

# Framing risks in a safety-critical and hazardous work: risk-taking as responsibility

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# Overview

Problem, purpose and major findings

System, framing of risks

Data and methods

A safety-critical job

Occupational hazards

Risk-taking as responsibility

Conclusions

# Major findings

Both transport and occupational risks seen as occupational responsibility

Informs and legitimizes actual balancing

Occupational responsibility makes work meaningful: service to nation, mutual support within team

Risks framed as manageable due to skills

Risk-taking sometimes necessary to make it work with given resources

# Problem

Railway maintenance technicians are assigned to secure safe and timely trains

Their assignments puts them at risk of being hit by trains or objects falling from trains or electrocuted by high-voltage contact wires

Everytime on tracks technicians balance demands for punctuality, train safety and own safety

# Purpose

Analyze how transport risks and occupational risks are framed by working conditions and through occupational discourse

# Risk perceptions socially framed

Constructed out of working conditions but also shaped by occupational discourse

Informs balancing and also legitimizes it

Reproduced within occupational communities

Risk perception serves processes of occupational pride and identification

# Safety-critical and hazardous work

Safety-critical tasks promotes identification with and involvement in work

Hazardousness and mutual interdependence within the team strong force to develop sense of internal commonality and uniqueness

Traditional blue-collar jobs, risks often constructed as manageable by team

# Railway virtues

Punctuality

Train safety

Service to the nation

Claims to occupational autonomy coupled to a claimed occupational responsibility: "freedom with responsibility"



# Methods and data

Ethnographic fieldwork, 5 months, in railway maintenance, locomotive driving and among dispatchers (train control) in contemporary Sweden

Safety certification training

Interviews

Focus groups to capture social control in workteams

# A safety-critical job

ETHNOGRAPHER: What is your responsibility [in terms of safety]?

STIG: That the technology works of course... that is what we are employed for...

SIXTEN: It is quite a large responsibility... when you have taken things away... or repaired something or replaced something. (Signal technicians, Focus Group, February 2003).

# Three reminders

Lerum accident: wrong wiring – support claims for responsible job

Incompetent outsiders (private companies, newcomers) reconfirm their responsibility, carefulness and competence

Train safety creates engagement – clearing weed between tracks: “What a mess! You feel ashamed for the railway!”

# Occupational hazards

Close interdependence within team require mutual responsibility

The unique, fatal and definite character of occupational hazards sets technicians apart from other jobs

Hazards are constructed as manageable through trust in colleagues, through skills and rules of thumb – visible when breaks down

# Closing section from traffic



Informant's  
photo

Track circuit clips

# Need for mutual trust

I follow track technicians Torbjörn and Torsten when inspecting a single-track line. Torbjörn asks the dispatcher to protect a number of track sections from approaching traffic. Since we are about to walk a couple of kilometres we cannot attach track circuit clips to achieve green zone working: we would have to return to remove clips all the time. Instead, only the dispatcher set signals to stop .

# “What kind of men do I have?”

We are left without protection against errors that the dispatcher makes in regard to our protection. Torsten and I are walking a little bit behind Torbjörn, noting that the time for our protected work is running out and we are saying to each other: “Should not he call the dispatcher now?” After a while the dispatcher calls Torbjörn and asks him to return the section to his control. Afterwards, Torbjörn accuses us mildly for irresponsible behavior.

# Risk-taking as responsibility

“This used to be our railway – we looked after it so that trains would arrive in time”, said track technician Torgny.

Occupational pride to “make it work” in time and with given resources

“Making it work” a collective ambition

Rule-bending and risk-taking sometimes necessary and legitimate to “make it work”



# Mundane risk-taking and rule-bending to "make it work"



# Risk-taking necessary and manageable

Everyday manpower and time-planning  
dependent on risk-taking

Combined expression of responsibility, skill and  
control

High-voltage technician Harry:

“You can break rules as long as you know what  
you are doing”

Serves technicians creation of social value,  
responsibility and accomplishment

# Conclusions

- Great undertaking for others safety: railway technicians different from e.g. US firefighters
- Collective ambition to make it work rather than individual competition
  - Risk-taking does not provide thrill or excitement
  - Risk-taking only when needed to "make it work"

# Conclusions

Risk-taking should not be seen solely in terms of macho working cultures:

Supported by such but made necessary through institutional arrangements: employment contracts, resource allocation, culture of production

Risk-taking underpins worker culture, social structure and corporate ends