

MAKING THE INVISIBLE VISIBLE AT A TEACHER EDUCATION COLLEGE USING AWARENESS-BASED ACTION RESEARCH

RWL8 8th International Conference on Researching Work and Learning University of Stirling UK 19-22 June 2013

Jürg Thölke, HAN University of Applied Sciences, the Netherlands

Gerbert Sipman, HAN University of Applied Sciences, the Netherlands

Daan Andriessen, Inholland University of Applied Sciences, the Netherlands

Fionnuala Herder-Wynne, Nowhere **ecl**, UK,

1. Introduction

This paper describes an approach to an awareness-based action research methodology that can help make visible the invisible patterns of behaviour in organizations and in so doing support purposeful change. This approach has been applied in a research project* with teams of (student) teachers and researchers at a higher education institute in the Netherlands.

Over the last 30 years the educational field has been overwhelmed with well-intentioned change initiatives aimed at raising educational standards. In the perception of teachers these changes have increased bureaucracy but decreased the quality time for education. Unintentionally, teacher's positions have been undermined as authority moves from the classroom to a more complex and powerful school organization governed by school management. This leaves teachers powerless to act and feeling stuck. Classroom education is part of a complex system and without seeing the system 'as a whole,' including that which is seen and unseen, change initiatives can have unforeseen consequences. Whenever change does not bring the expected results, it may be necessary to look in a different way and in a different place. The question is how.

One contribution to answering this question comes from the work of Otto Scharmer. In his book *Theory U* (Scharmer, 2009), he lays the foundations for an awareness-based action research methodology that allows researchers to identify and work with underlying social fields at various levels. Our paper describes one particular awareness-based action research methodology: 'Sparks of innovation'. 'Sparks' combines elements of Theory U, Ken Wilber's AQUAL model (Wilber, 2001) and the systemic perspective (Hellinger, 1998; Stam, 2006; Weber, 2002). It is founded in the premise that to be able to make purposeful change, we must make visible the hidden dynamics that entangle or block and the hidden resources that can help. The methodology enables researchers to co-learn, co-create and co-research with teams in organizations in order to support change from the inside out.

This evaluative paper describes the application of the Sparks methodology in a higher education institute. Our research question was: "*Can Sparks make visible and address the hidden dynamics of organisations in order to create purposeful change?*" Teacher teams worked on specific questions aimed at creating sustainable change

*Research made possible thanks to the funding provided by the University of Applied Sciences Arnhem Nijmegen (HAN) and through a RAAK international project of SiA, the Foundation for Innovation Alliance

within the organisation or the curriculum. They were facilitated by a team of researchers who helped them through a process of shared perception towards the creation of collective action. Researchers wanted to test the effectiveness of the Sparks methodology for supporting organisational change and to improve articulation of the methodology.

The paper is structured as follows. We present the Sparks methodology as our take on Scharmer's awareness based action research. We describe the case in which Sparks was applied. We provide insight into some of our findings and results, concluding with a discussion on the effectiveness of the Sparks methodology in making the invisible visible and bringing about purposeful change.

2. Awareness Based Action Research

2.1 First, second and third-person view

The mainstream reductionist point of view in science has brought great insights but it is insufficient to help us deal with the challenges of many of our real life phenomena. With the increased understanding of our interconnectedness, we need more inclusive scientific approaches in order to make sense of the world and of our organisations.

Scharmer (2009, p. 16) points to this when he writes: "(...) it is now time for social scientists to step out of the shadow and to establish an advanced social sciences methodology that integrates science (third-person view), social transformation (second-person view) and the evolution of self (first-person view) into a coherent framework of consciousness-based action research." In later work he refers to this research as awareness-based action research (see www.presencing.com).

He builds on the work of Ken Wilber (2001) whose integral approach embraces the most significant research paradigms of our time and includes the role of human consciousness. He explains that his awareness-based action research "(...) incorporates three methods: phenomenology, dialogue, and collaborative action research. All three address the same key issue: the intertwined constitution of knowledge, reality, and self. And all of them follow the dictum of Kurt Lewin, the founder of action research, who observed, 'You cannot understand a system unless you change it'" (Scharmer, 2009, p.19).

The result is not so much a triangulation of methods but an integration of paradigms. As a paradigm works as a filter to select that which we consider as worth being measured, a triangulation of paradigms opens the possibility to illuminate the blind spots in between.

2.2 Theory U

Scharmer translated his thinking on organisations into Theory U, one of the pillars of the Sparks methodology. This deep learning process begins in the left side of the U, sensing into 'what is'. It is a phenomenological process encouraging cognitive, embodied, emotional and intuitive awareness. It invites learners to explore and then let go of their mental models in order to be able to truly connect with others. "This process of letting-go (of our ego and self) and letting-come (our highest future possibility: our Self) establishes a subtle connection to a deeper source of knowing.

The essence of presencing is that these two selves - our current self and our best future Self - meet at the bottom of the U and begin to listen and resonate with each other. Once a group crosses this threshold, nothing remains the same. Individual members and the group as a whole begin to operate with a heightened level of energy and sense of future possibility. Often they then begin to function as an intentional vehicle for an emerging future,” (see www.ottoscharmer.com/publications). From the stillness, insights, solutions, ideas or movements may arise that are the first steps in a fundamental change process. The next step is the prototyping step in which small experiments with change lead to additional learning and adaptation. Through experimental exploration the new insights become applicable in the real world. In the final step of performing, the new insights are brought into the full reality of the organization.

2.3 A systemic perspective (the lens that transcends and includes)

Sparks is grounded in the systemic-perspective (Hellinger, 1998, Weber, 2002), its second pillar. The systemic-perspective (not to be confused with systems ‘thinking’ Beer, 1985, Senge, 1992), focuses on the phenomenological investigation of direct experience through sensation, reflection, and intuition. Its basic premise is that in systems of human interaction there exists an invisible field of information (Horn & Brick, 2009) about the hidden dynamics in a system which can be made visible through for example working with constellations (Jurg and Thölke, 2006). In a constellation, a facilitator works physically with people and artefacts as representatives of elements in a system. In particular, the stand-ins create a systemic field in which hidden patterns are revealed. This phenomenon is comparable with parallel processes in psychotherapy or group dynamics (Jurg, 2010).

For the healthy functioning of an organisation, certain rules need to be observed: 1) There is a respected order of positions within any system; 2) in any exchange there needs to be a balance between give and take, and 3) everything has equal right to a place within the system. These basic rules make it possible for a skilled facilitator to use systemic constellations to make visible the hidden dynamics and to work with them to create a healthier system.

2.4 ‘Sparks’, a Methodology for Co-Learning, Creation and Research

Sparks combines Theory U, the first-, second-, and third-person view and the systemic lens into a practical ‘hands on’ methodology to work purposefully with teams in organisations. It has been developed over years of working with innovation teams at the Technical University of Delft, Netherlands; with learning groups at Nyenrode University and through applying the methodology in higher education systems.

Sparks has three components:

1. A collective (team, group) within an organization holding a burning question. This question must be important not just to the organization, but also to the team and to the individuals within the team.
2. A creative journey that the group is willing to step into that follows the curve of Theory U. This requires the group to step into the unknown and be open to ways of knowing beyond the cognitive such as the emotional, felt sense and intuitive.
3. Systemic facilitation. The facilitation of Sparks is vital requiring:

- Systemic sensitivity: the capacity of the facilitator to be open to ways of knowing beyond the cognitive, to model this for the group and to invite the group to step into the unknown. Included here is also the ability to explore different perspectives through embodied techniques, for example working with constellations.
- Holding creative tension: the capacity of the facilitator to hold the tension as the group rides the highs and lows of a creative process. This also requires a high toleration for 'not knowing'.
- Systemic mastery and the inner journey: the capacity of a facilitator to allow herself to become immersed by the system, to work creatively with parallel processes, '*regress in the service of discovering connections between her own experience and the organizational context*' (Shapiro & Carr, 1991), interpret this inner experience and resolve via the 'inner journey' so that she can intervene in service of the process. This capacity is related to the extent that a facilitator is aware of her own inner point of departure (Scharmer, 2009), the extent to which she is willing to examine her own beliefs and their validity.
- Presencing: the capacity of the facilitator to be present in the here and now: alert and responsive to the movements towards health that the system reveals. Scharmer describes this as the ability to take 'action in an instant'.

3. Evaluation Methodology

3.1. Case

A higher education institute for teacher training (in the Netherlands) had the ambition to anchor 'sustainable education' in all facets of her organisation and curriculum. To do this the leadership sought the support of a research team from the University of Applied Sciences HAN, Centre for Quality of Learning. In consultation, three burning questions were articulated and sparks groups composed of teacher trainers, students and staff from partner schools invited to participate. Each group had its own facilitator, trained in systemic methods. Each group met for approx. 20 hours in facilitated sessions of 2 to 4 hours over a period of 2-4 months. The researcher/facilitators met regularly with the research group under the guidance of the Professor to reflect on the process and to learn from each other. The research group connected to the leadership of the College through a steering group in order to support communication and joint ownership.

3.2 Research Framework (see appendix 1 for details)

The research framework was designed to enable capture and analysis of first-second- and third person view and the systemic perspective. For the first person view we included phenomenological methods in our data gathering and analysis; the 'subject looking at the subject' and parallel processes between the researchers and the researched. One example is the use of logbooks, where all participants were encouraged to record (in addition to factual information) more subjective and phenomenological data: 'what did you feel?' For the second person view we included joint interventions and participative sense making, and the gathering of data about the interaction between the research and the Sparks process. One example is the translation of the research findings into short interactive theatre pieces which have 'body and heart.' For the third person view we added factual inventories of results and description of patterns.

At the end of five months we had an enormous quantity of data from logbooks, research workshops and interviews, descriptions of systemic constellations and transcripts of individual and collective reflections.

For the meaning making we used a blend of traditional analytical methods (e.g. discourse analysis to identify key topics and dilemma's problematized in the texts, Czarniawska-Joerges 1997; Marshall 1994; Miller 1994), and Sparks methods to delve deeper. We used systemic constellations to access direct experience through sensation, reflection and intuition in order to deepen our understanding of key topics and dilemma's such as 'absence of leadership', 'stuck within the system' or 'time constraints/hours/resources' that had been revealed by discourse analysis. Researchers began to relate to these topics as 'dramas', viscerally felt patterns of behaviour that reveal the stuck-ness in a group or organisation. For instance, through actually 'walking the lemniscate' researchers began to discover the sparks hidden within the drama (figure 3.2).

Figure 3.2: Walking the lemniscate



The 'Drama' loop	The 'Learning' loop
• Repeating patterns	• The learning's
• Getting stuck	• The movements
• Ordeal/judgements	• The hidden treasure
• Shadow	• The light

In order to look across the cases we conducted a coding method according to the Sparks Principles (Denyer, Tranfield, & Van Aken, 2008): Context of the Interventions, the Pinciples used in the interventions, the Mechanisms triggered by the interventions, and the Outcome produced by the interventions. Again the results were enriched by systemic constellations. One outcome of this research has been a more articulated Sparks method.

4. Findings

4.1 Overview

The research question held was: “*Can Sparks make visible and address the hidden dynamics of organisations in order to create purposeful change?*” In looking at the findings we need to pay attention to the *results* of Sparks for the organisation and how the *method* Sparks worked in practice. Appendix 2 provides a selection of the concrete results that emerged from the groups and that were supported by leadership for further action (the third person view).

For the purpose of this paper, in section 4.2 and 4.3 we concentrate on how the Sparks *method* worked to reveal hidden dynamics and how awareness based action research supports this process.

4.2 Sparks in action - Revealing hidden dynamics

In the research group researchers, facilitators and teachers jointly worked on exploring their experiences, stories and logbooks to reveal what was really going on and to shape helpful interventions. The textboxes show how we started to differentiate patterns and repetitive organizational dramas. Examples are the dramas of ‘not being good enough’ and the patterns, ‘nobody sees me’, ‘walking on egg shells’ and ‘the absence of leadership,’ which appeared as parallel processes in all of the Sparks groups.

Researchers and facilitators were themselves not immune to the undercurrent of the organization; several dynamics repeated themselves as parallel processes in the research group. As they were drawn into these hidden patterns, researchers began to appreciate the phenomenon as being an essential element in the discovery of the hidden dynamics. But the ability to intervene adequately, the ability to step out of the undercurrent (once revealed) needed facilitators and participants to work with the sparks principle of ‘the inner journey’ (textbox 4.2.1).

Textbox 4.2.1 Discovering 'Brilliant failures' using the first person and second person view

One of the most remarkable moments of the project took place some months into the Sparks process. The research group and the facilitators came together to discuss the results. Facilitators and teachers shared stories, dilemma's and experiences in an enthusiastic setting. They told how participants were getting to know each other at a deeper level, how they learned about the systemic and how they struggled with their 'dramas.' Results were not mentioned and the project management became more and more silent.

After a while the project manager asked: *'Did any of the groups actually work on their task? Did they work on their burning questions?'* The atmosphere in the meeting changed from an exciting exchange to a heavy, nearly depressive silence. Suddenly a fearful thought claimed our space: *'we had failed, we were not good enough.'* After a silence, one of the younger teacher researchers, visibly angry, stood up and said: *'Maybe in your eyes we have failed, however, I am proud of what we have done in our group during the last few months. We work now with systemic principles in our classes, we have developed a tool to explore sustainability from different perspectives, we facilitate systemic thesis's of students we.....'*

One of the senior researchers interrupted: *'Why didn't you share this in the first place? Why can't I read about these results in the logbooks and workshop transcripts?'* Obviously, we had been so much focused on the three defined starting questions that we could not see the emerging results in and between the groups. During this session we included the first person view by reflecting on our relationship to the pressure of delivering results. Each of the participants walked his or her inner journey and the connected feeling of 'not being good enough'. It was then that we really started to see and appreciate what was going on, we looked at the project with new eyes. We began to understand what the Sparks principles 'the inner journey' and 'holding the creative tension' really meant.

From then on, we cheerfully called our Sparks projects 'brilliant failures.' We realized that we had 'unwittingly' discovered something very special. Each of the groups (including the research group) had unfolded for the College typical undercurrent dynamics. In this case, we, the researchers were caught in what we later called the *'not being good enough drama.'* This 'drama' prevented us from seeing the results underneath our noses.

The 'not being good enough' drama showed that in the teacher education college, judging and being judged are common habits. An initiative to improve something (e.g. the Sparks project) is immediately interpreted as 'what I do now does not suffice'. The pattern leads to protective behaviour, resistance to change and destructive self-criticism.

The 'nobody sees me' pattern was also present throughout the system. Questions like 'does management see my extra investments? Do they see that I do my best?', 'If I criticize, do they see that it is because I am concerned about the organization or do they see it only as grumbling and resistance to change?'. 'How safe is my position in the next reorganization if I open my mouth?' The effect of this pattern is that teachers, teacher teams and leadership work against each other instead of together. Fragmentation is the result. Textbox 4.2.2 gives examples of how the pattern, 'nobody sees me', revealed itself during the project.

Textbox 4.2.2: Examples of the pattern 'nobody sees me'

A student participating in one of the sparks teams described it as follows: 'I see the feeling I have as a student mirrored by the teachers. Nobody sees us. It makes us feel powerless'.

In a research workshop one student teacher left the room in tears. Later she told us how alone she had felt in the circle (she was the only student and nobody had welcomed her) and how upset she was that a teacher – who had been her personal mentor for a year – did not even remember her name.

The project manager, a young teacher who had never had responsibility for such a complex project, suddenly decided to quit the task some months into the project declaring, 'I feel totally alone, there is no support whatsoever'. 'I do this for the first time and everybody expects that I already know how to do it.'

Another pattern that showed up in all kinds of parallel processes was 'the perception of absent leadership.' Participants felt that they received support in theory but not in practice. The three groups felt a lack of organizational support, the program manager lacked the support of the professor, and the student felt left alone by the teachers.

Last but not least we encountered the 'walking on eggshells' pattern. Throughout the project participants avoided getting into conflict, did not give adequate feedback and did not discuss quality issues openly. It was a collective pattern not to confront each other directly or to speak openly to a colleague if responsibilities were not taken. This pattern was also visible between the facilitators. At the start, facilitators did not voice their doubts and insecurities. One of the facilitators wrote in his logbook: "Sometimes Sparks of innovation felt like Sparks of solitude" referring to his difficulty and struggle during the process.

4.3 Sparks in action – working powerfully with the hidden dynamics

In section two we presented the *method* Sparks as having the components: a group holding a burning question willing to dive into a creative process that is systemically facilitated. In this section we provide preliminary insights on sparks in action in order to sharpen our understanding of the *method*. Textbox 4.3 illustrates the journey of one particular sparks group including dramas and parallel processes.

Textbox 4.3 Working with the hidden dynamics

Whilst two sparks groups started with enthusiasm, the third group had the label 'difficult' from the start. In principle each group was carefully selected for their involvement with the question AND their eagerness to step into an innovative quest. However, for this group it was difficult to find teachers willing to step in. Finally, the teachers agreed after getting 'a good deal' on their hours and for leadership it was 'problem solved'. Later it became clear that leadership had a hidden agenda: 'this might help them to....' in order to force behavioural change in these particular teachers.

'Stepping in' was from beginning a big issue in this group. One teacher left after the first session saying: 'I will come back for the right hand side of the U, when the process moves towards results. I'm not interested in sensing into and uncovering patterns.' *In parallel*, the facilitator also felt left out, not part of the research team, powerless and frustrated. In a constellation she revealed her frustration (at not belonging) ever since she worked at a teacher training college herself, years ago. Recognizing the 'old personal story' (*inner journey*) she felt more empowered to reconnect to her Sparks group.

Nevertheless, the time in the sessions was consumed by discussion about 'the method Sparks, is it evidence based?' and not creatively used for the task. From the start the struggle with the method became the connecting element of the group (the drama). One participant began an intense research of the internet for arguments against 'systemic principles' and theory U. During a systemic session with the research group, the facilitator recognized this resistance as a symptom of the undercurrent. Jointly they agreed to stop using constellation techniques, to work with dialogue as an intervention (*systemic sensitivity*)...and to begin work on their task!

The longer the facilitator and the group worked together (*holding the creative tension*) the more the participants revealed their anger and grief with about how things went at the teacher education college and the education system as a whole. They felt as small wheels in the education machine losing more and more autonomy ('they decide about us').

Together with the researchers they discussed 'the unspoken parts of the contract' with the board. It was a memorable meeting in which the anger and grief of this group was respectfully recognized. The board and the group jointly organized a dialogue session about the past, present and future fundamentals of the organization in which all participants of the teacher education college were invited. This dialogue session was a cathartic, healing process which brought many voices together.

1. Working with a collective in co research. Two of the groups stepped in with full commitment and focus with regard to their burning question. However, this appeared to be different for the group described in textbox 4.3. Neither project management nor researchers had recognized this issue in advance. It was hidden from perception. However, as the example shows, working with the dynamics as a source of learning lead to valuable outcomes - for all stakeholders. Each group carried their 'drama's and working creatively with them opened possibilities for constructive action. Working in research workshops with the 'lemniscate' and in particular the 'learning loop' led to moments in which participants across the groups moved into generative flow.

2. Stepping into a creative journey. The original design for the project was based on a number of assumptions about the creative journey: 1) each group would follow a full sparks journey, 2) results would be visible per group 3) Sparks was sufficiently articulated and understood by the facilitators and hence 4) transmissible to the participants. These assumptions proved to be unrealistic. The three groups followed exciting but very different processes with no one group completing a full journey. The

very characteristics of the journeys revealed much about the invisible dynamics of the organizations (textbox 4.3). Unexpectedly, the research group consisting of researchers, facilitators and at times participants and leadership actually formed a 4th Sparks group which did complete a full journey. This group had the overview of emerging results in and in between and could bring them to the attention of key stakeholders.

3. Systemic facilitation. Facilitators and researchers worked extensively with the 'inner journey' and the systemic rules governing the health of the organisation:

There is a respected order of positions in any system. This principle refers to the question: 'what is at this moment the right thing to do for somebody given his or her position in the system?' The facilitators used physical constellations that helped participants to become aware of each other's positions and the consequences of being in that position. Participants became aware of the unchangeable facts from a certain position (e.g. 'we cannot turn back the dial of time 10 years', or 'we are part of a larger organization'). Acknowledging that which *cannot* be changed freed up energy for what *can* be changed ('I can go into dialogue with...'). This process required the facilitator to reflect on her own past, *the inner journey*, with one facilitator commenting, 'without this, I would have been lost in the group's drama...'

Working with the principle of order helped to delimit responsibilities and bring back autonomy and ownership to participants in the process. One of the students who also dealt with the 'nobody sees me pattern' wrote in his logbook: "Normally I would never have done this, but now I decided to send X an email with the question 'Why did you not show up for our meeting? I would really like if you could join the next time or at least properly let us know when you are unable to attend'".

In any exchange there needs to be a balance between give and take. Many accounts showed a perceived misbalance between give and take in the teacher education college. Teachers have to work within a strict time schedule which has many obligatory meetings. As a consequence, there is very little discretionary time. To cope with this imbalance there is constant negotiation about hours spent on tasks ('I don't make any moves without hours'). Another way of coping is the habit of breaking appointments. During the project this constant time pressure seemed to give participants the right not to show up whenever it suited. This dynamic also became visible in the group's not focussing on task and not taking ownership for the success of the project. This happened in all four groups. Participation in a Sparks group offered space to leave the fast lane for a few hours and nobody pushed for results to task.

The main intervention with regard to balance was to endure the tension of not working on quick results but to invite people to step out of the fast lane and to provide space for reflection. For instance, we started each meeting with sharing stories, meditation or bodywork. This habit was widely appreciated by the participants and has been continued in the classroom. Working with constellations also enabled teachers to see more clearly their position and to appreciate and acknowledge their struggles, this had a 'breathing out', relaxing effect.

Everything has a right to a place within the system. This systemic principle states that whatever is important but excluded - be it in a conversation, a relationship or an innovation process – hinders the effectiveness of a team. We worked with this principle by regularly stepping into to ask the question: ‘what is included here and what not? What is easily said, and what not?’ This principle helped to name the grief (“I have lost my autonomy as an expert teacher”), emotion (“I’m afraid of losing my job”) or lack of support (“I really need your help, action or decision”), see textbox 4.3. The creative use of constellations supported this intervention, for example in one group we put a chair in the circle for all the voices not included in a conversation. Participants were asked to take a moment to sit on the chair and explore the conversation from the point of view of the ‘not yet included’. Exercises like this helped the groups to broaden their view and include whatever was necessary. Working physically and addressing experience and emotion in the process was, for the teachers an unconventional intervention. It added additional ways of knowing to a very cognitive oriented organization.

Using systemic facilitation in and between the groups seemed to reduce the power of the organizational dramas and to open up the space for both ownership and innovation.

5. Conclusion & Discussion

5.1 Conclusions

In this paper we introduce Sparks as an awareness-based action research methodology. The paper shows how we included and worked with hidden dynamics in a teacher education college and describes some of the results. The data shows that, in this case, Sparks helped, both to make visible and to address the hidden dynamics of an organisation. In particular the ability to include phenomenological methods in our data gathering, meaning making and analysis; the access to direct experience through sensation, reflection and intuition, really deepened our understanding of these hidden dynamics. Researchers and facilitators began to relate to the data in a way that allowed them to viscerally sense the patterns of behaviour that reveal the stuck-ness in a group or organisation. This process of co research really helped to sharpen our articulation of the Sparks methodology.

More particular findings are:

- Sparks equips facilitators with Systemic sensitivity and with tools to act upon hidden dynamics. Participants are invited to act more autonomously without losing contact with the rest of the organization. They regain a sense of actorship, a sense of right place in relationship to.
- Parallel processes and the inner journey are powerful tools for the facilitator, enabling her to be drawn into the hidden patterns (to allow their discovery) and yet be able to extricate herself from the undercurrent and intervene adequately.
- Different from what theory on creative journeys might suggest, the groups did not take a clear route. And in particular the detours hold valuable information on hidden patterns.
- Holding creative tension is difficult but inevitable for a team’s success. Being in a research process helps, as it takes away the pressure to perform.

- The capacity of the facilitator to be present in the here and now is inspiring for the participants and enables effective interventions.
- From a research point of view, working with systemic techniques enriches and deepens the process of data gathering and analysis. In particular the systemic increases the awareness of the researcher in a framework for awareness-based action research

5.2 Discussion

We reflect on the method from two perspectives: how well it supports change and how helpful it is in doing research.

The principles of Sparks are not simple to apply. Facilitators and researchers need intense training and support to work with this method adequately. To be 'aware and conscious' asks a lot of all parties involved. However, the more we put the methodology in practice, the more skilled, the more excited facilitators, participants and researchers became.

Often, in modern organizations 'slowing down' is not appreciated. For participants and management alike, stepping into this rather new and exciting world seems more to consume valuable time than to create reflective space. Yet, it is only in the slowing down that we can start to see and appreciate the patterns. A key reflection for us, the researchers was that we also needed to 'slow down' in order to see and appreciate the whole of what was going on, the direct 'results' and the results in the in between.

With respect to research we know that many researchers are sceptical about using phenomenological methods to gain access to knowing beyond the cognitive. We used these methods in this project in addition to more conventional tools as logbooks and content analysis. We found that collectively using, for instance, a constellation to analyse the results of a content analysis speeds up the interpretation and deepens the understanding. More research is certainly needed here.

Regarding the external validity of the research the results are restricted to a few groups in one particular context. Within this context there is high ecological validity. However, more research is needed to test Sparks as a method for awareness-based action research in different contexts and with different facilitators and researchers. We believe that Sparks has great potential to contribute to a new, more inclusive research paradigm. It certainly inspires people to improve their own working environments.

Bibliography

- Beer, S. (1985). *Diagnosing the system*. Chichester: John Wiley
- Czarniawska-Joerges, B. (1997). *Narrating the organization; dramas of institutional identities*. Chicago: University of Chicago Press.
- Denyer, D., Tranfield, D., & Van Aken, J. E. (2008). Developing Design Propositions through Research Synthesis. *Organization Studies*, 29, 393–413.
- Hellinger, B. (1998). *Love's Hidden Symetrie*. Phoenix, Arizona: Zeig, Tuckeer & Co.
- Horn, K. P., & Brick, R. (2009). *Invisible dynamics* (p. 204). Heidelberg: Carl Auer.
- Jurg, W. (2010). the perceived usefulness of Branding constellations; Unravelling Branding systems. Het Noorderlicht, Groningen.
- Jurg, W & Thölke, J. M. (2006). Integrating the inner and outer world in market research: An application of the systems constellation technique; The 5th International Workshop: Phenomenology, Organisation, and Technology; Amsterdam, 2006;
- Marshall, H. (1994). *Qualitative methods in organizational research*. London: Sage Publishers.
- Miller, G. (1994). Towards ethnographies of institutional discourse. *Journal of Contemporary Ethnography*, 23, 280–306.
- Scharmer, O. (2009). *Theory U; Leading from the future as it emerges* (p. 530). San Francisco: Berrett-Koehler Publishers.
- Senge, P.M. (1992). *De vijfde discipline*. Schiedam: Scriptum Books.
- Shapiro, E. R., & Carr, A. W. (1991). *Lost in familiar places: Creating new connections between the individual and society*. New Haven: Yale University Press.
- Stam, J. J. (2006). *Fields of connection* (p. 146). Groningen: Uitgeverij Het Noorderlicht.
- Weber, G. (2002). *Praxis der Organisationsaufstellungen; Grundlagen, Prinzipien, Anwendungsbereiche*. Carl-Auer-Systeme Verlag, Heidelberg
- Weissfelt, P. (2006). The purpose of a system; health and disease of the system and the consequences for the individual, group and organization. Nelissen, Soest. (in Dutch).
- Wilber, K. (2001). *A theory of everything* (p. 208). Boston, MA: Shambhala Publications.