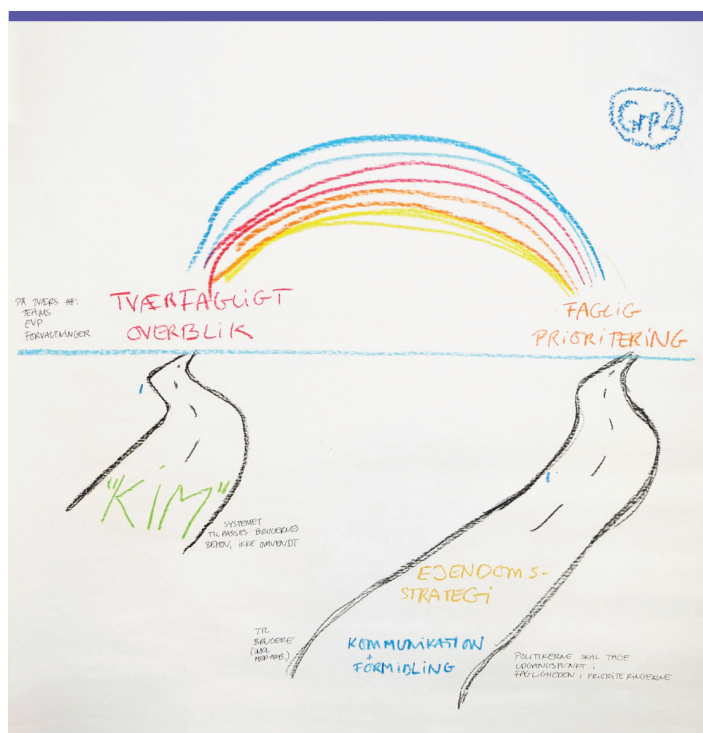


Public Facilities Management and Action Research for Sustainability



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DTU Management Engineering

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PREFACE

Current work is the main product of a PhD study with the initial working title ‘Sustainable Facilities Management’ at Centre for Facilities Management – Realdania Research, DTU Management 1. December 2008 – 30. November 2011.

Here the notion of Public Sustainable Facilities Management (FM) is analysed in the light of a change process in a Danish Municipal Department of Public Property. Three years of Action Research has given a unique insight in the reality in a Municipal Department of Public Property, and as to how a facilitated change process can lead to a more holistic and sustainable practice inspired by the principles of FM.

Current work is based on a joint process with the Department Manager and employees from Albertslund local authority Department of Public Property. Without the openness and courage to follow a process without specific goals others than ‘horizons for sustainability’, we would not have come so far and the empirical basis for this work would not have been as rich. Thank you for that!

The bottom up change process had an employee perspective, and the work provides answers to the challenges of creating a culture allowing for critical reflections in relation to the impact of FM practice on societal sustainability.

The work has been supervised by:

- Susanne Balslev Nielsen, Associate Professor at DTU Management, Technical University of Denmark (main supervisor).
- Kurt Aagaard Nielsen, Professor at Department of Environmental, Social and Spatial Change, University of Roskilde.

Hope you will enjoy the reading.

Kirsten Ramskov Galamba

DTU Management, November 30th 2011

TABLE OF CONTENTS

1. Introduction and Research Question	1
1.1 Sustainability and FM	1
1.2 Research Questions	2
1.3 Research in Sustainable Facilities Management	3
2. Modern Society and Public Steering towards Sustainability	7
2.1 The Unsustainable Modernisation	7
2.1.1 Sustainability and Organisation of Work	9
2.1.2 Globalisation and Economies of the World	11
2.2 Strategies for Sustainable Development and Sustainable FM	13
2.2.1 Ecological Modernisation	14
2.2.2 Natural Capitalism	15
2.2.3 Sustainable Public Facilities Management	18
2.3 Change in Governance and FM in the Public Sector	21
2.3.1 Professions	22
2.3.2 Bureaucracy	22
2.3.3 New Public Management	23
2.3.4 The Humanistic and the Relational Governance Paradigm	31
2.3.5 Modernisation through Public Sector Innovation	33
2.3.6 FM in the Public Sector	33
3. Methodology: An Action Research Approach.....	37
3.1 Early History of Action Research	37
3.2 Major Inspirations for Methodological Choices	39
3.2.1 Action Research based on the Relational Paradigm	39
3.2.2 Critical Action Research	43
3.2.3 Arenas for Change	45
3.3 Pluralism in Methods	46
3.4 Ontology and epistemology	47
3.4.1 Validity of Knowledge.....	49
3.4.2 Evaluation of Action Research	50
3.4.3 Dissemination.....	51
3.5 Cooperation Partner: Albertslund Local Authority	52
3.5.1 Department of Public Property	54
4. Action Research for Sustainability in a Municipal Department of Public Property...	57
4.1 A Department In Transition	57

TABLE OF CONTENTS

4.2 Negotiating Cooperation.....	59
4.3 Three Phases of Action and Research	60
4.4 Initial Process Inspired by the Relational Paradigm – 2009.....	61
4.4.1 Appreciative Inquiry 2009.....	61
4.4.2 Systemic follow up Autumn 2009	69
4.5 Critical Reflections and the Future Creation Workshop – 2010	75
4.5.1 Critique	76
4.5.2 Utopia and Realisation.....	77
4.5.3 The Next Steps.....	85
4.6 Wrapping Up: Future Sustainable Horizons and Arenas for Change.....	86
4.6.1 Preparing for the Finale	88
4.6.2 Introducing the Final Workshop.....	91
4.6.3 Governance and the Concept of Sustainability.....	91
4.6.4 Status on Change in Practice	94
4.6.5 Understanding public FM Practice in the light of Sustainability	101
4.6.6 Future Horizons for Sustainability	106
4.6.7 Feedback on Changes from Top Management	115
4.6.8 Good Bye for Now	117
5. Analysis.....	119
5.1 The Action Researcher’s Role	119
5.2 Workshop Methods and Free Arenas	122
5.3 Towards Public Sustainable Facilities Management?	126
5.4 Future Challenges	134
6. Conclusion	137
7. Annex	145
7.1 Logbook.....	145
7.2 List of Interviews.....	145
7.3 Table of Figures.....	146
8. References.....	149

1. INTRODUCTION AND RESEARCH QUESTION

In this chapter the research questions are presented and framed in a brief presentation of the content of current work, that is the main product of three years of Action Research in Albertslund local Authority' Department of Public Property. The research project has aimed at finding answers to how the future sustainable FM practice can be framed, which has enabled a suggestion as to how FM in local authorities should be understood to enable a sustainable practice on a holistic basis.

It has been an aim to make cross references across the thesis to enhance an overview and a possibility to check with writings elsewhere when reading. Only three abbreviations are used in the thesis: FM (Facilities Management), NPM (New Public Management) and AR (Action Research). To open for the field of sustainability and FM a short appetiser is given before the research questions that are followed by some initial reflection on the task of doing research within public sustainable FM.

1.1 SUSTAINABILITY AND FM

In historic times there has been an increasing pressure on planet earth. From a situation where humans could be regarded a species in equal competition with other mammals we have become *the* dominating species, regarding ecosystems not as our natural habitat but as a 'bank of resources' that can be used freely for production of material wealth. The human population grew beyond what ecosystems could sustain in their natural state, and more intensive forms of production were developed all over the world. From a situation where humans lived in balance with (other parts of) nature in local areas, most people are now living disconnected to nature, and goods are produced and distributed through a global market. The disconnectedness to nature and the market oriented approach to regulation have led to a highly unsustainable situation, where ecosystems are destroyed and some people work under inhuman conditions in the name of 'growth' – often elsewhere (Shiva 2005, Sachs 2007, XX 10, Nielsen, Elling et al. 2010).

Societal strategies for sustainable development as e.g. Ecological Modernisation (Mol 1996, Elling 2003, Holm, Petersen, L. K.: Læssøe, J. et al. 2007) and Natural Capitalism (Hawken, Lovins et al. 2010, Lovins, Lovins et al. 2007) are inscribed in the market orientation, claiming that current un-sustainable structures in the global society are signs of flaws in the capitalistic economy. Strategies built on this assumption are targeting at (eco) efficiency as a basis for more sustainable production promoted by 'green branding'. These approaches are, however, criticised to be too instrumental and not sufficient as they do not break with current unsustainable structures of society (Elling 2010; 2008).

One field in which sustainability has become a subject of interest is Facilities Management (FM). The origins of FM can be traced to an era of scientific management, with the main catalyst in the 60's being the introduction of computers in the workplace and in the 70's the energy crisis putting focus on cost associated with premises supporting core business of the organisation. The first FM centre was founded in 1979 in Michigan with a main focus on utilisation of space and refurbishment, but also with the aim of establishing and advancing FM as a new management science and professional activity. In 1980 the National Facility

Management Association (NFMA) was formed, with the aim to allow for FM's full potential to develop. The organisation later evolved into IFMA¹.

The 80's became an era of great change as governments were highly influenced by New Public Management that in the US and Great Britain led to outsourcing to specialist providers (Wiggins 2010). In the 2000's era the FM profession has established its profile in many organisations. Issues like business continuity, security threats, risk management, corporate social responsibility and financial instability have put increased pressure on FM to deliver efficiencies in the workplace (Wiggins 2010). The development of FM in Europe and the US has brought various definitions of FM. The European FM standard definition is pointing towards effectiveness, outsourcing and output performance: *'Facilities management is the integration of processes in an organization to maintain and develop the agreed services, which support and improve the effectiveness of the primary processes'*. The US definition tends to show a more holistic focus with the aim to ensure functionality and thereby effectiveness of the core business: *'Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology'* (Jensen 2008).

The term FM was introduced in Denmark in the 1990's as a general concept, covering the management of estate operations and service functions in corporations (Jensen 2008). More local authorities have started to use the term FM (Due 2007) and are accordingly gradually changing their Real Estate maintenance practice into a management framework of contracting, target setting, measuring of output and bottom line thinking.

1.2 RESEARCH QUESTIONS

The critical view on current unsustainable societal structures outlined above has inspired current work, as it aims at openings towards understanding of sustainability beyond eco efficiency. The research question is thus oriented towards knowledge about the more substantial aspects of sustainability in the specific field of public FM practice.

How is the concept of sustainability contextualized in public FM, and how does that relate to more substantial aspects of sustainability on societal level?

The concept of sustainability is outlined and discussed in chapter 2, beginning with the more critical and substantial understandings in chapter 2.1, followed by a presentation of current strategies for sustainable development in chapter 2.2. 'Substantial' here refers to the actual physical and social consequences of the current unsustainable consumption.

Public FM as understood in this work is framed by governance theory which will be unfolded and discussed in chapter 2.3. Public FM came on the agenda during the wave of New Public Management (NPM) in the 80's, but also other governance paradigms influence FM practice in the public sector.

This work is inspired by the critical thinkers claiming that current societal strategies are insufficient to create a sustainable world. Some answers as to how societal structures can be challenged has come from Action Research (AR), which has also been a major inspiration to current work that aims at knowledge beyond what can be found by studying today's practice.

¹ IFMA: International Facilities Management Association (, IFMA:International Facility Management Association - Professional Association for Facility Managers).

To get knowledge about the future is only possible in the process of creating the future, which point to an approach with the double aim of creating change and produce knowledge at the same time. This leads to the second question.

Can Action Research establish arenas for change in a Municipal Department of Public Property, leading to understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency?

The term arena is here understood as a space with a physical, a social and an aesthetic dimension. Arenas for change are thus spaces where employees can reflect on own practice in the light of sustainability, alone or together with others in social settings. In AR an arena can be facilitated with different aims, opening for more or less free dialogues. This is elaborated upon in chapter 3.2, where also the notion of free spaces is introduced as a specific arena aiming at excluding power relations that are dominating everyday work life. In practice an arena can be gestalted in many ways, which will be shown in chapter 4 and further analysed in chapter 5.4.

The discourse of efficiency is a term covering current strategies for sustainable development. They are based on a belief that we can solve the ecological crisis by implementing more efficient means of production, and by having companies adjusting their business model into a strategy of leasing out instead of selling physical goods. This is explained further in chapter 2.2.

A specification behind the second question is that the work is aiming at knowledge about practice in local authorities internal FM Departments. Hopefully the conclusions can inspire practice also in private companies' FM Departments and providers of FM services. The work is deliberately taking an employee perspective, which is inspired by the position of critical AR aiming of empowerment of those 'on the floor' through democratic processes. This has the strength that whatever changes the process might lead to, they emerge from the operational level and are implemented as part of everyday work life. Hopefully this perspective will inspire those working with change processes and sustainability in FM.

1.3 RESEARCH IN SUSTAINABLE FACILITIES MANAGEMENT

Choosing the field of FM can seem strange looking at my educational and professional background. With an educational background as biologist specialized in 'local Agenda 21 and Indicators for Sustainability' (Ramskov 1999) with more than ten years of professional working experience in this field, I was ready to leave 'production mode' behind me and get the opportunity to go into depth with the concept of sustainability and the role of local authorities. Participating as a practitioner in an action research project at the island of Møn (Nielsen, Nielsen 2007, Hansen 2007) had made it clear to me that if I should do research – it should be AR. That would bridge the experience I had from my professional career with the academic world, and thus – I hoped – contribute to a qualification of the way 'sustainable development' is operationalised in practice.

The idea emerged when I was employed as an internal consultant in Albertslund Local Authority. While writing the local authority Climate Action Plan (Albertslund Kommune 2009) an employee from the Department of Public Property presented the idea of using the concept of FM to enhance focus on reduction of Carbon Dioxide emissions. Being a very dedicated person he pursued the topic by regularly dropping information about FM on my

desk, and used every opportunity to talk about holistic management, coherence, transparency and whole life costing. His insistent manner led to both a notion in the Climate Action Plan and to an awakening of my curiosity. I found it challenging to address sustainability within a sector that historically did not have much focus on this issue. In the end it made me write an application for the PhD that enabled this work to take form. The idea was taking shape during half a year where I and some of my nearest colleagues developed a project description that I sent with my application for the PhD.

When doing research within an empirical field it is relevant to ask the initial question whether the field can be considered unique. Is FM a unique concept? Is it a discipline or a trans-disciplinary field? What characterizes FM as a research field? And are there any unique FM knowledge or methodologies? I claim that FM is not a unique field but an empirical phenomenon that could be regarded a 'child of the modernisation'. A number of service providers are united with the term FM, going for market shares by referring to 'support of core function' with efficiency and customer in the centre as core values. The division of labour (core function and support functions) is a significant trend in society, which is unfolded and discussed in a governance perspective in chapter 2.3.

FM must due to the variety of professions inscribed in the concept be diagnosed as trans-disciplinary (Bröchner 2011), which makes it difficult to talk about a FM profession as such. As a research field it means that FM is researched from very different theoretical platforms, as e.g. service management, change management, construction management and architectural sciences. When inscribing in the research of FM it is therefore difficult to talk about a unique FM knowledge or unique FM research methodologies, also because FM as an academic discipline is rather new. The first European FM institute was established at the University of Glasgow in 1992. In Denmark the research centre for Facilities Management at DTU was established with financial support from Realdania in 2008 (Jensen 2008).

As a research and development theme FM has evolved from a focus on indoor climate, briefings and building operation in the 80's to environment, benchmarking and computer aided FM systems in the 90's (Jensen 2011). In Finland the first wave of FM research was seen in the 90's, focusing on FM services, service development and the production and management of services, while the second wave focused more on the connection between FM and the client organisation (Nenonen 2011). In Denmark there was a focus on whole life costing, workspace planning and Building Information Modelling (BIM) in the 2000's (Jensen 2011).

At the Centre for Facilities Management in Denmark current research is focused on five strategic areas: Sustainability, Innovation and Partnership, Knowledge Implementation, Market & Added Value and Working Environments (Jensen 2011). In Sweden seven FM research themes have been identified by Bröchner (2011): FM costs and financial issues, Information technology and FM innovations, Space Management and Briefing, FM Service Qualities and Satisfaction, FM Contract Strategies, Company Strategies and finally FM and Environmental Sustainability. As future trends in FM research, Space Management and Briefing is pointed at as the one major trend, together with Contract Strategies. FM research in Norway started in the early 1990s at NTNU and has a 5 years research program in public real estate and FM. Also issues like knowledge workplaces, building adaptability and usability are important research areas here (Hansen 2011). In Finland current research is explicitly based on system theory and has an interdisciplinary approach to the field, which

challenges the way research is conducted, as knowledge sharing and intensive collaboration between industry and research as well as between disciplines must occur (Nenonen 2011). To the future FM research Bröchner points to the fact that the major channel for dissemination of current research to practice is through education, and calls for other means of research: *‘that could and should go into initiatives that promise an immediate impact on practice, and where high academic standards would have to make a significant difference from what is offered from good consultants or is developed in-house among major suppliers of integrated FM Services.’* (Bröchner 2011).

Studies based on AR provide an answer to Bröchner’s request with its change perspective and the solid empirical basis for FM knowledge. AR was thus used as an approach to enhance performance through a cooperative process between researchers and practitioners in a project where a Norwegian bank had to move to another facility. The scope here was to bring together the development project (moving) with scientific tests and evaluations made during the move, and thus enhance cooperation and address environmental aspects of sustainability (Blakstad 2011). Jones developed on the basis of AR with four stakeholder organisations a model for sustainable asset management: *‘A new built asset management framework that integrates the current sustainability agenda (social, environmental and physical attributes) and selective ‘futures’ scenarios (climate change) into the built asset management decision-making process.’* The study focused on efficiency of the built asset management, which resulted in a generic decision-making hierarchy for assessing sustainability and prioritising maintenance actions (Jones 2011). Current work also aim at an immediate change on practice as requested by Bröchner (2011).

The way into the theoretical aspects of the field of sustainable FM has, however, been quite a challenge in current work. Reading the FM literature gave me the impression of a research field more into producing conceptual frameworks than providing empirical based answers as to how people work with FM. This is supported by the writing of Price et.al. (2009) who claims, that FM has too many models, too little theory and too little empirical evidence of specific business contributions (Price, Ellison et al. 2009).

I could thus not really find support to my work in the literature on sustainable FM that is mainly interested in finding ways to make buildings or systems more sustainable in terms of efficiency. I must, however, position myself in the field, and the first border to draw will be between FM in the private and the public sector. As sustainability becomes an issue in private companies only when it pays on the bottom line I have found it relevant to focus on the public sector that has an obligation to act in a sustainable way and other values than the economic bottom line (though increasingly important) are on stake (Boyd 2006).

Having found it difficult to inscribe into the known academic discussions on sustainable FM I must make clear what I bring to the field. Inspired by the tradition of critical utopian AR that has an emancipatoric knowledge constitutive interest, I am delivering a critical analysis of the way ‘sustainability’ is understood and operationalised in FM and in Danish local authorities in particular, combined with an analysis of the actual possibilities for employees to work with sustainability in an everyday work life setting. The academic discussion on FM as a profession turned out to be relevant related to the steering technologies used in the public sector (New Public Management), and indirectly related to the notion of sustainable work life (chapter 2.3).

2. MODERN SOCIETY AND PUBLIC STEERING TOWARDS SUSTAINABILITY

This chapter is an attempt to outline a critical focus on current societal structures, to make clear that society is NOT sustainable. The diagnosis of society is coloured by researchers who have taken a critical position, claiming that current strategies for sustainable development are not sufficient to overcome the ecological and social crisis. Sustainability is often referred to as a balance between social, ecological and economic aspects of development. In practice this can be very abstract to operationalise, and the economical aspects easily become the overall frame for social and ecological concerns.

First part of this chapter (2.1) provides a substantial view on sustainability related to the process of modernisation. Two aspects of sustainability are presented:

- 1) A historic review on the organisation of work in the process of modernisation, related to the concept of social sustainability (chapter 2.1.1).
- 2) A critical diagnosis of current societal structures that has led to an ecological and social crisis of societies. Social erosion of local communities occurs as a result of destroyed nature in living areas and enclosure of land for production to the global market (chapter 2.1.2).

In chapter 2.2 societal responses and current strategies for a sustainable development are presented with references to literature on sustainable FM. The account on strategies for sustainable development is based on the theoretical concept of Ecological Modernisation and Natural Capitalism, and analysed with references to the critical diagnosis of society provided in chapter 2.1. Together, chapter 2.1 and 2.2 constitute the theoretical background to understand and answer the first research question: *How is the concept of sustainability contextualized in public FM, and how does that relate to more substantial aspects of sustainability on societal level?*

As public FM is embedded in an organisational setting, an account on current Governance Paradigms and their steering technologies are given in chapter 2.3, with references to relevant literature on FM. This is important to be able to answer the second research question: *Can Action Research establish arenas for change in a Municipal Department of Public Property, leading to understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency?* Understanding how current governance trend influence on the possibility to actually create openings for critical and reflective thinking, is important to relate to more general aspects of sustainable FM in local authorities.

A general definition of sustainability is not provided as one aim is to show that many interpretations of the concept are available as are answers as to what strategy is suited to address the challenges.

2.1 THE UNSUSTAINABLE MODERNISATION

Modern society as we know it today has developed during the ‘modernity process’ that had its early beginning in the late 17th century. Modernity is a term for the historic epoch in which science has developed and given the understanding of and means of control of nature by technological development (Elling 2003). The materialistic basis for life has increased

drastically in parts of the world due to improved production techniques, division of labour and the globalisation, which has given humanity better lives and security in parts of the world. It has, however, also had its price which is the focus in this chapter: The ecological crisis and a socially unsustainable practice connected to production.

The historical process of modernization has led to a change in (human) rationality based on processes of social differentiation: *'Modernisation is the process in which society is transformed from being reproduced by cultural traditions, norms and habits to a society characterised by reflectivity and a societal divide into autonomous parts, fractions and sectors'* (Elling 2010).

Early modernisation was seen as a process of disembedding, whereby social relations were lifted out of their local and traditional structures and contexts, and rearranged across world-wide time-space distances through the modern capitalistic economy of the 19th century. The disembedding process has also been interpreted as the differentiation of society into an economic sphere, a political sphere and the life world. Economic process grew increasingly independent from traditional structures and began to follow a specific economic rationality, putting local commons² structuring pre-capitalistic society under pressure due to the economic rationality replacing the traditional structures which supported these commons (Mol 1996).

The rationalities dominating society have resulted in a difference between actions oriented towards success in terms of efficiency (instrumental rationality) and actions oriented towards reaching mutual understanding (communicative action) (Elling 2010; 2008). Communicative action takes place in the life world while the instrumental rationality dominates the 'system world': The economic aspects and the political-administrative system that functions through money and power with efficiency, effectiveness and target orientation as central aspects. Actions thus get legitimacy by being target oriented and efficient (Hvid 2006).

According to Elling (2010) sustainability cannot be understood within the instrumental rationality alone, letting limits of nature define actions: *'Modern society must define its own limits by going beyond system limitations and strive for balancing needs and objectives in terms of society as a whole'* (Elling 2010). In practice this means that systemic thinking must be balanced with communicative action drawing on rationalities from the life world. Elling claims that the concept of sustainability as presented by the Brundtland commission (World Commission on Environment and Development. 1987) and with Agenda 21 (*Agenda 21 : Programme of Action for Sustainable Development : Rio Declaration on Environment and Development : Statement of Forest Principles : the Final Text of Agreements Negotiated by Governments at the United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil. 1993*) is systemic, because it aims at ensuring the conditions for a continued existence of the modern economic system. In the economic system the negative impacts of societal contradictions are abolished or compensated within present populations and between generations. *'The concept in this form is goal-oriented and furthermore does not include reflections on how these contradictions can be understood and abolished by employing another economic model'* (Elling 2010).

The problem is, however, that the system world is gradually expanding on behalf of the life world. Everyday life is influenced by a higher degree of instrumentality and a decreasing allocation of time and space for free communication. Free spaces allowing for communicative

² E.g. shared land for hunting, cultural meeting places or common water supplies.

action are available to a different extent in work life, depending on both the character of work and the specific culture in the organisation. The lack of balance between rationalities may have negative consequences as an absence of a strong life world to correct the system world can lead to highly irrational systems (Hvid 2006). Modernity is characterized by division of labour and flexibility in production, which is the scope of the next section.

2.1.1 Sustainability and Organisation of Work

The unsustainable situation of current global society is closely connected to the way work has been organised in the modern history. Going from local production to highly efficient production on factories has made it possible to produce more and thus more natural resources are used. Also the aspect of social sustainability is important here, as employees involved in production are influenced by the organisation on work. As formulated by Hvid (Hvid 2006): A major task is to create a free and responsible work organisation oriented towards sustainability.

Already at the end of the 18th century Adam Smith conducted work life studies showing how work could be specialised in a rational way, in which functions could be separated leading to increased productivity. At the beginning of the 20th century the American engineer Frederick Taylor refined the management concept of specialisation and fragmentation in work processes in his studies on what was called scientific management (and later referred to as ‘Taylorism’) (Hvid 2006). The factory of Ford Motor Company became the beginning of a more extreme division of labour with the introduction of the conveyor belt, where technology came to dictate the monotonous rhythm of work. Henry Ford transformed the car industry from an industry characterised by highly skilled craftsmanship based on employees with a high degree of autonomy, to a completely fragmented production process based on less skilled workers handling a very limited part of the production. The work at the Ford factories gave name to the epoch of industrial fragmentation – Fordism (Sennett 2006; 1999). The (tayloristic) work processes did, however, not only make the production more efficient, it also had some negative consequences for employees’ work that became highly monotonous and decoupled from the entity (Hvid 2006). When practiced, scientific management is an example of not vigilant rhythms in work life as they have become mechanic to make the single rhythm efficient and controllable in detail from top management. This is a degradation of work in the sense that employees have no influence on work, which is criticised to influence negatively on health, create de-empowered employees and establish a situation in which the employees take no responsibility. Aspects that all relates to the notion of social sustainability (Hvid 2006).

The end of the 20th century brought the post-fordistic production model emphasising flexibility, customer orientation, development of human resources, individualisation and service. Major parts of 20th century management thinking has focused on work as the place where we as humans could actualise ourselves through our creating activities ³. One way of achieving flexibility is seen in the project oriented, individualised work steered by values. Here development, learning and change are promoted at the expense of daily rhythm. Without rhythms there are no limits to work, which influences the relation to family life and free time. Knowledge work thus goes in the direction of the rhythm-less work. According to Hvid (Hvid

³ Human Resource Management is based on this with the notions of responsibility, self leadership, empowerment and self realisation. Ontologically Human Resource Management sees the company/organisation as the only possible and interesting frame for self actualisation that will accordingly happen for the sake of the individual as employee (not as citizen) and for the company (Hvid, 2006).

2006) a relationship between loss of rhythms and loss of free arenas as coffee breaks, lunch and informal communication exist. When the institutionalised rhythms disappear, only the individual habits remain, which makes it more difficult to defend coffee breaks to the surroundings than the former institutionalised coffee break. The challenge here is to create habits and common routines that are 'owned' by the employees while alien rhythms must be washed out. Without the routines that bring employees together in free arenas exchange of knowledge and views is restricted, which makes the employees less innovative in their daily practice. Rhythms in work life are well functioning if they are vigilant. They should frame daily practice so one should not think so much about what to do, with the important notion that the individual must have the freedom to adjust rhythms when appropriate (Hvid 2006).

The flexible organisation is conceptualised in an FM context as 'the Elastic Organisation' by Becker (1990). According to Becker the elastic organisation is different from other organisation with its '*commitment to succeeding in a competitive world by using all its resources to their fullest potential.*' This means that facilities must be created in a way that enhance individual and organisational effectiveness and at the same time give pleasure and promote human dignity (Becker 1990). The focus on support of core business does, however, leave blind spots on the facilities manager's work life. With references to the notion of rhythms in work life (Hvid 2006) it is important to note that also the facilities manager's work looses rhythms when supporting the rhythmless organisation, with the implications for work life as indicated above. Nielsen (Nielsen, Nielsen et al. 2007) connect the notion of flexibility with theories about risk society as described by Beck (Beck 1996), who placed the concept of risk centrally in his analysis of society. Organisations adapt flexibility strategies to handle externally generated social risks or uncertainties resulting from the ecological crisis. Thereby social problems connected to work life emerging from the demand for flexibility becomes coupled to the discourse of sustainability.

With references to Sennet (Sennett 2006; 1999) Nielsen et al. furthermore point to the fact that the constant restructuring of production and work lead to ruptures, that makes work more inefficient due to insecurity and lack of routine (Nielsen, Nielsen et al. 2007). Sennet draws the concept of power into his analysis of restructuring, by pointing to the asymmetry in the power relations between contractors and subcontractors. Responsibility and pressure to keep time schedules and budgets is thus carried by those making decisions, and the problems around flexibility become individualised. Each employee must find the capacity to present the flexibility demanded by the new forms of organisation (Sennett 2006; 1999). According to Nielsen et.al. (2007) the volatility following demands for flexibility can prevent long term planning, leading to an experienced lack of clearly defined references and professional capabilities. Lack of stable and permanent relations in work life furthermore lead to a risk of more fundamentally affecting employees' hopes and dreams for professional pride and knowledge. By acknowledging that the demand for flexibility is a condition for employees in modern society, it must also be enrolled in (action-) research for sustainable development. Knowledge must be gained on the opportunities and conditions for employees to internalise and reproduce questions about societal cohesion in strategies for coping with the flexible work life.

The notion of 'sustainable flexibility' becomes important as the consequences of ever changing working conditions influence also a broader societal scale, as employees are also citizens and family members with responsibilities others than those at work. Coping strategies must be developed that move responsibility for risk management from the individual

employee to an acknowledged part of the social identity of late modern work life (Nielsen, Nielsen et al. 2007).

2.1.2 Globalisation and Economies of the World

President of the Wuppertal Institute Peter Henricke in the pre-face of the book ‘Fair Future’ states that: ‘...more justice in the world cannot be achieved by globalizing the Western model of prosperity: that costs too much money and too many resources, and it would completely ruin the biosphere. So, development stands at a crossroad: Either most of the world remains excluded from prosperity, or the prosperity model is constructed in such a way that everyone can participate in it without making the planet inhospitable. It is a choice between global apartheid and global democracy.’ (Sachs 2007).

Fragmentation of work processes not only led to unsustainable working conditions in production, but also to a divide between human and nature. Nature thus became a resource for production primarily. Globalisation made production possible in locations different from the source of raw materials, and has thus turned societies into an interconnected world through the market driven by the aim for profits and increased power. Roughly half of the world trade is done within the triad of the EU, North America and Japan. A significant difference in the pattern of trade can be seen when looking at respectively raw materials and processed goods. There is only little trade in raw material within the triad, and the regions of the triad draw materials from their so called ‘hinterlands’ that are mainly regions in developing countries. High-value goods are exchanged between rich countries with very little exchange between poor countries. Economically the trade of refined goods between rich countries accounts for approximately 75% of the total world trade, based mainly on raw materials originating in developing countries. In the case of EU 75% of the total import (tonnes) of raw material origin mainly from developing countries, corresponding to only 20% of the economic value imported (Sachs 2007).

In-equality as a result of global trade is, however, not only an issue at global level. In some of the rising economies such as China and India the growth is concentrated in the central urban areas and more or less extensive industrial areas. It is thus only certain places or regions that compete globally under the trans-national division of labour. Accordingly growth regions must be regarded as junctions of global production networks – not as centres of growth in the national economy. According to Sachs the globalisation of economic activity thus leads to even greater inequality and differentiation, as some regions have growth while others are demolished due to the intensive resource utilisation of regional ‘hinterlands’ (Sachs 2007).

Vandana Shiva (2005), an Indian critical thinker, has illustrated the un-sustainable situation with the language of economy from a third world perspective (Figure 1). In her figure a stable situation for society would be based on a solid and resilient nature able to re-generate and thus support human sustenance. The market builds on both natures’ economy and sustenance economy⁴, as surplus production can be traded on the market. The notion of *re*-source here means a source that is renewed all the time, but only because people who sustain life on the basis of nature balance their use with protection (Shiva 2005).

⁴ Sustenance economy: Where life is nourished, maintained and renewed (e.g. giving birth).



Figure 1: Sustainability must be based on a stable constellation of the three economies: The nature's economy, sustenance economy and market economy. At present the situation is unstable as nature has been over-exploited and the sustenance- and market economies build on an insufficient basis (Shiva, 2005).

Economy of present society is, however, not a stable constellation as nature has been exploited beyond the limits of immediate regeneration, leaving people with less than needed to sustain life. Shiva emphasises the notion of 'enclosures' to explain what has happened seen from a third world perspective: Multinational companies have bought up land across the world and enclosed it for production. Due to enclosures local populations have been deprived of common land used for sustaining life, in exchange for the possibility of perhaps getting a job in the production. So earlier time's common good is now owned by a company: Cultural meeting places, hunting grounds, land for small scale farming or even water supplies (Shiva 2005).

The enclosure of land for production has become possible due to the mechanisms of a global market and an acceptance of a certain degree of nature degradation. The notion of 'strong' and 'weak' sustainability is connected to this, as a distinction between limits to resource availability and limits to the strain of eco-systems has become the basis for a principal discussion of the understanding of sustainability. Those defending 'strong sustainability' maintain that there are limits to replacement of nature by capital. They assign an intrinsic value to nature beyond a possible market value and thus lean on the principle of caution. Proponents for strong sustainability are divided in those who claim that there are limits to growth and those believing in sustainability as part of a (economic) 'growth community'. A simultaneous growth and sustainable development is believed to be possible in two ways: By a shift from a growth strategy based on material production to an immaterial production (experience industry) or by material production in more smart and resource efficient ways. Those who inscribe in the 'weak sustainability'-understanding argue that as long as other forms of capital are accumulated (technical, human or financial) there are no limits to the use of nature, which implies that value of nature and social capital is evaluated on market conditions (Hvid 2006).

Pushing the limits of ecosystems does, however, lead to gradual changes in nature quality that are often followed by socially uneven effects. Also the emission connected to production and consumption is a source of inequality, as e.g. pollution or changes in the atmosphere becomes a global issue. An example is the green house effect: Nearly half of worldwide CO₂ emissions stems from the industrial countries while the effects of global warming are most severe in the developing countries (Sachs 2007).

Societal response on the ecological crisis has been initiated leading to different strategies for a sustainable development of society which will be in focus in the next section.

2.2 STRATEGIES FOR SUSTAINABLE DEVELOPMENT AND SUSTAINABLE FM

That the world is not sustainable was put on the agenda in first in 1962 with the publication 'Silent Spring' (Carson 1987) and then in the early 70's by the Club of Rome that offered a critique of the capitalistic production of wealth on basis of natural ecosystems. The publication 'Limits to Growth' from 1972 was an acknowledgement of the ecological crisis which became evident with the development of systems theory⁵⁵ within nature science, showing that there are limits to what ecosystems can tolerate (Hawken, Lovins et al. 2001).

The environmental focus following 'Limits to Growth' gradually replaced a silent accept among citizens to the environmental damage that was a result of modernisation. The first environmental laws in western society (late 70's) were passed in a time where the environment was seen as sink for pollution, and accordingly had the focus of 'cleaning up' – if it was not too expensive compared to the gain from production. Ever since, environmental issues have gained momentum in the societal debate. According to Elling we have seen three major changes: 1) A change in what are regarded environmental issues; 2) A change in character and extend of environmental questions and 3) A change in what initiates environmental policy (Elling 2003).

Ontologically there is a change in what are regarded environmental issues. At the beginning environmental problems were understood as easily recognisable pollution of nature (e.g. ill smelling lakes and dead fish). This changed to a conception of 'environment' as more diffuse changes in landscape and disturbances of cultural heritage. Substantially, environmental problems have changed in character and range. Problems that could initially be recognised immediately are now hidden and can only be seen in a longer perspective: From poisoning to disturbances of genetic material of species, from air pollution to climate change. The substantial question shows that environmental pressure is accumulated in ecosystems with negative effects that might not be visible to the eye.

A pressure from the environmental movement initiated the first environmental policies. There was a general understanding in society that environmental political efforts were connected to a raise in cost that should be carried by the government as well as the business regulated by the laws. The laws were formed after the Polluter Pays Principle (PPP), complemented by support from government to implementation of environmental technologies. This led private business as well as public institutions to focus on development of cleaner technology and PPP came – as put by Elling – gradually to cover 'Pollution Prevention Pays'. Today in the western world environmental efforts have become institutionalised in all aspects: Public as well as private, internationally as well as locally, from the concrete to the more strategic and farsighted. This does, however, not mean that environmental problems have become less severe. Environmental problems have grown as has complexity of society (Elling 2003).

Sustainability is often referred to as 'sustainable development' which was introduced with the report "Our Common Future" from the Brundtland commission in 1987 (World Commission on Environment and Development. 1987). The concept of sustainability became broadened from a narrow focus on environmental issues also to embrace social and economic aspects of society. The Brundtland definition builds on principles of welfare and democracy, and extent the equality question to a global level also embracing future generations (Hvid 2006). The linking of sustainability to 'development' did, however, give the term quite an ambivalent

⁵⁵ For further definition of systems theory see chapter 2.2.2

meaning, aiming at both sustainability and growth (in opposition to ‘limits to growth’) and can be seen as a de-radicalisation of the term sustainability. The idea of Sustainable Development is a compromise suggesting a potential joint interest between ecological, social and economic interest and between corresponding social agents. It is thus based on the assumption that a dialogue between stakeholders can lead to a sustainable development (Nielsen, Nielsen 2006).

The Brundtland report was followed up by the UN conference on Environment and Development (1992 in Rio) where 178 countries signed the global action plan *Agenda 21*. Agenda 21 pointed for the first time at the important role of local authorities in the work for sustainability (Holm 2007). The notion of democracy is seen in the Agenda 21 agreement chapter 28 about Local Agenda 21 emphasizing that citizens shall participate in the creation of a sustainable development (United Nations 1999).

Acknowledging the ecological crisis and the social consequences of modern production, different strategies aiming at sustainable development have emerged. This will be the focus in the following sections.

2.2.1 Ecological Modernisation

Modernisation’s severe negative consequences of environmental as well as social character led sociologists to reflect on how to understand and handle the new challenges of society. This was articulated in the 1980’s by Ulrich Beck who placed the concept of risk central in his analysis of society (Beck 1996), whereby the ecological crisis became ranked among the most pressing social problems of society. The notion of reflexive modernity came to characterize modern society, referring to the constant examining and reshaping of social practices in the light of new incoming information (Mol 1996). This also influenced theory building within social sciences.

Ecological modernisation theory takes it to the question of ‘modernising modernity’. This means that the institutionalised destruction of nature was understood as ‘structural design fault of modernity’ that should be ‘repaired’ (Mol 1996). It builds on the assumption that the modern society has the capacity to establish self correction, standards and technological solutions to the societal environmental problems without major corrections in consumption patterns and production (Holm 2007). The concept of Ecological Modernisation is complex and shows different aspects of development (Petersen, Holm et al. 2007):

- Rejection of the previously dominant idea that environmental issues should be opposed to and hinder the growth in prosperity for private companies. On the contrary environmental concerns should be a source for earnings and savings on operation, just as much as environmental concerns can be driving force for modernisation of production and technology and a general renewal of society.
- De-radicalisation of the environmental thinking that aims for a fundamental break with industrialism, capitalism and consumerism as fundamental for a solution of the ecological crises. Ecological Modernisation is not about radical change or transition, but a gradual change through integration of environmental issues in market, everyday life, regulation and communication.
- In opposition to the aura of “back to the traditional way of living” as a road for sustainability.

Ecological Modernization is inscribed in the market in a process where environmental organizations, public institutions and business are participating in mutual reflexive, clarifying and developing processes. In a business setting Corporate Social Responsibility (CSR) can be seen as the most advanced form for Ecological Modernization, where reflective relations between companies and their relations with society (customers, environmental organisations, users organisations, authorities etc.) becomes central for strategy building in the organisation (Hvid 2006).

In public authorities Agenda 21' chapter 28 is framing the organisation of an Ecological Modernisation in practice based on two types of action: Involvement of citizens in (mainly) environmental matters and a 'sweep your own doorstep'-strategy that aimed at reducing use of resources in the public sector by management systems as e.g. green accounts, environmental management systems, green purchasing. This has also been the case in FM (Shah 2007), but not much research on the specific use of the tools has been conducted in a FM setting. As a part of the work on this PhD, a critical analysis on the environmental management system (EMS) in a Danish local authority Department of Public Property showed, that though the EMS may have potentials as a branding tool it does not support the more substantial aspects of a sustainable practice (Galamba 2011).

2.2.2 Natural Capitalism

Natural Capitalism is an approach for a sustainable development with the explicit double aim of protecting the biosphere and improving profits and competitiveness for business. The name is given to signal the possible future if the '*largest category of capital – the 'natural capital' of ecosystem services – were properly valued*' (Lovins, Lovins et al. 2007).

Natural Capitalism builds on the concept of environmental economic analysis that is based on an understanding of the market as incomplete and lacking mechanisms to include other economies than the capitalistic. The claim is that environmental problems emerge as a result of an underestimation of the price of nature when economic decisions are taken. Pollutions are regarded a 'free' externality. Environmental economics aim at correcting this flaw in the market by 'internalising' the external environmental effects, which is done by a process in which nature is given a price on the capitalistic market with the possibility of a nature regulation through the principle of 'willingness to pay' (Nielsen and Nielsen, 2006). In the late 90's the price for the global stock of natural resources was estimated to annually \$ 33 billion (Blok 2007).

According to Hawken et al. (2010) the problems connected to the environmental and social crises of society, reflect the absence of natural and human capital from the balance sheet of economic globalisation. Natural Capitalism is based on a whole systems thinking, that was inspired by the work of Ludwig von Bertalanffy who formulated General System Theory (Dubrovsky 2004). Taken into the field of organisational analysis, the organisation is seen as complex systems made up of interrelated parts that can be studied as an emergent whole. The organisation is open to its environment and management action is taken to keep the organisation in a steady state through management-functions that control activities and information within the organisation (Flood 2006) Figure 2.

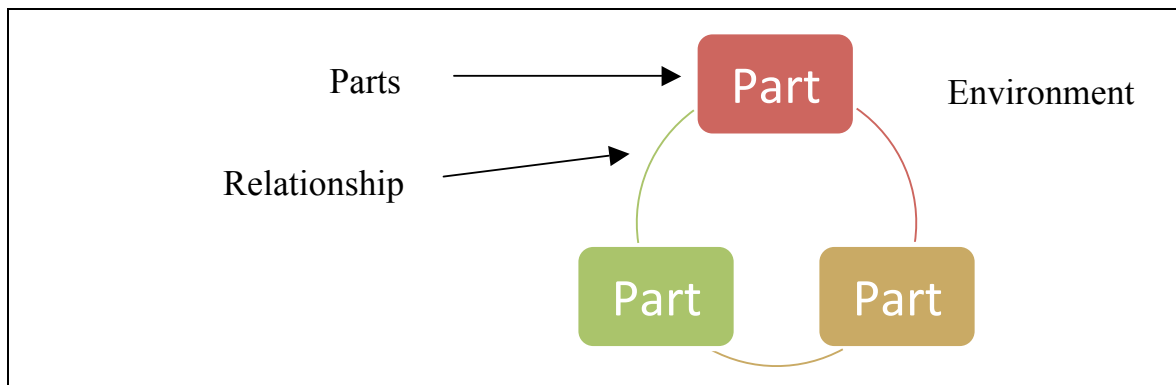


Figure 2: Ontological picture of a system in General System Theory (from Dubrovsky, 2004). System: The whole is more than the sum of the parts and their interrelationships.

The principle of Natural Capitalism is, that instead of focusing at parts of the system, phenomena are understood to be an emergent property of an interrelated whole.⁶ That means that when planning and executing production, the production must be seen as interconnected with extraction of raw materials from nature, transportation and refining of raw materials and in the other end the phases of use and disposal. The emergence of systems thinking can be explained with the increased complexity of society, and the fact that societal actions have become interdependent due to the extended division of labour. It has become increasingly important to analyse and understand the boundaries of (production) systems, and to evaluate which tasks to be undertaken by different (sub-) systems. When decision making is divided among many actors in complex network, it becomes important to continuously work for transparency in relations (Fuglesang 2009; 2004). To the processes of production Natural Capitalism emphasises that no waste must occur. Processes must be optimised in a way that allows for full use of raw materials seen in a whole systems perspective, also including the disposal of products (Hawken, Lovins et al. 2010).

There is a great focus in the literature on Natural Capitalism on buildings and building blocks, as a substantial amount of raw materials are used in the building process. In the phase of use buildings are heated, cooled and lighted, which becomes a source of CO₂ emissions, and when refurbishing, renovating or demolishing the building, waste is produced (Hawken, Lovins et al. 2010). Green buildings and eco-renovation has also been subject to research within FM (Sobotka, Wyatt 1998, Durmus-Pedini, Ashuri 2010, Eco-friendly buildings on the rise. 2006) as has the concept of sustainable buildings (Booty 2004, *Survey Reveals more Facility Professionals taking Strategic Approach to Green Practices*. 2008, Bardwell 2007, Lai, Yik 2006) and sustainable construction (Häkkinen, Nuutinen 2007). As a response to the challenges connected to climate change there has been a focus on energy performance of buildings (Sawyer, Wilde et al. 2008, Cheshire 2005) and FM responses in terms of preparing for disasters connected to climate changes (Warren 2010). As to the whole systems thinking also sustainable supply chain management (Wyatt, Sobotka et al.) and green procurement has been researched upon, as has life cycle assessment and the environmental impact of buildings (Khasreen, Banfill et al. 2009, Sterner 2002).

The authors of the conceptualisation of Natural Capitalism claim that four major steps must be taken within business to get a sustainable development: 1) Dramatically increase the

⁶ An emergent property of a whole is said to arise where a phenomenon cannot be fully comprehended in terms only of properties of constituent parts (Flood 2006).

productivity of natural resources. 2) Shift to biologically inspired production models. 3) Move to a solutions-based business model. 4) Reinvest in natural capital.

Increase the Productivity of Natural Resources

An increase in productivity is the very first step towards Natural Capitalism, which can principally be achieved by replacement of old technology and by adopting a whole system's approach to the production. Focusing not only on efficiency of parts of the system but also on the overall production efficiency as with lean manufacturing, resource consumption and waste can be reduced. In Natural Capitalism implementing a whole systems design must be implemented parallel with an introduction of alternative, environmentally friendly technologies (Lovins, Lovins et al. 2007). A whole systems approach allows for an informed choice of technology, which meant that 'old' technologies can lead to increase in productivity when imbedded in a new context and thus less stress on the environment.

Redesigning Production According to Biological Models

As the second step towards Natural Capitalism companies are to use closed-loop manufacturing to create new products and processes that can prevent waste. That would also imply a mimicking of biologically developed materials as e.g. spider web and eggshells that have some unique features and are 100 % biodegradable. This, together with the more efficient production processes, could lead to a cutting of companies' long term material requirements by more than 90% in most sectors (Hawken, Lovins et al. 2010).

Change the Business Model

Today most companies produce or sell products for people to own. The third step towards Natural Capitalism is to change this pattern into a business model where *services* are provided – not physical products. Leasing of floor covering or lighting could be examples, where organisations are provided with nice floors and appropriate light without owning the carpets and lamps. In order to make this business model work, a close cooperation is needed, balancing value for the customer and providers' bottom line. Changing the business model to a model of service delivery would contribute further to reduce waste, as the service providers would be able use e.g. furniture in new companies when replaced. The logic of 'buy and dispose of' is challenged as more users can utilise the same physical unit over the time. Maintenance and repair is provided by the service provider which is also believed to extend the longevity of physical items (Lovins, Lovins et al. 2007). In a FM context the business model of providing services is seen in the concept of ESCO⁷ (Jensen, Hansen et al. 2011).

Reinvest in Natural Capitalism

After having made production more efficient, reduced waste and changed the business model, the last step towards a Natural Capitalism would be to reinvest in natural capital: '*restoring, sustaining and expanding the most important capital – their own natural habitat and biological resource base*' (Lovins, Lovins et al. 2007). This is important as producers can no more ignore damage on the ecosystems. Violent weather as a result of climate changes is responsible for major loss of economic value, and the destruction of nature hinder the vital flow of services from living systems on which the capitalistic production is based: '*Without reinvestment in natural capital, shortages of ecosystem services are likely to become the limiting factor to prosperity in the next century*'. Case studies have shown that companies implementing changes that help protect the environment tend to gain an advantage on the

⁷ Energy Service Companies.

market, while companies perceived as irresponsible loose their legitimacy and thus also market shares. Enriching natural capital is thus not just a public good, but vital to every company's longevity (Hawken, Lovins et al. 2001).

2.2.3 Sustainable Public Facilities Management

In a study on current understandings of sustainable FM by Nielsen (Nielsen 2011), three different strategic approaches are identified. 1) The incremental: Limit environmental impact from organisation activities. 2) The radical: Towards a vision of a sustainable future. 3) The transformative: Going beyond the organisation to establish new partnerships for co-creating of new socio-technical services and technologies. Nielsen stresses that there is a tight connection between the organisational context and the FM approach for sustainability. The goal of the incremental strategy is to meet relative or absolute reduction in e.g. CO₂ emissions, and green accounting is here an important tool. Variations can occur in choice of indicators which mostly includes CO₂ and energy use, but broader sets of sustainability indicators can also be in use. The radical strategic approach aims to comply with the vision of a sustainable building. The strategy focuses both on the environmental and social aspects of sustainability, which means that users are included in the strategy through campaigning for environmentally sound behaviour. In this strategy there is a focus on solutions related to the local community and sustainability certificates like LEED and BREAM are used as means of branding. Those applying to the transformative strategy focus on development of new partnerships for co-creation of new socio technical services and technologies (Nielsen 2011).

The strategies identified by Nielsen (2011) are principal strategies, embracing a number of tools and means of reducing organisations impact on ecosystems. With a focus on tools as green accounting, management systems and sustainability certifications they inscribe in the principles of Ecological Modernisation and Natural Capitalism, based on instrumental rationality with a system focus and efficiency as the main keys to a sustainable development. Whilst Ecological Modernisation aims at an modernisation of modernity towards more nature protection (Mol 1996), it does, as Natural Capitalism, see the ecological crisis as a result of 'flaws' in the capitalistic market that must be corrected in order to maintain the basis on which it is built (Hawken, Lovins et al. 2010). Thereby the strategies support the rationalities of business, where sustainability is integrated as a value on the market and thus only when it can unite the aim for profit and better performance related to sustainability.

Ecological Modernisation emphasises a better regulation and integration of environmental issues in current systems, supported by establishment of incentives for environmental sustainable technology innovation. Natural Capitalism emphasises the capitalistic economy as currency for any transactions (also nature and humans) through the market, and the market is thus seen as the driving force in sustainable development. As both must be regarded theoretical constructions of an empirical reality, it is difficult to say what 'belongs' to the respective ideas when studying the empirical world. Ecological Modernisation was, however, described first and must be seen as the basis on which Natural Capitalism builds. Trends from both strategies are found in society and on organisational level side by side, and empirically it would be difficult to actually distinguish except perhaps for the business model thinking in Natural Capitalism. While Ecological Modernisation has been pushed by the public sector for decades through various Agenda 21 campaigns, the principles behind Natural Capitalism has developed in a business setting inscribed completely in market mechanisms.

In relation to FM it was shown in chapter 2.2.2 that different aspects of sustainable FM are directly inscribed in Natural Capitalism. As research is mainly conducted in a private business setting, a view on current steering in the public sector must shed light on possible understandings of sustainable *public* FM. In practice Ecological Modernisation was institutionalised through Agenda 21 which was mainly anchored in the local authority Environmental Departments (Holm 2007). ‘Sweep your own doorstep’ activities have been the dominating response in local authorities, with focus on green accounts and indicators as steering technologies (Arnborg, Andresen 2009). Due to the increased focus on sustainability (CO₂), obligations to act for sustainability have recently come on the agenda in the Real Estate departments. It is therefore my claim, that public FM is highly influenced by the principles of Ecological Modernisation. It is furthermore my claim that FM in public organisations dominated by the steering of NPM has adapted also the principles of Natural Capitalism due to the market orientated organisation of work. As research on this area is completely absent, those claims must be regarded qualified answers until further knowledge is collected.

Seen from the critical perspective as presented by Elling, Shiva and Sachs (Elling 2010; 2008, Shiva 2005, Sachs 2007), none of the strategies break with the unsustainable structures of society. The strategies are directly adaptable for companies and public organisation as they inscribe in current structures, and especially Natural Capitalism can be used directly in the competition to gain market shares. But who should be responsible for the radical changes as suggested? Nielsen (2006) emphasises that structural changes of society must come from governmental level, by e.g. laws and regulations imposing restrictions on business on their environmental impact (Nielsen, Nielsen 2006). As opposed to Natural Capitalism this will delimit the capitalistic production, whereas Natural Capitalism tends to make ecological production a new niche of capitalistic accumulation. Also alternative ways of contributing to society than paid work must be considered, as to enable more dignified living for those outside the labour market. On the level of concrete practice they point to processes of empowerment to enable citizen’s autonomy and thus ability to create a sustainable living.

The idea of reinvesting in nature to secure sufficient service deliveries (renewable resources) could be compared to the notion of sustainability as given by Vandana Shiva: Nature is a resource and must be cared for accordingly. The fundamental difference is, however, that while Natural Capitalism suggests investment in natural capital to secure production, Shiva emphasises a due respect to nature to secure *life*. Shiva does not pretend to ‘translate’ nature’s economy and sustenance economy into capitalistic value, but asks for equal right for other economies to be respected. One critique of a nature regulation through Natural Capitalism is that complicated forms of nature capital cannot be transferred to the market, as it is not possible to set a price in a meaningful way. No methods are developed to put price on commons as e.g. clean air and biodiversity, and as it is the market that indirectly defines the price, the citizen (in the role of consumer) is not obliged to take responsibility for the conservation of nature through his/her consumption (Nielsen, Nielsen 2006). The question is: Can the positions of Natural Capitalism and Vandana Shiva possibly meet?

Shiva takes the third world perspective and asks for less enclosure of common goods to enable dignified life in local communities. This is inscribed in ‘strong sustainability’ as even slight changes in nature quality can be crucial to quality of life for those living in and with nature. From the position of Natural Capitalism it might look romantic to ask for ‘quality of life in balance with nature’. The thinking is inscribed in a broader life world perspective and

not fitting to criteria for success as in instrumental rationality domination the thinking of Natural Capitalism. Nature is in Shiva's conceptualisation not merely a resource for material production for the capitalistic market, but an arena for life to take place with dimensions of aesthetic, cultural as well as material value.

It is difficult to inscribe in the perspective of Shiva in the western society. The de-coupling of nature from a capitalistic production inscribed in the instrumental rationality, takes power, money and efficiency before other values. Also the fact that very few in urban societies are actually in contact with nature in their daily life, makes it difficult to grasp the claim that populations elsewhere are (still) embedded in a close relation to nature. The principles of Shiva's critical thinking therefore seem rather radical in relation to current thinking. Defenders of Natural Capitalism would perhaps claim that Natural Capitalism has the same aim as Shiva, as it highlights the economy of nature as the fundament on which life must be built. It is, however, only indirect as life is dependent on *products* made from nature's resources - somewhere. The basis for life is so to say facilitated by the global market.

If I were to land this theoretical discussion by inscribing myself in one or the other philosophy I would find it very difficult to choose side. I find the thinking from Shiva highly important, I agree very much in her perspective and we must work for radical changes from western societies to turn the unstable situation into a more stable one. At the same time I realise that a response on her critique must come through regulation of the global market, which is far beyond what I and most other people can influence. The perspective is, however, important because of its communicative strength that can facilitate an integration of a third world perspective in discussions of sustainable actions on local level (which was done in the AR process in the final workshop, chapter 4.6).

Natural Capitalism is based on the instrumental rationality and entirely inscribed in the logics of the market. Incentives for sustainable actions are promises of decreased resource consumptions (and thus cheaper production) and additional market shares, which makes the concept easily digestable for most companies. The concept is, however, based on a socially constructed storyline: If resources can be utilised more efficient, nature will also suffer less. But what if consumption goes up when the products become more resource efficient? History has shown that when e.g. energy saving electrical devices are implemented in the household, more electrical devices can be afforded which makes the use of electricity the same – but the overall consumption of resources higher due to the production and following disposal of two devices and not one. This is called the rebound effect – effects that counteract the primary intended effects (Lindhqvist 2010).

The idea of investing in nature as a way to maintain resources as the basis for production is very good. If the incentive for restoring natural capital is to gain market shares through branding, the nature restored must, however, have some symbolic value to those on the market. Seen from the critical position of Vandana Shiva I would claim that there is the potential risk that nature is restored in areas important to the consumers and not necessary in areas where former common good has been enclosed for the use of production.

Though Natural Capitalism does not provide answers to structural changes of society it does, nevertheless, serve as an ideology and pragmatic position for business and must be seen as *one* important strategy. Means of incorporating the substantial aspects of sustainability must, however, be developed to avoid the complete relativism and social constructions in the aim for sustainable branding of products and businesses.

Related to the three principal strategies for sustainable FM as suggested by Nielsen (2011) only the transformative strategy has the potential to open for changes challenging current thinking, through the focus on partnerships and development of socio technical systems. With a competitive position on the market it is, however, difficult to imagine changes that could lead to radical changes in societal structures as requested by Shiva, Sachs and Nielsen. All strategies inscribe in the rationalities behind Ecological Modernisation and Natural Capitalism. Still it is relevant to ask whether openings can be created towards new orientations, especially if a deeper understanding of the substantial aspects of sustainability could come up front.

FM in the public sector is inscribed in an overall transition towards the future welfare state. Furthermore, with the special obligation for a public institution to contribute to a sustainable society, employees working with public FM *must* somehow address the concept of sustainability in broader terms than only energy efficiency. Olsen et al. (2003) suggest the following conceptualisation of strong sustainable development, that can perhaps inspire the thinking in public FM (own translation): *‘Societal sustainable development must be anchored in a for the whole society sensible use of natures’ resources. At the same time it must allow for a systematic experimentation with democratic activities connected to production and the lived life, creating the basis for public dialogues about possible orientations of what is regarded sensible.’* (Olsen, Nielsen et al. 2003). The definition covers very well the understanding underlying current work, as it emphasises the environmental and social aspects as interconnected and based on the assumption that sustainable development is an ongoing, democratic process. How that can be connected to public FM will be further unfolded in the analysis (chapter 5).

2.3 CHANGE IN GOVERNANCE AND FM IN THE PUBLIC SECTOR

Governance paradigms⁸ and technologies of steering inscribe in different understandings of change (or innovation) and may therefore allow for more or less space for changes – of more or less radical character. The chapter thus serves to frame the understanding of *public* FM. In this chapter current governance trends and their critiques are presented, to enable an informed discussion of the second research question:

Can Action Research establish arenas for change in a Municipal Department of Public Property, leading to understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency?

The public sector has been through a change in governance since the early 80’s influenced by an increased market orientation known as New Public Management (NPM). There has, however, been a historical development in the implementation of trends from different governance paradigms in the public sector, and not only trends from NPM are seen. As changes have happened gradually and over time, trends from all paradigms are influencing

⁸ Paradigm is here understood as an implicit frame and basic patterns or logics behind practice and is the structure uniting a field. It thus constitutes a universe of possible questions, answers, explanations etc. Though a paradigm has its blind spots - questions that cannot be phased and answers that cannot be imagined – it is also open to development. Governance paradigms are thus constructions that cannot always be found empirically (Lerborg 2010). The theoretical paradigms do, however, enable meaningful analysis of empirical governance strategies. The term governance covers paradigms structuring government in the act of governing as e.g. Bureacracy, New Public Management, The Relational Paradigm and Network Governance (the latter not included in current work).

current practice to a varying degree. Leon Lerborg (2010) has outlined four principal governance paradigms currently influencing the public sector administration: The Professional, the Bureaucratic, New Public Management and the Humanistic/Relational. This distinction is used to structure this chapter and will guide the analysis of the empirical material in chapter 5. To understand FM as a profession or a professionalised area, there is a paragraph in each Governance Paradigm addressing this. Especially the notion of *professionalization* is important to the understanding of FM in current work, as described in chapter 2.3.3 where NPM is presented.

2.3.1 Professions

The professional paradigm is constituted by well educated employees with a profession or expertise as e.g. carpenters, nurses and teachers. The professionals are organised with a high degree of self-governance as they must have a room for professional judgement according to task and context. Often different expertises co-exist in an organisation without any cooperation and the notion of ‘organisational silos’ describes very well the situation (Lerborg 2010). Professional labour is autonomous labour where the conditions of autonomy have already been inscribed in particular forms of conduct embodied in the concept of ‘professional competence’ (Fournier 1999).

2.3.2 Bureaucracy

The characteristics of modern bureaucracy were described by Max Weber (Weber 1978) and are seen as the ‘old’ way of organising public authorities.

- *‘A principle of official jurisdictional areas, which are generally ordered by rules (laws or administrative regulations).*
- *A principle of office hierarchy and channels of appeal stipulate a clearly established system of super and subordination in which there is a supervision of the lower offices by the higher ones.*
- *The management of the modern office is based upon written documents, which are preserved in their original or draft form.*
- *High degree of specialisation.*
- *Official activity demands the full working capacity of the official.*
- *The management of the office follows general rules, which are more or less stable, more or less exhaustive, and which can be learned.’ (Weber 1978:957-958)*

The three main characteristics of bureaucracy are hierarchy, specialisation and standardisation. Hierarchy is considered important to make roles and responsibilities as clear and transparent as possible, whereas specialisation ensures assignment of the objectives, missions and tasks in ways that best secure competence for the provision of policy advice and service delivery. Standardisation ensures equality, economy, efficiency and effectiveness by best practice in public management. Aucoin (1997) argues that bureaucracy is suited to support good government, focusing on three major challenges in relation to organisational design: Provision of integrated service delivery, development of policies to deal with horizontal issues and devolvement of management authority for government operations (Aucoin 1997). The bureaucratic paradigm emphasises legality, professionalism and legitimacy: Laws must be legitimate and governed by employees who act with high professional standards within jurisdictional areas (Lerborg 2010).

The Bureaucratic paradigm constitutes the hub of the public sector administration, though its former dominating role has been diminished due to the development of the public sector into a welfare state. Bureaucracy is, however, criticized for the high degree of regulatory control and hierarchical steering that is regarded centralistic, inflexible and causing disempowerment of public officers (Lerborg 2010).

The Professions

The professional environments have historically been against the steering mechanisms of bureaucracy, and the bureaucratic paradigm has neither had the means nor the need to steer the professionals. Not before the 60's and 70's which saw an expansion of the public sector, a regulation became necessary also within the professional areas (health care, social services etc.). The regulation did, however, not come from the logic of the traditional bureaucratic paradigm but from New Public Management (Lerborg 2010).

2.3.3 New Public Management

By the end of the 70's neo-liberalism influenced as the dominating philosophy not only economy but the whole society. All kinds of practices were to be restructured according to the market that was seen as the ideal mechanisms for the automatic co-ordination of the decisions for a multitude of individual actors. New techniques were budgets, contracts, performance-related pay, competition, quasi-markets and end-user empowerment. Government was to act indirectly upon the actions of autonomous entities steered by targets, standards, monitoring outputs, allocating budgets and undertaking audits (Rose 1999).

The NPM paradigm emerged at the beginning of the 80's based on neo liberal thinking, focusing on profit, reduction of taxes, less regulation and a smaller and more efficient public sector (Lerborg 2010). NPM was first described by Christopher Hood (1991) as 'the most striking international trend in public administration', linked with four other administrative 'megatrends': 1) Attempts to slow down or reverse government growth, 2) a shift towards privatization, 3) the development of automation (information technology and distribution of public services) and 4) the development of a more international agenda (Hood 1991).

NPM was introduced as a term describing a way of reorganizing public sector bodies to bring their management approaches closer to business methods. The public sector was believed to become less distinctive as a unit from the private sector in personnel, reward structure and methods. At the same time there would be a reduction in the extent to which discretionary power is limited by uniform and general rules of procedures (Dunleavy, Hood 1994). As an answer to increased demand for flexibility and adaptability, NPM (also called entrepreneurial governance) offered ten principles which linked together to 'reinvent' public sector organisations (Gay 2003).

- Promotes competition between service providers.
- Empowers citizens by transferring the control from the bureaucracy into the community.
- Measures the performance of their agencies focusing not on inputs but on outcomes.
- Is driven by its goals – missions – not by rules and regulations.
- Redefines its clients as customers and offers them choices.
- Prevents problems before they emerge rather than simply offering services afterward.
- Puts its energies into earning money, not simply spending it.
- Decentralises authority, embracing participatory management.
- Prefers market mechanisms to bureaucratic mechanisms.

- Focuses not simply on providing public services but on catalysing all sectors – public, private and voluntary – into action to solve their community's problems (Osborne and Gaebler from Gay 2003).

NPM was presented as a framework of general applicability. One argument for its universality was that it was claimed to be an 'apolitical' framework within which many different values could be pursued effectively. The different political priorities should be accommodated by adjusting the management system, without the need to rewrite the basic programme of NPM (Hood 1991).

In his article 'The Tyranny of the Epochal' Du Gay (2003) questions the rhetoric of such statements, asking whether the change from Bureaucracy to a more entrepreneurial way of working is really epochal. He sees the narratives as easily digestible sets of slogans through which the demand for change is catalysed, but questions the actual practical implementation in governmental institutions based on such gestural categories. The epochal approaches make individual circumstances invisible. Neglecting specificity of circumstances in the attempt to generalise 'entrepreneurial principles' to organisational conduct, may incapacitate particular organisations ability to pursue its specific purposes by redefining its organisational identity and purposes (Gay 2003).

The trend points towards a tendency for administrative reforms in the public sector, including decentralisation of management, definition of goals, targets and indicators of success and a focus on output controls and measured performance. At the same time there is a tendency for institutional reforms, seen by a breakup of the public sector into corporatized units around products, separate provision and production interests and cooperation with private companies through contracts (Hood 1991, Greve 2002).

In the Nordic countries the term 'modernization of the public sector' was used during the 80's to describe the gradual changes towards NPM (Greve 2002). NPM was an answer to the lack of efficient production and the ability to continuous change, and it was believed that the mechanisms of the market could secure this through competition and an enhanced focus on output. The output-focus was connected to an increased orientation towards the *users* of public services (Lerborg 2010).

Due to the neoliberal basis of NPM the individual has a strong position within the paradigm. Individuals are thus believed to have potential for self governance and responsibility if they are just relieved from bureaucratic steering and rigid systems. New economic incentives are introduced as performance dependent salaries (Ny Løn) and time limited contracts. Due to the increased goal orientation and output focus, management has gradually changed from professional supervision to generic management of staff (Human Resource Management) (Lerborg 2010).

The neo liberal basis also pointed towards privatisations and public private partnerships as a way to introduce the market mechanisms in the public sector. In the early 90's with John Major as Prime Minister after Thatcher in the UK, *civil society* was accentuated as a supplement to the market mechanisms, stressing the responsibility for organisations and families to contribute to society. Key words for this turn in governance are 'responsibility for own learning, self governance, self-managing teams, user driven innovation' etc. The idea of outsourcing based on contracts and competition was partly replaced with the notion of public private partnerships based on mutual trust and common values (Lerborg 2010).

Empirical trends from NPM were first implemented at the State-level and have from there gradually diffused to the public sector on local level. Local authorities are increasingly working with target and output steering, but in modified and adjusted forms. The logic of bureaucracy has, however, not been displaced, as the market mechanisms has been added as a new administrative layer in a bureaucratised form. What is seen strongest in local authorities today is steering by goals, contracts and documentation, supplemented by more efficient steering of processes by implementing e.g. lean management and standards (Lerborg 2010). There has also been a tendency to organise work according to economy of scale supported by new organisational principles (Pedersen 2009). Lately NPM trend as e.g. value management has gained momentum as a 'soft' supplement to the goal orientation (Lerborg 2010).

The critique on NPM is pointing at the re-bureaucratisation that has taken place by a demand for comprehensive contracts and documentation of 'success', together with standardised processes locked by e.g. IT-systems, standards and accreditation. The paradigm has thus reproduced the dark side of bureaucracy by implementation of rigid systems and contracts (Lerborg 2010, Pedersen 2009). According to Pedersen the NMP reforms have enhanced state management and centralisation of power by control and monitoring, and nothing in the reform points to how democracy is ensured, when the market based management is gradually transforming the citizen into a customer of public services.

Professionalization

The critique on the welfare state as bureaucratic, hierarchical and often unresponsive to the needs and differences of individuals and communities was allied with the critique of professions and expertise. The professions were said to be unaccountable systems of exclusion, delegitimizing local and alternative forms of knowledge and de-skilling the population of its existing capacities and local knowledge. Mitchel Dean (1999) presents the notion of 'technologies of performance' as the plural technologies of government designed to penetrate the enclosures of expertise and change the professional domains into new formal calculative regimes: *'Devolution of budgets, setting of performance indicators, 'benchmarking', the establishment of 'quasi markets' in expertise and service provision, the 'corporatization' and 'privatisation' of formerly public services and the contracting out of services are all more or less technical means for locking the moral and political requirements of the shaping of conduct into the optimization of performance'* (Dean 1999).

The notion of 'professionalism' has gradually changed as a response to threats of 'professions' by management (Fournier 1999): *'It seems that professionalism could embrace everyone with some claim to specialised knowledge or practice'*. Not only management inscribes in the notion of professionalism but also e.g. actors within the service sector claim to provide 'professional services'. Non-professional labour thus takes the label of professions but without necessarily referring to a professions code of conduct. Fournier claims in his critical analysis that the appeal to professionalism is one strategy deployed to control the increasing margin of flexibility in work, in a society moving towards flexible strategies of capitalist accumulation. The need for control in the flexible work organisation is resolved by mobilising individual employees' 'autonomy' through the alignment of their self-governing and self-actualising propensity with the competitive advancement of organisations (Fournier 1999).

Fournier uses the term 'software of control' that works through the responsabilisation of autonomy: They serve to constitute employees as autonomous and empowered agents and to delineate the space within which employees are to exercise their power and autonomy. An

emphasis on quality and the image of the customer have been central motives in the re-articulation of organisational control: Employees are expected to act of concern for the customer, and appropriate responses would be as if they owned the customers' problem. Employees are thus not told what to do but are urged to use their initiative in responsible ways answering to the needs of the customers (Fournier 1999). Needs formation is thus no longer a matter of the scientifically informed production of truth by professionals, as it is allowed to enter into a space of negotiated settlement conducted in the name of user rights. The rights of consumers and users then become the criteria for the evaluation of performance of professionals (Dean 1999).

The disciplinary logic as seen in the old professions (autonomous code of conduct) can be paralleled with that of extension of professional discourse to new occupational domains to regulate the flexible work life. The logics of professionalism thus get a disciplinary effect through the need to establish legitimacy with clients and continuously work at maintaining their legitimacy adapted to the norms and values of other actors in the network of liberal government. Criteria of legitimacy could be truth, public good, social welfare and efficiency, depending on the most dominant values in the actual organisation (Figure 3) (Fournier 1999). The articulation of professionalism through competencies serves to translate organisational control and authority into individual self-development understood as 'taking responsibility, flexibility, adaptability and persistence in the achievement of goals'. The professional competence is thus anchored in the practitioner's personal conduct but has a body of knowledge and a general control over own practice as a basis (Fournier 1999).

The model of professional competence is suited to explain what has happened when professions as e.g. architects and engineers and non skilled service areas as e.g. cleaning and security control unites within the umbrella of FM. The old professions accept an additional (or new) set of values in their personal code of conduct, and service areas with less educational background that did not before inscribe in a profession becomes professionalised.

The question as to what FM may be, has been raised within the academic discussion of FM. Tai and Ooi (2001) claim that '*despite a rapid development in the last decade FM still suffers from an identity crisis as the definition and scope of FM remains a contentious issue.*' Having identified a wide variety of FM definitions given in the decade

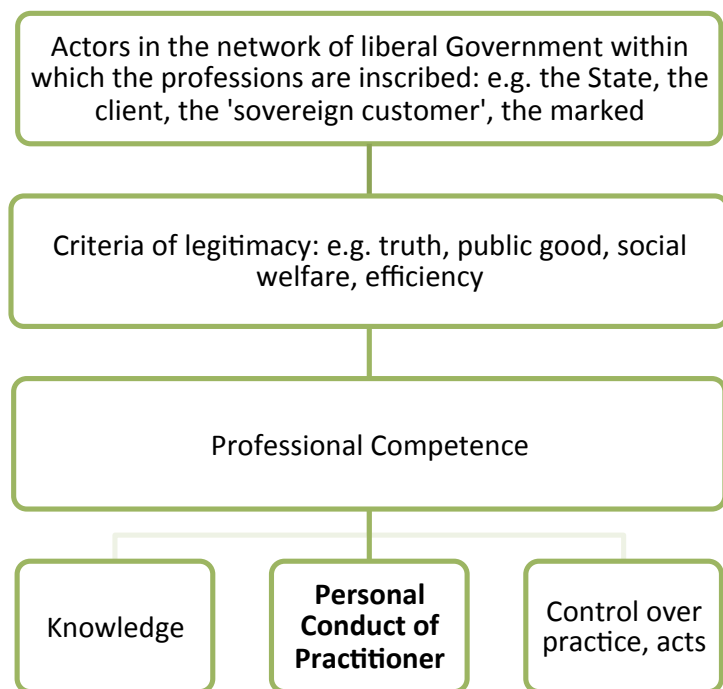


Figure 3: Professionalism as disciplinary logic. The lines show processes through which connections and translations are made. Professional competence is thus translated in terms of personal conduct and only loosely connected with the knowledge of the practitioner or control over practitioner's acts. From Fournier, 1999.

from 1990 to 2000, they show that there is no consensus as to the objectives and scope of FM (Tay, Ooi 2001). Since the work of Tay and Ooi a European standard for terminology and definitions within FM has been adopted. According to the standard FM is based on a frame of market mechanisms and with a clear division of core- and support functions (Jensen 2011).

Tay and Ooi seem to agree with Fournier (Fournier 1999) in how to define a profession regarding formal education and professional code of conduct, but they seem to be rather uncritical to the potential consequences of also having to put the needs of the customer in centre. Fournier makes a distinction between 'profession' and 'professionalised' as the latter allows for disciplines without formal educational background to be included. The critical edge to the concept of professionalization as provided by Fournier raises the question: Can a profession be loyal to a professional code of conduct and safeguards the expertise and standards of the profession and at the same time always meets the needs of individual clients? It seems to be the opinion of Tay and Ooi who formulate the following criteria for profession: *'Expertise and standards of the FM profession derive from meeting the needs of individual clients'* (Tay, Ooi 2001). Does that leave room for a distinctive profile for the FM profession, or will it then solely include the managerial level within what is today called FM?

Jensen points to the strange fact that FM has got the character of a professional area though neither tasks, knowledge or methods are sufficiently coherent to constitute a profession. According to Jensen a professional area emerges when a community is created that aims at defining the profession and ensures it through institutionalisation. To build a profession takes dedicated action as it does not emerge automatically due to technological or structural changes in society. Formal education and an institutionalisation through associations are important steps that have been taken within FM: IFMA and EuroFM are important international associations as is DFM in a Danish Context. Furthermore FM has gradually emerged as an academic discipline also (Jensen 2011).

Price (2001) focuses on the language of FM as something to be aware of when aiming at strategic level influence for FM. He points to the debate as to whether FM should have a status of a profession or a market. According to Price, FM rhetoric is very much on cost and inputs and the binary of 'them' and 'us', referring to core- and support functions. Though research has also come into the field of added value, business related outcome from FM other than reduced cost are only poorly understood. According to Price the language must change in which the strategic practitioners describe themselves, and the facilities managers must articulate their strategic position. Performance measures must be developed in a language that enables core function to judge the return of FM expenditure: FM rhetoric must change from a focus on *outputs* to business *outcome* (Price 2002). This is supported by Jensen (2011) who highlights the relevance of discussing the scope of FM as a profession, as FM would never evolve on the basis of a promise of resource savings alone. FM must deliver added value for the core function activities, which would also demand more specific professional knowledge other than generic management knowledge. Further research is therefore needed to build up specific FM knowledge (Jensen 2011).

Grimshaw (2001) add to the understanding of professions that the essence of a profession is its synonymity with public purpose, intellectual tradition and a relationship based on trust. A profession is handling important areas of policy and practice in trust for the public and is thus to be regarded an authoritative symbol of social responsibility. The essence of a profession is, however, training based on a specific body of knowledge, and duty of social responsibility in

how its members carry out their work. Claiming to be a profession thus implies that ethical issues are considered in relation to the way the professionals conduct themselves (Grimshaw 2001).

The question of FM ethics is, however, whether it should be driven by business or the professional bodies. That FM ethics cannot be seen in isolation from the development of business ethics, raises the question whether there might be potential conflicts between business codes and FM professional codes of conduct. The question is relevant in relation to the figure of Fournier (Figure 3), where criteria of legitimacy are negotiated in the network of liberal government and thus related to business needs. Would it be possible for FM to hold own ethics and values if inscribed in steering on the distance technologies? Grimshaw (2001) provides one answer to this⁹ stating that the professional codes are seen to have a wider credibility than those driven by business imperatives, and is judged to provide better guidance in difficult situations (Grimshaw 2001).

Grimshaw here points to the need of separate ethical codes for FM no matter if FM develops as a profession or not. In the context of global change and organisational structures that carry the potential of abusive working environments, FM based on ethical norms supporting public interests could influence positively on business decisions related to the infrastructure of work. To get ethical standards professional bodies must develop a culture whereby the ethical values and practice can evolve. This can be done by initiating debates on ethical issues within the profession, but also cooperation with educational establishment and employees must take place to establish a professional culture where ethics can flourish (Grimshaw 2001).

Accountability and Auditing

With NPM there has come an increased demand for accountability, transparency and rise of quality assurance models of organisational control. Auditing as a concept has emerged from financial auditing and spread into other areas such as health and safety, medicine, education, environmental management etc. The idea is that organisations and their sub-units establish objectives, design performance measures to reflect objectives, monitor actual performance and feed the results of the monitoring back for management attention (Power 2000).

Auditing has enabled a move away from a command and control mode of operation. Organisations are regulated indirectly through a defined space in which regulatory compliance can be negotiated and constructed. Regulatory systems rely increasingly upon 'control of control' as audits become the control of self-control arrangements. According to Power (2000) the welfare state is increasingly being displaced by the regulatory state, where instruments of audit and inspection are becoming more central to the operational base of government. Auditing and related ideas of monitoring have thus been uncritically introduced as an agency of organisational change, that can rapidly be disseminated without further understanding of what may be at stake. In line with Dean (1999) and Fournier (1999) Power suggests that it might be understood as an ideologically driven system for disciplining and controlling professionals rather than a tool for genuine accountability (Power 2000).

Within FM the quality and level of service deliveries are often agreed upon in contracts by Service Level Agreements (SLA), and if possible in a way that they can be quantitatively measured and accounted for. This is done through development of key performance indicators that can report on respectively input and output. Key performance indicators for input can be

⁹ Based on a study by Higgs-kleyn et al. (1999).

divided in three principal categories: The work process (e.g. how often), resources (e.g. qualifications) and management (e.g. procedures of control). Output indicators are related to the function of delivered services, as e.g. the amount of dust in carpets. As it is easier to measure input, those indicators are often chosen, though evaluation on delivered services based on output would principally tell more about the quality of the delivered services (Jensen 2011).

Also in relation to current corporate strategies for sustainable development accounting is important, which is seen in Environmental Management (Emilsson, Hjelm 2005, Emilsson, Hjelm 2004, Emilsson, Hjelm 2002) and Green Accounting (Kørnøv 2007) and in sustainable building certification as e.g. Breeam and Leed (Nielsen 2011, Jensen 2011). Accounting for sustainability has become a strong branding tool inscribed in the thinking of Natural Capitalism (chapter 2.2.2) through e.g. the triple bottom line and balanced score card (Chaklader, Roy 2010, Hodges 2008, Hodges 2008).

The design of accounting reports and performance measures by which organisations are judged, is greatly influenced by the imperative of making them auditable. Audit processes are not just neutral acts of verification, but actively shape the design and interpretation of organisational performance. In professional cultures this imply that activities that are valued locally might not be represented by the official system, and performance indicators might lead to a change in the field of practice and local culture. If auditing processes get decoupled from core organisational activities, these effects may, however, be minimal, and thus the audit becomes a ritual merely for the purpose of external legitimacy (Power 2000).

Power raises the issue of democracy by pointing at the relation between auditing, organisational democracy and transparency. Being required to account and having the account audited is not the same as being made more transparent or publicly accessible. He even claims that some audit processes lead to less transparency, as the audit gives legitimacy to the organisation no matter what is done and to whom reports are made. This is possible due to the narrow focus on the discipline of information gathering and control, but also because audit reports are often not designed to support deliberative processes by a continued stakeholder dialogue. The legitimacy thus becomes dependent on the auditor whose independence becomes an important benchmark of trust. The prospect of 'audit-light' is suggested as a development area within auditing, where a self directed audit process with focus on learning and self-help to regulatory compliance is seen as the ideal (Power 2000).

Accounting is more than just a neutral technical practice as it shapes preferences, organisational routines and visibility in a form that supports and gives meaning to decision making. Accounting systems do, however, more often function to legitimate individual and organisational behaviour than to support efficient and rational decision making (Power 2003). Going for something auditable shapes the process that is to be audited. This is because objectives must be formulated and followed up by development of new standards and systems of record keeping and accounting. The logics and technical requirements of audit displace the internal logics of expertise. Audits thus create accountability to one set of norms, namely transparency, observability and standardisation (Rose 1999).

According to Rose (1999) audits have come to replace the trust that social government invested in professional wisdom and the decisions and actions of specialists (Rose 1999). The notion of audit is connected to efficiency as the overall goal, which is discussed by Politt in his critical article '*Is the Emperor in his Underwear*' (2000). He notes that efficiency has been

at the heart of many management initiatives since the 80's, and in order to achieve more outputs per input, the process of reorganising is regarded a core skill of good managers. He point to the fact that efficiency is less difficult to measure than e.g. effectiveness or quality, as quality must be subject to a process of consensus among users as to what constitutes quality. Effectiveness must somehow be measured beyond the organisation. Both are very time consuming, costly and methodologically complex tasks, while measuring efficiency is 'just' a question of comparing organisational inputs with organisational outputs (Pollitt 2000).

The objections of Pollitt (2000) are firstly regarding the fact that efficiency gains may be achieved at the cost of other, less desirable effects. Referring to a study of Talbot (1996, 1997) he states that there has shown to be difficulties with actually measuring performance – or efficiency, as it can be difficult to find appropriate indicators. Referring to a Dutch study he furthermore claims that organisations with poor efficiency scores may be tempted to find other indicators or other means of collecting data. Reorganising the business is also pointed at as a way to hide poor result, as it may disrupt time-series data by altering the sphere of jurisdiction of an organisation: *'Reliable time series of well-validated efficiency measures turn out to be much rarer than one might have thought'* (Pollitt 2000).

Despite standardisations, differences in the style and application of audit routines have been evident, with a distinction between highly structured and formal approaches and those providing more space for individual judgement. Dirsmith and Haskins (1991) in (Power 2003) suggest that underlying the structure-judgement distinction is a more fundamental one that can be described by the metaphors 'mechanisms' and 'organism'. Mechanism names an aspiration for a formal approach based on algorithmic knowledge, while organism assumes that the whole is always greater than the parts.¹⁰ There is a tension between strategies based on respectively structure and judgement, and the predominance of relatively more structured audit approaches reflects the increasing demand for legitimate and transparent forms of standardised practice for management control purposes.

Auditing is regarded a legitimate part of good management practice in a wide variety of domains, pushed forward since the 80's by NPM with its demand for efficiency in public services. Environmental management auditing is one example, where auditing is introduced with perhaps competing professional expertises underlying judgement. Accountants thus favour a more managerial and abstract definition over the one that was more scientific in content. These strategies of defining and promoting similarity relations underlie professionalization projects and claim to expertise in new domains (Power 2003).

¹⁰ Referring to systems thinking (chapter 2.2.2)

2.3.4 The Humanistic and the Relational Governance Paradigm

The Humanistic and the Relational governance paradigms are positioned in the soft and human oriented end of the scale. The humanistic paradigm has existed for decades and seen in most public organisations as e.g. Human Relations Management, Human Relation Development and the learning organisation (Lerborg 2010).

The Humanistic paradigm has a focus on the employees who are organised in self managing teams in flat organisations, involved in decisions by bottom up processes and led by values. The paradigm is working complementarily to NPM in the sense that NPM constitutes the overall frame by systems and structures, while the humanistic paradigm takes care of human, management and change processes within the frames. It thus creates a counterweight to the efficiency oriented paradigms, except that there is also an interest in motivating employees to action towards goals of the organisation by flexibility and cooperation (Lerborg 2010).

The Relational governance paradigm is a term used by Lerborg (2010) covering a movement within the organisational theory that has gained momentum within the last decade. The paradigm has its roots in the humanistic paradigm but is based on other core ideas: Systemic thinking, Appreciative Inquiry and Social constructivism (Lerborg 2010). I have chosen to give it a special status in this presentation as steering in Albertslund local Authority is based partly on the Relational Paradigm, and the thinking behind the paradigm has inspired the Action Research Process.

Trends from the Relational Governance Paradigm is seen in both the public and private sector, but according to Lerborg it is strongest represented in the public sector among internal consultants, managers and psychologist, but also as a basis for local authority administration. The name of the paradigm indicates that the notion of 'relations' unites the three elements, with traces back to the systemic family therapy that focuses on clients' relations to the system to understand human potentials. In the social constructivism the notion of relations is a general ontological principle: Nothing exists in its own right but through its relation to others and often facilitated by language. Appreciative Inquiry and social constructivism shares the basic assumptions that the world is created through relations to visions of the future (Lerborg 2010).

People inscribed in the relational paradigm are inviting to common reflection processes through their language, as meanings and standpoints are seen as drafts for actor-based constructions (e.g. 'I am thinking that...'). Reflection plays a crucial role within the paradigm as humans are defined through relations. This creates interdependency between people that must be clarified and negotiated through a reflective dialogue in which reality is seen from a multiple perspective. The reflections of thoughts are surfaced in a dialogue, and methods within the relational paradigm are accordingly aiming at a facilitation of reflective dialogical processes. The claim is that the reflective processes opens for new horizons for action and are therefore crucial in change processes (Lerborg 2010).

Systemic thinking has been developed in different contexts and thus with different emphasis. The Relational governance paradigm is mainly informed by the systemic thinking that emerged in the 60's and 70's in the therapeutic environments, based on the thinking of Gregory Bateson (1904-80) and the Milano school. The latter has influenced the Relational paradigm with an introduction of the distinction between circular and linear ways of understanding things. In the circular understanding complex dynamics and interaction

between actors are pursued with respect to the fact that actors have different perspectives that are uncovered in the circular logic. The circular understanding shall be seen in contrast to the linear logic with a simple, chronological cause and effect relationship that can be described in an 'objective' manner. Also the notion of 'curiosity' has diffused from the systemic therapeutic tradition to the relational paradigm. Curiosity here is understood as 'neutrality' in the sense that the therapist asks curious questions inviting actors to reflective processes in which they see situations from different perspectives (Lerborg 2010).¹¹

The second element in the Relational governance paradigm is Appreciative Inquiry that has gained momentum in organisational practice through the theoretical work of David Cooperrider and Surest Srivastva in the late 80's (Ludema, Cooperrider et al. 2006, Cooperrider, Whitney 2005, Srivastva 1999, Cooperrider, Srivastva 1999).

Appreciative Inquiry is claimed to be egalitarian based on 'power neutral' methods as humans are regarded equal and top down approaches, orders etc. are not really accepted. The egalitarian viewpoint also means that 'expert' consultants are exchanged with process consultants who facilitate the processes in which the participants choose the agenda. Appreciative Inquiry is thus claimed to give 'voice' to the weak (employees). According to Lerborg the success of Appreciative Inquiry during the last decade is the focus on ideals, visions, the future, the positive etc. combined with an opening towards multiple possible futures¹². The paradigm is, however, criticised for its potential over-emphasising of the positive attitude and an avoidance of everything that has to do with problems. A radical exclusion of problem-thinking can result in repressions of issues important for individuals as problems are part of our life world. According to Lerborg the notion of 'the burning platform' that has been a crucial part of change management-terminology is also lost with the avoidance of problem-focus (Lerborg 2010).

Constructivistic and no Space for Critique

The Relational Paradigm can be criticised to be too constructivistic in its approach when e.g. the multivers-perspective develop into complete relativism or when the relationism leads to an 'over-contextualisation' due to the belief that individuals cannot have characteristics or personality formed through their own personal history and biology. It also means that a number of management technologies cannot be accepted as legitimate: Incentives and structural changes of organisations become problematic because 'objective' structures are regarded illusions and a causal influence of self-governing individuals impossible.

In the relational paradigm the language plays an important role, as it is through language the world – and future – is created. This implies that personalities, structures, organisations and concepts only exist through a continuous construction in linguistic communities. Lerborg (2010) explains that the social constructivistic relativism has a social aim rather than a philosophical, as it creates an arena for inclusion, accept and appreciativeness as – in principle – all standpoints are equally valid. The social constructivistic basis can, however, lead to a

¹¹ Sources for inspiration to the relational paradigm are among others Stephen Covey (Covey 2008) and Peter Senge (Senge 1993). In Denmark the paradigm has been taken forward by business psychologists (e.g. (Haslebo, Nielsen 2011; 2004, *NEWS AND LEGAL REVIEW* - News review - Facilities Management news coverage brings you the latest developments in the industry and keeps you up to date with legal issues. Topics this issue include - Government cuts Part L compliance timetable; . DTI consults on a more sustainable built environment; and . MEPs reach compromise on Services Directive. 2006)) and the founders of Attractor (now Rambøll) (, Forside - Attractor) based on the thinking of the English Systemic theoretician and AI-supporter Peter Lang.

¹² More on Appreciative Inquiry in chapter 3.2.1

very optimistic understanding of human's possibility to form the world and perhaps an exaggerated belief in the possibility of changing the social world through language and new ways of thinking. In relation to the governance perspective this can influence the understanding of what is needed to steer the public sector and to what approaches are regarded appropriate to create changes. Defenders of the Relational paradigm would consider e.g. rules, structure and technologies invalid factors for change and management, unless they are made subject to communication (Lerborg 2010).

The absolute focus on the positive aspects of work life can be criticised to be a strategy to avoid critique as the critique when given is claimed to be deficiency thinking and thus filed without being handled. Also the fact that employees not always agree is not addressed, as all perspectives are regarded equally valid. This means that serious critique might not be questioned or discussed and documentation for claims not asked for (Lerborg 2010). The critique by Lerborg showed its relevance in the AR process which is unfolded in the analysis (chapter 5.2)

2.3.5 Modernisation through Public Sector Innovation¹³

Lerborg gives some indications as to the strengths of different paradigms in relation to change or innovations in a broad sense. There is not one paradigm that can cope with all challenges of local authorities, and often principles and technologies from more paradigms are used as means of steering. Denmark is only a tiny part of a giant and ever changing global society, and in order to overcome competition the public sector must cope with the radical changes on global level which raises the question as to how the different paradigms can support this. Innovation as inscribed in NPM has been seen as scientific innovation within e.g. nanotechnology or biotech supported by Ministry of Research with the aim of making scientific knowledge available to business to enhance competitive advantage. Another innovative trend inscribed in the Relational Paradigm is the more analytic approach with focus on societal changes, user driven innovation, social innovation etc. None of the paradigms are, however, oriented against the creation of steering technologies that could support a *systematic* innovation of the public services and organisation. Innovation takes place as incremental changes of practice, but without focus on and technologies for more radical innovation of the public sector (Lerborg 2010).

The question then remains: What combination of governance technologies constitutes the basis for Albertslund local authority Department of Public Property and has there been space for innovation to take place during the AR process? Answers were given in the last workshop in September 2011 and presented in chapter 4.6.

2.3.6 FM in the Public Sector

Due to the relatively short history of FM research, FM in local authorities has not been investigated much (Jensen, Due 2008). It has therefore not been possible to find research on FM in local authorities related to the concept of sustainability, or to the question as to how change processes can be run towards sustainable practice within public FM. As sustainable FM is the subject of current work, this literature review is very short and with a focus on research in Danish matters as this can be seen as the initial frame for the PhD.

¹³ The term Innovation is here is used as a broad and rather unspecific term for change with reference to Lerborg, 2010.

There has been a focus on the role of public FM in urban development and community based FM (Alexander, Brown 2006) and on contracting out vs. in house FM (Bröchner 2003, Wagenberg 2003, Leväinen 2003, Alexander 2003, Haugen 2003, Alexander 2003, Bröchner 2003, Leväinen 2003, Wagenberg 2003, Haugen 2003). Knut Boge (2010) analysed the empirical phenomenon of outsourcing of public services in Norway as a result of a number of reforms inspired by NPM. He concludes that the reforms have paved the way for outsourcing of FM services and thus transformed former public administrations to joint stock companies. This has increased the total size of the Norwegian FM market and also influenced on the strategies of FM towards integrated FM suppliers (Boge 2010).

In Denmark FM was introduced in local authorities during the structural reform of the public sector in 2007, where major centralisations took place. The development of FM in local authorities was supported by a project focusing on the organisation of FM in local authorities in 2006-2007, run by the Danish FM network in cooperation with 18 local authorities. The aim of the project was to *'investigate the possibilities and effects of implementing an organisation based on FM in municipalities'* (Jensen, Due 2008). According to Jensen and Due many local authorities did not have an overview of their property due to decentralised responsibility and no common procedures for dealing with the facilities. The organisation of FM related activities were judged to be a result of history rather than strategic choices, and many employees responsible for FM were not properly qualified to handle Real Estate management and FM related activities. The argument to transform the management of public property into an organisation based on FM was that of economic savings, as it was estimated that around €1-2 billion could be saved by implementing professional FM in the Danish local authorities (Jensen, Due 2008).

The project identified a number of requirements for the implementation of an FM organisation: *'It is necessary that the new organisation has a strategic awareness and support at top level in the municipality, which both involves the political leadership and the top management in the municipal organisation. The organisation should be proactive and optimize the municipal property portfolio in accordance with the political intentions for the development of the municipality, based on a holistic view, and with focus on the needs of the users on both short and long term.'* (Jensen, Due 2008) It seems that the understanding of FM underlying the project was based more on the principles of the US definition than the European with the aim of a holistic view. At the same time it also emphasised the strategic focus and an alignment with political intentions and users needs.

Due states that a shift in paradigm is needed in relation to the way public Real Estate is seen. From seeing public property as mainly an expense, the Real Estate portfolio must be regarded a strategic parameter that can facilitate the overall visions and goals of the local authority. The most important presumptions for FM is claimed to be an alignment with political intentions and the customer's needs – now and in the future (Due 2007). These are other words for the principle of 'professionalism as a disciplinary logic' (Figure 3) as suggested by Fournier, where the personal conduct of the facilities manager must be aligned with criteria of legitimacy and the sovereign customer in centre (Fournier 1999).

Research in local authority FM has been focused very much on the concept of outsourcing and thus the market for FM, which inscribes in the more market oriented understanding of NPM that according to Lerborg did not really come to influence Danish local authorities (Lerborg 2010). The Danish research has accordingly had a more change oriented scope with

its aim of developing knowledge to the internal organisation of FM in local authorities, which is also part of the scope of current work. In more general terms the Danish FM research does, however, include very technical matters related to tools and techniques used in FM as e.g. how to make contracts, economy steering, Real Estate Strategies and Portfolio Steering and Space Management (Jensen 2011).

As there is not one valid definition of FM, many understandings and interpretations of the term are used without further specifications. FM in the public sector can thus be understood as a function responsible for Real Estate maintenance practice inscribed in a management framework of contracting, target setting, measuring of output and bottom line thinking. It can, however, also be understood as a function responsible for Real Estate maintenance based on a holistic thinking. The principal difference between the two is that whereas the first understanding has a focus on steering technologies, the latter has a focus on the *aim* of the function. Related to the principles of respectively NPM and the Relational Paradigm (chapter 2.3.3 and 2.3.4), the first constitute the hard steering while the latter inscribes in a more soft, value based steering. The tools and technologies can, if used critically, support a holistic practice e.g. by providing valid data and thus inform communication.

It is, however, my claim that FM based primarily on the steering technologies of the market leads to further fragmentation and lack of holistic view. This is because steering by contracts and indicators becomes rigid and tends to guide actions towards what is measured, rather than leaving to the judgement of employees to take decisions in accordance with political priorities, professional standards and a feeling with the context. On the other hand, practice informed only by political values and personal judgement leave a great responsibility to the individual employees' code of conduct, and ability to actually understand and navigate in the organisational cross pressure (Lerborg 2010).

A last aspect on FM in the public sector is a critical notion on the binary of core- and support functions (Price 2002, Jensen 2011) (chapter 2.3.3). FM can be seen as an example of an out-differentiation of something that was historically integrated in everyday practice and became an emerging profession in the 70's and 80's. Per Anker Jensen (2011) provides a view on this stating that FM is based on a division between core business and secondary production or support functions placing FM as the latter. This implies that FM cannot be viewed in its own right but must always be seen in relation to core function (Jensen 2011).

This raises the question as to what core function might be in a local authority. Is it providing public services as e.g. child care, elderly care and education? Or is it 'the good and dignified life of citizens? And if it is the good life of citizens, do not all other employees in the local authority have the role of support function? It relates to the question of being a public institution, and I will leave the question open for now, but return when analysing the AR process in the Department of Public Property in Albertslund local authority.

In the next chapter the methodological frame for current work is outlined. For those reading the thesis only with interest in the concept of FM related to sustainability, I would remind you to at least read chapter 3.5, as this is where Albertslund local Authority is presented. If also the change perspective is of interest, the entire chapter 3 might be of interest as it provides the theoretical background to understand the role of the action researcher and the analysis of the methods provided in chapter 5.4.

3. METHODOLOGY: AN ACTION RESEARCH APPROACH

This chapter aims at giving the theoretical background to discuss methods and approaches for change towards sustainability, also in the critical understanding aiming at openings for horizons beyond current systems and structures. It thus provides a basis for answering the second research question:

Can Action Research establish arenas for change in a municipal Department of Public Property, leading to understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency?

Especially the concept of Arena is elaborated upon in chapter 3.2.3. Due to the double aim of both understanding sustainability in context and investigate possibilities for change, AR has been chosen as the primary approach aiming at both creating action and build new knowledge in the same process. Current AR process has been inspired by the relational governance paradigm (chapter 2.3.4 and 3.2.1), and Critical Utopian AR (chapter 3.2.2) with its emancipatoric constitutive interest and critical edge to sustainability (Nielsen 2006). The AR process has been framed by a hermeneutic understanding, as methods used have been chosen in cooperation with practice based on a hermeneutic analysis of the situation (chapter 3.3)

Before going more into detail with the actual methods applied, a review of the history of AR is presented. The history of AR can be seen as integrated in history of society as it has a critical orientation towards current structures of society. It can, however, also be seen as part of the counter movement actually shaping society. Both systemic theory and Appreciative Inquiry have been developed and operationalised within the frame of AR, from where it has spread and become mainstream management philosophy as described with the Relational Governance Paradigm by Lerborg (Lerborg 2010).

3.1 EARLY HISTORY OF ACTION RESEARCH

The history of AR can be told in many ways with focus on the trends of history that underpin the specific tradition to which the author of the story is assigned. This is also the case with this historic account, as I have chosen the parts of the story of relevance to understand AR based on the Relational Paradigm and the Critical Utopian tradition.

Current AR has its roots in the early work of Kurt Lewin (1890-1947) who is regarded the father of AR. He criticized the positivistic experiment to have a static and objectifying view on the social life of society, and suggested that the scientific value of knowledge creation should involve a change perspective with the aim of empowering participants (Nielsen 2009; 2004). Lewin's critique of the positivistic experiment was supported (by chance) from the results of the 'Hawthorne experiments' conducted at the General Electric's factory in Hawthorne in 1926-32 (Sennett 2006; 1999). Variables believed to affect working conditions were manipulated to test their relation to productivity in a factory. Though the experiment was aiming at knowledge about the relationship between efficiency and specific variables influencing working condition as e.g. light and temperature, it concluded that the production increased no matter they changed the physical environment to better or worse. As an unexpected result of the research it was concluded that the neutral (positivistic) experiment is not possible, and that the intervention in itself (being researched upon) creates some change. The controlled experiment did thus not uncover patterns of an objective reality but created a

new reality. According to Nielsen (2009) the raise in production was a result of the fact that the employees involved in the experiment began talking more together and thus developed more human relations in the organisation. It was thus the social context and not the variables tested that was responsible for the change (Nielsen 2009; 2004). The results must, however, be seen in the light of the extremely inhuman working conditions in a fordistic setting, being forced to work with only one fragment of a production process.

The Hawthorne experiment has become a classical basis for a discussion within philosophies of science regarding the understanding of the results of a research process. The question discussed is whether or not a hermeneutic interpretation of social experiments, made in a dialogue between participants and researchers, is needed to interpret the innovations of an experiment (Nielsen 2009; 2004). The Hawthorne effect (defined as the effect on the field of research of the researcher's intervention) formed the basis for an AR practice that deliberately aims at influencing or changing practice in the research process.

In this light Kurt Lewin conducted social experiments in natural settings with the aim of creating change with a specific goal, and his work led to a conceptualisation of social change as a three-stage process: Dismantling former structures (unfreezing), changing the structures (changing) and lock back to a permanent structure (freezing). The conceptualisation of change is still an influential model for social change, where it is believed that short interventions of change can create new stable situations (Greenwood, Levin 1998).

The idea of changing the researcher's role from a distant observer into an active part involved in problem solving through natural experiments was taken further in the Tavistock Institute in Great Britain just after Second World War. The studies focused on the link between production technology and work organisation, and came to represent a break with the conventional Tayloristic approach to work (Greenwood, Levin 1998). Flood (2006) refers to the work of the Tavistock Institute as a further development of open systems theory shaped by psychoanalytic thinking and an action orientation¹⁴ (Flood 2006). The work of Emery and Trist led to the development of what is today known as socio-technical systems approach, which became the basis for critical systemic AR (Babüroğlu 1992), the Relational Paradigm with Appreciative Inquiry as one cornerstone (Lerborg 2010), and in a Nordic context the dialogue tradition and Critical Utopian AR (Nielsen 2006).

The experience from Tavistock was brought to Norway by the Norwegian scholar Einar Thorsrud who sketched out a Norwegian program very much in line with Lewin's approach, but with a normative focus on creating democracy in work organisations through participatory approaches (Greenwood, Levin 1998). Lewin's work thus became a fundamental basis for the AR tradition that emerged in the Scandinavian context through the Norwegian Industrial Democracy Project in the 50's (Nielsen 2009; 2004). One of the major conceptual schemes emerging from the Norwegian project was the socio-technical thinking as a design criterion for interventions, building direct links between technology and work organization (Greenwood, Levin 1998). Socio technique is development of knowledge about the construction of the social organisation as a reality parallel to the technological reality. In a

¹⁴ Flood refers to Greenwood and Levin (1998) when describing the socio-ecological perspective as a derivative of open systems theory. Greenwood and Levin does, however, use the term socio-technical perspective and they don't refer to the roots of systems thinking. It seems that Flood has interpreted the work at the Tavistock Institute through the description of Greenwood and Levin, and I choose to refer to Flood though he refers to Greenwood and Levin.

broad sense the socio technical AR aimed at developing the employees' social organisation into a self-governing system developed by the employees (Nielsen 2009; 2004). Experiments were made in Norway and Denmark in the 60's and 70's. Outcome of the changes were often positive seen in a short term perspective. The main problem was, however, the diffusion of the changes inside as well as outside the workplaces. The strategy for diffusion was based on presentation of 'best cases' which should be disseminated on a larger scale, but according to Svensson and Nielsen this did not happen (Svensson, Nielsen 2006).

The Industrial Democracy Project had a strong democratic and idealistic dimension: Workers at the shop-floor level were regarded a value in their own right and their position was advocated by ARers and labour leaders. The ideological democratic element was, however, gradually replaced by pragmatic arguments for organisational changes, and focus shifted from democracy to empowerment, from participation as the key to democracy to participation as a necessary move to motivate workers to shape a more effective organisation. The socio-technical thinking thus became the major conceptual outcome of the Industrial Democracy Tradition (Greenwood, Levin 1998). The dualism between development and diffusion did, however, become a dilemma for the socio-technical traditions and resulted in a split in the Nordic action researchers' society and two main schools developed from the socio technical tradition in Scandinavia: Critical Utopian AR also inspired by critical theory and the dialogue tradition with a more consensus oriented approach (Nielsen 2009; 2004).

3.2 MAJOR INSPIRATIONS FOR METHODOLOGICAL CHOICES

One methodological element had a dominating role in the process: The workshop. Though inspired by different AR traditions the workshops have all been created with the intention to create arenas for change. In the following the major inspirations for choice of workshop design is presented. First the theoretical background for AR based on principles of the Relational Paradigm is unfolded, with a special focus on the method Appreciative Inquiry that was used at the beginning of the process. This is followed by an account on the historical and theoretical background for Critical Utopian AR, with a special focus on the Future Creating Workshop.

3.2.1 Action Research based on the Relational Paradigm

The Relational Paradigm as described by Lerborg (2011) is constituted by Systemic Thinking and Appreciative Inquiry, both based on social constructivistic assumptions (Lerborg 2010). In this section both Systemic AR and Appreciative Inquiry in an AR context is presented. Workshops based on the relational paradigm are thus designed according to the *principles* of the paradigm and have not as such followed a specifically predefined method.

Systemic Thinking

Systemic thinking has emerged in different fields of research and the aim of this short presentation is to give an introduction to systemic thinking in an AR context. Systemic AR is '*AR that locates local action inquiry within a wider system taking into account both the effects that the system has on local issues and vice versa*' (Burns 2007). Systemic AR is ontologically based on systemic thinking that is presented below.

Systems theory had its origin in a critique from within natural science, and the transfer of systems thinking¹⁵ to social systems has been subject to discussion within academia. The idea

¹⁵¹⁵ See also chapter 2.2.2 for an account on systems thinking.

that all phenomena are systems that can be described, explained or even predicted through models is not applicable in the social world. Understanding of social phenomena is by way of interpretation made through cognitive processes of the human brain. A systems approach will therefore employ concepts as emergence and interrelatedness to interpret social phenomena, rather than attempt to represent systems as if they exist in the world. The latter is referred to as 'systemic thinking' and represents the belief that a system is not real but an interpretation and thus socially constructed (Flood 2006). There is, however, not a coherent and consequent use of the terms which is also seen in this text. Soft Systems Thinking that is presented next is thus taking a social constructivistic stand and is thus systemic – in spite of the name.

In soft systems thinking reality is understood as the construction of human beings. Social reality is thus the construction of people's interpretation of their experience, and thus work focuses on evolving appreciation of people's points of view and intentions. Soft systems thinking also uses the concept of modelling as with systems thinking. Models are, however, not seen as representations of reality but as 'a pair of spectacles' through which reality can be interpreted. In the process of making sense of reality the cultural dimension must be taken into account, and so must the diversity of different stakeholders that make the interpretations. Soft systems thinking therefore states that an 'authentic' understanding of any action context requires participation of all stakeholders, those taking action as well as those affected by the actions.

Flood advocates a combination of systems thinking and soft systems thinking. He thus envisages a case where 'real structures' in the world are recognised (e.g. economic and political structures) and that these are necessary for social arrangements. Changing people's worldviews is thus not sufficient to change their situation, changes in the structures are also needed (this points to the critique of relativism). A criticism of soft systems thinking is that it has little to say in its principles about knowledge-power and the way that this distorts the outcome of a debate where every viewpoint is considered equally valid (but some stakeholders are more powerful in the context than others) (Flood 2006).

In the later schools of systemic AR there is a strong focus on boundary judgements, as it is crucial for the process to be aware of constructed boundaries to understand or interpret the systems dynamics. Gerald Midgley thus points to the boundary critique as an important first step in every process, and he inscribes in critical systemic thinking which is taking a critical stand towards earlier systemic AR approaches (Midgley 2000).

Critical systems thinking is an approach to systemic thinking that emerged in the 80's having the critique of soft systems methodology on its agenda. Critical system thinkers find integrity through a number of core commitments in spite of different approaches: Critical awareness, social awareness, human emancipation, theoretical and methodological complementarities. 1) Critical awareness can be focusing either on the assumptions and values inherent in any systems design or on the strengths and weaknesses and theoretical underpinnings of systems methodologies and associated methods and techniques. 2) Social awareness is about appreciation of social rules that influence modes of practice in society. 3) Human emancipation expresses a concern for people's well-being as well as development of their potential, in a world where people are pressed to contribute to efficiency and effectiveness in a work situation where they may not control or even make sense of their work life. 4) Theoretical complementarities must follow the concerns of human emancipation for two reasons: a) Critical systems thinking must not itself slip into the knowledge-power trap

creating its own conventional wisdom; b) The scope of issues raised in the last paragraph cannot easily be addressed by just one systems approach, as any framework of ideas has limitations. 5) Methodological complementarities are aligned with theoretical complementarities as the framework of ideas brings methodological principles for action. Critical system thinking thus recognises the need for different methodological approaches addressing the concerns of human emancipation (Flood 2010, Midgley 2000).

Appreciative Inquiry

Appreciative Inquiry was first presented in 1986 in the doctoral dissertation (unpublished) by Cooperrider (Yaeger, Sorensen et al. 2005). It is based on a long American tradition for 'positive thinking' and has emerged from an AR project with roots in the work of Kurt Lewin and the American Organizational Development (OD) tradition (Lerborg 2010). The method was invented by the action researcher Cooperrider who claimed that it 'explores the best in human and the world surrounding us'. A basis assumption is that reality is not fixed and more (understandings of) realities exist. It is believed that in every society and in every organisation something is working, and what we choose to focus on will be our future reality. The method furthermore builds on the understanding that humans feel safe by travelling into the (unknown) future if they are familiar with the vision of what will come and at the same time experience that they bring along the best from the past (Pjetursson 2009). The strong focus on the 'positive change core' is argued to be a focus on 'the other side of problems'. The method is thus, according to Cooperrider and Whitney, not ignoring problems, but focusing on the wish behind the experienced problems (Cooperrider, Whitney 2005). Appreciative Inquiry is based on a number of principles: The constructionist Principle, the Principle of simultaneity, the Anticipatory Principle, the Poetic Principle and the Positive Principle.

Cooperrider and Whitney phrase their understanding of social constructivism with references to Ken Gergen (Towards transformation in Social Knowledge (1982)): *Constructivism is an approach to human science and practice which replaces the individual with the relationship as the locus of knowledge and thus it is build around a keen appreciation of the power of language and discourse of all types (words, metaphors, narratives etc.) to create our sense of reality - our sense of the true, the good, the possible* (Cooperrider, Whitney 2005). Constructionism thus replaces claims based on objective knowledge with the never ending collaborative quest to understand and construct options for better living.

In Appreciative Inquiry it is recognised that inquiry and change are simultaneous processes. The inquiry is regarded 'the seed of change' – the things people think and talk about, discover and learn and the things that inform dialogue and inspire images of the future. Cooperrider and Whitney formulate it as: *'The questions we ask set the stage for what we 'find' and what we 'discover' (the data) becomes the linguistic material, the stories, out of which the future is conceived, conversed about and constructed'* (Cooperrider, Whitney 2005). The construction is created in an interaction between human beings in organisations, and as long as the organisational members work with the stories (the construction of) reality changes.

The anticipatory view of organisational life is based on the belief that images of the future guide the current behaviour of any organism or organisation. According to Cooperrider and Whitney (2005) human systems are forever projecting ahead of themselves a horizon of expectation (formed linguistically) that brings the future into the presence as a mobilising agent. To inquire in ways that serve to refashion anticipatory reality would thus create new positive images leading to positive actions. The anticipatory principle is theoretically based on

empirical studies as e.g. the Pygmalion dynamics in classrooms (students learn to the level expected to by the teacher) or the placebo studies in medicine (people get cured because they believe in the medicine, also when it is not real medicine they are given) (Cooperrider, Whitney 2005).

The poetic principle says that the story of an organisation is constantly being co-authored and that past, present and futures are endless sources of learning, inspiration or interpretation. It is the claim of AI that any topic in an organisation can be subject to inquiry and change, which is based on the social constructivistic belief that the topics are social artefacts or products of social processes – not something from outside dictating or driving reality (Cooperrider, Whitney 2005).

According to Cooperrider and Whitney the positive principle is based on empirical observations when working with Appreciative Inquiry showing that the more positive the question asked, the more long lasting and successful the change effort (Cooperrider, Whitney 2005). Appreciative Inquiry is thus distancing itself from the problem-oriented approach to change. Ludema et. al. (2006) claim that *'action research has largely failed as an instrument for advancing 'second order' social organisational transformation because of its romance with critique at the expense of appreciation.'* They also claim that *'to the extent that action research maintains a problem-oriented view of the world it diminishes the capacity of researchers and practitioners to produce innovative theory capable of inspiring the imagination, commitment and passionate dialogue required for the consensual reordering of social conduct... If we devote our attention to what is wrong with organisations and communities we lose the ability to see and understand what gives life to organisations and to discover ways to sustain and enhance that life-giving potential'* (Ludema, Cooperrider et al. 2006).

Appreciative Inquiry is an explicit methodology to create organisational changes through positive thinking and focus on possibilities. In everyday work life Appreciative Inquiry can be traced as slogans as 'think positive', 'focus on possibilities and not obstacles', 'the glass is half full – not half empty' or learn to say 'YES, and...' instead of 'NO, but...' etc. The positive and appreciating approach is often dichotomised with the so called deficiency-thinking (Lerborg 2010). It is claimed that when people in organisations inquire into their weaknesses and deficiencies, they gain an expert knowledge of what is 'wrong' with their organisations, and they may even become proficient problem solvers, but they do not strengthen their collective capacity to imagine and to build better futures. The ability to foster constructive change relies on the capability of a group or organisation to see and produce alternative realities through language (Ludema, Cooperrider et al. 2006).

Ludema et. al. (2006) are leaning on the work of Gergen¹⁶ in 'The limits of pure critique'. Here he identifies the consequences of the critical effort which according to him destroy or erode human communities and the production of generative knowledge. Gergen claims that a consequence of a critical approach is the containment of conversation, as the critique establishes a binary that delimits the ideas created to only reflect the critique. According to Gergen, words, sentences, images and ideas that lie outside of the binary are ignored, which means that artificially boundaries are drawn curtailing the exploration of new knowledge and forecloses opportunities for breakthrough discoveries. Having established the binary the

¹⁶ Gergen 1994. The limits of pure critique. In Simons and Billig 'After Postmodernism: Reconstruction ideology Critique.' London: Sage Publications. Pp. 58-78.

critic's voice is claimed to reify the terms of the binary and thereby silencing other voices. It is assumed that arguments will proceed within the terms of the binary which will remove other realities, values and concerns from the view. It is furthermore claimed that the act of critique leads to rhetorical incitement as people start criticising each other, leading to defensive attitudes and destroyed relationships (Ludema, Cooperrider et al. 2006).

Ludema et. al. (2006) invented the method 4D that takes participants through a process of Discovery, Dream, Design and Destiny (Ludema, Cooperrider et al. 2006). The model is later extended to also include a first phase – Define – in order to find out what topics are relevant to explore (Pjetursson 2009). The method thus describes five phases (5D) in a process as presented below.

- 1 Define: Topic choice.
- 2 Discovery: Appreciating 'the best of what is'.
- 3 Dream: Envisioning 'what could be'.
- 4 Design: Co-constructing 'what should be'.
- 5 Destiny: Sustaining 'what will be'.

In the Define phase the topic is chosen. All kinds of topics can be chosen, as long as it is considered important for the organisation (Sorensen, Yaeger et al. 2005). In the discovery phase the participants are invited to search for and highlight their best experience and discuss what made it possible. With the best experience in mind, the participants develop positive guiding images of the future, if possible, formulated in present tense (Dream) (Ludema, Cooperrider et al. 2006). The third phase is where the participants design the future through dialogue. The purpose of this phase is to create and agree on shared future scenario(s) or vision(s) for the future, and to formulate some statements about organisational changes in order to realise the visions. The Destiny phase is an invitation to actually construct the future through innovation and action. The participants discuss how the vision can become a reality, and first steps for individuals or teams are decided (Pjetursson 2009). The 5D model was used as inspiration for the first part of the AR process.

3.2.2 Critical Action Research

Critical AR is based on critical theory¹⁷ and has had different approaches to research and action during the time. As forerunners and inspiration to the Critical Utopian AR tradition, the resource building approach in Scandinavia emerged in the 80's connected to radical students' movement at the universities and aim at creating 'joint venture' research with workers and unions. The main focus was development of business specific public discussions and strategies against the capitalistic hegemony, and the criteria for knowledge were bound to consciousness-raising and learning process by the workers. Oskar Negt developed a critical research tradition together with the unions in Germany, based on critical theory by the philosophers Adorno and Horkheimer. The idea was that they should give space for the expression of utopian social needs in relation to the entire life world. Together with researchers the workers elaborated on own working experiences as well as in the context of

¹⁷ Critical theory is interested in expressing an understanding of 'what is' in the light of what 'should be', as opposed to traditional theory that does not take such normative and subjective stand. That means that there can always be found some utopian 'otherness' behind critical theories reflecting reality in a critical light (Nielsen 2006). In an action research context the 'otherness' can be seen as the normative wishes that are emerging during the process and thus becomes basis for change.

family and societal institutions. The aim was to create self regulated social arenas that should exist as a 'subjective factor on societal level' as the arena is addressing needs in relation to work life, family, gender, locality and the society as a whole (Nielsen 2009; 2004).

Since mid 80's further attempts were made to revitalize critical AR in Germany and Denmark inspired by the future research of Robert Jungk (1913-1994). The focus in the work was development of utopian horizons for a democratic social life and initiation of social experiments based on the critical-utopian method 'the Future Creating Workshop' developed by Robert Jungk (Nielsen 2009; 2004, Jungk, Müllert 1989). Jungk was thus engaged in creating utopian horizons beyond existing relatively narrow technocratic future horizons and thereby open up for a variety of future possibilities. His thinking was developed during the period of industrialisation and post industrial society that was dominated by expert oriented future scenarios, and he argued that social experiments were needed to make radical changes. According to Nielsen the pragmatic normativity of the critical tradition allows for arenas where people can express their critique regarding structure of society. Critical AR thus aims at more radical structural changes of society, searching for alternatives in everyday life and society as a whole (Nielsen 2009; 2004).

The Future Creating Workshop

The aim of the Danish Critical Utopian AR was – and is – to create democratizing changes in work life through future utopias based on the workers' experience with experienced ambivalences in everyday life. Methodologically free arenas are essential to frame the process of creating social imagination in a safe environment (Nielsen 2009; 2004). The Future Creating Workshop was developed as a way to concretize the utopian thinking about everyday life, and creates an arena within which insecurity about changes could be overcome by an exploration of possible and desired futures. The method has been further developed by Paaby, Nielsen and Nielsen (Paaby, Nielsen et al. 1998), by including an elaboration on the critique by silent plays before the utopian phase and 'the advocacy of the devil' before the realisation phase.¹⁸

The Future Creating Workshop is a way of designing a process in a workshop that enables social imagination to evolve in the shape of a critique of existing life arenas, utopian ideas and concrete visions about the possible next steps. The arena¹⁹ for this must support systematic experimentation which is only possible with a certain distance to the routines of everyday life and a call for cooperation through democracy, play and motion. The Future Creation Workshop aims at a certain arena - 'free spaces' - away from everyday restrictions and power structures. The concept of free space has been defined by Schwencke (Schwencke 2006): '*a technique of counteracting the asymmetry [in power relations], something more than empty time and room*'.

¹⁸ The Future Creating Workshop method used in this context has been close to the method as described by Paaby, Nielsen and Nielsen, with small changes as the workshop was a step in an already ongoing process.

¹⁹ An ARENA is here understood as a room with a physical, a social and an aesthetic dimension that is designed and facilitated in a way that supports the aim(s) of the workshop. The physical dimension of the arena is the physical facility (e.g. meeting room) for the workshop. The social dimension is the meeting place for experiences, critique and visions of the participants, which is facilitated by e.g. walls covered by flip overs for common notes, but also by the processual facilitation by the facilitator. The Aesthetic dimension is dedicated to the feelings, senses and imaginal forces, which is most clearly seen by the plays giving a physical substance to the content (e.g. pictures of critique) (Husted, Tofteng 2005).

Social imagination as understood in the Future Creating Workshop has its roots in the everyday experience of human. It is anchored in the life world and further developed through communicative action. People have experience from a whole life, also some that are not normally expressed in a work life dominated by the instrumental rationality. That means that there shall not only be a certain distance. A connection to everyday life must also be present. The future workshop grows from the critique, wishes and expression of ambivalences that is part of everybody's everyday life. The assumption is that the critique and wishes are not only formulated but also allowed to grow beyond the limits experienced in everyday life. The Future Creating Workshop is characterized by the unity of play and seriousness and thus the space to find 'the inner child'. This is supported by the strict division of phases that enables the participants to be exactly where they are, having confidence that the workshop leader will lead the process and present the next phase when appropriate (Paaby, Nielsen et al. 1998).

The Future Creating Workshop is led by the theme of the workshop (Here: Work life and Sustainability) which in the critique and utopia phases are transformed to titles asking for the subjective critique of the participants (critique on everyday work life and the sustainable aspects of our action) (Husted, Tofteng 2005). The process has three main phases: Critique, Utopia and Realisation (for more comprehensive explanation, see (Paaby, Nielsen et al. 1998)).

- Critique phase: Short statements of critique (brainstorm) → identifying centres of gravity in the critique → performing pictures of the critique by silent theatre.
- Utopian phase: Short statements of utopian ideas (brainstorm) → identifying centres of gravity in the utopian ideas → developing the utopias → presentation of utopias and the Devil's advocate (a gentle critique of something cared for).
- Realisation phase: How could (parts of) the utopian horizons be realised in the future? Ideas and first steps.

The knowledge gained through the workshop is meant to enable participants to see reality in a new light or even lead to new recognition. Social experiments in the workshop are regarded 'protected free spaces' where ideas and actions for radical changes in society can be prepared. What makes the future workshop a free space is the structure specified by rules that aim at reducing competition and power when critique, utopian ideas and drafts for action are formulated and gestalted. The rules enable a reduction of structures in the everyday life that impede critique, free imagination and desire to formulate radical ideas for action (Nielsen 2009; 2004).

3.2.3 Arenas for Change

Theoretically both Appreciative Inquiry and the Future Creating Workshop build on the assumption that strong pictures of a desired future can lead to changes.

Appreciative Inquiry assumes that positive future dreams lead to actions moving practice towards the desired future, and that the stronger focus on the future the more efficient changes will occur. Appreciative Inquiry does, however, not take into account the power of reality, imposing restrictions in everyday life that might make action, however wished for, impossible. The contradicting rationalities and wishes that are part of life are not addressed deliberately in the process. If touched upon it has the risk of becoming a de-coupled part of the process that is otherwise entirely focusing on the positive future image. As future

scenarios developed in Appreciative Inquiry are based on what is already there (what works), they will most likely be ideas to improvements of present systems and practice.

Workshops organised and facilitated on principles of Appreciative Inquiry must be regarded a limited free space as defined by Schwencke (Schwencke 2006) due to the intended participation of all relevant stakeholders, which means that employees as well as managers take part in the inquiry. The un-equal power relation constituted by the formal power of managers potentially imposes restrictions on the social imagination aimed at²⁰. Also the resistance towards critique limits the freedom of the ‘free space’. A claim behind Appreciative Inquiry is that critique destroys communities through negative circles of communication (Ludema, Cooperrider et al. 2006). This becomes challenged when reading the work of Rasmus Willig, who claims that *not* addressing and handling critique destroys communities by de-empowering employees. According to Willig the modern societal changes have led to a work life situation where people experience that their critique is not heard and that they are unable to influence their own work situation. He claims that public sector employees are subject to de-empowerment due to steering technologies in NPM that has led to a dethronement of the professional foundation for public services (Willig 2009).

This is also the thinking behind the Future Creating Workshop. Though also based on an assumption that strong future horizons are essential for change, it builds on fundamental respect for the ambivalences connected to the life world and the assumption that reality is perceived as un-changeable (reified) due to current power structures. Critique is therefore addressed deliberately at the beginning of the workshop, to make space for expression of ambivalences and frustrations. Allowing for critique connected to everyday life thus opens for a life world perspective which according to Elling is necessary to break with current, unsustainable societal structures, and thereby allowing for utopian future horizons reaching beyond the perceived boundaries of the system (Elling 2010; 2008).

Assuming that arenas allowing for a life world perspective to emerge are important for change towards sustainability as claimed by Elling, the approaches outlined are theoretically not equally suited for this particular challenge. Whether this also shows in practices will be subject to further analysis in chapter 5.2.

3.3 PLURALISM IN METHODS

Inspired by the ontological positions represented by respectively the Relational Paradigm and Critical Utopian AR, my choice of methodological AR approach was not obvious. On the one hand I was curious to explore the relational paradigm as a theoretical inspiration for change, as it is a significant steering trend in local authorities. My curiosity was, however, mixed with a sceptical distance as I had experienced the ‘sale’ of systemic thinking as quite uncritical and with the notion of campaigning attached to it. Having been part of a Critical Utopian AR process (Nielsen, Nielsen 2007, Hansen 2007) in the role of local Agenda 21 coordinator in the local authority of Møn, I also had personal experience and inspirations from the Future Creating Workshop. The Critical Utopian AR tradition has a specific focus on the substantial aspects of sustainability (Nielsen, Elling et al. 2010), which became a very important inspiration for current work. In the end I ended up drawing on thinking from both paradigms,

²⁰ In current AR the Department manager was, however, only taking part in limited parts of the Appreciative Inquiry, which was an aim of reducing un-equal power relations in the workshops.

which is in line with the opening in plurality in methods as suggested by Midgley (Midgley 2000). This is unfolded in the narrative presented in chapter 4.

The AR process was designed in dialogue with the employees and the manager along the way, based on a hermeneutic understanding of the situation. The dialogue with practice about interpretations of context and understandings was created through informal meetings, qualitative interviews, at department meetings and in the workshops.

Theoretically the hermeneutic analysis is based on the hermeneutic circle which is symbolising an interaction between 'part' and 'whole'. The meaning of parts is determined by the meaning of the whole, as the meaning of the whole exists on the basis of the meaning of the parts. It is thus the connection between parts and whole that enables understanding and interpretation (Højberg 2009; 2004). Understanding must, however, also be related to the context which turns the hermeneutic circle into a relation between text²¹ and context. Understanding a social phenomenon is bound to context and based on presumptions²² carried by the interpreter. Presumptions thus constitute the horizon²³ for understandings from which we understand the world, individually as well as collectively through culture. In the act of understanding, the interpreter's horizon fuses with the horizon of the object in a circular interaction between parts and whole, subject and object (Højberg 2009; 2004).

Deciding the methods applied in the AR process along the way has only been possible because of the many informal and formal meetings between workshops, supplemented by a limited number of qualitative interviews conducted with employees and the manager. This has helped me to navigate in relation to needs and reflections by employees, and thus better balance the workshops aligned with wishes from employees as well as my own academic interests. The interviews have been transcribed (list on interviews chapter 7.2) and constituted part of the basis for the narrative (chapter 4).

3.4 ONTOLOGY AND EPISTEMOLOGY

As AR is practiced by researchers with different ontological positions there is not one perception of reality in AR. The first explicit ontological assumptions in AR were, however, formulated by the Norwegian philosopher Hans Skjervheim. AR builds on the belief that reality must always be considered unfinished and changeable in many directions, and that democratic processes can lead to active decisions regarding the direction of change. Skjervheim claims that engagement is a basis virtue of the human life, and that the researcher trying to establish neutral research would never succeed. The researcher is thus on the same ontological level as other actors, and the relation to other humans must build upon a call to act

²¹ The term 'text' shall be understood very broadly as including all types of empirical phenomena that we aim at understanding (Fredslund 2005).

²² Presumptions are defined as the understanding of a phenomenon prior to analysis (preunderstandings) and the luggage one draws on when understanding the world (presuppositions) (Højberg 2009; 2004, *NEWS AND LEGAL REVIEW - News review - Facilities Management news coverage brings you the latest developments in the industry and keeps you up to date with legal issues. Topics this issue include - Government cuts Part L compliance timetable; . DTI consults on a more sustainable built environment; and . MEPs reach compromise on Services Directive.* 2006).

²³ The horizon is the range of vision that includes everything that can be seen from a particular vantage point (Højberg 2009; 2004, *NEWS AND LEGAL REVIEW - News review - Facilities Management news coverage brings you the latest developments in the industry and keeps you up to date with legal issues. Topics this issue include - Government cuts Part L compliance timetable; . DTI consults on a more sustainable built environment; and . MEPs reach compromise on Services Directive.* 2006).

together (Skjervheim 1996). A critique on traditional analytical researchers aiming at neutrality is that they make constructions of reality with the purpose of researching, which means that it is the reality constructed by the researcher that is 'measured', not the dynamic and constantly changing reality. All dialogues have elements of 'creating', being on the way somewhere. If the researcher is avoiding this in the quest for neutrality, the picture of reality will become reified and distanced from opportunities for democratic change (Nielsen 2009; 2004).

The term reification is by Skjervheim an ontological key term, describing reality as a state of frozen activity not able to change. According to Skjervheim the researcher must have a participative approach to the field, and in order to get a valid picture of reality the researcher must not solely relate to the social engagement of the actor but also articulate her own engagement in the process. To be able to see social reality in an unfinished, non reified form the researcher must be in a position where change horizons are visible. The understanding of reality is always temporary as something that can change in many directions. Reification is, however, never complete as there are always elements of immature patterns of action present in the social life. According to Nielsen (2009) critical utopian actions researchers believe in an actual reality that sometimes appears reified to us. The aim of AR is thus to help creating responsibility and social communities on the expense of reified reality (Nielsen 2009; 2004).

In Critical AR the subject is regarded as something able to actively create itself – socially as well as practically, except for the fact that it is restricted by the social conditions under which it lives. As individuals in modern society we experience ambivalences as a result of choices that we are not able to make, as e.g. the need for adaptation to power structures of everyday life and at the same time an urge to be actively taking part in free social relations. It is assumed that society is reified and that humans live in social structures that delimit their possibilities to understand and gain common insight and control of the development they are subject to. The role of critical AR is thus to create counter movements against reification by empowering people in their everyday life (Nielsen 2009; 2004).

The assumption in critical AR is that contradictions and ambivalences exist side by side in ones imagination and that social imagination can open up for an action orientation beyond the barriers experienced in reality. AR thus offers free spaces where imagination can evolve and be transformed into social 'draft of actions' that would be subject to taboo or suppression within the realistic horizon of everyday life. The collective free spaces are thus believed to support the creation of ideas for changes in everyday life that would not otherwise be subject to change due to fear of leaving the well known reality (Nielsen 2009; 2004).

In the current AR project the action researcher's ontology has been quite in line with that described by Skjervheim: In every step taken decisions have been made in equal dialogue with practice both on management level and directly with the employees. This has been the most important ontological position in the process, which influenced the choice of methodology differently than if e.g. the constitutive emancipatoric knowledge interest had been in the foreground. The emancipatoric interests were, however, always inscribed in the critical hermeneutic thinking behind every step taken in the process.

3.4.1 Validity of Knowledge

Knowledge was created with respect to 1) the local context, 2) academia and 3) a broader target group in society respectively (Figure 4). On the contextual level knowledge has been created through workshops, informal dialogue and interviews. One aspect of the hermeneutic analysis is to seek the general aspects of the particular, contextual knowledge. During the AR process interpretations have been made in relation to academic theory, and ideas and reflections were presented to the employees in order to validate the analysis – but also to further challenge the thinking in the local context (symbolised by the double arrow in Figure 4).

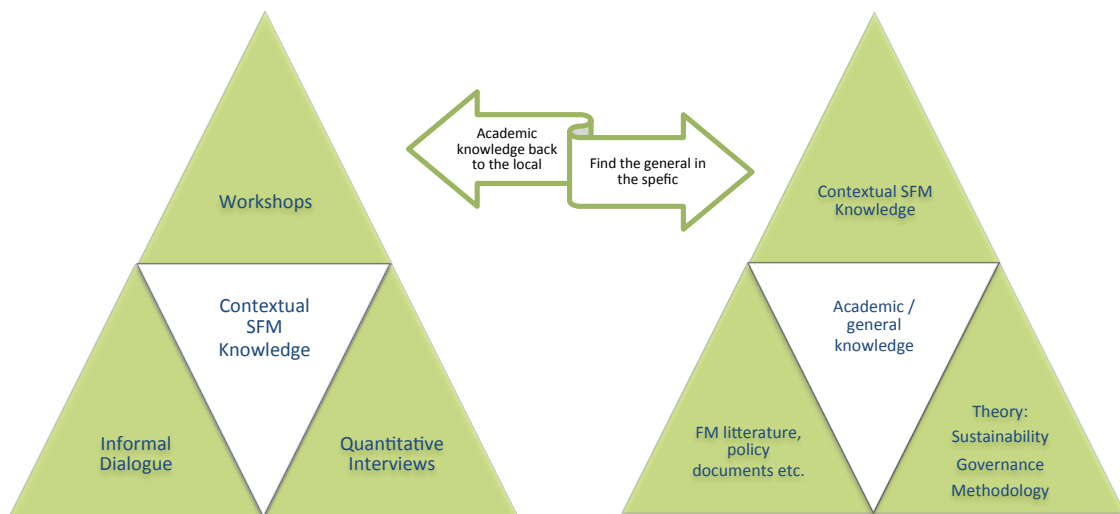


Figure 4: Contextual and general knowledge. Contextual knowledge about SFM is created on the basis of learning from workshops, interviews and informal dialogues. Academic and more general knowledge is created in the discussion between contextual knowledge, relevant theory and studies of FM. There has, however, also been a transfer of knowledge from academia back to the local through presentations of academic reflections on the basis of the hermeneutic analysis made along the way. This has been used to qualify and validate the hermeneutic analysis – and to further challenge the thinking in the local context.

The AR traditions agree that an involvement of participants is crucial in the formulation of conclusions, as researchers alone cannot conclude on the experience from the actions taken. In the Critical Utopian tradition valid data is primary empirical knowledge gained through the process and documented through the production of flip-charts²⁴. Data is seen as something of value for the participants and not something produced solely for the use of the researcher. One criterion for success is thus a democratisation of knowledge. Interpretation of the material must also be subject to a common process where the experience of the process is brought in dialogue with already existing knowledge – practical experience elsewhere as well as theoretical academic knowledge (Nielsen 2009; 2004). This has also been the case in the current work as analysis and conclusions have been presented and discussed with employees and the manager along the way. An employee²⁵ helped me prepare the joint analysis in the final workshop based on the narrative. The workshop held few month prior to the final

²⁴ Productions in the form of flip charts etc. are collected in logbooks in the present study.

²⁵ Jan Holm, team Road and Park.

dissemination, had the primary aim of analysing the process *together* in relation to the theoretical perspectives presented in the first part of this theses (chapter 2).

In the narrative citations and scenic reconstructions have been used to bring the voices of the employees into the analyses, which has resulted in a pretty long narrative. The aim has, however, been to enhance validity of the analysis by not only relating to *my* words and interpretations of the process. The narrative is written for the employees in Albertslund local authority to maintain knowledge related to the change process. Also other professionals working with FM in local authorities and beyond can, however, hopefully gain from reading the narrative. It gives an insight in the actual steps taken in a change process extended over three years.

To enhance the quality of the rhetoric in current work I had a facilities manager employed in a local authority²⁶ to give feedback on the work in the final stage. This helped me frame FM in the analysis and made clear what – from her point of view – could be interesting for the facilities manager in local authorities.

3.4.2 Evaluation of Action Research

Based on the belief that the researcher must engage in change to be able to recognise or interpret the social reality, it becomes possible to define a scientific theory of learning based on joint action. The process of learning is described as ‘joint venture’ as researchers and participants are creating shared knowledge in a dialogical process. Criteria for truth or learning are bound to practical change, to barriers and opportunities for change and to creation of experience. In critical AR epistemological learning is seen as critical mirroring of the reified society in a utopian idea about a democratic society characterized by individuality, autonomy, freedom and happiness. The epistemology of critical AR thus exists in a paradox by on the one hand having to refer to a utopia to be able to see the reification or reified structures, and on the other hand not being able to engage with institutional actors without the risk of legitimising interests of instrumental character and thereby undermine the intellectual critique of society as a whole (Nielsen 2009; 2004).

In the current work I have taken a very pragmatic viewpoint also allowing for engagement of more instrumental character as this was important for the employees. The instrumental rationality is part of reality in the organisation and making systems more efficient is crucial to navigate. I did, however, aim at also challenging the instrumental rationality by working with utopian horizons for sustainable practice (Future Creating Workshop) as well at outlining utopian horizons for more sustainable structures of society (Vandana Shiva).

In the current work one basic assumption is that casual relations in social systems cannot be identified and it would not really make sense to try. Evaluation then becomes very difficult, as change cannot be evaluated as being a *result* of the process but only to have taken place in the time of AR. Rhetorically that means that when presenting the action part of the process changes can only be connected to the process to the extent that it has been invented or made subject to elaboration in the workshops, or when employees or managers credit the process for the achievements. I have therefore chosen to make the presentations and joint analysis in the final workshop inform the interpretation of the change perspectives (chapter 4.6).

²⁶ Tibbe Iben Knudsen, local authority of Gladsaxe, Department of Real Estate.

3.4.3 Dissemination

There has historically been a challenge connected to the dissemination of new knowledge from AR, due to the focus on the change perspective in the specific process (Svensson, Nielsen 2006) (chapter 3.1). In the current AR project different attempts to disseminate experience and knowledge along the way have been made: Writing and presenting conference papers (Galamba 2010, Nielsen, Galamba 2010, Galamba 2011), writing popular articles for the magazine FM-Update (, FM Update) and speaking in non-academic settings (conferences and seminars). The real dissemination must, however, take place through dialogue between employees/the Department Manager and cooperation partners - internal in the organisation as well as professional connections in local authority FM functions. Due to the high learning curve and visible results from the process, the Department was one out of three nominated to the finale of 'Driftherreprise' (a prize given for exceptional results or processes within FM and Real Estate). Unfortunately they did not get the prize, but have been asked by the chair of the evaluation committee to present their work at a DFM seminar at the beginning of next year. Recently Albertslund local authority did, however, get a prize as 'Nordic Energy local Authority 2011' (Nordisk Energikommune 2011) (Albertslund Posten 2011).

This brings me to the issue of *time and space*. AR is time consuming and a demanding approach to research and it can take years before results can be seen and disseminated, which is often beyond the time allowed for research projects. In this case I have chosen to disseminate my work in a monography, which is due to the hermeneutic character of the process that takes quite some explanation to make transparent to the reader. It is of course possible to write articles afterwards, but writing articles before 'chewing through the journey' would in my view be a reduction of the material beyond what would be ethically right in a process where I am researching *with* others. Writing a monography has enabled me to embrace a more whole picture of the process, and to analyse and discuss most important learning with the employees and manager along the way and before finishing the writing.

The Critical Utopian AR tradition aims to disseminate to a broader public by letting the participants tell their story to invited guests from local society or other relevant networks. By telling the story as a narrative to a broader public, the knowledge created in the process is made subject to a democratic dialogue, and thus further developed and internalised with the participants. This approach is connected to the criteria of success in the tradition: A process concluded with open horizons for change (Nielsen 2009; 2004). This happened in current work to a certain extent as conclusions of the AR process were presented to the top management as a basis for further dialogue (chapter 4.6).

3.5 COOPERATION PARTNER: ALBERTSLUND LOCAL AUTHORITY

I will now turn to the empirical field by presenting Albertslund local authority and the Department for Public Property. After this brief presentation the narrative of the AR process is unfolded in chapter 4.

Albertslund local authority is one of the environmental frontrunners in Denmark among local authorities that have worked systematically with both user involvement and internal environmental management for decades. Albertslund is a young city in the outskirts of Copenhagen established in the 60's as an answer to families' needs to move out of the bigger cities. Within a decade the size of the city grew from approximately 3,000 to 30,000 inhabitants. Today 27.206 citizens live in Albertslund in an area of 23 square kilometre (Albertslund Kommune 2009).

Since the early 90's Albertslund Local Authority is known for the extensive citizen involvement in the management of green areas and in environmental questions. This was an answer to the Rio-process in 1992 where Agenda 21 was signed, emphasising local authorities' role in chapter 28. This was important as many of the problems and solutions suggested in Agenda 21 are anchored in the local context. Albertslund local authority thus became one of the front runners on Agenda 21, which showed by the publication of the first Danish Green Account in a public institution in 1992 (Holm 2007). The Green Account has since developed into an account showing the resource use for the entire city – the authorities' buildings, private housings, businesses and traffic and in 2011 the first digital green account was published. The implementation of the Environmental Management System began in 1999 and the organisation is now fully certified with EMAS (Miljøstyrelsen 2011). This means that 3,000 employees are working within the frame of EMAS: E.g. the administrations, kindergartens, schools and elderly centres (Albertslund Kommune 2007, Albertslund Kommune 2008).

The implementation of green accounts and environmental management systems is part of the local Agenda 21 'Sweep your own doorstep'-strategy, which was implemented as a more technocratic answer to the environmental challenges. Albertslund was also early in the process formalising radical forms of involvement of citizens, organisations and business. This was institutionalised through the Users Group²⁷ and the Agenda Centre that initiates citizen related activities (Holm 2007).

Organisationally Albertslund local authority is a rather flat organisation, with the political top represented by the mayor and the Municipality Director on administrative level. Supported by Centre for management & staff and the economy centre four professional administrations are responsible for (handling) the local authority obligations. The Department of Public Property is placed in the Administration of Environment and Engineering (Figure 5).

²⁷ Group of representants from local councils, living areas etc. who are consulted in all questions related to environmental issues before they are sent to the City Council for political decision. According to the former Mayor Finn Aaberg the political process has always followed the recommendation from the Users Group (091215, Int. FA).

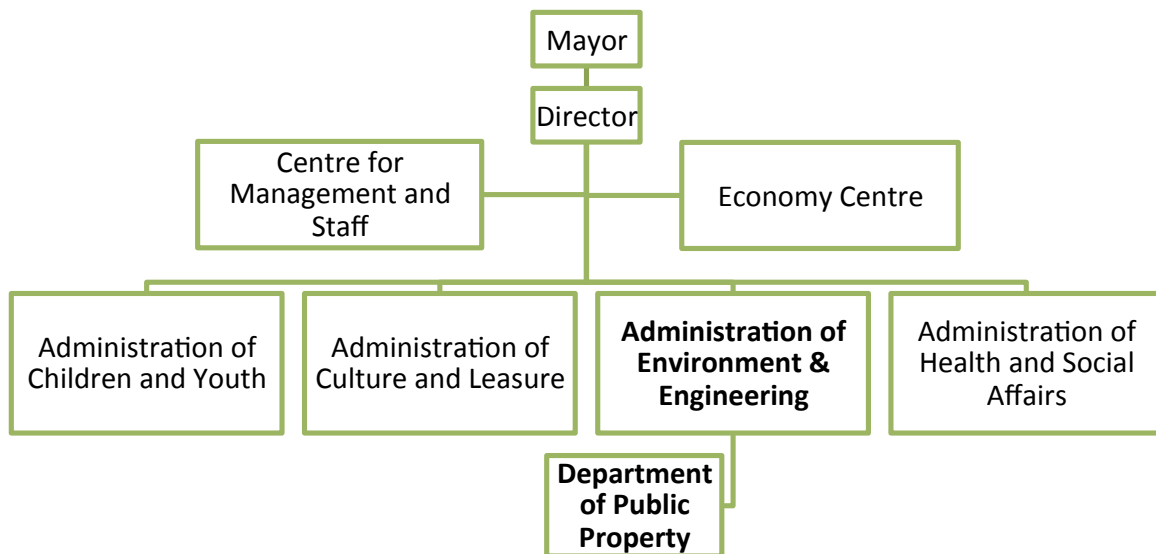


Figure 5: The administrative organisation of Albertslund Local Authority. Source: (Albertslund Kommune 2010)

As shown in Figure 6 the Department of Public Property is an integrated function in the municipal organisation, placed in the Administration of Environment and Engineering handling all physical aspects of the city. The Department deals with ‘hard FM’ tasks, while tasks belonging to the category of ‘soft FM’ are handled by the Service Department (cleaning, security service, post handling, catering etc.).

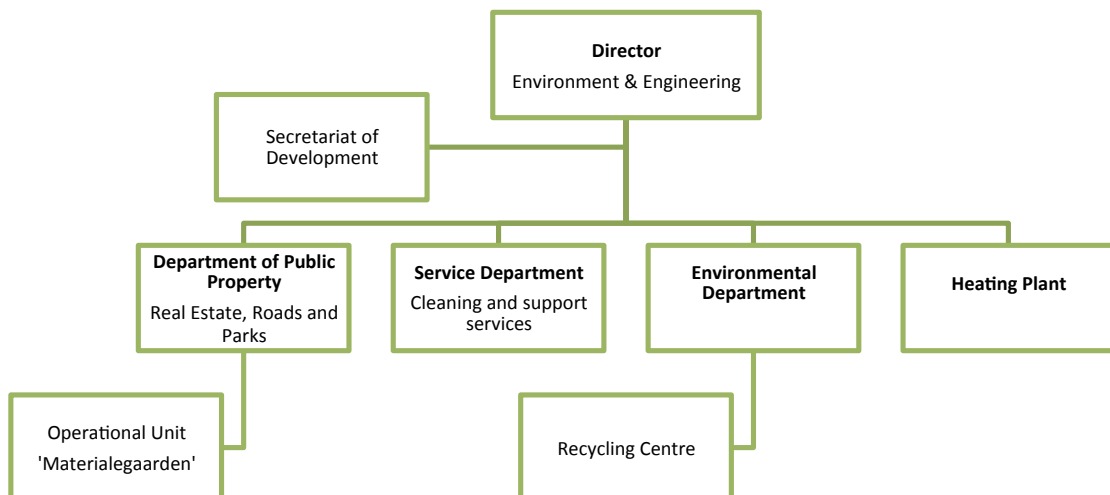


Figure 6: Organisation of Administration of Environment & Engineering in Albertslund Local Authority. Source: (Albertslund Kommune 2010)

The Administration was a merger of two former Administrations working with respectively technical and environmental matters. A process had taken place where managers on lower levels were removed and greater units formed with managers handling more employees on a

more generic level (090626, Int. SK). In terms of the managerial approach Albertslund local Authority is leaning on a systemic basis with references to the concept of NPM as an ideological inspiration (Rasmussen, Bluhme et al. 2009). The relational paradigm does, however, also play an important role which is implemented through e.g. the concept of ‘management through committing dialogue’. A great part of employees in the central administration have thus been trained in project management with references to systemic thinking (Albertslund Kommune 2010).

3.5.1 Department of Public Property

The Department of Public Property was formed in the process of a greater reorganisation of the Administrations in 2007. It was a deliberate choice to merge the functions of Real Estate, Road and Parks, as it was believed that it would lead to a greater coordination of projects concerning all public physical aspects of the city.

At the beginning of our cooperation the 27 employees in the Department were organised in four teams responsible for respectively Road & Park, Architecture & Planning, Operation & Maintenance and GIS & Call Centre²⁸. While employees working with Infrastructure, Planning and GIS are working primarily on a strategic and tactical level, ‘Operation & Maintenance’ and Call Centre are anchored more on a tactical level and in the day to day operational tasks.

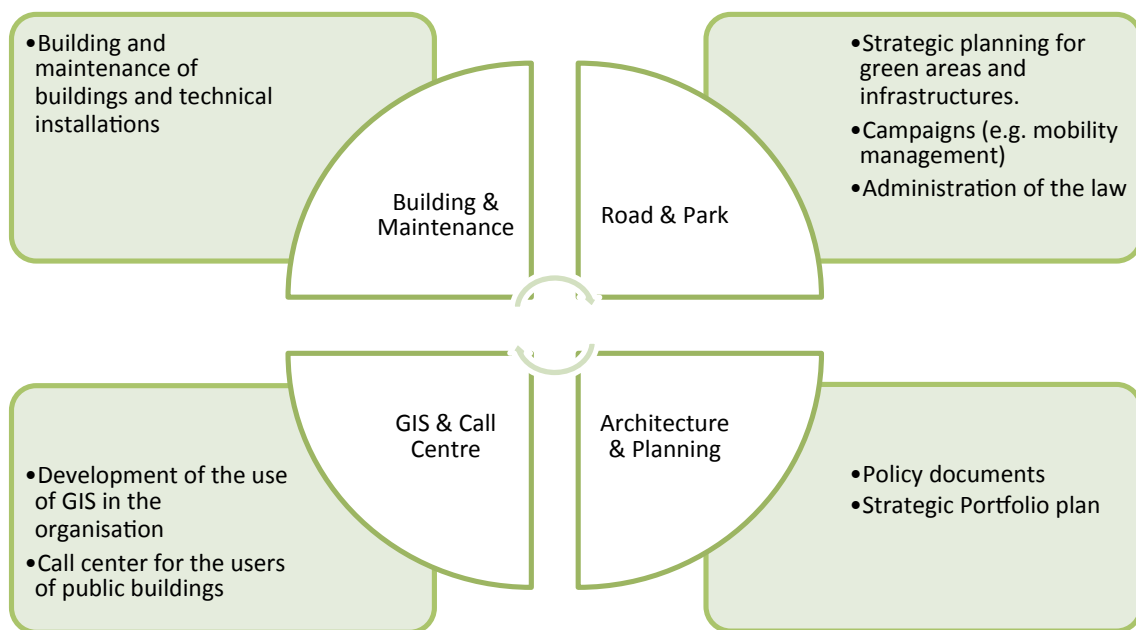


Figure 7: At the beginning of the AR process (2009) Department of Public Property was organised in four teams as shown in the figure (team structure has been changed since the beginning of the process).

The Department was formed through a merger of two former departments working with respectively technical & operational tasks and planning just before the AR process was initiated.

²⁸ Team structure has changed more than once in the period of cooperation and I have chosen here to present the original structure, as this became subject to critique in the process and have subsequently been changed.

As the name indicates the Department was not defined as a FM Department. In terms of steering it was, however, inscribed in both NPM and the Relational paradigm. Making a parallel to the two principal ways of understanding FM in the public sector as outlined in chapter 2.3.6, the Department was partly steered within a management framework of contracting, target setting, measuring of output and bottom line thinking. Furthermore a more value based steering was constituting the basis for actions, but this was (as is shown in chapter 4) not integrated in the thinking of the entire Department.

In relation to sustainability the Department was principally working according to the overall goals of the organisation, systematised through the environmental management system and followed up by green accounts and external auditing. This is also unfolded further in chapter 4.

4. ACTION RESEARCH FOR SUSTAINABILITY IN A MUNICIPAL DEPARTMENT OF PUBLIC PROPERTY

In this chapter the AR process in Albertslund Local Authority is presented. To make the process and the following analysis transparent to the reader I have chosen to make a narrative constructing a storyline through the phases of the process. The story is thus told by me, but I have aimed at letting the progression as experienced by the employees show by highlighting the voices of employees through translated citations and scenic reconstructions. I have thus decided what to include in the narrative, but by describing the scene of a dialogue I aim at a story loyal to what happened in the workshops.

The narrative builds on the written material produced during the AR process: Meeting requests, notes from conversations and meetings, logbooks from workshops, transcribed interviews etc. The logbooks are sampled and structured in three parts resembling the structure of current thesis. There are no references in the narrative to specific parts of the logbook, as it is chronologically following the same storyline as the narrative and presented under the same overall headings. The logbook has an initial register which allows for easy navigation.

Analysis and interpretations are made on the background of both the productions in the process (e.g. posters, presentations etc.) and a methodological review, which means that the narrative is a balanced mixture of process and results. In this way I hope to enable the reader to create her own understanding and interpretations when reading and thus potentially draw other conclusions than mine.²⁹ The narrative is written to maintain knowledge and experiences for the employees in Albertslund local authority, but also to inspire other FM professionals.

4.1 A DEPARTMENT IN TRANSITION

As described in chapter 3.5 the entire organisation had been transformed and the Department was recently merged when we initiated the AR process. This means that employees were somehow in transition and had not yet build a common culture. The Department Manager had chosen to facilitate the merger by having consultants to help with the process of implementing a team structure, which was an entirely new way of working for most of the employees. *'We had two days at Birkehundgaard where we talked about team profiles, goals and code of conduct in the teams. In that sense you could say that I used a lot of time creating teams.'* [...] *'It was a difficult task to get the Department on track, and management of staff came to take much more time than I had expected.'* [...] *'First a couple of employees resigned, and on the top of that I also had a number of employees on long term sick leave.'* [...] *'It was a heavy pressure. Two died, seven were on long term sick leave and five found other jobs – it was a hard beginning in terms of managerial challenges.'* (090626, Int. SK). The Department was, however, almost at its full size when we began the cooperation 1½ year after the merger was initiated.

²⁹ Text in *Italic* is citations translated by me. Dots in square brackets [...] means that parts of the dialogue has been cut out, but it is the same person talking. Text in square brackets is added by the author to enhance the understanding if a citation is taken out of context.

In the team formation some teams came to consist of employees from different localities (Sletteland and the City Hall) and cultures. As expressed by the team coordinator from the GIS & Call Centre in an interview after the Appreciative Inquiry (090904, Int. SD): *'The most crucial changes were that of our team. We became a mixed team with employees from Sletteland and from the City Hall, who also had two different working areas. The vision was to make us a common communication and information team. [...] It is, however, very difficult in practice to get two functions united. Hopefully this process can help us.'* At the beginning the team working with Nature and Traffic also had cultural challenges and the team coordinator pointed at a difference in primary reference in the work (090902, Int. TZ): *'There has been a cultural difference related to the point of reference. Is it the projects one is working on or the team? We are, however, working on it and are getting closer to a solution.'*

Another challenge was also connected to the merger as some were used to work rather autonomously while others came from a more top managed culture. As the team coordinator for Operation & Maintenance put it (090916, Int. FL): *'It has been very difficult [to work team-oriented] as many were used to go to the manager with problems. It is not how it works anymore. Now the Department Manager has the responsibility for 27 employees which makes it impossible for her to help us all. It is difficult to take responsibility for own priorities. When we were at Sletteland I functioned as a kind of informal junior manager and I still experience people asking me permission to do things. I must then make it clear that the decision is not mine but that I am more than willing to help. But it is a little difficult. [...] Decisions are taken differently now and it makes the employees unsecure not to have the Manager close by as before.'*

In the strategic team Architecture & Planning one employee expressed that before the team were formed every employee had his own tasks, holding information close and not willing to share knowledge: *'Even though we were located at the same office, there could be days where we hardly spoke together. She did not inform about her tasks and projects at all.'* After the team structure had been implemented, the strategic team still felt that knowledge was not shared properly. One employee expressed his frustration with the fact, that he had an expertise in contract building that nobody took advantage of: *'Nobody has asked me to look through their contract to help secure that it was legally and politically valid. Not even in the two times ten million kroner spend on the schools.'* This led to a reflection on the need for a process where knowledge about competences in the Department was shared. Also to the knowledge sharing vertically in the organisation there was critique: *'Sometimes the flat structure leads to problems when managers and Directors do not communicate and we don't get the right information when needed. [...] This is also connected to the fact that we are a political organisation, where the agenda can change from day to day. That means that projects can change direction many times in a process, which makes it even more important that we get the appropriate information'*. (090919, Int. A&P)

The idea of using the thinking from FM to create changes in the Department came from the team Architecture & Planning. Working on the strategic level they had a very holistic view on the role of the Department: *'Our strategic planning is about sustainable development of society. This is what it is all about. [...] Then we need to get the organisation optimized in the best possible way that can enable us to provide better service and thus better support the activities in schools and institutions. This is the overall aim with our work. This is also why we see the whole idea of this 'facilities management.'* The team were, however, challenged as other employees did not really understand their rhetoric about FM: *'For us the [AR] process*

makes a great difference because FM is something that we have tried to put on the agenda for some time. (090919, Int. A&P)

The presentation above gives a picture of the basis of the inquiry and also some indications as to the need for a process of integration in the Department. It turned out to be a long journey of social integration, mutual learning and change.

4.2 NEGOTIATING COOPERATION

It is here relevant to present the special situation that I was an ex-employee in the organisation of AR. I was employed in the Administration of Environment & Engineering as a consultant, in a team that historically had had a position close to the Director – and in the eyes of some employees in the Administration also a bit too strategic (and not enough down to earth). I only knew a few from the Department and mainly from small social meetings, except for the employee behind the introduction of FM, with whom I had developed the basis for the PhD. As stated in chapter 1.3 the whole idea of addressing FM as a way to approach the difficult task of reducing CO₂ emissions, came from a few employees in the team Architecture & Planning. At the same time I heard about the PhD in Sustainable FM, and heavily supported by those having introduced the idea, I decided to follow my personal ambitions for a deeper understanding of Sustainability within the field of FM research.

The Department Manager entered the process when the PhD became a reality. The fact that it was one of her employees who had pushed the process was important to the legitimacy of the proposal by me, when suggesting cooperation in a joint AR process. In the first meetings with the Department Manager, my former role was something we had to address. I made clear that no matter what ideas I had formulated in the past about the organisation of FM it would be the voices of her employees that would matter in the cooperation. I had no intention of reproducing the barrier between ‘the strategic level elsewhere’ (my old team) and practice in the Department. This I emphasized by defining my own role as mainly facilitating in the first period of our cooperation. I was also using some time to discuss my intentions of doing research *with* her and the employees, focusing on change in practice as well as production of knowledge.

The relation with the Department Manager was also based on some specific shared experience in an Albertslund context, both from ‘the old days’ and more recently. When I did my master about local Agenda 21 and indicators for sustainability at the University (Ramskov 1999), she was the Agenda 21 coordinator partly responsible for the process that I was studying. We also shared a more general history having been part of the ‘local Agenda 21-aera’, as we had both worked with local Agenda 21 from the late 90’s. That influenced our relation during the entire process in the sense that we had a common frame of understanding in relation to the concept of sustainable development. In relation to FM she expressed her reservations in relation to the potential rigidity of procedures and documentation: *‘You can make procedures and instructions to a degree where it becomes inhibitory to practice. There must be space for reflections also, I don’t want it to be un-reflected’.* (090626, Int. SK)

In our discussion of possible potentials and obstacles of the cooperation it became clear that she had some reservations in relation to a lack of resources in the Department. She would not force her employees into a process that would be regarded an extra burden. At the same time she was anxious not to trigger a heavy critique in the department, which she was not confident she could handle in the present situation (chapter 4.1). For these reasons I suggested that we

initially planned for cooperation for half a year, and that the approach of the research should be designed with inspiration from Appreciative Inquiry (Ludema, Cooperrider et al. 2006, Sorensen, Yaeger et al. 2005).

The process should be evaluated after half a year and decision taken for continuation of the joint AR process. This was a very pragmatic solution as she could not promise me something not knowing whether her employees would approve it. I decided to take this risk but also the chance of having a mutual cooperation for a longer period with one of the environmentally leading local authorities in Denmark.

4.3 THREE PHASES OF ACTION AND RESEARCH

Figure 8 shows an overview of the three principal phases of the AR process. In the initial phase presented in chapter 4.4, workshops were designed in accordance with principles in the Relational Paradigm based on Appreciative Inquiry and systemic thinking. This was followed by a phase of critical reflection inspired by the emancipatoric knowledge interest of the Critical Utopian AR and thus facilitated through the Future Creating Workshop (chapter 4.5). In the final phase the AR process was evaluated in relation to both the action perspective (development of tools for practice) and for openings towards future sustainable horizons. This was done through thematic workshops and the final workshop held in September 2011 (chapter 4.6).

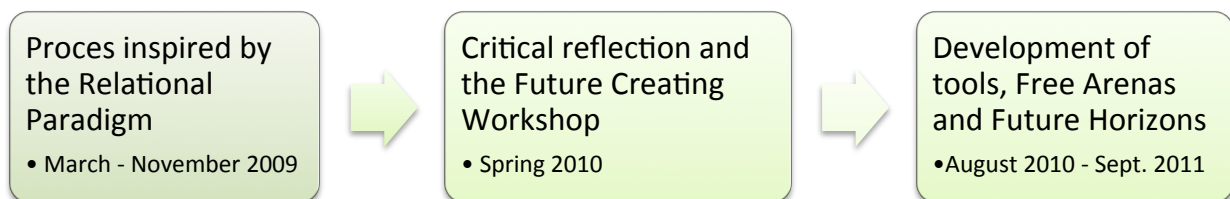


Figure 8: Three principal phases: 1) The initial phase where workshops were designed in accordance with principles in the Relational Paradigm (Appreciative Inquiry and Systemic Thinking). 2) A phase inspired by the emancipatoric knowledge interest of the Critical Utopian AR. 3) The final phase where tools were developed inspired by the future utopian horizons and facilitated by an increased awareness of the creation of free arenas in everyday work life.

4.4 INITIAL PROCESS INSPIRED BY THE RELATIONAL PARADIGM – 2009

As outlined in Figure 9, the initial process of the AR process was informed by the Relational Paradigm as described in chapter 2.3.4, based on Appreciative Inquiry 5D model presented in chapter 3.2.1 at the beginning (chapter 4.4.1) with a systemic follow up focusing on e.g. organisational boundaries, communication between actors, skills and competences in teams (chapter 4.4.2).

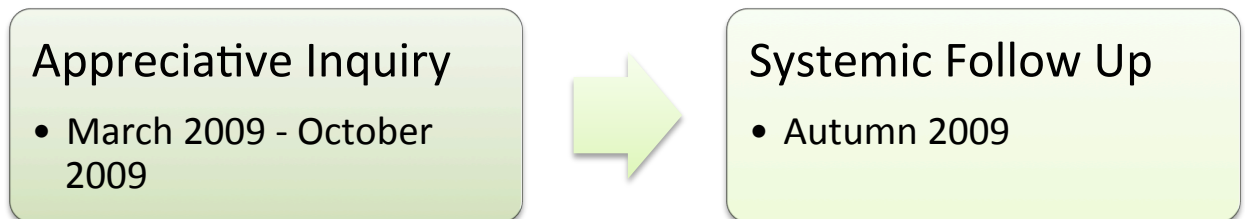


Figure 9: Principal process for the initial process based on principles of the Relational Paradigm.

4.4.1 Appreciative Inquiry 2009

Before going into the discovery phase of Appreciative Inquiry we had to choose topics for the inquiry. In order to get a feeling with the employees and their situation I chose to initiate the process by workshops in the respective teams. The initial team based workshops were followed up by two full day workshops as shown in Figure 10 and described below.



Figure 10: The process of Appreciative Inquiry was facilitated by a series of workshops in March 2009 - October 2009.

Before Define

The initial team based workshops were planned as 90 minutes meetings, starting with a presentation of the purpose and ‘rules’ of the workshop, followed by a dialogue about the tasks of the team and how they were influenced by others on the three organisational levels – operational, tactical and strategic. The workshops were finished by a small evaluation on the method and on employees’ (possible new) understandings of own practice.

The teams had different attitudes to the workshops and to me, and I saw the meetings as a way to build up confidence and understandings to a possible joint process of learning and change. In all cases we succeeded getting to the point of filling out the three levels of organisation. The main surprise was the huge amount of tacit knowledge on the tactical level. Learning by doing



Figure 11: The initial workshop with team Architecture & Planning was held in their office.

and training by seeing seemed to be the dominant way of passing knowledge and procedures to new employees. The employees expressed that they found it useful to focus on their tasks in a broader context, and that the figure showing the three organisational levels could help organise tasks and make their role in relation to decisions taken elsewhere in the organisation visible to the management.

The workshops gave an indication as to which subjects were regarded important in relation to their work life and sustainability. After a close dialogue with the Department Manager we did, however, choose to make the first phase 'Define' (topic choice) subject to a further process in the first part of the full day workshop in April 2009.

Define, Discover & Dream

After the small team workshops a full day workshop with the whole department was arranged, planned in close cooperation with the Department Manager. One issue was the question of her participation in the workshops. I suggested to her not to participate as I aimed for an arena without the formal power structure characterizing the manager - employee relation. Initially she objected to the idea of not being there, because she thought that she wouldn't become a part of the process then. The conclusion after some dialogue was, however, that she should take part at the beginning and the end of the day as this would give her a feeling of the energy in the workshop.

The aim of the workshop was to open an arena for employees to create visions on their future FM function, and to challenge the employees' views on sustainability. Present as guests were my supervisor in the role of rapporteur and a FM consultant in the role of co-facilitator.³⁰ In order to link to the team workshops the employees were invited for a private view on the posters produced, followed by a plenary discussion about FM and sustainability.

As the overall theme of the Appreciative Inquiry was *sustainable* FM I presented the Brundtland definition on sustainability (World Commission on Environment and Development, 1987) as a common frame. To illustrate the complexity of defining sustainability in a FM context, I invited the employees to create post-it representing tasks and place them in a matrix with sustainability on the one axis and FM on the other, showing how the FM tasks were supporting sustainable development. This was done for the 'ideal situation' and for the present situation in Albertslund. The result of the process became a very interesting discussion on how to define sustainability.

To prepare for the selection of topics we had a small play to create a good atmosphere and at the same time mixed the employees. In (new) groups of two, the employees wrote down on post-it the very most important SFM issues – in their opinion. The post-it should be placed on an empty board divided in four, and if possible near other post-it's within the same topic. Topic choice (Define) thus became subject to an open, self-organising process inspired by the open space technology (Bjerring, Lindén 2010; 2008). No headings were given and the employees were told that their choice of topics would influence the work for the rest of the day (Figure 12).

³⁰ Poul Henrik Due, Cowi.

The employees formed a half circle around the wall with post it and with me before the posters, headings for the themes to be worked with were negotiated. It took some time to formulate the right headings, and some employees came to dominate more than others in the process of suggesting appropriate headings. No headings were, however, decided upon before those having formulated the SFM issues in question had agreed. In the dialogue about possible headings for the 'clouds of post-it', four themes were defined and the employees considered their choice of group during lunch.



Figure 12: Employees placing post it with important topics on a board.

The discovery and dream-phases took place in the four groups working with the themes presented below. Selected key words attached to each theme are shown in brackets.

- Strategy for a sustainable FM (definition of sustainability, building maintenance and FM – how? Strategy and planning, common platform for planning, communication, priority of values).
- Data handling (organising, filing structure, common template, professional knowledge / FM, citizen service, GIS, coupling of data connected to locality, visualisation).
- Environmental management in practice (strategy for sustainable maintenance, practical environmental work, implementation of environmental goals, definition of sustainability, models for finance).
- Communication, cooperation and dissemination (quality assurance of documentation and in administrative work, knowledge sharing, coordination and cooperation, social coherence in the Department, sustainability on strategic level).

Due to the extended Define phase the employees had only short time to discover best practice and create future scenarios³¹. Drafts were, however, created to be elaborated further upon in the next part of the process planned a month later.

Dream, Design & Destiny

The second full-day Department workshop was based on the future scenarios created a month earlier. Prior to the meeting I had e-mailed the employees with congratulations on the prestigious award for best action for a sustainable FM granted in spring 2011. The idea of starting in the future was to create a space where the employees could express their thoughts on the framework conditions (Design) and the first step (Destiny). The employees were invited to tell what had happened, what decisions were taken and what had changed since 2009.

A light breakfast and a formal welcome by the Department Manager started the day (Figure 13). In her little speech she pointed out that virtually all employees had been in her office the day before to ask permission not to participate in the workshop due to other urgent tasks.

³¹ Planning the overall process I was not sure whether I should go into the dream-phase already in the first workshop, as I knew that the time for this phase would be very limited. I chose to do so anyway, as I thought it important to have an energy-boost looking into the future already in the first workshop. I also had the hope that the future dreams would develop in the period between the two full day workshops.



Figure 13: A light breakfast and a formal welcome by the Department manager started the day.

After a general welcome to 2011³² the employees were invited to watch the slide show from the first workshop in April 2009³³. The slideshow was followed by a plenary dialogue about what had happened between the first and second workshop. The dialogue was a little hesitant at the beginning as the employees found it difficult to relate to what they had created on the first workshop. As one employee said: *'I can't really remember the scenarios and we have been quite busy since last workshop...'*

One employee who had not taken part in the first workshop had, however, noticed that his colleagues now said good morning, which he considered important as the social coherence in the Department was not so strong. This was followed by a reflection on the fact that moving together in the City Hall had not led to more knowledge sharing than when the Department was spread on two facilities. The present facility lacks space for leisure, and the centre constituted by the two secretaries before the move was not a social meeting place anymore (this was not regretted by the secretaries though). When asking how far they had come with the thoughts on sustainable FM, virtually all employees had been in 'urgent-quadrant' (Covey 2008) that did not leave time to reflect on the scenarios developed in the first workshop.

After the initial plenary session the groups got some time to further develop their dreams and present suggestions to organisational changes that should make an implementation of dreams possible (Destiny). It turned out that not only had the employees problems remembering their

³² Inspired by the method 'Letter from the future' (Bjerring, Lindén 2010; 2008, RW.ERROR - Unable to find reference:2008).

³³ Since there had been a whole month between the two workshops, I had made a slideshow with pictures from the first workshop and logbooks with photos and participants' own notes from the group work.

future dreams, some also found it difficult to understand what they were supposed to do in the group work. One group was puzzled with the notion of ‘frame condition’ and another felt that they were not competent to actually find out how to design ‘good communication’. However, all groups worked hard and the group rooms buzzed with energy.



Figure 14: An employee grouping resources.

After lunch we made a small play giving appreciative statements of skills and competences to each other (Figure 14), followed by group work on the future scenarios (Dream), organisational frame conditions (Design) and the first steps to be taken (Destiny). The group work was presented in a plenary session with the presence of the Department Manager, just before the evaluation of the workshop.

In the evaluation the employees stated that it had been very good to get a space for ‘*a tour in the helicopter*’ and key words were given as ‘*positive, future oriented, energy, variation, good with future scenarios, difficult to get to ‘how’ and good with working groups*’. As to the coherence in the process views were divided. Some had experienced the workshops as a coherent flow of action while others – especially in the second workshop – had trouble finding the read thread. The employees expressed that they had had difficulties remembering the outcome from workshop to workshop, a general critique supported by many employees nodding. Generally, the process was experienced as meaningful, and the possibility to ‘get up into the helicopter’ was emphasized as important in order to understand the role of the Department in a wider frame, and to realize that there are different understandings of the Departments’ role and tasks. Some did, however, find it difficult to relate the workshops to their daily work life. When I asked why they did not say that during the workshops, they explained that it didn’t feel right – ‘*As if everyone else found it good and meaningful and I was the only one not really understanding the meaning*’. As to the future process the following key words were written on post it: ‘*PhD must help to create spaces, more workshops, input from experts, need for projects that can be realised, do something concrete on operational level, need help to remember the project if it shall not be forgotten in a stressful work life*’.

After an agreement with the Department Manager that the process should continue also after the summer holidays, the scenarios and their relevance in everyday work life were discussed further in thematic workshops in autumn 2009. In the following section the scenarios are presented under the heading ‘*Sustainable Facilities Management 2011*’ in a form ‘as if’ they had already become a reality.

Sustainable Facilities Management 2011

As shown in Figure 15 Sustainable FM has become a strategic discipline in the administration of Albertslund local authority and is accordingly used as an evaluation tool in all important decision making. The organisation is characterized by clear and transparent connections between vision and strategy to the tactical and operational levels. To give a direction to the work the Albertslund Strategy (Albertslund Kommune 2008) is the overall steering document with common organisational goals based on a broad definition of sustainability with aspects of social, cultural and environmental issues.

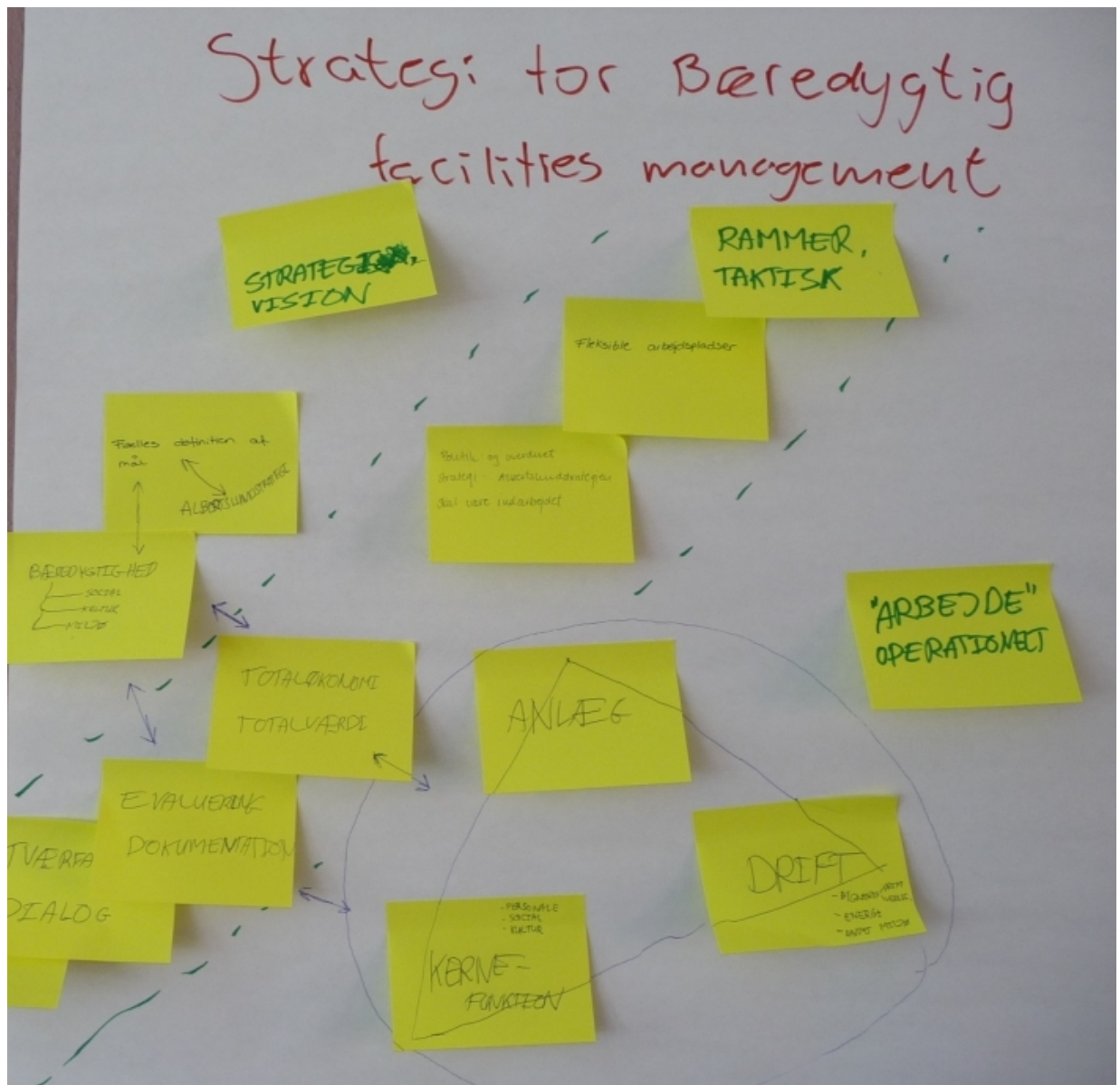


Figure 15: The Scenario 'Strategy for a Sustainable Facilities Management'. Left side: visions/strategic level. Middle: Frame/tactical level. Right: Operational level. On the operational level Construction, Operation/Maintenance and Core Function are linked in a triangle, that again is linked to the concept of 'Total Value & Total Economy' and 'Documentation & Evaluation'.

On the tactical level the strategy has led to an organisation with flexible workplaces characterized by a broad interdisciplinary dialogue. Everyday work life is characterized by good planning and thus time and space to work on a more strategic level, as opposed to only day to day business defined by others.

Economy is thought of as 'total economy' and 'total value' linking the cost of construction, operation and maintenance of the facilities with the core function on operational level. This is made possible by a close dialogue and cooperation between employees, teams, departments and between employees and management (Figure 16). The fact that teams have become clearly defined in terms of responsibility and tasks also makes it easier to cooperate.

Good communication between administration and decentral level has also led to a general raise in awareness of 'our' buildings and a greater sense of security among the users of buildings. Not as in 2009 where a large proportion of the maintenance reports were suspected not to reflect reality being written by consultants who did not communicate with the users on a regular basis. Communication based on valid data contributes to greater transparency, which is crucial for the efforts for sustainability due to its ability to support decision making balancing different values.

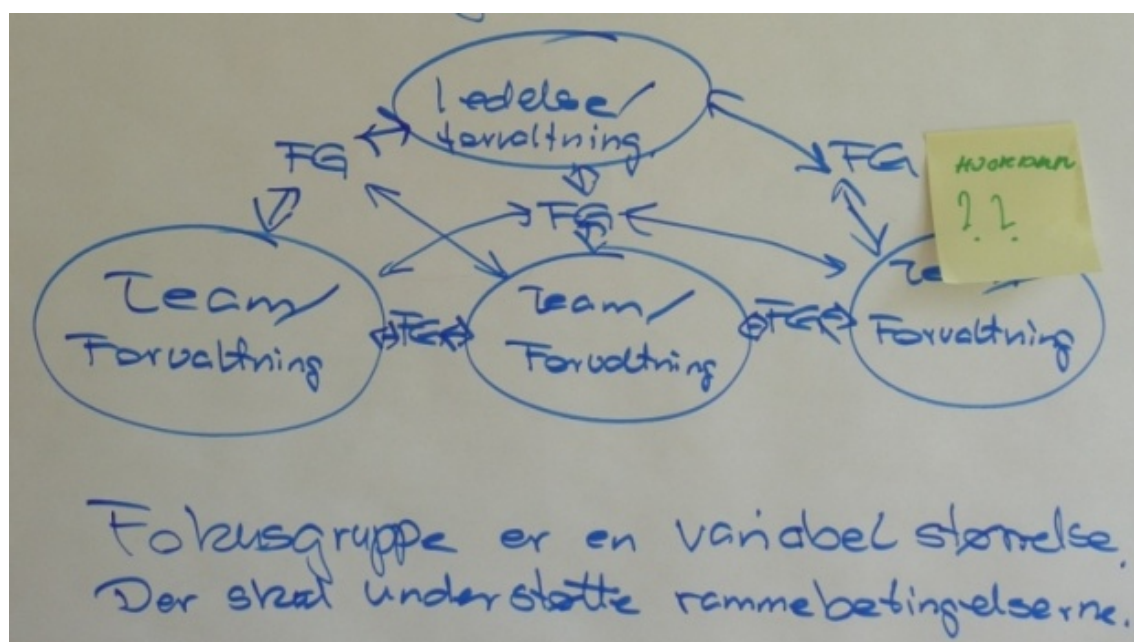


Figure 16: Conceptual diagram for communication within the administration. Arrows indicate communication lines.

Securing valid data supported by the professional data handling system is a reality now. Databases that were not compatible in 2009 have been connected (Figure 17). Procedures for quality assurance of data and common procedures have been developed just as standard contracts and task lists. The comprehensive data base provides an overview that enables the individual employee in the Department to provide better assistance and service to colleagues and citizens.

Users of public facilities draw information directly via the Internet. The system is also making the administration less vulnerable to illness and staff replacements. When information is being stored and accessible to everyone proceedings becomes better and more efficient. At the same time more time has been allowed for planning and development of other tools. In regard to the politicians, the data base enables production of value-based scenarios for political decisions, supported by the feature that all kind of analysis can be extracted from the system, focusing on for example use of resources, functionality, cleaning costs, aesthetics or historical values (also 'soft' values). At the societal level the data handling system has strengthen democracy due to increased accessibility to information about facilities and thereby also more equal access to use the facilities for the citizens.

Environmental management is still a focus in the organisation, and new procedures and common processes³⁴ have been developed and implemented. The Green Account is regarded the primary environmental steering tool. Employees have access to relevant knowledge supporting an environmental sustainable practice and political priorities between values (e.g. environmental, economical or aesthetical) are ranked.

The overview and holistic understanding has led to better work environment and less frustration, as the individual employee has more influence on her own work and finds it meaningful seen in a broader societal context. Facilities for social interaction have been established as e.g. a group of furniture around a coffee machine, inviting for informal communication across team borders.

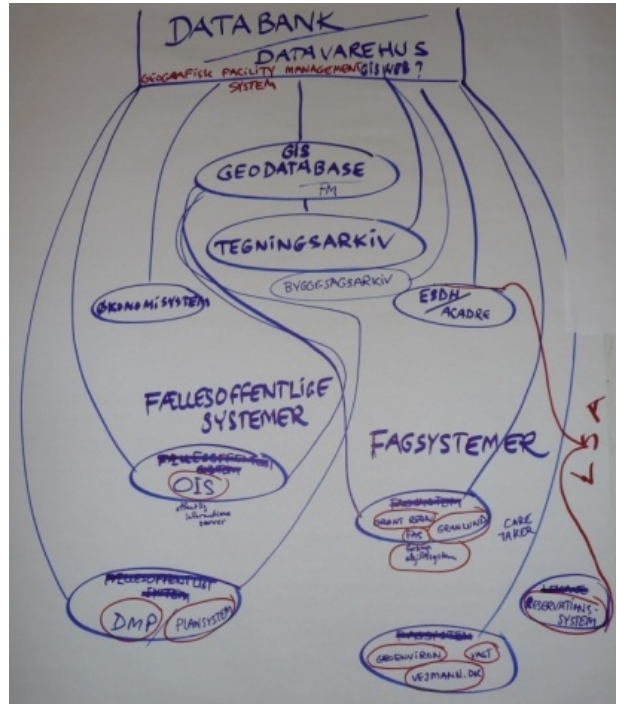


Figure 17: Conceptual drawing of the database as developed in the Appreciative Inquiry 2009.

4.4.2 Systemic follow up Autumn 2009

After the first part of the process we had some reflections on how to continue the work. The employees asked for more action and some were also sceptical as to the aim of the whole process. This showed in the interviews conducted with the team leaders after the first workshops, who had evaluated the process with their team and talked about future cooperation. Not everybody had taken ownership to the process yet: *'There are different perceptions. Some are very positive towards the idea of optimisation, dialogue etc., while a few believe that it is just a help for the research project.'* (090916, Int. FL) Another team coordinator had following comment to the process: *'I think it has been very good for the Department what we have made with you. As I see it, much more fruitful than if we had used an external consultant because you go into the process in a completely different way. You take the professional basis into the process related to the development of a common culture'. [...] Every time we meet one has the expectation that it will be positive. That it will lead to results and can be used for something. We come closer to each other and our cooperation matures.'* (090904, Int. SD)

The problem of priorities and lack of time was highlighted as a barrier, explaining the lack of action between workshops: *'The problem is that though we can clearly see the vision and believe that it is the way to go, we don't know how to get from the situation of today to an implementation of the ideas in practice.'* Also the whole idea of change had created reactions in the teams: *'Some are better at change processes than others. While some can quickly overview the process and its implications, others get stuck. I think some consider it as another organisational change process, which it might also lead to? Perhaps some of my colleagues have been through too many changes which explain their scepticism.'* (090916, Int. FL)

³⁴ E.g. the building process, maintenance, communication etc.

Small changes have, however, been seen in the way employees regard their role in the organisation: *'I believe that there has been a change in what is regarded our core function. Before we had a narrow focus on maintenance of buildings whereas now we more clearly express that the facilities we maintain have specific functions for others. We have a more holistic view now, which shows in our attitude towards wishes from colleagues from other administrative areas.'* This claim was supported by another who said that her team had agreed that they had indeed developed a more holistic view that had enabled them to see their role in a greater context. *'But, some more concrete action has been asked for. It is difficult to implement the thinking in everyday work life...'* (090904, Int. SD)

In relation to the notion of sustainability it was claimed that they had developed a greater perspective on the concept. *'... that does, however, also make the tasks more complicated and difficult to overview...'* (090916, Int. FL)

The Appreciative Inquiry Workshops were regarded very good and full of energy, but *'it has been too long between workshops to maintain energy and connecting the thinking'*. This was also related to the difficulties in actually prioritise 'a tour in the helicopter' in a busy work life, though it is really needed: *'We use too much time for stupid communication, when users complain and we must handle situations after something has gone wrong. Just in our team [Operation & Maintenance] there is really much time to save and many frustrations to avoid if we become better at communication.'* (090916, Int. FL) Another team coordinator also complained about the problem of lacking prioritization but claimed that *'we now have the spirit to do something about it, more than before. The process has given a common wish to actually work for a united Department'*. (090902, Int. TZ)

A third team coordinator claimed that the ideas and dreams from workshops were also talked about between workshops: *'We have our small conversations in different contexts. In the corridor, in coffee breaks etc. [...] ...but there is of course the everyday work life that takes its greater share, but we do think about it also between workshops.'* She followed up on the statement by showing me the wall where a myriad of notes were posted in a matrix of four quadrants showing the urge respectively the importance of tasks (Covey 2008): *'We have only posted tasks in one of the quadrants so far [urgent], the others are beyond what we can overcome...'* (090904, SD)

For the future process a more tool oriented focus was requested: *'It was perhaps expected that we would have had some more concrete tools that could be applied directly. Instead we have used the time to understand concepts and develop a new way of thinking. [...] But it is an ongoing discussion. Some just want consultants to develop the tools we are dreaming about, others can see the idea of developing the tools ourselves. It has, however, been very good to get into the holistic thinking, really good, but we hope that we can get help to get started...'* (090916, Int. FL) Another was not satisfied with the level of holistic thinking and pointed that they should be better at helping each other professionally: *'I dream about a flourishing professional environment which we don't have today. But we are working on it'*. (090902, Int. TZ)

Based on the evaluations it was decided to continue with the themes of Appreciative Inquiry in a two day Department workshop. As many employees were beginning to see the process also as theirs, the workshop was organised jointly by staff from the four teams, and when possible also for the four working groups from the Appreciative Inquiry. Employees participated in the planning voluntarily as each team decided who should participate. I had

brought a number of wishes and ideas from the small thematic workshops, which were the basis for the planning process, resulting in the following aims:

- To get a view on the department's role in the city development and an analysis of the dynamics of the organisation as a whole.
- Follow up on the implementation of the four future scenarios.
- A focus on the practice of evaluation as a way to retain experience in the organisation.

It was highlighted as essential that the workshop should somehow balance between the creation of new future horizons and greater perspective, knowledge and insight into each other's work *and* lead to agreements on concrete action. The workshop is here presented by highlighting the themes elaborated upon during the two days.

Storytelling and an Analysis of the Organisation

The role of the Department seen in the light of city development was outlined as a vision by an employee with the purpose of providing input to a common narrative (story telling). The presentation was followed by a critical analysis of the employees' ability to navigate in the organisational cross-pressure between politics, the rational or professional arena and the social context. The analysis was given by an employee in the Department, with the purpose of giving a background for a discussion of the role of the individual employee and the need for competences on a very broad scale.

The presentation led to a dialogue of the organisational cross pressure. Quite a number of the employees could relate to the analysis, especially the problem related to the fact that the professional foundation is dethroned by other interests. It was stressed that being in a politically governed organisation is putting some demand on one's personality. A consensus on a position in the middle of the figure emerged as employees must be flexible and move between positions in relation to the context.

Team Profiles, Communication and Knowledge Sharing

In the four groups it had been a repeated request prior to the workshop to get more focus on team profiles and interfaces between teams. The aim was to create more clarity in relation to tasks, collaborative interfaces and responsibilities. Each team was thus asked to answer the following questions: 1) What do we think the others know about us? (Tasks, overlap etc.) and 2) What do we know about the other teams? The competencies present were also elaborated upon as a way to share knowledge on how the employees could better assist each other in everyday life. Focus was also put on communication and knowledge sharing in the Department, with employees in the central administration and on the de-central level.

The presentation led to a dialogue about tasks performed by more than one team or tasks not performed by any. The atmosphere was relaxed but also frustration was felt sometimes with the lack of coordination of tasks between teams. Especially the teams Building & Maintenance and Architecture & Development discovered a number of tasks and responsibilities without an exact address. Also the notion of quality assurance of contracts became a focus, and it occurred that one person had tried to position himself as someone able to actually help the colleagues with their contracts as he had some special knowledge and experience in this field. He had, however, experienced that his colleagues did not profit from his knowledge which he encouraged them to do in the future.

A number of concrete proposals of a very practical character were presented: Update employee data base on intranet, follow up on the projects at department meetings, newsletters and short meetings between teams on a regular basis. Some more general aspects were calling for long-term cultural changes in relation to e.g. a clarification of responsibility for dissemination, chains of command, revising the team structure.

Sustainability and Environmental Management

The purpose of this part of the workshop was to identify frustrations and barriers in environmental work, challenge the concept of sustainability and give suggestions on the role of Albertslund local authority in the efforts for a sustainable development. The following questions were asked: 1) Imagine that you live in Albertslund and are asked to come up with criticism on the local authority's handling of the question of sustainability. What would you say? 2) Imagine that you live in Albertslund and everything was possible - how would life be here? 3) What can you as professionals do to make a difference in regard to critique and utopian ideas? And what is outside the range of your sphere of influence? The exercise led to a dialogue about the sphere of influence of Department of Real Estate, Road and Park. Some priorities came up as obviously not sustainable but outside the sphere of influence of the Department (e.g. heating of a 'green corridor' at the eldercare centre). The major part of both the critique and dream was, however, within the frame of what the employees could influence through their position.

As a basis for a dialogue about everyday practice an employee from the Department presented her reflections on building maintenance and climate change, which she had discussed in her thesis in connection with an internal project management course³⁵. This was followed by a presentation from the internal consultant³⁶ responsible for the environmental management system and the implementation of political environmental goals. He told about the attempt to simplify the EMAS-system by the 'environmental management steering group'³⁷, and invited the Department to collaborate in the continuing improvement of the environmental management system and on the action done on the environmental area – centrally and on the de-central level.



Figure 18: The plenary sessions were facilitated by café like surroundings.

The dialogue after the presentations was facilitated by café like surroundings (Figure 18). A wish for common goals and areas of focus in the environmental management system was expressed, anchored in a critique of the fact that the environmental results were not visible in the green accounts. As an overall conclusion it was stated that we did NOT get nearer a solution to the frustrations connected to environmental management in the organisation, and that cooperation with the environmental management consultant should proceed after the workshop.

³⁵ Autumn 2009.

³⁶ Niels Ringlebjerg Jensen - Positioned on strategic level in the Environmental and Technique Administration.

³⁷ A group consisting of employees responsible for the overall environmental management certification for the respective Administrations (the local authority held certificates for each of the professional administrations in 2009).

Data Handling

As a follow up on the scenario of data handling we had invited a consultant who presented an interactive IT platform for communication developed for and with Reykjavik local authority.³⁸ The idea had been introduced by the data working group, who would show colleagues how such a system might look when finished as a background for further discussions on the design of a system in Albertslund local authority.

The presentation opened for reflections and questions regarding the scope of an interactive Internet platform, and it was quickly concluded that the system should *not* be developed and maintained by the Department of Real Estate, Road and Park alone. Scepticism was expressed on the amount of the data and the degree of detail due to the immense work connected to building up and maintaining the system in relation to the actual 'added value'. Some of the employees argued that they would never be able to actually live up to the interactivity of the system, as it would require them to take action on input from citizens regularly.

The presentation did, however, also introduce a dialogue on the possibilities of reaching new target groups (e.g. the younger generation), especially if it could be based on good visual (GIS based) mapping.

Towards Phase Two

To conclude the Department Manager was asked to give a speech to the employees under the headline: 'Vision, Hopes and Dreams for Albertslund Local Authority and the Department in light of a Sustainable Community Development'. This was suggested by the employees in the planning team who wanted to know more about the department manager's views on the issue. She chose to make a narrative related to her own life and career, and in relation to the AR process she expressed confidence but also a call for action: *'The future scenarios are fantastic and there is so much to go forward with in the future. BUT – being realistic I must admit that I have been afraid of what we have started, heading for an unknown future led by the process alone. I have felt like in the story where Moses divided the waters which subsequently toppled down over the Egyptian army. With our process I have been afraid of the wave - but have at the same time had a firm belief that the water stays as long as Kirsten is here'. [...]* 'Now we are on the way and we must land again! Exciting, I see that we get through a learning process together and you are asking for changes now which I think is absolutely fantastic. There is SO much to grasp now, so many positive things'. [...] 'We are responsible for all natural areas and the building portfolio and we act in a sustainable manner. We've moved away from having a role as those cutting the grass and sealing the roof, to take part in the development of the city'.

At the end of the workshop the employees were asked to make a written evaluation of the process so far.³⁹ The evaluation indicated that employees felt that cooperation in the Department had improved as they had got greater knowledge about others' tasks and responsibilities. Boundaries between teams had become clearer, and tasks and issues handled by more than one team had come into focus. The workshops had put focus on the importance of prioritizing time for reflections on the strategic and tactical levels, as everyday work life is mainly influenced by urgent tasks and no time to reflect on the relevance of each task in

³⁸ ICE consult

³⁹ One employee had specialised in evaluation practice in the project management course (autumn 2009), and wanted to put this on the agenda of the workshop. We had agreed that she should present the thoughts and reflections on the usefulness of evaluation, and thus set the stage for the evaluation of the workshop.

relation to others. The heading of the workshops was ‘Sustainable Facilities Management’ which led some of the employees to reflect on the concept as such. Some stated that it was good with a focus on SFM while others considered the concept very diffuse and not so easy to grasp.

According to the evaluation the process had opened a dialogue across teams creating multiple new ideas. The role of the Department could be seen in a more holistic perspective and the strategic-tactic-operational model⁴⁰ was seen as a new frame for evaluation of tasks. This was believed to lead to an optimization of work processes and procedures and thus enable better communication. The Department had become more coherent during the AR process as the social dimension of everyday life had improved, and the process contributed to a feeling of a ‘common project’ for the Department by improving the professional profile and the ability for cooperation in the future.

It was considered important that the workshops were giving space for different ways of thinking by creating arenas away from the ‘quadrant of urge’⁴¹ that dominate employees’ everyday work life. Some claimed that they had not seen the process as a research project but rather a process for them⁴² while others had regarded it very exciting to be part of a research project. Especially the ‘mirroring’ of their practice by an outsider was regarded fruitful as it had led to new ideas and perspectives.

Also some more critical voices were heard in the evaluation. As to the concept of sustainability one employee wrote: *‘There has been a great focus on optimisation of processes. That is good – but we have not talked so much about the concept of sustainability...’* We had not really managed to address sustainability, as the attempt through the systemic workshop did not really reach further than to the environmental management system and concrete operational tasks already cared for. We did not manage to create a space for the underlying critique on the frame for environmental practice in the organisation.

The evaluation also showed that not everybody felt competent to take part in the workshops, which showed in the comment: *‘Sometimes the dialogue was beyond what I could understand. I guess it is because I don’t really understand the terms...’* Another wrote: *‘Tasks related to the production of valid data is clear, but the other aspects of sustainable facilities management are still a bit blurry to me...’*

⁴⁰ Model used to facilitate the first workshop in spring 2009.

⁴¹ Reference to (Covey 2008). The first year of cooperation was influenced by several ‘force majeure-situations’. A public building burned, mould in day care institutions was detected, and a strategic portfolio plan had to be finished for political evaluation. A national political decision allowing local authorities to take additional loans for building activity meant that all of a sudden employees had to invest DKK 48 million within a year in building activity, at the same time as they were asked to save on the staff budget (Kremmer, April 2010).

⁴² This is a shift since the process began where more than one employee talked about the process in terms of ‘helping you with your research’

4.5 CRITICAL REFLECTIONS AND THE FUTURE CREATION WORKSHOP – 2010

Based on the evaluation of the first phase of the process and my own reflections I suggested that we should make a Future Creating Workshop (Jungk, Müllert 1989). The specific method was suggested to create an arena for thinking beyond the very instrumental answers given in the process inspired by the relational paradigm. Here there had been much focus on relations and tools and too little on the substantial aspects of sustainability. Though the Department Manager had wished for other methods than the Future Creating Workshop from the beginning she agreed. It was difficult to actually plan the Future Creating Workshop together with the employees, as the method is quite thoroughly described. Only the practical things as e.g. interior design and catering were planned in cooperation with a few employees.

The Future Creating Workshop took place 18-19 May 2010 with the critique phase and the utopian phase on the first day and continuing the utopian phase and the realisation phase the second day (Figure 19).

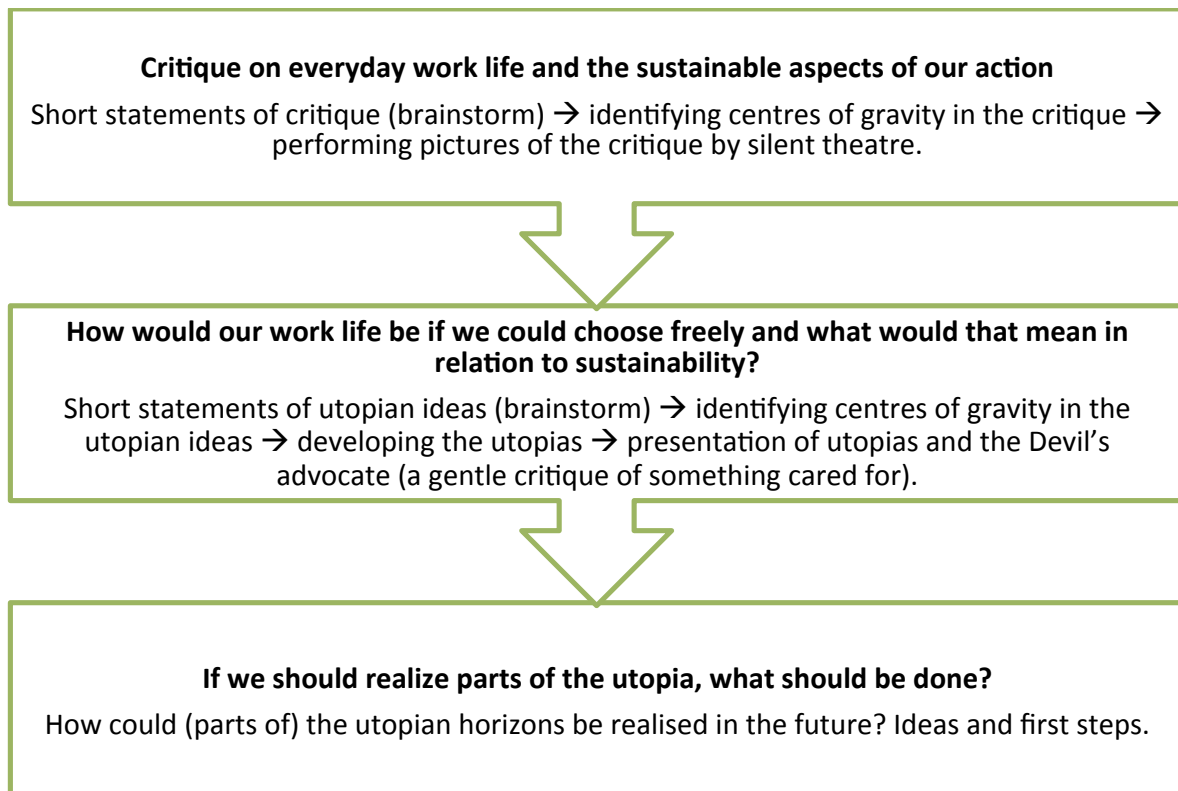


Figure 19: The Future Workshop is divided in three phases: the critique phase (day one), the utopian phase (day one/two) and the realisation phase (day two). The method is described thoroughly in: (Paaby, Nielsen et al. 1998, Jungk, Müllert 1989).

The day began with breakfast in the canteen followed by some games to warm up for the critique phase. The wall was covered by flip charts and the chairs were positioned in a half circle facing the brainstorm-wall. Tables were removed from the room and all walls emptied in order to get space for the posters to come. As opposed to the previous workshops I should do all the writings in plenary – no post it here.

4.5.1 Critique

The critique brainstorm was initiated with a game of imagination, trying to imagine what a box for a pair of glasses could possibly be. Many crazy ideas came up, and from that we switched directly to the critique brainstorm that produced a wall full of critique given in an atmosphere of both laughing and seriousness. From the critique formulated in the brainstorm phase the employees selected a number of themes that they found to be most relevant (centre of gravity). Three of the themes were further elaborated, as the employees made silent theatre visualising that specific critique (small pictures in Figure 20).

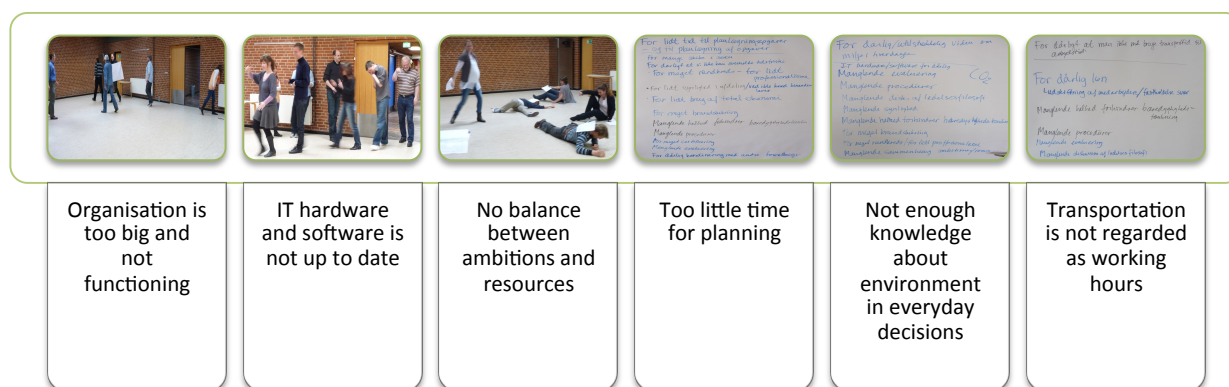


Figure 20: The critique phase led to six topics that were regarded 'center of gravity' in the critique. Three of the topics were further elaborated upon in the silent theatre, where the employees expressed the critique physically and afterwards reflected on how it felt to be in the critique (pictures above). Also the 'audience' gave their response to the theatre and the reflections were caught in flip charts and are documented in the log book.

The reactions on the plays split into two categories: Factual and more emotional reactions. On the factual level the employees expressed a lack of leadership and coordination: *'no management, no direction or different directions, lack of overview, gets nowhere, confusion, can't reach the goal, no connection between plan and action, ambition without direction and individuality.'* The critique also pointed to a lack of action, which was expressed as *'no action, no solutions, doesn't get anywhere, blind alleys, carelessness, no communication, no help, waste of time and slow motion'*. On the emotional level the employees experienced *'frustration, irritation, loneliness, defeat, a search for meaning, furiousness and resignation'*, and the word *'tyttepe'* was invented to symbolise a meaningless language (in the IT-critique). There were, however, also expressions as *'freedom, will and richness of ideas'*. These words were specifically connected to the play showing a critique of the imbalance between ambitions and resources.

Sustainability and environmental management was addressed in the critique phase, but nobody chose to elaborate on this issue – neither in the critique pictures created nor in the utopia phase. The critique did, however, give some indications of the reason for the sense of distance to the environmental management system and also showed a reflection on the way sustainability is understood in the organisation. The understanding of the term sustainability as used in Albertslund was criticised to be far too narrow, without the holistic view that could support a more sustainable thinking. A strategy for sustainability the Department was furthermore requested.

There was strong critique of the branding of Albertslund as being in the lead on environmental issues. The employees claimed that environmental efforts are not prioritized on

a management level, *‘as if the environment had become a word of commercial value only’*. The environmental management system is regarded stiff and heavy to work with and with no connection to the everyday work life and the priorities of values (e.g. environmental, aesthetic, economic etc.) the employees have to make from case to case. That nobody chose to work with environmental management in the future workshop became an issue of dialogue in the plenary sessions of the utopian brainstorm phase. An employee reacted quite strongly feeling pushed by me to come up with statements on the issue.⁴³ It seemed that they are fed up with the contradiction in the strong branding of Albertslund on the environmental issues and what they experience as no focus (and thus not enough allocated resources) on the issue from management. *‘The environmental management system only has a focus on goals and results, not on the actual knowledge and skills needed to fulfil the goals’* (e.g. out phasing of chemicals).

4.5.2 Utopia and Realisation

The Utopian phase was also based on a brain storm followed by a process of selecting most important key words (centre of gravity). The employees were quite eager to get into the groups after the plenary session where utopian themes were chosen. Everybody knew what to do, and on my round to the groups it was clear that they were all better off without me.

Four utopian ideas were developed in the group work as presented in a short form in Figure 21. Some of the groups had selected specific locations as to where they wanted to present the utopia. The ‘Happy Employees and Management’ group wanted to be outside as fresh air and the sky was part of their utopia. The group having developed the utopia ‘More Cooperation between Local Authorities’ was situated in the corridor as this central position is where their utopian office was positioned. Not only the content but also the gestalt was thus considered important by the groups.

In the following sections the utopian ideas are presented, followed by a review of the questions and comments given in the Devil’s Advocate and suggestions to realisation of the utopia.

⁴³ I argued that I was loyal to the critique that they themselves had prioritized as important (center of gravity), but also choose to use the opportunity to come a bit closer the reason for the reaction.



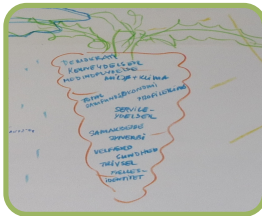
Happy Employees and Management

- The Utopian work life is coherent and balanced. Team members are prioritizing tasks together with the manager. They have influence on their own working conditions and their tasks correspond to their resources. The utopia was gestalted as a theatre.



Project Management in Paradise

- Utopia is an organisation entirely project oriented with employees working together on projects across administrative borders and a holistic view on the facilities supporting core business. A GIS-based database has been constructed as a basis for the cooperation, containing all relevant information for the administrations.



A Coherent Local Society with Common Goals

- In the utopian society the local authority is working together with citizens and business life on an equal basis, aiming at coherence and mutual responsibility for 'the good life'. A mobile shed and an Internet platform serves as democratic meeting place for actors cooperating about common projects.



More Cooperation between Local Authorities

- Albertslund Local Authority is working together with six other local authorities on an administrative level. The aim is to gain a more effective and holistic management of Real Estate and services as IT and call centre, and at the same time get a more exciting work life together with skilled employees within the same profession from other authorities' administrations.

Figure 21: Four scenarios were developed in the utopian phase.

In the following section the four utopian scenarios are unfolded as narratives based on the presentations made at the workshop.

Happy Employees and Management

The scene is set. A team meeting is taking place in open air and the employees are all into a deep conversation about prioritisation of present and coming tasks. The team members are nursed by skilled student workers and fruit and coffee is served. When the manager arrives with additional tasks, they have a conversation about the balance in resources and tasks, resulting in further resource allocation to the team and the manager promising that he will inform the top management about their prioritizations.

When asking how it felt to be in the utopia answers as '*community, respect, autonomy and the feeling of being heard and satisfaction with the work situation*' were given. It was, however, asked afterwards who should be responsible for prioritisations, the team or the manager?

'How often should the team members meet to ensure continuity? Could the prioritisation lead

to conflicts between special interests represented in the team? Is a closer contact to the management needed? And what would it mean for the role of the Department Manager?'

The questions helped the group to present a chart showing the organisation of their utopian work situation (Figure 22). Responsibility of actors in the organisation is coordinated by a vertical dialogue between politicians, directors, department managers and the teams. In order to realise the utopia the group pointed out a number of initiatives.

- Make time for planning.
- Conduct a workflow analysis – the same task is performed by many.
- Implementation of telephone free periods and a mail policy.
- Personal planning including an estimate of time.
- Better overview and feedback to the management.
- Social arrangements where teams meet for cake and coffee.
- Introduction to new employees.
- Team competences listed in the IT-function “find employee”.
- Uniform procedures in the Department.

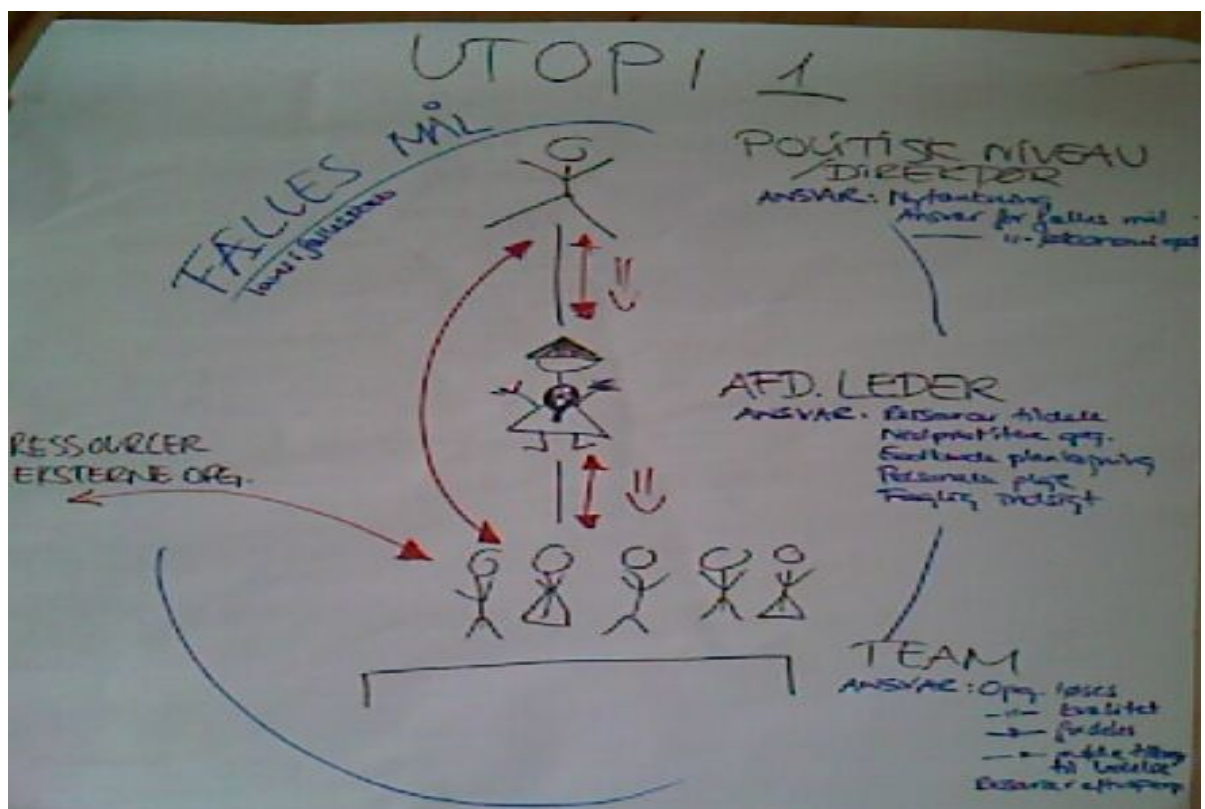


Figure 22: Realisation Phase: 'Happy Employees and Management' was gestalated as an organisational chart showing the responsibilities of top management (new inventions, common goals, good economy), the manager of the Department (Available resources, prioritize tasks, supervise planning processes, human resource management and professional supervision) and the teams (solve tasks with a high quality, planning activities).

Project Management in Paradise

The administration of Albertslund local Authority has no internal boundaries in the utopian world. The administration areas are working together as four synchronic wheels turning simultaneously, creating a dynamic unit that is contributing to Total Value. Employees representing the respective administrations (Figure 5) meet in 'power points' working on joint projects. This is supported by flexible work spaces: Employees decide their workplace on a day to day basis depending on their projects

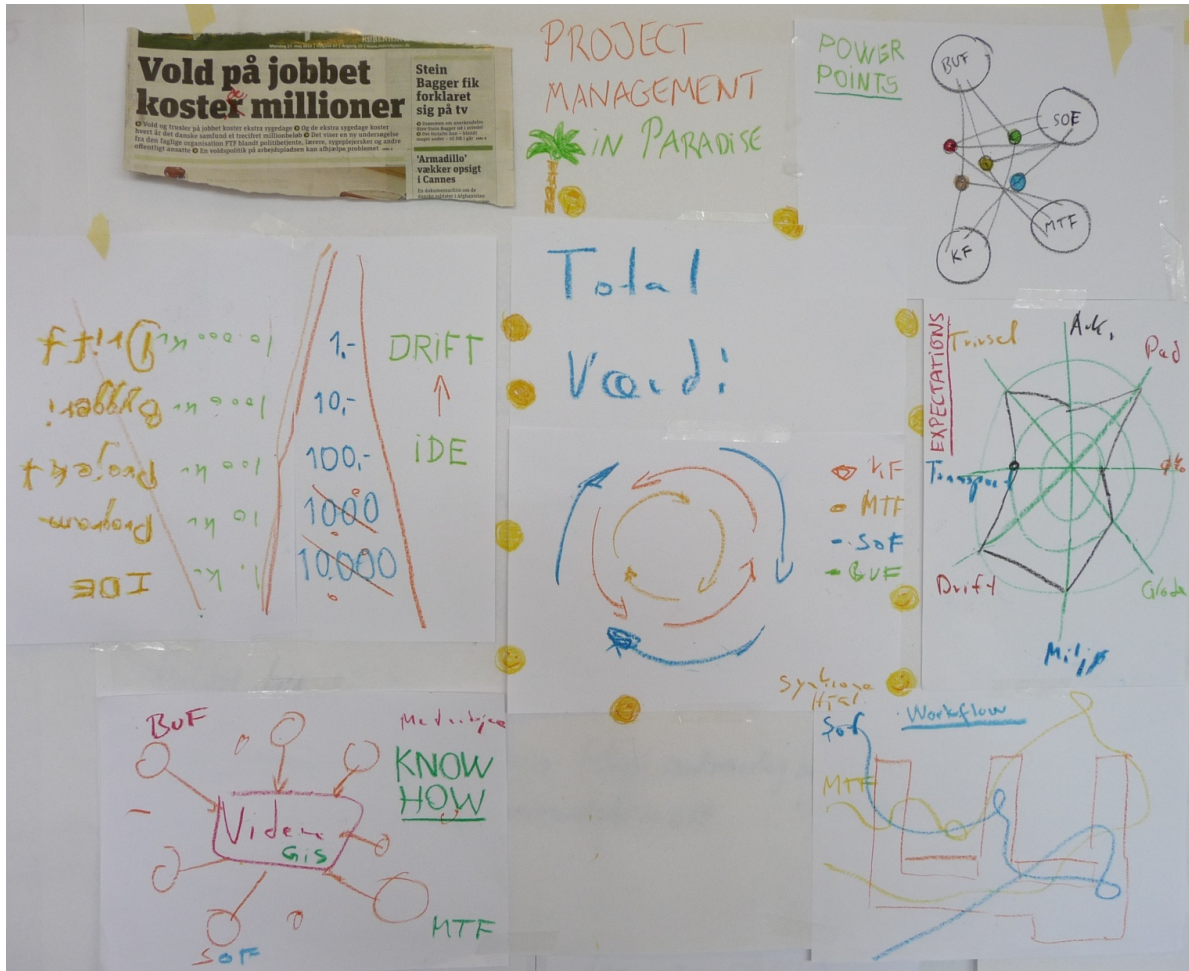


Figure 23: Utopian Phase: 'Project Management in Paradise' was gestalted as a drawing of the organisation.

The administration is working on a holistic basis and the facilities are managed from the perspective of total cost (construction, maintenance and price of the core function is seen as a whole). To ensure that all are working in the same direction the goals of the organisation are plotted in an 'expectation map', showing what is expected within the respective professional areas.

Knowledge used in the entire administration is sampled in a common GIS-database that is fed into by employees from all administration areas. In this way all employees gain access to relevant knowledge which is seen as a crucial support to cross sectoral project cooperation.

The utopia got quite a few questions from the other groups. *'Is there a potential conflict between tasks on the operational level, the regulatory services and engagement in projects? Is there room for professional help and cooperation? How can chaos be controlled and is there a leadership in the utopia? Who is responsible for personnel management and how is work environment taken care of? Reality is never the same – who then defines reality? How is the connection between hierarchy and the project organisation? How is the contact to the political level? Where do I place my papers and physical folders? Where is the citizen and how does he find the way to the relevant employee? How are the projects coordinated?'*

The group concluded that the whole idea of the utopia is not to delete existing structures, but to create new interdisciplinary arenas where new ideas can be developed into reality through the project organisation.

In the realisation phase the group decided, however, to focus on only a small part of the utopia – the data handling system (Figure 24). KIM⁴⁴ is a digital platform containing information supporting all projects in the organisation. The system will give access to all information available in ACADRE (obligatory filing system) but linked to locality. It is thus possible to get information on a certain facility regarding e.g. technical drawings, BBR⁴⁵, number of employees working there, the use of space, pedagogical profile, maintenance level and activities.



Figure 24: Realisation phase of the utopia 'Project Management in Paradise': The employees chose to design a GIS based database to support cooperation across administrative borders: KIM or GIS-Intra. The database contains information of relevance to the entire organization and is seen as a tool for cross-sectoral cooperation.

A Coherent Local Society with Common Goals

The utopian society – gestalted in a very symbolic way (Figure 25) – is characterized by a high degree of responsibility, unity and a will to make a difference. The local authority, business life and the citizens (symbolized by sledge-dogs) have shared goals and work together on specific projects (symbolised by green plants) and for a general development of society. The issues relevant for society are democracy, citizen involvement, a total economy for society, service, synergy, health, common identity, environment and climate, profiling, cooperation, welfare and well being (symbolised by the carrot).

⁴⁴ Kommune Informations System = Local Authority Information System. Playing on the similarities to BIM (Building Information System).

⁴⁵ BBR: Byggnings og BoligRegistret (Register of buildings) (, BBR)

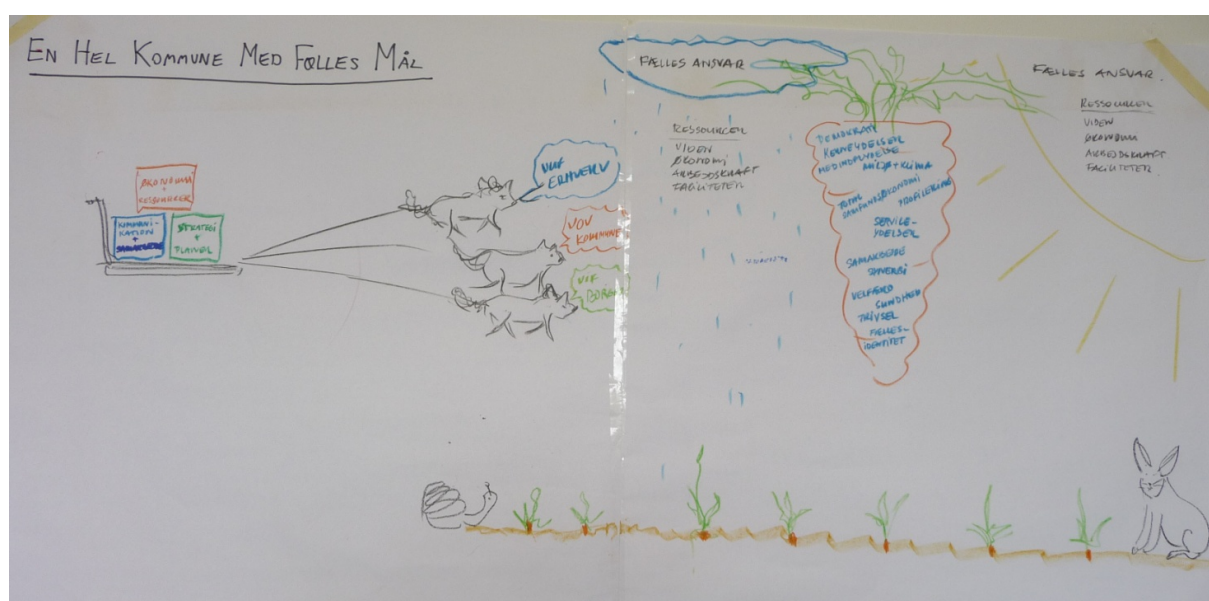


Figure 25: Utopia for a Coherent Local Society with Common Goals. Dogs symbolise Business, Local authority and Citizens drawing together. On the sledge: Economy/resources, Communication/cooperation, strategy/planning. Dogs are pulling towards the carrot: Democracy, Core business, involvement, environment and climate, total economy for society, profiling, service delivery, cooperation, synergy, welfare, health, well being and community identity. The herbs symbolise joint projects that are threatened by the snail that might eat it and the carrot symbolising the time factor. Cloud and Sun symbolise joint responsibility with following resources: Knowledge, economy, labour and facilities.

Knowledge, economy, an appropriate workforce and suited facilities are available (rain and sun). The fact that everybody takes responsibility for his own backyard has released pressure from the technical administration, which means that taxes can be used for development of common goods instead of operation and maintenance.

After a grand tour in utopia the other groups raised a number of comments and questions.

‘What is the role of the local authority administration in relation to the business life and the citizens? And what is the specific role of the Department? Which segment of the citizens are involved in the utopia – and how? Do the citizens wish to have that kind of responsibility? Citizens – not users! Is the administration situated in one location and is it separated in professional silos? Where do you meet the citizens? Who decide the common goals? Nice to be employee here! Good to see the consequences on a societal level of our jobs.’

The group chose to elaborate on the question as to HOW they would cooperate with the citizens and business life to develop the future local society. They came up with two ideas: A mobile shed in the local area(s) and a virtual

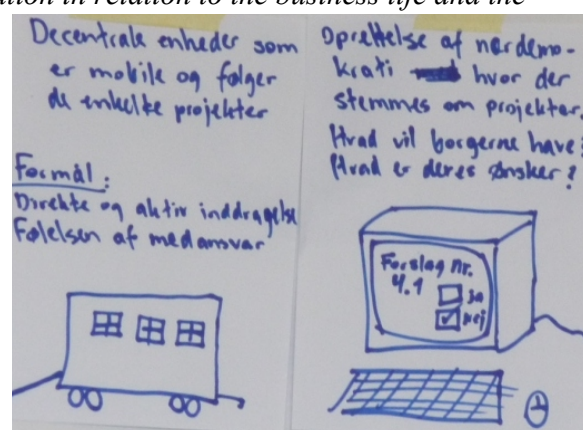


Figure 26: Realisation phase the 'Coherent Local Society with Common Goals': Underpinned by two suggestions as to how communication with citizens can be facilitated: A mobile shed and a digital platform.

platform on the Internet (Figure 26).

The mobile shed should facilitate the project meetings between citizens, business life and employees from different Local Authority Administrations. The physical position of the shed is meant to support the local context by opening up for citizens who are interested in specific local projects, and enable all actors to gain influence and hopefully also lead to a higher sense of responsibility for the projects by the actors. The digital platform is meant as another tool for local democracy, where citizens should be able to vote for specific ideas and projects and thereby provide an insight in the values and wishes of the citizens.

As to the question of realisation the group was aware that this is a utopia that neither could nor should be realised only by their Department. It would need to be actively supported by the political and strategic management level and there should be a strong focus on communication, both internal in the organisation and between groups of citizens, local business life and the local authority. The idea could be implemented as a pilot project at the beginning, with inspiration from e.g. community renewal projects in Nørrebro and Vesterbro in Copenhagen.

More Cooperation between Local Authorities' Administrations

In this utopia the seven local authorities in the region 'Vestegnen' have decided to go into a one year pilot project with the aim of developing continuous cooperation on a number of areas – and ONLY on an administrative level (Figure 27).

The physical centre of the cooperation is in the building of the former jail where four offices have been established, one for each cooperation area (Figure 28). The cooperation is coordinated by three employees from Albertslund local authority, from headquarters situated centrally in the building to enhance knowledge sharing and coordination between the areas.



Figure 27: Utopia: 'More Cooperation between Local Authorities' symbolised with a drawing connecting seven local authorities.

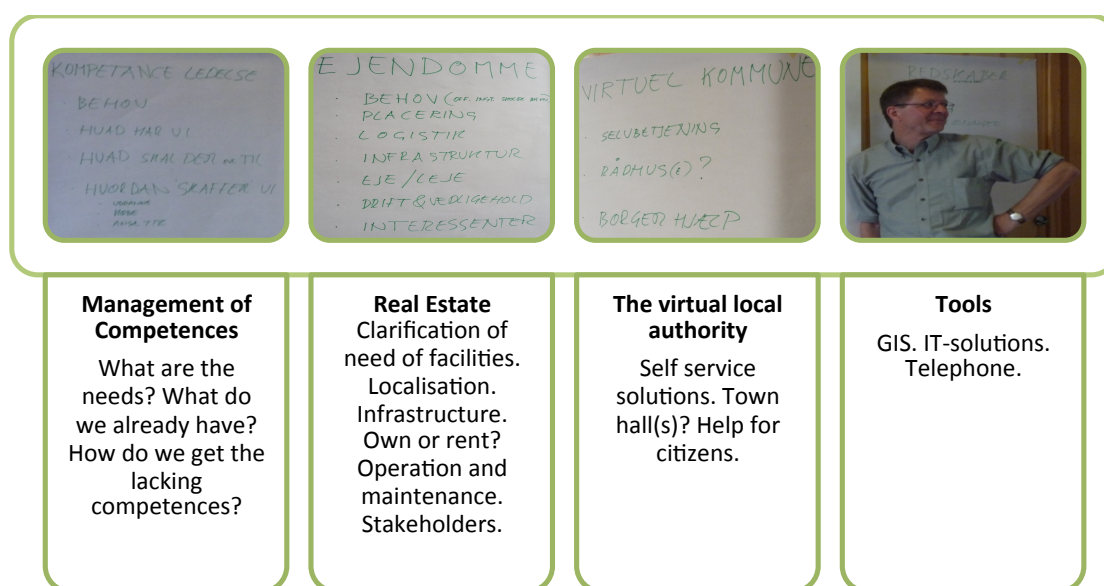


Figure 28: Utopia 'More Cooperation between Local Authorities': Begins with four areas of cooperation as showed in the picture above. The pictures shows the posters put on the office doors in the former jail building that is facilitation the cooperation. Text on the posters is translated in the green boxes below pictures.

The other groups presented the following comments and questions to the utopia: *'Do we still have the local authorities? How are the local authorities represented? What is the overall vision? Why is there a decoupling from the political level? And can the need for competences be decided without the political level? "GIS cash" – it is possible to apply for money for development of the digital area. Where is the management level?'*

Asking the coordinators of the pilot project about the origin of the idea they answered that a channel to Køge Bay was part of the utopia at the beginning, but that they had decided to make the concept more generic. The Køge Bay channel could, however, still be seen as a project that could unite all the local authorities in the pilot phase.

On my question to all employees whether they could see themselves in the utopia, different aspects were highlighted: *'More resources and more competences and knowledge would be the result of cooperation on specific professional areas (e.g. GIS). It could be a learning process due to the way of working. Are there any arguments that Albertslund should coordinate the project? Who will assign the coordination group and should it be on a civil servant level or on the management level? A joint planning on a regional level would enhance the holistic thinking.'*

After having reflected upon the questions and comments the group returned with some suggestions as to how the pilot project should be initiated and who should assign a steering committee, the coordination group and the working groups. The result of the pilot project should be recommendations to the politicians and top management on how the administrations could gain from the cooperation.

In the realisation phase the group stressed that the cooperation should still be decoupled from the political level. They pointed to the Department Manager and the Director of the Technical Administration as key actors within the organisation to whom they should 'sell' the idea, and

to a number of actors with whom the project as such should be developed (the local authorities, Gate 21⁴⁶).

4.5.3 The Next Steps

As a conclusion on the Future Creating Workshop we addressed the practical consequences of the workshop. The discussion was facilitated by me in plenum (with the employees) and documented as short statements on a poster. The statements are presented below.

- GIS – Geographical Information System – is seen as the corner stone for data handling in the Department and the idea of KIM must be developed further and prioritized in terms of operationalisation of the digital platform of Albertslund local authority.
- There shall be more clarity as to what kind of data the Department receive from consultants, in order to have data support the vision of KIM as a tool for holistic management.
- The GIS-group must anchor the development somehow – but how and who?
- Work flows and procedures must be prioritized higher. It was suggested to constitute a ‘procedure working group’ with representation from each team who can create an overview of existing procedures and help develop new where needed.
- The ‘technical drawing-group’ was pointed at as a possibility with the addition of representatives from the teams ‘Nature and Traffic’ and ‘Economy’.
- It was suggested that the principle of a ‘tegnestuemanual’ describing the steps in a given tasks should be developed to make it easier for the individual employee.
- It was stressed that employees could get a higher degree of knowledge sharing and coordination if they had more informal meetings (e.g. coffee breaks), and if teams could meet each other for mutual information on current tasks regularly.
- Dialogue about how the teams could create space for strategic thinking and development of practice (Not urgent but important – quadrant). Employees were asking for guidelines as to the code of conduct in relation to alternative ways of planning working hours
- A concrete suggestion was telephone free periods, leaving the office for team seminars etc.
- Asking for procedures regarding how tasks are assigned to the teams (e.g. can they be rejected?).
- It was suggested that a project group should follow up on the AR process, and that the Department meeting could have ‘development in the Department’ on a continuous agenda.
- KRG offered to take part in follow up meetings.
- Sustainability only indirect focus? – Key figures?

On the question concerning practical implications of the future workshop, a discussion about informal ‘coffee meetings’ dominated the session. It turned out that an initiative to create a rotation of visits between teams had been neglected by some and that this was believed to be due to old preferences prior to the merger of the two departments. It appeared that the employees who failed to support the initiative weren’t there and that they were more or less absent in the ongoing discussions about a potential change perspective in the Department.

⁴⁶ Gate 21 is a cooperation between business life and local authorities in the region Vestegnen focusing on development of sustainable solutions to societal challenges (, Om Gate 21 | gate21.dk).

4.6 WRAPPING UP: FUTURE SUSTAINABLE HORIZONS AND ARENAS FOR CHANGE

After the Future Workshop two factors halted our common process for a while: 1) The Department was facing an economical situation requiring dismissals and therefore influenced the urge to go into further development before things were settled; 2) I needed time for my own (academic) reflections on the process before we could decide next steps.

In the meantime I had a few meetings with the manager and one interview with the employee who had introduced the idea of addressing FM as a concept (chapter 1.3). In the following I will highlight some of the reflections to the process as a whole, to show the background for decisions taken for the last part of the AR process. The interview referred below is, however, not representative for all employees in the Department, also other communications constituted the basis for decisions on the further process. As I was regarded a welcome guest in the Department, I always had many small conversations when I was there.

The interview aimed at an understanding of how the AR process was perceived in the Department. To the first phase of the process the employee responded: *'I would say that working at a place like this with many professions represented, there will also be different attitudes as to right and wrong. For that reason I think that it was wise to begin the process at the very basic level as we did in the first workshop. I think though that it has been a bit difficult for some to actually understand the concept of FM, which also meant that it was difficult for them to be part of the world of imagination that was created at the workshops. [...] Later in the process people began to relate what happened in the workshops to their own work and work life. It seems that it was difficult for them to relate to the more abstract thinking in the first workshops.'*

To the social aspects he mentioned the cultural gap in the Department between the two former departments. *'We did not succeed to make common cake and coffee meetings part of the culture, people really reacted negatively there. On the level of 'good morning' we succeeded to change culture, but we have not yet created any lasting social relations between employees.'*

When I asked him whether there was a difference between workshops in the initial phase (relational focus, chapter 4.4) and in the second phase (Future Creating Workshop, chapter 4.5) he responded: *'In the last workshop you were facilitating the whole day. I think that here the holistic understanding became much stronger. [...] It was much better. It has sometimes been difficult I think. You know, when people talk together. One says something and the other responds to that - and then synergy emerges. That is what happened there. [...] As soon as one or two are challenging current thinking, poetry emerges. And I think that it is imagination and poetry that enables development. [...] The workshop really framed some good and funny stories!'*

When I claimed that I had really had the feeling of 'being there' in utopia, he responded: *'I have exactly the same experience and I think that it is because people felt more free, whereas they were more true to reality on the previous workshops. [...] On the other hand, had the first workshops not been, the sparks might not have ignited there?'* As to the difference the workshop had constituted for the realisation of the ideas he stressed: *'One learn how to argue when hearing other people's views. That is really important.'*

We also talked about the changes in the Department and he answered from his own position: *‘What has happened is that I am no more just the person in the corner talking about FM. Now I can get a kind of response on my thinking. Not that they do always agree – but I get response which I didn’t before. They have understood that FM is a professional way of working, a professional approach, and not just long haired talk from me in the corner. That is how I perceived it at the beginning.’* When I asked how he perceived the fact that the Department Manager had not participated in the workshops, he responded that he considered it a right decision: *‘I think that some of the discussions at the workshops would not have been possible, had she been there. And there I think that I have become better equipped to some of my discussions with her, because I have gained a better understanding in relation to how my colleagues think.* It was, however, all the time a balance of excluding her from the workshops but not from the process. To my question whether the Department Manager had actually backed up on the initiatives taken by the employees he responded: *‘Susanne is very open and listen to what we say. In some processes that is an advantage and in others not...’*

Still after the conversations, meetings and the interview I was not sure how to plan the final Department workshop and I decided to suggest meetings in smaller groups first. At a Department meeting I therefore suggested to conclude the process with three thematic workshops, followed by a Department workshop where the process should be evaluated and analysed. Prior to the meeting the Department manager had told me that the employees had asked for help from me to handle the new situation with fewer people for the same tasks. Though I was happy with the confidence I also felt that we should keep working with the utopian future horizons for sustainable FM. Presented with that dilemma one employee said very clearly *‘We MUST find the balance between work life that is always too busy and a maintenance of the utopian horizons for the future - that is not a question’*. This was supported by nods and some also offered their help to the planning. The employees claimed that the situation is always different from yesterday and they need help to find the energy and direction in the work (Department meeting 16th February 2011).

The employees backed up on the idea of preparing the finale in small workshops with the themes Environmental Work, Work Life and Data Handling and a final two days’ Department workshop (Figure 29). The thematic workshops should both facilitate a discussion on the specific issues addressed and address how we should conclude the process (give input to the



Figure 29: Principal diagram for the final process March – September 2011. Themes for the thematic workshops were: Environmental Work, Work Life and Data Handling.

design of the final Department workshop).

4.6.1 Preparing for the Finale

The three thematic workshops had different focus. Two had a clear professional focus while the third focused on work life. As the themes are interconnected, they were, however, all touched upon in the workshops but with different emphasis.

In the Data group the employees had a dialogue about KIM on a very high professional level. The two employees actually developing KIM were deeply engaged in the technical issues, and when confronting them with the principal difference in the gestalt of the Appreciative Inquiry Data scenario and KIM they responded that they could not really see the difference. Another employee who had not been in the Department during the entire AR process had another opinion: *'Tell me, is it from this kind of discussions that you have developed this systematics? If that is the case it begins to make sense to me...* When asking more into the role of the AR process the project manager on KIM responded: *'Of course it has influenced. Though it seems that we have just put data into the system, the dialogue about KIM has made us add data others that just those for the green account to support practice also in other Administrations.* Regarding the communication of data one employees had the vision of combining art with information: *'...And then I would make art with lighting on the chimney near the station, showing how many people choose the train and thus how much CO₂ has been saved. This should be done in all cities in the region, and I have talked with Carsten (Director) about sending an application for funding.*

The GIS employees were prepared for a status presentation on the project. Even though it is rather concrete what has been done, one employee had some reservations: *'I think that it could be very exiting but we are very busy at the moment. [...] We also need to test the system in our own Department or in the Administration before we can really tell anything about it.* Another said: *'I still think that it is not yet concrete. I don't know what the end product will be ...'* Confronting him with the idea of 'just' having a utopian horizon as a guide, he claimed that to him it is somehow too abstract and a more concrete idea as to what data should constitute KIM still need to be identified. To this the other GIS expert responded that the system is to be developed as a dynamic tool, where data are added when needed. *'If we build a data model with too many restrictions, it will be outdated before we have finished it.* To this an employee from another team added: *'The point is that we never know what tomorrow brings, right?' [...] This is why it is so important to have the Utopia as something that we aim at, instead of focusing on the scepticism and negative attitudes to the technical parts. [...] The strength here is that is has been developed in an operational context. Not by some experts from outside that have made some theoretical model that must then be implemented. It is much stronger what we have made though it is a slow process.'* It was concluded that the employees would be happy to present their ideas at a workshop, and though the system is not finished, they felt confident by sharing their thoughts with the other employees but also with eventual guests (110330, DATA).

In the Environmental Work workshop the substantial aspects of environmental sustainability in every day work life was discussed. The



Figure 30: A guide for environmentally friendly buildings developed in the Green Cities Cooperation.

employees had experienced a high degree of freedom to experiment, which had resulted in test areas of Bio-asphalt and LED light. Also challenges with the high environmental goals were, however, addressed: *‘There is also the issue with chemicals, which is where I get most frustrated. As for example with pressure treated wood. This we cannot use anymore. [...] For instance, I had an institution that wanted to build a shed. They had found something in BauHaus, but what should I tell them? In BauHaus the wood would with guarantee be pressure treated. Then I had to tell them to get a carpenter to make the shed, knowing that they would not be able to afford that and that they would probably not treat the wood afterwards as also paint is expensive...’* Also the case of abandoning the use of PVC had been subject to testing in some new passive house institutions, which had also showed to be very difficult to do in practice. *‘How do we e.g. check that they have actually used the materials asked for in the end?’* To new employees the publication ‘En Smal Sag’ was mentioned as the guide for green practice (Figure 30) though already a bit outdated, but also a demand for environmental certification by suppliers was mentioned as an important way to go.

The employees were a bit unsure as to what to tell about change in the Department. *‘I think that it is important that we get the perspective in relation to where we were before the AR process, as it is sometimes difficult to look back at change. Where were we two years ago? [...] something has been initiated by those workshops, but we somehow need the picture to see how we have moved. We don’t see the gradual changes. [...] You see the changes because you come from outside, right?’* To this I asked whether I should present my analysis of the process as a basis for a joint analysis and status. It seemed to solve the problem to some extent (110408, ENV).

In the Work Life workshop a dialogue about communication was central, as it had been decided to upgrade the competencies by employing a communication expert: *‘I find it strange that one would use so many resources on this area, when it could have given a bit more room in the professional groups if it had been spread out.’* It was expressed that the professional areas were increasingly suppressed by other areas as e.g. communication. Also in relation to management there has been a loss of professional steering: *‘I think that it is a general problem that the distance between professional knowledge and the management becomes ever greater. To be rude I would say that management has lost the contact to the professional areas. [...] Of course there is respect for the professional knowledge when some recommendations are given, but in the daily work we don’t have a professional dialogue.’* To this an employee from another team responded: *‘I think that it is the resources that are taken from us, we don’t get the time.’* An employee from a third team pointed to the specific area of economy steering as a blind spot: *‘I think that there is really a lack of professional competence and knowledge within the issues related to economy. Whether it is due to the fact that key employees have been fired due to savings or for other reasons. [...] It can’t be right that we as a local authority don’t have anybody who knows the system. It is embarrassing. [...] It is what happens when somebody on management level takes decisions without really knowing what is going on.’* To the work organisation it was stressed that some very high demands are put on the employees due to the decentralisation of power by the team structure: *‘When our manager gets ever broader areas of responsibility, she obviously can’t go into details with day to day decisions. More responsibility is given to the teams, and then we must operate as more or less autonomous units. That means that we must also define our own quality level. And when the resources are scarce, it becomes a bit difficult, right? And there is more and more focus on answering stupid ‘letters to the editor’ in the local newspaper, and we are measured mainly on the economy.’* Also the notion of ‘audition’ was discussed as a

meaningless activity taking too much time without any gains: *‘We make audits in Høje Tåstrup and in Glostrup, and they come here asking whether we follow procedures, if we have updated all the data systems etc. It would have been nice if some had actually reflected on the meaning of the auditing. We use far too much time for it.’* It was, however, also stressed that it is actually possible to influence the direction in which the professional areas move. This is, however, only possible if coping strategies are developed that enable employees to handle the unpredictable: *‘We operate in chaos, it is our every day work life. And then I feel more like trying to make an action plan that can handle THAT.’*

In this workshop the employees were definitely not ready for a workshop based entirely on their input. They asked for my view on the process as they believed that I could see something that they could not. One employee thus expressed her frustration with the change perspective: *‘I really need some kind of a scale to judge how we have moved the last two years. It is fine when you claim that we have moved. I do, however, feel like when a granny tells her grandchildren that they have grown, and the child just can’t see it herself. Then she needs to have a mark on the wall or something. [...] I just can’t put words on what it is that we have developed, so I thought that we could perhaps go back and try to find out where it is we have grown and then talk about that...’* Another employee responded to her: *‘If I should tell where we have moved, is in the attitude of the individual employee. Because we have talked about it, there has come greater ownership and it has become integrated that we care for the environment’* (110412, WL).

Having returned from the Work Life workshop I had a talk with some of the employees about the Department workshop that was planned for June, and we concluded that we could not mobilise a Department workshop based on a pure bottom up emancipatoric approach in the current situation. We agreed that my input would be necessary to ‘lift’ the evaluation, as I could perhaps give some indications as to the ‘scale’ by which change could be measured. Accordingly we postponed the Department workshop till September 2011, which was only three months prior to the deadline of my PhD thesis. The postponement was needed if I was to make some preliminary analysis before the workshop.

Two preparatory meetings were held in August. It was agreed that I should present the narrative (short version of this chapter) and two of the theoretical fields that I would use as analytical discussion partner: Governance and Sustainability. The employees would then prepare presentations of status and future action on the focus areas Strategy & Procedure, Data Handling, Communication & Knowledge Sharing, Environmental Practice and Evaluation Practice. It was decided that the Department Manager should take part in the workshop this time to enable a fusion of future horizon for the Department. The aim became as follows:

- To analyse, understand and question current practice and future scenarios in the light of theory on sustainability and governance in the public sector.
- To identify the most important future horizons for sustainability that the employees would work towards in their daily practice.
- Find ways to create free arenas in everyday work life now that the AR process was at its end.

The notion of free arenas (in a coffee break context) had been subject to some dialogue with the Department manager who found that I was over-analysing the situation, but the employees found it highly relevant and important to also address this in the final workshop.

4.6.2 Introducing the Final Workshop

The aim of the final workshop in September 2011 was to analyse current practice in relation to understandings of sustainability and to formulate future horizons for a sustainable FM practice.

The Director of Environment & Engineering and the Municipal Director had accepted an invitation to attend the last session, where employees should present status and future plans for a sustainable practice and ask questions to the Directors relevant for their future horizons. The workshop was therefore planned as a process building up for the presentation of what had been learned and what should be the future horizons for a sustainable practice.

My role in the workshop was significantly different from that in other workshops⁴⁷. I presented my theoretical footing which at the beginning got the character of dialogue based teaching, where employees asked and commented my presentation with examples from their practice. During the entire workshop I kept returning to the theoretical aspects as a discussion partner for the joint analysis of practice. I deliberately took the critical theoretical position, to get the employees to reflect on the governance critique and see current practice in the light of different understandings of sustainability. Both days began with welcome and coffee in the kitchen.

To create a common frame for the analysis we had created a time-line on a wall showing 2009 – 2010 – 2011 with indications of the workshops that had been held, accompanied by the posters produced in the different workshops. This showed visually the process in time and content, and formed the basis when going through the process from 2009 – present time. Before beginning the analysis the theoretical perspectives should be presented and understood by the employees, which created the focus of the first part of day one.

4.6.3 Governance and the Concept of Sustainability

Governance trends (Bureaucracy, NPM and the Relational Paradigm) was presented by me followed by the Department manager who had the special role of giving her analysis of the governance profile in Albertslund local authority. As I presented both the principles of the governance paradigms and the connected critique, we had a background for critically discussing the pros and cons in an Albertslund context. Also to the concept of sustainability both mainstream understandings and more critical positions were presented (main stream: Ecological Modernisation and Natural Capitalism / critical: Vandana Shiva, Sachs, Elling and Aagaard Nielsen) (Figure 31).

⁴⁷ For the first time a digital recorder was used in a Department Workshop to support my memory. This was accepted by the participants of the workshop before the device was turned on.

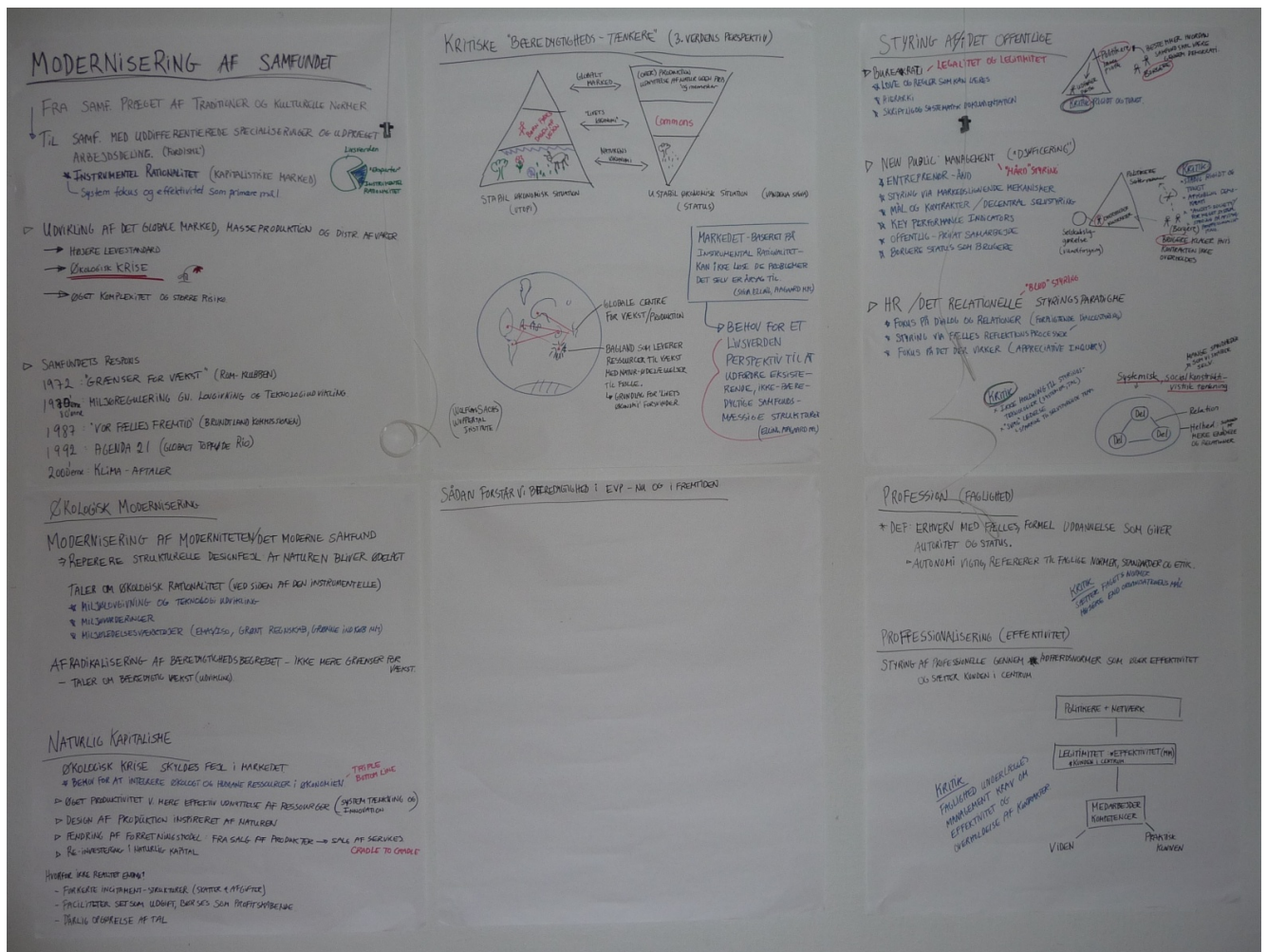


Figure 31: Posters supporting the presentation of governance theory and theoretical understandings of sustainability. Posters were chosen as media as it enabled us to return to the theoretical points during the workshop. This would not have been facilitated as well by using power points.

Governance in Albertslund Local Authority

The department manager initiated her presentation of governance trends in Albertslund by using the GPS technology as a symbol of a technology that can lead the way but never gives an overview of the city. The story led to the conclusion that it is important to reflect critically on how and when the technology is used, as technology influences the way people interact socially.

She told that managers in Albertslund local authority are all educated within the same tradition (systemic) which is a way of steering the organisation in a certain direction, but when it comes to reality it is the individual employee who must take the decisions from task to task due to the flat organisation and decentralisation of responsibility to the teams. To cope with the lack of rules and completely loose structure in the organisation of work, strategies, plans and procedures must be produced to give some kind of direction as to how tasks must be solved. Having looked at all the steering documents (more than hundred) the Department manager concluded: *'Every one of the documents is relevant for the work of the Department'*. As the Department has the role of providing facilities to all administrative areas, strategies

and plans cannot be made without somehow influencing the plans for the Department. Interestingly there has not (yet) been strategies or plans for public buildings, but this is on its way as one of the result of the AR-process.

According to the department manager practice in the Department is evaluated through criteria of the professions in building processes and maintenance, but skills in economy steering and interdisciplinary communication are also important. On top of these demands for skills and ability to navigate in the system, wishes for innovation are also present and must somehow be addressed – e.g. sustainable FM. More and more steering documents are produced, and in a four year period the number of steering documents has raised from 53 to 102. In order to get an overview the top management has developed a matrix where all steering documents are evaluated through red-yellow-green light that enables a quick overview (Figure 32).

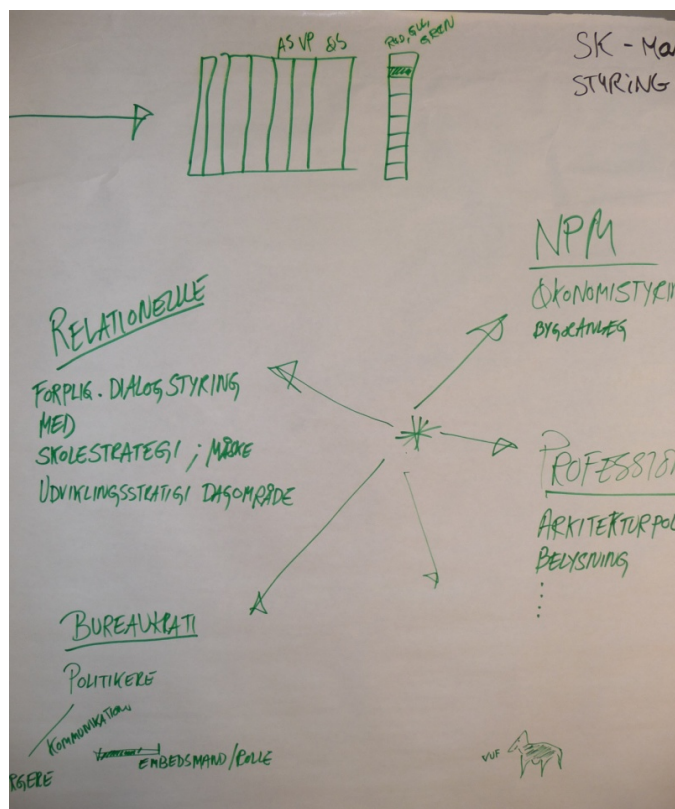


Figure 32: Figure of public governance trends as drawn by the Department Manager. At the top the matrix of Red - Yellow - Green traffic light is indicated. The dog at the bottom symbolises innovation (inspired by Lerborg, 2011).

This raised a dialogue about the administrative burden connected to this, and one employee claimed that he thought it was extremely bureaucratic – not flexible as believed when NPM was launched as a governance strategy. According to the department manager Albertslund local authority has not really integrated the principles for NPM, as local politicians are happy with the bureaucracy with its representative democracy based on a direct dialogue with citizens: *‘Local politicians are engaged in all kinds of small matters and interfere with daily practice. They have not accepted the market thinking in NPM, whereas strong emphasis has been put on the relational paradigm through a focus on internal as well as citizen related dialogue.’* Internally the relational paradigm can be seen in practice through employees’ cooperation bodies, representatives securing a healthy work environment etc., and on the societal level there are opening towards new ways of engaging citizen through partnerships or single case involvement through e.g. workshops.

In spite of the strong rhetoric focus on aspects of the relational paradigm, also more instrumental steering technologies are regarded important by management. The department manager stressed the demand for SMART⁴⁸ goals, which led to a discussion whether it is fair to steer through goals as not everything can be measured. Sustainability was mentioned as one

⁴⁸ Specific, Measurable, Attainable, Relevant and Timely (Wikipedia contributors 2011).

example a something that can be difficult to put into smart goals and the employees sees it as a challenge to make visible also the soft parameters.

Understandings of Sustainability

After a presentation of governance trends in Albertslund by the department manager, perspectives on sustainability were given on basis of a historic account on the modernisation process: Principles of Ecological Modernisation and Natural Capitalism and as a counterweight the critical third world perspective as presented by Vandana Shiva and Wolfgang Sachs. Critical Utopian AR was presented as one possible bridge between the critical thinking and potential openings in societal structures towards a more sustainable situation.

Presenting the critical edge of sustainability as outlined by Shiva and Sachs (and deliberately presented in a very critical way) called for reactions among the employees. Some thought that it was a little exaggerated to claim that nature quality is negatively influenced by any modern production, and others thought it unfair to judge Ecological Modernisation and Natural Capitalism incapable of solving the ecological crisis. Especially Natural Capitalism was highlighted as something fundamental new and something that would take quite some time to implement.

Also the notion of inequality as presented by Sachs was provoking, and led to the question whether we would then be the bad guys? It becomes difficult to actually act when it is structures of society that enforce certain patterns of unsustainability, if there are no obvious openings for action. The claim that the strategies of Ecological Modernisation and Natural Capitalism is not sufficient as it does not break with unsustainable structures in society, led to the question whether it is not too soon to abandon the idea as a road for sustainability. It takes time to change society and Natural Capitalism is a visionary thinking in the aim for sustainability. The idea of buying services (e.g. light or transportation) instead of material goods (lamps or cars) was considered a radical break with the thinking in modern society, and it will take time to promote the idea. Examples were mentioned on local initiatives that inscribe in Natural Capitalism: Car sharing in Albertslund and cooking together in a common kitchen in residential areas.

The discussion of Natural Capitalism and the critical thinkers led to reflections as to whether the world is mature for the critical perspective. It was suggested that it would perhaps take a journey through the steps of Natural Capitalism to get ready to change structures of society in the critical understanding. A last reflection was, however: *'We are at a point of no return and the nature has begun to strike back already. The world will change and it will be radical changes.'*

4.6.4 Status on Change in Practice

The discussion of theoretical perspectives on governance and sustainability was followed by an account on status and future perspectives of focus areas, with reference to the visions and utopias developed in the workshops. Five focus areas were chosen to be accounted for by the planning group: Strategy & Procedures, Data Handling, Communication & Knowledge Sharing, Environmental Practice and Evaluation Practice.

Strategy and Procedures

The notion of (lack of) procedures and a vision of the Department working on strategic level had been on the agenda since the very beginning of the AR process. As a follow up on the process focusing on lack of procedures in the Department, work had been initiated to develop and collect standardised procedures for different tasks systematised in a ‘manual of procedures’. Procedures are systematised and made concrete, in relation to internal knowledge sharing and communication with external partners. The project is driven by employees from the strategic team ‘Communication and Architecture’⁴⁹ and the more operational team ‘Building and Maintenance’. The aim of the tool is to enable employees quickly to find relevant information when getting a new task, regarding communication, process management, documentation etc.

According to the responsible employees developing the manual of procedures was made possible through the dialogues in the AR process, where the profile and core function of the Department was discussed and the focus on (lack of) procedures had led to a clarification of the needs in the Department. The manual of procedures had since gradually developed as ‘work in progress’: A file visited and elaborated upon by the two employees who work on the document when time allows this. The vision is that all employees must be able to draw upon the procedures and communication plans of the manual, as an integrated function in KIM – the GIS based digital platform for data handling. The manual is seen as a dynamic tool to be developed according to current challenges. When new tasks emerge, procedures can be implemented in the manual as soon as they are ready. The manual is not quite ready for use, but the procedure was working for getting new procedures into the manual. The manual of procedures will also contain information in relation to suppliers: *‘We must have clear demands for sustainability when ordering services by providers. In this way the market is forced to act innovatively and move in a more sustainable direction, due to the demands given by our Department.’*

The systematised collection of procedures is followed up by a Real Estate strategy, developed by employees from different teams in close cooperation (work in progress). The aim is to make a strategy for the building portfolio, describe ways to communicate within the organisation and externally with other administrations. The AR process has shown that the daily work is very much based on tacit knowledge, and the strategy is a way to make the tacit knowledge explicit. When addressing sustainable FM in the process of developing the Real Estate strategy, it was discovered that the environmental management system seems to have paved the way for a more smooth communication. The common platform constituted by the system has, however rigid, somehow created a communicative culture across administrative borders that serves as a basis for further cooperation between the Department and other administrative areas.



Figure 33: Employees presenting status for Strategy and Procedures.

⁴⁹ New team formed in June 2011 uniting the GIS function with strategic and communicative tasks of the Department.

Development of the Real Estate strategy facilitates a process where employees gather in a larger group discussing a sustainable development of the future building portfolio, with a special focus on how to communicate the plans to the rest of the organisation. According to the department manager, the Real Estate strategy is a way to elaborate on and communicate what we have learned through the workshops in the AR process, which has shown the enormous amount of knowledge in the Department. The Real Estate strategy is meant both as a formal steering document and as a help in everyday work life through a number of tools connected to it as e.g. the manual of procedures.

Data Handling

Many discussions related to knowledge sharing and systematisation of existing knowledge and data had been facilitated through workshops and continued in the GIS team. Needs and wishes in relation to data handling have become clearer along the way, and ideas have been tested as to the choice of an FM system to support needs through discussions with a number of system providers. It was claimed that without the workshops and the social arenas created through the workshops, they would not have come so close to actually being able to choose a digital platform.

When reflecting on the starting point for the data handling system the figure connecting databases (Figure 17) seem relevant for a small number of employees due to technical character of the vision (Appreciative Inquiry workshop). The utopian idea of the flexible organisation (Project Management in Paradise Figure 23) had helped open up the vision of a KIM database to the Department and beyond, as it was taken from the technical level to a broader context as a tool that should support a specific way of working in the organisation. A dialogue about the use of terms as Total Value and key performance indicators was seen as important to consider the database in a broader context, and thus guide the right choice of data on the right detail level.

The vision is that KIM shall contain data relevant for the entire organisation, but also open for possibilities of making graphical presentations of whatever may be requested from the organisation or from a broader public. As phrased by the project manager: *‘The work is at a very advanced stage already, and in the organisation beyond the Department people are gradually realising the potentials.’* The AR process has not only helped the project team to find its own footing in the work. It has also taken the project from the stage of a technical discipline performed by ‘nerds’ to a stage where employees from the entire Department have become engaged in the development. *‘It has become a way of thinking in the Department, and all teams contribute with ideas as to how the systems could help their practice.’*

At present the system already contains an enormous amount of data, as it is connected to all the databases described as incompatible two years earlier. Next step will be access to even more systems by the new version of KIM already available on the citizen interface. That means that information from public databases as ‘Reno-web’ (waste handling) and ‘Rotte-web’ (pest control) can be drawn directly from KIM, and data connected to operation and maintenance of roads will also become available. ACADRE, the formal local authority filing system, has also been integrated, which has enabled data to be drawn connected to locality and not only CPR (citizen legitimating number). The system enables a new and innovative



Figure 34:
Employee presenting status on KIM.

way of working by combining data in new ways, as in e.g. presenting the digital green account and biking routes graphically on an Albertslund city map. *‘There are no limits as to the creative ways data can be made visible, both in relation to administrative tasks and as a tool for decision making by management and the political level.’*

In the search for an FM system it had been difficult to find one that connects data to geographical locality, and it was therefore crucial to find one that integrates with GIS. There is, however, a favourite that provides the possibility to import BIM models into KIM, and automatically verify that formats are correct or rejecting the data if not. *‘That ensures the quality and compatibility of data and makes the transfer of knowledge easier about new buildings from providers.’* An agreement has been made so far that the providers of the systems will demonstrate the interface on data connected to one of the buildings in Albertslund local authority to verify the virtues before an eventual agreement.

Key performance indicators must also be integrated in KIM within the more soft areas (relational paradigm) that are developed in the organisation, and the overall vision is that the system shall support all possible needs of data. Technically it has shown to be possible and the next step would be to actually get the other administrative areas to draw on the same data, in order to get a common basis for decisions. To the question as to how this should be implemented, the possibility of a top down process directly from the top management was mentioned as the correct and perhaps easiest way, but also a spreading of awareness through a bottom up process through cooperation with employees elsewhere in the organisation. Key persons knowable in relation to IT in other professional administrations had, however, left the organisation due to savings, so a bottom up approach to the implementation would need education of other ambassadors who could argue for the thinking and potentials of KIM.

One way to show the potentials has been to actually make solutions to challenges that would not otherwise have been made. An example was given where all stages (for theatre) in the centre of Albertslund had been plotted in KIM, with information of how big an audience the stages could safely support. This was made for the professional administration of Children and Youth that wanted an overview to plan arrangements with the institutions during the year. As the fire Chief saw the result, he realised that having that kind of overview in the entire city would make administration much easier, and it would be possible quickly to give answers as to where arrangements of a certain size could take place to citizens and users of public facilities.

Communication and Knowledge Sharing

Communication has been improved dramatically internally due to the AR process that began by merging two departments and two very different cultures had to meet. The workshops have created room for communication and sharing of knowledge, and the roles of teams and individual employees have been subject to focus which has resulted in closer social and professional relations: *‘That means that we communicate much more with each other on a daily basis.’* According to a newcomer specialised in rhetoric the communication in the Department is very good, beyond what could be expected in an average work place. The good mornings and good buys have become an integrated part of the culture, which also means that employees have become aware of walking to the end of the corridor in the morning even though they are located in the very first office.

As a result of the learning process related to team structure and means of knowledge sharing, new teams have been formed and meeting practice has been changed in order to meet the demand for knowledge sharing and coordination between teams and between teams and the manager. In practice the Department manager will meet with the teams separately and with two teams together, in order to enhance knowledge sharing and coordination between potential cooperation areas. To follow up on the external communication one member of the team 'Communication and Architecture' will take part in all team meetings. The concept of communication plans has also reached a level where it can be used as a tool, as e.g. the PCB⁵⁰ communication plan that was made as a follow up on recent renovation where the use of PCB was discussed (, Kritisk PCB-indhold i to af fløjene på Vridsløselille skole - Albertslund Posten).



Figure 35: Employees presenting status on Communication and Knowledge Sharing.

Externally there has also come a greater focus on communication, partly due to an overall communication strategy in the organisation. The management group had asked for a proactive and clear communication to citizens, aiming at a communicative position one step ahead of the public communication through local and national media. This is done by analysing the present and future local authority activities on the technical areas, in order to plan and execute communication before eventual critical voices in society. This is a shift from reactive communication answering critique and explaining what have been done to proactive communication making narratives of future projects and innovations. The external communication is coordinated through a trans-disciplinary group with representatives from different departments in the Administration. A specific procedure must be followed from idea to a joint communication process: The group makes a project description to the management group, with information of aim, use of resources and time schedule. Management thus takes the final decision whether to execute the plan or not.

The proactive communication strategy has been a wish for a long time also in the Department, but has been further pushed by a new internet based media called 'Vestfronten.com' (, Albertslunds Netavis2011). Whereas the trend of the official local newspaper 'Albertslundposten' is to show the efforts by Albertslund local authority in a very bright light, the new media has a more critical view on performance. As put by an employee: *'The administration must then foresee what critical stories might possibly diffuse into the political agenda or to other media, and act accordingly in a proactive way to avoid critique from politicians and citizens. Vestfronten.com can be seen as a resistance to the NPM steering, and*

⁵⁰ PCB is a chemical compound that was used in some building materials until it was forbidden in 1977 (Danish context) (, Forside - PCB-guiden). The compound is poisonous and accumulates in ecosystems, imposing a health risk in human organisms due to accumulation (, Miljøstyrelsen - PCB findes fortsat i visse ældre danske bygninger).

one of many signs that a new wave of user involvement is necessary to compensate for the weakening of representative democracy - also from our Department.'

Environmental Management

From a situation where frustrations with environmental work and in particular the environmental management system were so intense that they could almost be felt in the room, since the beginning of the AR process there has been a change to a situation where it is not considered an important issue to discuss. This was noticed by me as an outsider but confirmed by the employees, who came up with a number of possible reasons for the change: 1) The system is being changed which should give less administration and more time for actual work with environmental issues. 2) Environmental focus has become an integrated part of the way of working in the department. We all know that we cannot have PVC in cables and no chemically pressure treated wood. 3) Focus has changed in the organisation due to the economical crisis but also because e.g. health is now branded as a focus area. Having given all those reasons it was stated that there are still challenges in relation to an environmental sustainable practice, as it is still the individual employee who must know and act without further coordination and overview on the environmental area. *'It is unclear how ambitious the efforts must be, and a coordinated plan could be a next step for environmental priorities in relation to buildings and green areas. More coordinated activities on the environmental area could perhaps lead to better results environmentally.'*

The green account was evaluated in relation to the actual use in environmental practice, concluding that it is not really used as the energy labelling are preferred as a tool to find new areas of environmental action. It is, however, a wish to use the green account more actively which has perhaps come closer with the publication of the first digital web based green account in 2011 (, Grønt spring ind i digital verden - Albertslund Posten). As to the environmental management system there is still an experienced division between the 'real' environmental work done in relation to buildings and green areas, and the small things as waste management, turn out light etc. that is in focus in the system. People know how the system works and have become confident with it, but the future focus must be a holistic plan for environmental practice in relation to core functions in the Department and relevant communication.

The status report on environmental work in the Department was concluded by asking the rhetorical question: *'Do the politicians wish for branding or real environmental effects on the buildings?'*

Evaluation Practice

An employee gave an account of the status on evaluation practice in the Department, claiming that formal evaluation practice is very much connected to the steering documents as e.g. the business plan. *'Day to day evaluations are, however, a bit less systematic, but the action research process has changed the culture that has been more reflective, and evaluations have thus become integrated in the daily dialogues.'* According to the employee a systematic tool would have the risk of being too rigid and having blind spots due to specific evaluation criteria, as e.g. the environmental management system that leads actions primarily towards specific goals and thus prevents a broader perspective on environmental issues and sustainability.

As to the AR process it had put sustainability on the agenda and thus given a greater understanding of the topic, but the greatest effect – also on evaluation practice – has been the change in culture: *‘The process has given theoretical perspectives on the steering and thus a deeper understanding of the tools we use, that has led to more informed reflections on own practice and a critical distance to the system and tools.’*

According to the employee presenting status and reflections on evaluation, the AR process had led to a second order understanding of their situation in relation to sustainability. *‘Learning has occurred beyond a first theoretical understanding of steering mechanisms as framing working conditions, by analysing the governance perspectives in relation to different understandings of sustainability. This has given us an opportunity to see the role of the Department in a more holistic perspective, and thus enabled a culture supporting a reflective practice in relation to the concept of sustainability.’* It was also stated that the workshops had helped very much in the process of creating a common culture with strong social relations in the Department: *‘The AR process started just after the merging of two departments with very different cultures, and the process has facilitated a journey towards a more coherent Department.’*



Figure 36: Employee presenting status on Evaluation Practice.

It was concluded that though a specific evaluation tool or evaluation procedures have not been developed, the AR process had led to a culture where evaluation had become an integrated part of every task. It was specifically mentioned that also evaluation in relation to sustainability had become common practice, which was regarded as perhaps the most important change in the Department in relation to evaluation. From a situation where use of narrow sighted tools were the only mean of evaluation, a situation has evolved with a far more holistic view on evaluation and development of practice. With the recognition that management technologies bear the risk of providing blind spots in evaluation, it was suggested to develop traditions for evaluation in relation to sustainability when being together – at department meetings or in less formal settings. *‘This would be a counterweight to the formal demands given by the official tools for evaluation in the organisation that are often answered mainly with the aim of meeting the demands and thus not leading to learning and development of practice.’*

Evaluation criteria and data tend to be outdated very quickly when it comes to technical matters, as e.g. the ambitious plan for sustainable lighting in Albertslund made in 2006 (Albertslund Kommune) that was considered outdated a few years later. *‘The hideous task of listing current laws to fulfil the demand in the environmental management system has finally been abandoned, as new laws and regulations are forwarded to the employees automatically through an Internet service.’* This pointed to the conclusion that internal tools, systems and plans might be good for something, but the Internet is a more dynamic tool which is used to a large extent to look for new knowledge and thus contributes to evaluation of solutions in relation to e.g. sustainability.

As a conclusion the employee stated that: *‘Evaluation has become part of everyday communication and thus embedded in culture! The challenge is how the professional judgements can be balanced with economic demands.’* The balanced score card was pointed to as one tool that could give this holistic view, by balancing the values that must be taken into account.

4.6.5 Understanding public FM Practice in the light of Sustainability

After a nice lunch we were ready to begin the analysis of the visions, utopian horizons and corresponding development in practice. The analysis took place as a dialogue informed by the tension between practice and the theoretical (critical) perspectives on governance and sustainability. As the dialogue went back and forth between themes and perspectives, the presentation is here structured with headings to make reading easier and more consistent.

Free Arenas and the Motion of Zooming

The discussion of practice in relation to a governance perspective and different understandings of sustainability opened for reflections showing that the employees had realised that though reality as experienced in everyday life seems unchangeable (reified), the process of ‘zooming out’ can enable a critical examination of current systems, procedures and tools. In order to create and maintain a sustainable work life this was considered absolutely crucial. Free arenas were highlighted as necessary to create the critical distance.

Employees do not accept efficiency as primary goal, and systems not considered meaningful are challenged either by civil disobedience or by doing what must be done and then turning to the ‘real work’. This kind of resistance seems to have become legitimate in the department through the AR process, and has also led to changes in the environmental management system as former obligatory law-lists are not produced any more. It was highlighted by the Department Manager that the idea of resistance must be seen in a context. *‘Albertslund local authority has been governed through trust and a high degree of freedom to create alternative arenas for change, due to its historical long period with a Mayor allowing for untraditional solutions.’*

The employees expressed that something they had really learned from our joint workshops was that it makes a huge difference in everyday practice that space is provided for a critical distance to everyday practice. Here it was very interesting that the employees with few expectations agreed that it is now possible to create free arenas in everyday work life, and that it is mainly a question of will and the right attitude. Confronting them with the situation in 2009 where it was claimed that change was impossible because they were always extremely busy and not in control of their own work life, they responded that things had changed: *‘The mindset is different now’*. It had become legitimate to create free arenas and also possible to actually integrate the idea of free arenas into the rhetoric of everyday work life.

Another response to my claim was that it is a question of *creating* a free arena, it might not be provided from outside. Some teams are, however, better at creating free arenas than others due to different working tasks (strategic vs. operational). *‘The AR process has led to a ripening in relation to the whole idea of leaving urgent tasks sometimes to reflect on the overall priorities, and the readiness for action has only come within the last year or so. Free arenas are also something that one must integrate in everyday thinking, and not necessarily a question of scheduling time to be creative. Turning situations upside down in front of the screen a couple of minutes can make the difference, by reflection on own practice during the*

day – and not just in a defined space and time.’ Though many agreed that it is possible to create free arenas in everyday work life, they acknowledged that this was not the case when we started the AR process.

It was claimed that: *‘Free arenas are crucial to be able to take sustainable decisions, as it takes some distance to see the small tasks in the broader perspective.’* When elaborating further on the claim that free arenas can always be created, one employee pointed to the necessity of also having institutionalised free space as e.g. the workshops in the AR process, to help paving the way for free arenas as integrated in work life. An example mentioned was the manual of procedures that has been developed in between tasks because the two responsible employees found free arenas for development, but only because of the workshops where ideas and needs were discussed and elaborated upon.

By one employee free arenas were extended in its meaning: *‘It is freedom to challenge the steering technologies. We must abandon the idea of being steered by systems and take charge of the development of systems in order to make the systems support practice.’*

It was mentioned that the coffee breaks discussed at the future creating workshop had not become reality, but that this was perhaps not so important any more as the whole culture in the Department had changed: *‘Everybody remembers to say good morning and good bye’*. According to a newcomer they walk in and out to each other all the time to seek advice, get help and try out possible cooperation situations. Teams had also been changed as had the formal structure for meetings, providing arenas for knowledge sharing between teams in a way also bringing the manager closer to the difficult job of task prioritising.

Critical Distance to Systems

In a movement back and forth between practical experience and theoretical perspectives the employees developed a critical edge to the concept of ‘system’. *‘Systems are constructed for a reason in a specific context, and must be abandoned or changed deliberately along the way to support practice – and not the other way around.’* The balance between systems and resistance towards systems were discussed, as it was recognised that systems and tools are also valid and useful in everyday practice. The conclusion was: *‘We must develop and maintain a critical distance to systems in the organisation, and make visible resistance if systems become irrelevant or even restricting on everyday practice.’*

An employee expressed his difficulties in seeing what should motivate to a further engagement in practice, if management systems are the only means of steering in an organisation. A dialogue followed about free arenas as a way of creating engagement, with references to the AR process that has indeed created motivation and drive for action. *‘We must get a critical distance to the systems in order to evaluate whether the system makes sense in daily practice, and if it does not, it must be changed accordingly or even abandoned as steering technology.’*

The renovation of ‘Bakkens Hjerte’ (club/institution for young people) was given as an example of something that can be regarded sustainable, as it is partly based on recycled building materials. Rhetorically the question was: *‘Would something like that be rewarded by the environmental management system?’* It was stated that the innovative and sustainable solutions are not encouraged by a system. *‘On the other hand, innovative thinking had led to a sustainable practice in the case of the specific renovation, so free arenas for thinking beyond the system co-exist with the system, they do not necessarily exclude each other.’*

An employee experienced the many systems as obstacles in relation to her work: *‘I wonder if they make a difference on managerial level?’* She was highly frustrated with the system focus: *‘Systems are something that I must obey in order to get to the real work, where I draw on my professional background and personal competences gained through a long work life.’* It led to a reflection in relation to steering at distance, as the systems are meant as steering technologies enabling top management to evaluate and influence on practice, in spite of the distance to the teams or individuals. The red-yellow-green traffic light showing status on all goals in the organisation was given as an example of a steering technology that was perceived meaningless: *‘I assume that it somehow provides information to top management of some value, for me it does not make sense’*. The Department Manager added: *‘Responsibility is pushed out in the organisation and the individual employee must take decisions, based on knowledge and practical experience.’* The criteria of legitimacy are formulated by politicians and top management, made explicit through goals and followed up by traffic lights.

With reference to the critical thinkers, I made some reflections on the systems as something created by humans with the aim of improving the social world. This led to the comment: *‘If systems do not make sense, it is important to be ready to either change or abandon the system.’* It does, however, take a critical distance to see this as suggested by one employee: *‘The critical distance to the systems under which we work can only be established in a continuous zooming in and out.’* A grand tour in the helicopter is important to find out whether to adjust and thus take ownership to the system or alternatively mobilise resistance against the system.

I suggested that taking ownership would fit to the relational paradigm where Appreciative Inquiry and a focus on what works would inform the reaction, while the mobilisation of resistance against meaningless systems would inscribe in the thinking behind Critical Utopian AR: *‘One claim could be that a critical distance together with some resistance is needed to mobilise the energy to actually change a system already in function.’* An employee commented: *‘You get blind to the system and perhaps some frustration and resistance is needed to actually see the system and thus change it.’* Another noted that *‘Seeing the systems with a distance and realising that they are not supporting practice does, however, often lead to quick action towards solutions to improve the system. It would then also be important to zoom out again after a while to evaluate whether the work situation had actually improved and if the system actually supports a sustainable practice.’*

It was mentioned that management expects employees to actually act critically in relation to systems that do not make sense, as it would not be good for the organisation if employees became so pacified that they could only follow systems. The Department Manager responded

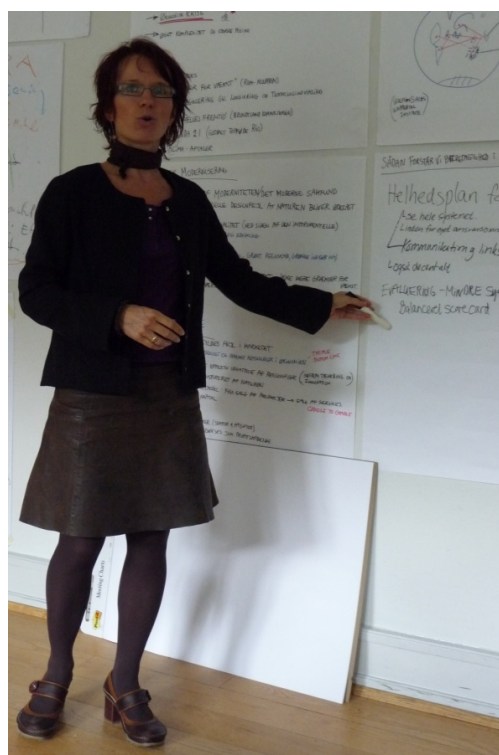


Figure 37: Kirsten Ramskov Galamba facilitating the joint analysis.

(smiled): *‘Management demands no less than the soul of employees.’* It was, however, stressed that systems are needed to make the organisation work and therefore the systems critique is not meant as a fundamental critique against systems as such. What was requested is free arenas that enable the critical distance needed to see the systems from somewhere beyond the systems (zooming out) and thus critically evaluate and perhaps change the systems according to daily needs and in relation to the concept of sustainability.

A question related to the Agent Principal theory (Lerborg 2010) as means of steering of the operational unit (Figure 6) taking care of operation and maintenance of public property led to a dialogue about contractual steering, and the challenges connected to embrace a concept as sustainability when the contract is the main steering technology. To put demands in relation to sustainability in a contract reduces the concept to concrete and measurable targets, and thus contradicts the aim of action out of a holistic understanding. A close dialogue as inscribed in the relational paradigm is thus called for. The question is how the agent succeeds in communicating central values and criteria for legitimacy (Figure 3), and thus actually creates the room for self-governance at de-central level and at the same time ensuring that practice is developed according to goals.

‘Systems must not be too automated’, one said. This brought the discussion to indicators and design of systems (with reference to ‘audit society’), as the engineers behind a system indirectly control practice through design of indicators used as evaluation criteria. As the indicators can be complex and in-transparent, it might be difficult to see through the rationalities behind evaluation and thus understand the implications in relation to sustainability. It was suggested that one learn to ‘cheat’ the system to get the desired results, as e.g. the sustainable building certification where criteria might not support a sustainable practice in the specific building, but nevertheless gives the organisation a branding tool. Buildings are thus built to send signals to the surroundings that the company is sustainable, but if the values behind the certification are developed in another context, it might not lead to sustainable performance of the building or sustainable practice from the users.

On the other hand, accounting systems are also nice to have as they can provide overview. The balanced scorecard was suggested by an employee as a tool to provide an overview of values, and if indexed it can even come out with a number in the end that takes into consideration the values and priorities of different goals in the system. But what happens when indexing? Who can judge whether the criteria put into the system are right? It was suggested that the balanced scorecard can be produced ad hoc in relation to specific decisions, and that the indexing could be made transparent from case to case.

Natural Capitalism Perspectives on Sustainability

A question as to whether the single tool or system should embrace all aspects of sustainability as suggested in Natural Capitalism (social, ecological and economic) led to a reflection on parts in relation to the whole (with references to systems thinking). Natural Capitalism takes a whole system perspective on sustainability, claiming that solutions can never be sustainable if not seen and acted upon in relation to the whole. This raises the questions of boundary critique. No matter where boundaries are put to define the system, it remains a social construction.

Confronted with this the employee responded: *‘The concept of sustainability becomes empty, if we can just define everything ourselves.’* We tried to relate to the social constructivistic assumption behind the relational paradigm, and concluded that in a social constructivistic

light sustainability becomes a relativistic and perhaps empty frame for branding. Even if all steps in Natural Capitalism are followed (chapter 2.2.2), the balance of the pyramid of economies as presented by Vandana Shiva might still be unstable, and how do we act then? Do we just construct pictures of reality that ensures us that because we followed all steps in Natural Capitalism, our actions are sustainable and accordingly also the world, ignoring that resource consumption and sharing of natural resources is still not equal? The common reflection highlighted the complexity of working with the concept of sustainability in a society inspired by social constructivism and steered through market mechanisms.

I mentioned Hotel Crowne Plaza as an example of a sustainable building built within the Natural Capitalism understanding of sustainability. I had taken part in a presentation at the hotel where they told about the performance of the building. They stressed that the sustainable profile of the building was primarily a way to get an advantage on the market and not as a contribution to global sustainability. While building the intended sustainable profile was therefore kept secret to avoid others to take up the idea in a time of great building activity in the area. An employee responded that innovation and development of sustainable solutions would have better conditions in a shared process, where ideas are presented to an open forum and made subject to discussion and further modelling (crowd sourcing⁵¹). The open forum was termed a free arena where ideas and visions can grow beyond the restrictions of specific systems as a result of the different rationalities in play.

The idea of competition is, however, inscribed as a driver in the Natural Capitalism strategy for sustainability, which restricts the use of crowd sourcing as arena for innovation of sustainable products. On the other hand, if Crowne Plaza did not see the potential of being leading on the market by their highly efficient energy solutions, they might not have chosen to invest in a 'sustainable' building. This would be the argument of Natural Capitalism, and accepting the market as driver for development in the modern world would necessarily lead to this conclusion.

BUT – what if we did not accept that the world must be structured as it is today? Could we then find new openings towards an understanding of sustainability other than those that can be promoted by the market? It is very difficult to take the societal perspective when competition is the driving force, as an openness could potentially lead to a weaker position on the market due to 'thefts' of ideas. A balance between joint innovation and the right to have business secrets was the pragmatic solution given by the employees.

Breaking with the market as primary driving force is, however, difficult because the market has such a dominating role in society as showed in the figure of Vandana Shiva (Figure 1). The question is whether the utopia of a stable constellation of the three economies as described by Shiva could possibly become reality? The employees found it difficult to see the alternative to the current structure of society: *'The idea of Natural Capitalism is very visionary and a road that should be followed. It is ambitious to go for a complete change in the thinking about products, bying services and not physical goods'*. Presenting the thinking of Shiva, Sachs and Aagaard Nielsen they responded that the critical thinkers are a bit too critical in their opinion, as we live in a world where changes takes time because it is people who must change. *'Perhaps we need to go through the steps in Natural Capitalism before we can address the perspectives given by the critical researchers'*.

⁵¹ **Crowd sourcing** is the act of outsourcing tasks, traditionally performed by an employee or contractor, to an undefined, large group of people or community (a "crowd"), through an open call (Wikipedia contributors 2011).

As a last perspective on the current societal challenges an employee stated: *‘The idea of the western society as second world country after giant nations as China and India might soon become reality, which would lead to a new world order built on other values than the western – and perhaps more sustainable ones?’*

4.6.6 Future Horizons for Sustainability

On the second day a recap of the first day’s analysis was followed by group work, where four groups representing all teams were answering the questions:

- What future horizons for sustainable practice in the Department are regarded most important?
- How can free space be created that enables reflection and development of practice?
- What would you ask the Directors of the organisation now that you get the chance?

After the group work the Director of Environment & Engineering and the Municipal Director attended the presentations. Firstly current practice was presented again. Secondly an employee attempted to give a narrative as to what had been learned about current practice in relation to sustainability. And lastly the groups presented their future sustainable horizons and reflections on free arenas.

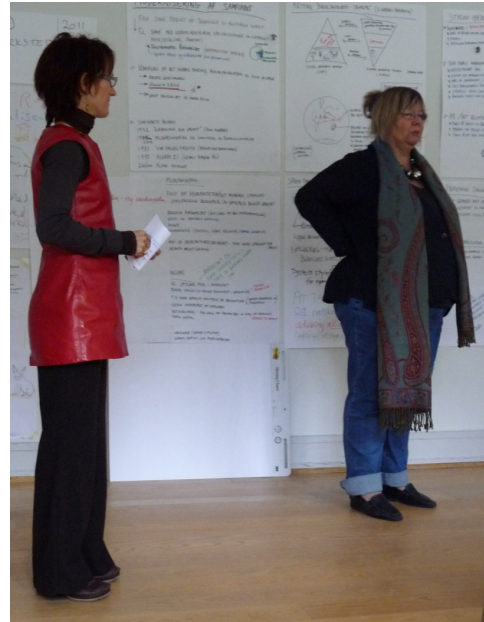


Figure 38: Welcome by Department Manager and Kirsten Ramskov Galamba (left).

Engagement in Society beyond the Work Situation

A brave employee had taken the challenge of summing up and evaluating the process in relation to a learning perspective. He presented his reflections as a narrative on the basis of presentations and the joint analysis, and the other employees were invited to comment along the way. His narrative is here presented in a translated and slightly shortened version.

‘Sustainability is a question of how to organise our everyday life. In relation to work it is important to have the possibility to do your job and when leaving the office at the end of the day, go home with the feeling of having done the right things in a proper way. It is important to be able to draw on the professional background AND the engagement in society beyond the work situation. Perhaps that is where we are heading?’

Looking at the visions and utopias created during the action research process and relating those to the situation of today, it seems that we are quite far already. We are also on our way in relation to professionalization of the respective functions in the Department, meaning that we must act according to criteria of success and not just solve specific predefined tasks. To a certain extent we have also sold our soul to the organisation (smiling), which can be seen by the engagement in this workshop both in the presentations and in group work.

Sustainability is not (yet) a steering paradigm, but we have formulated a number of visions or utopias as to what it might imply. One is in the soft end of the scale represented by the 'Happy employees and management utopia' (Figure 22): We shall be able to face ourselves with dignity and remember the soft values as not everything can be measured. And most importantly: We must talk about sustainability and common sense rather than efficiency. We must maintain space for common reflections as those provided in the AR workshops.

As to the governance trends the relational paradigm has influenced steering in Albertslund local authority which is seen by the extended self-governance in the teams. We have found out that this actually allows for the creation of free arenas that we asked for at the beginning of the process, and the concept of 'steering by committed dialogue' has come closer thanks to the many workshops and the changes in meeting structure. One part of the vision is also to have a close dialogue about sustainability with other departments and administrative areas, which requires a common language across the organisation beyond the concept of environmental management. This has not yet been fulfilled. As has been discussed in the workshop another aspect of the relational thinking is involvement of citizens in decisions which is related to the concept of democracy. Seen from a critical point of view it can, however, also be interpreted as a way to draw potential critical voices closer to decisions in order to avoid critique...

New public management was introduced as the paradigm of audits and efficiency. This is seen in the visions by the focus on knowledge sharing through data handling that shall support a more efficient practice and resource management. New public management thus contributes with something of value to us.

Most importantly there has been some resistance against meaningless systems. The quality management system is an example where I have personally practiced civil disobedience to some extent. Systems must be meaningful if they shall have space in everyday work life. One utopia also showed a distance to the interference by politicians in daily practice (Utopia: Cooperation between Local Authorities), as a critique to the very long decision making processes in the political system. And in relation to the model of professionalization it must be possible to create free arenas in work life to reflect on professional practice along the way.

The action research process has been a learning process for all of us, and it has been a nice free space to be in. One thing that has not been touched upon is how the 'new way of thinking' is spread to the rest of the organisation. The communication strategy and KIM makes the changes visible on a more instrumental level, but the way sustainability is understood in the Department is perhaps more 'ripe' than in the rest of the organisation. How can this insight and mature understanding of the concept of sustainability be aligned with or lift the understanding of sustainability in the rest of the organisation?



Figure 39: A brave employee summing up and evaluating the process in relation to a learning perspective

It seemed that the rest of the employees agreed in the presentation. The Environment and Technique Director Niels Carsten Bluhme responded to the presentation with a little speech: *'The Department plays a crucial role in restructuring the welfare society, both the physical aspects of the city and the way we construct society. The mature way you can formulate how to deal with highly political questions at an abstract level is amazing, and at the same time transforms the thinking to tools that actually make a difference. You have shown a deep understanding of society which I consider extremely impressing. Normally one would say that a department as yours is working mainly as a caretaker on the operational level, but that is not the way you see yourselves. With the position you have taken I think that the rest of the organisation will perceive the new understanding or values that you have developed through interaction. People will understand it, and I can hear in the organisation that also others are impressed with our achievements. They like to cooperate with us, which is seen e.g. when you cooperate about day care institutions where you take part in formulation of needs and design for the social area. And you even have visions as to how the welfare society can be understood, which is very impressing.'*

After the narrative the word was given to the groups and their presentations are outlined below.

Did you say Sustainability to your Politicians today?

The first group had some perspectives on how to work with the concept of sustainability in the future. Initially they rhetorically asked the question: *'Does it make sense to work with sustainability in the Department? Would there be resources and economy available?'* Answers were to be found in the future horizons, suggesting that ideas and visions of sustainability must be implemented on a long term basis, which means that some parts of the vision can be postponed or implemented in steps as resources becomes available.

As to the concept of sustainability it was agreed that a specific definition could and should not be decided, as it is the dialogue about understandings of sustainability that matters. It must be discussed and experienced with on macro- as well as micro level, in order to develop the understandings in relation to context. In the conclusions from group work an important point was that boundaries should always be moved in an explorative motion towards utopia. *'Criteria for sustainability must sometimes win over economy in priorities.'* It was highlighted that a balance between professional judgements and efficiency must be kept, as the professional's code of conduct will sometimes challenge the immediate quest for efficiency.

In relation to free arenas the group suggested that there must be free arenas focusing on the professional challenges and the social aspects of work life (Figure 40). Also free spaces (facilitated by workshops) that open for thinking beyond tasks and projects should be created symbolised by a series of years following the three years of AR, where sustainability is put on the agenda with the aim of allowing the motion of zooming out (get the critical distance to systems). It was mentioned as a gain to have dared to be in 'deep water' focusing on utopian horizons, as it had given a deeper understanding of current practice and thus a basis for deliberate changes.

It was suggested that they should further improve the process of supporting each other professionally before, during and after projects or tasks, which would also improve the quality of documents for political process. *'The rhetoric used when presenting a case for politicians is important, and if sustainability shall be integrated in decision making on a political level, it must be clear how a specific case influences the overall vision for sustainability.'* As a conclusion the group had formulated the slogan: *'Did you say sustainability to your politicians today?'* This was a way of signalling that sustainability and the language of sustainability must be integrated in the daily dialogue on all levels.

The question asked to top management was: *'What would you do to ensure free arenas to continue the development of the concept of sustainability and professionalism when resources become less?'*

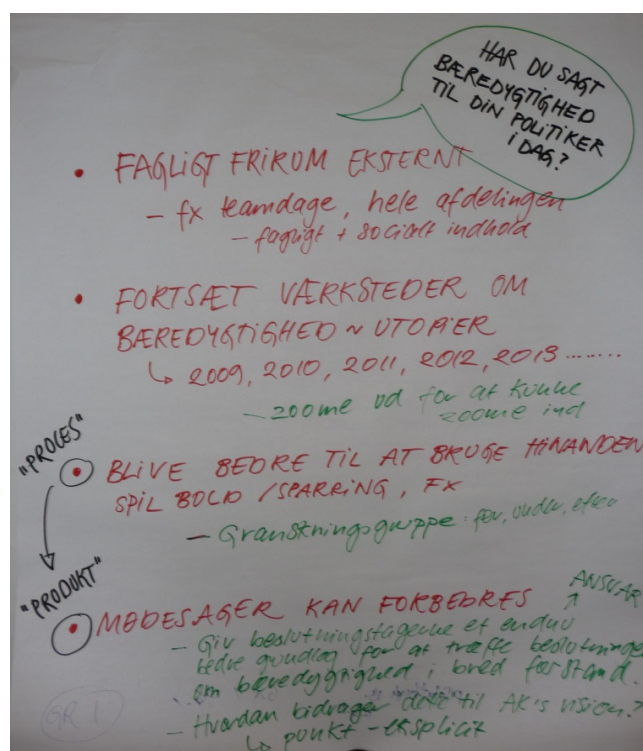


Figure 40: Did you say Sustainability to your Politicians today? About free arenas for professional issues and for the more open horizons related to the utopias for sustainability (zooming out). Employees must support each other professionally which would lead to a more qualified basis for political decisions. (Group 1).

Professional Horizons and Spaces for free Thinking

In group two they had had a long dialogue about being loyal to the professional code of conduct in relation to the political and economic reality. A trans-disciplinary overview and possibilities for priorities on the basis of professional judgements were seen as the future horizon for a sustainable practice in the Department (symbolised by a coloured bow in Figure 41). KIM was suggested as the road to a trans-disciplinary overview whereas the Real Estate Strategy combined with Communication and Dissemination was regarded important to be able to make priorities on a professional background. Rhetorically the following question was asked: *'Can we as professionals make priorities or alternatively get politicians to make priorities on basis on professional recommendations?'*

A free arena was defined quite broadly as *'supporting free thinking beyond concrete tasks and systems'* (Figure 42). In relation to how free arenas can be created it was stated that the responsibility is with both employees, teams and the management. To allow for free arenas a certain culture must be nursed, calling for initiative, understanding and accept. The notion of free arenas must be put on the agenda all the time, and cooperation between teams is important. In Figure 42 a spiral symbolises the synergy effect created by getting the free arenas. The crocodile is biting its own tail symbolising the circular and self enforcing motion.

The question to the Directors was: *'How can our professional backgrounds be of use and will it be used?'* The question was related to the issue of professionalization with the goals of the

organisation in centre (efficiency and customer orientation) in relation to loyalty to the code of conduct belonging to the profession.

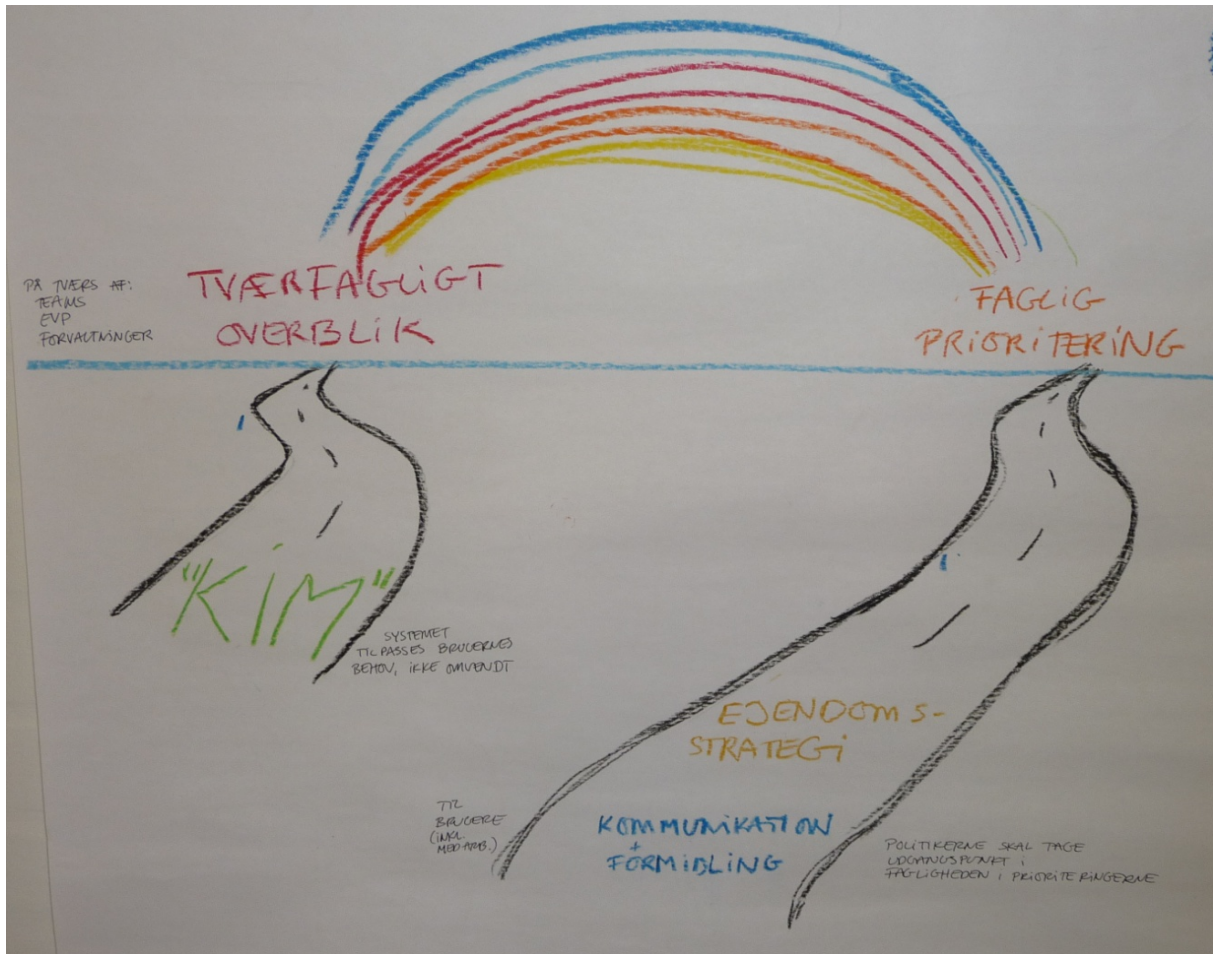


Figure 41: Horizons for a future sustainable practice in the FM Department (Group 2).

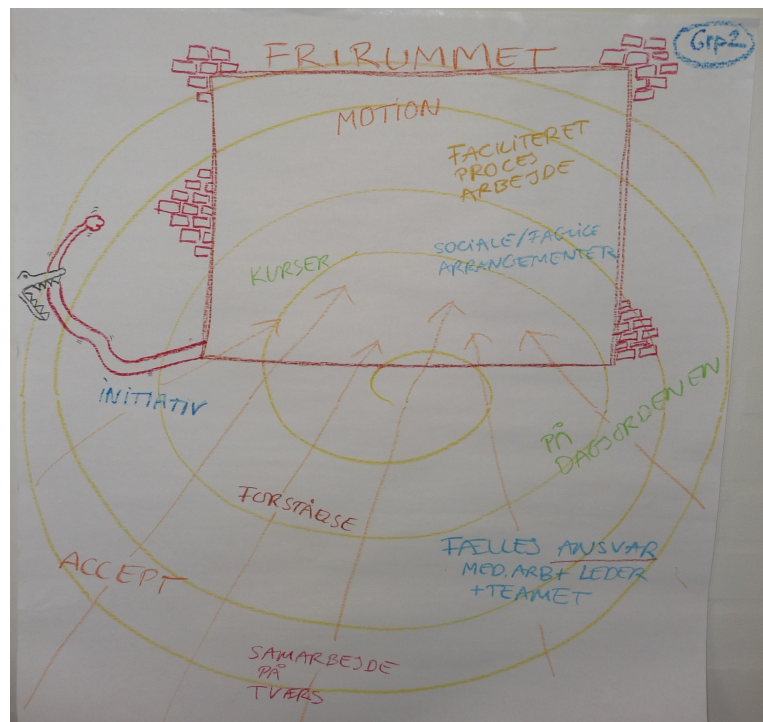


Figure 42: Free spaces: Study tours, courses, going to the training centre together, social arrangements, joint breakfast at the office or facilitated processes through workshops. (Group 2).

Free Arenas needed to define Sustainability in Context

Group three opened their presentation by rhetorically asking for a definition of sustainability, and concluded that free arenas are important to continue the dialogue about how it can be understood and operationalised in an Albertslund context. *‘Free arenas can facilitate a common language about the concept of sustainability, and sustainability could perhaps even develop into a platform of communication?’* (Figure 43).

As to the current understanding of sustainability it was stated that it embraces much more than CO₂ that had become the focus recent years. *‘It is a question of reducing waste, recycle materials and optimise processes where possible. Operation of facilities must be taken into account in the design phase to be able to have the holistic view supporting sustainable solutions in the different phases of a facility’s life cycle.’*

Free arenas are considered crucial to enable reflections and thus develop practice. The idea of personal free arenas integrated in everyday work life was suggested as something needed by all employees, and it was claimed that current steering actually supports this. Also the Department study tours were mentioned as a free arena, as was the series of workshop facilitated during the AR process.

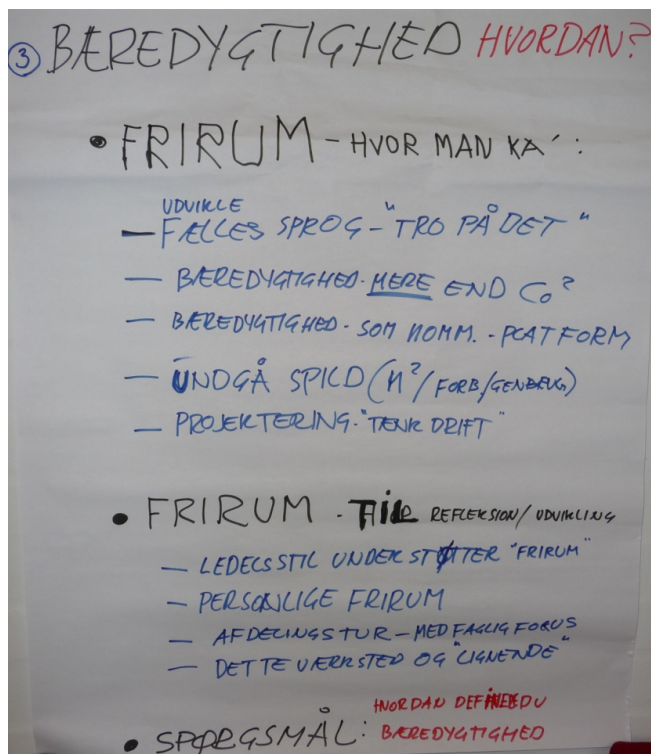


Figure 43: Sustainability and free spaces (Group 3).

The question to Directors was: *‘How do you define sustainability?’*

Holistic Understanding of Sustainability

The last group had discussed different kinds of free arenas, and made clear that it is not the same for everybody: *‘Sometimes it is a question of looking differently at a project and dare creating the critical distance to projects needed to be seen in a greater perspective.’*

Professional free arenas emerge in networks, and the most important frame condition is the legitimacy in the organisation. *‘Free arenas are crucial to keep focus on development of a sustainable practice in the Department, as it enables the zooming out to evaluate current practice in relation to horizons for sustainability.’*

The group suggested three principal free arenas as important: Social, Professional and Perspectival (Figure 44). Social free arenas call for a collegiate mutual responsibility and can take place as informal meeting e.g. with coffee and cake. The professional free arenas are found at conferences and courses, through networks, whole day team arrangements and cooperation on projects and tasks. The professional free arenas can be seen as the ‘zooming in’ while the perspectival arenas are important for ‘zooming out’. This can be facilitated by whole day arrangements in the Department or workshops as those in the AR process. Also structural changes in the Department had, however, shown to open new horizons. Evaluation and development is seen as the gains of having the perspectival free arenas. As seen in Figure 44 the good work life is somehow connected to the notion of ‘zooming’ and the perspectival free arenas are important for this.

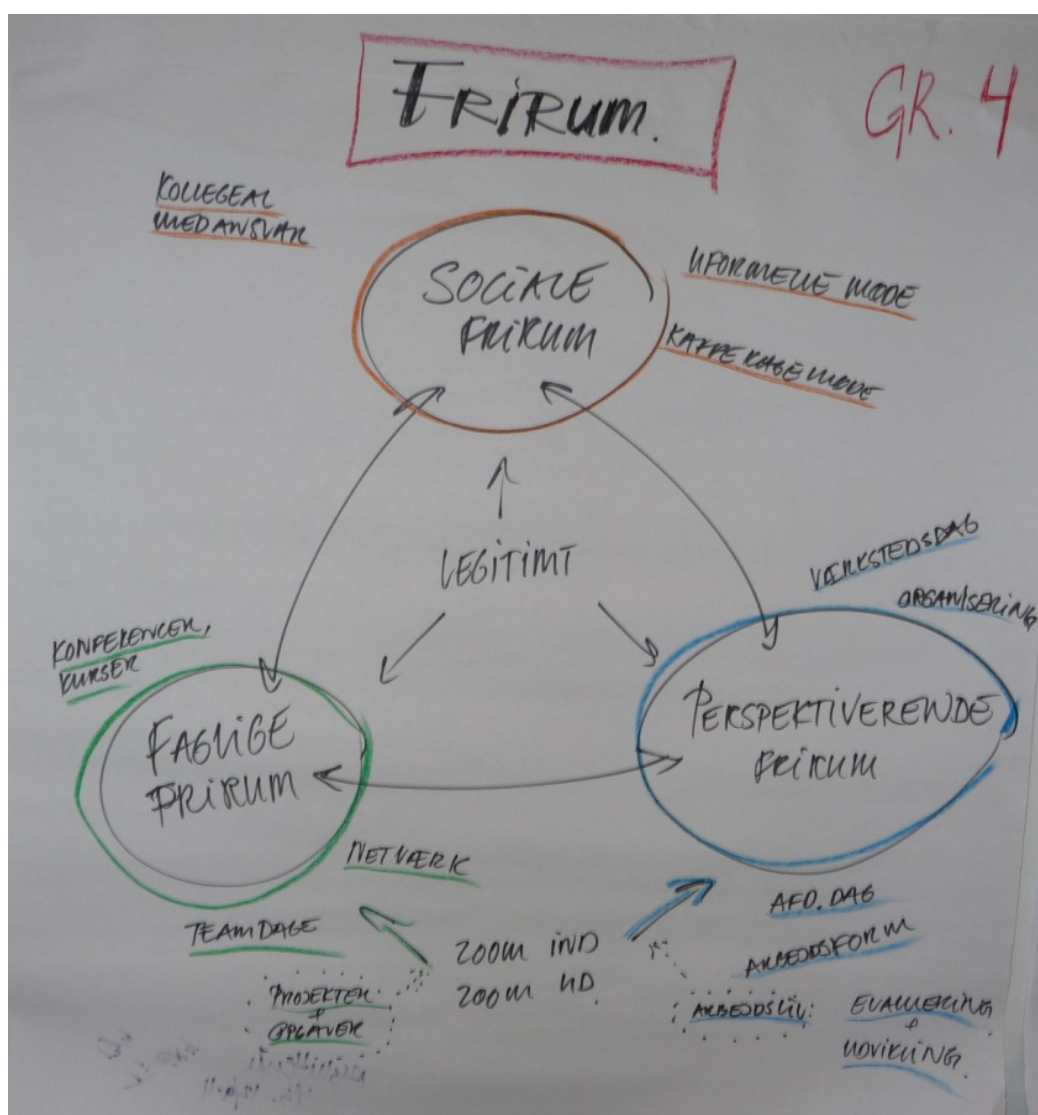


Figure 44: Group four suggested three principal free arenas as important: Social, professional and perspectival. (Group 4).

As to the concept of sustainability the group made a distinction between a holistic view supporting sustainable actions internally and on a societal level. Internal Data, Strategy & Procedure and Environmental Work constitute parts of a whole (Figure 45) and enable decisions in the organisation to be taken on an informed basis in relation to different aspects of sustainability. The overlap of the three areas furthermore enables a more clear communication of decision in a broader perspective.

On a societal level Politicians, Citizens & Business and the Professional Administrations constitute parts of a whole that will find common ground and visions for society when working together and thus pull in the same direction (the figure is derived from the utopia 'A whole society with common goals') (Figure 46). It was stressed that it takes some very broad qualifications as an employee to navigate in this field, and a common understanding and sharp communication vertically in the organisation is needed. The overview and holistic thinking does, however, provide openings for horizons for sustainability against which decisions and actions are taken.

The question asked to the Directors was: *'What governance strategy do we have today and where are we heading? How is sustainability inscribed in our organisation – socially, environmentally and economically?'*



Figure 45: Holistic understanding of sustainability seen as an internal matter. Data, Strategy & Procedure and Environmental Work constitute parts of a whole. (Group 4)

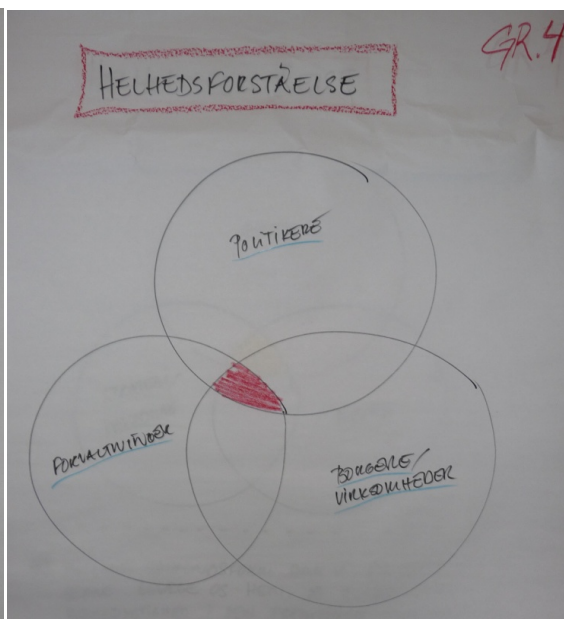


Figure 46: Holistic understanding of sustainability seen as an external matter. Politicians, Citizens & Business and the Professional Administrations constitute parts of a whole. (Group 4)

4.6.7 Feedback on Changes from Top Management

As an overall response from the Directors of the local authority they claim to have witnessed a raise in skills and levels of abstraction when the employees were cooperating with other administrative areas. The employees got the direct feedback from the Directors that they had developed from a technical Department into a strategic partner in city development, by integrating knowledge and skills about facilities with the abstract thinking of sustainability on societal level.

In the following answers from top management are presented chronologically as short, translated versions with additional comments from the employees or Department manager.

The Director for Environment & Engineering Niels Carsten Bluhme (NCB) (Figure 47) stated that he is impressed by the very abstract thinking showed in relation to the societal context. *'We must be prepared to move as society changes all the time. If we are not ready to move, it can be very difficult to cope with societal challenges. The speed with which our work frame changes forces us to act proactively, and we do have the possibility to influence development. The public sector must be slimmed, this is a condition we must*



Figure 47: Director of Administration of Environment and Engineering Niels Carsten Bluhme (NCB)

accept and if not we will loose our basis for competition. Technology helps us to be more efficient as e.g. KIM that can help us find and overview data with less resources, and I predict that Albertslund will soon be too tiny to keep the level of administration as today. We are moving into an abstract world which forces us to keep educating ourselves, also within your understanding of sustainability. In our self governance we must get used to work in projects and within themes, and work according to the goals set in the organisation. This means that we are in a potentially constant change of organisation, which implies that free spaces must be created by concluding projects that are no more relevant, or perhaps skip old traditions as e.g. the users group that could get other forms of organisation. We must get used to the fact that professional knowledge might be bought elsewhere in the future on the international market.

Now that you have become so skilled in abstract thinking and have gained a great overview, I miss somehow a goal hierarchy showing how you work with the organisational goals. Strategy is transformed to practice – how are exact and measurable goals formulated here? You must also distinguish between goals and tools, and goals must be measurable to enable efficient follow up. The hierarchy of goals is important as it enables milestones to be incorporated on the way to final goals, which would also provide a basis for efficient communication on the political level.'

It was responded by an employee that not all goals can be measured as there are 'soft' areas that cannot be quantitatively evaluated as e.g. thrive in schools. Another response was related to the tool level, and the importance of tools that can provide an understanding of the local authority practice as a whole was emphasised. An employee pointed to the critique of steering

technologies as a mean of translating from the political and strategic level to action: *‘The world does not move alone by having the steering documents, other factors are perhaps more important to actually create change.’*

After the comments the Municipal Director of Albertslund local authority Bo Rasmussen (BR) (Figure 48) responded to the questions asked in the previous session: *‘Professional knowledge and competences are extremely important as it creates a secure basis for decision making, and we must keep analysing what competences are needed in our organisation and the network around us. Somebody must be able to dig into complicated problems with a professional background. But also a high level of abstraction is necessary to understand and react according to the overall development of society. A range of different competences is needed.’*

As to free arenas BR emphasised that he did not think it wise to make sharp distinctions between free arenas and work arenas. *‘It is a question of terms as free arenas can be understood as a room for free reflections where right and wrong in relation to the thinking is not judged.’*



Figure 48: Municipal Director of Albertslund local authority Bo Rasmussen (BR)

‘In relation to governance strategy there is not one strategy but many that constitute a common picture. In some parts of the organisation traces of NPM can be seen and elsewhere the extreme systemic steering is dominating. So far approximately 200 leaders are educated on a systemic basis. Also value based management through a ‘mutual and committing dialogue’ is important. We are working on goals for the future which is seen in the Albertslund Strategy with more than 120 goals that are all followed up together with the political budget agreements. The myriad of goals are pointing towards a desired future.’ According to BR the goals are not inscribed in NPM as the documentation is rather weak, and the organisational steering is thus more based on values and a trust in the employees that are expected to be skilled and loyal to the organisation and the political will. *‘In Albertslund it is legal to visit the Mayor if needed, also for the employees. The price is, however, that it is expected that you are loyal to the system you are a part of. Managers and employees talking to politicians must know where we are heading, and there is a trust that employees on all levels act accordingly. And this is what happens! Great resources are mobilised by the autonomous actions. Also here there is, however, a potential price to be paid: The teams and individual employees must remember to prioritize tasks runningly, and sometimes conclude projects or areas of focus according to changes in the surroundings.’*

According to BR the welfare system has a higher priority than anything else in society, and changes are needed to keep welfare at a certain level. *‘For example ‘mastery of own life’ by*

elderly with more resources could enable a better care for the weaker. And can we find new ways of constructing the welfare society by organising work differently? Work together in new ways? There are no known solutions and we must act together to find some.

BR suggested a greater extent of cooperation between citizens, business and the local authority in the aim of finding ways to cope with the societal challenges. *'Citizens are perhaps neither in the role of users, customers or citizens but a completely different role? People contributing to welfare for e.g. children. Professionals might make judgements that turn out not to be good for those they should help, and a dialogue with the people involved might ensure better decisions. How can we find new solutions for the next 10-15 years? We must remember to listen to each other.'*

'Albertslund is special because we have very engaged politicians. Sometimes I think that they should stop interfering with administrative practice, but on the other hand there are also advantages by the close dialogue with politicians. Common ground is found through the dialogue which enables changes that would not otherwise be possible. In the future development we must be even better at creating arenas for cooperation with citizens. There will probably be even fewer resources than today...'

The answers from BR led to the reflection that his version of the future was very close to the utopia 'a coherent society with common goals' (Figure 25). As to the governance thinking the figure of professionalization (Figure 3) seemed to be the perfect frame to visualise his thinking, with the values of Albertslund inscribed in the 'criteria of legitimacy'. To his claim that a new world order will soon be a reality it was highlighted by an employee, that also here it must be possible to act in a sustainable way.

An employee asked how the understanding of sustainability evolved in the Department (beyond measurable goals implemented by systems) can be spread to the rest of the organisation. This led to a reflection as to the notion of welfare as the management's understanding of sustainability. NCB answered that the public sector is challenged from globalisation. *'We loose jobs that sustained households and contributed to taxes, as goods are produced elsewhere in the world. And how shall we afford growth? We have the preconditions to create welfare and efficient competition if we take the challenge, due to the holistic view and the ability to act in a cross pressure.'*

BR reflected on the competition and the possible losers in the game. *'We must, however, act within the current political frame, also when it means that we cannot e.g. prevent oil drillings in Greenland or other unsustainable practices. It is not inscribed in our frame of action and we must solve the problems we face within the frame as first priority.'*

It was highlighted that openings had showed during the AR process towards understandings of sustainability others than (resource) efficiency. To the question whether this understanding could have a potential of spreading to the rest of the organisation, BR emphasised that the focus was not so much on efficiency in his understanding as to effectiveness: To do the right things.

4.6.8 Good Bye for Now

In the final session the Department manager claimed that she was proud to say that the Department had made a giant leap during almost three years of AR by understanding the context in which they act. *'It has been very enriching to open for a broader understanding of*

sustainability, but in everyday work practice the principles of Ecological Modernisation and Natural Capitalism is what counts. We now have a common basis for further innovations and especially in relation to sustainability we have really moved. When at the end of the 90's Kirsten made her master thesis here in Albertslund local authority, sustainability was very much understood as environmental sustainability. Now we see the concept much broader and the notion of sustainability has really been facilitating change in the Department through the many workshops and meetings.

5. ANALYSIS

How is it possible to make a sharp, structured and loyal analysis on basis of almost three years' AR, where every step has been taken in accordance with both research interest and wishes and needs by practice? This is how I felt when facing my writing of the analysis, in spite of the fact that I was so privileged to actually validate my analysis at an early stage in a dialogue with the employees and the manager before writing this. I will now be leaving the joint journey and make the material my own, doing what I can to live up to the mutual trust we have had during the AR process. The analysis aims at giving the empirical background to answer the research questions:

How is the concept of sustainability contextualized in public FM and how does that relate to more substantial aspects of sustainability on societal level?

Can Action Research establish arenas for change in a Municipal Department of Public Property, leading to understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency?

The first question has been discussed and answered at a general level in chapter 2.2.3. The theoretical analysis will be further elaborated upon, related to the outcome of the AR process in the Department of Public Property in Albertslund local authority. Especially the question related to the substantial aspects of sustainability is in focus in the analysis, as this is what we addressed in the last part of the AR process. The second question relates to the change perspective, and thus draws on methodological considerations presented and discussed in chapter 3.2.

The theoretical aspects were brought into the analysis already at the final workshop, but a further analysis is made here based on the theory. The theoretical perspectives help to highlight the general, societal aspects in the specific context. By mirroring and pushing the empirical material with critical theoretical edges, I hope to open for perspectives for *possible* answers to a sustainable practice in public FM. I am aware that the Department constituting the basis for the analysis is not defined as an FM Department. At the beginning the aim of the AR process was, however, to 'transform the Department into a Sustainable FM function'. The employees' understanding of own practice during the process will therefore be mirrored in the principles of FM, informing reflections on ambivalences related to the concept of FM in a municipal institution aiming at sustainability.

As the two questions relate to both understandings of public sustainable FM and a change perspective, the analysis must embrace both methodological aspects and those related to sustainable FM. To frame the analysis of the outcome of the AR process, questions are analysed first related to the action researcher's role (chapter 5.1) and choice of methods to allow for free arenas (chapter 5.2). Hereafter the process is analysed in relation to the concept of sustainable FM (chapter 5.3) and future challenges for the Albertslund local authority Department of Public Property (chapter 5.4).

5.1 THE ACTION RESEARCHER'S ROLE

As suggested by Skjervheim (1996) the action researcher's ontology is based on engagement with actors on equal ontological level, and the relation to other humans builds upon a call to act together. The action researcher must therefore have a participative approach to the field.

To get a valid understanding of the reality she must articulate her own engagement in the process. This has been my basic assumption during the AR process. That this ontological aspect was before other knowledge interests came to influence the process from the very beginning, as the choice of Appreciative Inquiry was a result of the dialogue with the Department Manager that wished for another opening than critique (chapter 4.2). She later told me that the fact that I respected her wishes here became important for the trust on which the following process was based.

I did, however, also sometimes deliberately create a critical distance to practice to analyse the change horizons in relation to the concept of sustainability and to understandings of FM. Here it became important for the process that my main focus was to create openings for understandings of sustainability. As to the implementation of FM I got a bit disillusioned to the concept. It seemed that though holistic thinking might be the overall goal, focus at FM conferences and in the literature was completely on contracts, service level agreements and key performance indicators – and support of core function. It seemed to lead to further fragmentation rather than the holistic basis aimed for. In a public setting the buzz words connected to NPM fitted perfectly to the rhetoric of FM. This made me conclude that FM in the public sector was not a new concept, as I assumed that a number of Real Estate departments were already working after the principles of FM due to implementation of NPM steering technologies. This was also true to some extent in Albertslund local authority. I thus left the explicit rhetoric of FM in the process, but the understanding of FM as a holistic mindset were carried forward by the employees with more strength the further we came in the process (see chapter 5.3).

An important role for me as action researcher became to keep focus on the horizons to evaluate regularly whether horizons were closing or maintained open for change in many directions. This hermeneutic approach enabled me to challenge practice by presenting *my* interpretations of the process regularly during the process, and thus open for a dialogue about methodological choices. During the three years of AR my role changed in accordance with the situation, which will be elaborated upon in the following.

In the Relational Paradigm there is an emphasis on facilitation inviting to common reflection processes acknowledging a multiple perspective and building the future through social constructions based on language. Methods are therefore aiming at reflective, dialogical processes facilitated by a ‘process consultant’ without any explicit professional knowledge (chapter 2.3.4). This was the role I took in the first part of the process, aiming at an inclusive arena where all opinions were regarded equally valid. That my role was relatively neutral at the beginning was important. Otherwise there might be a risk that my experience and knowledge about sustainability would dominate the bottom up process. I regarded it important that the employees found their own footing and understanding of sustainability as *contextualised* in FM.

It was, however, a critical examination of the change horizons that made me suggest the Future Creating Workshop. Here I took a more critical role in line with my critical hermeneutic anchoring, pointing to the risk of creating expert based, narrow solutions to the challenge of sustainability that would not transcend the horizons of current practice. The narrow horizon was also connected to the fact that we had asked for answers as to what Sustainable FM might be. I realised that the concept of FM was creating a barrier for involvement and chose to abandon the focus on FM as a concept and ask more broadly for

answers to ‘sustainable practice in your department’. Furthermore I addressed the underlying critique connected to the environmental management system by referring to the work of Willig (Willig 2009), and the employees agreed that it would be valuable to have a workshop with more space to address critique connected to work life and tools for sustainability.

My role thus changed from supporting a process of organisational development on the premises of current systems, to open for arenas that would potentially allow for a break with power structures and rigid systems. This can also be seen as a change in constitutive knowledge interest, which was connected to the fact that I became aware that the employees lacked collective free arenas where they could have an informal dialogue about the scenarios, but also free arenas where they could reflect on their own individual practice seemed to be absent. With the emancipatoric knowledge interest the Future Creating Workshop seemed to be the right choice. The facilitator in the Future Creating Workshop takes the role of ambassador for the utopian horizons. Also here I was ‘neutral’ as facilitator, as my expert knowledge on sustainability was not explicitly part of the process (chapter 4.5).

This changed in the last phase of the process at the employees’ request, who asked for my expert knowledge and analysis of the outcome of the process. In the final workshop I thus deliberately took the role of expert in theories on sustainability and governance strategies. I did so to provide a discussion partner for the analysis, as the employees found it difficult to evaluate practice without relating to something. Not only did I present the relevant theory and my interpretation of what had happened during the process. I also deliberately challenged the employees’ perceptions by insistently returning to the critical positions, questioning current strategies for sustainable development, governance trends and steering technologies.

By doing so I pushed the potential hermeneutic fusion of horizons between me and the employees. It was clear that with my background as a biologist specialised in ecology and strategies for sustainability I had a far deeper understanding of the substantial aspects of environmental sustainability. There is a difference in knowing that you may not use pressure treated wood and also knowing the potential ecological consequences from doing so. This also led to a situation where an employee felt manipulated by my claim that all material production somehow contributes to stress on ecosystems – even agriculture. In relation to the social aspects of sustainability we were more equal, as I could refer to critical researchers having outlined substantial aspects related to work life and community development, but without having the same internalised solid knowledge base. I think that showing how absurd it seems that people get sick by working in a society designed by us became an eye opener for us all, which urged the focus on sustainable work life and the societal perspective connected to this. Maintaining the third world perspective got the role of ‘irritating’ our perceptions to remember the impact on local practice on the substantial aspects of sustainability on global scale. Environmentally as well as socially.

In the last workshop I could have chosen to have a co-facilitator with me. Taking the role as ‘expert’ and ‘neutral’ facilitator at the same time is in principle not possible. I chose to do so anyway, as I judged that the trust we had built during the process was strong enough to push the situation here. I thus welcomed to the workshop by stressing that my role was different, that I was taking the role of expert at that this was a deliberate choice. In the dialogues I kept referring what the employees said on flip charts, which was a method for ‘neutral documentation’ that we had used in all other workshops also. As I knew that it was theoretically not the ideal frame for a workshop, I had considered inviting an outsider to help

the facilitation. I had, however, facilitated all other workshops alone (except one) and as we had come so far in a shared understanding of the process, I thought that it would be too difficult for an outsider to be included in the facilitation with the right ontological attitude and knowledge to the field.

Clearly I could not have taken the role of the critical expert at the beginning of the process, as the power balance would then have been unequal. This emphasises the importance of the hermeneutic framing: Choice of methods and changes in researcher's role must always be anchored in a critical reflection of outcome related to the context, and when possible in a democratic dialogue with practice.

In the next chapter an analysis is provided on workshop methods and workshops facilitating the creation of free arenas as integrated in work life.

5.2 WORKSHOP METHODS AND FREE ARENAS

Free arenas were provided during the process by workshops based on the principles of two different AR traditions. The two approaches are here analysed for their ability to create openings for sustainability: Appreciative Inquiry and The Future Creating Workshop. A principal difference between the methods is the scope of change processes facilitated by Appreciative Inquiry and the Future Creating Workshop respectively, and the methods must be judged accordingly. Appreciative Inquiry claims to provide '*a multidimensional view of action-research which seeks to both generate theory and develop organisations*' (Cooperrider, Srivastva 1999), emphasising the organisational focus in the change process. The Future Creation Workshop has a wider scope, as it aims at more radical structural changes of *society*, searching for alternatives in everyday life and society as a whole. Embedded in Critical Utopian AR, the Future Creating Workshop furthermore has *open horizons* as criteria for success, which means that a 'finished' product is not aimed at.

The Future Creating Workshop did indeed provide answers different from the ones produced in the Appreciative Inquiry. Though the themes raised were similar to those in the first part of the process, the gestalt of the ideas was significantly different. 1) From arrows indicating communication between different actors in the organisation to a theatre showing how communication takes place in the team and to management, and a vision for cooperation between the local authority, business and citizens for development of common good and shared responsibility. 2) From a drawing showing lines between strategic, tactical and operational levels to a vision of the flexible organisation where different administrative areas work together and communicate in equal relations according to an agreed expectation in relation to goals and performance. 3) From drawing a technical system of connections between existing, not compatible digital sources to a vision with a name – KIM – based on the utopian flexible organisation. 4) From a focus on environmental work in everyday work life and frustration with the environmental management system, to a broader understanding of sustainability and thus less focus on the narrow interpretation of sustainability as represented by the environmental management system.

The scenarios produced in Appreciative Inquiry were quite technical in their gestalt. The arena opened with Appreciative Inquiry was based on systemic thinking and the heliotrophic principle, asking for scenarios based on the best of what is (chapter 3.2.1). Initiating a process with appreciating current practice as a basis for design of a desired future did not allow for a break with current rationalities of the system (instrumental rationality). The scenarios thus

inscribe in a systemic understanding of sustainability as defined in e.g. Agenda 21 (see chapter 2). According to Elling (2010) modern society must, however, establish categories for sustainability drawing on the rationality of the *life world* also, to ensure strategies beyond current unsustainable structures dominated by the capitalistic market.

Important learning can be drawn from the process in relation to change. After the first ‘wave of energy’ that was raised during the Appreciative Inquiry only few employees engaged in the follow up on the future scenarios: The GIS team and those working on the strategic level finishing the strategic portfolio plan. Appreciative Inquiry somehow opened for answers anchored within the expertise or professional FM knowledge, which means that only those possessing the specific knowledge could act. It thus seemed that only some of the employees felt confident with the Appreciative Inquiry, while others found it difficult to understand the idea of sustainable FM. This calls for a reflection on the idea of framing a bottom up process by a conceptual goal as e.g. FM. Instead of asking what a sustainable practice in the Department might be, the process was framed by the question ‘what is Sustainable FM?’ For those employees unable to really grasp the idea of FM it was not possible to participate on equal footing with those familiar with the term. This showed in the evaluation and in the interviews conducted as a follow up on the first part of the process (chapter 4.4). Not only were the employees restricted by the narrow horizons of current practice. Some were also de-empowered by the lack of expert knowledge related to the concept of FM.

Appreciative Inquiry thus did not live up to the idea of a ‘free space’⁵² (chapter 3.2) due to the imbalance in knowledge power. Also the lacking room for critique became a source of frustration, though we tried to create a ‘parking lot’ for critical comments connected to work life. Creating future scenarios becomes irrelevant and abstract based on systems that you are critical towards in the first place. This showed when the future scenario on communication was created (arrows connecting focus groups, Figure 16). The employees behind the scenario were quite insecure as to how they should approach the task. They felt frustrated with what they considered insufficient communication in the organisation, but also felt that it was a bit outside the scope of their competences to come up with visions and strategies for better communication. Expert knowledge in the field was requested, and it ended up being a compromise to make the diagram and then add the post it: ‘HOW?’

The missing implementation of scenarios was explained with lack of time and managerial priority. It seemed that most employees did not take ownership, which showed as they could not remember the scenarios from one workshop to the next. Some also pointed to the lack of connection between their everyday work life and the scenarios. Not one could really explain the scenario showing how the Department should cooperate with the strategic level, and it felt out of focus in the following workshops. Appreciative Inquiry and the systemic follow up thus did not lead to practical changes in terms of improved tools or procedures, and though it did contribute to closer relations and more communication in the Department due to the knowledge sharing in workshops, a fundamental change in culture did not occur.

The Future Creating Workshop led to a break with the relational process. The utopian horizons opened for a broader understanding of the thinking behind the expert based and instrumental scenarios, and thus facilitated a change in the way employees could think and talk about their future dreams. The utopian horizons had a more substantial character, actually

⁵² The concept of free space has been defined by Schwencke (Schwencke 2006): ‘a technique of counteracting the asymmetry [in power relations], something more than empty time and room’.

envisioning society though symbolically. An example was the data base, where the utopian idea of the flexible organisation had helped open up the vision of a database to the other employees and beyond the Department (KIM, Figure 24). The shift in understanding and rhetoric from a technical discipline of connecting data, to a vision of a specific way of working had made the task of developing the database a joint project in the Department. Focus was removed from expert knowledge to also embrace other rationalities connected to work life and society in a more substantial way.

The discussion of coffee meetings in the final session of the Future Creating Workshop (chapter 4.5.3) was the first opening towards what was later called ‘free arenas’ (frirum in Danish). I interpreted the discussion about joint coffee and cake as if they did not have (enough) free arenas. When presenting this for the employees and the manager after the workshop there were different reactions. The Department manager thought that I was over-analysing the session a bit, claiming that they could create the free arenas they wanted, and to institutionalize coffee breaks would perhaps be to exaggerate. The employees, however, found it highly relevant and important to further address the concept of free arenas. The opening for a discussion of free arenas turned out to be very constructive, and in the final workshop led to some nuanced answers as to the value of free arenas and to how they can be understood and constituted. The conceptualisation was based on experience gained in the last part of the AR process. It seems that there was a connection between the cultural change where free arenas had become legitimate and the significant moves in change of practice: Change had really begun to take form only in the last year of the process.

Three years of AR have shown that the concept of free arenas integrated in work life is something that must be addressed and critically asked for. My claim is that the significant change during the AR process in the employee’s attitude to the concept of free arenas happened thanks to the workshops that constituted free arenas where practice could be reflected. Especially the Future Creating Workshop opened for thinking beyond expert knowledge opening for a societal perspective, and here utopian horizons for a sustainable work life was gestalted deliberately for the first time without being connected to frustrations.

It seems that the change from a perceived lack of influence on own work life to a position where employees claim that free arenas ‘*are just something that must be created*’ is connected to the Future Creating Workshop. There is, however, also a time perspective connected to the change process as the Future Creating Workshop was held at a point where the Department was already consolidated to a certain extent compared to the situation before the AR process. If the process had been initiated with the Future Creating Workshop, it might not have led to the creation of free arenas and change in practice directly. It takes time to change the mindset and to create sustainable social relations in a work place.

On the other hand, if the process had continued based on the relational paradigm, it is not likely that we had succeeded to actually break with the expert orientation. The fact that some employees had asked for consultants to develop the scenarios developed in Appreciative Inquiry indicates a distance and thus lacking anchoring to the idea of changing practice. Furthermore it was a closure of horizons, which is perhaps the scope of Appreciative Inquiry but contradicting the aim of the Future Creating Workshop. If we had continued working with communication, data handling and environmental management as separate disciplines as in the beginning of the process, I would judge that it would have been more difficult to integrate in everyday work life. And more importantly, we would not have had the opening of horizons

towards societal aspects of sustainability as we did in and after the Future Creating Workshop.

On basis of the analysis above I conclude that the Future Creating Workshop has the greatest potential for innovations towards a *sustainable* practice, as it has shown to better embed work life and professional practice in a societal perspective. With references to the conceptualisation of strong sustainability presented in chapter 2.2.3 (Olsen, Nielsen et al. 2003), the Future Creation Workshop constituted an arena facilitating a systematic experimentation with democratic activities connected to work life and sustainable development of society. The change potential connected to this is strong due to the democratic and non-expert gestalt of the utopian horizons, allowing for integration in culture of ideas from the realisation phase. Though Appreciative Inquiry is claimed to be egalitarian and 'power neutral' due to the social constructivistic basis (Chapter 2.3.4), the scenarios developed were expert based and perfectly inscribed in an instrumental rationality. In relation to potentials for change towards *sustainable* practices it is my claim that the method did not open for horizons for sustainable practice beyond current systems and structures.

In the final workshop it was made clear by the employees that action had really been taken since the Future Creating Workshop (4.6.4). While only little action had occurred between workshops during the first two years of AR, significant changes had happened here. Creation of free arenas was highlighted as one important precondition for action, and employees seemed to have developed strategies for coping with organisational flexibility bound to the concept of free arenas. They claimed that it had become legitimate to actually take time to reflect and not being productive in terms of efficiency.

Three important free arenas were described: Social, professional and perspectival. Social free arenas were regarded important to enhance dialogue between teams and open for new and unexpected ideas to emerge. But also on the more informal level the social free arenas were regarded important, as the employees had experienced a change in social coherence in the Department that they wished to maintain. The professional free arena would be more formal gatherings where professional issues were addressed, as e.g. the cooperation with professionals from other local authorities or making professional priorities at a team meeting (Utopias from Future Creating Workshop, Figure 21 and Figure 22). The professional free arena was also mentioned as an arena for knowledge sharing which is also connected to conferences and meetings with other professionals in networks as e.g. the Green City Cooperation (, Green Cities).

The perspectival free arena was not seen as something integrated in daily work life. Here a more formal and facilitated space was requested, aiming for horizons beyond current practice related to the concept of sustainability. Free spaces as those provided in the AR process were thus considered crucial to maintain the culture of accept towards free arenas in the future. The three free arenas were by one group drawn as interconnected (Figure 44), where the dynamics between the professional and the perspectival free arenas would enable the motion of zooming out and zooming in. Theoretically the motion of 'zooming out' correspond to what is described in the Critical Utopian tradition of AR as: 'Creating a utopian position to be able to see otherwise reified structures' (chapter 3.4.2). In the final workshop the dialogue about 'zooming' was connected to the notion of 'a critical distance to systems'. The critical distance made it possibly to recognise and talk about otherwise reified structures, as e.g. the steering technologies that were regarded rigid and un-changeable before the process.

It was stressed that a free arena is not necessarily something that is planned and visible. It can also be small sessions of thinking before the computer or a walk around the lake with colleagues. The employees expressed that the relational governance paradigm on which management in the organisation is based can allow for free arenas, but it is a question of creating it and not waiting for it to come. Free arenas can, however, not be taken for granted. A culture based on an inclusive attitude towards free arenas must be nursed and maintained, as it could otherwise be interpreted as being unproductive (judged from an instrumental rationality). It implies that it must be deliberately addressed as an integrated part of e.g. meetings (Figure 42).

At the final workshop the Municipal Director made the comment, that while NPM and the relational governance paradigm enable very individual planning and leave space for creative thinking, it also imposes a great responsibility to the employee to prioritize. Being in a position where nobody says stop or NO on your behalf, it really takes some solid free arenas to keep maintaining the future horizons and make the right decisions accordingly. And the more complex the world, the more difficult it becomes to make the choices. As stated by an employee, the more they had learned about sustainability, the more difficult it had become to actually be sure to take the right decision.

The AR process has shown that it is possible to take a position that enables a critical evaluation of steering technologies in relation to the concept of sustainability, and thus balances the use of NPM inspired technologies with more reflective and holistic thinking.

In the next chapter the outcome of the AR process is analysed in relation to the principles behind FM and understandings of sustainability.

5.3 TOWARDS PUBLIC SUSTAINABLE FACILITIES MANAGEMENT?

Before we began the AR process the Department was functionally divided in two very different cultures. There had been an organisational merger of two departments and they had only recently moved to the same location. Culturally there was, however, no coherence in the Department. This showed as a lack of communication, knowledge sharing and cooperation in the professional arena, where work flow was suffering from lack of common procedures. Teams had been recently formed and they were not all perceived logical.

The merger also created a new way of working, especially for those working on the more operational level. From having a functional manager taking decisions, the team or the individual employee got the full responsibility of making priorities and take decisions with the manager in a more distant position. This had caused frustrations among those not used to the greater distance to management. Theoretically they were leaving the security connected to a manager inscribed in the professional paradigm and thus involved professionally in all decisions, to the more distant manager with other organisational obligations than professional judgements.

For some it was also a great change having to build a team with colleagues from a completely different culture. There seemed furthermore to be a tension between employees in the strategic team Architecture & Planning and the others, as employees here had some visions and ambitions inspired by the concept of FM that was not shared outside the team. They spoke the language of FM, and felt that the others did not listen when they introduced ideas for development in the Department. Also socially attempts to bridge the cultures had been

made by suggesting a rotation of social meetings where they should meet with other teams for cake and coffee. This was neglected or even rejected by some and thus did not become reality (chapter 4.5.3).

The situation can be seen as an example of the unsustainable trend in modern work life as explained by Nielsen (2007), where recurring restructuring lead to ruptures making work more inefficient due to insecurity and lack of routine (Nielsen, Nielsen et al. 2007). From this I would characterize the Department before the AR process as fragmented and with poor social coherence, little or no knowledge sharing and cooperation, overlap in functions due to insufficient knowledge of the profiles of other teams and a lack of common procedures. At the same time some were frustrated with what was perceived as lack of management, while others were frustrated with not being heard when trying to change the situation. That the Department was vulnerable also showed by the reluctance by the Department Manager to allow for critique at the beginning. She expressed that she was afraid that she could not handle this in the current situation, as she had major challenges already with employees on sick leave and conflicts in the Department (4.1). She did, however, allow for a completely open process without defined goals or criteria of success.

Fragmentation and silo thinking was also what had made the employee from the strategic team Architecture & Planning suggest a process of implementation of FM. The understanding of FM carried by those having introduced the concept to me was very much in line with the US definition aiming at a holistic view. Procedures and tools to support a more professional practice were, however, also requested (chapter 4.1).

After the first year of AR some changes were seen in the Department, most of them connected to enhanced focus on relations and tools for efficiency. Small and non-measurable cultural changes seemed to have happened due to the focus and cooperation in the workshops, but the ideas and scenarios developed in Appreciative Inquiry were regarded disconnected to everyday work life by many employees and could to some extent be seen as – mainly – scenarios for system improvement.

Related to the concept of FM the answers can be understood as a step closer to a professional FM practice based on systematic data handling and organised communication. Only the scenario describing strategic sustainable FM points at a more holistic understanding of FM, but only few understood the scenario and it fell out of focus soon after the first workshops. It was difficult to see how the Appreciative Inquiry scenarios were connected to aspects of sustainability, except the scenario on environmental work in everyday work. The employees were focused on optimisations of systems and communicative interaction, which was connected to a firm belief that better and more efficient tools would lead to a more efficient practice, better and more sustainable decisions and a better work life.

Discussing the outcome of the process with the employees from a critical utopian position in the final workshop did, however, give some indication of understandings of sustainable FM behind the scenarios. It seems that the four future scenarios were pointing towards an understanding of sustainable FM as connected to a whole systems perspective as outlined in the US definition of FM and Natural Capitalism (chapter 2.2.2). Sustainable practice was believed to be supported by a holistic view on planning, maintenance and operation of facilities, supported by good communication, knowledge sharing and a comprehensive data base enabling decision making on an informed basis. The idea of Total Value underpins the whole systems perspective by emphasising that not only costs connected to the facilities are

important, as they must be seen together with the costs (and gains) connected to activities supported by the facilities. This can only be achieved by a close coordination between strategic level (top-management) and the Department, as a mutual understanding between the facilities managers and the professional areas is crucial for a true holistic view.

Though the official organisational strategy for sustainability was embedded in Ecological Modernisation inspired by local Agenda 21, the employees seemed to abandon the idea of current ‘sweep your own doorstep’ organisational tools (green account and environmental management system). They referred to tools that they needed for a holistic and coherent *FM* practice, and thereby came to inscribe in Natural Capitalism (also). Related to the critique on current strategies for sustainability (chapter 2.2.3) there is, however, a risk that strategies for sustainable FM inscribed in the logic of Ecological Modernisation and Natural Capitalism become only social constructions created for the purpose of branding. Focus is mainly on the relation between input and output (efficiency) and the substantial aspects of sustainability measured as quality of ecosystems or coherence of social systems are not included in the horizon.

After Appreciative Inquiry it was therefore concluded that we should aim for more open horizons for sustainable practice. Framed by the method of the Future Creating Workshop (chapter 3.2.2) we asked for the good work life and utopian horizons for sustainability. The four utopias were richer in their gestalt, embracing different societal aspects reaching beyond the tools and steering technologies of the organisation. They all somehow inscribed in the notion of flexibility that dominates modern society (chapter 2). The utopia ‘Project Management in Paradise’ (Figure 23) was a gestalt of the flexible or elastic organisation as described by Becker (Becker 1990) (chapter 2.1.1). The utopia shows the flexible organisation at its best, enabling FM on a strategic level based on systems thinking and aiming at Total Value. In the utopia, boundaries between administrative areas were broken down and cooperation had become completely interdisciplinary, based on a map of expectation with a number of measurable goals. As a tool for accounting and systematic sharing of knowledge in the otherwise unstructured organisation, the GIS based database ‘KIM’ was suggested. This answers an increased demand for accountability, transparency and quality assurance as means of organisation control in the flexible organisation.

The utopia ‘Happy Employees and Management’ can be interpreted as a strategy to cope with the consequences of the flexible organisation, where long term planning has not been possible and the individual employee has only little control of own work life (Sennett 2006; 1999, Nielsen, Nielsen et al. 2007) (see chapter 2.1.1). Employees lacked stability and control of the working hours, which showed during the entire AR process where ideas and projects developed in the workshops were not implemented between workshops. Also the decentralisation of decisions in the organisation was addressed by the utopia, where the Department Manager became involved in the difficult task of prioritizing and aligning tasks with resources. He also undertook the responsibility to communicate changes in priorities to the management group of the organisation, which would align also expectations with priorities. The mutual dialogue and alignment of resources with tasks can be seen as one strategy to cope with a situation where politicians, users and management keep changing priorities, and it thus inscribes in the understanding of social sustainability on the work place as suggested by Nielsen et.al. (Nielsen, Nielsen et al. 2007) (chapter 2.1.1). In the realisation phase the group suggested practical solutions to the problem of ever changing work conditions. They were based on both the instrumental rationality (e.g. workflow analysis and

uniform procedures) and the creation of free arenas for strategic thinking (e.g. telephone free time and social arrangements). Especially the notion of free arenas showed to be of great importance, and what seemed to be utopia in May 2010 was claimed to be reality in September 2011 (chapter 4.6.6).

Also the utopia 'A Coherent Society with Common Goals' was based on the flexible organisation that constituted the foundation for cooperation on societal level across administrative boundaries. With the symbolic drawing of sledge dogs heading for a carrot, the utopia of a coherent society was outlined: The local authority works together with citizens and business towards common goals, meeting in a shed with stakeholders or communicating through an interactive digital platform as e.g. KIM. Everybody in local society takes responsibility and people are willing to make a difference in local society on democratic premises. In the utopia a mutual responsibility is the backbone of society, which is a step away from the customer orientation of NPM and FM.

The employees were also oriented towards other professional communities which showed in the utopia 'More Cooperation between Local Authorities' Administrations. Seen in a governance perspective this utopia can be interpreted in principally two ways as inscribed in either NPM or in the professional paradigm. The utopia could be seen as a means of more efficient administration through the principle of economy of scale, and with the complete decoupling of the political level it also fits into the model of the liberal market. In the light of FM this could be arranged within the frame of contractual steering, which would bring it close to an understanding of FM corresponding to the European definition where agreed services are evaluated through key performance indicators. When I confronted the employees with this possible interpretation, they completely rejected the idea that they wanted to de-couple the representative democracy in the name of efficiency. The utopia was meant as a step closer to the professional paradigm, and the decoupling of politicians was a way to get a more stable work life with more rhythm and less unplanned changes. Furthermore the utopia had potentials for a more holistic planning of public facilities and infrastructure, as municipal borders constitute a barrier to more farsighted planning on regional level.

There was a great insecurity related to the flexible workplace as described in 'Project Management in Paradise'. The total elasticity of the utopian organisation would potentially lead to chaos, and how should that be controlled without leadership? The figure of professionalization as suggested by Fournier (Fournier 1999) (Figure 3) describes the situation very well: Employees must act according to criteria of legitimacy, which are negotiated on the political and managerial levels with users and citizens to which services are provided (Figure 3). They are not told what to do, but are expected to act out of concern for the customer and values of the organisation (chapter 2.3.3). Though the employees have different educational backgrounds they must all inscribe in the same set of criteria of legitimacy, and at the same time refer to a professional code of conduct. To navigate in this field was at a workshop referred to as the organisational 'cross pressure' (chapter 4.4.2).

All utopias reached beyond the dichotomy of core and support function. The binary might make sense on an organisational level with a distinct production, but in a public setting it will potentially reduce the role of FM to only provide 'agreed services'. That this is not wished for in Albertslund was also the attitude by the Director of Environment & Technique, who in an interview opposed to the idea of Department of Public Property as a support function. He pointed to the strength of integrating the regulatory function connected to infrastructure with

planning and operation of public property, and stressed that development must happen as integrated in daily operational work. According to the Director it would lead to fragmentation to make a separation of support functions connected to public buildings from other tasks related to public property and infrastructure. A holistic view on city development would thus not be possible (110311, Int. NCB).

The Future Creation Workshop opened for horizons towards an understanding of the social aspects of a sustainable work life. The utopias inscribe in the idea of the flexible organisation that is potentially leading to volatility due to lack of rhythms and continuity, and thus loss of routine and knowledge important for a strong professional anchoring on which the employee must base priorities of values. This has consequences not only for the effectiveness of the organisation, but also reach the societal level as the organisation of work and its consequences is very much a societal matter (chapter 2.1.1). The employees did, however, take the first small steps towards ideas of how to cope with the complete flexibility demanded through the notion of free arenas: Social (coffee meetings) as well as professional (prioritising tasks together, cooperation with other professionals). As to the environmental aspects of sustainability the critique on current strategies for sustainability was made explicit, pointing to the complete lack of substance in the social constructions of audited environmental management and green accounting (chapter 4.5).

At the final workshop (chapter 4.6) the theories on governance and sustainability were introduced to the employees, which enabled a reflection on practice in the light of sustainability and steering technologies. This added a deeper interpretation and perspectives to the outcome of the process.

It became evident that the Directors saw the future organisation very much as shown in the utopia 'Project Management in Paradise' (Figure 23). The organisation is driven by values and goals and based on communication and mutual trust, and it is the individual employee's responsibility to know the values and criteria for legitimacy. Values are negotiated with citizens and politicians in different fora as e.g. 'city development workshops' (Albertslund Posten 2011), and internally between management and employees. The utopia also corresponded to the request from the Environment & Engineering Director to have a more transparent hierarchy of goals and measurable targets to follow up on practice in Department of Public Property. The weakness by steering through targets and key performance indicators was, however, pointed out by the employees, which shows a critical distance to the more 'hard' steering technologies in FM.

In the final workshop the utopia 'Coherent Society with Common Goals' was translated into a 'holistic view on sustainability' (Figure 46), where politicians, citizens & business and the professional Administrations constitute parts of a whole that will find common ground and visions for society when working together and thus pull in the same direction. Though the utopia with its symbolic gestalt seemed to be only a utopia back in 2010, it turned out that it fits neatly into the strategic thinking of top management in the organisation. This was expressed by the Municipal Director, who claimed that current governance trends were perhaps not the future frame for development, and that other means of problem solving should take place as e.g. close cooperation with other actors in society. This is important for the understanding of the role of public FM, which the Director also pointed at in the final workshop: The Department has taken the role of strategic partner in the development of local society during the AR process. By making the gestalt of a future utopian horizon beyond what

could be implemented by the Department alone, the employees positioned the Department among those taking the lead in future strategic development of the city, leaving behind the reactive and executing function of implementing visions and strategies developed elsewhere – on strategic level.

With references to the figure of Fournier (Figure 3), the joint analysis in the final workshop indicated that the employees in the Department of Public Property are on their way to have developed new, internal criteria of legitimacy embedded in new and broader horizons for sustainability. Though perhaps not explicitly defined yet, criteria of legitimacy connected to the substantial aspects of sustainability have been internalised in the personal conduct. The body of knowledge now includes a deeper understanding of sustainability, and the gained legitimacy of creating free arenas as part of everyday work life has strengthened control over practice. Greater knowledge on the concept of sustainability and more deliberate control over practice has contributed to a more solid basis for the professional competence. Not only the values and steering technologies defined by the top have been subject to critical examination, but also values based on a new category – Sustainability – have been developed and operationalised within the Department. More than one employee had told me that the process did somehow provide the content to the value management of the organisation that was before seen as rather empty.

In the light of the quest for specific ethical codes of conduct for FM as raised by Grimshaw (2001) (chapter 2.3.3), I would claim that this is what has developed in the Department of Public Property. A culture has evolved allowing for the development of specific ethical criteria for ‘good work’. According to the analysis in the final workshop criteria for ‘good work’ would here both imply a professional judgement, alignment with values of the organisation *and* the feeling of dignity of having done the right thing according to a more substantial understanding of sustainability. It was stressed that the culture had changed, in a direction where also personal experience from engagement in society beyond the work situation was legitimate to draw into judgements when reflecting on own practice (chapter 4.6.6). The question is, however, whether this legitimacy can remain. It becomes a question of balancing the degree of personal judgement based on experiences from engagement in society with an alignment with specific goals and indicators. The process must continue towards a further institutionalisation of criteria for sustainability beyond key performance indicators. A sustainability strategy was suggested by the employees, who also stressed that ways to account for the more soft aspects of sustainability must be found.

The Management in Albertslund local authority has deliberately chosen to integrate the responsibility of all public physical aspects of the City in one Department: Real Estate, Roads and Parks. The aim of this was to create coordination between the administrative areas, prevent silo thinking and thus enable development of the City on a holistic basis. This is also the background for a critical attitude towards the idea of core and support function as connected to public buildings, as this would delimit the scope of action in the Department of Public Property as well as the possibility of cooperation on equal terms between the Department and other administrative areas. In terms of sustainability a core - support function dichotomy based on a contractual relationship would make it difficult to develop and maintain a culture supporting a reflexive practice based on rationalities beyond those of key performance indicators and economical evaluation.

The thinking in Albertslund local authority corresponds to the US definition of FM with a focus on a holistic integration of people, place and processes. Related to the list of requirements for the implementation of an FM organisation in local authorities as suggested by Jensen and Due (Due 2007) (chapter 2.3.6), the Department of Public Property is well on the way. The Department has a strategic awareness and support at the top level in the local authority. The employees work proactively both related to strategic planning and to communication, is well aligned with the political intentions for the development of the municipality and have gained a holistic view on practice. One parameter, however, deviates from the list of requirements: A division in core and support function. Though the employees are aware of the fact that FM is often regarded a support function, they prefer to refer to colleagues and citizens rather than users (090919, Int. A&P).

The work in Albertslund local authority has helped me overcome the disillusion I experienced in relation to the concept of public FM at the beginning of the AR process (chapter 5.1). I have decided to consider the concept of sustainable public FM as unfinished and with openings for qualified suggestions as to scope and steering. This gives space to reflect on the concept more freely.

In chapter 2.3.6 a distinction is suggested between understandings of FM emphasising market based steering technologies and FM emphasising the holistic aim of the function. I am now ready to take this distinction a step further by suggesting that if the holistic understanding of FM could be understood as a *mindset* and not a specific way of working, there would be an opening to suggest other means of steering than purely market based technologies. To specify the core of the mindset I would claim that the principles of systems thinking are valid (chapter 2.2.2): In systems thinking the organisation (or city) is seen as complex systems made up of interrelated parts that can be studied as an emergent whole. Ontologically it is thus believed that there is a whole beyond the sum of the parts. This is important in local authorities due to the increased complexity of society, and the fact that societal actions have become interdependent due to the extended division of labour. The AR process showed that a 'FM mindset' as suggested above has the potential to embrace a true holistic thinking, and even allow for openings towards understandings of sustainability beyond market based steering and 'sustainable technologies'.

The principal role of FM is important to the 'FM mindset'. The role as support function places the facilities manager in an uneven power relation to those with whom she must cooperate. If the aim is holistic based FM, interrelated parts must be connected and solutions found as an emergent whole. To translate this rather cryptic formulation it would imply an equal cooperation between employees from different administrative areas to find a solution beyond a coordination of solutions found within each area. If FM has the role of an executing function trying to adapt the facilities to decisions taken elsewhere, the potential of negotiating and developing the building portfolio on equal terms with other priorities is reduced. It is my claim that leaving the dichotomy of support-core function would enhance the potential for holistic thinking and thus also allow for a reflective sustainable practice based on a whole systems perspective.

It is a question of ontology to decide what means of steering is believed to support a holistic FM. Current research point at a balance towards a culture allowing for free arenas supporting a reflective practice, and it has showed to be possible in an organisation emphasising steering inspired by the Relational Paradigm. Though management ask for key performance indicators,

they also encourage autonomy and ‘out of the box’-thinking. This strategy is supported by the critique raised by Power (Power 2000) (chapter 2.3.3), who points to the fact that accounting and audits shape the design and interpretation of organisational performance, and sometimes lead to priorities others than those most appropriate from a professional or political judgement. I would therefore claim that if aiming at holistic FM based on systems thinking, a certain degree of autonomy and room for thinking beyond key performance indicators is required.

As to the substantial aspects of Sustainability the view of Shiva and Sachs provided a perspective at the final workshop. It indicated that we must move from an approach based on the social construction that the world will be more sustainable by green accounting and implementation of environmental management systems, to a broader and more substantial perspective on sustainability.

In a work life context employees seemed to have adapted the understanding of a sustainable work life as suggested by Nielsen (Nielsen, Nielsen et al. 2007), who points to the necessity of developing coping strategies to be able to live in the chaos of flexibility. At the final workshop free arenas became the symbol of a coping strategy as time and space where it is legitimate to abandon most urgent tasks to reflect on immature ideas and make priorities. Free arenas help employees to get the distance to everyday work life from where current practice can be critically examined. This is important to actually take control of the working hours, and not only letting requests and urgent tasks decide the workflow. The more strategic view is important when great challenges as sustainability shall be addressed. It takes strategic, long term decisions to actually make a difference here. Also the word ‘*dignity*’ became connected to the sustainable work life in the final workshop (chapter 4.6.6), which by Nielsen (2007) is connected to the notion of professional code of conduct. It seems that openings towards hope and dreams related to professional pride and knowledge have been created, which is an important aspect of sustainable work life (Nielsen, Nielsen et al. 2007, Hvid 2006) (chapter 2.1.1).

In relation to the environmental aspects of sustainability the employees also had some reflections. Environmental sustainability must be more than accounting for consumption by numbers in systems or boosting the capitalistic market with green products. Also the narrow focus on CO₂ that had been criticised earlier in the process was challenged by suggesting that an explicit strategy for environmental sustainability should be made for the Department. This is an opening towards the more substantial aspects of sustainability, acknowledging that whatever choices are made they influence on society locally as well as globally.

It became evident that the different aspects of sustainability are not necessarily complementing each other. The right decision seen from one perspective may contradict other concerns. Due to the ambivalences connected to the concept of sustainability it becomes important to also base daily practice on values, experience and engagement in societal matters elsewhere, and not only be informed by systems and explicit criteria for success. Experience from outside the scope of the instrumental rationality links us to the potential sustainable future that is already anchored in society, and at the same time reaches beyond the current economical and social structures of today (Olsen, Nielsen et al. 2003).

The final workshop made alignment with management possible, which got the character of ‘fusion of horizons’ as the employees’ utopian ideas seemed to supplement the strategic thinking of top management. Most importantly perhaps was an acknowledgement of the new

competences and role of the Department. To translate this to a work life perspective the strategic position might imply that they become even more engaged in transdisciplinary cooperation as described in the utopia 'Project Management in Paradise.' The Department for Public Property has an important role in societal development due to their direct impact on the physical expression of public property. The access for the citizens to public property is related to leisure and creation of social associations as e.g. association of art. Cooperation with volunteers might therefore become an increasing part of work life. But what happens when the employees shall not only care for the practical aspects of public facilities but also take increasingly part in political processes within the Administration and on societal level? This will indeed demand a high degree of flexibility and skills, which current work has shown is only possible to cope with if free arenas are maintained and strengthened.

5.4 FUTURE CHALLENGES

Though the AR process has ended focus must be kept on developing and maintaining a reflective sustainable practice in the Department of Public Property.

In relation to environmental aspects of sustainability, an important question is how to ensure a balance between the 'real work' handling the substantial aspects of environmental sustainability and the obligations related to the environmental management system and green accounts. The employees pointed to a need for a strategy for environmental practice in the Department, which would be another approach than that of the environmental management system. Here the professional free arena becomes important, as a place where knowledge and knowhow about the connections between practice and the substantial impact on ecosystems can be explored. Internalising an understanding of the substantial aspects of sustainability will perhaps also make it easier to answer the demands from users of public buildings. E.g. when pedagogical staff want to build a shed, why must they use alternatives to pressure treated wood – and what will be the alternative?

Though the environmental management systems have been simplified in terms of administrative duties for the employees (110329, Int. NR), it will most likely remain a steering technology in Albertslund local authority due to the high value of branding. Principally the employees can then chose one of two strategies: Integrate goals related to the strategy for environmental practice into the environmental management system, or make a clear distinction between the *system* and *practice* for more substantial aspects of sustainability. The latter would allow for a broader interpretation of sustainability, but would also be more challenging in terms of selection of key performance indicators as requested by the Director at the final workshop. This would correspond to the suggested decoupling of auditing from practice as suggested by Power (2000), with the aim of not being steered by narrow and perhaps irrelevant goals defined by others.

As to the social aspects of sustainability, a work life perspective as well as a local community perspective has emerged. Openings emerged towards an understanding of work organisation as an aspect of societal structures, and the fact that employees are also citizens with experience beyond those connected to the specific work place was recognised. Feelings, indignations and personal experience are necessary if future horizons are to be kept open and changeable. To create and maintain a culture supporting this, calls for a further strengthening of the concept of free arenas, which would probably need a continuous process where free spaces are provided through e.g. workshops. Three years of AR have shown that focus on areas of development gradually disintegrates in the time after a workshop, to gain momentum

again in the next. Related to the idea of creating change on the basis of a single intervention, the process has indeed showed that change takes time and must be facilitated regularly to succeed.

The free arenas provided by workshops have allowed for societal aspects to emerge as embedded in the specific work context. This is important as it opens for horizons enabling employees to understand their professional role at a societal scale, but also to understand that changing practice is also a change of society. The employees have gained an understanding of the substantial aspects of sustainability but at an immature stage that makes it difficult to explicitly articulate what that might imply. A process challenging and adding to current knowledge could thus be a future perspective, inviting experts experienced in different substantial aspects of sustainability. The experience with PCB that was found in the process of renovating the local school (chapter 4.6.4) is an example why the substantial aspects of sustainability must be understood, and the consequences of accumulation of chemical compounds and heavy metals in ecosystems as connected to practice could thus be *one* possible theme to explore in the professional arena.

I would think that the process of cultural change has also empowered the employees to better support sustainable work elsewhere in the organisation. It has been expressed that a greater understanding of values and priorities by employees within other administrative areas has developed. The employees are thus better prepared for a mutual dialogue with the users about development of the facilities, referring to other understandings of sustainability than the narrow environmental focus. In relation to community development the employees are also better prepared to take part in a dialogue between citizens, business and the local authority. They have gained a better understanding of their role in the organisation and on societal level, and have also discussed what it might imply in relation to work life in the Department.

It is difficult to judge whether the institutional changes will remain. According to the Department Manager there had been organisational changes every two years since 1986, which indicates that the organisation is indeed elastic and would not likely remain as it is for a very long time. Also the Directors indicated a demand for flexibility, and stressed that with the Department of Public Property in front on strategic level they would have the opportunity to influence necessary changes. According to Nielsen (Nielsen, Nielsen et al. 2007) the volatility following the demand for flexibility can prevent long term planning, lead to an experienced lack of defined references and professional capabilities. This was also what was seen in the Department before the AR process, and to avoid a reproduction the coping strategies facilitated by free arenas are important to maintain.

The team structure had been changed as a result of the process, and it seems that the changes are perceived as relevant and meaningful by the employees. The move of GIS to a more strategic team has enabled a closer cooperation between those developing KIM and those doing the strategic FM planning. This is seen as a gain, as KIM thus becomes more integrated in the strategic and interdisciplinary thinking of the organisation, and at the same time it can provide graphical material to support the strategic communication undertaken by the team. The Call Centre and the economy function has become one team. During the entire process employees from this team have, however, shown frustration with lacking change in practice. The workshop thematising work life (chapter 4.4.2) showed that there are major frustrations with the financial system, as it is no longer connected to the operational FM system Care Taker. One employee even said that she sometimes found it highly frustrating to go to work

due to lack of professional knowledge related to the financial steering system. It was also employees from this team who in the final workshop rejected the claim that everybody can create free arenas as integrated in work life. There is thus room for a further process here!

I think that the notion of zooming connected to the free arenas is a very important point in relation to the question: Are the cultural changes permanent or will the reflective way of working and developing practice erode now that they are no more part of an AR process? Before the final workshop an employee made a reflection on this, saying that they had become used to always having another workshop so they would have to find out how to proceed without... At the final workshop all groups thus pointed at 'Kirsten's workshops' as something to be continued. Though there is a belief that they can maintain the idea of free arenas, it was also explicitly mentioned that the real zooming out with sustainability in focus needs more than free arenas as integrated in work life. Free spaces are thus needed with structures aiming at a wider perspective away from the power structures characterizing every day work life.

6. CONCLUSION

It is time to answer the research questions that were presented at the beginning of the thesis, shed theoretical light on in chapter 2 and 3, empirically informed in chapter 4 and analysed in chapter 5. Having understood the steering mechanisms of public FM it becomes possible to answer how sustainability is contextualised here, and how that relates to the substantial aspects of sustainability on societal level. This is the focus of the first question.

How is the concept of sustainability contextualized in public FM, and how does that relate to more substantial aspects of sustainability on societal level?

FM has emerged in society as a modern professional area in the process of specialisation and division of labour. It was first seen in the public sector during the implementation of NPM, and can thus be understood as a contextualisation of NPM within public property and service delivery. As public property was taken care of before NPM also trends from other governance paradigms influence the organisation and steering of public FM.

With NPM the autonomy of the professionals became restricted by ‘technologies of performance’ as e.g. decentralisation of budgets and accounting by performance indicators, as is also widely used within FM. This was a means of shaping conduct into the optimization of performance in the flexible organisation related to organisational values and goals by the mechanism of ‘responsibilisation of autonomy’ (chapter 2.3.3). The professionals are expected to act of concern for the customer, and the users’ needs and rights become criteria for the evaluation of performance. In modern public organisations employees must thus act according to criteria of legitimacy formulated through a negotiation of politicians and the network around the political arena. The shift of paradigm towards steering by market mechanisms is also called for in public FM, where the facilities manager must align actions with political intentions and the customer’s need (chapter 2.3.6). The facilities manager must thus act according to values and criteria of legitimacy not specific for FM - to support core business. This is shown in Figure 49.

To balance values of the organisation with professional judgement, specific FM values and criteria for legitimacy must be developed. This shall guide judgement and thus decision making when balancing different political values with professional standards. The professional facilities manager bases her competences on knowledge and control of practice. As FM has not yet developed a coherent knowledge base, knowledge must be shared and coordinated between those inscribed in FM: E.g. architects, architectural technologists, engineers and economists. Control of practice implies both know how *and* control of own work life.

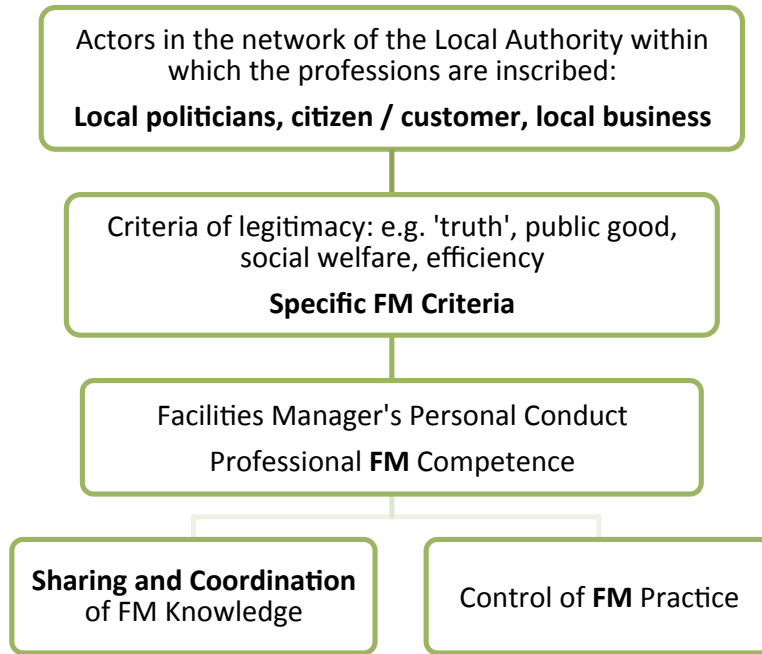


Figure 49: Conceptualisation of Public FM. The facilities manager must act according to political and managerial priorities and always focus on the customer. Criteria for ‘good’ FM practice must, however, be developed to enable decisions balancing political values with a professional code of conduct. The facilities manager must possess relevant FM knowledge and control practice, both in terms of knowhow and control of own work life. Source: Inspired by Fournier (1999) and contextualised in FM by the author.

Public FM⁵³ is thus development and maintenance of public property in accordance with overall visions and goals of the (local) authority. It is based on the steering of NPM and trends from other governance paradigms as e.g. Bureaucracy and The Relational Paradigm. The facilities manager refers to political values and criteria general for the organisation, and must act according to the customer’s needs. This leaves the facilities manager in an organisational cross pressure, where political values and criteria of legitimacy must be balanced with a professional code of conduct based on a coordination of knowledge relevant to FM. As the professional competence is anchored in the facilities manager’s personal conduct, she must show responsibility, flexibility, adaptability and persistence in the achievement of goals.

Emphasis on holistic thinking is important in public FM, as one aim of the public institution is to create coherence in society. This is only possible if the administrative areas can cooperate and find solutions to societal challenges across administrative boundaries. It must therefore be critically considered whether the binary of core and support function connected to FM is appropriate, as it positions the facilities manager in an unequal position to the partners with whom she must cooperate to fulfil political visions and organisational goals. Furthermore the dichotomy carries the risk of delimiting the scope of FM to organisational matters only. If citizens are to be customers also, it becomes meaningless to talk about core and support on an organisational level, as everybody working in the local authority somehow supports city development (chapter 2.3.6 and 5.3). It is thus my claim that leaving the dichotomy of support - core function would enhance the potential for holistic thinking in public FM and thus also allow for a reflective sustainable practice based on a whole systems perspective.

⁵³ Only ‘hard’ FM is included in this conceptualisation.

It is also crucial to be aware of the balance of steering technologies when implementing the principles of FM in local authorities, as there is a risk that when based primarily on market based steering FM leads to further fragmentation and lack of holistic view. Steering by contracts and key performance indicators becomes rigid and tends to guide actions towards what is measured rather than leaving it to the employees' professional judgement to take decisions in accordance with political priorities, professional standards and a feeling with the context. Current research points at a balance towards a culture allowing for free arenas supporting a reflective practice, which has showed to be possible in a municipal organisation emphasising steering inspired by the Relational Paradigm.

Having conceptualised public FM I will now turn to the second part of the research question related to a *contextualisation* of sustainability in public FM. As shown in chapter 2.2.3 sustainable FM in the public sector is informed by the principles of Ecological Modernisation and Natural Capitalism and draws on tools and technologies aiming at resource efficiency. Trends of Ecological Modernisation have been implemented in local authorities due to various local Agenda 21 campaigns. Parallel with the implementation of trends from NPM also the thinking of Natural Capitalism has influenced understandings of sustainability in the public sector – and thus also public FM. Sustainable buildings, energy efficient technologies and cleaner energy inscribe in the more substantial operationalisation of sustainable FM, while environmental management systems, green labelling, sustainability certifications and green accounting have a more systemic approach.

In the systemic approach to sustainable development criteria of success is connected to efficiency of the *steering technologies* and not the outcome of practice. This makes the steering unsuited to support practice in the task of addressing more substantial aspects of sustainability. Current research has shown that this can lead to frustrations connected to a perceived discrepancy between organisational green branding and the substantial aspects of sustainability connected to practice as e.g. environmental performance and social coherence. In worst case the social construction related to performance indicators and green branding can lead to a promotion of unsustainable practices and thus undermine the engagement in societal sustainability among employees. The understanding of sustainability in Natural Capitalism is connected to a whole systems perspective. The system is, however, often limited to the organisation and its stakeholders, which means that it can be difficult to reach a societal level in democratic processes for sustainability. In systems thinking it is believed that natural systems can be understood and modelled. Focus has, however, been primarily on CO₂ reductions in current strategies, which means that substantial aspects and the social consequences of other environmental problems are widely neglected.

In public FM the knowledge of substantial aspects of sustainability is anchored by employees with different professional backgrounds. The challenge here is to share and coordinate existing knowledge in relation to tasks and projects, and to find criteria to evaluate the sustainable aspects of practice. There is, however, a need also to gain and internalise new knowledge related to the substantial aspects of sustainability in local authority FM practice. While there has been a strong focus on environmental issues, public FM seems to have difficulties integrating the social aspects of sustainability. Though the local authority has the obligation to work for a sustainable development of society, there has not been much focus on this in research literature related to the role of public FM to enhance sustainability of society.

Current societal strategies have proven insufficient to overcome the ecological crisis. The relativistic approaches for sustainability are blind to the substantial aspects of sustainability, as e.g. erosion of nature and social communities, but also unsustainable patterns in the way work is organised (chapter 2.1). Management tools and green steering technologies are evaluated mainly in terms of efficiency of the systems, and thus carry the risk of a very relativistic account on sustainable performance. The actual limits to the capacity of ecosystems to sustain life are not taken into account, and thus the social consequence in terms of equality tends to be ignored. The question then becomes whether other strategies for sustainability can be developed within a public FM framing. This leads to the second research question.

Can Action Research establish arenas for change in a Municipal Department of Public Property, leading to understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency?

In Albertslund local Authority Department for Public Property AR has shown that it is possible to develop an understanding of sustainability connected to practice, beyond the systemic approach based on management systems and accounting. By deliberately addressing sustainability in a work life perspective, free arenas for reflective thinking became established as part of everyday work life. This improved control of own practice and thus enabled actions to be taken to develop a practice according to future horizons for sustainability. AR has thus established arenas for change leading to change in practice, based on understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency. This will be further unfolded in the following.

The free arenas provided by workshops opened for utopian horizons for sustainable practice beyond the instrumental rationality on which current strategies for sustainable FM are based. They also allowed for reflections on work life, which led to a conceptualisation of three principal free arenas important for a reflective sustainable practice.

The notion of ‘zooming out’ to see practice in a critical and holistic perspective became important, and is connected to the perspectival free arena. The utopian horizons enabled a critical examination of current organisational steering and practice in relation to sustainability in society, with references to social as well as environmental aspects of sustainability. Having been in a process of zooming out, the critical and holistic perspectives must be transferred by ‘zooming in’ to the professional and social free arenas. These are arenas integrated in everyday work life in which practice is reflected upon, with references to the utopian horizons developed in the perspectival free arenas. The motion between utopian horizons and practice enables the critical distance needed to maintain a reflective practice not entirely guided by customers’ need and key performance indicators constituting criteria of legitimacy.

The explicit rhetoric of zooming was connected to the fact that current steering in the organisation was addressed during the AR process. An analysis has been important not only of understandings of sustainability but also the steering technologies under which they flourish. It has enabled the distance to systems and tools necessary for a critical examination, as not all steering technologies invite to reflective thinking beyond the restriction of current systems. It does, however, also enhance the general aspects of the conclusion, as other municipal Departments of Public Property can reflect their own practice and organisation of work in the overall steering strategy and technologies.

Figure 50 is an attempt to conceptualise sustainable FM in local authorities. Free arenas enable a reflective practice which includes control over practice in terms knowhow and control of the working hours. Knowledge of FM and sustainability is shared and coordinated to enable a holistic and informed basis for decisions. The personal conduct of the facilities manager is thus strengthened as the reflective practice enabled by the free arenas serves as a coping strategy related to the constant demand for flexibility. This is connected to the concept of sustainable work life.

The free arenas enhance the potential for knowledge sharing. The social arena is important for social coherence and thus also for informal sharing of knowledge. This is also where the life world perspective is allowed for, through the informal communication connecting the work place to societal matters beyond specific tasks and projects. The professional arena is important to further develop the professional code of conduct, but also to explicitly address challenges connected to the substantial aspects of sustainability. As shown above this is not ensured through the steering technologies of Ecological Modernisation, but must be based on common sense and factual knowledge about ecological and social consequences of practice on societal level. A culture where free spaces integrated in work life are considered legitimate must, however, be built. A free arena can be defined as a time and space for free thinking, not necessarily framed by formal gatherings or scheduled innovative moments.

Based on the stronger knowledge base and a more reflective practice related to the concept of sustainability, specific criteria for sustainable FM can be developed. Criteria for sustainable FM must embrace the substantial aspects of sustainability and thus reach beyond the focus on efficiency of management systems. As the substantial aspects of sustainability can be difficult to transfer into key performance indicators, other means of accounting must be developed.

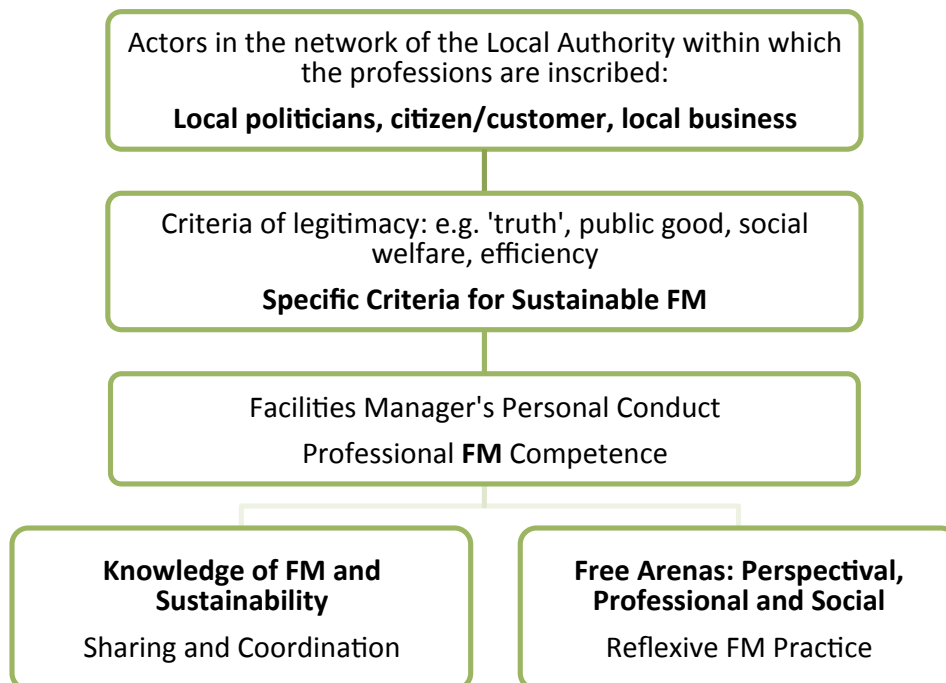


Figure 50: Conceptualisation of Public Sustainable FM. The facilities manager must act according to political and managerial priorities. Criteria for ‘good’ FM practice include criteria related to the concept of sustainability beyond key performance indicators. The facilities manager must possess relevant knowledge related to FM and the substantial aspects of sustainability. With the motion of zooming in the free arenas a reflective FM practice is enabled. Source: Inspired by Fournier, 1999.

The workshops held in the AR process were perspectival free arenas that led to a broadening of horizons and a critical examination of practice in the light of sustainability. It is my claim that perspectival free arenas are crucial for change towards sustainability as they allow for a life world perspective to emerge. This implies that not any workshop approach has the same change potential in relation to the more substantial aspects of sustainability. Current research has shown that with its emancipatoric constitutive knowledge interest the Future Creating Workshop facilitates an arena allowing for a broad variety of rationalities. Other workshop methods based on deliberative democratic processes may have the same potential. It is important to work with the arena in a way that creates a critical distance to power structures of everyday work life. This also means that one must be aware of the power relations between the managerial level and employees. A process as the one supporting this conclusion, furthermore demands a high degree of mutual trust between the action researcher and the employees and manager, but also between the manager and her employees.

Can, however, *permanent* arenas for change and a reflective practice be created? The AR process showed that a free arena is something that must be actively and deliberately created by the employees as integrated in work life. Employees must prioritize the working hours individually or team wise, allowing free arenas for reflections beyond urgent tasks. Theoretically this is difficult within the frame of NPM due to the demand for flexibility to serve the customer and the rigid accounting by key performance indicators. The demand for flexibility leads to a situation where employees loose rhythms and continuity in daily work life, which makes it difficult to plan and thus work life has the risk of becoming structured by most urgent tasks. In this situation it can be difficult to maintain a culture where free arenas are legitimate. The individual employee must act in a cross pressure between different rationalities and steering technologies, and act according to changing political priorities. Also recurring organisational changes create ruptures in continuity, which can make it difficult to find the extra energy to actually create free arenas as integrated in work life (chapter 2.1.1). Current research has shown, however, that free arenas constitute a coping strategy that enables employees to handle the cross pressure and demands for flexibility connected to the modern public organisation.

A permanent culture allowing for free arenas thus demands a deliberate effort from management and employees. It is important sometimes to zoom out and critically examine work life in relation to the employees' ability to reflect on own practice as an integrated activity in work life. And act accordingly. This does, however, demand a strong support from management both in relation to the creation of perspectival free arenas and to the openness for critique of steering technologies and current management strategies. The notion of 'unfinished' must be integrated as a way to understand the culture, as the free arenas are not only meant as arenas where difficult challenges can be solved, but also to keep horizons open. There must always be elements of 'unfinished' or 'openness' to keep the culture viable. This will probably not always be possible, which emphasises the importance of regular free arenas provided by e.g. workshops to help employees remember to 'dare treading on deep water' (reference to final workshop, chapter 4.6.6).

The conclusion to the second question is that free arenas can be established enabling change and a reflective practice beyond the discourse of efficiency in a municipal Department of Public Property. Steering technologies must, however, support a culture allowing for free arenas and reflective thinking drawing on individual experience from a life world perspective. Furthermore openness is crucial to a continued process towards sustainability without specific

goals. A culture allowing for free arenas is, however, vulnerable and must be continuously cared for.

The AR process showed clear openings towards understandings of sustainability and a reflexive sustainable practice beyond the discourse of efficiency. In relation to knowledge on the substantial aspects of sustainability there is, however, still potential for a further process. Immature ideas of a strategy for sustainability in the Department of Public Property was formulated, but without really getting to the substance. A focus on this in the professional free arena could lead to a more solid knowledge base to guide the professional code of conduct in relation to the question of sustainability. As to the utopian horizons for a sustainable practice, it is too early to say whether they will remain 'alive' to inform critical reflections on practice in the free arenas.

Current research has opened for a reflection on a more open understanding of the concept of sustainable FM in a public setting. I suggest that the holistic understanding of FM (US definition) is taken one step further: FM as a holistic mindset. FM in local authorities must furthermore be regarded an equal partner of cooperation in the organisation with a frame of steering allowing for a reflective practice based on a whole systems thinking. A strategic view is important when great challenges as sustainability shall be addressed. More focus on the holistic mindset and less on rigid steering allows for free arenas to be created. Here the societal dimensions of public FM can be mirrored in the utopian horizons for sustainability and thus inform a reflective sustainable practice beyond the discourse of efficiency.

7. ANNEX

7.1 LOGBOOK

The logbook is printed separately and contains a table of contents.

7.2 LIST OF INTERVIEWS

Interviews can be found on the USB that was send together with the Monography. Most interviews have been transcribed by a student worker and due to a tight time schedule there has not been time to make a proper proof writing. Interviews have been sent to the interviewee for confirmation.

090626, Int. SK: Susanne Kremmer, Manager in Department for Public Property.

090902, Int. TZ: Torben Zinn, team coordinator in 'Road & Park'

090904, Int. SD: Susanne Dalby, team coordinator in 'Gis & Call Center'

090916, Int. FL: Frederik Lerche, team coordinator in 'Operation & Maintenance'

090918, Int. A&P: Bent Ranbøll og Maria Møller, Team 'Arkitecture & Planning'

091215, Int. FA: Borgmester Finn Aaberg

100709, Int. SK: Susanne Kremmer, Manager in Department for Public Property.

100923, Int. CS: Christen Sonnicson, team Arkitektur og Planlægning.

110311, Int. NCB: Niels Carsten Bluhme, Director in Environment & Engeneering Administration.

110329, Int. NR: Niels Ringlebjerg, responsible for the environmental management system in Albertslund Kommune.

110330, DATA: Thematic Workshop DATA.

110408, ENV: Thematic Workshop Environmental Work in Practice.

110412, WL: Thematic Workshop Work Life

110620, Int. SK: Susanne Kremmer, Manager in Department for Public Property.

7.3 TABLE OF FIGURES

Figure 1: Sustainability must be based on a stable constellation of the three economies (Shiva, 2005).....	12
Figure 2: Ontological picture of a system in General System Theory.....	16
Figure 3: Professionalism as disciplinary logic.....	26
Figure 4: Contextual and general knowledge.....	49
Figure 5: The administrative organisation of Albertslund Local Authority.....	53
Figure 6: Organisation of Administration of Environment & Engineering.....	53
Figure 7: At the beginning of the AR process (2009) the Department.....	54
Figure 8: Three principal phases.....	60
Figure 10: The process of Appreciative Inquiry was facilitated by workshops in March 2009 - October 2009....	61
Figure 9: Principal process for the initial process based on principles of the Relational Paradigm.....	61
Figure 11: The initial workshop with team Architecture & Planning was held in their office.....	61
Figure 12: Employees placing post it with important topics on a board.....	63
Figure 13: A light breakfast and a formal welcome by the Department manager started the day.....	65
Figure 14: An employee grouping resources.....	66
Figure 15: The Scenario 'Strategy for a Sustainable Facilities Management'.....	67
Figure 16: Conceptual diagram for communication within the administration.....	68
Figure 17: Conceptual drawing of the database as developed in the Appreciative Inquiry 2009.....	69
Figure 19: The plenary sessions were facilitated by café like surroundings.....	72
Figure 20: The Future Workshop is divided in three phases.....	75
Figure 21: The critique phase led to six topics that were regarded 'center of gravity' in the critique.....	76
Figure 22: Four scenarios were developed in the utopian phase.....	78
Figure 23: Realisation Phase: 'Happy Employees and Management'.....	79
Figure 24: Utopian Phase: 'Project Management in Paradise'.....	80
Figure 25: Realisation phase of the utopia 'Project Management in Paradise'.....	81
Figure 26: Utopia for a Coherent Local Society with Common Goals.....	82
Figure 27: Realisation phase the 'Coherent Local Society with Common Goals'.....	82
Figure 28: Utopia: 'More Cooperation between Local Authorities'.....	83
Figure 29: Utopia 'More Cooperation between Local Authorities'.....	84
Figure 30: Principal diagram for the final process March – September 2011.....	87
Figure 31: A guide for environmentally friendly buildings developed in the Green Cities Cooperation.....	88
Figure 32: Posters supporting the presentation of governance theory and theoretical understandings of sustainability.....	92
Figure 33: Figure of public governance trends as drawn by the Department Manager.....	93
Figure 34: Employees presenting status for Strategy and Procedures.....	95
Figure 35: Employee presenting status on KIM.....	96
Figure 36: Employees presenting status on Communication and Knowledge Sharing.....	98
Figure 38: Employee presenting status on Evaluation Practice.....	100

Figure 39: Kirsten Ramskov Galamba facilitating the joint analysis.	103
Figure 40: Welcome by Department Manager and Kirsten Ramskov Galamba (left).	106
Figure 41: A brave employee summing up and evaluating the process in relation to a learning perspective.....	107
Figure 42: Did you say Sustainability to your Politicians today? (Group 1).....	109
Figure 44: Horizons for a future sustainable practice in the FM Department (Group 2).	111
Figure 43: Free spaces. (Group 2).	111
Figure 45: Sustainability and free spaces (Group 3).	112
Figure 46: Group four suggested three principal free arenas as important.....	113
Figure 47: Holistic understanding of sustainability seen as an internal matter.	114
Figure 48: Holistic understanding of sustainability seen as an external matter.	114
Figure 49: Director of Administration of Environment and Engineering Niels Carsten Bluhme (NCB)	115
Figure 50: Municipal Director of Albertslund local authority Bo Rasmussen (BR).....	116
Figure 51: Conceptualisation of Public FM.....	138
Figure 52: Conceptualisation of Public Sustainable FM..	141

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Sustainability is at the societal agenda and it is expected that companies and public authorities take responsibility. This also applies within Facilities Management (FM), which is a coordination of everything that supports a company core function: Operation and maintenance of buildings, cleaning, catering, postal services etc.

This PhD dissertation is a reporting of a three-year action research process showing that it is possible to create an organizational culture with space for reflection and critical evaluation of practice in the light of a broadly anchored understanding of sustainability. However, it requires that free space can be created in everyday work life, opening for informal dialogue on ideas and frustrations associated with social as well as environmental aspects of sustainability.

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