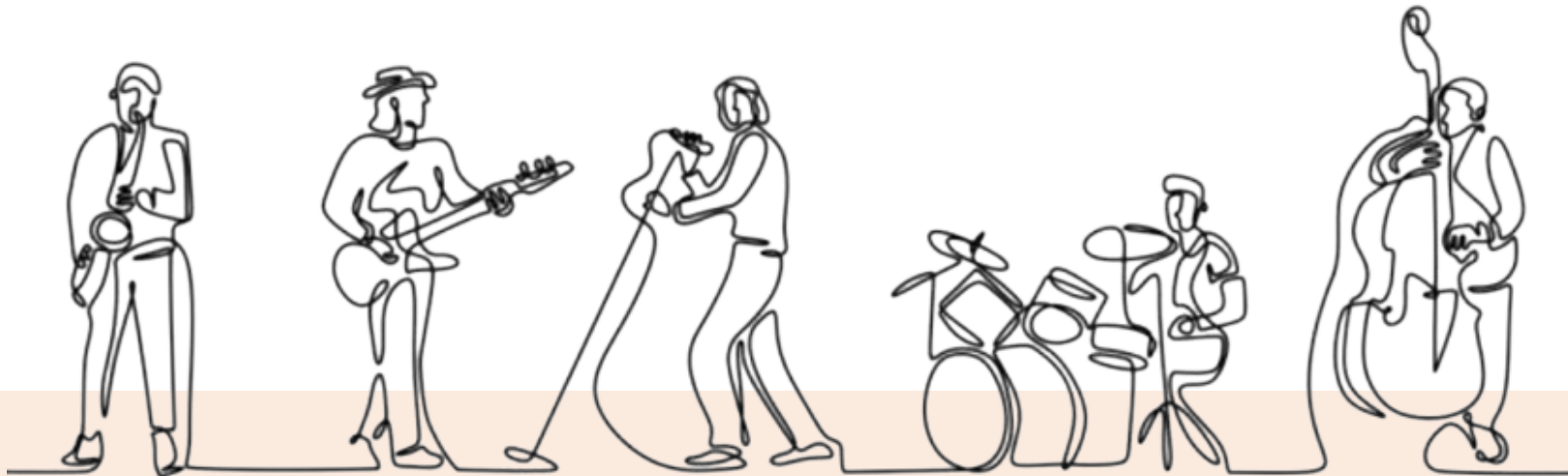




# BEYOND THE BOUNDARIES



MSc Thesis  
Liz Hoogeveen

Management in the Built Environment  
1st mentor: Dr. J. L. Heintz  
2nd mentor: Ir. H. J. M. Vande Putte  
Graduation organization: Brink

## Problem statement



## Problem statement



## Existing knowledge



Alhussein et al., 2022

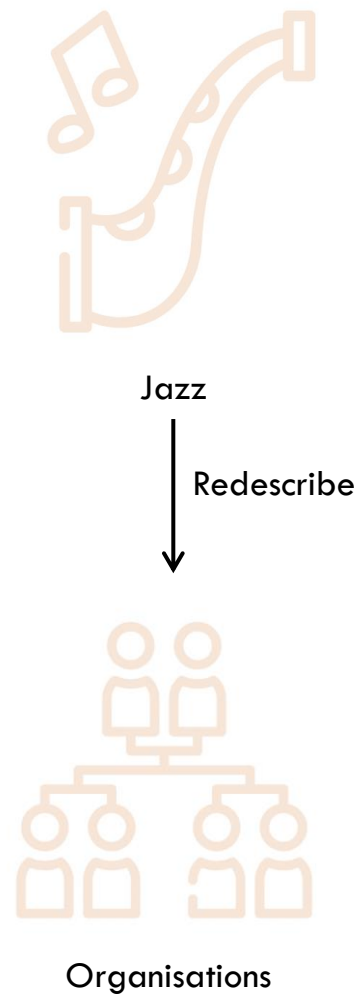
Hamzeh et al., 2019

Klein et al., 2015

Sohi et al., 2019

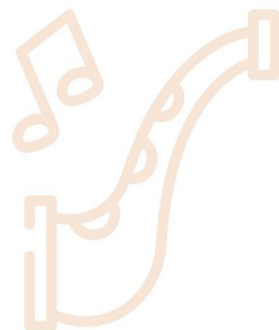
Weick, 1998

## Existing knowledge



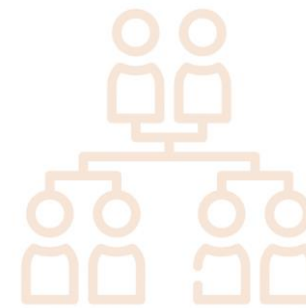


## The literature gap



Jazz

Parallels



Organisations



Redescribe



Project management

***“What can we learn from applying the parallels between improvisation in jazz and organisation to project management?”***

*“What can we learn from applying **the parallels between improvisation in jazz and organisation** to project management?”*

**SQ1:** What does improvisation mean in jazz and organisation and what are the parallels between improvisation in jazz and organisation?

*“What can we learn from **applying** the parallels between improvisation in jazz and organisation **to project management?**”*

**SQ1:** What does improvisation mean in jazz and organisation and what are the parallels between improvisation in jazz and organisation?

**SQ2:** What does improvisation mean in project management?

**SQ3:** What is “the head” in project management?

**SQ4:** Which actions in project management become salient when applying the parallels between improvisation in jazz and organisation and how?

**“What can we learn from** *applying the parallels between improvisation in jazz and organisation to project management?”*

**SQ1:** What does improvisation mean in jazz and organisation and what are the parallels between improvisation in jazz and organisation?

**SQ2:** What does improvisation mean in project management?

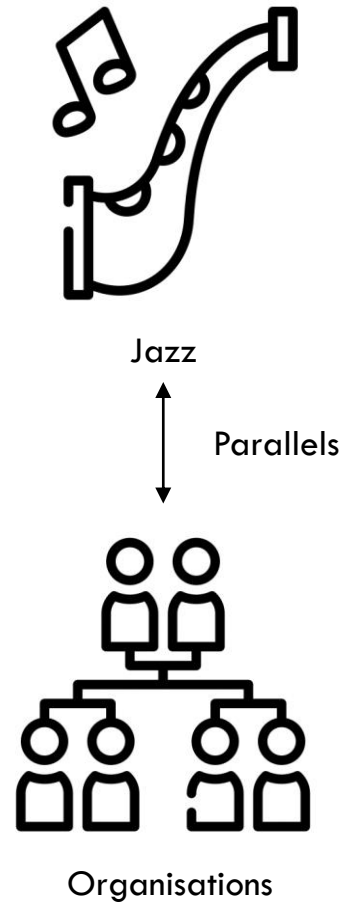
**SQ3:** What is “the head” in project management?

**SQ4:** Which actions in project management become salient when applying the parallels between improvisation in jazz and organisation and how?

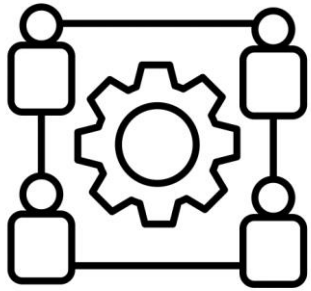
**SQ5:** What does redescribing project management using these parallels tell us about project management actions?

Scope: design phase in construction sector

## Conceptual framework (simplified)



## Conceptual framework (simplified)

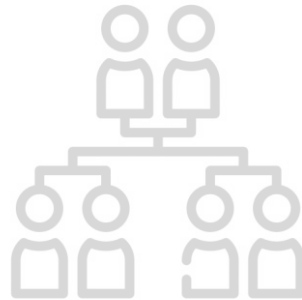


Traditional view on project management

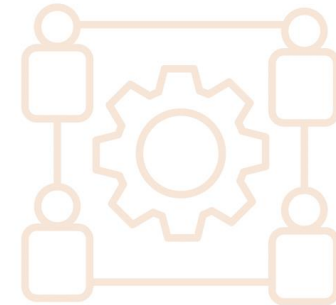


Jazz

Parallels



Organisations

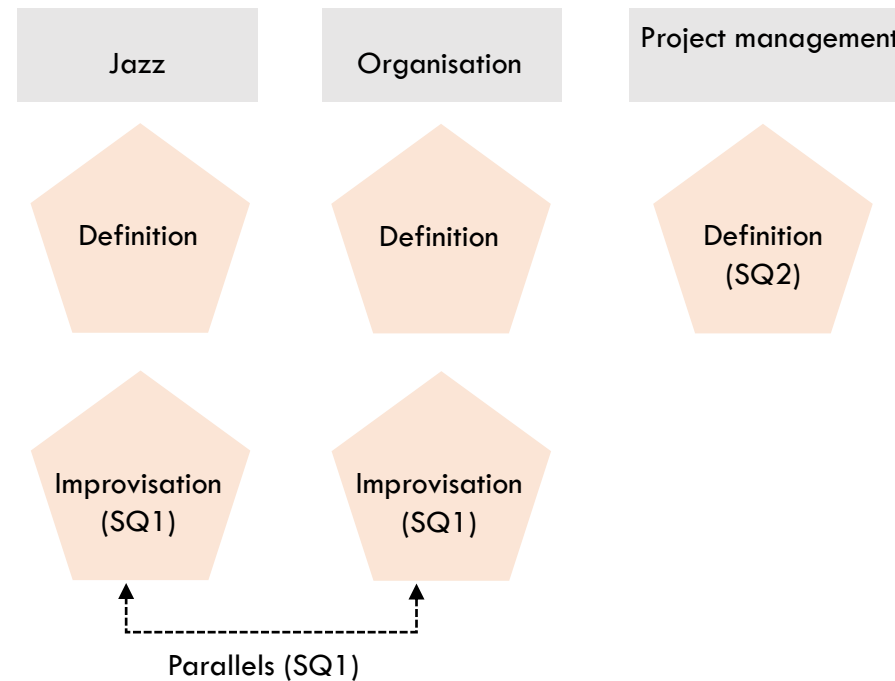


New view on project management

## Literature review

**SQ1:** What does improvisation mean in jazz and organisation and what are the parallels between improvisation in jazz and organisation?

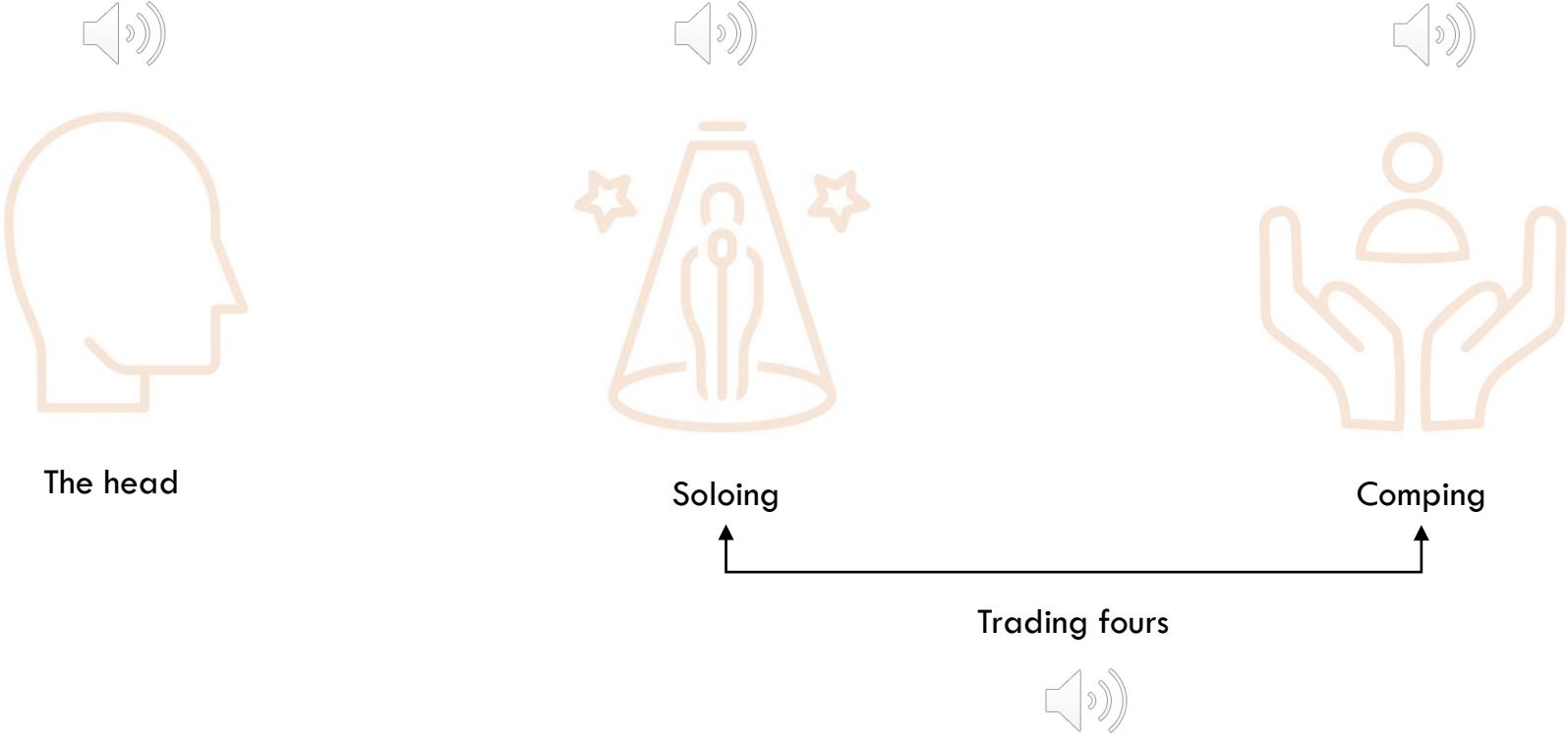
**SQ2:** What does improvisation mean in project management?





# I) Jazz

**Improvisation:** composing music in performance



Bailey, 1992  
Berliner, 1994  
Brenneis, 2013  
Hatch, 1999  
Murphy, 1990

## II) Organisations

**Improvisation:** the deliberate fusion of the design and execution of a novel production

### Nine parallels

#### Jazz

1. The head
2. Soloing
3. Comping
4. Trading fours
5. Listening (sense-making)
6. Responding
7. Groove and feel
8. Provocative competence
9. Embracing errors

Teamwork

#### Organisation

Organizational structure

Teamwork

Teamwork

Sensemaking

Strategy process

Organizational culture and identity

Create something new

Share and learn

### III) Project management (PM)

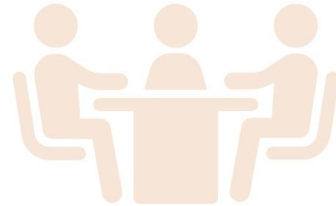
**Definition project:** temporary organization

**Improvisation:** dealing with the unexpected without preparation

What is lacking:



i) Team

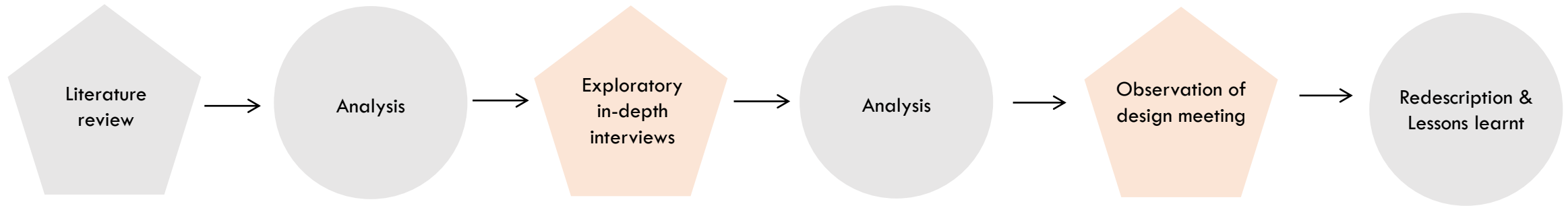



ii) Application



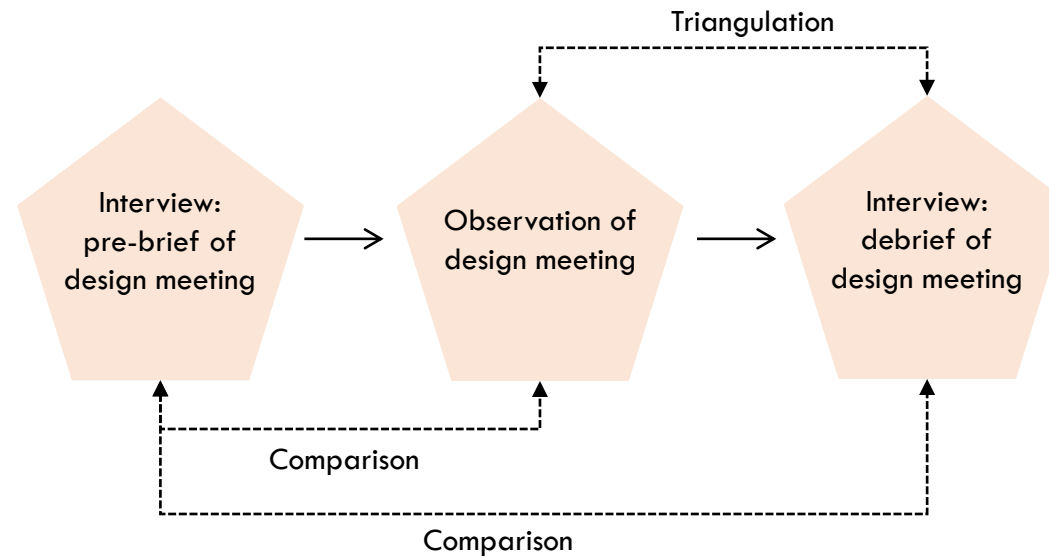
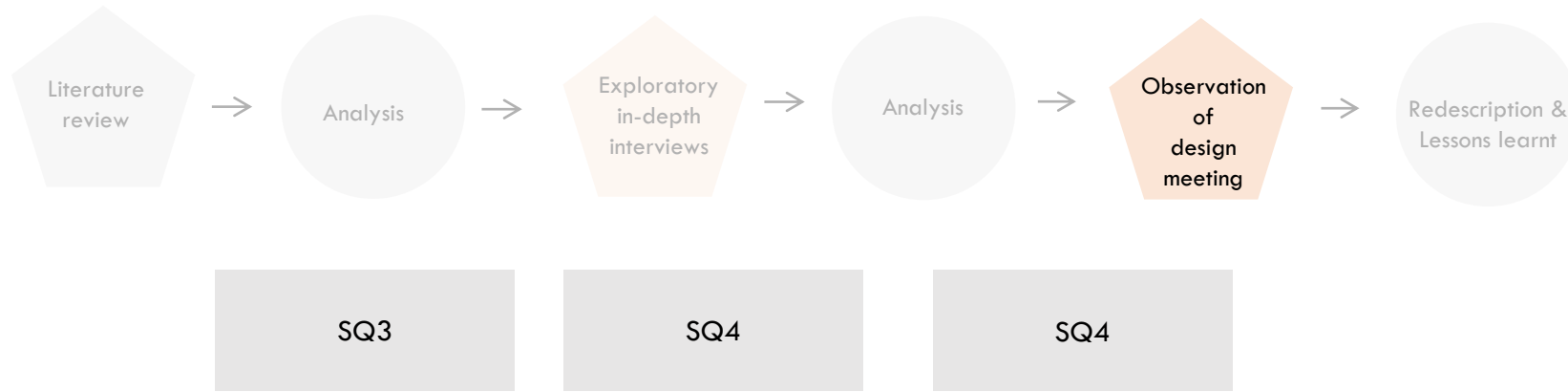
iii) Meaning


# Methodology



 Qualitative, inductive (exploratory)

# Methodology



 Qualitative, inductive (exploratory)

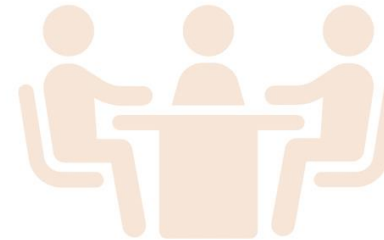
- Introduction
- Research design
- Literature review
- Methodology**
- Results
- Discussion
- Conclusion

## Results



### **6 exploratory interviews**

- Project managers with experience from 5-20 years
- Emphasis on the definition and head



### **6 observations including pre-brief and debrief**

- Preliminary design or final design phase
- From student housing to big corporates
- Analysed using notes, minutes and/or video recordings

## **SQ2:** What does improvisation mean in project management?

### **Exploratory interviews**

React to unexpected (interviewee 1, 2, 3)

Deviation from existing plan (interviewee 1, 3, 6)

Unknown outcome (interviewee 2, 6)

The merging of composing and executing (interviewee 5 & 6)

## **SQ2:** What does improvisation mean in project management?

### **Exploratory interviews**

React to unexpected (interviewee 1, 2, 3)

Deviation from existing plan (interviewee 1, 3, 6)

Unknown outcome (interviewee 2, 6)

The merging of composing and executing (interviewee 5 & 6)

### **Quotes**

“Acting upon a situation which we did not expect” (interviewee 1)



## **SQ2:** What does improvisation mean in project management?

### **Exploratory interviews**

React to unexpected (interviewee 1, 2, 3)

Deviation from existing plan (interviewee 1, 3, 6)

Unknown outcome (interviewee 2, 6)

The merging of composing and executing (interviewee 5 & 6)

### **Quotes**

“Acting upon a situation which we did not expect” (interviewee 1)

“You embark on a path where you are not sure whether it will turn out well, but that is what you will discover” (interviewee 2)

### SQ3: What is “the head” in project management?

Level	The head		
Meetings	Agenda		
Phases	Program of require-ments	Design (product/ process)	Planning
Organization	Guiding principles	Contracts	

### SQ3: What is “the head” in project management?

Level	The head			Improvisation
Meetings	Agenda			- Deviation agenda
Phases	Program of require-ments	Design (product/ process)	Planning	<ul style="list-style-type: none"> <li>- Small design changes</li> <li>- Unusual design parts</li> <li>- Estimations</li> <li>- Scenarios</li> <li>- Deviation planning</li> </ul>
Organization	Guiding principles	Contracts		<ul style="list-style-type: none"> <li>- Organizational deviation</li> <li>- Reacting to mismatching expectations</li> </ul>

#### **SQ4:** Which actions in project management become salient?

<b>Level</b>	<b>The head</b>	<b>Action</b>	<b>Parallel</b>	<b>Lessons</b>
Organization	Contracts	First, the project manager proposes to go after another party but then the architect decides to call (observation 2)	Soloing	Taking initiative decided on the spot, originating from all disciplines

**SQ4:** Which actions in project management become salient?

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Meetings	Agenda	No agenda, project manager supports needs of other disciplines (observation 4)	Comping	Course of meeting determined together like in jazz jam session

**SQ4:** Which actions in project management become salient?

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Meetings	Agenda	No agenda, project manager supports needs of other disciplines (observation 4)	Comping	Course of meeting determined together like in jazz jam session
Phases	Design	Installations advisor, manufacturers, architect and contractor draw changes in the design for fire safety (observation 3)	Trading fours	Going back-and-forth to create common understanding, accelerated process

### SQ4: Which actions in project management become salient?

Level	The head	Action	Parallel	Lessons
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Meetings	Agenda	No agenda, project manager supports needs of other disciplines (observation 4)	Comping	Course of meeting determined together like in jazz jam session
Phases	Design	Installations advisor, manufacturers, architect and contractor draw changes in the design for fire safety (observation 3)	Trading fours	Going back-and-forth to create common understanding, accelerated process
Phases	Design	Project manager does alternative propositions for placement of air handling units (observation 6)	Provocative competence	Stepping outside role necessary to enhance product/process

## Synthesis

Two types of improvisation:

- 1) within the design team meeting setting, also called the “safe zone”
- 2) reacting to exogenous trigger events outside of design team meeting setting



## Synthesis

1) within the design team meeting setting, also called the “safe zone”

**Category definition:** merging of composing and executing

Design team meeting setting: “safe zone”				
Level	The head			Improvisation
Meetings	Agenda			- Deviation agenda
Phases	Program of require-ments	Design (product/ process)	Planning	<ul style="list-style-type: none"> <li>- Small design changes</li> <li>- Unusual design parts</li> <li>- Estimations</li> <li>- Scenarios</li> <li>- Deviation planning</li> </ul>
Organization	Guiding principles	Contracts		<ul style="list-style-type: none"> <li>- Organizational deviation</li> <li>- Reacting to mismatching expectations</li> </ul>

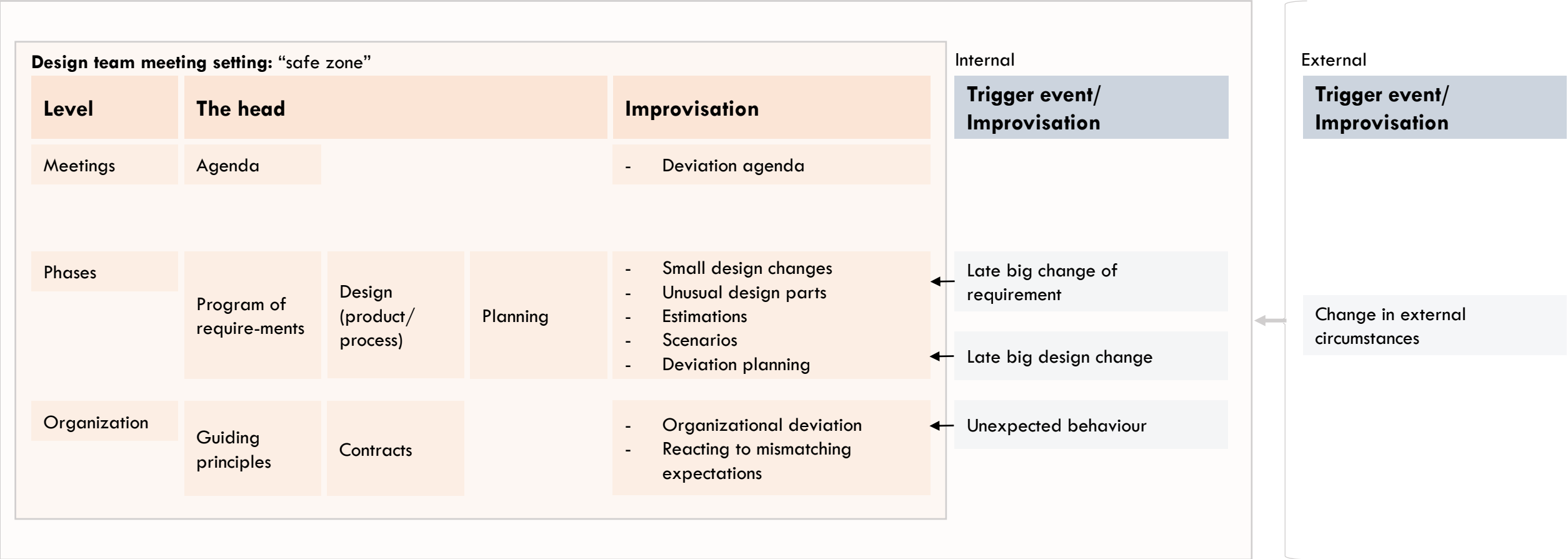
## Synthesis

2) reacting to exogenous trigger events outside of design team meeting setting

**Category definition:** react to unexpected

Level	The head	Trigger event/ Improvisation
Phases	Program of requirements	Late big change of requirement
	Design (product/process)	Late big design change
Organization	Contracts	Unexpected behaviour
External		Change in external circumstances

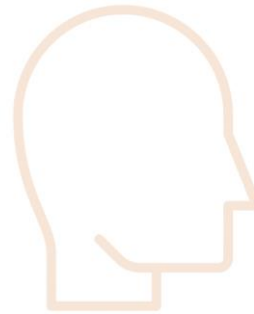
# Synthesis



**SQ5:** What does redescribing project management using these parallels tell us about project management actions?



**1<sup>st</sup> type:** within setting is jam session  
**2<sup>nd</sup> type:** exogenous trigger events have different reactions



Different heads present on multiple levels  
Tasks defined upfront but merely form the head



Openness  
Meetings led by whole team  
Focus on reacting

## **Discussion**

### **Findings into context**

Traditional project management literature: focus on defining tasks and control

Application of parallels brings new view, response to increasing complexity

Categories definition: no focus on 1<sup>st</sup> type 'merging of composing and executing'

### **Practical implications**

- i) Facilitation of improvisation by project manager
- ii) Focus on team improvisation and dynamics
- iii) Work on reactions to exogenous trigger events

## Conclusion

*“What can we learn from applying the parallels between improvisation in jazz and organisation to project management?”*

More accurate understanding of project management

Design team meetings like jazz jam sessions, led by whole team

Two types of improvisation:

- 1) within the design team meeting setting
- 2) reacting to exogenous trigger events

merging of composing and executing  
reaction to unexpected

Parallels soloing, comping, trading fours and provocative competence can be applied to 1st type

Trigger events present in project management and jazz, but parallels not applied to reactions



## Conclusion

*“What can we learn from applying the parallels between improvisation in jazz and organisation to project management?”*

Multiple heads on various levels

Tasks defined upfront but merely form the head

Improvisation prevalent and expected on a microscale

Openness

Team dynamics

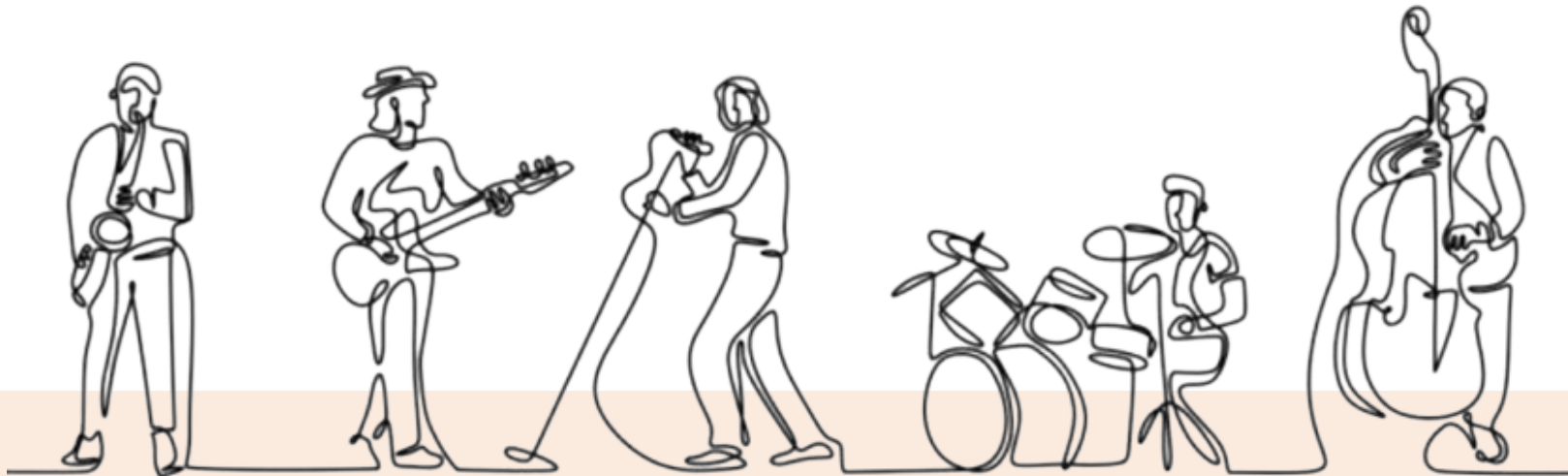








# BEYOND THE BOUNDARIES



MSc Thesis

Liz Hoogeveen (5005957)

Management in the Built Environment

1st mentor: Dr. J. L. Heintz

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Graduation organization: Brink

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## Reflection

+

Using the head to categorise improvisations

Pre-brief and debrief in combination with the observations

-

Implicit components hard to talk about. Next time: not providing examples to prevent steering the conversation

Stronger focus on team improvisation

All empirical data from 1 internship company

## **Future research**

Pre-briefs and debriefs with more than 1 participant per observation

Follow multiple meetings of the same project

Compare improvisations between SO, VO and DO design phase

Stronger focus on paralinguistics and body language