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Ambiguity, identity construction and stress amongst knowledge workers

Developing collective coping strategies through negotiations of meaning

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AMBIGUITY, IDENTITY CONSTRUCTION AND STRESS AMONGST KNOWLEDGE WORKERS: DEVELOPING COLLECTIVE COPING STRATEGIES THROUGH NEGOTIATIONS OF MEANING

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ABSTRACT
The point of departure for the project "Preventing stress in knowledge work" is the realisation that in order to work on preventing stress amongst 'knowledge workers', a new understanding of the concept of stress and knowledge work is required. This paper explores how stress and associated mechanisms for coping in knowledge work can be understood both in terms of ambiguity, continuous identity construction and as a social learning process among the employees. The aim of the project has thus been to conceptualise and organise preventative initiatives as ongoing negotiations of meaning among workers and leaders in the specific organisational contexts studied. The ambition of the present paper is to draw a preliminary picture of the empirical results and theoretical perspectives produced in the project so far, stressing that both are in the making.

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1. The Problem

'Knowledge work' is often characterized by allowing a high level of decision latitude. Due to the nature of their work, knowledge workers often have a high degree of influence on how their work is performed and structured. When it comes to intellectual, creative, open ended and complex work, 'self management' is a predominant form of management. As the knowledge workers often are left to determine their methods of work and plan their work, they, according to the job-strain model (Karasek & Theorell 1990), will come out with a high score when it comes to influence and job control. However, work-related stress has become a serious problem for many engaged in knowledge work occupations. Surveys conducted by professional societies, e.g. The Danish Society of Engineers and The Danish Association of Lawyers and Economists, show that knowledge workers claim that they are affected by heavy workloads and an increasing work pace that results in the classical symptoms of stress. This appears to be a paradox, since according to the job-strain model knowledge workers should not be at serious risk of developing stress (Buch & Andersen 2008, Sørensen et al, 2007). As Grönlund concludes, knowledge workers in particular seem to face so many and diverse demands, that they cannot be compensated for by an increase in decision latitude and job control (Grönlund, 2007). Accordingly there seems to be a need for new ways of conceptualising and preventing stress in knowledge work based on a far more detailed and complex understanding of the main categories: "Stress", "Knowledge work" and "Knowledge workers".

2. Project idea and methodological/theoretical outset

The project "Preventing stress in knowledge work" is a research and development project (RD) funded by the Danish Working Environment Research Fund. The project is designed to highlight how to develop preventive initiatives within organisations in coherence with the particular traits of knowledge work. The development project has used a type of intervention which puts emphasis on the shared understandings of work and organising and how this may influence the knowledge workers' experience of either enthusiasm or strain in their work.

The starting point of the intervention has been to map out the leaders' and employees' understandings of the features and contexts which lead to enthusiasm and strain. The aim is to better highlight the problems involving knowledge work and the organisation of knowledge work and consequently what measures it would take to solve these. It has been imperative that this mapping has been closely linked to the specificities of the participating firms and their employees. In other words, elucidating the actual work and work environment is significant both in relation to defining the problems and in relation to finding solutions to them. An important assumption of the intervention is that negotiations of stress (enthusiasm and strain) between the participants are ever present. Only by means of thoroughly considering the collective processes of negotiation can stress prevention become the object of social learning and, thereby, an integrated part of how the knowledge workers and their organisations operate on a day-to-day basis.

As mentioned above a primary goal for the research part of the project has been to look at both stress, knowledge work and knowledge workers as open and dynamic categories of meaning defined by context. In this respect the mapping of the employees and leaders understandings in the participating organisations respectively has been an important contribution. It focuses on the participant – in particularly the employees' – preconceptions and understandings and thereby serves to uncover the nuances and

ambivalences they experience in their work lives[2]. Accordingly the collective naming of straining and enthusing factors by the participants has served as our way to avoid a simple reproduction of the general discourse on stress, instead focusing on the specific work and practice. A method which can be characterised as an "inside-out" perspective as opposed to an outside-in perspective focussing primarily on developing a definitive figure by describing and categorising stress and knowledge work once and for all. The latter being quite wide spread in the prevailing research literature, which we will attend shortly.

Thus, our point of departure and the most important characteristic of our research ambitions are exploratory. Exploring and thereby questioning previous conceptions of both stress and knowledge work. Not being able at this point of the research to precisely define our theoretical corpus, however, does not mean that we completely dismiss any theoretical framing. Accordingly the following can be seen as an attempt to outline some basic assumptions central to our method and understandings.

2.1 Knowledge work as identity work and ambiguity

Knowledge work has attained a great deal of attention over the past decade, resulting in a lot of different definitions and models. Quite many theorists share the general view that above anything knowledge work is innovative and creative (Reich 2001; Florida 2002; Nonaka & Takaoshi 1995; Leonard & Swap 2005). This understanding of creative knowledge work emphasises the importance of the knowledge worker's professional excellence and educational background as the backdrop for understanding their expertise. Regardless of variations in the ways that 'rules and regulations' are interpreted among the theorists[3] it does not change how knowledge work is chiefly described by innovation and creativity. In this way, the general view does not appear to contain the notion that even knowledge work at times includes routines of more repetitive nature.

Thomas Davenport (2005) has challenged this general definition of knowledge work. Although the products of creative work are often very visible and prestigious, there are other elements to it. Some knowledge workers work with very creative assignments whilst others are allocated to tasks that are characterised by being described in detail and drawing on existing routines. And some knowledge workers' posts include all of these tasks. Davenport (2005) argues that it is impossible to describe knowledge work by the use of one perfect matrix. It is highly complex and can be identified through a variety of different angles and dimensions. However, he does call attention to two very

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[2] In this paper we focus on the employees and their understandings of enthusing and straining elements in their work. We do this in spite of the fact that in the workshops representatives from management, HR and unions participate. In so far the opinions expressed by the managers are important for the understanding in the knowledge workers' statements, these are brought forward

[3] Leonard and Swap call the attention to the fact that knowledge work demands high levels of discipline and expertise in order to develop and achieve appreciation. In other words, the much valued creativity and innovation must be maintained within the rules and regulations defined by the context, i.e. the academic society or the market. To thoroughly comprehend and recognize these rules and regulations often requires either courses of long duration or deep socialisation within an area of discipline.

important dimensions: the intensity of complexity and the level of collaboration involved.

Hence "knowledge work" is neither easily defined nor easily delimited. Despite the lack of unanimity on the issue of how widely the concepts knowledge work and knowledge workers should be interpreted, the literature does agree to include certain groups of employment and some types of tasks in the definition. The point of retaining the use of this concept is also widely agreed in the literature, if nothing else, then for heuristic reasons – simply to understand the new dynamics and developments of knowledge work (Kärreman et al 2002:72; Alvesson 2004).

Following our own research results so far, a relevant characterisation is put forward by Alvesson in his extensive research on Knowledge Intensive Firms (KIF´s) (Alvesson, 2004). Here he stresses ambiguity as a general trait. Not the least when it comes to how the work is experienced by the employees. As he points out, the versatility in the concept of knowledge work involves difficulties when it comes to drawing up clear criterion and standards, which in turn can lead to feelings of instability, arbitrariness and vulnerability amongst the employees. When the challenges of the job are successfully overcome, feelings of enthusiasm are evoked but when they are not, the result may lead to anxiety and doubt. Due to the ambiguous character of knowledge work the identity development and construction of knowledge workers is under pressure. Knowledge workers constantly have to reflect on their contribution to and their entitlement in the organisations, in society in general and not least in relation to personal expectations to career development and work life. The nature of knowledge work requires them to continuously (and often openly) define and substantiate themselves. Follwing Alvesson knowledge work can first and foremost be characterised as a field of intense and ongoing identity construction driven by ambiguity.

Applying the concept ambiguity to understand the alchemy of knowledge work means that we look on the issue of ambiguity both as a source of the problems and as a resource for continuous identity work, leaning and change.

2.2 Stress

From being a subject matter discussed primarily by researchers the term stress has increasingly become a part of every day vocabulary. When you "feel stressed" it can describe everything from dissatisfaction with long working hours and heavy work loads to severe illness. And when you want to fight, cure or prevent stress the initiatives will also vary; from establishing noise reduction and organisational changes to offering individual consultation or courses on stress. As Sørensen (2008b) describes, also the field of stress research is both growing and very diverse as to the different subject traditions having informed the field historically. Varying from physiological to psychological inspired perspectives focusing on the individual response to a focus on organisations and the working environment emphasising the sources of the straining factors.

In keeping with the theories brought forward by Länsisalmi et al. we view stress as a collectively and culturally negotiated phenomenon, placing our selves in the paradigm which Sørensen defines as organisational. Accordingly we consider stress as:

"(…) a cultural artefact (Fineman, 1995), that results when members of a particular organizational culture as a group perceive a certain event as stressful" (Länsisalmi et al, 2000 p. 2).

At the same time, this perception of stress proposes that stress not be seen as a universal response amongst individuals, but that stimulus as well as response is mediated through the organisational context in which these individuals partake. Following Länsisalmi a material point is that strategies for coping are likewise collectively shared/produced. A viewpoint which settles the account with the more hegemonic understandings of the coping-paradigm, namely that developing coping strategies is looked upon as primarily an individual activity (Sørensen, 2008b). As Länsisalmi puts it:

"Collective coping then, consists of the learned, uniform responses that members within the culture manifest when trying either to remove the stressor, to change the interpretation of the situation, or to alleviate the shared negative feelings it produces"(Länsisalmi et al, 2000 p. 2).

As opposed to the perspective brought forward by Länsisalmi, which above all is analytical and descriptive, the project at hand is of a proactive kind. It does not stop at the point of discovering how stress and correlated coping mechanisms are negotiated in the collective; it also poses the question: How can we actively help create a framework "to change the interpretation of the situation" and thereby support the (re)-negotiation of "the learned uniform responses"?

2.3 Identity work as collective negotiation of meaning

Following our ambition to understand stress in knowledge work as a collectively negotiated phenomenon, it is pivotal for us to stress that also the question of identity work and the driving ambiguity is best understood and practiced within a collective framework.

Accordingly we draw on the insights of Wenger and his work on communities of practice where the ongoing negotiation of meaning is constitutive of the community as well as the identities within it (Wenger, 1998). The concept of identity is seen as "identity of participation" and thereby closely linked to the meaning and practice of the community. Another central point is that both meaning and identity are the result of an ongoing negotiation – both implicitly and explicitly. Considering our intervention initiatives it is our concern to make the negotiations on meaning and identity as explicit as possible, so that not only convergens but also different perspectives and interests within the community will be made visible along the way.

A central process in the negotiation of meaning and identity is the continuous dual relation between reification and participation. Reification is defined as a way to temporarily fix experiences and meaning. Reification can be expressed as objects and tools but it also has a far less material side to it, being concepts, symbols or other types of representations. Reification functions as an organising principle in the community of practice, since it makes it possible to both reflect the most essential features of the community and represent a short cut in the negotiation of meaning. It helps reduce complexity. Participation has a more straightforward meaning, and is defined as taking part in the community and establishing relations with others thereby engaging in a mutual process of recognition and negotiation of meaning. The reified objects or

symbols of the community form an important part of the participation process both informing it, but also being the object of further negotiation and altering. In that way participation represents the dynamism and changeability which is always inherent in the meaning and practices of communities.

3. The intervention design

Six very different Danish organisations[4] - four private, one public and one third sector - participate in the project and in the intervention exercises. The intervention part of the project is divided into three main phases. The first phase consists of four focus group workshops in each company with a cross-section of employees and leaders. The purpose of this activity is to illustrate as detailed as possible what the employees in the organisation/company collectively sees as enthusing and straining factors in their work. The participants are then asked to write down on post-it notes what they believe are the causes of enthusiasm and strain in their work. Next, the participants are asked to place these notes according to what they think are causes of strain and enthusiasm on a map shaped as a fishbone. This design is based on a Cause-Effect diagram called 'the Fishbone' (see Sørensen 2008a)

In each company the workshops are followed by a second phase carried out in a specific department. We use a dialogue-game as a joint kick-off activity to agree on a number of focus areas and action plans for the following nine months of intervention. The game consists of a deck of cards on which we, the organisers, have put statements from the previous workshops. The entire community of leaders and employees in the department participates. In this way the portrait of enthusing and straining elements in knowledge work originating from the previously held workshops undergo yet another round of joint negotiation. In the third and last phase, the work on finding strategies to prevent stress continues independently in the department, using an agreed action plan which also includes progress meetings. The researchers participate in several of these meetings partly to monitor the progress and partly to organise knowledge exchange seminars between the participating organisations giving them an opportunity to learn from each other's experiences and perhaps identify generic tendencies. At the time of writing, only the first phase has been completed in all participating organisations. However, it is the first phase that creates the optimal opportunities to analyse the data from all six companies and from which we can compile the first empirically grounded insight into the unique nature of knowledge work.

4. The findings so far

The aim in the first part of our analysis has been to focus on similarities between the participating organisations. The organisations are very dissimilar to one another and the similarities we have found between them are not as straight forward as they may seem. They vary according to the contextual meaning in which they came into being. The knowledge workers in our study cover an area of employment from lawyers operating in the trade union and layout workers in the creative development department. This means that statements i.e. as to whether professionalism matters for their sense of enthusiasm – can on the surface appear identical, but in their respective contexts, they may be

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[4] Cowi, Grontmij | Carl Bro, The social services administration in the municipality of Copenhagen, Djøf, BT and Lego (see www.videnogstress.dk)

interpreted in very different ways. Regardless, it has been estimated that focusing on similarities in the study enhances the scope for mapping out a tentative generalised view of what the challenges and positive potentials of knowledge work are.

4.1 Enthusiasm

These are the recurrent themes voiced by the employees when they talk about what stimulates enthusiasm in their work:

- o Professional competences
- o Development prospects – professionally and personally
- o Delivering the results [achieving results]
- o Identification, pride and meaning
- o Autonomy
- o Recognition and feed-back
- o Social support from colleagues
- o Clear framework and "good leadership"

The bullet points above are not organised according to priority as we found that, to knowledge workers, distinguishing between the different themes in terms of importance in terms of leading to enthusiasm was nonsensical. In practice all themes are intricately intertwined and mutually reinforcing.

4.1.1 Professional competency, results and pride

The overall picture that emerges in the study is that knowledge workers strongly identify with their subject specialism and the possibilities for using their educational background in their jobs. To experience oneself as highly competent in one's subject area is essential for job satisfaction; just like being able to solve challenging problems and having the time to become absorbed in one's subject is it. Professional competences are not something the employees consider to be static, quite the opposite. When they continuously challenge and develop it, it is something that adds to their feelings of enthusiasm. The ambition to develop professionally cannot be separated from their personal development. In other words, professional competences are an integrated part of the knowledge workers' identity. Personal as well as professional development is primarily linked to the specific work they do and the opportunities it offers to be creative, innovative and "thinking out of the box". In the study, only very few mention further education or developing their professional competences through courses as something which brings enthusiasm into their job.

It is very important to knowledge workers to be able to deliver the results needed. To some it is expressed as "Yours truly built that bridge!" to others "I helped the member"; sometimes it is simply called "success", no matter what, the bottom line is that they find great satisfaction in doing a good (professional) job. The enthusiasm the knowledge workers' get from their work is tightly linked to their identification with the organisation they work in. Regardless of whether the product is creative toys, good negotiation results, solidly built engineer work or good journalism, "making a difference" to society, makes a difference to the employees.

4.1.2 Frameworks and conditions

The frameworks and conditions to which the knowledge workers attach most importance when it comes to enthusing elements in their work are thematised as:

1. Autonomy
2. Social support
3. Feed-back
4. Good leadership

Autonomy is about individually planning and carrying out the working day. An aspect of knowledge work which is very important to the employees. To them, autonomy represents "freedom", "latitude" and even to some degree "anarchy". In other words, work autonomy is a great source for enthusiasm for the knowledge workers.

Still, this is not to say that they generally can be characterised as 'lone rangers' preferring to work alone. Quite the opposite: themes as 'social support', 'recognition' and 'clear frameworks' for the work are voiced as essential conditions for achieving enthusiasm in work. Social support relates to collegial cohesiveness, to humour in the work place, to using each other to bounce off ideas in the day-to-day routines and ultimately, to receiving personal and professional feed-back. Here, colleagues, management and 'clients' are considered as greatly important. Salary as a theme is only mentioned in semi-ironic comments, leading us to believe either that salary is insignificant as a source for enthusiasm at work (as long as it is not too mediocre), or, that the issue of salary, does not constitute a legitimate contention within the group. The theme "good leadership" concerns the structures and frameworks for the assignments. It is also about good planning, joint ambition and guidelines and finally it is about trust. Yet, when it comes to comments regarding enthusiasm at work, leadership receives little attention compared to the other themes. When it comes to the question of strain in work, however, good leadership is often emphasised. Perhaps, seen from an employee's perspective, leadership only becomes an issue of concern when it is absent or considered poor.

4.2 Strain

The themes regarding elements in knowledge work which produce strain decidedly mirror those listed as leading to enthusiasm. Thus they address the following issues:

o Too much work
o Too diversified tasks
o Interruptions
o Not delivering results
o Ambiguous demands, vague framework – "bad leadership"
o Unpredictability/insecurity
o Rivalry between colleagues

4.2.1 Workload, complexity and lack of results

The first four themes all address questions regarding the work and the tasks in it. Basically there is too much of it and it is difficult to do the job to a satisfactory standard

within normal working hours. Employees tell how they take work home and how this hinders their attempts to obtain a healthy family-work-life balance. They find that there are too many, too varied assignments going on simultaneously, making it difficult for them to maintain a sense of perspective, *"too many balls to juggle"*, not least because the assignments in addition are highly complex and demanding. Finally, disruptions and interruptions are mentioned as straining factors as they hamper the knowledge workers' attempts to concentrate and create a space for immersion and quiet contemplation in their work.

Consequently, the knowledge workers experience a heavy workload due to the orchestration of the work (the multitude of assignments and disruptions), that makes achieving a satisfactory standard in the execution of the work difficult. Not meeting the deadlines or delivering the results leaves the employees with feelings of discontentment: "never being able to finish off things" or simply "unfulfilled expectations".

4.2.2 Leadership and feedback

Whether the difficulty of managing to meet deadlines revolves around the amount of work and/or the quality of the work is an open question. The management expresses concern that the employees are *"overly ambitious"* and *"lacking self-awareness"*. The employees, on the other hand, speak of never having sufficient time to do the job. Seen through the lens of the leaders it is a question of adjusting the levels of ambition: *"Not delivering a Rolls Royce when a Skoda will do the job"*, as one of the leaders expresses it. There is no doubt that the management has got a point; the employees are indeed very ambitious and conscientious. However, following the knowledge workers' chain of reasoning, the problem is less due to personal ambition and more to do with *"bad leadership"* in the shape of: obscure frameworks and guidelines for the work as well as a lack of alignment with expectations as to the results. In this way, the quality of the work performed is also thematised by the employees but for them, the responsibility is firmly placed with the management.

The employees call for the leaders to bring the collective workload and performances into focus, so that they can take an active part in helping the employees to prioritise their assignments; especially when completion of a task demands meticulous balancing of time, resources and quality.

Thus, the employees voice their frustration expressing that they, on the one hand, prefer to organise their work independently, which the management also expects of them, but that they, on the other hand, lack the requisite overview to actually be able to plan significantly ahead. The experience among the employees is that they find themselves in a leadership-void reinforced by the work being project-oriented. The managers appear uncomprehending since they are short of insight into the details of project solving. To the employees working on several different projects concurrently and under different 'project masters' is difficult, and since these as mentioned before lack overview, the employees are left to fend for themselves and to stretch their personal resources as far as possible, working from deadline to deadline. On a day-to-day basis this leads to insecurity and unpredictability with worrying undercurrents. Thus, several employees point out that fear of job loss and repeated cutbacks causes them great emotional strain. The unpredictability is in this way not only related to the planning of the work, it is also related to the fact that the employees very much identify with the companies they work in, and whose reputation they embody. This also includes the strategic and financial

situation of the company. If the company gets into trouble it may have an undesired effect on the individual.

Seen from a perspective of strain, even colleagues represent a problem, namely as internal rivals. Hence, the relationship between colleagues is ambiguous and is characterised by both offensive and defensive strategies, all serving the same objective, which is, to fortify and retain a position in the organisation. The ambivalence in the relations between colleagues is particularly evident because each employee's current value to the organisation always has to be seen in the context of: who else amongst the colleagues would be qualified to take over the task, should it be needed? As a consequence the knowledge worker constantly seeks to balance social and professional relations on the one side, and establishing the appropriate levels backing and support on the other; all the while avoiding weakening any personal positions of strength.

5. When enthusiasm becomes a strain – fruitful paradoxes ?

Besides being interesting per se, to find out what it is precisely the knowledge workers perceive as respectively enthusing and straining factors, what is really striking in the findings are the complexities and ambivalences in knowledge work. The picture of knowledge work, as defined by high degrees of creativity, professional competency and focus on development, which was painted by the theories on knowledge work previously presented in this paper, is the very same picture that causes strain in the work for the knowledge worker. This entails that the very elements that feed the employees' sense of enthusiasm in their work and provides them with fuel to go on, are the same that in the end tip them over the edge and become a strain.

Our findings thereby corresponds quite closely with Alvesson: the specific knowledge work we have studied is far and foremost characterised by ambiguity. As Alvesson points out, however, the dilemmas of knowledge work do not merely pose a problem for the knowledge worker, they also carry with them of resources driving continuous identity work. Whether this actually corresponds with our findings is to soon to conclude, although it serves as a fruitful hypothesis for the time being. Thus, the following reading of central dilemmas in our material will be drawn forward to tentatively show how the dilemmas may serve as potential strategies of (collective) coping and constructive identity work.

5.1 The profession as a resource?

Looking at the results from the workshops, it appears that there are various strategies the knowledge workers can choose to apply in order to address the pressures on their identities brought on by the ambiguous character of knowledge work. One strategy is to identify with the profession and/or one's academic education – being an engineer, a lawyer or a journalist. In the workshops this strategy is especially evident when the knowledge workers, not belonging to one of the dominating professions in the organisation, express a different kind of professional insecurity than that of the 'professionals'. Belonging to a profession provides an opportunity to enter a frame of reference where it is possible to understand oneself and one's work in terms of a number of set norms, codes and concepts of values. In this way the profession – understood broadly as a particular set of values or as a complex of norms, internalised for instance through long university educations – can act as a critical reference point to

the knowledge worker, making it possible to keep informed and find one's bearings in the complexity; especially when the identity is under pressure.

At the same time, however, it is clear that especially this strategy, emphasising the professions, may fall short when it encounters the aims and frameworks for the work which exist in the organisation. The specific professional values and norms the knowledge worker carries with him/her can turn out to be an absolute impediment. This dilemma is especially articulated by the leaders. On the one hand the leaders praise the unique abilities, the ambitions and the expertise the employees represent, stressing how they signify a unique and essential resource for the organisation. On the other hand, the managers equally accentuate how the very same abilities, ambitions and expertises, are also a source of strain because they make the knowledge workers more likely to refuse a compromise and less likely to deliver the results cf. the parable of the Rolls Royce versus the Skoda.

5.2 Bureaucracy as a resource?

As we have learned, the knowledge workers generally express a need for clearer frameworks, more structure and more guidelines in their work. Hence, an alternative or supplementary strategy to the professional could be to seek stability and continuity in work by adopting routines, established procedures, standards and other bureaucratic regulations. This strategy of bureaucracy which offhand is in conflict with the prevailing picture of the knowledge worker as dynamic and flexible can be found in other studies as well as in the one at hand (Kärremann et al. 2000). Due to the technological development which makes standardisation of more and more areas of work possible by integrating them in various IT-based systems, the knowledge work in the recent years has become increasingly more bureaucratic (Rolfsen 2000, Andersen & Nielsen 2004). The bureaucratisation of knowledge work can both be interpreted as a strain (conflicting with the knowledge workers' demand for autonomy and professional integrity) and as a potential relief when it comes to the pressures on identity construction. 'Selective' bureaucratisation of knowledge work, may contribute significantly to minimise the ambiguous nature of knowledge work; for instance by introducing quality systems providing guidelines for how the work should be carried out and, not least, what the quality demands for the 'products' are.

As Kärreman et al.'s study show, these quality regulations, however, can lead to conflicts and strain if they are not aligned with the knowledge workers' sets of values about what they think good quality work is. Correspondingly, we see that in several of the participating organisations, the employees 'solve' this dilemma individually, by taking cases and assignments home and thereby solving them according to their professional standards. For most of the employees this strategy results in them feeling that they have "too much work". At the same time as they find themselves in a leadership void, where they call for more frameworks and guidelines, they also vehemently criticise the leadership tools, various KPI-measurements, introduced to help benchmark and guide their work. The core of the criticism being linked to the lack of influence on how these KPIs are decided and what they are used for.

5.3 Results as a resource?

The third coping strategy we found the knowledge workers made use of, we call the result strategy. It concerns the feelings of pride and satisfaction when the work they do leads to the production of a specific product and/or result. Several employees emphasise the importance they attach to the fact that, what they do results in something concrete and tangible; something appreciated by the end-users (i.e. the children who are happy about their new toy; the union member who values the advice he is given by the lawyers; the bridge which eases the congestion problems on the roads etc.). Thus the result strategy refers to very specific and everyday criteria for success, to a large extent taken, not from the domains of both the professions and the companies, but from a wider societal context. All the same, the result strategy may also refer to criteria for success and "good results" laid down by the company and/or the profession. What characterises the strategy is that the knowledge workers, so to speak, materialise themselves in unambiguous categories. The abstract and intangible nature of knowledge work combined with the lack of clarity seems to be (at least temporarily) reduced via referring to an independent authority: the concrete artefact (i.e. the bridge) or a positive verdict from the end-users.

At the same time, if rigorous time schedules, quality management or other kinds of regulations prevent feeling satisfaction and pride creating "good results", the employees get displeasures. It hurts, when you have to deliver a result, which do not live up to your own expectations. According to Ipsen (2007) and our own workshops we see, that you often have a sort of parallel perception of quality in the companies. One could ask, what would happen if all the employees just worked by the rules and did not feel compassion about the work they were doing and felt pride of the result?

6. Collective negotiation of meaning – balancing the process of reification and participation

As Ibsen calls attention to, there is a general tendency in organisations to resort to preventive initiatives which take their starting point in the individual; i.e. offering the employees a range of coaching possibilities (Ibsen, 2005). With reference to the premise for the study introduced in the start of this paper, namely that we regard stress as a collectively produced problem, we find that there is every reason to work on developing solutions which are anchored more firmly in the organisational practices(s).

We view both the workshops and the subsequent dialogue games as proactive ways of creating a framework for collective negotiations of meaning in each organisation/department. Especially the dialogue game serves as an opportunity for the employees and leaders to locally negotiate their ways of understanding enthusiasm and strain in their everyday work. Their individual identities but not least their identity as a community of practice will be a central issue and point of departure in this process. The big question of course is whether the process of balancing the paradoxes inherent in the knowledge work will actually become a resource for further development (betterment of the working environment). Following Wenger a central issue will be how the negotiation of meaning will actually be able to balance on the one hand the reification process and its ability to organise and reduce complexity - *and* - on the other hand still make room for participation securing that initiatives and procedures become an integrated and accepted part of the employees everyday practice.

6.1 Further research and challenges

So far the tendency in the organisations points towards further reification – not least as a result of the employees feeling of a "leadership void". Considering that the employees are highly motivated by autonomy in their work, it is obvious that reification - in this context meaning bureaucratisation – has a flip side to it. Accordingly what will be in focus of the research efforts to come, will be to follow and analyse closely how the negotiations of meaning go on in the different departments: What kind of problems do they prioritise? What initiatives do they take and how do they manage to actually use the insight as to the dilemmas of knowledge work to balance reification and the openness of participation respectively?

Due to the inherent ambiguity in knowledge work, the ambition of the intervention is not, however, to bring a definite end to the paradoxes. We see the ambiguity and the paradoxes as constituting a 'burning platform' for shared as well as individual learning which, by introducing possible interim solutions, at best, can lead to temporary 'closure' of meaning. The fundamentally irreconcilability of the logics that we have come across in the study, quite simply cannot be resolved. In view of the fact that identity construction and collective negotiations never stop, the process, in principle, has to be addressed ad infinitum and not just within the framework of this project and the dialogue game. In any case, making the issues of stress and collective coping the objects of social learning in organisational contexts is not an endeavour achievable solely within one - say this- project.

References

Alvesson, Mats (2004): *Knowledge work and knowledge intensive firms*. Oxford University Press. Oxford.

Andersen, Vibeke & Flemming Nielsen (2004): Selvledelse under systemkontrol. I: Vibeke Andersen, Bruno Clematide, Steen Hoyrup Pedersen (red.): *Arbejdspladsen som læringsmiljø*. Roskilde Universitetsforlag/Learning Lab Denmark. Pp. 53-72.

Buch, Anders & Vibeke Andersen (2008): Knowledge work and stress – beyond the job-strain model. Conference paper presented at *ODAM IX, International Symposium on Human Factors in Organizational Design and Management* d. 19.-21. marts. (Download from www.videnogstress.dk)

Davenport, T. (2005): *Thinking for a living. How to get better performance and results from knowledge workers.* Boston, Harvard Business School Press.

Drucker, Peter (1996): *Landmarks of Tomorrow*: A Report on the New 'Post-Modern' World (1959) Transaction Publishers,U.S.; New Ed edition (31 May 1996)

Florida, Richard (2002): *The Rise of the Creative Class*. Creative Class Group.

Grönlund, Anne (2007): Employee control in the era of flexibility: A stres buffer or a stress amplifier? *In European Societies*, 9,3, 409-428.

Ipsen, C. (2007). *Vidensarbejderens særlige arbejdssituation og muligheder for forebyggelse af arbejdsrelateret stress i vidensarbejdet.* – Et kvalitaivt studie af arbejdsrelateret stress i vidensarbejdet. Lyngby, The Technical University of Denmark.

Karasek, R. & Theorell, T. (1990). *Healthy Work – Stress, Productivity, and the Reconstruction of Working Life*, New York, NY, Basic Books.

Kärreman, Dan, Stefan Svenningson and Mats Alvesson (2003): The Return of the Machine Bureaucracy? *Management Control in the Work Settings of Professionals*. Int. Studies of Mgt. & Org., vol. 32, no. 2, Summer 2002, pp. 70–92.

Leonard, D. & Swap, W. (2005): Deep smarts. How to cultivate and transfer enduring business wisdom. Boston, Harvard Business School Press

Länsisalmi et al (2000): Collective stress and coping in the context of organizational culture. In: *European Journal of work and organizational psylology*, 9 (4) pp. 527–559.

Nonaka, I. & Takeuchi, H. (1995): *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*, Oxford, Oxford University Press.

Reich, Robert(1992): *The Work of Nations*, Vintage Books, New York

Reich, Robert (2001):*The Future of Succes*. Vintage Books, New York

Rolfsen, Monica (2000): *Trendernes tyranni – produksjon og arbeid i et nytt århundre.* Fakbokforlaget. Bergen.

Sørensen, Ole Anders Buch, Peter Holdt Christensen og Vibeke Andersen (2007): Indflydelse i videnarbejdet – kan man få for meget af det gode? *I Tidsskrift for arbejdsliv* nr. 2, 2007. Ss. 38-54.

Sørensen, Ole (2008a): Poster to APA Conference. Washington March. (Download from www.videnogstress.dk)

Sørensen, Ole (2008b): Working paper: *Stress*. National Research Centre for the Working Environment

Wenger, Etienne (1998): *Communities of practice – Learning, Meaning and Identity*. Cambridge University Press. USA.