model of four aspects of logical forces, that I have completed in Figure 7.5 with the most important discourses related to the stress processes met in Factory X:

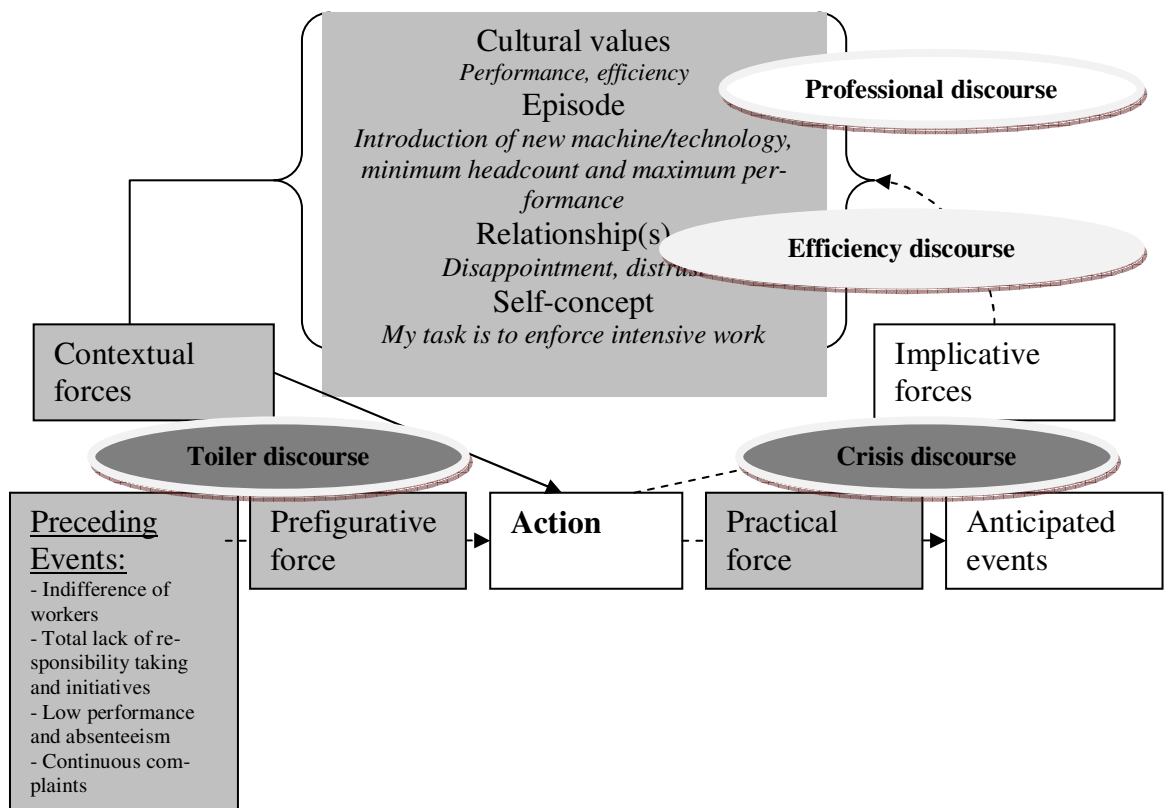


Figure 7.5 Most important forces and discourses affecting management activities in Factory X

With the help of the CMM analytical tools it is possible to reveal the key influencing “senses of obligation” that are enhanced by different forces. In Figure 7.5 strength of forces are indicated by the strength of the gray background colour. In the case of Factory X, contextual and prefigurative forces are the ones to have the strongest effect. Both in the case of managers and workers we can observe their decisions as something that was forced by the previous behaviour of others. Contextual forces emphatically transmit those resources (cultural value system, episode, connections and self-interpretations) that strengthen distrust, control and forcing others as a basic necessity in the decision maker. In the case of the managers of Factory X, practical forces can also be identified, but these point exclusively towards increasing efficiency and the survival of the factory. The failure of these practical forces does best to elucidate the importance of the organizational discourses, because the character

and strength of this force is determined by the “crisis discourse”. Crisis discourse gives an interpretation and explanation of the organizational problems and work place stress processes that are characterised by the approach to take all sacrifice in order to survive. Out of this reductionist discourse rational or moral considerations are often excluded. Its logic is “the end justifies the means” and “there are losses in all wars”. Counter-productivity of this discourse is shown by the fact that, in spite of its striking power, Factory X is getting further and further away from the chances of survival. Based on the findings of my analysis, there is a so called “toiler discourse”⁶¹ that enhancing each other with the “crisis discourse” increases the influence of the contextual and pre-figurative forces to the extremity. “Toiler discourse” emphasises the separation of managers and workers, the inability of the workers to take responsibility (or the lack of its possibility) and the workers inferiority. In this discourse distrust and hostility between the workers and the managers is natural, which combined with the “crisis discourse” makes this war-like relationship structure more and more a reality.

In the case of Factory X I managed to also reveal through my data collection some latent, hardly effective discourses that could activate forces of other types. In the case of the managers, there is a spectacular lack of implicative forces (senses of duty pointing towards forming contextual forces). As I see it, the main reason for this is that in Factory X the “professional discourse” can only be found at a latent stage. This discourse emphasizing the appreciation for professional expertise, commitment to work and joy over good solutions to problems, is almost totally pushed in the background in Factory X. The statements fitting into the “professional discourse” are almost immediately marginalised and sometimes even made fun of. “Efficiency discourse”, that is - if it works - characterised by expressions of economical and technological planning, sound and rational problem solving has also become similarly empty and suppressed. This, by now latent discourse can only be detected in retrospective thinking and nostalgic remarks. From the discourses about the present and future of Factory X the “efficiency discourse” was almost totally shut out by the “crisis discourse”, that almost totally singled out in influencing practical forces.

7.2. Recommendations

The initial aim of my research was to contribute to the unveiling of the unnecessarily oppressive social and power structures and to draw attention to the concrete manifestation of domination and exploitation in the workplaces in Hungary. My research goal was to identify the intervention points in Factory X, onto which the interventions intending to improve the life situation and mental-physical health of the workers who are suffering from workplace stress can be targeted. In the course of my research my initial objectives were enriched further, since I could familiarise with the factory managers’ aspects as well as the weight on their shoulders. As a result of

⁶¹ For „toiler discourse” there is no appropriate English expression that reflects the Hungarian word „melós” perfectly. This word is used by manual workers and managers as well. This Hungarian word expresses the hard work done by the person but also has a pejorative style.

this, the series of acts and communicative events that created a social reality filled with suffering for all the stakeholders due to the meaning-giving that is embedded in different contexts, emerged and unfolded before my eyes.

Built on this basic finding, I will also present my proposals simultaneously within two groups in the final chapter of my dissertation according to the parallel multi-paradigmatic methodology. In the first group I collected those findings that have a critical view and that can be considered intervention points in terms of reducing the workers' sufferings and eliminating the oppressive social relations and power structures. In the second group of my recommendations that are reflecting a postmodern perspective, I make proposals for how the organisational discourse and the communication between workers and managers that can be improved in the case of Factory X. Furthermore I will present such proposals for my readers with the help of which I think the culture of mutually beneficial cooperation can be promoted against the current hostile attitude in Factory X.

7.2.1. Recommendations from a critical perspective

With my proposals that have a critical perspective I would primarily like to draw attention to the potential intervention points. However, I would also like to show some specific solution opportunities that can be applied in the case of Factory X.

Health awareness

The understanding of the development process of mental and physical illnesses in terms of unveiling the oppressive structures causing sufferings for the workers proved to have crucial significance. The mental-physical health of the Factory X workers, the epidemiological studies in Hungary (Kopp, 2008) and mortality data show that the approach in Factory X (which might be similar to the approach of other Hungarian factories as well) definitely requires a review. Keeping the unhealthy workplaces and tolerating the unhealthy working conditions may demand even greater sacrifices in the workers' life and for the society as well, than the values these workplaces really represent. We have to contrast the individual and social burdens of unemployment with the burdens deriving from the employees' sicknesses and reduced work capacity. In my opinion the approach that in the long term counts with a decrease in workplaces as a result of stricter medical inspections and sanctions is controversial. A more determined industrial medical inspection can lead to the increase in the employee headcount of the companies and can simultaneously bring back to the working life those people who turned away from it due to the unhealthy working conditions.

Thus, I suggest radical changes for the societal regulatory bodies and controlling services in the field of employment-healthcare. Of course, all of this must be preceded by such extensive impact studies that emphasize the long term effects of the measures. It is necessary to examine whether the limited resources available for the society and for the budget can be better utilized by creating new workplaces or by developing healthier workplaces.

The health awareness is equally an individual, a managerial and a social responsibility. The improvement of the employees' health awareness, their knowledge and life management connected to health is absolutely necessary. Furthermore, shaping the managers' attitude is also necessary, by the help of which, the responsibility for the employees' health and integral human development (Alford and Naughton, 2004) beyond economic responsibility will be realised adequately as well. Regarding the employees' health awareness it is important to emphasise the conscious upbringing starting from childhood onwards, which is the mutual task of parents and educators taking part in the educational system.

The trade unions taking up a more determined and novel role

Based on the results of my research the interest representation role of the trade unions was extremely important in the case of Factory X. Often, the union leader remained the only communicational channel between the hostile managers and the workers. The union leader represented the employees' interest with success in connection with the work-organisation and other human resource system related decisions. At the same time, his distance from the technological processes and the failure of interest representation related to technical changes caused a considerable loss in his credibility in the workers' eyes. The trade union leader could not represent the employees' interest efficiently in matters of crucial technological issues such as the employees' health, since most of the times he did not even understand the essence of the technical modifications and he did not have any personal experience as to how all this affects the workers.

Thus, I strongly suggest strengthening the connection with the everyday work in the trade unions' work, since the work management and technological questions concerning the workers can be understood and represented towards the management in such a manner. I do not find the idea of completely releasing the representative person from his original labour tasks a satisfactory solution. Furthermore, I suggest that the trade union enrich the traditional representative topics (compensation, working hours, number of employees) with a systematic presentation of issues like technological modifications and work organisation in the course of the negotiations. The usage of the membership fees paid by the union members and trade union representative's compensation from the company management requires supervision as well.

Strengthening the moral rules and laws that mean stable landmarks

The development of the misuse and oppressive social structures experienced in Factory X strongly correspond to the notion that for the stakeholders of the organisation there is no mutually accepted, valid and easily accessible ethical rules that would control their work and behaviour and in this respect that would make them predictable. Even the ethical minimums, that can be expected from everyone – such as respect for human dignity, appreciation of human right for health and life - is not considered valid by the managers and the workers in

the factory. Therefore, the operation of the factory and the managers' decisions are unpredictable and they cannot be planned. The managers and the workers assume the worse about each other and their relationships are characterised by mistrust. In the lack of easily accessible and trust creating ethical landmarks the right direction could be set by the statutory minimum. At the same time, in Factory X not even the law regulation means a stable base for the workers. The regular violation of law without any consequences undermined the legal security, moreover, the workers do not believe that they would be able to defend their rights in front of the Hungarian court.

I find it extremely crucial that there would be substantive consequences for the violation of law in the case of Factory X. However, the central coordinating role of laws and regulations results in a complicated and rigid operation. Therefore I find it important to start a dialog in the course of which the employees of the factory by mutually interpreting its content agree to some guiding ethical rules that go beyond the statutory regulations. This could include for example the respect for human dignity or the right for health. I find the liquidation of the extremely destructive shifting of responsibility in Factory X an opportunity for intervention that is strongly related to all this. The clarification of the responsibility relations can primarily begin with the accurate setting of the borderlines of individual responsibility. At the same time, it is also necessary to begin the development of the construction of the mutual responsibility. In the below table I summarized in groups my recommendations from a critical perspective for the stakeholders of Factory X:

Recommendations on country level	Recommendations for management	Recommendations for the labour union	Recommendations for the workers
Strengthening control of workplace health regulations and increasing sanctions	Increasing accountability of managers concerning the health and well being of employees (e.g. inclusion in performance evaluations)	Placing union leaders back into work processes and decreasing their distance from technological processes	Standing up for rights to safe and healthy life and work
Investing resources in the development of quality workplaces instead of just creating new jobs	Strict application of work, health and safety regulations	Extending traditional topics of labour representation with questions of technology, work design, health and safety, integral personal development	Increase appreciation of the value of life
Development of health awareness in families and public education	Clarifying areas of personal and collective responsibilities	Compensating union leaders from the membership fees of union members	Develop and follow a collective understanding of morality in work
Strengthening the rule of law			

Table 7.2 Recommendations from a critical perspective for stakeholders of Factory X

7.2.2. Recommendations from a postmodern perspective

With my recommendations based on the results of the dissertation's postmodern reading I would like to primarily draw attention to the opportunities that can help in the development of the series of communicative

actions between the organisational members and the dominant discourses influencing the actors. Hence, a more liveable, social world can be created in Factory X.

The improvement of the dialog between the concerned persons of Factory X by involving external experts

The hostility between the organisational members is mainly due to the fact that they ascribe different meanings to certain events and actions according to their own embedded contexts, and the responses of the concerned persons are largely defined by these. For the members of the organisation each other's interpretations are almost inaccessible and the distrust deriving from this leads to the hostility.

The practical methods evolved from the CMM theory offer several opportunities for the development of a series of communicative actions. With the help of trained facilitators the decision making processes can be slowed down and the participant's openness towards the other party's interpretations and stories can be developed. Untold or not understood stories can be revealed for the participants, which can conduce to the mutual understanding and can show alternatives that have not arisen thus far. Similarly, among the forces that are aiming at the actors and raising a feeling of responsibility, those initiatives that are aiming at the strengthening of the practical and implicative forces are pointing towards a positive direction. The results of the postmodern reading of the dissertation clearly show that these forward-looking forces may actually affect the stress procedures at the workplace beneficially, since with them the decisions aiming at the constructive and mutually beneficial solution of the problems and the development of the well-being of the concerned persons can be strengthened. An example for all this can be the qualitative and action research that examine Factory X from the targets and constructive problem-solving side and involve the concerned persons into thinking or discourse about this.

Strengthening the latent discourses found in Factory X

The previously presented 'economy discourse' and the 'specialist discourse' mutually strengthen each other, since in the 'efficiency discourse' a good professional is one of the most important and essential value while in the 'professional discourse' the economical and successful operation is one of the most significant affirmative feedback. Thus, the essence of my proposal is nothing but the strengthening of the professional and efficiency discourses and the unveiling of the inconsistencies of the "crisis discourse" and "toiler discourse". I think that by the strengthening the 'professional' and "efficiency" discourses that are currently appearing only as latent discourse it is can be possible to create a social reality that is more peaceful and more beneficial for everyone.

The stronger embeddedness of Factory X and its stakeholders into the civil society can play a crucial role in the strengthening of the latent discourses. Currently the organisation is a local reality where the diktats of the

foreign centre can prevail without any limits and the communicative actions of the organisational members create the social reality filled with suffering in a vicious cycle. Those patterns of thought and logics that are necessary for the evolving of the new discourses - that are more constructive than the previous ones - in Factory X can be strengthened by the organisational members joining to professional organisations, chambers, employer's associations, local communities or by a more active participation in the interest representations. I would like to demonstrate the connection between the discourses with the following figure:

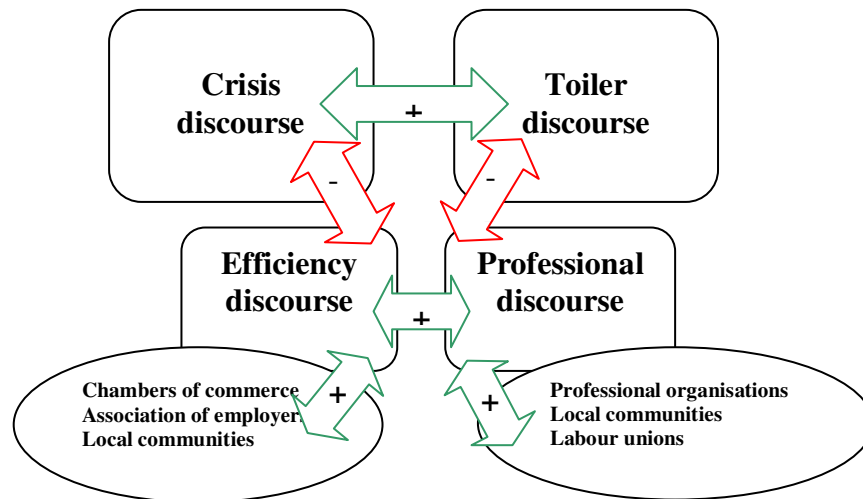


Figure 7.6 The relationship of dominant and latent discourses and the opportunities for strengthening them

The formation of non-governmental organisations and institutions that are supporting solutions at a local level

Regarding my previously presented recommendations there can be some doubt concerning the opportunities related to the civil society in Hungary, since in many cases the mentioned non-governmental organisations do not even exist in the area of a factory, or if they exist, they are not the depositaries of the 'professional discourse' or the 'efficiency discourse'. After 20 years of the transition period (also called the "system-change") it is necessary to recognise that one of the most considerable deficiencies and arrears in Hungary appear in the state of development of the civil sector.

The problems found in Factory X – may not be so conspicuous, but - can also be found in several organisations in Hungary. They cannot be solved by simple central decisions, regulations or instructions. In order to modify the social reality of the organisations similar to Factory X, the series of local communicative actions and the discourses that are strongly influencing them should be changed. Although the development of the discourses can be influenced centrally as well, yet, it will primarily depend on the concerned persons and will be

decided locally what kind of discourses they will allow to become dominant in their social worlds. For these local procedures and developments it is essential to create non-governmental organisations and institutions; so when joining them - for example in Factory X – the constructive discourses that are focusing on the well-being of the concerned persons can become dominant.

7.4 Recommended directions for further research

The initial inspiration of my research was a large sample quantitative research that focused on workers' health conditions. The results of the research and of the few, supplementary interviews conveyed with a shocking strength the tragic situation of the workers of Factory X and the need for further action and research. This was the experience that gave the starting point of my research focusing on the relationship of workplace stress and organisational justice as described earlier. Hopefully it was successful in exploring the oppressive and social structures causing workers' suffering, while also helping to understand the series of communicative actions that created the undesired social relationships.

The complexity of the case of Factory X required also from the perspective of understanding and potential measures of improvement to try to explore local reality with a multi-aspect, multiparadigm method, thus offering a more complete and a more detailed view to my readers. For further research, I consider the multiparadigm approach to be promising as the research approaches fitting to the different paradigms can be mutually fertilizing to each other. Further research possibilities are offered by the implementation of recommendations in the course of action-research. Based on the above I recommend the following studies to be carried out in the future:

- A nationwide representative, large sample quantitative research exploring the connection between cognitive appraisals of workplace stress, perceptions of organizational justice and physical-mental consequences of work. This research should be based on the results of the case of Factory X and other case studies prepared with a similar qualitative methodology.
- Further qualitative researches with case study method, aiming at a deeper understanding of the “crisis”, “efficiency”, “toiler” and “professional” discourses identified in my research.
- Design and implementation of action research projects that aim to dissolve suppressing social structures, to eliminate unhealthy work conditions and to strengthen mutually beneficial relationships in the workplaces through strengthening latent discourses and by using the methodological tools of CMM.

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