

Successful safety and health coordination in the construction industry

/Jeppe ZN Ajslev

Senior researcher

The National Research Centre for the Working Environment, Copenhagen, Denmark

Today's agenda

- Background for the project
- Methods and design
- Results part 1 – the professional identities of successful OSH coordinators
- Discussion
- Results part 2 – the practices of successful OSH coordination
- Perspectives
- Discussion

Background for the project

- The construction industry contains all types of OSH risks and construction workers figure on the wrong level of all statistics.
- OSH coordination is one of the most central EU initiatives in construction. Instituted in 1992.
- The coordinators task – to coordinate where more than one employer is present.
- To ensure that general prevention principles are applied and that safety and health is coordinated in both projecting and construction phases.
- In spite of this important role, almost no research exist. And definitely no research exist on the effects of coordination.

Existing research about OSH professionals may be interesting

- OSH professionals take care of many roles in organizations.
 - There are different types; technical experts, human resource managers, OSH advisors, ergonomists etc.
- Organizational positioning is tough – so is the establishment of a profession.
- Limited knowledge about professional identity among OSH professionals.
- No knowledge about the effectivity of their efforts.
- Limited knowledge about the relational roles they fulfill – how they create effect.

Research aims

1. How may we unfold the professional identities as to better understand their aspirations, their strategies for obtaining these and the barriers they experience.
2. Do OSH coordinators improve the OSH on Danish construction sites? And how do they do this?
 1. What relational practices do they employ when seeking to improve OSH?

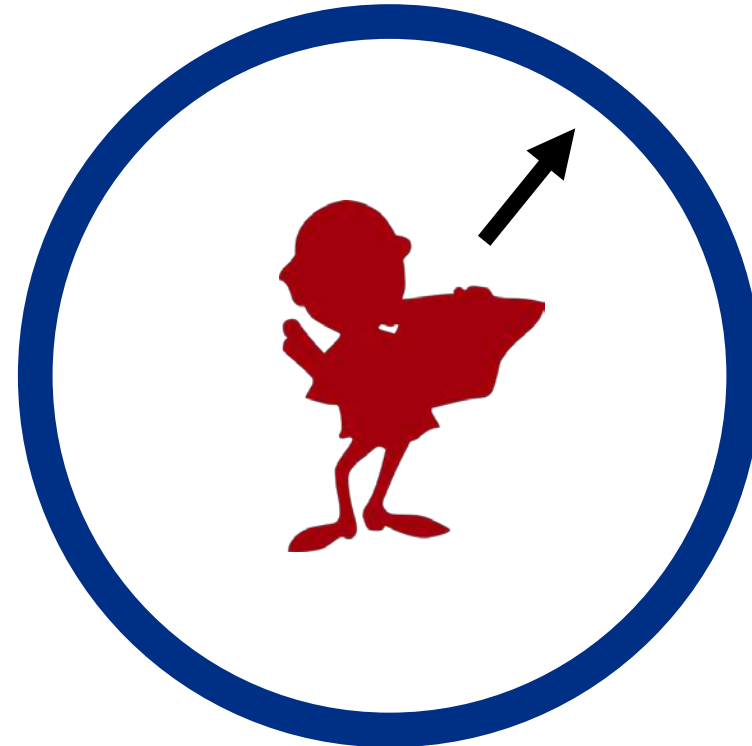
Methods

- Delphi-metod for selection of 'successful coordinators'
 - 24 had more than 3 nominations.
- Observation studies with 12 selected coordinators.
 - A total of 107 days of shadowing observations.
 - Interviews with each coordinator.



Results part 1

The professional identities of succesful OSH coordinators



Puzzle-piece caretaker

- *At the basic, principal level, I believe that the work I am doing as an OSH coordinator is highly important – it's a question of life and death... But in the bigger picture, we are such a small, small part of the puzzle. People have to think about economy, branding, consumer satisfaction, insurance, esthetics, design [...] But it's my passion, I think it's exciting and I like to improve things.'*

(Finn, OSH coordinator)
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- *'What I am really passionate about is when we celebrate a number of days without accidents [...] It makes me so happy when we succeed. It points in the direction that you're making a difference. If I didn't make a difference, I don't think I would do it.'*

(Peter, OSH coordinator)
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PPC-continued

- *‘Both the professional aspects but also the changeable character of things, I like those. But also the combination of the theoretical, the written work with the design papers and the physical work out on the site. I think the combination is amazing, and then all the different people you get to work with.’*

(Anne, OSH coordinator)

A necessary evil

- *'I think it's conflict-filled. And that's hard. I almost miss normal OSH advisory work. You want to be appreciated, when you visit a client, right. But sometimes, you're just a necessary evil. And that leads to a lot of negative things. I'm tired of it when I have to throw in the towel and say; 'it's my way or the highway'. That's sort of a defeat, it's not a way of working. But it's necessary at times.'*
- *(Charles, OSH coordinator)*

A straining working environment

- *'At the end of the day, you get so immensely tired of telling them to put on that helmet. Or telling them to clean up, it's like 'are we ten years old, right. Every time I come here, I have to tell you to do these things, and we talk about it at safety meetings all the time.'* Then you get tired. And that's not okay. And sometimes I get really angry – other times, I just let it be. Because I just can't do it again. And that's not okay either, because it's my responsibility, but I'm just a human too.'

(Anne, OSH coordinator)

The peripheral decision maker

- *“Our company made the whole budgeting with architects, landscapers etc. And I’ve been the design-phase coordinator the whole time and I’m supposed to be the execution phase coordinator too. Then something happens, and all of a sudden, I’m told by the project manager, that there are very few hours left for the execution phase coordination. Then I had to say that it says in the papers that I’m the OSH coordinator for the next two or three years. So, I negotiated my way to one day a week, and that’s just too little.’*

(Finn, OSH coordinator)

- *'Usually it works like; 'woah, we need some OSH coordination as well...hmm what might that cost?' and then I have to calculate a price. Then I send my estimate to my colleagues, but I can't be sure, they don't just cut down the price. So, you have to be lucky to have some projects where they accommodate you and you actually have the time. Most projects, I have too little time.'*
- (Anne, OSH coordinator)

Risk assessor

On the spot

- *‘So you have to be a listener, to be all-embracing and that’s a problem as a coordinator. Because, for instance in the design phase, you have architecture, construction, electricity, fire, plumbing and so on. There are many trades and you have to know this as a coordinator, you have to work across disciplines. I’m no specialist in ventilation, and I’m not an engineer, but I know my way around these things, so I can ask; how are you going to do this?’*
 - (Finn, OSH coordinator)
- *‘Actually, what I do, is I make a risk assessment inside my head, and that’s my prioritization. We had an issue yesterday where the crane is craning out on the street and risks dropping the load on the road with pedestrians, bikes, cars. And, I told them – we have to stop traffic, while we do this, so it doesn’t end badly.’*
 - (Peter, OSH coordinator)

Systematic risk assessor

- *'I don't make demands that we submit an OSH log on 100 pages. It can be four pages long for all I care, if it has substance. I want to be sure that things have been worked through during the design phase. But instead, the design phase coordinators send me something in sections, and they have been filling stuff out in this log that I cannot even remotely recognize from the workshops, we held. And, it's unspecific, I mean references to general legislation, handbook for entrepreneurs – Laurel and Hardy level... And we promised that a first edition would be done last Thursday, and now that guy who made it, he turned in sick. So we rescheduled for next Wednesday. We'll see. But it is pathetic, I mean, really pathetic. On average, design phase coordination in general, you can shove it where the sun don't shine, it has no impact at all.'*
- (Poul, OSH coordinator)

SRA-2

- *'It demands a systematic approach I think. My experience means that I know what risks occur in different types of projects and when you have that, then you just need a systematic approach. In my experience, you can do OSH coordination in the design phase based on these two things.'*

(Michael, OSH coordinator)

Alliance builder

- *You don't always agree with the contractor, because they have other things to think about; materials, time schedules etc. However, I think it's important that you approach them with open arms and try to contribute with some solutions. They may not be satisfied, but you try to cooperate and maybe discuss the options rather than categorically saying no. You listen to pros and cons and then try to make a decision.*
- *(Peter, OSH coordinator)*

AB-2

- *'You have to interview your client. Dear client, what do you actually want? So sometimes, they say; just make sure, I don't get any trouble, make sure I live up to this and that legislation, and that's frustrating, so now I ask the client; what's most important to you? Then they might say, I have an accident frequency on 28 per million working hours, help me get down to ten. And I say, fine, that's a goal. And goals like that, or other goals, they emerge when I interview my clients.'*
- *(Gert, OSH coordinator)*

The conductor – a ballanced challenger

- *'There are some considerations about how hard you go at them or not go at them. Where are you in that spectrum between yelling and then letting all things pass. And some of my colleagues have called me an up-tight bitch, because at some point enough is enough. And then, I tell a group of construction managers that now, that work is stopping! Then, I may call the client and say; I'm stopping that work because of this and that.'*

(Louise, OSH coordinator)

- *'I'm thinking, we're like orchestral leaders and we hear when the orchestra is playing well, and we can hear if one of the instruments plays falsely, right... And that's what I listen for, when for instance a site manager answers questions about their processes, then I can hear... HEY, here are some things that he has not got under control. Of course, I draw on my experience here.'*

(Gert, OSH coordinator)

Underlining the engagement

- *'I feel that, I actually like that when... I have some ability for getting the conflicts resolved, and I actually like when I succeed. [...] And, I think that if you're engaged, then you can make a difference. If you're not, then It's just a job where you get time to pass[...]. But engagement, we just need that back, that's what it takes to make a difference. '*

(Peter, OSH coordinator)

Discussion

- Take 2 minutes alone with pen and paper to reflect on what you have heard.
- What are your thoughts about these findings?

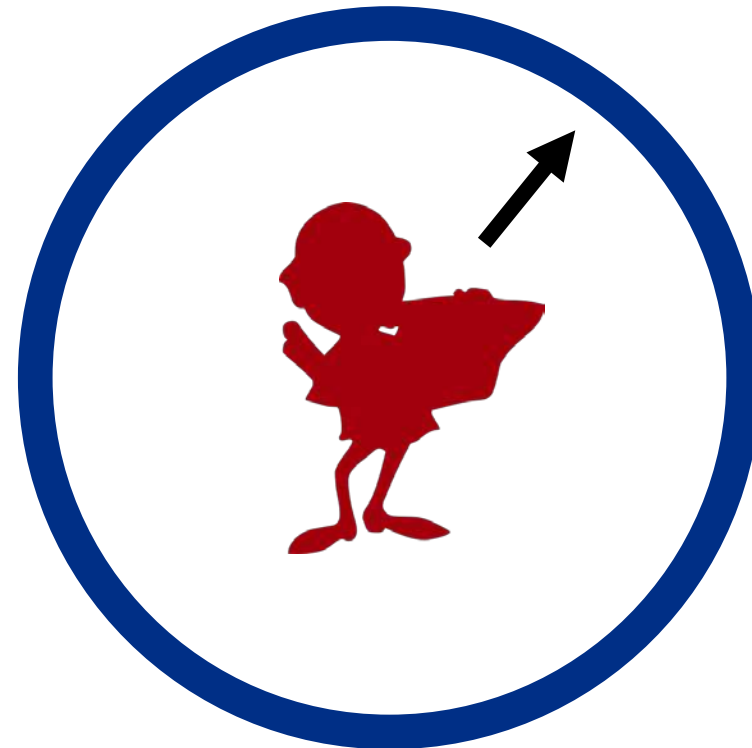
Main contributions of the study

- Showing the complexity of OSH coordination
 - What should new coordinators attend to.
 - Is the education enough?
- Displaying tensions between moral obligations and financial results.
- Understanding the precarious position of OSH coordinators.
 - Are their tools and position adequate?



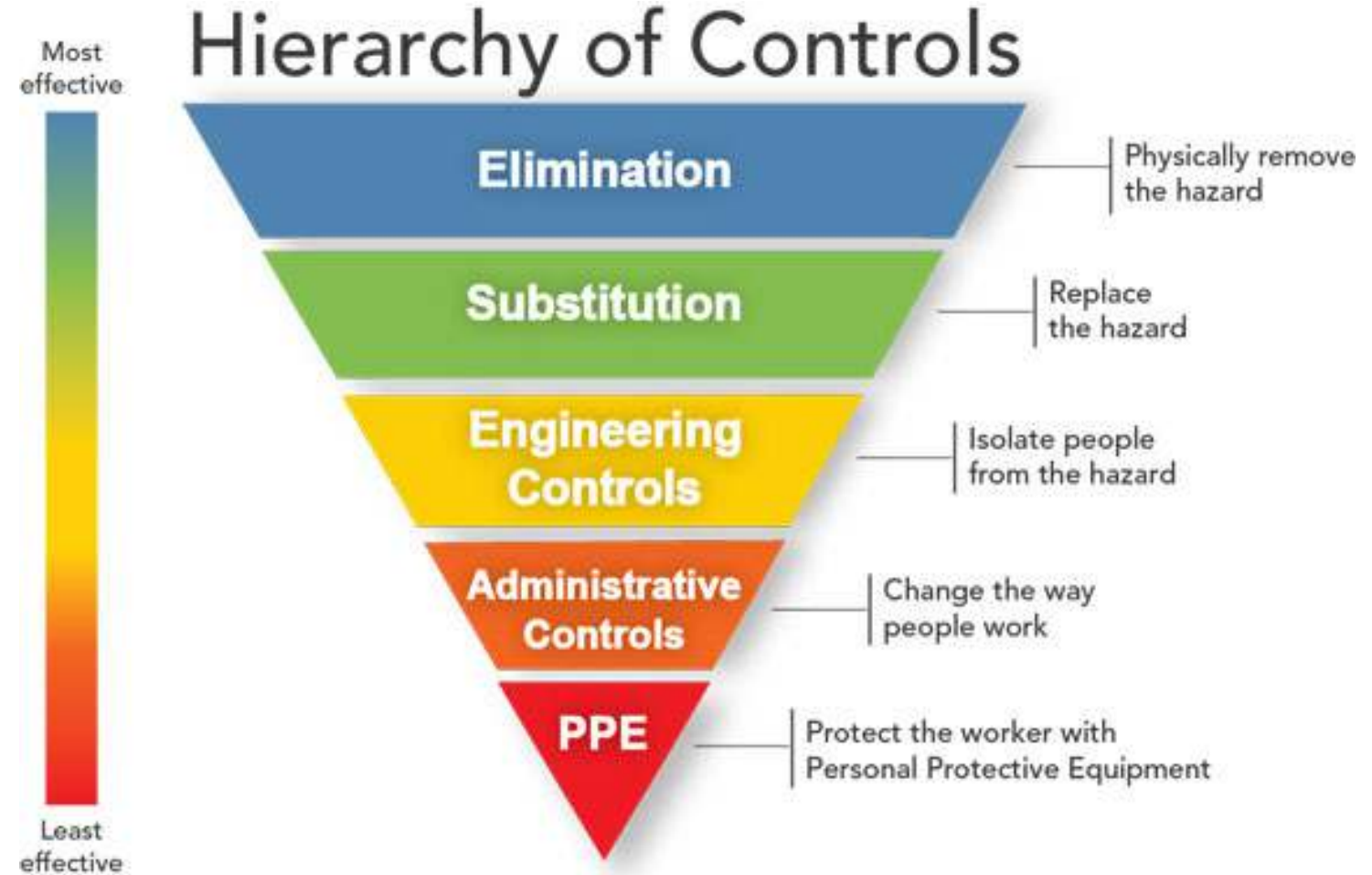
Results part 2

Do OSH coordinators improve the OSH on Danish construction sites?
And how do they do this?



Analysis of observation study

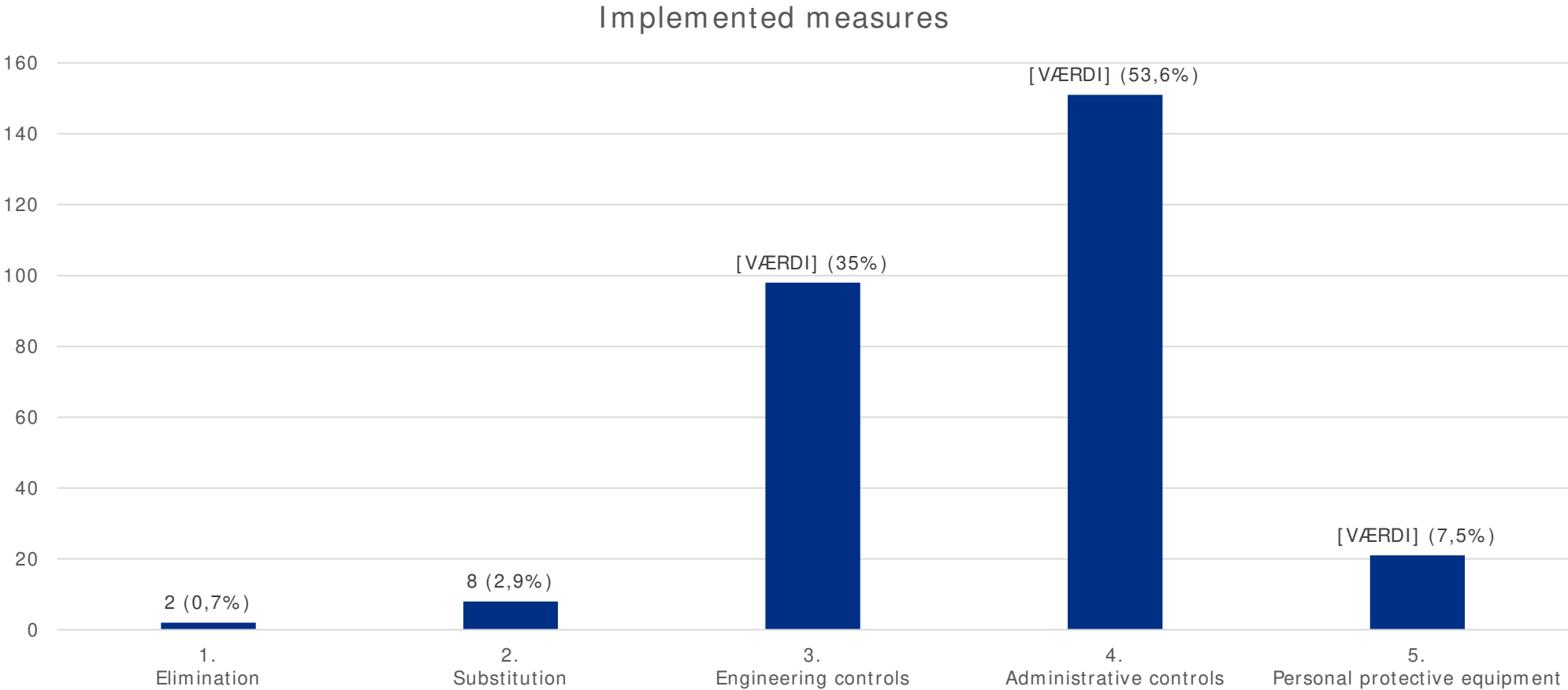
- The implementation of:





Implemented measures

All together 280



Analysis of relational roles

- 2 eliminations
- 8 substitutions
- 5 technical controls
- 5 administrative controls
- 5 PPE's

- Zooming in – and zooming out.

- 6 successful practices:
 - Authority
 - Alliance building
 - Challenging
 - Ekspert positioning
 - Championing OSH
 - Influencing

Authority and alliance building

- **Practicing authority**

- *Employing formal authority*
- *Employing informal authority*
- *Gaining traction in the organization*

- **Practicing alliance-building**

- *Identifying the interests of others.*
- *Becoming partners with both workers and managers.*
- *Implementing activities aimed at improving relationships.*
- *Paying attention to informal relationships.*

Influencing and challenging

- **Practicing influencing**

- *Securing the support of the right stakeholders – both internal and external.*
- *Saying the right things to the right people.*

- **Practicing challenging**

- *'Speaking up' about unhealthy and unsafe situations.*
- *Challenging the priorities of management.*
- *Conducting constructive enquiry.*

Expert positioning and Championing OSH

- **Practicing expert positioning**

- *Displaying knowledge about OHS legislation.*
- *Displaying practical knowledge about processes and their associated risks.*
- *Criticizing the work of others on a professional basis.*

- **Championing OHS**

- *Representing OHS in a broad sense.*
- *Basing assessments and recommendations on OHS knowledge rather than employment obligations.*
- *Working to one's best ability to improve OSH.*



Example 1

- *At an extra safety meeting caused by the OHS coordinator's continual pointing out that workers on site must wear helmets in the appropriate areas, Jannik, the OHS coordinator, begins: '**How may we (the coordinator and client) be of assistance?**' the site manager Richard replies: 'the cranes, creating boundaries, it has been dangerous and we need to get it under better control. And also, the helmets. But we need to agree on the rules'. They discuss whether helmets should be used on the whole site, or only be mandatory within particular areas. Richard wants something to happen. Jannik: 'we could make a kit'. Richard: 'a checklist' Jannik: 'a checklist of five things to remember about creating boundaries and using helmets that will be relatively easy to do.' They agree, and Jannik works the afternoon on the poster showing the five items. He checks up with Richard and they agree to put them out on site and to include them in the crane instructions to the workers.*

• (Field notes, situation 19)

Example 2

- *Tenna addresses a worker drilling in some tin without hearing protection, and his partner is not wearing the helmet, which is obligatory on site. First, they respond with some joking. Then Tenna tells them that she is the OHS coordinator. 'Ah', they respond and put on their helmets and hearing protection.*
 - (Field notes, situation 25)

Example 3 – the entwinement of roles

- *At a 'crisis meeting' after a number of safety walks with two entrepreneurs on site. There has been a number of negative observations during the OHS-coordinators safety walks and two minor accidents in the previous weeks. Therefore the coordinator that we are observing; **Arne, has arranged with the project owners internal OHS-coordinator (a highly professional project owner with many sites) to have this meeting and take some action. To the meeting the contractor's safety managers are summoned.***
- *Arne sums some issues up – **there has to be more control with safety walks and reports. Arne is constructive and asks if the safety managers need any help in these matters. But he sharpens the tone regarding working at heights – every time we have been to the site, there has been issues with this.***

(Field notes, situation 5)

Example 3 – the entwinement of roles - part 2

- *Arne goes on: ‘one thing is that you perform safety walks, but another thing is that **the production people needs to get on board!**’ he begins to ask about the organization of OHS work in each of the three contractors organizations. One of the safety managers explain that often the site managers simply do not react to the things he ask of them – they think the OHS people should do OHS work. One of the other safety managers agree with this point. The third safety manager do not recognize this problem, they use weekly toolbox-meetings to handle safety and he finds that everyone is engaged. Arne: ‘I would like to invite the production people to these meetings as well’ the project owner’s OHS coordinator backs him up: ‘I think we need to get the people with the legal responsibility in here to talk these things over. Did anyone run any campaigns?’. One of the site managers reply that they did not, but that it would make more sense if that was a general thing for the whole site. The project owners OHS coordinator asks for suggestions for some campaigns. Arne; **‘yes, that would be really great, but there is simply not good enough instructions. On Saturday when I came in here, unexpectedly, four guys were mounting 150kg windows manually with no assistive devices.** Even though they have the finest machine. It was unplugged and stood in the corner, you guys (singles out a contractor) have no clue whether the people are instructed properly!’*

(Field notes, situation 5)

Example 3 – the entwinement of roles - part 3

- *Arne: from now on there will be written warnings if we see the same things as in week 34. It will be better if you identify them yourselves.*
- *OHS-manager: they shouldn't even be there.*
- *The coordinator we observe finally underscores that if this type of things become noted again, there will be issued warnings. One of the OHS managers underscores his engagement to that cause. After this the client's coordinator repeats his message about campaigns which they agree upon and finally they agree that the lifting machine for mounting the windows should be always applied. Later as we make a safety walk, the workers use the machine for mounting the windows.*
- *(Field notes, situation 5)*

Occurrence of roles taken through practices

- Challenger in 13 of 25 situations
- Alliance builder in 8
- Influencer in 8
- Champion of OSH in 11
- Expert positioning in 18
- Authority in 17



Perspektives

- Implementation of measures is often a demanding endeavor requiring the switching of roles during practice.
- Are the number of implemented measures high?
- What could be done to move up the HOC?
- Championing OSH – is it a good idea that coordinators have to go beyond their responsibility to do a good job?
- Challenging – an important practice – a diagnose of a culture?

Discussion

- Again spend 2 minutes thinking
- What are your thoughts?