Writing on the Long Wall: Engaged scholarship in the socio-technical tradition

Inaugural Lecture by Prof. Dr. Kristina Lauche

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Which role should scholars play in today’s organisations? How can they make sense of what people in organisations do in a manner that not only contributes to new academic knowledge but also benefits the organisation? Engaged scholarship is a professional ethics that seeks dialogue and collaboration with organisations and their stakeholders. With reference to the origins of the socio-technical tradition, three aspects of engaged scholarship are proposed: ‘reading’ of signals through intensive field research; studying the ‘wall’ as the sociomaterial setting of an organisation; and ‘writing on the wall’ as interventions for human-centred organisational design. As today’s organisations have become more networked, also scholarly attention needs to extend beyond traditional organisational boundaries.

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WRITING ON THE LONG WALL:
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Writing on the Long Wall: Engaged scholarship in the socio-technical tradition

Inaugural lecture delivered on occasion of her appointment as professor of Business Administration, in particular Organisational Development and Design, at the Nijmegen School of Management, Radboud University Nijmegen, on 12 May 2011

by prof. dr. Kristina Lauche
Mijnheer de rector magnificus,
geachte collega’s, dear students, friends and family,

I am delighted that you are here to cherish this moment of my inauguration with me and to reflect on our role as academics in organisations. I have decided to give this lecture in English for the benefit of the guests from abroad, but also as a contribution to the internationalisation of this university. I genuinely believe that we have a message that is worth sharing with a broader audience, and English – as the lingua franca of academic discussions – is an important vehicle for that.

1. Introduction

The title of my inaugural lecture is Writing on the Long Wall: Engaged scholarship in the socio-technical tradition. Apparently this title was so complicated that it had to be simplified for the announcement on our website. I will explain the title and, by the time I have finished doing that, it will probably be time to go downstairs and have some drinks. So let me explain what I mean by the first part, Writing on the Long Wall.

If you are from the same generation as I am or perhaps also grew up close to the Iron Curtain that split Europe for 40 years, your association with Writing on the Wall may well be the Berlin Wall, which was toppled by the people of East Germany in 1989. The Berlin Wall had a lot of writing on it on the West side where one did not risk one’s life by getting close to it. It was an open art exhibition and a tourist attraction, and pieces of coloured concrete were sold as souvenirs after it was knocked down. Only later did the Berliners realise that keeping some of the Wall would have helped to retain a sense of their divided history. Yet, despite my strong links to Berlin, it was not this kind of Writing on the Wall that I had in mind.

There are other historical references to Writing on the Wall. Some of you may be familiar with the Monty Python film The Life of Brian, a parody of films on the life of Jesus. The film illustrates the absurdities of infighting between different revolutionary groups the People’s Front of Judea versus the Judean People’s Front and the Judean Popular People’s Front, who target each other rather than uniting forces to combat the imperial oppressor, in this case the Romans. One of my favourite scenes is when Brian sets out to write ‘Romans go home’ on the wall and is spotted by a Roman guard.

Centurion: What’s this thing? ‘ROMANES EUNT DOMUS’? ‘People called Romanes they go the house?’
Brian: It… it says ‘Romans go home’.
Centurion: No it doesn’t. What’s Latin for ‘Roman’?

Rather than arresting Brian, the guard corrects his grammatical errors until the writing reads ‘Romani ite domum’. In the manner of a school teacher, he forces the activist
to repeat the corrected version a hundred times, apparently not realizing that blindly exercising power in this way may actually help the revolutionary cause. Let’s hope that in the current struggle for liberation in the Arabic world, the democratic forces will outsmart those who are grimly holding on to power. But, as much as I love this scene, it’s not this Writing on the Wall either that I had in mind when I chose this title.

The reference to Writing on the wall is actually much older: In the Book of Daniel King Belshazzar of Babylon stages a feast with sacred vessels stolen from the Temple in Jerusalem (Dan 5, 1-30). An invisible hand appears and produces mysterious writing on the wall. Frightened, the king orders his astrologers to explain the inscription, but they cannot make sense of it. The queen suggests to call for Daniel, a member of the deported Jewish minority who works at the palace but tries to remain true to his beliefs. The king promises him costly presents in return for deciphering the inscription. Daniel rejects the offer and simply reads:

מֶנֶ֥ה, מֶנֶ֥ה, תֶכֶלֶ֣, עָפָ֖רֶשָׁ֑ין

Mene, mene, tekel, upharsin. He explains that this means that God has ‘numbered’ the kingdom of Belshazzar and it was destined to be brought to an end; that the king had been weighed and found wanting; and that his kingdom would be divided and given to the Medes and Persians. As the Jewish Encyclopaedia entry shows, scholars are still struggling to interpret why only Daniel could read this inscription and which letters might have been lost or changed, which could offer a different interpretation than the names of coins. It is evident that the authors of the Book of Daniel implied that the writing was in characters that were familiar to the scribes of the king, but their meaning was obscure. I believe that our role as scholars in organisations can be seen as similar to that of Daniel: a critical eye, remaining true to our values and having the courage to speak out about what we see, rather than being silenced by financial rewards.

The Writing on the Wall that I had in mind is the The new SocioTech – Graffiti on the Long Wall (Coakes, Willis, & Lloyd-Jones, 2000). The authors build on socio-technical systems theory, which was originally developed at the Tavistock Institute based on studies in the British mining industry. The Long Wall method was a technical invention conceived to make mining more efficient: instead of working in small pockets of coal with manual tools, a large seam is mined in a straight line using a conveyor belt.

However, the introduction of the Long Wall method led to social unrest and strikes. In order to understand why it failed to produce the intended benefits, the Tavistock researchers studied the impact of the new technology. The miners felt that the new system destroyed their social relationships. Mining has always been a dangerous job, and people forge close-knit relationships. Miners shared their earnings and took responsibility for each other’s families if someone got killed. With the Long Wall method, these social relationships were replaced by a several layers of hierarchy that separated planning from execution. In the eyes of the miners, this division of labour undermined
their safety at work; hence they went on strike. The unrest was alleviated when the Tavistock researchers proposed combining the new technology with a team structure designed to retain a sense of shared responsibility. They introduced similar approaches in the textile and automotive industry: when work was organised so that teams could themselves regulate tasks, they not only experienced their work as more meaningful but were also more efficient.

The Tavistock researchers then theorised organisations as open systems, in which social interactions are closely intertwined with technical components that 'play a major role in determining the self-regulating properties of an enterprise' (Emery, 1959, p. 5). Consider a production plant with an assembly line that moves at a given speed. In Charlie Chaplin's film *Modern times* the hero desperately struggles to match the speed of the system and becomes the victim of technology. In a contemporary production plant assembly lines move rather slowly, but it still means that workers need to accomplish their tasks at the speed of the assembly line time. There is no time to stop and think, to share learning, or to do corrective maintenance.

Another example is the layout of this lecture theatre, which is based on the assumption that our interactions will be dominated by a few people speaking and a majority listening. It is not designed for spontaneous interaction among equals or for gathering input for a shared vision. The social roles are amplified by people's positions in the room and the dress code.

The chair I am inheriting is rooted in the Dutch version of socio-technical systems theory. Ulbo de Sitter was one of the 'grand old men' of socio-technical systems theory in the Netherlands. He was appointed professor of 'Moderne Sociotechniek' here in Nijmegen at the end of his career: from 1990 to 1995 (de Sitter, 1994; de Sitter, den Hertog, & Dankbaar, 1997). As someone who grew up in the socio-technical tradition, albeit in a different branch, I am honoured to continue this tradition. In my formative years as a student in Berlin and a researcher at the Institute of Work Psychology at ETH Zürich I was introduced to the rich history of human-centred work design (Ulich, 1998), industrial democracy (Emery & Thorsud, 1969; Weber, 1997), action-regulation theory (Hacker, 1998, 2003; Volpert, 1999), activity theory (Engeström, 1987) and socio-technical systems (Emery & Trist, 1965). This lecture is a reflection on how this tradition has shaped my professional ethics and how I intend to give meaning the socio-technical tradition associated with this chair.

2. Engaged scholarship in the socio-technical tradition
The second part of my title, Engaged scholarship in the socio-technical tradition, builds on Andrew van de Ven's (2007) argument that complex social problems require the input and perspectives of practitioners and users as much as those of researchers. I believe his ideas about conducting research as well as the classic studies in the mining industry are relevant to our mission at the Institute of Management Research, which is to carry out
research on the ‘Responsible Organisation’: what enables organisations to care for their stakeholders and to contribute to a sustainable future for society as a whole, while acting responsibly towards their members by providing meaningful work. I will address three key issues:

1. Reading the Writing on the Wall: understanding what actually happens in organisations
2. The Wall itself: the physical qualities of organisations
3. Doing the Writing on the Wall: taking an active role in developing interventions.

2.1 Reading the Writing on the Wall: Understanding what happens in organisations

In April this year, a father of four set himself alight outside his France Telecom office. This was one in a series of suicides at this company: since privatisation, the climate had deteriorated and staff were complaining about family breakdown, divorce and being forced to sell their homes due to arbitrary changes at work (The Guardian, 27 April 2011). I have not done any research with France Telecom, so I do not know what went wrong. But clearly they had a way of organising that did not reflect what we mean by Responsible Organisation. These suicide messages constitute ‘Writing on the Wall’: they are trying to tell us something and it requires Daniel’s close, critical reading and courage to understand how an organisational structure can become so deadly.

The Tavistock researchers went to great length to understand the work system of mining. The first paper (Trist & Bamforth, 1951) contains rich detail of work practices and detailed descriptions of the technology. This is partly explained in a footnote: ‘The fieldwork necessary for this study has been lessened by the fact that Mr. K.W. Bamford was himself formerly a miner and worked at the coal face for 18 years’ (p.3). This type of bodily involvement with the field is rare and seems completely lost in later conceptualisations of socio-technical systems. I believe it is no accident that Emery, in his theoretical conceptualisation in 1959, chose to refer to this seminal paper as Trist 1951. Just eight years later, Bamforth the miner is the victim of an abbreviation. His name was briefly mentioned on a stub on Wikipedia requesting more information, but now even that has disappeared.

The expression ‘the writing on the wall’ means a portent of doom or misfortune. What I believe is doomed here is not privatisation or capitalism in general but the idea of grand theories of organisations that imply we do not even need to go and look, because we already know – theories in which we do not get to meet the father of four at France Telecom or Mr Bamforth the miner.

Most academic discussions of organisation design tend to conceptualise work processes and organisational settings in abstract terms. For example, students learn that in lean management machining centres are regarded as ‘evil monuments’ (Womack & Jones, 2003), because they cannot be adapted to single piece flow. However, our students have no ‘feel’ for what it is like to work in such an environment and would not
recognise an evil monument if they saw it. This distance from actual work processes is not only characteristic of our teaching; it is mirrored in the lack of phenomenological detail in our scholarly publications. Research methods are reported in numbers of respondents, often without a detailed account of the work processes involved. Even if field notes contained sketches of what was observed, we rarely see any visual representations in academic papers. We are educating a generation of students who do not know the smells of woodworking or steel processing.

Socio-technical systems theory could be accused of the same shortcoming: providing a set of abstract concepts for anything and everything. I do not believe this is the case, or at least it need not be. The origins of the field are very much in line with more recent developments in workplace studies and practice theory. Let me quote Emery (1959, p. 10):

‘In coal mining the hardness and ’grain’ of the coal exert a considerable influence on the strain that will be experienced by both individuals, work groups and management. Many of the immediate conditions of temperature, light, noise, dust, dirt and orderliness are broadly dependent upon the nature of the material being worked on and the level of mechanisation. Thus there are certain working conditions that are commonly regarded as characteristic of foundries, ironworks, cotton mills, machine-shops and mining.’

This picture (figure 1), taken during my first research project, shows me doing fieldwork at our industrial partner company, which manufactured hydraulic control systems. I did not know about practice theory back then, but I had the instinct that engaging in their work would help me to get a feel for what people were doing.

This picture was taken because I was the first woman to work at the test stand. This was potentially messy work: if the parts were not fitted properly, you could get showered in oil. In an interesting reversal of gender roles, the women reckoned that, since the men got paid more, they should do the dirty work. I was interested in finding out whether the job design provided inherent feedback. More than anything, it helped me gain respect on the shop floor. I still try to

Figure 1: Practice studies: the author testing a hydraulic component
do this with my Masters students, for example by going with them to the MRI scanner, although I am not trying to directly engage with the work at the MRI scanner.

As part of my personal journey from individual psychology to socially embedded practices in organisations, I have joined the call for ‘bringing work back in’ (Barley & Kunda, 2001) and for ‘following the object’ of an activity (Engeström, 2005): the detailed activities involved in going about one’s daily work, which are embedded in social relations, the history of an organisation and the intricacies of the material world.

While I do not suggest that we should all immerse ourselves for years on end in the proverbial coal face of whatever domain we are studying, I argue that adopting a ‘sensitive ethnography’ (Hasu, 2005) will help us to re-incorporate ‘sociomateriality’ in organisational research. In her research on the interactions between technology developers and users, Hasu conducted intense fieldwork on the implementation and use of a new neuromagnetometer. She reflects on the invisibility of the ‘handoffs’ from technology developers to women users and links it to her own experience of being a women researcher whose findings are highly valued, while the intensive ethnographic process remains largely invisible. Bringing the invisible to the forefront and seeing the blatantly obvious takes sensitivity, skill and time. I have spent many hours with my PhD students putting together the pieces of the puzzle, reading between the lines and making sense of what we see. In my research on coordination in distributed teams, we observed people who monitor drilling operations remotely in the oil and gas industry (Lauche, 2008; Lauche & Bayerl, 2010). An important finding from these observations was that those tasked with monitoring spent much of their time communicating by phone with various people on the drilling rig and keeping everyone in the loop (figure 2).

Figure 2: Monitoring drilling operations
Another example from this research is a clear sign on the wall: the company expected the teams to maintain a constant video link between the platform and their offices. Not everyone was happy with constantly working in front of a camera. So people came up with all sorts of things: teddy bears sitting in front of the cameras, or a hat that can cover the camera – a small token of protest by people who felt the mission was not appropriate (Bayerl & Lauche, 2010).

In communicating our readings of the writing on the wall, we need to be brave prophets like Daniel in the face of those in power, rather than be seduced by the amount of money they offer. There is wisdom in the Hebrew tradition of prophecy as an independent force countervailing the king as executive leader and the priests as moral watchdogs. The prophets hold up the vision of a better society – the concept of a responsible organisation, one might say – even at the risk of making themselves unpopular. It took the voice of Moses to get the people of Israel to leave the pots of meat in Egypt. It took Aaron to ensure they would not forget what was sacred. But it needed the voice of their sister Miriam to remember why it was worth the struggle (Exodus 15, 21). I believe that Miriam and Daniel could be role models for engaged scholarship and that the tradition of prophecy can illustrate what it means to read the Writing on the Wall in organisations.

2.2: The wall: the sociomateriality of organisations

Many scholars treat organisations as ‘text’: there is organisational discourse in talk and in documents and undoubtedly words shape organisational reality. However, treating organisations as text completely misses the fact that organisations also have physical homes. The Berlin Wall is a powerful example of how physical boundaries can have a huge impact on our interactions. Within organisations, these physical environments are under-researched and findings are largely inconclusive (Elsbach & Pratt, 2007). The ‘practice turn’ in organisational theory has created momentum for a research methodology that is sensitive to what people actually do and the setting in which this happens. Yet the obvious conclusion that it matters whether an organisation produces microprocessors or trucks is often lost, and there is a sense that ‘artefacts in organisations are highly visible but overlooked’ (Rafaeli & Pratt, 2006).

A small group of researchers argue that materiality is integral to organizing the social and the material are constitutively entangled in everyday life – there is no social that is not also material, and no material that is not also social (Orlikowski, 2007, p. 1437). This interest in sociomateriality has been driven by technology implementation (Orlikowski & Scott, 2008; Suchman, 2007) and by science and technology studies (Latour, 2005). At the same time, organisational scholars and social anthropologists have started to conceptualise organisational space (Dale & Burrell, 2008; van Marrewijk & Yanow, 2010). These recent developments address the architecture of organisations as physical substance that shapes – and is shaped by – human agency. Attention to
materiality does not imply technological determinism: the same physical setting may support different interpretations and social arrangements, yet ‘material phenomena do things that cannot be attributed to social practice’ (Leonardi & Barley, 2008, p. 163).

One of my previous workplaces, the School of Psychology at Aberdeen University, followed the convention of using room size to signal hierarchy: professors had more square meters than lecturers or PhD students. Yet the building also used the size of the windows to signal hierarchy. There are normal sized windows and there are very small-sized windows – for the bathrooms and for the postgraduate rooms. Presumably PhD students were supposed to be looking at their books rather than outside. Another

Figure 3: Layout of a mine in Trist & Bamforth (1951), p. 12
example of how space can be used to signal meaning comes from my time at Delft University of Technology. The former central workshop of the university was transformed into the faculty building of Industrial Design Engineering. You could not help noticing that this is a place where learning has to do with materiality: designers make things, and the building echoes that message.

The early researchers of socio-technical systems theory still had this notion that the physical setting matters. Trist & Bamford’s (1951) paper represents a rare example of a scholarly text that includes a picture: the layout of the ‘spatio-temporal structure’ of the organisation, in this case the mine (figure 3).

Later socio-technical work sometimes includes schematic drawings of workflows or a particular sub-unit, but visualisations of the physical setting are very difficult to find. Even the literature on organisational space is mainly text: in developing her conceptual framework for interpreting the meaning of buildings, Dvora Yanow (2006) explains how she is looking for a Matnas building, an Israel community centre. With this concept in mind she finds that building. Yet in the whole chapter there is not a single picture – she talks about studying physical artefacts without showing any.

At the other end of the visualisation spectrum is the architectural discourse: the majority of handbooks on architecture present materials, building technologies and examples of actual buildings rather than a coherent typology. The term ‘architectural theory’ typically refers to collected readings on style or artistic principles, and conceptualisations of human nature borrowed from other disciplines (e.g. Moravanszky, 2003). An anthology of corporate architecture describes it as a communicative means of conveying the intangible elements of corporate identity and demonstrating the financial, political, and social power of institutions (Bahamon, Canizares, & Corcuera, 2009). Corporate architecture constitutes large-scale artefacts that are deliberately designed as expressions of what decision makers and architects believe an organisation stands for. Corporate buildings are also a formidable example of how materiality and sociality are co-produced (Law & Mol, 1995). The physical setting of an organisation constitutes the place in which its members interact and it embodies the ‘touch and feel’ of an organisation. Yet the same material setting can be enacted, experienced and appropriated differently by different actors over time.

Lefebvre (1991) proposed that the perception of space is always the product of a social process of appropriation, transformation and experience. He distinguishes between perceived, conceived and lived space. Perceived space relates to physical space and the way in which it is organised: functional uses and infrastructure that shape our spatial experiences. Conceived space refers to the way in which professionals such as scientists, mathematicians, planners and architects represent space and is thus the result of an epistemological process. Lived space embodies the images, symbols and associative ideas of the ‘users’ that give meaning to space.
An example of corporate architecture from the anthology is the Prada shop in New York designed by Rem Koolhaas (figure 4a). Its visual language shows some similarities to his earlier buildings, such as the Kunsthalle in Rotterdam (figure 4b). What struck me about the Kunsthalle was the large semi-transparent wall at the entrance: the fibreglass resembles material used in sheds and workshops to create translucent roofs. It gave the room an unfinished, rough touch. The retail space also uses semi-transparent walls and stairs to create a kind of atrium.

In Bahamon et al.’s (2009) anthology, people feature only in their role as great architects or as customers to be impressed; employees as users of building are largely absent. We learn about Prada’s desire to create a flexible shopping space for their premises, yet the people who work there hardly ever feature in the visuals or descriptions. The anthology provides little in the way of a ‘sensitive ethnography’ (Hasu, 2005) of enacted space.

There are two exceptions that apparently could not be described without reference to the employees. One is Zaha Hadid’s office building for BMW in Leipzig (figure 5a&b). The scissor-shaped building creates a space for administrative functions. The idea was to connect the production plants – the halls devoted to bodywork, painting and assembly – with the administration and thus integrate the people who work there. Bahamon et al. (2009) describe the qualities of the design as a connection between the formal qualities and the function of the space.

‘All the factory’s movements are condensed in one plan, creating an industrial and social dynamism that is unusual for a factory involved in mass production. ... The workers’ integration is reflected in architectural terms in the minimal, transparent separations that eliminate hierarchies and exclusivity. ... The building is clad with glass and corrugated steel – a finishing that established a degree of continuity with the production halls.’ (p. 469).
The second example in Bahamon et al.’s (2009) anthology that mentions the employees is Google’s office in Zürich. Designed by a young architectural firm, Camenzind Evolution, it is a rare case of real co-creation between professional architects and members of an organisation. The firm worked without a corporate identity guideline and was instructed to steer away from using other Google offices as a model. Instead they were tasked to engage with the employees to create a suitable space for their work. The outcome is a playful environment designed to stimulate creativity and strengthen teamwork, not unlike the premises of IDEO in Palo Alto. Again this was an example that the book could not describe without talking about the people in the organisation.

I also think we can learn from architects in terms of methodology for describing sociomateriality. The aim of the TEAM 10 group of architects was to develop a more ‘human’ form of modernism after Corbusier. For the CIAM project, they went to Algiers in 1953 and mapped out living conditions in a squatter settlement in Bidonville Mahieddine (Risselada & van den Heuvel, 2006). This study produced a wall-mounted grid of 2x10 meters with drawings, pictures and photographs describing the basic conditions/way of life, physical setting, discussions/problems, technical implications, plus propositions and a short text describing all of this. Even the discussions consisted of annotated photographs and sketches (figure 6).
The picture conveys a sense of the crowdedness in these slum areas. This highly visual form of capturing findings could inspire organisational scholars to move beyond audio recording and transcripts and include visuals, photographs, videos, plans, etc. in their data – and in their publications. This could mean that we’ll take a camera when we collect data – and not just an audio recorder.

On a trip to Kazakhstan I took this picture (figure 7) at the former Soviet Cosmodrome in Baikonur. What surprised me was the Russian flag. The exhibit dates back to the 1960s, and then the cosmonaut would have worn a Soviet flag. In order to fit the re-writing of history as a nationalist story, the flag was retrofitted. By looking at these small signs on the wall we can pick up messages that we would not be able to capture as ‘text’.
2.3 Writing on the wall: Intervening in organisations

The third dimension of engaged scholarship I want to address here is our active involvement as scholars in organisations. This presupposes a different role for science. The classic approach to science that a lot of us have been brought up with was to be as objective as possible, as un-involved as possible. Conducting double blind tests in which not even the people administering the experiment have any idea what they are investigating was considered to be good science. I think that this is one possible model of science, but certainly not the only one. In business administration, part of our role as academics is to help organisations to change for the better. One way to test our hypotheses about changing for the better is to engage in action research and to conduct interventions. If one accepts Susman & Evered’s (1978) arguments for a different epistemology, being involved with the field of study becomes a strength rather than a weakness. Luckily, my colleagues here in Nijmegen also see intervention as part of our task. I believe that to fulfil our mission of researching Responsible Organisations we should think about intervention as a means of action research and a way of making a difference.

In his proposal for engaged scholarship, van de Ven (2007) also argues that to tackle complex problems in business, we need others stakeholders to help us define and understand the research problem. He is very careful to identify techniques for soliciting the kind of input that will give many people a say. Otherwise we risk becoming the instrument of those in power. We need to question in whose name we are conducting an intervention, and very often we do not ask that question. We simply accept a task from management because they pay the bill and then only later realise that not everyone is singing from the same hymn sheet. The professional ethics that I was encultured to during my time in Zürich is based on a critical awareness of in whose name supposedly neutral academic work is conducted. As part of a book review, we also analysed who was supposed to benefit from the research and what the intended context of exploitation was (Clases et al., 2000). In fairness, the notion that work psychology is psychology for the workers was always naïve: the research was either funded by or at least supported by management. There was a strong rhetoric, which implied that the joint optimisation of technology and organisation would benefit efficiency and not just worker well-being. Yet the question ‘In whose name are you proposing this?’ has never left me since.

As a profession, we have learned in recent years that change is a multi-story process (Buchanan & Dawson, 2007). While resistance has traditionally been viewed as an unwanted obstacle, the concept has recently been problematised as an over-simplification of an ambivalent response (Oreg & Sverdlik, 2011; Piderit, 2000). Resistance is a means of feedback that can create awareness and momentum for change and can help to eliminate impractical elements (Ford, Ford, & D’Amelio, 2008). Buchanan & Dawson (2007) strongly warn that it is an illusion that in a polyvocal change process anyone could (or should) provide an objective version of the various narratives.
I believe we should not throw the baby out with the bathwater: acknowledging that we live in a post-modern world with diverse perspectives should not imply that we forfeit our basic values. The issue of human-centred work design is neither a luxury nor a matter of taste. Ultimately it is an ethical question. It is our moral responsibility to ensure that when we help companies to improve their value creation this also creates value for those who carry out the work: aiming for ‘no harm to people’ and providing opportunities for personal growth and development as crucial ingredients of a meaningful life.

The classic study about a village whose inhabitants all lost their work during the 1930s recession by Jahoda, Lazarsfeld & Zeisel (1933) illustrated that work provides much more than an income: it also provides a time structure, opportunities for social interactions, social status and identity and a set of goals and achievements on a collective level. Human-centred job design not only considers the social meaning of work, but also the job content based on psychological theories of action regulation (Frese & Zapf, 1994; Hacker, 2003) and well-being at work (Parker, Wall, & Cordery, 2001). It postulates basic criteria such as the requirement that technology, the way work is organised and job content should be designed so that the work can actually be carried out and that employees are not subjected to physical or mental strain. In Sweden, legislation further specifies that closely-controlled or restricted work shall be avoided or at least limited, and efforts shall be made to ensure that work provides opportunities for variety, social contact and co-operation, while ensuring coherence between different tasks. The underlying reasoning is the Marxist insight that physical experience shapes how we experience and think about the world. Studies on the relationship between work and leisure activities revealed the ‘long arm of the job’: those with more decision latitude and opportunity for social interaction at work were also more socially active in their spare time. Those whose jobs were more constrained engaged less in leisure activities that involved planning, coordination, or goal-directed activities (Meissner, 1971).

Compared to these classic studies on human-centred job design, we face a more complex situation today because we are not simply intervening in one organisation. More and more organisations engage in inter-organisational collaboration (Ring, Huxham, Ebers, & Cropper, 2008). There is a great deal of division of labour among organisations. If we just interact with one of them, we might not get the full story. A good example is the explosion of the Macondo well and the resulting oil spill in the Gulf of Mexico in April 2010. In many ways it was a so-called ‘normal accident’ (Perrow, 1999): the result of a closely coupled technical system in which the layers of technology contributed to the risk. Many oil and gas companies have realised that such underlying risks could also affect them and I have been working with industry representatives on how to address these risks across organisational boundaries (OGP, 2011). But ultimately we as consumers should also be more aware of how our copious consumption of oil & gas contributes to an even more frantic search for more of such resources.
Another phenomenon that adds to the complexity of intervening on human-centred work is outsourcing. Organisations may look after their own core employees, but our economy increasingly relies on illegal immigrant workers to do all kinds of nasty jobs. Those who will be harvesting the asparagus that we are enjoying these days work on temporary contracts and often under horrendous conditions. If we only consider the core workforce, we will not be targeting the people who are most at risk.

This picture (figure 8) was taken on May Day in 2008 in Paris. The theme of the protest was not higher wages – people were campaigning for legalizing ‘sans papiers’. Many of the protestors were North African immigrants and, as individuals, they risked being targeted by police but, as part of a unionised movement, they dared to take to the streets. When we talk about Responsible Organisations we need to make sure we are not just helping an organisation to have a clean sheet for their core employees, while outsourcing all the nasty work to temporary workers.

3. Conclusion
Let me summarise what engaged scholarship is about and what I think a prophet like Daniel or Miriam would do. When Reading the writing on the wall, they would be carefully paying attention in order to understand what is actually going on. For the wall itself, they would try to understand the ‘touch and feel’ of organisations and not just capture the words. When engaged in writing on the wall they would be actively changing organisations for the better and would insist on their values and what they believe is important.
4. ACKNOWLEDGEMENTS

There are a number of people I would like to thank. First, those who went before me, who paved the way and shaped my thinking. This lecture is dedicated to Dorothea Christiane Erxleben (1715-1762), who I was named after. She was the first woman to receive a medical doctorate in 1754 with special permission from the Prussian king. She learned theoretical and practical medicine from her father at home and practiced in her hometown of Quedlinburg. Like the prophet Daniel she was not afraid of pointing out the malpractice of some of her male colleagues. As a 23-year old she wrote a book entitled ‘Thorough investigation of the reasons that prevent girls from studying’, in which she challenges gender stereotypes and calls for universal access to education for girls. I was given a reprint as a 14-year old and made ample use of it for my presentation on women in academia when competing for a scholarship from the German National Scholarship Foundation. Beyond the clarity of her arguments, it instilled a sense of pride that has never left me. Dorothea and I have of course never met. So this is a way of saying thanks to my parents and extended family, who brought me up in this spirit and never left any doubt that I would make my way in whatever I would choose to do. Knowing that she wrote her doctoral thesis while taking care of nine children, her husband’s congregation and a medical practice made me feel that I should be able to do the same without these additional challenges. I am immensely grateful that my parents and my mother-in-law Irene Troxler, who taught me to read and write phrases like mene, mene tekel, are alive and well and can share this moment with us.

I would like to credit some people who have instilled this sense of ‘Yes you can’ in me: my teacher Ursula Kaus-Gehringer taught me to think and analyse critically, my mentor Ellen Aschermann gave me a sense of joining a scientific community as a student, and Gisela Mohr and Rhona Flin have been important role models for being a professor.

Thanks to my colleagues in Delft and elsewhere who supported me on my way to a professorial appointment: Petra Badke-Schaub, Cees de Bont, Miriam Erez, Gabriella Goldschmidt, Hans de Jonge, Kathy Mosier, Pieter Jan Stappers and Steve Sawaryn. This is also your inaugural lecture, since I never gave one before leaving Delft for Nijmegen. I hope this lecture helps you to understand that when I was suddenly faced with more chairs than I could comfortably sit on, I decided to take up the challenge of designing organisations rather than products. I will continue to collaborate with many of you and will make as much as I can of my 0% contract at Delft.

Thanks to my colleagues in Nijmegen for trusting me with this position: to Hans Mastop as dean at the time, and to Yvonne Benschop, Rob van der Heijden, Paul Hendriks, Miriam Ester Sent and Jac Vennix as members of the selection committee for a fair dialogue during the process. I am proud to be part of the new generation of professors in Business Administration, alongside Hans van Kranenburg, Allard van Riel and Beate van der Heijden who, after the difficult years of reorganisation, have been asked to help build the future. For the first time since working at the Institute of Work Psychology at
ETH Zürich, I have felt that the research programme of Responsible Organisation could form a vision that I can endorse wholeheartedly – one that addresses impact beyond citation indices of academic journals. I look forward to our future together.

I also want to thank the members of the Organisational Development and Design group for accepting me into this group. I believe we have a lot in common from our different but not too distant traditions in socio-technical systems theory and I am greatly looking forward to firmly placing our joint work on the map in the coming years.

What you probably did not know is that I wanted to go to Nijmegen a long time ago. As a student I envisaged a career at the Max-Planck-Institute for Psycholinguistics in Nijmegen, and I have kept an advert for a ‘young psycholinguist’ dated October 1989. In my first semester I already had the idea of going to Nijmegen. I am here on a different mission now, but I am finally in Nijmegen.

Klara Butting and my friends at Erev-Rav (www.erev-rav.de) have enabled me to see what prophecy can mean in our modern world and how biblical spirituality can lead to hands-on political actions that transform the lives of those on the fringes of society. My idea of what a Responsible Organisation could be has been strongly influenced by our discussions about God’s project and visions of a better society when reading Exodus or Ezekiel.

My final thanks go to those who have been my companions and comrades along the way: to my colleagues in München, Zürich, Aberdeen, Delft and Potsdam, to my PhD students and to my partner. Working with my PhD students is the part of my work that I love most: it is the most gratifying experience to see young academics grow and develop and to explore this fascinating world with them. I have learned a lot from every single one of you – in order of appearance: Bill Rattray, Hanne Bruhn, Tanja Pullwitt, Jared Dempsey, Tom Reader, Andre Neumann, Leentje Volker, Saskia Bayerl, Linda Kester, Carolien Postma, Tina Urbach, Fleur Deken, Esra Bektas and Aaron Houssain. We have jointly nurtured a sense of academic endeavour that combines curiosity, ambition, perseverance, and solidarity with lots of laughter and good food. Our dinners shall continue and this will be a model I will export wherever I go. Thank you for all the walls I have been able to read through your eyes and the inspiration you have provided me with over the years.

Finally, to Peter, my partner for over 13 years: my worst critic and my best support. If it hadn’t been for your willingness to join me on my various jobs across Europe, I might still be standing here, but it would be a rather lonely life. Very few people are blessed with a shared passion for their work and the opportunity for seemingly endless dialogue at the dinner table. I greatly cherish this gift and look forward to many more years of dialogue and collaboration.

And now I would like to invite you all to a toast to engaged scholarship in the socio-technical tradition.

_I heb gezegd, I have spoken._
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