# Organisations as Artefacts

## An Inquiry into Hidden Design Activities Within Situated Organisational Contexts

Lorenz Herfurth
Dipl-Designer, MA

A thesis submitted for the degree of
**DOCTOR OF PHILOSOPHY**

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## Abstract

The overall aim of this PhD is to provide insights into the hidden and socially-distributed design activities and behaviours through which members of an organisation contribute to its shape. How do those who are part of the organisational artefact contribute to the design of the artefact?

Looking at an organisation as an artefact on the one hand acknowledges the human-made process that brings organisations into existence and the possibility that an organisation is a product of human action. On the other hand it raises questions with regard to the properties of this artefact and the design activities that lead to its existence or influence its development. A paradox is represented by the circumstance that an organisation is both made by and, at the same time, "consists" of humans.

A small sample qualitative multi-case study was selected as the research strategy. One case is a retrospective study of an architectural construction project for a higher education institution in the UK, the other is a live study of a mass participation music performance that took place in a major UK city. Together they combine the wealth of material from a longitudinal and retrospective study with the detailed insights obtained from live observation.

Analysis is partially grounded, prioritising an understanding emerging from the data itself rather than applying a specific concept to identify themes accordingly. However, fundamental understandings of design are applied to understand whether the design activities identified cohere with existing approaches or provide novel insights into hidden

design actions.

In both cases the findings confirm the existence of hidden and socially-distributed design actions in processes of organisational design. While fundamental indicators of design change are identifiable in selected events, novel characteristics add to existing understandings of design. Contributions this PhD makes concern the identification and description of hidden design activities within communities of non-expert, silent designers and the empirically supported specification of organisations as socially-designed artefacts. Specifically, the findings lead to the articulation of three contributions: design-before-design, an approach that promotes the acknowledgement of unique organisational settings before design interventions, socially-distributed design as an empirically supported extension of silent design and the resulting description of case studies as self-referential artefacts.

**Keywords**

Silent design, hidden design activities, design actions, design studies, socially-distributed design, human-centred design, organisations as artefacts, organisation studies, temporary organisations, multi-case study, grounded research



**Declaration**

I declare that this thesis is my own work and has not been submitted in substantially the same form for the award of a higher degree elsewhere.

## Acknowledgements

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Rachel Cooper was instrumental in providing the conditions for this PhD and by joining the supervisory team. I also want to thank my previous supervisor, Sabine Junginger, formerly ImaginationLancaster, for being an important inspiration for this work by introducing me to the evolving role of design within organisations.

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# 1 Introduction and Thesis Overview

## 1.1 Introduction to the Thesis

This research is motivated by an interest in organisations and the movement of design into areas that pose challenges beyond traditionally recognised design problems (see for example Buchanan's four orders of design, Buchanan 2001). While I started out with a specific interest in participatory design and the role it could play in organisational design, the focus of this thesis shifted towards the exploration of design that is practised by members of an organisation but is not recognised as professional design practice.

I set out to critically reflect on the idea that design is an activity that can potentially contribute to the development of, and to innovation within an organisation itself, not exclusively to its products, services or other offers. This relates to propositions articulated by scholars who state that an organisation can be considered an outcome of design activities (Junginger 2005), a designed system (Buchanan, 2001) or human-made artefact (Rollinson 2008).

One aim of this research is to understand the specific characteristics of this artefact through a design lens. As the reader will come to understand when reading the Literature Review, a number of scholars have compared an organisation to a centrally designed formation (Mintzberg 1981), a 'design shop' (Martin 2004) or 'socially created artefact' (Jelinek et al. 2008). But such comparisons lack a more in-depth description of:

- the specific design characteristics of such an artefact,
- the design activities that impact upon it.



Therefore this thesis explores whether empirical research would support an interpretation of organisations as artefacts and provide insights into the activities and dynamics that are involved in designing such an artefact. This interest in organisations as artefacts was first aroused in my Masters thesis, through which I realised that organisations become better at assessing their impact on the environment and communities, but don't consider the members of their organisation and the internal environment of the organisation (Herfurth, 2009). The involvement of members of an organisation in the creation and development of the organisation therefore became a core interest of mine. Combined with a designerly view of organisations as artefacts this suggested a research topic that would further explore the role of members of an organisation in creating and maybe even designing the artefact they are members of.

The selection of cases is based on insights from the Literature Review. Literature that promotes an understanding of organisations as artefacts or products of design actions (see section 2.3.) tends to focus on large and rather monolithic forms of organisations. On the other hand, organisation study literature and debates around novel forms of stakeholder involvement in design suggest that organisations tend to change towards more distributed and dispersed formations (see section 2.2). The selection of cases addresses the lack of empirical research into distributed forms of organisations by focusing

on organisations whose stakeholder groups change over the course of their existence, that exist only temporarily and are dependent on other organisations. They are not business organisations, but groups of people that come together to pursue specific aims. These include the improvement of teaching conditions at a university and the creation of a music performance for a festival.

This thesis inquires into both cases to learn more about the hidden and silent design activities that might be identifiable in organisations. Important to mention here is the emphasis on activities that affect the design and maintenance of each organisation. I am not trying to identify design actions while people pursue the aim of the organisation e.g. in the building project, members of the organisation pursue the design of a building extension. This research does not focus on the occurrence of design actions, which eventually will lead to the conception of a new building, but focuses on those actions that help establish the organisation, that support and influence its development and affect its formation. The same applies to the second case, the performance project.

As this thesis shows, when we consider organisations as artefacts themselves, their formation, dynamic development and maintenance offers opportunities to identify unique aspects of design actions. Design actions in this context reflect a diverse dynamic and are executed by an unpredictable set of stakeholders without the involvement of a professionally-trained designer (see also Herfurth and Murphy, *under review*). The findings of this research describe the characteristics of the hidden design activities identified in each case study organisation. They further provide insights into the dynamics that stimulate and enable their execution by non-designers. In addition, this thesis describes the effects of such hidden design actions on each organisation. It offers a discussion of the benefits that an awareness of the silent design activities which occur in organisations can have for designers as well as organisational practitioners when entering unique organisational contexts.



For example, being aware of the unique appearances of design means that professional designers can identify cultural barriers and help organisations to understand their own design potential. However, one possible consequence might be that socially-distributed design activities can be recognised and articulated by a group of silent designers themselves, independent of the presence of a professional designer, suggesting that this research could lead to a more inclusive understanding of design.

## 1.2 Thesis Overview

On the following pages I will give a chapter-by-chapter overview of the research process, findings and contributions. This is intended to serve as a guide for the reader, to help navigate through the structure and content of this thesis (see Figure 1.1 for a visual overview of the thesis structure and sections). The overview starts with the chapter that follows this introduction, which is Chapter 2 - Literature Review

### 1.2.1 Chapter 2 Summary– Literature Review and Research Questions

**Chapter 2** comprises the literature review and articulates the research aims, objectives and

questions that follow from the review of literature and of the gaps identified within the body of literature.

At the outset of the Literature Review, the interest in how inclusive design approaches can contribute to an organisation's shape, form or design was one driver for the selection of background theory. The review responds to the question: how do people become involved in the creation and development of an organisation and which specific dimensions of this supposed artefact do they contribute to?

The Literature Review in Chapter 2 therefore enquires into two main debates: the way design theorists talk about organisations in relation to the involvement of its internal stakeholders and the extended application of design processes to problems that occur outside of established design disciplines (e.g. product, graphic or service design). It complements these viewpoints with concepts of organisational formation and organisational participation from organisation theory (e.g. Scientific Management or Human Relations). Part of this secondary inquiry is the acknowledgement of relevant developments in organisational design (e.g. distributed organisations) and design theory (e.g. Open Design, CoDesign or Design for Social Innovation).

From these readings I articulate a preliminary conceptual idea of an organisation as artefact to be found in the later section of Chapter 2. The resulting Conceptual Sketch summarises findings from the background theory and represents a first conceptual proposition. Organisations appear to develop towards less hierarchical and controllable entities. They further show an unusual artefactual quality in that they are created by those people in whom at the same time the organisation is manifest.



The Conceptual Sketch develops in three stages throughout the thesis and is a mechanism that facilitates comparative analysis, which is a core element of the grounded approach to research (Glaser & Strauss 1967) which this research adopts.

The Literature Review and first Conceptual Sketch informed the identification of four research gaps. Full supporting evidence for these will be given in Chapter 2 (section 2.10), but are presented here as part of a brief summary:

1. Propositions that state that if we understand organisations as artefacts they become subject to design lack substance and theoretical as well as empirical support, e.g. one aspect that distinguishes an organisation from other artefacts and has not yet been recognised in design debates is its dependence on humans.
2. It is questionable whether design processes that originated in product development are suitable to be transferred to designing in other contexts such as complex social systems and organisations (see Norman 2005).
3. Design management theory relies on an understanding of organisations as large, monolithic and bounded entities. But organisational research suggests that organisational formations change towards distributed entities with less clearly defined boundaries and relationships (Balogun & Johnson 2004).

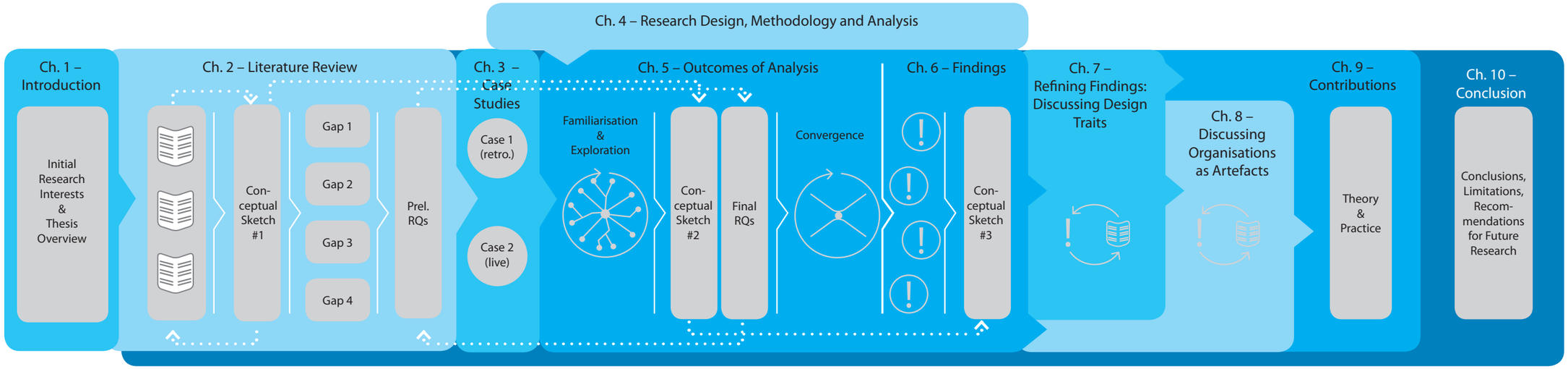


***Figure 1.1:*** *Chapter structure and sections*

4. People are involved in shaping social systems beyond specific task or professional role descriptions. For example, people in organisations do not necessarily adhere to imposed decisions. Furthermore, in social contexts the role of the designer is changing. This suggests that non-professional activities are also part of design in social systems. Although scholars have established that design can be silent and covert (see Gorb & Dumas 1987) little has followed this strand of research and provided means by which designers and managers can identify such hidden and potentially distributed design.

These research gaps in combination with the initial research interests led to the articulation of a research aim and subsequent objectives. Chapter 2 will detail the literature that informed these gaps – a few key items are mentioned above for summary purposes.

**Research Aim:**

The overarching aim of this research is to qualify the interpretation of organisations as artefacts, and to examine the results of hidden versus acknowledged design processes. By doing this, this thesis fills a gap in the research where scholars have suggested that organisations can be understood as artefacts and even designed products, but fall short of stating the specific characteristics of the design activities involved in creating this artefact (see Section 2.3). This includes an exploration of the established as well as the hidden design activities that take place within organisations and contribute to its creation and development. Since organisations can be understood as socially complex, the social dynamics and interactions between members of an organisation form the unit of analysis, from which this research gains insights.



**Research Objectives:**

- To disseminate the concept of an organisation as design product by understanding its own specific and unique set of variables, characteristics and dynamics. Identify these in each case and in relation to their effects on the design activities taking place.
- To open an epistemologically grounded exploration of the collaborative activities that contribute to the formation of an organisation with the aim of identifying commonalities with and differences to design theory.
- To articulate the conditions and factors that contribute to and influence the occurrence and type of existent, but hidden, design activities during organisational creation, development and change.

I felt that in order to be able to understand how organisations are designed or, more precisely, whether they are designed at all, it was important to understand how they are created and develop. Preliminary research questions were aimed at understanding the process of organisational creation and the ways in which stakeholders are involved. Since considering organisations as artefacts is a relatively young research strand in design studies, the research questions reflect the requirement for the generation of rather fundamental insights. Additionally, since this research tries to determine the characteristics of design

activities in processes of organising, I start by questioning established concepts of design that might be identifiable in the act of creating an organisation. A first attempt at a set of research questions read as follows.

**Preliminary Research Questions**

1. What do people create when they organise and what aspects of organisational design do they contribute to during this process? This first preliminary research question aims at a deeper understanding of an organisation as the result of a process of creation.
2. What activities contribute to the design of temporary organisations?
   The second research question addresses the interest in what people do when they get involved in formational activities of organisations.
3. How emergent or intended is the involvement of others?
   The third question aims at gaining deeper insights into the degree of intentionality of involvement. This refers to the previous proposition that people influence an organisation beyond professionalised or intended role descriptions and assignments. It is a question that touches on the motivations for involvement beyond imposed obligations.

The preliminary research questions are a result of the study of the literature and the identification of gaps in secondary materials. These research questions support the overall research aim to study organisations as artefacts and guide primary research efforts by placing an emphasis on the creation of organisations, activities that are part of the creation and the roles in which stakeholders contribute to the creation. As I will exemplify in **Chapter 5**, these research questions were later revised as a result of the insights I gained from primary and secondary research.



### 1.2.2 Chapters 3 & 4 – Case Studies and Research Design, Methodology and Analysis

**Chapter 3** proceeds with the introduction of two projects, which I chose as empirical, qualitative case studies. The proposition that organisations become less dominated by hierarchical and professionalised roles resulted in the decision to look into two temporary and distributed organisations as the primary research context.

One case is a building extension project *(Building Project)*, concerned with the extension of a management school building at a university in the UK, the other one is a music art performance *(Performance Project)* that took place during a festival at a major UK city. More details about the two case studies can be found in **Chapter 3** (p. 36).

It is relevant to mention here that one case study, the building project, was a retrospective study while the music art performance was a combination of live observation and retrospective interviews. Both cases provide complementary insights into organisational development and stakeholder involvement. For example, the building case has a high level of stakeholder involvement in shared decision-making at the beginning of its creation and continuously develops towards a centralised decision-making paradigm. The music art

performance in comparison starts with a relatively low involvement of stakeholders, which subsequently rises to a mid-level involvement which is maintained throughout its existence.

While the research methods vary from semi-structured interviews to observations including field notes and video/audio recordings of live events, the analysis is characterised by different types of coding (e.g. Open Coding, Hypothesis Coding or Process Coding – see Figure 4.3, p. 74) as well as visual sense-making – using visual maps to understand the research context.

Three cycles of coding are conducted, in the style of the coding process described by Miles, Huberman and Saldaña (2013). In between them is placed a reflective section that results in a revision and re-articulation of the Conceptual Sketch and consecutively a revised and more specific set of research questions.

The reader might want to refer to **Chapter 4** to learn more about the research design and methodological basis of this research. In this summary I will concentrate on the analysis, observations and findings to provide an overview of the research journey.

### 1.2.3 Chapter 5 – Outcomes of Analysis and Review of Research Questions

**Chapter 5** is dedicated to a detailed account of the analytical process consisting of five phases and two cycles of coding (see Figure 1.2 for an overview of the two cycles of coding and reflection). The first cycle of coding is guided by the initial set of research questions. Its aim is to 'open inquiry widely' (Berg, 2001) by initially staying open to allow codes to emerge from the materials. This type of coding appears suited to generate new insights and explore a research field that is only starting to be articulated in scholarly debates.



At this stage preliminary insights emerge that provoke reflection on the kind of artefact these two organisations represent and the activities involved in forming them, e.g. both organisations appear as transient artefacts, artefacts that change and shift shape continuously, and activities that contribute to the shape of this artefact centre around the kind (communication) and quality (sensitive) of interactions between stakeholders.

Insights that resulted from the first cycle of coding changed my understanding of organisations as artefacts and the activities that are involved in forming them. They supported pursuing further knowledge about the initial research interest, but proved limited in provoking specific insights into the way design appears or is employed in processes of organising.

Therefore a review of the initial Conceptual Sketch and re-adjustment of the research questions seemed necessary for the inquiry to move deeper and produce more specific insights.

Informed by observations from the first cycle of coding, the revision of the first Conceptual Sketch took shape.

The result is a longitudinal model that separates organisational development into three stages, (a detailed explanation of the three stages can be found in Section 5.2, pp. 91):

- Stage 1: the purpose of an organisation becomes defined

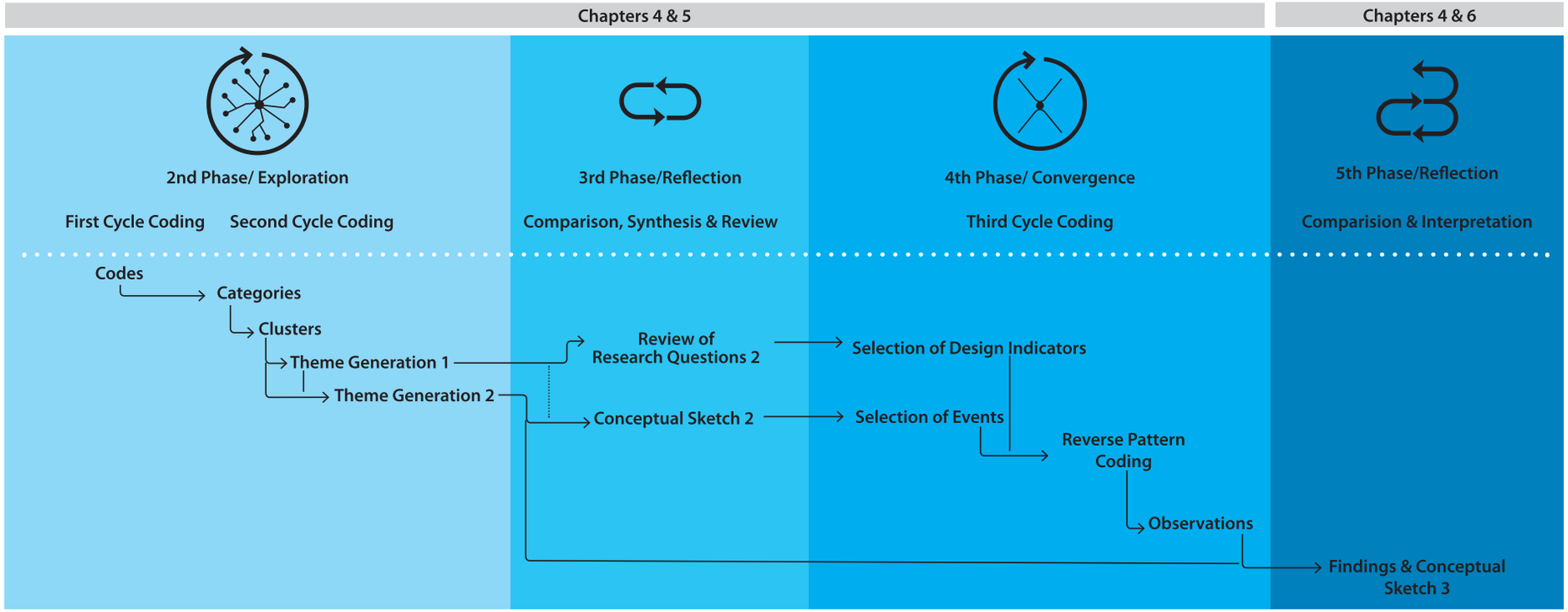


***Figure 1.2*** *An overview of the analytical process (excl. phase 1 'Familiarisation')*

- Stage 2: resources are aligned around the defined purpose
- Stage 3: an organisational formation becomes established

After completing the first phase of analysis I felt that the previous set of questions had enabled me to explore a rather wide range of issues (exploratory phase). Now it was necessary to select, focus on and go deeper into specific aspects (convergent phase).

The revised research questions focus on the further definition of design activities and behaviours that I observed in both case studies during cycle 1. Specifically aiming at further substantiating a nuanced view of the characteristics of design emerging from the materials as opposed to the established concepts of design found in the literature. The revised set of research questions directs research efforts towards the deeper exploration of the diverse appearances of design activities.

**Final Research Questions**

1. Which design traits are evident in temporary organisations?
2. How do these compare and contrast with established design concepts?
3. How does the identified design impact on the organisation?
4. What is the value of identifying such emergent, hidden and distributed design behaviours and activities, for practice and theory?

Progressing to the second cycle of coding, I start with thematic patterns deduced from literature – **design indicators**. These establish or represent fundamental characteristics of design that span a variety of design theories. From these, I elicited three indicators that serve as pattern codes. These pattern codes are then applied to the materials. Matches between indicators and phenomena in the materials as well as differences between both were collected and analysed.



The indicators refer to intrinsic attributes of design and read as follows:

- Taking directed action
- Creating something new
- Developing alternative solutions

This analytical step resulted in the identification of four main findings, which are summarised below.

Concluding the second cycle of coding I state that design activities can be identified whenever people organise. These are covert, hidden forms of design as they are not considered as design by stakeholders of either case study organisation. Further, professional designers are not involved in these activities and the appearance of the design process is distinct from known and formalised theories of design (such as e.g. Human-Centred Design). They share similarities but provide novel dimensions as well.

### 1.2.4 Chapters 6, 7 and 8 – Findings and Discussions of Findings

Since the findings are based on the primary data analysis, they require further comparison with extant theory. This I do to verify interpretations and further develop the conceptual ideas of hidden design and of the organisation as artefact in two steps:

While in **Chapter 6** I present the four main findings, in **Chapter 7** I verify and refine the findings in light of and in contrast to design theory, moving towards a further description and refinement of what designing looks like in these contexts and how it distinguishes itself from or correlates with existing theory. This stage of refinement then returns and further responds to Research Questions 1 and 2: what design traits are evident in temporary organisations and how do they compare and contrast to established design concepts?

The following four findings, which are presented in **Chapter 6**, are discussed and refined in comparison to concepts in the literature in **Chapter 7**:

- design indicators change as projects evolve;
- directed actions show varying degrees of spontaneity;
- design activities show reflective qualities, and
- design change is influenced by the unpredictability of stakeholder involvement.

The findings are confronted with the appropriate theoretical concepts that e.g. describe variations of the design process or the designer-stakeholder relationship. This discussion elicits five main characteristics of hidden design identified across both cases:

- organisations can be interpreted as communities of silent designers
- silent designers design from the inside out
- involvement affects design actions and contributes to socially-distributed design
- experience rather than observation determines design actions
- Uncertainty is part of silent design and reflects design practice



In **Chapter 8** I turn to organisation studies and describe the characteristics of the organisational entity as a designed artefact. This section responds to Research Question 3: how does the identified design impact on the organisation?

I consequently take design characteristics and place them in their organisational contexts, to reply to the question how the identified design behaviours affect the organisation and contribute to a better understanding of organisations as artefacts.

I continue to refer to scholars and their contributions, but here it is mainly concepts from the organisation studies field that I engage with. I conclude with a description of organisations as socially-designed artefacts and discuss its specific aspects in relation to concepts of artificiality and the two case studies.

From analysis it follows that each case study organisation represents a specific type of artefact, while both are socially designed. This means that they are created through the sharing of knowledge between its members. This type of design explains the relationship between members of an organisation being both creators and at the same time

manifesting the artefact. It is through the immediate and iterative movement between existing and preferred situations that self-organised groups create and become the artefact. While this becomes obvious in the building project, the music arts performance reveals details about the dependence of a temporary organisation on an unpredictable set of stakeholders. Control in these configurations is indeed limited and uncertainty exists throughout the lifespan of both case studies. In this, organisations resemble designs more than is often acknowledged.

### 1.2.5 Chapter 9 – Thesis Contributions to Knowledge

In **Chapter 9** I specify the contributions this research makes to design theory and organisational practice.

Contributions comprise of the following three aspects, which I briefly summarise below:

- "Pull versus Push" – an attempt to highlight the need for design scholars to remain open to the specific, tacit forms of design that appear in situated contexts and not subscribe to a deterministic trap where design is hailed as a one-fits-all solution.
- "Socially-Distributed Forms of Design" – this research shows that design exists within organisations apart from formalised and professionalised understandings and roles and is practised by a varying set of stakeholders.
- "Organisations Considered as Socially-Designed Artefacts" – this contribution highlights that design theory can help organisations understand how their culture develops and what potential for innovation resides within their boundaries.



I started out with the initial assumption that people contribute to the formation of the organisation they are members of through hidden design activities.

> Since its beginning this research has helped me realise that hidden design activities within organisations share commonalities with established design theories, but more importantly it has revealed the existence of not yet acknowledged design cultures within varying organisational contexts. The description of the socially-distributed character of non-professional design activities within organisations is a main insight that I hope this work contributes. Further, the interpretation of an organisation as a socially-designed artefact is anticipated to help practitioners, designers as well as managers, to engage with organisations in a meaningful way and help them more holistically to harvest their internal innovation potential.

### 1.2.6 Chapter 10 – Conclusion and Limitations

The conclusion summarises and demonstrates how I answered the research questions, reflects on the limitations of this research and suggests how these can be addressed by future research endeavours.

Now that an introduction to the research topic and an overview of the thesis have been given, the next chapter introduces the review of initial literature which concludes with the articulation of research aim, objectives, gaps and questions.

## 2 Literature Review

While the previous chapter combined an introduction to the research topic with a summary of the whole thesis, in this chapter I will provide a detailed review of the literature which resulted in the identification of gaps in current scholarly debates and informed the articulation of the research aim, objectives and questions. These are mentioned near the end of the chapter, following the literature review.

### 2.1 Introduction – Organisations as Products of Design?

In considering the innovation capabilities of organisations, scholars have stated that while innovating around products and offers has previously given companies the advantage, it is now the whole organisation that is regarded as the unique IP[1] of an organisation (Shapiro 2002), innovation not being restricted to the offers an organisation makes but including the organisational conditions of innovation itself (Junginger & Rind Christensen 2014) . Consequently organisations and businesses look for more holistic approaches to innovation. At the same time the drive for further customer centricity is enforced in businesses as well as in public bodies[2]. The organisation itself becomes the target of efforts to create a competitive edge through innovative approaches. This questions previous conceptions of organisations. Indeed it makes the organisation a potential subject and object of design.

This thesis is interested in interpretations of organisations as artefacts and designed products (Junginger 2005; Krippendorff 2005; Jelinek, Romme and Boland 2008; Rollinson 2008). These raise interesting questions regarding the character of the designed product and the dynamics involved in creating such an artefact. One central question, for example, is how those who are part of an organisation and constitute it as its members are also involved in actively influencing multiple parts of the organisation, its shape, behaviour and actions. Therefore this literature review will evaluate accounts of stakeholder involvement in organising.



I will first provide a brief overview of management paradigms and their specific form of stakeholder involvement, from Scientific Management to the current turn to design as a new management approach, resulting in an understanding of organisations as designed products or artefacts.

Secondly I take a closer look at organisations as design and mention theories that refer to organisations as designed products and artefacts with the aim of finding further descriptions of those artefacts. I then elaborate on a variety of mechanisms, methods and concepts that scholars have developed and identified with respect to the involvement of stakeholders.

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1 *IP* refers to *intellectual property* here.

2 The Swiss telecom company *Swisscom* is a recent example of an organisation that aims at becoming a customer experience-centred organisation by using tools like the Customer Centricity Score.
With regard to policy, several governments have established departments or centres that advise on customer centred, service-oriented policy-making (e.g. *Policy Lab*, UK; *MindLab*, Denmark or *La 27e Region;* France)

## 2.2 The Development of Organisational Paradigms towards an Understanding of Organisations as Design – An Overview

The following account of the development of managerial paradigms places the emphasis on the involvement of members of an organisation. During different periods the idea of what an organisation is has changed, and organisations have been interpreted from changing view points. Changes have involved a re-consideration of relationships within an organisation and the constant negotiation between individuals' needs and the overall purpose and efficiency of an organisation.

### Scientific Management

The notion of Scientific Management, including e.g. the work of Frederick Taylor, Carl Barth or Frank and Lillian Gilbreth (Cunliffe & Luhman 2013), was developed at the beginning of the 20th century, and is based on 'The Principles of Scientific Management' by Taylor (1911; 2005). It takes an organised approach to documenting the details of work processes and managing the contributions of workers to organisational processes more effectively. Selecting workers appropriate for a specific task according to their skills, and through thorough studies of their behaviours and actions all serves the purpose to better structure participation in production. In Taylor's view this would benefit management as well as workers (ibid). The hierarchical attitude to the division of power in organisations is not questioned in the Taylorist paradigm, and participation of the lowest part of an organisation - its workers - is limited to the contribution made through work practices, which are carried out as devised and planned by managers higher up in the hierarchy. Workers are regarded as an asset that needs to be applied as efficiently as possible. With regards to organisational concepts, the scientific management paradigm can be understood as a closed and mechanistic understanding of an organisation, a view on organisations as a system that is driven by someone in charge (Senge 1994), where the different, individual "parts" of the system - mainly its members - have to function in a highly synchronised way to produce and replicate predictable outcomes. Innovation is aimed at the improvement of work processes to as to achieve the same results in ever better and more efficient ways. One might conclude that Scientific Management was the first attempt to manage the way in which people participate in contributing to the overall performance of an organisation in modern industry.



### Human Relations

Referring to the Human Relations paradigm as delineated by Guillén (1994), coordinating and enabling human relations within a company are a manager's main tasks. In the 1930s, researchers from Harvard University began to investigate the relevance of the informal interactions between members of an organisation for its performance by studying work processes at the Western Electric Company's Hawthorne plant in Illinois (Anteby & Khurana 2010). Heller (2004) refers to the Human Relations paradigm as one of the two theoretical models of organisational participation - together with Human Resources, which I will introduce below. Human Relations claims that organisational performance is positively related to 'participation, work satisfaction and lower resistance to change' (ibid). This is an

early example of research that sees the improvement of an organisation being related not only to quantifiable processes but depending on the human factor as well.

**Structural Analysis**

The post WWII-period is interesting in the way that managerial models developed from being viewed as a closed structure, a system, that was unable to adapt to its environment (e.g. Scientific Management, Human Relations), to an open, adaptable structure. Where Scientific Management and Human Relations aim to define the "one best way to organise", Structural Analysis (Drucker 1968; Guillén 1994) incorporates Contingency Theory (Woodward 1965) by acknowledging that organisations organise 'differently for different products, production processes, and external environments' (Guillén 1994, p. 14). The tools used for decision-making processes are conflict-based, and solution-oriented, aiming to gain control of and structure processes and people based on Weberian sociology, with its definition of bureaucracy by establishing rules and laws (ibid; Weber 2005). Conflicts are regarded as helpful in resolving disputes.

**Organisational Participation**

After WWII, Organisational Participation (OP) as a field of research gained significance (Heller 2004). OP was projected as a way to increase efficiency and performance in the face of strengthening international competition. Participation in an organisational context has been called a number of different names, such as *co-determination*, *workers' representation* or *human resources*; which I will refer to below.



**Participatory Design**

Around this time, designers became involved in facilitating intra-organisational relationships. Although Participatory Design is not primarily a management paradigm, it is an approach to workers' participation in product development. It demonstrates the recognition of the importance of involving employees in the design of their workplaces in the 1970s (Muller & Kuhn 1993) and the relevance of design to organisational change around new technology (Schuler & Namioka 1993). Thereby Participatory Design provides an initial insight into the developing interdependence between design and management, beyond design management in the strict sense.

**Human Resource Management**

The 1980s were marked by the emergence of a new management paradigm and theory of organisational participation, Human Resource Management (Heller 2004; Geare 2001), which is still current. While Heller refers to Human Resource Management as the second model of Organisational Participation, which attributes the success of OP to the effective use of expertise, experience and skills through participation, other more recent authors derive the development of Human Resources from a human focused approach to a functional and strategic method for the efficient management of human resources as organisational assets (Wright & McMahan 2011; Thompson 2011; Parry & Tyson 2011).

**Socio-Technical Systems**

Other participatory approaches developed comprise Socio-technical Systems which first appeared in academic literature in 1980 (Trist 1980), but had predecessors in Scandinavian countries in work experiments from the 1960s on (Heller 2004). Here the aim was to give employees within work teams the discretion to organise their own work and operate without supervision. Trist's (1980) publication points to the important relationship between social and psychological factors in the workplace in the analysis of technology and work organisation (Kester 2001).

**The Learning Organisation**

As management paradigms shifted, the perception and understanding of organisations changed from their being seen as mechanistic systems to being interpreted as living systems (Senge 1994). Organisations began to be described as systems of distributed control, in analogy with the evolution of nature and its subsystems where every being is connected to each other and yet contributes independently to the overall function of the ecosystem. In the notion of the Learning Organisation introduced by Senge (1994), the organisation is described as a human community rather than as a machine for making money, which is coordinated by a 'genetic code' instead of an internal structure (i.e. VISA). He abandons the perspective of a mechanistic model of reality, instead embracing the principles of living systems as the basis for organising. He argues that healthy systems distribute control (like the human body). Here participation is related to the distribution of control and the constant generation of knowledge. Pusić (1998) contributes the interpretation of organisation as 'information-using and information-processing systems'. He states that the availability of necessary information and the competence to use it are essential preconditions for participation. He adds:

> 'organisation itself is the enhancement of individual effort through the differentiated and integrated work of many and at the same time the constraint of coordinated cooperation imposed upon individual will and representation' (Pusić 1998, p. 65).



**Distributed Forms of Organisation**

Recently, more scholars have departed from the understanding of organisations as clearly defined structures. Balogun and Johnson (2004), as well as Jelinek, Romme and Boland (2008), suggest that organisations become increasingly distributed and dispersed, making it more difficult to allocate centres of power and control. Another strand sees an organisation as emerging from communication (Taylor 2011), claiming that something as volatile as communication is what an organisation is fundamentally about, interpreting an organisation as a 'fabric made out of communication' (Taylor 1988 in: Taylor 2011, p. 1275). This resembles the organisational configuration that Mintzberg introduced as 'adhocracy' (Mintzberg 1981). Mintzberg identified flexible, project-based organisations with less centralised forms of control that address creative problems and are flexibly based on smaller operating units. Formal structures as organising principles and the managerial paradigm have been called into question by the introduction of informal communities of practice (Wenger 1999) and the idea of informal learning as relevant for strategic management (Mintzberg 1994).

**Action Theory Perspective**

Supporting a rather distributed and segmented view of an organisation, scholars from an Action theory background promote a view that assigns relevance to the ongoing actions of individuals within the organisation. Considering some rather fundamental assumptions articulated in Action theory, humans, through their actions and interactions, constantly change or influence the execution of directives they are expected to fulfil (Macy 2006). Thereby members of an organisation contribute in an emergent manner, but continuously, through their actions and interpretations of decisions made in other parts of an organisation (Weick 2012). Participation is seen as being more self-motivated rather than centrally controlled.

As should be apparent from the preceding paragraphs providing an overview of managerial paradigms, interest in participation and inclusive approaches to management have developed over the existence of management as a discipline. Over the last three decades the involvement and participation of members of an organisation have been of increasing concern, which is met with varying approaches to and mechanisms for participation. The following management paradigm represents the adoption of design attitudes towards understanding the involvement of stakeholders.

**Management as Design Science and Organisations as Artefacts**

This particular interpretation is the main focus of this thesis. An organisation can be understood as a human-made artefact (Rollinson 2008) and the product of human-centred design activities (Junginger 2005). These interpretations are based on developments in organisation studies that regard management as a design science. Simon (1996) was one of the seminal authors who first identified the relevance of design for management. Design science has been acknowledged as allowing a more planned and strategic approach to managerial practice and decision-making (van Aken & Romme 2009). While this has been an important change in the relationship between design and management, it has also been criticised for being limited as an approach that is deterministic (Faust & Junginger 2016). Organisations as artefacts or designed products as such have been less explored than other interpretations of organisations. Therefore the way stakeholders participate in the design of this product itself is less clearly defined. However, authors from the design community suggest that involvement is facilitated by product development (Junginger 2008) or co-design processes (Sanders & Stappers 2008). Participation is a planned, a designed process, aimed at the internal recipients of products and processes as well as the external users of an organisation's offers.

> This interpretation suggests that the organisation itself is the product that yields the highest potential for innovation and competitive advantage. In a market environment where products are being developed ever faster and technology changes rapidly the organisation with its culture and processes appears to be at the most powerful

competitive advantage.[3] This raises a variety of questions around the quality of such an artefact and its process of creation.

While organisations become better at meeting users' demands and re-configure themselves to become user-centred (see examples given on p. 12), there seems to be a lack of empirically supported discussions about organisations as artefacts and designed products themselves, and the potentially participatory dynamic of their creation. In the following section I will elaborate further on the interpretation of organisations as products of design and the preliminary character of such definitions. I will do so by explaining the development of design management towards designing businesses and organisations and changes in the designer's role and relationship to stakeholders that is related to the turn in the design field itself towards more complex, social entities such as organisations.

### 2.3 Focus on an Organisation as Artefact – Perspectives in Literature

As stated in the last paragraph of the previous section, organisations have been considered as designed products and design has been given a role in the organisation beyond product development (e.g. as an approach to managerial decision-making).

As previously noted, the way stakeholders participate in the design of such an artefact and the specific characteristics as well as the design activities involved in creating it have been less explored. In this section I will outline why I come to this conclusion. I will thereby indicate a gap in the recent literature that tries to explain the development towards a design understanding of organisations.



Considering organisations as artefacts has a variety of nuances attached to it. Krippendorff, in his work 'The Semantic Turn' (2005), sees organisations as part of the 'trajectory of artificiality' (ibid, p. 6). Here organisations are project-based and designed by expert designers. They become part of the changing environment of designers and one of the latest design tasks for professional designers besides networks and discourses. Krippendorff allows insights into the way designers facilitate projects as part of their work and brings this into play to demonstrate the changing relationship between designer and client. Where previously the designer was dependent on the client and their requirements, the designer now behaves more independently and is more integrated into social processes. As Krippendorff explains:

> 'The semantic turn challenges designers' blind submission to a stable functionalist social order, which is anachronistic to the kind of society experienced today' (ibid, p.6)

Still, here the designer as professional plays a central role in establishing the artificial and maintaining a designer - stakeholder relationship that is skill-oriented. The design of the project as artefact is secondary for Krippendorff.

Some design scholars, e.g. Junginger (2008), describe organisations as the result of human action. She refers to Margolin's definition of design as human action (Margolin 1995) and

3 See, for example Shapiro (2002) for a discussion about the potential for innovation that lies within an organisational design. Junginger and Rind Christensen emphasise the importance for organisations to not only pursue purpose-driven innovation, but to consider the potential that lies within the innovation context, the organisation, as well (Junginger and Rind Christensen, 2014).

concludes that organisations, as products of human action, can be regarded as designed products. This statement utilises a design term that raises associations with product development or the tangible as well as digital results of design processes. My concern with this comparison is that an organisation seems fundamentally different from other designed products such as e.g. a physical design product.

Organisational course books introduce organisations as artefacts, and as human-made (Rollinson 2008). On the other hand many organisational theories, such as Chaos and Complexity theory, were adapted from a natural science context (Fitzgerald 2002), suggesting that a social system can be analysed using methods that were previously applied to analyse *natural* facts (Peterson 1998; Morgan 2006; Jelinek et al. 2008), not *human-created* artefacts. In this context design is seen as an alternative that places artificial phenomena and the social character of organisations at the centre of inquiries into organisations (Jelinek et al. 2008; Avenier 2010, p. 320). Jelinek et al. (2008) build on Krippendorff's (2005) trajectory of artificiality, seeing design as capable of bridging the gap between a perspective on organisations as socially created artefacts and natural facts (ibid). And while they state this, they fall short of further detailing in which specific ways this artefact is socially created, what activities contribute to it and which characteristics establish it.

Other authors from the management community have described organisations as 'design shop' firms, or suggest they should become more like design shops. Roger Martin (2004) uses the term to describe the potential of design thinking for organisations. Again, the question is how much this term adequately reflects design characteristics and acknowledges the unique characteristics of organisations as unique artefacts. He suggests that organisations need to integrate approaches used in design to become more innovative. Design here is a new management paradigm, a 'new business agenda' (ibid, p. 10), a strategy to improve organisational behaviour and performance.



But what about the organisation as an artefact itself, rather than applying approaches from design to the processes and ways organisations work, as proposed by the design thinking debate?

Other scholars use the term *design* as Morgan used the term *image* in his seminal book 'Images of Organisation' (Morgan 2006) as a description of the specific appearance of an organisation characterised by a configuration of elements, processes and structures (see, for example Hedberg, Bystom and Starbuck 1976; Mintzberg 1981; Daft 2015). Different organisational designs can be distinguished from each other given their structure or configurations (Mintzberg 1981). Organisations can be considered as consisting of varying assemblies of similar components. Here design is used as a category that combines a set of characteristics that can occur in a variety of configurations. This focus on configurations pays less attention to the way in which each organisation comes into existence or is designed through the contributions of its members. This resembles an approach that, in my viewpoint, tries to force organisations into an overarching, pre-defined schemata of components, parts and processes.

Another strand of debate deals with the role of artefacts in organisations. This strand explores the role of artefacts within organisations and recent publications consider co-designed artefacts as supportive of organisational innovation (Murphy, McLean and Herfurth 2015). The authors suggest that different artefacts have an effect on the culture of an organisation. They also state that artefacts can limit or encourage the involvement in organisational innovation.

As I stated before, the fact that an organisational artefact might exist *through*, but also *as part of* its creators, has raised my interest. The separation of creator and artefact has been described as the feature that makes artefacts available for individual meaning making. As Gagliari explains '(…) artefacts can be imbued with meaning, but they exist independently of those who make and wield them' (Gagliari in: Pratt & Rafaeli 2006, p. 282). I wonder though: how separable is the organisational artefact from those who make it?

As this section demonstrates, many different perspectives can be taken on organisations and their design. Discussions around artificiality that this research is motivated by include the above mentioned understandings of an organisation as a human-made artefact, the result of human action or design activities. I take these statements as the motivation to critically inquire into the perceived lack of substance surrounding the statement that organisations are artefacts from within the design community.

A first step is the dissemination of the relationship between the artefact and its creator or creators, which the following section discusses.



### 2.4 The Creator-to-Creation Relationship

The previous section closed with the statement that artefacts exist independently from their creator once completed. In this section I will look into whether the organisational artefact falls within this category and continue by discussing how people take part in creating it in the succeeding section (2.5.).

**From an Independent to Interdependent Relationship**

Some scholars suggest an organisation is created by its founder (Mintzberg 1981; Jelinek et al. 2008); others suggest it is transformed by its members and continuously changing (see for example the Human Relations paradigm, see p. 13, or Living System theory, see p. 15). While these two perspectives do not necessary contradict each other, the question as to whether an organisation is created by an individual or its members might consider activities that go beyond the initial foundation of an organisation.

With regard to organisations we can identify conditions under which an organisation can be regarded as an artefact that exists independently of its creator or creators. This, in my opinion, would require the existence of a creator or designer in the first place. For example, someone who intentionally designs an organisation and might leave it after initial set up. We can identify such relationships in what Krippendorff (2005) describes as the project stage on the trajectory of artificiality or in social contexts like Design for Social Innovation (Manzini 2014) where the designer facilitates and initiates group collaboration around a specific topic. This means forming an organisation, a project, that might continue to exist

without a professional designer's ongoing contribution. Designers may even be regarded as being placed intentionally outside the organisation and only sporadically engaging with the organisational entity, implementing new ideas (Hedberg et al. 1976). This portrays an understanding of a classical designer-stakeholder-artefact relationship, with the designer as the professional, the stakeholders as amateur designers and the artefact as independently existent.

But recent design research strands have turned to explore dispersed ways of creation, production and design, as I will exemplify below. These are linked to novel forms of organisations, as introduced above, where technology enables people to spontaneously and collaboratively create and share objects and knowledge. Research has investigated into *hackathons* (Hillgren et al. 2011), *fablabs* (Kohtala, 2013) or other open source movements. Here the aspects of sustainability and democratisation of creation and production gain relevance. An interaction-design perspective, interested in the potential of non-designers creating new products or software, is called Open Design (van Abel et al. 2011) and has its origins in the Dutch open source movement (Ozorio de Almeida Meroz & Griffin 2012).

Further, a strict intra-organisational distinction into decision-makers and those who act on directives might not tell the whole truth about the dynamics that lead organisations to act. This means that those who make decisions and thereby influence the organisation and its development might not be the only ones who influence the artefact. Action theory portrays an organisation as a set of individuals who constantly alter the decisions they receive through their actions (Macy 2006). Decisions are rarely unchanged once they get implemented[4]. Further, as Schein states, while leaders and managers manage organisational culture, they are not the only ones who influence it (Schein 2004, p. 10). These aspects point to a quality of the artefact that suggest a widened understanding of those who contribute to the artefact. It also suggests that an organisation as artefact might not exist independently of its creator or creators, when members of an organisation are also acknowledged as creators.



Considering the suggestion that two perspectives exist, one that predominantly sees managers and other decision makers as creating actions that impact on the organisation, the other acknowledging that throughout an organisation activities and interactions are stimulated that affect the organisation, thereby extending the pool of creators of an organisation to its members. Taking this into consideration, consequences for understanding design become apparent: the classical designer-stakeholder relationship resembles the first perspective while more open and inclusive ways to design reflect the second perspective. This also points to facilitated and directed forms of involvement versus forms of involvement that are emergent and less likely to be centrally controlled. Below I will continue by outlining the different ways in which people contribute to an organisation as portrayed in design as well as organisation studies debates.

All this section points to the emergence of a new design perspective, where internal

4 See also Suchman's (2007) work that stresses the difference between intended plans and executed, situated actions. The reader will find a comprehensive discussion of her work on page 146.

members are not users but creators. Previously, participatory design approaches, as well as user-centred design, have seen the internal members of an organisation mainly as users (Schuler & Namioka 1993). Other approaches from the social sciences that are interested in organisational artefacts, such as Science and Technology Studies (see, for example: Pinch & Bijker 1984), have been concerned with the use and shared meaning making of members of an organisation in relation to the use of new technology.

This thesis will explore a perspective that sees the internal member as a creator *and* user, rather than limiting my perspective to the perception of stakeholders exclusively as users.

## 2.5 The Dynamics of Participation – Pathways to and Areas of Involvement in Organisations

The previous section raised the question of whether an organisation as a designed artefact can be regarded as an artefact that exists independently from its creator. This then led to further thoughts and questions around the implications of either a creator-perspective or a collective design perspective. These implications raise questions concerning the quality of the involvement of internal stakeholders in creating the organisational artefact. In the following sections I present a selection of defined interactions through which internal stakeholders contribute to an organisation they are part of. This is segmented into how people participate and what they participate in – meaning which dimensions of an organisation stakeholders contribute to or get involved in. I will start by introducing three ways of participation that acknowledge various dimensions of the interaction between individual and organisation: engaged, involved and empowered.



### Pathways to Involvement

#### Engaged

Analysing employee engagement from a psychological point of view, Macey and Schneider (2008) develop a framework to clarify the different uses of engagement in an organisational context. By distinguishing between engagement as *trait*, *state* and *behaviour*, the authors categorise and clarify its relationship to other concepts. With respect to engagement as a *state* they elaborate on its relation to understandings of engagement that establish its characteristics as a psychological state: commitment, involvement, satisfaction (affective), empowerment. Engagement as a psychological state is influenced by the personal *traits* of engaged individuals, such as, for example, a proactive personality or an autotelic personality. Engagement as *behaviour* can be most broadly considered as adaptive behaviour. The authors (ibid) list additional attributes of engagement as behaviour as follows: Organisational Citizenship Behavior (OCB), Proactive/Personal Initiative, Role Expansion.

Here the conditions under which engagement takes place and is influenced by come into consideration. Scholars not only consider the effects of working environments on engagement state and behaviour, but also question the feasibility and degree to which engagement can be attained without causing negative effects, like burnout.

The central argument introduced by Bakker and Schaufeli (2008) with respect to the need

of organisations to think about their relationship to their employees is described by looking at the personnel situation companies find themselves in today. Ulrich (1997) states that companies have to engage employees in different dimensions, 'not only the body, but the mind and soul' (ibid, p. 125), to achieve more or the same with less 'employee input' (ibid), through increased employee contribution. Bakker and Schaufeli (ibid) list a series of demands and expectations that today's organisations put on their employees – such as being proactive, taking responsibility for their own professional development, and being committed to high quality performance standards. This is a reason, as stated, why employees have to be dedicated and highly engaged, even absorbed by their job. Further, they introduce three approaches to employee engagement:

- Employee engagement as a set of motivating resources such as support and recognition.
- As a psychological state that motivates employees to exceed job requirements, based on an increased interest in an organisation's performance.
- A positive state of work-related well-being which is defined by its opposition to job burnout.

Bakker and Schaufeli (ibid) introduce Positive Organisational Behaviour (POB) as an approach to engagement. It is related to positive psychology which differs from the dominating negatively biased approach of psychology. They see a positive approach to psychology as more appropriate in understanding engagement and its effects as it focuses on mental wellness and the strengthening of mental wellbeing instead of mental illness. Here, employee health and well-being play a core role in considerations of POB, as they potentially provide employees with the ability to contribute, by keeping them engaged, and then sustain it - contributions, as I understand it, being a direct measurement of performance.



POB is further described as being interested in

> the individual psychological states '(…) and human strengths that influence employee performance' (ibid, p. 149).

Still, there are arguments, familiar from Organisational Participation, on whether POB's aim should primarily be efficiency and performance and how and where employee health and happiness as aims in themselves fit in.

**Involved**

Kühnel, Sonnentag and Westman (2009) take a psychological view of individuals' motivations for work participation by focusing on the relationship between personal resources, job involvement and work engagement. They are interested in the relationship between a highly involved attitude towards job engagement and psychological detachment from work during short off-work breaks.

Resources and individual contributions to work engagement play a central role in their considerations. Here, resources are understood as a two-fold concept: firstly, as the energy

that allows people to identify opportunities for and contribute to the enhancement of a goal and secondly, as self-regulatory resources that enable individuals to control their behaviour (ibid).

With regards to the relations between attachment, engagement, involvement and resources characteristics, they are described as follows. Both *work engagement* and *job involvement* are understood as 'empirically distinct constructs' (ibid, p. 578) that represent different facets of work attachment.
Involvement refers to a stable attitude towards a job based on the perceived ability of a job to satisfy individual needs and expectations. Here the authors refer to the perception of involvement as a belief about the relationship between the individual and the job (Kanungo 1979; Kanungo 1982). 'Work engagement refers to a motivational state at work' (Kühnel et al. 2009, p. 578), which describes a fulfilling, positive state of mind at work, characterized by high levels of energy in pursuing aims related to the work task, overcoming obstacles and taking pride and enthusiasm in work related activities. Furthermore, being fully absorbed in one's work is the criterion of positive engagement at work (ibid).

**Empowered**

Empowerment can be described as the autonomy that an individual is granted in an organisation to make decisions over their own task-related actions in a self-determined manner (Zhang & Bartol 2010; Zhang & Begley 2011). *Empowerment* and *team participation* have been described as two modes of participation in an organisation's activities (Zhang and Begley (2011) which are distinguished by power distance, one of Hofstede's five culture dimensions (Hofstede 2001 in Zhang & Begley 2011). Power distance according to Hofstede 'refers to the degree of acceptance of an uneven distribution of power in society' (ibid, p. 3602).



From the readings above I deduct that the aim of empowerment is self-determination, which is supported by the provision of information and authority over decisions. On the other hand it appears that team participation represents a concept characterized by low discretion and a higher amount of supervision, leading to more intense collaboration and cooperation. Team members acquire and share experiences through interaction, knowledge sharing and contribute to improvements in work management as well as to the development of a shared knowledge base (ibid).

Zhang and Begley (ibid) shed some light on the role of empowerment for organisational participation. Here, it seems that empowerment, on some level, is contrary to participation as it requires an employee's discretion and autonomy over their own task-related decisions and therefore is distinct from participation in group activities. On the other hand, individuals gain more power over their work environment and processes.

The above concepts and arguments highlight issues in organisational participation such as whether the humans within an organisation and their needs and fragility are being managed as a resource for efficiency (see "engaged"-section). These different aspects and dimensions that the generic term *participation* comprises offer a distinctive view

on the complexity of participation in organisations. Individual ability reduces collective involvement. Participation in an organisational context seems to involve a tension or even conflict between individual freedom or fulfilment and the contribution or submission to a collective effort. The individual member of an organisation never acts independently from the internal environment or other stakeholders. Empowerment of one or some has an effect on others. There is no action without reaction or consequences.

This might suggest then, that organisations are to a certain degree inherently participatory or engaging by their fundamentally social nature.

**Areas of an Organisation that Internal Stakeholders Contribute To**

In this section, I refer to literature that provides insights into the processes, activities and attributes of an organisation that a variety of stakeholders participate in. Participation can range from active contribution to passive involvement. Introducing here different concepts of participation articulated through a variety of view points on participation in an organisational context and from both Organisation Studies and Design Theory perspectives. I will do so by referring to four functions of an (not all) organisation(s): performance, decision-making, product development and production, which I elicited from the previously mentioned management paradigms.

**Contributing to Performance and Productivity**

Members of an organisation contribute to the performance of an organisation. The way this is achieved is the subject of controversial discussions that oppose normative approaches to management to motivational approaches. On the one hand a normative understanding of participation as the ability to e.g. contribute to financial performance through Human-Resource Management[5], on the other the interest in e.g. the prerequisites for someone being motivated to contribute (Wilpert 1998)[6].



It seems that *two overarching perspectives* on participation are reflected in the literature reviewed: one that looks at participation from an *organisational point of view* and is interested in it in order to increase productivity and efficiency and decrease resistance to change (Heller 2004), e.g. the Human Resources model; the other viewpoint puts the *human being* at the centre and concerns itself with questions of worker satisfaction, problems of work alienation and motivational factors, e.g. the Human Relations model. With respect to the concerns of both viewpoints, overlaps exist. Both argue that increasing the motivation of workers, for example, can affect productivity and serve to improve the performance of an organisation and benefit workers.

Within both perspectives there are competing arguments over how to attain the associated goals. While for the human focus, ideological influences go back as far as to Marx and the Frankfurter Schule of Habermas, opinions on how human satisfaction at work can be

5 Another managerial paradigm that I consider being part of this category is Scientific Management. See also the contributions to the debate around employee engagement as discussed in section 2.6.1, specifically the improvement of employee engagement as a means to enable organisations to do more with less, increasing an organisation's efficiency.

6 This statement summarises the discussions around involvement and work engagement from section 2.6.2. and empowerment in section 2.6.3. Wilpert (1998) describes a separation between the Anglo-American and Continental understandings of participation along similar lines of efficiency versus personal development.

achieved vary (Heller 2004).

Performance here has two meanings attached, on the one hand the organisations overall efficiency and on the other the motivation of an individual within an organisation. Both perspectives incorporate opposing approaches to the way individuals can contribute to an organisation's performance. While Thompson (2011) calls for management to motivate through activities that incite the heart and mind of people, and put transparent communications at the centre of interactions, specifically of Human-Resource Management, others see the role for management in the use of a more normative and technology-oriented approach that results in 'efficiency, service delivery and standardisation, relational outcomes and potential improvements in organisational image' (Parry & Tyson 2011, p. 352).

Contributing to the performance of an organisation then is a process that is arguably as much about recognizing the individual as a human with a mind and heart as it is about aligning the individual with the structure of an organisation that is designed to yield specific outcomes and allow for the strategic pursuit of an organisation's purpose. It is an argument between the human characteristics of much of what makes an organisation and the requirements of a more abstract and normative structure.

Participation mechanisms can range from direct to representative, from more direct forms of stakeholder involvement with a high degree of autonomy and power sharing which empower workers to actively shape processes and experience participation to indirect forms of participation, where workers are represented in board room meetings, but don't necessarily experience participation as an activity themselves.



**Participation in Decision-Making**

Sharing decision-making powers through participation is a central concern of Organisational Participation. In this context participation includes different levels of an organisation, from the shop floor of an organisation to the board room (Heller 2004). Still, the impact of organisational participation on power sharing is doubtful, especially with respect to decision-making (Canevacci 2003) and the optimism in the literature does not seem to be reflected by an according uptake in practice (Heller 2004; Heller 2003).

A central argument concerns the distribution of decision-making powers through participation. Zoghi and Mohr (2011), however, state that high-involvement work practices, like teams, quality circles or Joint Consultative Committees (JCCs) do not necessarily increase participation in decision-making and thereby the sharing of decision-making powers. The need to share decision-making in organisations of a specific size, where knowledge relevant for decisions is distributed throughout the organisation, has been recognized, but a barrier to such shared decision-making is that not every stakeholder shares the objectives of the organisation (ibid). Further, it is doubtful whether participation in decision-making actually leads to the empowerment of those involved or is a means for the further control of workers and increased job intensity (ibid).

Some authors share this concern, when they argue that implementing radical changes requires a selective approach to stakeholder involvement rather than extensive

participation (Meyer & Stensaker 2009). They suggest participatory processes should be regarded as tools that can be manipulated to influence decision-making towards a favoured solution rather than being seen as enablers of stakeholder involvement in general (ibid 2009).

**Participation in Product Development**

Participation in organisations is not limited to more abstract and strategic functions of an organisation such as performance or decision-making. Product development is another distinct area of participation. Here the development of products by an organisation that are to be offered to outside users as well as products developed for an organisation itself to use, such as information technology, are both processes that require involvement. In this context design becomes relevant. It is closely linked to the product development process and has increasingly gained relevance in realising successful participation, as I will demonstrate below.

Regarding the development of technology for users within an organisation, Participatory Design has a long tradition in involving end users (Schuler & Namioka 1993).Here participation is concerned with the direct and continuous interaction with those who will use the technology in their everyday lives and work and who will judge on the adequacy of it (Suchman 1993). Suchman (1993) describes participatory design as the development of design processes. By referring to the quality of the relationships between designers or developers of new technology and those who use it, she identifies three main qualities of participatory processes: they are more 'humane, creative and effective' (ibid, p. viii). Pelle Ehn (1993) in contrast to Suchman, extends participatory design beyond the involvement of stakeholders in design processes. He defines it as a design strategy in opposition to expert design strategies, but also considers design as a method of facilitating participation. Although Participatory Design claims to be a non-expert approach to design, a hidden hierarchy can still be identified when scholars classify stakeholders as high skill users, ordinary users or designers (ibid).



Where the involvement of users that reside outside an organisation is concerned, Human-Centred Design (HCD) (see, for example (Krippendorff 2005; Norman 2013) articulates a relationship that is not only relevant when design or product development processes are concerned. Here the designer is an expert who, sometimes in the role of an authoritative or even 'dictatorial' leader (Norman 2005), makes and defends design decisions (Press & Cooper 2003; Norman 2005) and those who participate are considered design amateurs, but 'experts of their own experiences' (Visser, Stappers, van der Lugt, Sanders 2005, p. 129). But HCD has moved on from product design, which represents the second order of Buchanan's (2001) four orders of design, into other orders of design such as *experiences* and *systems*. By doing so, the internal interactions and processes of an organisation have become a subject for HCD [7]. Designers have started to not only consult stakeholders, but to transfer design specialisms by educating people from within an organisation (Body 2008).

7 See, for example Junginger's work on the role of design for organisational change (Junginger 2008), Buchanan's work on interaction pathways (Buchanan 2004) and a special issue on design and organisational change of *Design Issues* (2008, 24:1).

HCD then appears as an empathetic approach to the involvement of stakeholders in the design of products or processes that are dependent on their acceptance by their users – in order to be used effectively and be successful. Being able to do so, it appears, depends on the involvement of professional designers or the creation of such a function.

Both approaches to involvement in product development, Participatory Design as well as Human-Centred Design, appear as expert-facilitated forms of participation, the difference being that Participatory Design advocates the interests of those lower down in an organisational hierarchy and thereby questions the role of the professional designer while Human-Centred Design scholars see the specialist knowledge and expert role of the designer as necessary and valuable to the product development process and users as informing the knowledge of these professionals.

Beyond the direct, intended and expert-led involvement of stakeholders inside an organisation, hidden and unacknowledged participation occurs, as I will explain in the following section.

### 2.6 Emergent Forms of Participation in Organisations

While the previous sections describe the identifiable and often officially or formally acknowledged interactions through which internal stakeholders participate, there are less evident forms. I mention those here, as they point towards the emergent characteristics of an organisation and support the idea that distributed interactions take place unofficially across the wider community of an organisation outside of defined structures, functions and roles.



This section raises awareness of the involvement that happens outside and independently of established organisational processes and functions. New technologies, such as social media, can facilitate involvement but within an organisation people participate through hidden activities and informal roles without the facilitation of technology as well.

#### Silent Forms of Design and Hidden Involvement in Product Development

As previously stated, informal, not formally articulated and considered forms of involvement in design exist around product development processes.

A study on silent design by Gorb and Dumas (1987) inquires into the activities surrounding formalised product development in organisations. Unfortunately this pilot study was not followed up by a more in-depth study of the specifics of such hidden design activities. Gorb and Dumas (ibid) state that around the creation of 'artefacts and systems of artefacts' (p. 151) actions take place which resemble design but are not recognised as such nor carried out by people who call themselves designers. The definition of design they based their research on reads as follows:

> [Design is] 'a course of action for the development of an artefact or a system of artefacts; including the series of organisational activities to achieve that development' (Gorb & Dumas 1987, p. 151).

Here the organisation is represented by a hierarchical entity, most likely segmented

into project teams. Their perspective derives from a product development context, as the Human-Centred Perspective does. They open up the activity of design to members of the organisation, non-professional designers and include organisational activities surrounding the development of products as defining dimensions of design. Scholars that have conducted research into Silent Design (Gorb & Dumas 1987; Walsh 1996; Marsh 2010; Candi 2010) distinguish between two types of activities through which members of an organisation contribute to development processes: overt design and covert design activities (Gorb and Dumas 1987). While overt design activities comprise professional and recognised design activities, covert design also involves other activities of members of an organisation that integrate and interact with design processes (ibid). Silent Design, according to Gorb and Dumas is based on

> 'design activity (...) which is not called design. (...) carried out by individuals who are not called designers and who would not consider themselves to be designers' (ibid, p. 151).

It recognises that several functions of an organisation, not only professional designers, can or do contribute to design decision-making (Walsh 1996).

Another study that uses the concept of silent design explicitly is Candi (2010). Here silent design is placed in opposition to overt design and applied to a software development context. The author suggests that companies use silent design to differing effects. The question, though, is whether silent design is defined enough to be used as a concept (e.g. what are its dimensions or principles) or emerges within organisations and by doing so is highly flexible in its appearance – hence situated.



Although scholars (Walsh 1996; Candi 2010; Lee 2015) refer to the study of Silent Design by Gorb and Dumas little research has been conducted to find out more about the specifics of non- professional design activities within organisations.

**Direct Involvement Through New Technologies – Mass Participation Independent of Organisational Structures**

New web-based technologies such as Social Networks enable participation in novel ways. As exemplified by current democratic movements in politics (Occupy and liquid democracy) new possibilities arise through the use of technology to create a shared space that can be used for a combination of direct and indirect participation in political decision-making (Brinkhoff 2011; Shank 2011; Caren & Gaby 2011; Skinner 2011). While in the political realm the use of new technology is targeted towards new and more direct forms of interaction and involvement, in an organisational context, as demonstrated by the notion of e-Human Resource Management (e-HRM), the application of new technology is targeted towards e.g. efficiency, standardisation and service delivery (Parry & Tyson 2011). While the first is interested in the empowerment of the one who participates, the later is interested in processes of participation management.

While the previous considerations of the ways in which people participate and the areas they contribute to are based on research conducted in established, lasting and monolithic

organisations, technology enables temporary, spontaneous and distributed forms of organisations. Concepts around mass participation and technology-enabled organisation (see, for example Leadbeater 2008 or Shirky 2008) propose that new technologies enable different forms of communication and novel ways to form an organisation, sometimes referred to as organisations *without* organisation (Shirky 2008) due to the lack of formalised structure that is necessary to bring people together in the pursuit of a goal. The following is a brief excerpt of what such self-organised involvement can look like.

The *Occupy* protests, that took place in different cities around the world, enabled through the use of social media platforms like Facebook, are one example (Caren & Gaby 2011; Skinner 2011). Here web-based communication channels change the way people participate in group decisions based on information that can spread farther faster and incite rather more spontaneous than organised participation. Further, the emerging concept of *liquid* or *fluid democracy* (Brinkhoff 2011; Gascó 2012) is using virtual space as a shared place to enable people to participate in political decision-making in a direct or representative way. It represents a concept of flexible change between the direct participation of individuals in decision-making and the referral of individual voices to representatives who might be better informed about the topics of decision-making processes. While I have not yet succeeded in finding peer reviewed sources on the *Occupy* movement or *fluid democracy*, as most sources of information are weblogs and interviews in daily newspapers (Brinkhoff 2011; Shank 2011), scholarly debates within the field of digital anthropology (see, for example: Horst and Miller 2013) explore novel dynamics of participation that are enabled by new technologies.



While Digital Anthropology can be defined as a sub-discipline of anthropology that perceives technology as a mechanism for the production of social life (Ingold 2011) and therefore relevant for inquiries into peoples everyday lives, it gains specific importance in the context of this literature review through its focus on digital technology and the possibilities it provides for more direct and horizontal forms of communication and participation (Tacchi 2013), similar to those described above.

New technologies can not only provide a more equal footing for communication and involvement, it is also suggested that they allow those who participate to take control over the character and duration of their participation (Paulini et al. 2013).

Such novel forms change how internal stakeholders contribute to the organisation and indeed they change the notion of an organisation itself. Resembling the distributed, fabric-type of structure described by Balogun and Johnson (2004), as well as Taylor (2011). Balogun and Johnson (2004) suggest that organisations will more widely go through a shift from hierarchical to decentralised and modularised structures, due to new, technology-enabled work behaviours. This resonates with the description of distributed decision-making in self-organised systems (Morgan 2006). Here the focus shifts from facilitated or mediated participation to distributed involvement and collective design where communities of designers become self-organised and members themselves determine their roles and contributions (Paulini et al. 2013).

### The Changing Nature of the Designer-User Relationship

As previously stated (see previous section and p. 20) design has seen a development of discourses that suggest a turn towards distributed forms of designing. The advent of the internet enabled movements such as the open source movement, a mass-collaborative form of software development. Principles of this way of working have been transferred to design through, e.g. fab labs (Ozorio de Almeida Meroz & Griffin 2012) and Open Design (van Abel et al. 2011; Cruickshank 2014). Mass participation was enabled and changed the dynamic of creation (ibid) and idea development (Leadbeater 2008), by the use of new channels through which they can be encouraged and harvested independent of previously dominant role understandings. As Leadbeater states

> 'in the 20th century we grew accustomed to the notion that ideas came from specially gifted people, working in special places: the writer in the garret, the artist in the studio, the boffin in the lab' (ibid, p. 20).

Open forms of design then describe a different relationship, a more communal and collaborative form of creation than is possible in an expert designer- user relationship, similar to open systems, where producers and consumers can be difficult to distinguish (Cotham and Leadbeater 2004), as exemplified by the case of Wikipedia, where the user of a service and the creator of a service become intertwined.

## 2.7 Organisational Design – Design Without the Involvement of Designers?



As previously explained, the dependence or independence of the artefact on its creator and, in fact, the difficulty in allocating the responsibility for an organisational design to a specific role, such as a designer, questions the designer-stakeholder relationship.

While a growing body of literature is dedicated to harvesting the potential of amateurs to be creative, innovative and design their own solutions (see, for example: Amabile 1983; Von Hippel 1986; De Bono 2000; Cottam & Leadbeater 2004; Leadbeater 2008) as Cruickshank exemplifies (Cruickshank 2014, p. 27), the relationship between designers and stakeholders in a number of design disciplines is still being described as an expert to amateur relationship. Design Management, for example, is very much based on a classic designer-stakeholder relationship (see e.g. Cooper and Press, 2003), where the designer inquires into stakeholder needs to inform his or her work[8].

> But the insight that participation within organisations happens unintentionally and hidden and unacknowledged, as exemplified in the preceding sections, suggests that other, informal relationships exist and that contributors to the design of an organisation are not always recognised as such.

Emerging approaches to design, for example, describe a less professionalised and controllable (Cottam & Leadbeater 2004; Meroni & Sangiorgi 2016) process. In Service Design scholars suggest that designers can create the conditions for solutions, but might not be able to tightly control the result of design, the actual 'performance' of the service,

8 A discussion around the relationship between design experts and amateur participants is part of Chapter 7 (Section 7.6.1).

which is dependent on those involved in enacting it (Meroni & Sangiorgi 2016).

This literature research has raised my curiosity with regard to the relationships that I will find during my empirical research and how strong or weak, relevant or negligible the importance of professionalised profiles might turn out to be.

## 2.8 Overall Conclusion of Literature Review – Conceptual Sketch #1 of an Organisation as Artefact

Summing up from the literature reviewed above, a first proposition of an organisation as artefact and the activities involved in creating it surfaces. This Conceptual Sketch will serve as a comparative element throughout the thesis[9] that I will return to and review as the research and analysis of primary materials progresses and my understanding evolves. It also contributes to the articulation of the Research Gaps in the subsequent section.

1. **Organisational Formations and The Way Organisations Are Created is Changing – From Monolithic and Centralised to Distributed and Participatory**
   Organisations change. From monolithic and hierarchical to distributed and horizontally structured. While there are debates that focus on an organisational model where the leader or founder is the one who decides on how an organisation is shaped (see, for example Mintzberg 1981; Jelinek et al. 2008), other forms of organisation raise questions regarding the role of stakeholders in its creation. Communities of practice (Lave and Wenger, 1991), for example, and more modular understandings of organisations[10] challenge the picture of structured and hierarchical organisations.
   Such a post-structural position is not so much interested in "technical", formalised structures (like role profiles or positions), that define and potentially limit individuals 'freedom of movement' (Pusić 1998), but in the more dynamic, maybe even organic fabric of interactions (Taylor 2011). A system, shaped and created by humans with humans in it, viewed as a social object, but not in the technical, engineering sense of object, rather, in an understanding that acknowledges the role of the individual and the informal, the hidden extra-normative behaviours and interactions between individuals.

   Here involvement remains a core aspect of inquiry, as one central question is: how do those who are members of the organisation become involved in shaping it? The way people are involved might to a degree be determined by the formation, structure and culture of an organisation or its informal interactions or both.

   Organisations as artefacts, then, can be understood as the finalised and formalised end products of a design process, but the literature suggests they might as well be characterised by more dynamic and fluid interactions that enable a wider and more inclusive involvement of stakeholders.



9 See Section 4.3.2 for an extended account of Conceptual Sketches.

10 Referring to organisational interpretations of e.g. a brain (Morgan 2006), an interdependent living system (Senge 1994) or temporary organisation (Bakker 2010).

2. **Organisations Considered as Artefacts Question the Independence Between Creator and Creation**

   An organisation understood as artefact therefore undergoes changes too. While Design Management scholars (e.g. Oakley 1984; Cooper & Press 1995; Mozota 2003; Press & Cooper 2003; Best 2006) primarily consider monolithic[11] business organisations, Human-Centred Design scholars (e.g. Krippendorff 2005; Junginger 2012), as well as Social Design authors (e.g. Meroni 2007; Thorpe & Gamman 2011; Manzini 2015) debate alternative forms of organisation, such as project organisation or community groups, as design contexts. Here the organisational artefact opens new perspectives regarding the relationship between the creator and the product of creation. Firstly, the question of who creates an organisation cannot sufficiently be answered by centralised concepts that see a founder as the main creator. When emergent forms of involvement in organising are considered and a cultural, rather than technical, perspective is taken, a different picture emerges, one that sees less formalised and less easily identifiable activities also contribute to the creation of an organisation. In this case, then, an organisational artefact might be more difficult to detach from its creator, especially if we consider the members of an organisation as constant contributors to its design, potentially executing hidden design activities.

   In more general terms, an organisation as artefact may involves its members in its creation beyond hierarchical role understandings.



3. **Stakeholder Needs and Motivations Can Conflict with Organisational Requirements**

   An organisation, then, may be considered an artefact that is characterised by a constant drive for individual expression that can conflict with the overarching organisational aim, self-understanding and drive for efficiency. Issues identified in the Organisational Participation literature (see p. 21), here specifically the conflict between individuals' well-being and the profitability and efficiency of the organisations they contribute to, becomes a creator-user conflict. When we define an organisation as artefact, the conflicts between the individual and the organisation as overarching concept, can be interpreted as a conflict between the recognition of stakeholders' needs as creators, their drive for self-expression, intrinsic motivations, human-centeredness and imposed, extrinsically motivated design policies which are based on a perception of employees as users. An organisation, I conclude, appears as a set of conflicting attempts to assign meaning to the complexity that is part of the artefact in order to maintain or create the ability for decisive actions.

## 2.9 Research Aim

Resulting from the discussion of the literature in this chapter and my initial motivation to

11 By "monolithic", I refer to large, established organisations that have a clearly defined boundary that separates them from their environment and a hierarchical structure, similar to mechanistic models of organisations (Senge 1997, Morgan 2006).

inquire into the internal stakeholder dynamics of organisations, the aim of this research is to qualify the interpretation of organisations as artefacts and the results of hidden or unacknowledged design processes. This will fill a gap in the research where scholars suggest that organisations can be understood as artefacts and even designed products but fall short of stating the specific characteristics of the design activities involved in creating this artefact. This includes an exploration of the established as well as hidden design activities that take place within organisations and contribute to their creation and development. Since organisations can be understood as socially complex the social dynamics and interactions between members of an organisation form the unit of analysis from which this particular research gains insights.

### 2.10 Four Research Gaps – Limitations of and Opportunities in Current Research

Reflecting on the research aim in relation to existing debates in the literature, the following four gaps in current academic debates emerged:

**Research Gap 1: There is a lack of substance and empirical evidence in relation to understandings of organisations as artefacts**

This research acknowledges that organisational design is an established concept. Still, in organisational studies the term design is used to describe the practice of organising in contrast or extension to the theory (see, for example: Daft 2015). It is not a description of design specific approaches applied to organisations. In addition, design scholars inquire into the role design approaches and processes play in organisations and their activities. Still, the notion of an organisation as a product of design and artefact lacks substance.



> Although scholars have started to look at the effect of design activities on the wider organisation (Boland & Collopy 2004; Buchanan 2004; Junginger 2005; Jelinek et al. 2008) they are yet to substantiate these propositions empirically and adapt them to distributed organisational formations.

**Research Gap 2: Design theories tend to refer to monolithic models of organisations**

Changing configurations of collaboration and faster changing environments call for proactive and visionary practices of ordering organisations. In networks and modular settings, the allocation of power and hierarchy is no longer centralized and controllable as it could be in closed systems. Networks are dependent on trust and mutual benefits (Sparrow 2012, pers. comm., 23rd Feb). Motivation for engagement and incitement to engage may be harder to control than in previously established authority structures.

> 'Today's virtual organisations, strategic alliances, outsourcing and open innovation all point to ambiguous organisational boundaries and new interested parties.' (Jelinek et al. 2008, p. 322).

The design literature that contributes to an understanding of organisations as artefacts (see Section 2.3.), mainly refers to established, structured organisations (see, for example: Buchanan 2004; Junginger 2005; Jelinek et al. 2008) or project settings that maintain established relationships, e.g. between designers and amateurs (see: Krippendorff 2005).

**Research Gap 3: Existing design approaches seem to be transferred to complex social systems such as organisations without appropriate adaptation**

Don Norman (2005) challenges the assumption that human- or user-centred design approaches lead to good design solutions. By referring to the challenges and complexities of products in software development, he points to the weaknesses of an approach that is good at user involvement when developing simple, static solutions, but is described as inadequate for developing complex, dynamic systems of products or services. Although this is a debatable statement, since product development is a complex process and task in itself, it points to a potential shortcoming in design literature: a lack of critical evaluation of the transferability of design to varying, novel purposes and settings. Further, the specifics of silent or hidden design activities in organisations have yet to be specified and considered in varying organisational contexts.

**Research Gap 4: Organisational theory suggests involvement of members in organising beyond imposed actions**

Design studies have not yet extended the concept of Silent Design (Gorb and Dumas, 1987) to design activities that contribute to processes other than product development. Silent design, as other design approaches such as human-centred design and participatory design, were derived from product development. The organisation is a fundamentally different artefact. It is social (Banathy 2013), complex (McMillan 2004) and discursive (Weick 1979). It differs from other, inanimate or digital design products. Further, the role of stakeholders in design is changing when considering silent design activities. In the 1960s, a seminal definition of design suggested that anyone who devises actions for change is a designer (H. A. Simon 1996). This has been a foundation for design thinking and the emphasis on design as activity - as design*ing*. Further, Papanek (2005) stated that everyone possesses design capabilities and designing is a fundamental part of human activity. With regard to the organisation these concepts have been used to access new contexts for design but the designer still takes centre stage as a skilled person who might not be in control but has a central role in facilitating design processes, projects or discourses (see Krippendorff 2005). This thesis wants to extend such discussions by looking at forms of silent and hidden design where no professionally-trained designer is involved, asking questions such as:

> If an organisation can be regarded an artefact that is designed by the people who constitute it, how does this work and what does design look like in such a context?



## 2.11 Research Objectives

Objectives to pursue research that addresses these research gaps in alignment with the overall research aim are:

- Disseminate the concept of an organisation as design product by understanding its own specific and unique set of variables, characteristics and dynamics. Identify these as case specific and in relation to their effect on design activities taking place or being inhibited.

- Open an epistemologically grounded exploration of collaborative activities that contribute to the formation of an organisation, aiming to identify commonalities with and differences to design theory.
- Articulate the conditions and factors that contribute to and influence the occurrence and type of potentially existent hidden design activities during organisational creation, development and change.

At this stage, the following research questions serve as preliminary research questions into the fundamental concept of creating an organisation rather than into the specifics of designing an organisational artefact. From insights gained during this preliminary inquiry I expect to identify phenomena which will then allow me to later refine these questions and ask more specific questions about the occurrence of design.

### 2.12 Preliminary Research Questions

1. ***What do people create when they organise and what aspects of organisational design do they contribute to during this process?***
   This first research question aims at a deeper understanding of an organisation as the result of a process of creation. Is it an artefact or a natural fact (Jelinek et al. 2008)? What is it that people contribute to?
2. ***What activities contribute to the design of temporary organisations?***
   The second research question addresses the interest in what people do when they get involved in activities formational of organisations.
3. ***How emergent or intentional is the involvement of others?***
   Thirdly, this question aims at gaining deeper insights into the intentionality of involvement. This refers to the previous proposition that people influence an organisation beyond their professional or intended role descriptions and assignments. It is a question that touches on the motivations for involvement beyond imposed obligations.

Now that a review of the literature has been presented, and preliminary research questions defined as a result, the next chapter will introduce the case studies which form the empirical context of this thesis.

# 3 Case Studies

## 3.1 Introduction

In this chapter I introduce two qualitative case study projects that this research inquires into. Firstly, I will briefly provide an introduction to both cases and then present each case by detailing the nature of each project, its aims and purpose. Further, I will provide the reader with information about the sets of stakeholders, the social dynamics manifested through meetings and groups, and the development of each project. The chapter continues with a justification of the selection of each case study in relation to the research gaps and the research design.

The selection of both cases places the emphasis on a design-relevant organisational form: the project. The project has been described as specific to design (Findeli 1998), combining theory and practice. This is a characteristic organisational form that might provide a promising context to evidence design activities. While the cases qualify as projects, they can also be seen as temporary organisations. A temporary organisation can be defined as

> 'a set of organisational actors working together on a complex task over a limited period of time' (Bakker 2010, p. 468).

While this definition applies to the Performance Project and the Building Project there are significant differences between the two, which I will draw out in the following sections.

## 3.2 Both Cases Introduced

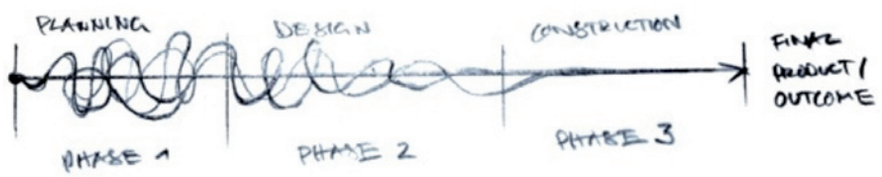


The two projects chosen each have a specific participatory quality, providing rich insights into the complexity of stakeholder involvement and diversity of organisational designs. Both are examples of temporary organisations and creative projects, but differ in the set of stakeholders and organisations involved as well as in their purposes and process (see Figure 3.1) of organising. While one case is a retrospective study of an architectural building project for a Higher Education institution (HEI) in the UK (Building Project), the other is a live study of a mass participation Performance Project that took place in a major UK city (Art Performance). Further, the roles of stakeholders and participants in both projects differ.

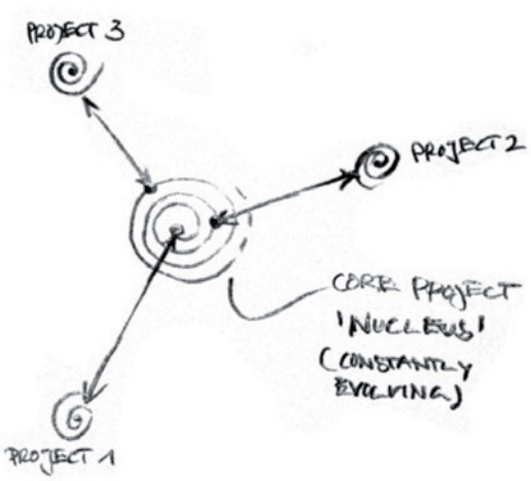
While the Building Project can be separated into stages of planning, design, construction, completion and use that extended over a three-year period, the art performance was part of an open-ended and iterative endeavour, consisting of an iterative series of performances. As Figure 3.1 exemplifies, the characteristics of the Building Project can be described as "linear", in contrast to "fluctuating" in the case of the Art Performance. The Building Project has a defined start and end point and goes through stages, from a fuzzy front end to a linear construction stage. It can be described as "linear" in contrast to the open-ended overall process of the Art Performance. The Building Project forms a temporary assemblage of stakeholders around a specific construction problem. Most of the organisations involved, though, exceeded the existence of the temporary project. It can be defined as a temporary organisation within an enduring social artefact – a temporary project that takes place within an established, lasting organisation – a university. Part of the stakeholders who

formed the temporary organisation are members of the university, and returned to their formal roles after the project.

The Performance Project case is part of a series of performances that themselves constitute an overall research project. The artists conceived of the Art Performance as an extension of a series of performances. All these performances feed back into the artists' own research which is an ongoing project. In this, the single performances form temporary organisations that are formed and dissolved regularly, as they bring together amateur and semi-professional musicians that reside at the location where a performance takes place. They join the artists for each performance only, while the artists' team continues to exist as the nexus, providing continuity beyond the individual performance projects. In this thesis I concentrate on one specific performance with brass instrument players that I observed.




*Building Project (CS1)*




*Performance Project (CS2)*

***Figure 3.1** A procedural (CS1) versus a circular process centred around a "nexus" (CS2)*



### 3.3 Case Study 1: The Building Project Case

The Building Project case is based on a construction project at a Higher Education Institution (HEI) in England. The aim of the project was the extension of an existing building that hosted the Management School of the University. Before its extension, the building provided offices for members of staff and teaching facilities. The original building was built in the 1960s and respectively the layout and facilities were considered outdated around the year 2000. This becomes apparent in the accounts of interviewees who, at that time, were part of a group of academics that identified the need for more teaching space to accommodate a growing number of students.

Starting in 2002 with a first meeting of concerned members of staff, the extended building opened in 2005. The construction took place within an operating management school environment and affected a major part of the building used by academic and administration staff. It resulted in an extension that would offer more teaching and study space for postgraduate students as well as social space for the whole faculty. This was a £10m investment that required an extensive network of institutions, internal departments and external contractors to work together. It not only involved the coordination of internal decision-making groups, partly based on formalised procedures and processes already in place (i.e. executive meetings or process blue prints), but even more the collaboration between a number of external contractors with the university and each other. The picture of a complex collaboration emerged from interviews with academic staff, project managers from the University's Facilities Department and administrative staff from the Management School. Meeting notes were used to cross-reference and supplement interviewees' accounts of events, stakeholder groups, committees, sequence of meetings and interactions[1].

***Figure 3.2*** *The completed building extension of the Management School (exterior view)*



The overall project development is captured in a longitudinal map that documents meetings and interactions (see Figure 3.3). This map is based on interviews with four stakeholders who were involved in the project as administrative members on a School level and University level. Further, a comprehensive collection of Meeting Notes provided documentation of the interactions and sequence of events at the time of the project.

### 3.3.1 The Stakeholder Committee Forms– Initial Meetings Take Place

As a result of ongoing, informal conversations a committee was set up in November 2000 by academic staff, prior to the project starting. For a while members of staff had identified the need for more teaching space to accommodate the rising numbers of postgraduate (PG) students and to ensure the 'needs of the school' were met. This however, appears to be one dimension or manifestation of a generally felt neglect of attention to PG teaching in

1 A detailed description of research methods can be found in Chapter 4: Research Design

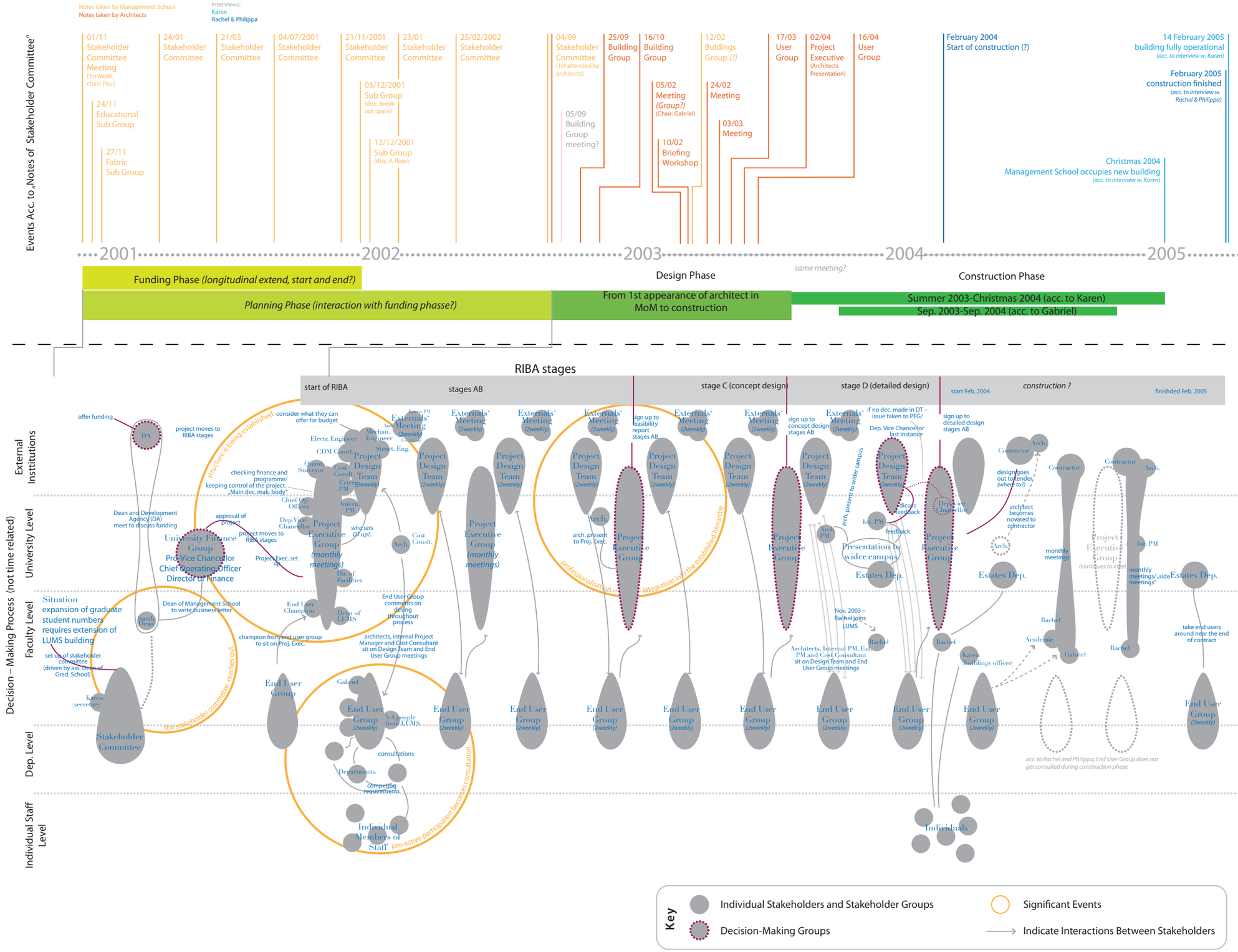



***Figure 3.3*** *Longitudinal map of meetings, groups, interactions and Meeting Notes (Building Project/anonymised)*

the school, as the then Head of the Postgraduate School (Paul) put it. Beyond the creation of more space, another, less tangible, rather political motivation for pursuing change was to 'put PG teaching on the map' - as Paul states.

| Informants – CS1: Building Project | | |
|---|---|---|
| Name (Anonymised) | Organisation | Role During Project |
| Karen | Management School | School Administrator, formally responsible for the building (Buildings Manager) |
| Marianne | Management School | Head of School Administration |
| Gabriel | Management School, Accounting and Finance | Assistant Dean of Finance |
| Rachel | Management School | Employed by Management School to interact with Estates department of University; Building Project Coordinator |
| Philippa | University, Facilities Department | Now: Senior Project Manager (was familiar with, but not directly involved in the project) |
| Sarah | Management School | Dean of Management School |
| Paul | Management School | Head of Post Graduate School |

***Table 3.1*** *Overview of research informants and their roles – CS1: Building Project*



The Stakeholder Committee initially consisted exclusively of stakeholders from within the management school. It had a chair and a secretary, but apart from these two roles no initial functions. The committee was chaired by Paul, the Head of the Postgraduate (PG) School within the management school, and the Management School Administrator, Karen, volunteered as secretary to take the Meeting Notes. The initial meeting was initiated through an open invitation from the Head of the Postgraduate School. According to the Meeting Notes, an attendance of nine members of staff was recorded for the initial meeting in November 2000.

Further meetings took place from November 2000 till April 2003, according to the Meeting Notes. The Stakeholder Committee met at irregular intervals approximately six times per year. In total, 23 meetings are documented between November 2000 and April 2003 (see Appendix D, p. 225, for a complete list of Meeting Notes).

It was Paul who invited a number of academics from all departments in the school to the first meeting. This meeting was the first of what would become the Stakeholder Committee meetings. Although initiated by Paul in his role as Head of the PG School, the Committee became an entity that was formed and run autonomously within the Management School. Thereby I mean that it was a stakeholder-driven endeavour, not one that was sanctioned or imposed by the leadership of the school or the university. It existed outside of formal structures and routines, such as regular administrative meetings. During the first meeting the interests of individual participants in the project were shared. These interests ranged

from the creation of more teaching space, installing improved and future-proofed IT solutions to interests in the promotional image of the school.

### 3.3.2 "Gathering People" – The Stakeholder Group Reaches Out

Once space for discourse (the Stakeholder Committee) had got created by setting up the first meeting and coming together as a group for the first time, discussions could take place. Specific topics were identified, such as IT integration, and members of the group volunteered to do some research on these topics. The emergence of specialist topics was met by the recognition that it would be better to split the group up. The sub topics were being identified, as is evident from Meeting Notes. The group formed sub-groups which would then meet individually to discuss specific topics, and eventually the whole committee would reconvene. Also, small groups of two people would agree to take on specific tasks, for example to develop a business plan for the next meeting or a financial overview (i.e. during the first and second committee meetings) and a central person volunteered to monitor the progress of activities that were taking place in sub-groups.

***Figure 3.4*** *The completed building extension of the Management School (interior view)*

During the further course of the committee meetings the group realised that more specific information was needed. As a result, the group consulted both upwards and laterally in the hierarchy of the enduring organisation (the University and the Management School) –talking to specialists from other university departments, such as Facilities Managers, as well as to the Interim Dean of the Management School. As meetings continued, the committee, that consisted of 12 core members, invited other members of staff from within the university to discuss specific project-related aspects, i.e. the view from the Facilities Management Department. These specialists introduced building requirements and established a financial framework for the project. As the project continued, the committee 'gathered people higher up in the hierarchy', as Paul recalls, from across the school and

university. They later called on the Interim Dean to promote the further pursuit of the project. This had implications on the temporary organisation as it became less driven by the Stakeholder Committee but more dominated by central functions higher up in the school and of the university.

### 3.3.3 Establishing Structure– Decision-Making Bodies and Project Groups

**The University Finance Group**

While the project had so far been in a pre-planning phase without gaining final approval by the university, it was around the end of 2001 that the *University Finance Group* approved the project. The University Finance Group is a body that meets regularly and is responsible for the approval of financial decisions across the university. Proposals for the new building and the release of funds had to receive approval from this group before design and construction could commence. Members of the finance group were senior members of the University, the pro-Vice Chancellor, the Chief Operating Officer and the Director of Finance. From this stage on, the project moved through defined stages, as established by the Royal Institute of British Architects (RIBA).

**The Project Executive Group**

As a result, the project became officially structured and regular meetings and decision-making mechanisms established, such as the Project Executive Group and the Project Design Team. The *Project Executive Group (PEG)* comprised representatives from the School, the Dean and a champion representing the end users, functions from the University, the Deputy-Vice Chancellor, the Director of the Facilities Department, Chief Operating Manager and the Internal Project Manager. Members external to the University included an External Project Manager, quantitative surveyor and a cost consultant. The PEG was the main decision-making body of the project, it executed control over the project by checking finances and progress. This group was also responsible for signing off the different stages of the project in order to proceed to the next stage.



**The Project Design Team**

The *Project Design Team (PDT)* met every two weeks. It was a body that brought together the external contractors who had collaboratively made bids to the university initially. Both the internal and external project managers joined this group. Apart from this, a mechanical, a technical, and a structural engineer were also members of this group together with a CDM coordinator. The architects sat on this team as well. Throughout the RIBA stages this group made technical decisions regarding the design and construction. If issues could not be clarified within this group, they got delegated to the PEG.

### 3.3.4 Professionalisation – The Project Becomes Integrated Into the Established Hierarchy

Two years on from the initial meeting of the Stakeholder Committee the dynamics had changed. The architects arrived and joined the group, and now it was they who took the Meeting Notes (Meeting Notes, 04/09/2002). Around the same time the Dean of the

Management School appointed a "champion" who took over as chair of the Stakeholder Committee. This champion got selected for specific reasons, which had to do with his position and reputation amongst members of staff. As the Dean stated: '(…) he is a person that everybody would trust I think and he is a very strong, you know, a calm person.' Further, the previous chair of the group, Paul, the head of the PG school, pointed out that this development was the first shift towards a more professional approach to the project since the champion was the Associate Dean of Finances and therefore had project relevant qualifications that the previous chair had lacked. While previously the stakeholder group had drawn on other functions in the school to promote their concern, now it was the Dean who installed a champion to communicate and negotiate her vision of the school's architectural and organisational future to the stakeholders.

The self-directed activities of the Stakeholder Committee began to be phased out. It was now the architects who were conducting research into aspects of the project, reporting back to the group and documenting discussions. Only in a few cases did members of the group take actions related to the further development of the project. It further seemed as if the arrival of the architects led to a partial neglect of previous work by the Stakeholder Committee. The architects consulted the group to learn about issues, requirements and previous inquiries undertaken, starting out with holistic inquiries in order to understand the school's characteristics and organisation from an outsider perspective. During this process they familiarised the group with their way of working, introducing them to the role of a briefing questionnaire (Meeting Notes, 10/02/2003), presenting specific assessment methods (Meeting Notes 16/4/2003) and the deadlines and stages along which a building project is organised (Meeting Notes, 05/02/2003), to give a few examples.



### 3.3.5 Dynamics of Participation in the Building Project: From Bottom-Up to Top-Down and Ad-hoc to Planned Procedures

The preceding description of the Building Project shows that the early phases (Phases 1&2, see Figure 3.6) of the project are specifically interesting with regard to the dynamics involved in creating an organisation. When the Stakeholder Committee first meets and decides on further measures to establish a project, a temporary organisation is created in a way that allows its members to participate and shape it.

Across the development of the project, though, the organisation changed. Overall, a development from an organisation which was formed as a bottom-up initiative to one later turning into a hierarchically-owned project can be observed. The figure below (Figure 3.5) shows a graphic representation, rather than an objective account, of the development of the Stakeholder Committee meetings, based on the Meeting Notes. Meetings are arranged in chronological order, starting on the left at the beginning of the project – the first meeting. The chronological development happens to correspond with the change from an experiential and exploratory inquiry into the purpose of the project and the need for organisation around the project to a planned and formalised process (following the RIBA-defined stages) adopted to achieve a pre-defined outcome.

I further added a second dimension, reflecting the participatory character of the

organisational design. “Bottom-up” stands for an approach to organising that is self-directed by motivations based on the intrinsic interests of those who join the organisation.

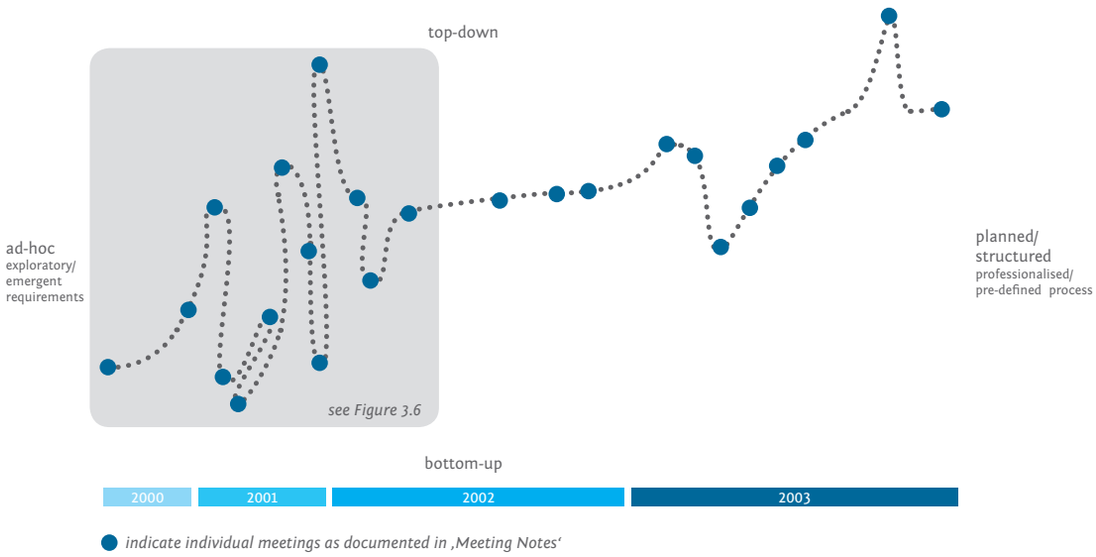



***Figure 3.5*** *Graphic representation of the changing characteristics of group meetings – from CS1: Building Project*

The organisation starts off as a bottom-up, stakeholder-driven initiative, brought into being by those who are exposed to and experience the circumstances which require change and whose motivation to participate is based on this experience. The Stakeholder Committee then move between having autonomy over their own decisions and being exposed to decisions made by people with the relevant professional skills and responsibilities in the university.

The overall developments described above can be segmented into phases (see Figure 3.6) that portray the growing inclusion of roles and functions into the project. During Phase 1 the initial stakeholder group firstly interacts with itself before going out to interact with specific functions in the university. This phase represents a pre-planning stage, where definition of the purpose of the organisation is being negotiated before any plans or specific decisions on aims and objectives are made. While the first, second and third phases are mainly driven by bottom-up decisions made within the stakeholder group, the transition to the fourth phase represents a change in decision-making dynamics. Here interactions widen to stakeholders outside the university and decisions are made from within the hierarchy of the enduring organisation, the university, from the top-down (Figure 3.6).

With regards to the creator-to-artefact relationship, the role of the Stakeholder Committee changes too. It shows development from a group that forms an organisation to pursue a specific purpose, here embodied in the establishment of a project, to a group that is on the outside of a project. The group as the initiator and creator of a project then becomes marginalised by those who claim ownership of the project as it gets professionalised.

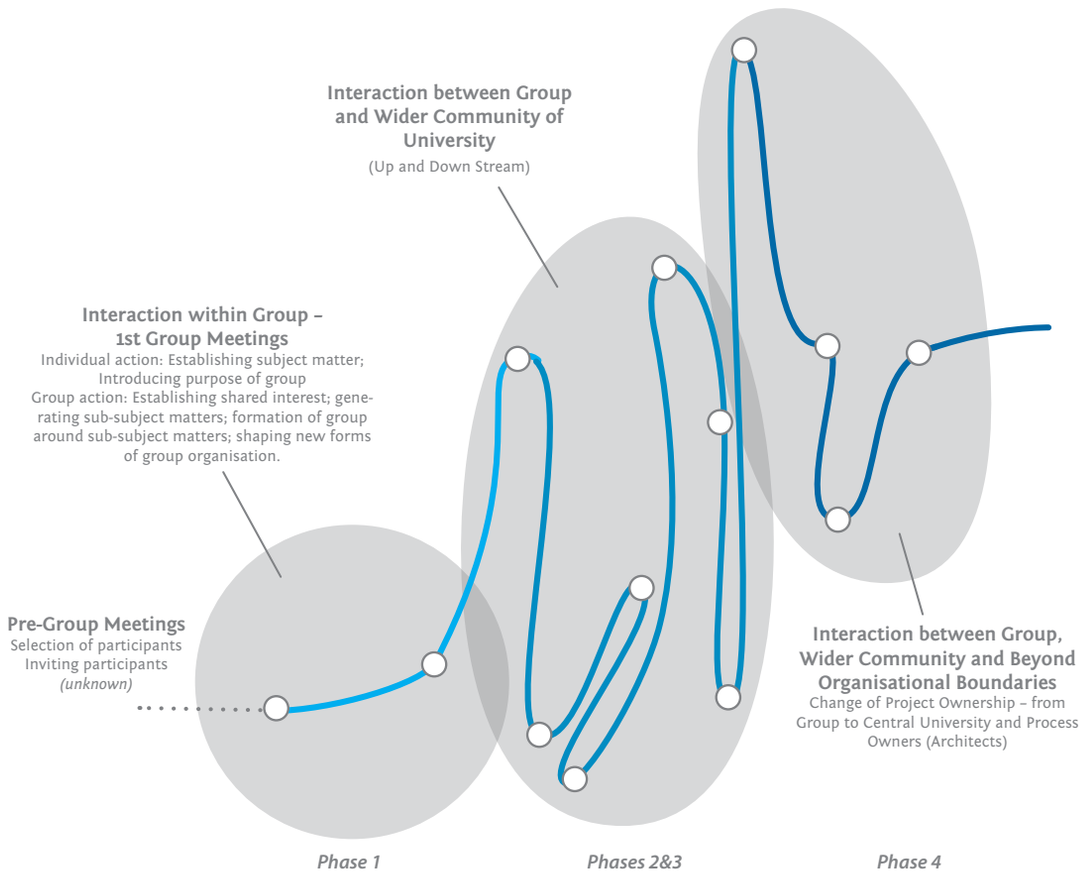



***Figure 3.6*** *Graphic interpretation of changes in decision-making dynamics: from bottom-up to top-down– from CS1: Building Project*



The artefact, the project, emancipates itself from its creators, the Stakeholder Committee (Figure 3.7).

### 3.3.6 Justifying the Selection of the Building Project Case Study

The choice of a temporary organisation as case study seems likely to provide insights into moments of organisational creation which are manifest in the early stages of organisational life and the initial activities that lead to the establishment of an organisation.


***Figure 3.7*** *Development of relationship between Stakeholder Committee and the overall project*

This project as a bottom-up initiative provides an environment for inquiry into forms of organising that resemble distributed, rather than self-determined and autonomous settings.

> In response to Research Gap 2 (see p. 33), which states that design management theories mainly consider monolithic structures of enduring organisations, this case represents a dynamic, stakeholder-driven organisation that builds on pre-existing roles (taking advantage of existing roles and responsibilities, such as Head of the Postgraduate School), but avoids establishing a hierarchical structure and formalised responsibilities.

It is interest-driven and participation is motivated through intrinsic intentions and interests. The lack of a leader or founder leads to considerations over whether co-design activities might be involved in creating this artefact. Apart from the architects, no officially recognised designer is involved, nor are consciously articulated design activities recognised by the interviewees. The person who might be considered the founder, the Head of the Postgraduate School, Paul, takes on a proactive role. It is, though, more a role of moderation – of the different interests of individual members of the organisation. Also, throughout the meetings, a variety of members influence and determine the further development of the group and a centrally allocated decision-making role is difficult to identify. All this suggests to me that this case represents a collectively created organisation that shows the characteristics of a distributed organisation as described in the literature review (see p.15), i.e. an organisation with shared responsibilities, that functions without a central allocation of power, which applies to the early phases of the project. It also provides insights into the further development of a newly created organisation that is linked to an enduring organisation with established structures and hierarchies, thereby allowing for the potential identification of the effect of different forms of involvement and directive on organisations. It represents an artefact as dependent on its creators, an organisation at a phase where its structure has not yet distanced its members from the purpose of the organisation and each other.



Different forms of organisational design are identifiable as the organisation gets established, grows and becomes formalised. From an organisation that is self-motivated and inquiry-driven to the imposition of structures, aims and goals that drive the organisation.

> The first two interpretations suggest a rich environment for a grounded inquiry into dispersed ways of creation and design, which would address Research Gap 4 (see p. 34): organisational involvement beyond imposed decisions and defined, formalised role understandings.

The social complexity and at the same time limited extent of the case's stakeholder group makes the multiple interior and exterior influences an organisation can be exposed to more transparent and identifiable. It is also an example of an organisation that does not react to superior instructions but forms around a commonly shared desire for change.

### 3.4 Case Study 2: The Performance Project Case

Compared to the Building Project, the Performance Project was a more compact rather than longitudinal case study. The following account therefore focuses on a sequence of rehearsals that led up to the performance, the wider organisation around the performance, and the dynamics surrounding the event, rather than being structured by successive project phases.

The Performance Project case is based on live observation of an art performance that involved performing artists and brass music players[2]. The artists who conceived of the brass Performance Project were members of an Australian Performance Project trio. Two of the artists travelled to England for the Performance Project.

The performance in England was commissioned and partly funded by an art and

| Informants – CS2: Performance Project | | |
|---|---|---|
| Name (Anonymised) | Organisation | Role During Project |
| Matthew | Artist Group | Artist |
| Peter | Artist Group | Artist |
| Catherine | Festival Organiser | Director/CEO |
| Liz | Collaborating Organisation | Programme Coordinator |
| Tom | Graphic Design Studio | Graphic Designer |
| Christopher | Brass Band | Musician: Contest Secretary/ Bb Bass |
| Irene | Brass Band | Musician: Principal Cornet |
| Robert | Brass Band | Musician: 3rd Cornet |
| Andrew | Brass Band | Musician: Eb Bass |

***Table 3.2*** *Overview of research informants and their roles – CS2: Performance Project*

technology conference, but took place during and was advertised as an integral part of a community festival that took place parallel to the conference. The Festival celebrated the arrival of the Olympic torch in England, in Spring 2012. The artists had strong, close links to the Art and Technology Conference organiser whom they had done a similar project with the year before. To the Festival organisation, in contrast, the artists didn't have a close and trustworthy relationship, as became apparent during an interview with Catherine, the Festival organiser.

The conference organisers collaborated with the Festival and subsequently the performance got integrated into the Festival's programme. The artists, however, were financed by the conference, not the Festival.

2 A detailed account of the research setting is given in Chapter 4: Research Design. In Section 4.5.1 I discuss my relationship to the research context and the music performance group studied.

### 3.4.1 The Artists

The artist group consisted of three individuals who have a background in music studies and journalism, as well as academic research. The two artists who were present that day, Matthew and Peter, were both pursuing a PhD. The performance formed part of an ongoing series of performances that use similar sets of mechanisms to engage musicians in a non-hierarchical way. The critique of the classical organisation of orchestras, and the resulting separation between musicians, audience and space, is the artists' fundamental motivation to conduct participatory performance projects. I like to describe the artists' organisation as a nexus-organisation, as they form a core or *nexus*[3] around which they temporarily form performance projects that dissolve after a short period of time while the nexus organisation endures (see Figure 3.1).

The structure of the performance was such that a few rehearsals were staged before the final performance took shape. The whole event extended over two hours with seven rehearsals staged at different outdoor locations. Each rehearsal lasted for approximately 15 minutes and there was an hour's feedback and coffee session at the end indoors, during which the artists explicitly asked the musicians for feedback on the organisation of the event as well as recruitment. They also shared video recordings of the choral performance they had organised a few days earlier.

### 3.4.2 The Musicians

The group of musicians consisted of 10 individuals in total, the majority of whom were members of one brass band, located in the same city. Apart from these, two individual musicians, one with a professional music background, also took part. In addition to the musicians and the artists, a project manager, employed by the Art and Technology Conference, was part of the group during the performance. He was responsible for time keeping and in contact with photographers and documenters, hired by the conference, that would arrive later. A few friends and family members of musicians attended and followed the group throughout the performance.



The musicians all brought their own brass instruments to the performance. The selection ranged from tubas to trumpets and horns.

### 3.4.3 The Festival as Part of the Wider Organisation

The Festival was organised by a collaboration of 7 partners, ranging from councils to event management organisations, community organisations and the Art and Technology Conference. It took place at an open space area within a newly developed media business and culture complex in one of the major cities in Northern England. The Festival was a free half-day event staged at three different locations across the complex. The Festival offered a stage for community groups by encouraging them to collaborate with artists of their choice for the development of art, music or other artistic performances. The organiser of the Festival, Catherine, described the collaboration between a number of neighbouring

3 The term 'nexus' in this section is based on a definition as 'a means of connection between (…) things in a series ; a connected group or series.'(Anon 2014)

councils, event management companies and local communities as politically complex and the Festival in general as planned on a tight schedule. The first ideas were discussed in Autumn 2011, the project bid for the Festival got approved in early 2012, and work with communities started only two months before the Festival took place, in Spring 2012. She highlighted that this was the first time that anyone had done something like this on the site. Figure 4.2 (p. 71) illustrates the time line of the projects, collaborations and the development of the Festival. This anonymised map was co-produced with the informant, the organiser of the Festival, during a one hour interview.



***Figure 3.8*** *The group of musicians – from CS2: the Performance Project*

### 3.4.4 The Art and Technology Conference as Part of the Wider Organisation

The Art and Technology Conference is a yearly conference with an extensive accompanying art and music programme. While the conference takes place at a central venue, music and art performances take place across the city. It is internationally renowned and attracts academics, practitioners and artists alike. Its founder and main organiser also works in academia and conducts research into open data, cities and new media in general. In 2012 the conference took place over four days in spring. Apart from the head of the conference, Thomas, three staff were responsible for the music programme, one music programme manager and two music programmers who together organised and arranged the music-related performances around the conference.

The conference organisers provided the project manager, photographers and videographers that documented the Performance Project. The head of the conference together with a keynote speaker arrived together to attend parts of the performance.

### 3.4.5 Creating the Conditions for a Performance

But before the artists could engage with the stakeholders they had to create the conditions

that would allow them to carry out the performance. As one of the artists stated: 'we have to manage a lot before we can be creative'. Such managerial actions included the organisation of financial funding through funding bodies in the artists' home country and negotiating with a set of stakeholders from the Festival and the Art and Technology Conference. They, for example, were in close contact with Catherine, the organiser of the Festival, who herself had to manage and mediate between a very diverse set of organisations and participants, ranging from artists to community groups, councils to property management companies. This demonstrates the complex and distributed organisational setting that was involved in staging a two-hour performance.

The interaction with the actual participants came late in this process, only after the artists had arrived in the UK, two weeks prior to the performance.

Managing the conditions could take different forms: from writing applications for funding, organising travel arrangements, mediation between different organisations, to the management of expectations of participants and development of situated knowledge about their local cultures.

### 3.4.6 The Performance

Once in the UK, the artists invited potential participants to rehearsals. As the artists said, they use these rehearsals mainly to make participants familiar with their way of working, and to get a feeling for what they can ask participants to do and what participants feel comfortable with. Although the artists do not adhere to a predefined, formalised process, they have their internal processes. These are not formalised nor put down in writing, they compare more to lived and relived experiences from past performances which get reconsidered and adapted constantly through interaction with each other and participants.



Part of their initialisation procedures is to familiarise participants with the language artists use, the kind of instructions they give and how they expect participants to transform them into actions. These are less about giving a clear outline of what will happen on the day of the performance, or communicating a script for a performance than co-creating a scaffolding, flexible but defined patterns of interactions that will enable effective communication and operation during the performance.

This way of recruiting participants was supported by the conference that had sent out newsletters via email to previous delegates. Still, in addition the artists contacted established brass bands in the vicinity to recruit more participants.

While the Festival organisers advertised the performance as bringing together ''masses' of musicians playing identical instruments' (text from the programme leaflet) and the conference project manager promoted an expected participation of 150 musicians (internal email communication), the actual number of 10 participants lagged far behind such expectations.

On the day of the performance, seven individual rehearsals were staged at different locations with different musical instructions. The map (Figure 3.9) shows the different locations and their sequence. The circles around each event location reflect the number of

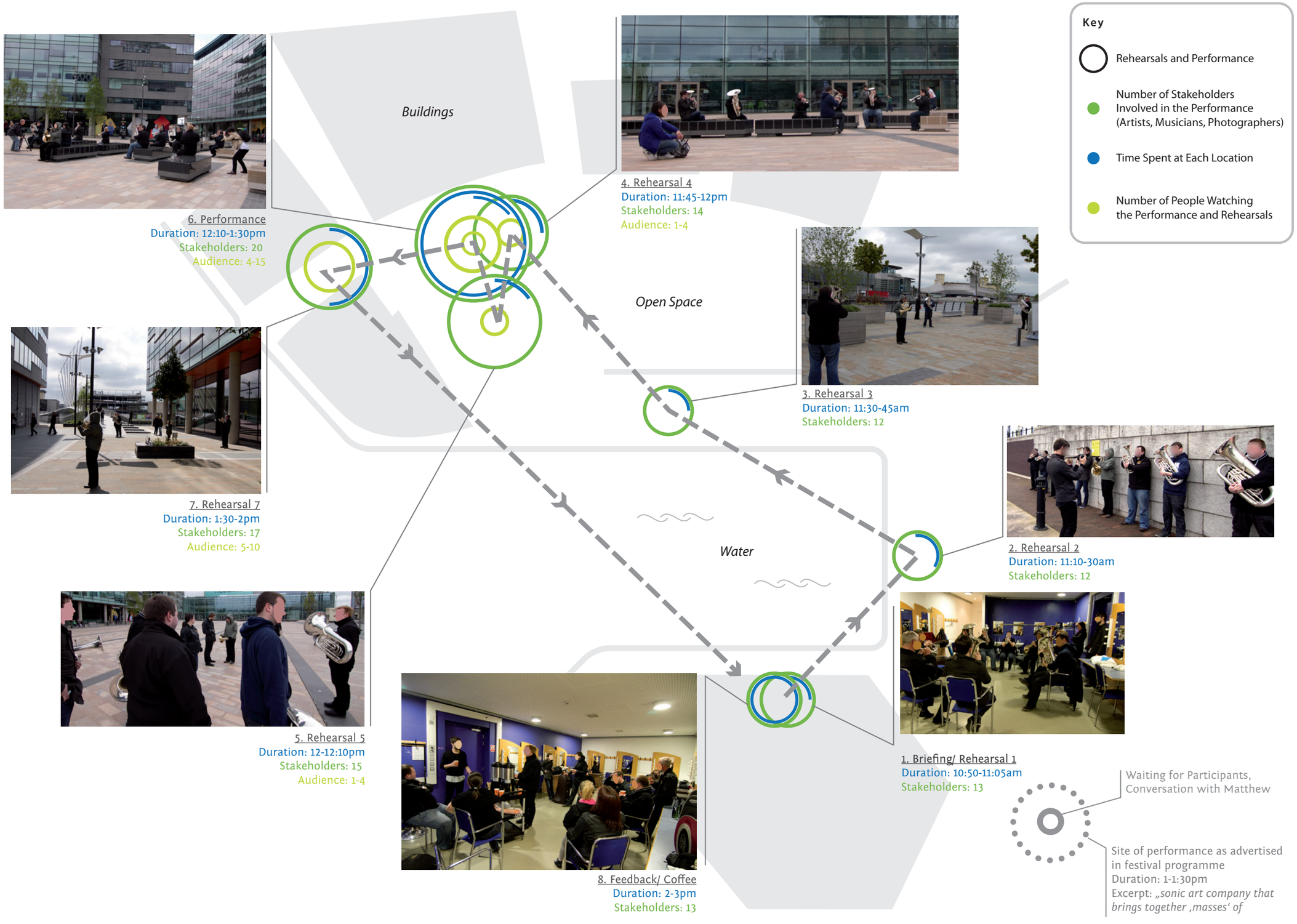



***Figure 3.9*** *Map of rehearsals and performance – from CS2: Performance Project*

attendees and spectators.

After the first four rehearsals, photographers who were supposed to document the event for the Art and Technology Conference arrived. Now the arrangement of performers followed instructions not only oriented along the artists' intentions and aims, but were negotiated between the photographers and the artists and then communicated to the performers through the artists. At one point, the performers were asked to arrange themselves within a square, outlined by lines on the floor of the outdoor space they were performing in. Another time the performers were sat on stone benches, arranged across a compact area at one end of the same outdoor space.

Shortly after the photographers other documenters joined. The arrival of videographers, audio professional and conference organisers distinguished the performance from the series of rehearsals.

Instructions could range from rather clear and brief, loudly voiced one-directional commands to more discoursal, bi-directional considerations of ways to change the tunes and scores together with the performers. The arrival of the documenters changed the dynamic of the group. The artists became more commanding and the whole atmosphere became more official, feeling more like a real concert in contrast to the succeeding series of rehearsals and ad-hoc decisions. For the first time during the day there was a real audience, although it was comprised mainly of professionals hired to document the event.

All these activities and interactions would finally create the conditions that allowed the artists to improvise, iteratively explore specific spaces and creatively arrange resources and people until 'everything comes together' (as Matthew stated during an interview), until they feel that their creative process and the interaction between participating musicians has created something that resonates.



### 3.4.7 Dynamics of Participation in the Performance Project: Fluctuating Between Involved and Distant

A significant characteristic of the Performance Project is the nature of its development. The quality of this process is characterised by the artists' intention to keep everything flexible and open for as long as possible, referring to the decisions they make on the musical and spatial arrangement. As their performances are site specific they often have to deal with existing circumstances and contexts and work with resources available. A central quality of this process is emergence – the emergence of ideas and the emergent quality of decisions on the musical as well as spatial arrangement. This is illustrated by the artists' account of a conversation they had on their way to the performance. This also concerns the uncertainty of artistic results, as it refers to the unpredictability of the effect of arrangements. Sometimes significant innovative ideas are articulated only very late in the creative process, literally just before a performance.

During the sequence of rehearsals that led up to the final, central performance piece, both artists were reiteratively instructing participants on the tunes and scores to play, then stepping back from the band, walking around and through the performers, listening to

the performers, taking pictures and video recordings, putting their heads together and privately discussing with each other, before they would alter the instructions for the music played and for the spatial arrangements of performers. During these periods of listening and consultation, they shifted from being involved participants to observers. The group of performers itself would rarely interact with each other apart from the co-creation of music pieces. Discussions with artists and performers centred around clarification of the tonal ranges that specific participants could cover with their instrument, spatial arrangements according to each instrument, including suggestions from participants to modify the musical arrangement. During the sequence of rehearsals and performers a clear distinction between artists and performers was maintained.

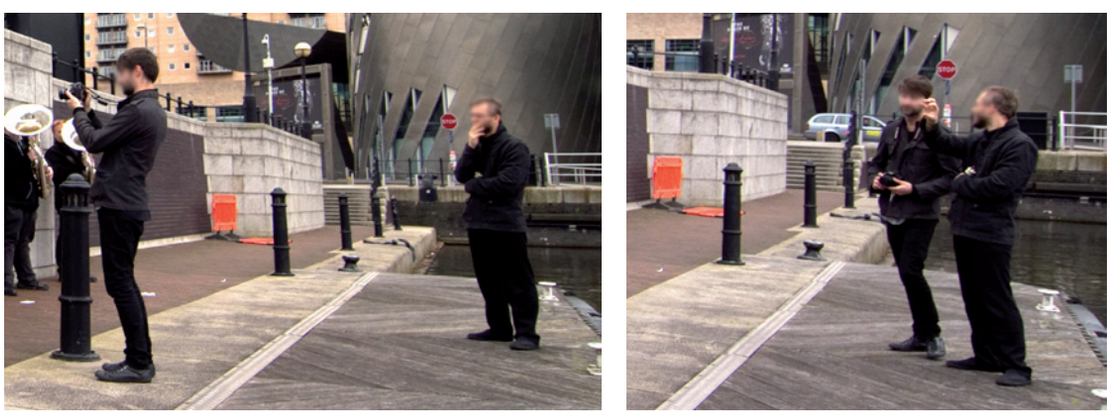


***Figure 3.10*** *Artists observe, reflect on and discuss a music piece during the Performance Project*



This process of iterative modification continued until everything "came together", as the artists describe it, meaning until the artists felt that the musical performance is harmonious and thereby also sensing that the musicians are feeling comfortable with what they are playing.

This kind of working structure requires flexibility from the artists and their temporarily created organisation. The music participants are constantly being moved around, asked to change their melodies and respond to revised requirements. Flexibility and spontaneity is key in this kind of open-ended and iterative organisational dynamic. Artists orientate their choices for organisational changes along aspects of spatial aesthetics and band-spectator interaction rather than the officially promoted structure of the Festival programme. They, in fact, ignored any dimension formalised in the programme (time, space, number of participants) in favour of the constant re-organisation of established relationships (a body of musicians) in space and time according to their subjective perceptions. They would though co-operate with direct demands made by the photographers to change the organisational shape.

The introduction of external interests in addition and potential contrast or conflict to the interests of the artists and their research interests becomes apparent in this event. The photographers and videographers were responsible for the representation of the

performance, serving to translate the temporality of this event into lasting impressions that can be reused and re-edited through media and digital technology.

***Figure 3.11*** *Photographers and documenters join the Performance Project*

### 3.4.8 Justifying the Selection of the Performance Project Case Study



Above I have started to outline some of the characteristics of the organisational design apparent in the Performance Project Case. Open-endedness, flexibility and emergence are some of the characteristics that make this case interesting, in addition to the Building Case, as it represents a temporary organisation within a less flexible, established context. This case is an organisation that in its formation is planned and structured into those who make decisions and instruct others and those who act on behalf of those decisions (the musicians). This the latter do with flexibility, retaining a certain autonomy over their own performance. They can choose the order in which to play specific tunes and when to play them in response to the other participants' performance. This organisation (and I am focusing on the musicians and the artists) can be considered a consciously formed organisational artefact, formed by the artists as a situated artefact. In other words, this is a group of people that are part of an experiment that is specific to a certain space and time. The arrangement of the group in space and the variation of this arrangement in regard to its interaction with space is a crucial part of the artists' work and the purpose of the organisation. Musicians are carefully arranged and different locations are tested, with the emphasis on sound and visual quality. This therefore makes it a case that clearly differs from the Building Project and at the same time provides more detailed insights into observable, live dynamics of creating an organisation.

While in this case the artists can be considered designers or someone in charge, they have to combine their creative ideas with skills that enable them to organise people. And this they do through an open-ended, planned but spontaneous process. This co-existence

of creative ideation, planned interventions and spontaneous improvisation seems a rich research context. I became aware of the complexity of interactions while taking part in a rehearsal myself and found the constant move between managing people and developing new ideas compelling.

> This case also represents a distributed organisation, in response to Research Gap 2, the observation that design management mainly inquires into monolithic, enduring organisations.

This case is temporary and rather porous in relation to its environment. It is highly dependent on collaboration with other organisations and individuals. Although it can be considered an enduring organisation in itself, the artists' team as an organisation would be incomplete without participants. Therefore openness and permeability are crucial design characteristics of this project. This temporary organisation is interesting, as well, due to its lack of integration into an enduring context, which is often said to be characteristic of temporary organisations (Bakker 2010). Indeed, the context that provides the 'key resources of expertise, reputation, and legitimization' (Grabher, 2004 in: Bakker, 2010, p. 468) are two temporary organisations themselves – a festival and a conference.

### 3.5 Conclusion

In this chapter I introduced the two case studies which form the research context for this thesis by describing their individual characteristics. Both cases are temporary organisations, which exist only for a limited amount of time with a temporary set of stakeholders and distinct relationships to enduring organisations. Beyond this, in-depths accounts of both cases underline the structure unique to each. This includes an approach to documenting the cases through narratives that elicit their specific anatomy. For the Building Project case this involved the description of successive stages of organisational development, while for the Performance Project case this required the description of the social dynamics involved in creating and maintaining the organisation.



This chapter also elicited the unique mechanisms of stakeholder involvement that each case displays. From a deep involvement in the early stages of purpose definition (CS1), to a more facilitated and directed involvement of stakeholders in an open-ended form of organisation (CS2).

Now that an overview of the case studies has been given, the next chapter will introduce the research design and methodology that I applied in inquiring into the cases.

# 4 Research Design, Methodology and Analysis

## 4.1 Introduction

Decisions about the epistemological and ontological nature of a specific research project can determine the methodological approach, as methodologies are located within a specific epistemology and ontology, whether implicitly or explicitly. Still, the matter is not straight forward and during the research project I have experienced forward and backward movements when reflecting on methodology. Forward describes the process of methodology selection based on the ontological and epistemological position of my own research approach, an approach where research questions guide the selection of research methodology - the choice between qualitative and quantitative (Corbin & Strauss 2008, p. 12). Backward describes the revision of such selections while the research is under way and the practicalities of data collection and analysis become influenced by circumstances and findings as well as changes in the researcher's understanding of the subject matter. This process of selection and allocation of appropriate methodologies within the research process can be described as a tidal movement, an ongoing swing of the reconsideration of epistemological and ontological questions in confrontation with and reflection on the experiences made in the field. This does not, however, liberate the researcher from a consistent, rigorous approach to research design.

This research is characterised by an iterative progression of data collection, moments of analysis and the evolution of research questions. Early engagement with the field had been preceded by a short and exploratory overview of the literature in three main areas: organisation, design and participation. This was guided by the intrinsic motivation to learn more about the way members of an organisation take part (or are inhibited from taking part) in shaping an organisation. While participation was the initial lens I was looking through at organisation (organisational participation, HRM, Involvement/Engagement) and design (Participatory Design, Co-Design and other forms of user-involvement in design) it later became a less important dimension. Instead the understanding of organisations as artefacts themselves and the way they are shaped came into closer focus.



In this chapter I will first locate this research within established research paradigms by identifying relevant ontological and epistemological models. I then present the chosen research strategy (case study research) in more detail, together with an overview of the Grounded Approach to analysis. Material collection methods are subsequently presented for each case which leads to a detailed account of the process of analysis, segmented into five phases: *Familiarisation, Exploration, Reflection 1, Convergence* and *Reflection 2* (Figure 4.3, p. 74).

## 4.2 Considering Research Approaches

### 4.2.1 Research 'Into' or 'About' Design

This research is placed within the category of 'research *into*' (Frayling 1993, p. 5) or '*about* design' (Granville 1997 in: Jonas 2012. p. 35).

Design research has been separated into a number of strands: research *into*, research *through* and research *for* design and art (Frayling 1993) or research *for, through, about* and *as* design (Jonas 2012). These distinctions reflect a design specific discourse, since art and design operate in knowledge domains where thinking can be embodied in other ways than written communication. This becomes apparent when considering Frayling's (1993, p. 5) account of research *for* design

> '(…) where the goal is not primarily communicable knowledge in the sense of verbal communication, but in the sense of visual or iconic or imagistic communication.'

The location of this research within the realm of research *into* or *for* design might be helpful for the reader, as it will provide orientation as to the character and structure of this work. Research into design has been described as inquiry 'into a variety of theoretical perspectives on art and design' (Frayling 1993, p. 5) and this is fundamentally what this thesis is doing. It starts out by exploring and questioning several theoretical statements on design and its relationship to the organisation. This research is a more detached endeavour compared to 'research *through* design', which integrates elements of action research (Frayling 1993), where the researcher actively intervenes in the empirical research context (Cole et al. 2005). This research, in contrast, resembles 'research *about* design' (Glanville 1997 in: Jonas 2012, p. 35), where the researcher is outside the design system studied and aims to explore 'various aspects of design' (Jonas, 2012, p. 34).

### 4.2.2 Ontological and Epistemological Positioning of Research



With regards to the ontological dimension of research philosophy, this inquiry is based in a view of reality that correlates with the nominalist position towards the construction of reality by individuals. It believes that the way in which people make sense of the world around them and create reality by assigning labels to objects around them is fundamentally subjective (Burrell & Morgan 1979; O'Dowd 2003; Suchman 2007; Easterby-Smith, Thorpe and Jackson 2012), in contrast to the realist paradigm that suggests the existence of a truth independent from human interpretation (Denzin & Lincoln 2003; Easterby-Smith et al. 2012). This research therefore does not put forward a hypothesis that will be tested by methodologies that aim to generate verifications by finding evidence in reality. It is not so much interested in the quantifiable occurrence of phenomena, but in understanding the reasons and context in which phenomena occur and the reasons for their occurrence, based on individuals' experiences. This is akin to approaches that explore the nuances and motivations of and for human behaviours.

The research design is therefore characterized by an interest in the way individuals make sense of their world and aims to explore contexts which are characterized by the creation of meaning through people's experience (Easterby-Smith, Thorpe and Jackson 2012), their behaviours and actions. This places it in the social-constructionist paradigm, which, according to Burrell and Morgan, forms a part of radical humanism (1979, p. 32). It is informed by principles of nominalist ontology, approaches based in constructionist epistemology (Berger & Luckmann 1991) and makes use of ideographic methodologies, following the assumption that

the 'social world can only be understood by obtaining first-hand knowledge of the subject under investigation' (Burrell & Morgan 1979, p. 5).

Ideographic methodologies form an alternative to nomothetic methodologies that use 'standardized research instruments' (ibid) for the construction of scientific tests through quantitative methods (ibid). Ideographic methodologies support an interest in phenomena that are observable in the real world in comparison to what others have written. It moves this research approach close to strategies that allow for theory generation through data collection (Eisenhardt 1989). Exploring phenomena in their situated context allows for the generation of insights that otherwise would have gone unnoticed. When inquiring into dynamic environments such as organisations, methods that allow the researcher to understand phenomena through subjective, personal observation are more likely to yield deep insights than methods that limit the researcher to learning about the perceptions of others through statistical analysis of instruments such as questionnaires or surveys (Mintzberg 1979), e.g. when studying the effect of the environment on organisational structure, it is arguable whether useful conclusions can be drawn from a study of 'perceptions of environment' rather than the 'environment' (ibid p. 586). It is not the interest in the generation of meaning as universal truth or as 'meaning' (McKeon 1998) that drives this research. It is interested in situated meaning making, i.e. meaning as relevance or 'what is meant' (ibid), rather than a truth that exists independent from the context and the subject that makes sense of a situation. This has implications for research design. Here, Mintzberg (1979) points out, the researcher's choice is not between true or false interpretations but more or less useful ones.



Where hypothetico-deductive research is about testing deducted hypotheses (White 2006) inductive research, such as Grounded Theory, in contrast, aims at generating theory, rather than testing it (ibid) under controllable conditions, such as a laboratory would provide. Inductive research acknowledges the complex and messy character of organisations, which calls for exploratory but rigorous methods (Mintzberg 1979). It becomes clear then that creativity and interpretation form part of research and analysis (see, for example (Glaser 1978), as

'the data do not generate the theory – the researcher does' (Mintzberg 1979, p. 584).

This aspect of the individual researcher's ability to creatively make sense of materials and extract novel insights is shared by Grounded Theory scholars (Glaser & Strauss 1967; Glaser & Strauss 1968; Glaser 1978; Corbin & Strauss 2008) as well as qualitative research scholars when they describe a 'researcher-as-interpretive-*bricoleur*' (Denzin & Lincoln 2005, p. 375). Even so, research might not be clearly separable into deduction and induction when considering interpretative approaches such as Grounded Theory, as new ideas are said to emerge from the interaction between both deduction and induction, as either on its own does not yield original but 'sterile' thoughts, as Sudabby (2006, p. 639) concludes.

### 4.2.3 Exploring Choices of Research Strategies

The chosen research strategy should reflect and be adequate to the research paradigm

and the subject studied (Denzin and Lincoln 2005). With regards to the choice of research strategy, I considered the following methodologies and research designs that incorporate aspects of induction and are based within a nominalist ontology and a social-constructionist epistemology.

**Mixed Methods**

Mixed methods, the combination of qualitative and quantitative methods for data collection as well as analysis (Gray 2009), has received growing interest over the last few years (Sandelowski 2000; Easterby-Smith et al. 2012). I considered a mixed methods approach that would include questionnaires or surveys for an initial sampling of larger groups of informants, combined with the in-depth qualitative methods of interviews and observations. But I found myself sceptical of the value of the insights generated from large-scale surveys, based in parts on my own experience during a Master's research project and conversations with fellow students who had conducted research using surveys. I had to consider the limitations of the mixed methods approach against its potential opportunities and relevance to research questions. It occurred to me that the emergent character of qualitative research and the early entrance into the field it promotes, suggests a rather flexible and to a degree open-ended research design (Denzin and Lincoln 2005), while the combination of quantitative and qualitative methods would require a more linear and well planned sequence of research (Easterby-Smith et al. 2012). This might be less adequate for a research project that is fundamentally exploratory and inquiring into novel phenomena of design. Further, the generation of quantifiable data is not the concern of the research questions that reflect the positioning of this research in the social-constructionist paradigm. Therefore a strategy that combines methods from different paradigms and potentially leads to contradictory results (ibid) does not appear to be a good fit.



**Participatory Action Research**

I next considered Participatory Action Research, which represents an attitude towards research characterised by doing research 'with' rather than 'on' people (Marshall and Reason, 1997). As an interpretivist approach, such as social constructionism, action research methods enable the collection of materials together with participants or enable them to do so themselves (Collins 2010), e.g. by use of cultural probes (Gaver, Dunne and Pacenti 1999). Its aim is to achieve change of the social context that the researcher enters (ibid) – not a detached position, but a close encounter.

Participatory Action Research (PAR) has a tradition of use in participatory design contexts and originated as a strategy that aimed at the improvement of living conditions (Madden et al. 2014). A core element of PAR as well as action research is a learning cycle. On the one hand, the researcher aims to learn about the participants' way of life and potential improvements (Collins 2010) on the other hand the researcher engages in a learning process together with participants about the research context and the participants' environment (Madden et al. 2014). Marshall and Reason describe a cycle of action and reflection that participants go through while shaping the research together with researchers (Marshall & Reason 1997). A more formalised description can be found in the action learning diagram,

that represents the cycle of action research as four steps: to *plan*, *act*, *collect* and *reflect* (MacColl, Cooper, Rittenbruch and Viller 2005; Collins 2010)

Action research is based on the assumption that a social context, such as an organisation, is constantly changing and best understood by attempting to change it (Easterby-Smith et. al 2012). Although action research is positioned in the same paradigmatic landscape as this research operates in, its focus on the researcher's interaction with research subjects has practical and ethical limitations attached. I found it less suitable for this inquiry into the concept of an organisation as artefact and its enactment, as it is intended for the exploration of a specific social context with the aim of changing a problematic situation. The characteristics of action research, identified by Eden and Huxham (1996), include, as a requirement, a strong relationship between theories as the basis for the design of an intervention which in turn is supported by the research. In the case of this research, the theoretical basis is rather weak. Therefore, I would have felt that the rigorous design of an action theory intervention was not feasible or ethically realisable. Furthermore, action research can be considered an approach adequate for research 'through' design (Frayling 1993, p. 5), while this research, as previously outlined, is allocated to the area of research 'into' or 'about' design space.

Considering the above I will now introduce my final choice of research strategy.

## 4.3 Chosen Research Strategy – Case Study Research and a Grounded Approach to Analysis



The resulting choice of research strategy is a combination of case study research and a grounded approach to analysis.

### 4.3.1 Case Study Research

Small sample, qualitative, multi-case study research (Eisenhardt 1989; Yin 2003; Stake 2005) was chosen as the research strategy. Planned and opportunistic approaches to inquire into real world contexts were combined to attain in-depth insights into subjective perspectives and the ways in which individuals make sense of their role in the process of organising. Analysis is in parts grounded (Glaser & Strauss 1967; Glaser 1978; Charmaz 2005; Suddaby 2006), as well as thematic (Braun & Clarke 2006; Easterby-Smith et al. 2012). It acknowledges the role of the researcher in the analysis and interpretation of data and the consequences and limitations that thereby arise with regards to the transferability of results (Eisenhardt 1989). The data for both cases was collected from primary and secondary data sources. As the character of inquiry into each project differed – on the one hand a retrospective study, on the other an opportunist observation of a live project – the methods used span retrospective interviews, live conversations, audio and video recordings, observational as well as reflective research notes and the study of third party documents such as Meeting Notes and a debriefing report.

The distinction between instrumental and intrinsic interests in cases might be helpful to establish a perspective on case study research. According to Stake (2005), an interest in cases can be either oriented towards the in-depth exploration and learning about a specific

case itself or instrumental, inquiring into a case to learn more about a specific phenomenon that can be generalized beyond that individual case (Stake 2005, p. 445). While in the first type the researcher has an intrinsic interest in the case itself, and the actions and activities within it, for the second, a case is a context from which to elicit information related to a previously formulated, external research interest (Stake 2005, p. 445). A further dimension to this typology is added by the distinction between single and multiple-case studies (Woodside & Wilson 2003; Stake 2006) . A collective case study is described as an instrumental case study extended across several cases, where the triangulation of findings between cases is intended (Woodside and Wilson 2003). While I do not want to review debates about case studies here, I want to point to those parts of the literature that are relevant to explain the methodology chosen for this specific research.

I side with the more instrumental study of cases beyond the intrinsic interest in the complexity of a single case. My intention is to explore data in relation to my research aims and questions; case study methodology therefore is part of the research objective – to create a language and arguments that allow for a better understanding of the relationships, roles and activities within organising practices. Still, since this research is not based on a clearly defined hypothesis, it allows and is open towards the emergence of hypotheses as a result of the, as Eisenhardt (1989, p. 547) calls it, 'theory-building process' through case study research. Yin (2003), in contrast, sees case study data collection and analysis as guided by a clearly articulated theoretical proposition. This partially applies to this thesis, but at the same time it differs in that the propositions that guide this research are based on theory, but evolved along with the primary research, and are therefore informed by a combination of theoretical thinking as well as empirical observations.



Furthermore, the interest in what really happens in comparison to what others have written moves this research approach close to strategies that allow for theory generation through data collection (Eisenhardt 1989). Case Study research is described as one such strategy (ibid). Furthermore, the proposed novelty of the area under study justifies the selection of case study research, as the unpredictable and probably novel character of the data sourced can make a contribution (ibid).

**A Complementary Multi-Case Study Design**

The case studies introduced in the previous chapter (Chapter 3) were selected due to their distinct characteristics, both in terms of the different characters of the projects they represent, but also with regard to the different materials and insights they would provide.

Both cases provide insights that respond to the research gaps and some of the propositions articulated in Conceptual Sketch #1. To summarise, each case responds to Research Gap 1 *(a lack of empirical evidence for an understanding of organisations as artefacts)* and Research Gap 2 *(design theories tend to refer to monolithic organisations)* by:

- providing an empirical context for the study of organisational creation and development,
- representing distributed forms of collaborative organisations due to their

temporary character and participatory settings.

They respond to Research Gap 4 *(organisational theory suggests involvement beyond imposed actions)* by:

- representing a primarily self-motivated involvement in organising as part of CS1,
- providing potential insights into a variety of different modes of engagement (e.g. from self-motivated to invited and instructed), as part of CS2.

Further, both cases integrate a variety of relationships, e.g. those between members within a group, between the group and its outside stakeholders or between novel and established structures. I therefore consider these cases adequate for an inquiry into the proposition that the relationship between the creator and the creation in an organisation differs when compared to other artefacts (see Conceptual Sketch #1, pp. 31).

The cases also contribute to a complementary case study research design: on the one hand there is the retrospective study of a project that expanded over several years and, on the other, the compact and in-depth observation of a two-hour performance. Thereby these two inquiries complement each other as they allow me to consider the longer term development of an organisation while also gaining detailed insights into the dynamics of interactions and behaviours when people organise.

This research design has proven to be a pragmatic approach that compensates for the limitations of either retrospective and observational research methods by taking advantage of each other's strengths through the combination of a retrospective inquiry, covering longitudinal dimensions of phenomena with the in-depth and detailed inquiry into a live event, providing insights that range from a general (overall development of a project) to a specific level (people's behaviours and actions). A more formal approach, as represented by interviews, is thereby complemented by research methods that allow the researcher to 'uncover accounts' that would otherwise not have been accessible (Anderson 2008), thus expanding the array of dimensions of the research context. This can be accessed and documented by combining methods which allow learning from what people say with methods that provide insights into what people do and think (Salvador, Bell and Anderson 1999; Julier 2013).



This correlates with the decision to focus on a smaller group of stakeholders within each of these cases, rather than on the wider organisation around each case, which is based on suggestions that complex and often abstract organisations, in contrast to sub-groups of people, are difficult to study with regards to their specific qualities (Sandelands & Srivatsan 1993). Instead sub-groups offer a more sharply defined research context in which a researcher can observe the specific qualities of organisational culture (ibid), allowing for the experiences of the people involved in organising to be studied rather than the abstract theory of organising.

With regard to previously introduced choices of research strategies, case study research, as represented by this research project, shares characteristics with action research. As outlined by Breslin and Buchanan (2008), case study research can also result in findings, or theory,

that aim at informing practice. This is also true of the contributions this research strives to make.

### 4.3.2 A Grounded Approach to Analysis

Beyond its interest in specific cases and their situated properties, this research is characterised by a parallel progression of data collection, moments of analysis and the evolution of research questions. Early engagement with the field had been preceded by a short and exploratory overview of literature on three main areas: organisation, design and participation. This was guided by the intrinsic motivation to learn more about the way members of an organisation take part (or are inhibited from taking part) in shaping an organisation. While participation was the initial lens I looked at organisation (organisational participation, HRM, Involvement/Engagement) and design (Participatory Design, Co-Design and other forms of user-involvement in design) through, it later became a less important dimension. Instead, the understanding of organisations as artefacts themselves and the way they are shaped came into closer focus. As I ventured into primary research contexts, preliminary observations suggested a departure from participatory design as the guiding framework. Instead I continued to inquire into the dynamics and interactions within cases with an open mind and sensitivity towards situated phenomena.

With respect to the research design and the early venture into the field, this research, although not strictly adhering to Grounded Theory methodology, sides with accounts of Grounded Theory, that describe grounded theorists as interested in starting data analysis early in order to 'focus further data collection' (ibid, p. 508).



> While this research is inspired by Grounded Theory, I should declare that it doesn't strictly subscribe to any single way of doing Grounded Theory, such as that outlined by e.g. Strauss and Corbin (2008), who introduce a number of criteria that can be used to judge the quality of Grounded Theory research.

They see Grounded Theory as both flexible and integrated with other forms of qualitative research, such as Case Studies (Locke 2001). This is supported by scholars who see Grounded Theory approaches as supporting the flexibility of qualitative research by allowing for a variety of data collection methods to be applied (e.g. interviews, field notes, document analysis) (Charmaz 2006). As Charmaz states:

> '(…) the flexibility of qualitative research permits you to follow leads that emerge. Grounded theory methods increase this flexibility and simultaneously provide you more focus than many methods.' (ibid, p. 14)

Further, Grounded Theory embraces the researcher as the central instance for interpreting materials, and recognises the resulting subjectivity (Glaser & Strauss 1967; Glaser 1978; Charmaz 2006; Suddaby 2006) by rejecting claims of scientific objectivity (Charmaz 2006).

I see the subjective character of meaning making specifically reflected by the principles of *Creativity* and *Theoretical Sensitivity*. Glaser, one of the scholars who first formulated Grounded Theory, regards creativity as essential to the construction of Grounded Theory. 'The discovery of grounded theory implicitly assumes that the analyst will be creative'

(Glaser 1978, p. 20). A researcher's creativity, he argues, can be fostered through the concepts and ideas that emerge from the material. Intensive confrontation with the collected materials, including the researcher's observations and memos, represent a prerequisite for the emergence of ideas and concepts. Creativity also relates to the novel quality of insights, 'new understandings of a topic brought forth' (O'Reilly et al. 2012, p. 306), which, however, does not mean that findings are detached from existing literature. In contrast, neglecting the literature to enable creative ideation is recommended, but the results will eventually require comparison with existing theories (Glaser 1978).

Theoretical Sensitivity refers to the mindset with which the researcher enters the research context. Sensitivity applies to the way a researcher approaches the informants, the research settings and interacts with the empirical setting, but it also refers to the researcher's heightened awareness of his or her own biases, concepts and meanings that might be being forced onto the material (Glaser 1978; Corbin & Strauss 2008; O'Reilly et al. 2012). Again, this does not mean that previous knowledge should be neglected, on the contrary, Glaser (1978) suggests that extensive knowledge of the relevant literature will increase sensitivity. When entering the field, though, theoretical sensitivity requires the researcher to be aware of any pre-conceived ideas that might obstruct the emergence of ideas from the materials (Glaser & Strauss 1967; Glaser 1978; Charmaz 2006).

Creativity and Theoretical Sensitivity are part of a set of principles often used to describe Grounded Theory, comprising *theoretical sensitivity*, *constant comparison*, *theoretical sampling*, *theoretical coding* and *theoretical saturation* (Corbin & Strauss 2008; Suddaby 2006; O'Reilly et al. 2012). Locke describes Grounded Theory in a more pragmatic way that acknowledges the many developments it has gone through since its discovery by Glaser and Strauss (Glaser & Strauss 1968). Her definition of Grounded Theory reads as follows:



> 'Grounded theory's distinctive features, as initially presented, are its commitment to research and 'discovery' through direct contact with the social world studied coupled with a rejection of *a priori* theorizing.' (Locke 2001)

**Conceptual Sketches as Comparative Elements**

Inspired by Grounded Theory literature (Glaser & Strauss 1967; Charmaz 2005; Corbin & Strauss 2008), I use a *Conceptual Sketch* as a vehicle to capture and compare propositions as they develop during the research process. At the same time the iterative formulation and review of the Conceptual Sketch facilitates the comparative element which is characteristic of the grounded approach to research (ibid).

Rather than being based on hypotheses, my assumptions about the research are captured in Conceptual Sketch #1, as introduced in the last section of Chapter 2 (Section 2.8, pp. 31) – a first attempt to articulate the conceptual ideas that emerged from my engagement with the literature. This Conceptual Sketch is comparable to a designer's sketch in the early stages of a design process, when new shapes are being envisioned and articulated in order to be shared with others (Lawson 2005). In total three Conceptual Sketches form comparative and reflective elements that are used to exemplify the progression of research

and the development of insights gained during the different stages of analysis.

Finally I want to refer to this research as theory-building research, as described by Eisenhardt (1989, p. 536), in contrast to theory-testing research. Although referring to research questions as helpful, she emphasizes the opportunities that lie in the unpredictable and emergent character of theory-building through research. She describes the process as one in which the construct, or as I would call it, theory and measurement 'often emerge from the analysis process itself' (ibid, p. 542). Still, even though the emergent character of theory from data is dominant, the identification of patterns across several cases, described as 'cross-case patterns' can be a helpful method to limit the danger of deducing 'premature and (…) false conclusions' (ibid, p. 540).

**The Role of the Researcher**

My methodology, strongly characterized by case study research, covers a range of roles of the researcher, from more detached and reflexive to participant-as-observer (Easterby-Smith et al. 2012).

My methodology makes active use of the subjectivity of the researcher him or herself and is aware of the interpretive and reflective capabilities of the individual researcher. This has an impact on the reliability and validity as well as the transferability of data. Since the clear acknowledgement of subjectivity, not only in the character of data, but in the instance of interpretation as well (the researcher), has consequences on how the quality of data and findings is being described, research methodology is grounded in the self-reflexive perception of a researcher, as articulated by advocates of action research methodologies who aim to do

> 'research with and for people rather than on people' (Marshall & Reason 1997, p. 231).

As Charmaz states:

> 'We are not scientific observers who can dismiss scrutiny of our values by claiming scientific neutrality and authority.' (Charmaz 2006, p. 15).

Here I refer to Grounded Theory and the significance of the sensitivity and creativity of the researcher (Glaser 1978; Bartlett 2001; Corbin & Strauss 2008) in making sense of what he or she observes.

Now that an account of the research methodology and approach to analysis has been given I will now move on to provide an account of the methods used for material collection.

## 4.4 Material Collection for CS1: Building Project Case

### 4.4.1 Interviews and Interviewees

For the Building Project case study I used qualitative research methods as well as secondary sources to elicit retrospective information. With respect to the inquiry into primary sources, I used interviews as the main research method. In total seven participants were interviewed

### 4.4.2 Conducting Interviews for CS1: Building Project

Interviews represent the major method used to elicit information from primary sources. At the beginning, for the first interview, I anticipated a structured interview schedule. Similar to a questionnaire or survey, I developed questions relating to the specific case study characteristics as well as the research questions in a structured manner (Yin 2003). I started with a detailed initial interview schedule (see Appendix A, p. 215), segmented into five overarching sections:

1. Questions that concern the structure of the project, its start and end, its focus and stages of development, as well as groups involved.
2. Roles of those involved in the project, asking for who was involved in what capacity. This section also asked questions about participation and its qualities.
3. The third section inquired into the personal involvement of the interviewee in the project, what activities the interviewee took part in and what their impression of stakeholder involvement was.
4. The fourth section is shorter, asking about the mechanisms of participation employed and whether the interviewee had heard of collaborative design approaches
5. At the end of the interview schedule, I asked for any available documents and recommendations regarding other stakeholders the interviewee thought I should talk to.

Prior to each interview, I sent out information to each participant with information about myself, the research project, its objectives and ethical considerations.



> After the first interview I realised that a structured and detailed schedule such as the one outlined above was difficult to follow. Moreover, the information that emerged through the first interview, which had taken on a more conversational character, was richer than the information I initially aimed for. As described by Czarniawska (2002), the respondent told a rich narrative about the project and the organisation which did not necessarily comply with the intentions of the interviewer.

This made me review my interviewing practice and resulted in a more open-ended (Yin 2003) and semi-structured approach (Barriball & While 1994). As Barriball and While (ibid) state, semi-structured interviews are suitable for research contexts where respondents come from different professional backgrounds and for clarifying responses to an inquiry into complex situations (ibid, p. 330). Both criteria apply to the Building Project case study. I used the opening question to ask interviewees about their role in the project and encouraged them to relate their experience of being a stakeholder in the project. Such open-ended questions allowed the respondents to provide facts as well as their own opinion (Yin 2003). I then used the replies provided as the basis for further questions, further detailing some aspects of the response in a process similar to 'laddering' (Easterby-Smith et al. 2012) by asking questions that try to reveal further nuances of aspects of a specific response. I also used a semi-structured approach that is based on the respondent's initial narrative to relate back to my research interests by asking how specific occurrences

relate to themes such as stakeholder involvement.

Occasionally, notes taken during the interviews would support the clarification and further elaboration of significant events, relationships or stakeholder interactions during an interview. In one of the interviews, conducted with two members of the Estates Department of the university, a map that I scribbled down on my notepad, representing my understanding of the groups and stakeholders, unexpectedly drew the attention of the interviewees. One of them spontaneously referred to my drawing to clarify some of the relationships I had documented. A brief discussion ensued about my interpretation and what had been said. This way, I had immediate confirmation and clarification of my understanding of what the interviewees had said by our making 'joint sense of what is going on' (Easterby-Smith et al. 2012, p. 151). Figures 4.1 and 4.2 below show examples of maps that were co-created during interviews. After this experience I integrated this mode of material collection, which is described as 'collecting data through interaction' (ibid, p. 151), and used mapping techniques during subsequent interviews.

Before each interview I practised an ethnographic research routine, not only taking notes of what interviewees said, but taking note of the environment and my impressions and feelings provoked by the interview setting. These served as an aide- memoire to each interview setting and sometimes caught dimensions that were not captured by notes and audio recordings.

Each interview was audio recorded with the interviewees' consent. During the interview I took notes that would help me evaluate the significance and usefulness of specific parts of each interview. This way I wouldn't have to listen to the whole interview but could use my notes as an access point to specific, relevant bits of the interview recordings. In parts I managed to integrate recording times in the notes, which eventually helped me to match the audio recordings with the notes.



**Selecting Interviewees for CS1: Building Project Case**

My primary point of contact was an informant who was the Head of Postgraduate Studies of the Management School at the time of the Building Project. He was a *key informant* (Yin, 2002), someone who not only provided extensive and elaborate insights into the case, but also pointed me to other respondents. As the Head of the Postgraduate School he played a key role in setting up the stakeholder committee and therefore had an in-depth understanding of the stakeholders involved in the project as well as its dynamics and development.

Other respondents were selected in accordance with the key informants' recommendations, and based on the consideration that they should represent a wider section of the stakeholders involved – beyond, but also including, the stakeholder committee. Interviewees include the former Chair of the Stakeholder Committee, the Head of the Postgraduate School, the school administrator, responsible for documenting the stakeholder committee meetings and managing the operational aspects of the Building Project. I also interviewed two members of the Estates Department, who were involved

in the project and other building projects and the Dean of the Management School, who started in the role after the Stakeholder Committee had been set up. I also interviewed the Head of School Administration who at the time of the project represented the Dean during a number of meetings and another academic, who had done some previous research on the same case, and finally, I interviewed the academic who succeeded the Head of the Postgraduate School in chairing the stakeholder committee.

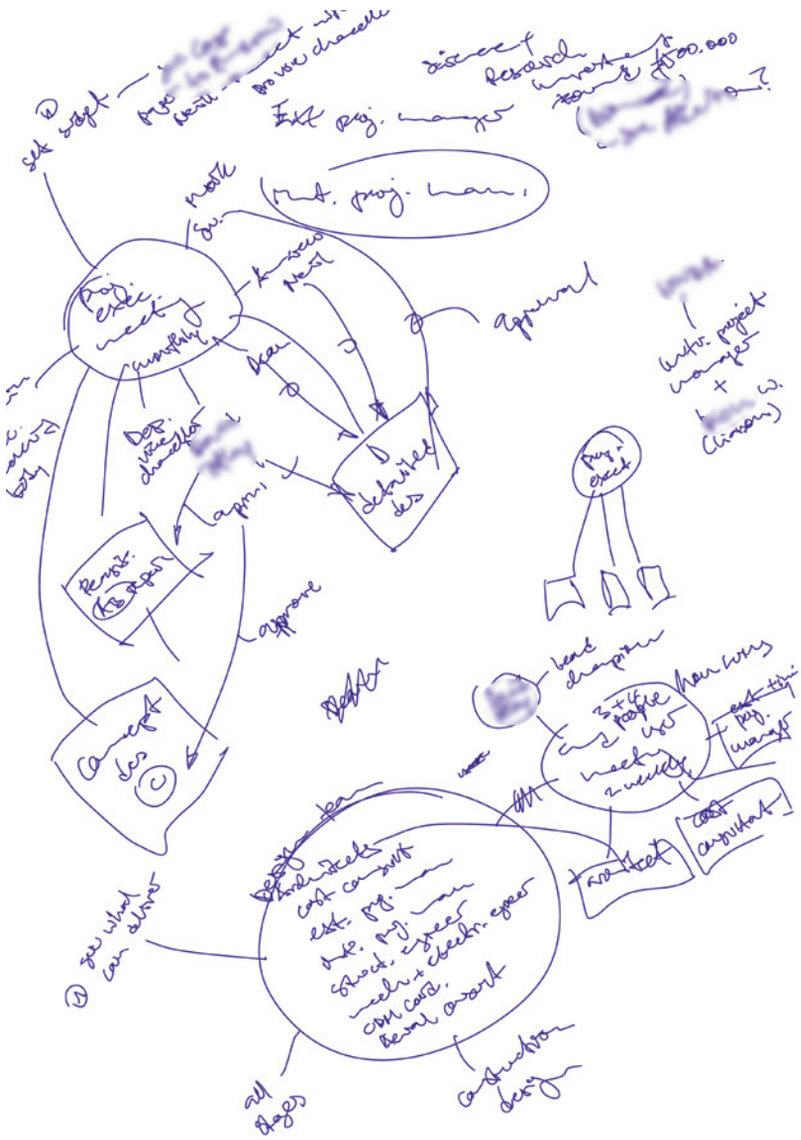


***Figure 4.1*** *Map from an interview, showing stakeholders and relationships (Building Project)*

Most of the interviews took place in a "neutral" social space, indeed the very social hub that is a result of the Building Project itself. Some took place in the interviewee's office. I generally aimed at involving the participants in choosing a place and time that would suit them best. Please refer to Appendix B (p. 217) for an overview of interview participants, their role in the projects and their informant codes.

### 4.4.3 The Collection of Secondary Materials

Besides the interview recordings and notes, the Meeting Notes that had been produced during the time of the stakeholder committee meetings were an invaluable source of information. They allowed me to stay close to the events at the time without having been there in person. They supported the clarification of contradictions that appeared between respondents' accounts and helped me to specify insights.

Yin (2003) points out that a researcher can become overly dependent on a key informant which can bias the handling of information by the researcher. Obtaining Meeting Notes of the stakeholder committee meetings, enabled the cross-referencing of information gained from the key informant as well as the other respondents, thereby avoiding heavy reliance on one type of source alone (Yin 2003).

I gained access to the Meeting Notes through an interviewee who was responsible for taking the Meeting Notes at the time. In total, 20 meetings were documented. The notes include the attendance, agenda and decisions made during each meeting. They also documented background research into the organisational structure of the management school. I also attained floor plans of the management school before and after the completion of the building extension.

## 4.5 Material Collection for CS2: Performance Project Case

The methods of material collection for the Performance Project case represent a mix of qualitative methods, not to be confused with the Mixed Methods Approach (where quantitative and qualitative methods are combined). I used methods for live observation as well as open-ended and semi-structured interviews and collected secondary materials from websites.



Grounded Theory as well as Case Study scholars see observation as an appropriate research method. While non-participant observation is described as a frequently used method in case study research (Liu & Maitlis 2010), Charmaz (2006) emphasises the value of collecting 'rich data' (Charmaz 2006, p. 14) through observation and extensive field notes respectively. These provide 'solid material for building a significant analysis' (ibid).

### 4.5.1 Non-Participant Observation

The methods used for the Performance Project reflect the dynamic character of the case study context. I observed the performance as a 'complete observer' (Anderson 2008), observing the artists and musicians before, during and after the performance. Equipped with a video and photo camera, a voice recorder and note pad I tried to capture as much of the interactions between artists, participants and others stakeholders as possible while at the same time taking research notes of my experience and observations.

Initially, though, participation in the music performance was not anticipated to lead to a research case study. Out of musical interest I took part in a rehearsal one week before the performance as a musician, but partly also guided by my research interest in participatory involvement. During the rehearsal I recognised the potential richness of the interactions

between artists and participants for my research which made me an opportunistic participant observer (Anderson 2008; Easterby-Smith et al. 2012). While I was planning to take part in the performance in the role of 'complete participant' (Anderson 2008), being one of the musicians, but openly stating my research interests, in the end the exclusion of my type of instrument from the performance didn't allow me to take part as a musician. Instead, I agreed with the artists that I would observe the performance. Still, the rehearsal I attended as participant became part of my observational material, as the artists shared their recordings (audio and video) of the rehearsal with me.

During the performance I took on a role which is best described as 'non-participant observation' (Liu & Maitlis 2010) and 'personal observation' (Collins 2010). I would say that I was more involved than a non-participant observer, but less involved than a participant-observer. While a complete observer or non-participant observer is described as being distant to the studied context (Easterby-Smith et al. 2012) and not interacting with the researched activities directly (Liu & Matilis 2010), a participant-as-observer is described as a researcher concealing his identity and intentions (Easterby-Smith et al. 2012) and integrating themselves into the community under study (Collins 2010). I moved between these two poles, being a participant in the first rehearsal, then moving into an observer role during the performance, but still interacting with the artists, musicians and spectators, rather than observing strictly from the outside. This enabled me to stay close to the artists and their actions, behaviours and interactions. The opportunistic approach allowed me to build trust (Liu & Maitilis 2010) with the artists in a conversation after the first rehearsal, in which I revealed my research interest and they agreed to my potential engagement as an observer. Indeed, an element of participatory research can be identified in the fact that the artists were interested in my research for the further development of their own practice.



This led to a two to three hours period of observation, starting with the artists arriving at the rehearsal room before the performance and concluding with the whole group of musicians and artists de-briefing after the performance.

In total, the observational material spanned roughly a combined period of one day (including the rehearsal and the performance) and I felt that, in terms of the insights I could gain from live observation, saturation had been reached after the performance. Therefore further observation was not required.

In addition I conducted an interview with both artists directly after the performance, a group interview with some of the musicians and individual interviews with the Festival organiser and a designer who had created the Festival programme and other related artefacts. Thereby I was able to deepen insights into dimensions of the case that I hadn't been able to access through observation. I further gained access to internal documents related to the performance such as a de-briefing report from the Media Conference organisers.

The conducted observation can be described as unstructured (Collins 2010, p. 132). I didn't specify the phenomena to be observed in detail, but, at this early stage of the research, was open to learn from the observed context. Therefore I tried to capture as much as possible

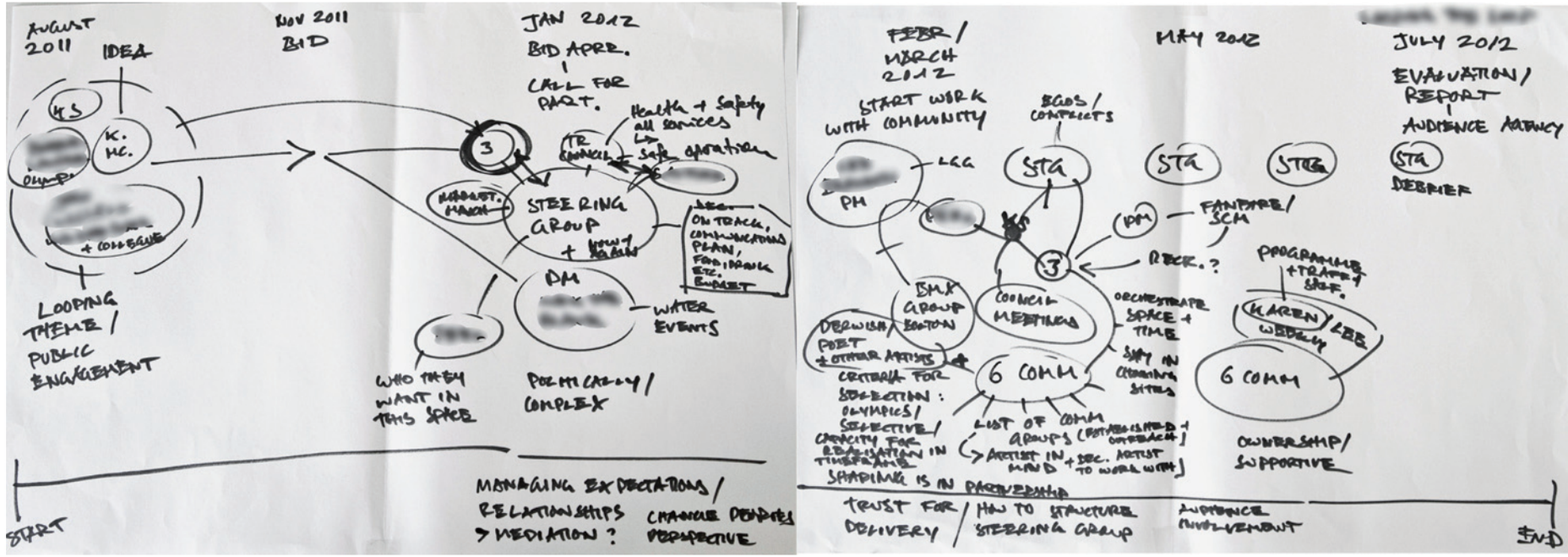



***Figure 4.2*** *Map from an interview, showing the organisation around the Festival (Performance Project)*

of the actions that seemed relevant to the research aims and questions (ibid). I see this approach to observation resonating with the concept of 'Theoretical Sensitivity' as used in Grounded Theory (Glaser 1978), where the researcher enters the field with as few pre-conceptions and hypotheses as possible and is sensitive to the phenomena that emerge from the primary context (O'Reilly 2009).

The conducted observation was intentionally overt (Miller & Brewer 2003; O' Reilly 2008), as I informed the artists about my intentions and the artists introduced me and my interests to the participants. During the course of the performance we met other people who did not know I was observing and who it was not feasible to inform about my research activities either as they appeared only occasionally or I felt that it would have interrupted the flow of conversations and interactions between them and the artists.

### 4.5.2 Conducting Interviews for CS2: Performance Project

While observational research took place early on in the research process, as early as in the first third of the research project, the interviews were arranged after the performance.

With respect to interviews conducted, the richness of the material collected was considerably increased by the application of mapping as a technique to facilitate interaction with the interviewee (Easterby-Smith et al. 2012). While an opportunistic interaction around a map happened during a previous interview (see Figure 4.1), I intentionally integrated it into the interview with the Festival organiser (see Figure 4.2). It proved very helpful as I was able to map out the procedural development of the project in front of the interviewee's eyes, thereby clarifying understandings and extracting details.



The interviews were all open-ended and semi-structured, as a result of my experience during the Building Project case study.

I conducted three individual interviews and two group interviews with a total of ten informants. The individual interviewees included the organiser of the Festival, a cultural manager from an estate company that manages the site the Festival took place at and the designer who created most of the visual materials for the Festival. The group interviews were conducted with the two artists and a group of musicians who took part in the performance. During some of the interviews I used secondary material, such as the Festival programme, as prompts to bring interviewees closer to the event as it happened and stimulate their memory.

In total I collected approximately 2-3 hours of video material and a similar amount of audio material from the observation, three hours of interview recordings, field notes, email conversations, website announcements and email correspondence (please see Appendix C, p. 218, for a complete list of recordings).

## 4.6 A Grounded Approach to Analysis in Five Phases

Analysis is partially grounded, prioritising the understanding emerging from primary materials rather than applying a specific concept to identify themes accordingly.

The analysis consists of five phases, which I will present in detail in the following sections

(also see Figure 4.3):

1. Phase 1: Familiarisation with structure of materials and context of cases (Section 4.6.1.)
2. Phase 2: Exploration/Divergence – 1st and 2nd cycle coding (Section 4.6.2.)
3. Phase 3: Reflection 1 (Section 4.6.3.)
4. Phase 4: Specific/Convergence – 3rd cycle coding (Section 4.6.4.)
5. Phase 5: Reflection 2 and observations (Section 4.6.5.)

These phases represent an adopted sequence of stages characteristic of grounded analysis as described by Easterby-Smith et al. (2012). Specifically, the integration of reflective phases and the comparative quality of these together correspond with the iterative periods of coding. Figure 4.3 below provides an overview of the analytic process.

### 4.6.1 Phase 1: Familiarisation with Structure of Materials and Contexts of Cases

During the first phase of analysis I familiarised myself with, firstly, the materials collected and, subsequently, each case and its context.

**Creating Structure**

The first stage is about creating structure within the materials collected. This is a case-specific activity, as the quality of materials differs between cases. Creating an overview of the materials and information contained happened in parallel with the first, preliminary categorisation and coding. During this phase I created an overview of interviews, interview notes, field notes, audio/video recordings and secondary materials that would establish easy access to this extensive set of materials.



This was specifically valuable for the Performance Project as the character of materials was more diverse than in the Building Project. Firstly this involved cataloguing audio and video files and compiling a spread sheet with short summaries of what kind of interactions and activities these documented.

In this way, I created a database that provided access to information which was hidden inside recordings and text files, which would allow me to later gain access to interesting sections of the materials more efficiently. It further involved transcriptions of interviews and specifically interview notes, which are very useful as an overview of an interview's content. I included my own observational and reflective notes from field research and those compiled before and after interviews.

For the Building Project case I collated a list of the individual Meeting Notes, which helped me to gain an overview of the constellation of these meetings and the quantity of notes taken. The resulting list mentions participants of each meeting, dates of Meeting Notes, names of meetings and the names of the groups that met. At this stage I also attributed codes to each interviewee, to maintain their anonymity.

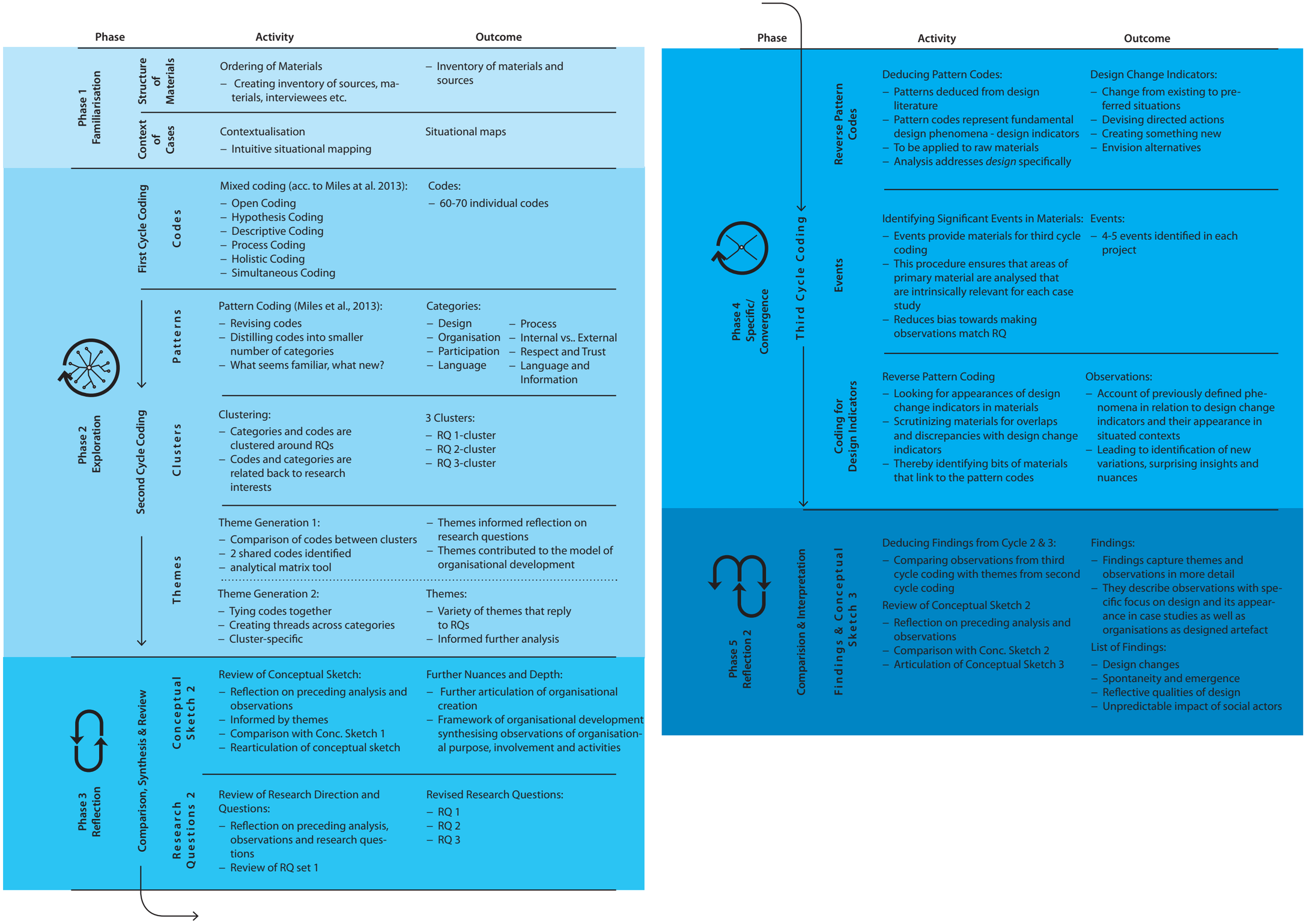
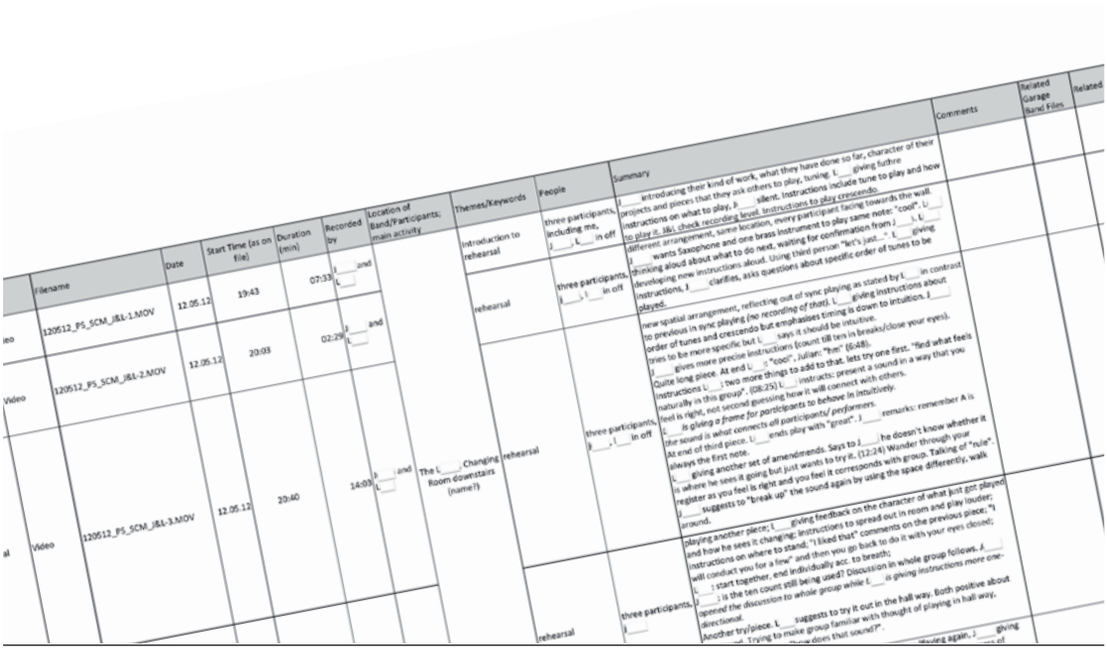



***Figure 4.3*** *Overview of the analytic process*



| | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary | Comments | Related Garage Band Files | Related |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| eo | 120512_PS_SCM_JBL-1.MOV | 12.05.12 | 19:43 | 07:33 | J and L | | Introduction to rehearsal | three participants, including me, J, L in off | J introducing their kind of work, what they have done so far, character of their projects and pieces that they ask others to play, tuning; L giving further instructions on what to play, J silent. Instructions to play crescendo. To play it, JBL check recording level. Instructions to play crescendo. different arrangement, same location, every participant facing towards the wall. J wants Saxophone and one brass instrument to play same notes: "cool". L thinking aloud about what to do next, waiting for confirmation from J L L developing new instructions aloud. Using third person "let's just..." L giving instructions, J clarifies, asks questions about specific order of tunes to be played. | | | |
| Video | 120512_PS_SCM_JBL-2.MOV | 12.05.12 | 20:03 | 02:29 | J and L | | rehearsal | three participants, J L in off | new spatial arrangement, reflecting out of sync playing as stated by L in contrast to previous in sync playing (no recording of that). L giving instructions about order of tunes and crescendo but emphasises timing is down to intuition. J tries to be more specific but L says it should be intuitive. J gives more precise instructions (count till ten in breaks/close your eyes). Quite long piece. At end L, J "cool", Julian: "ten" (6:48). Instructions L: two more things to add to that. lets try one first. "find what feels naturally in this group". (08:25) L instructs: present a sound in a way that you feel is right, not second guessing how it will connect with others. | | | |
| Video | 120512_PS_SCM_JBL-3.MOV | 12.05.12 | 20:40 | 14:03 | J and L | The L Changing Room downstairs (name?) | rehearsal | three participants, J L in off | The sound is what connects all participants/ performers. At end of third piece: L ends play with "great". J remarks: remember A is always the first note. L giving another set of amendments. Says to J he doesn't know whether it is where he sees it going but just wants to try it. (12:24) Wander through your register as you feel is right and you feel it corresponds with group. Talking of "rule". J suggests to "break up" the sound again by using the space differently, walk around. playing another piece; L giving feedback on the character of what just got played and how he sees it changing; Instructions to spread out in room and play louder; instructions on where to stand; "I liked that" comments on the previous piece; "I will conduct you for a few" and then you go back to do it with your eyes closed; start together, end individually acc. to breath; ; is the ten count still being used? Discussion in whole group follows. J opened the discussion to whole group while L is giving instructions more one-directional. Another try/piece. L suggests to try it out in the hall way. Both positive about | | | |
| | | | | | | | rehearsal | three participants, J | | | | |

***Table 4.1*** *Excerpt from material collected during the Performance Project (anonymised)*

**Integrating Maps**

In the second stage, I familiarised myself with the case studies by mapping specific, basic concepts that relate to the overall interests of my research: people, places, time and organisational formations, such as meetings, structure, relationships (see Figures 3. 3 and 3.9). This stage generated a profound knowledge of each case, their dimensions and development. It informed my understanding of the complexity and differences between both cases and laid the foundation for further case-specific analysis.

Although these maps do not belong to the canon of situational maps introduced in Clarke and Friese's (2010) chapter on situational analysis, they take inspiration from them. They are 'analytical exercises' that represent an unconventional, yet adequate approach to social science materials (ibid, p. 366). While Clarke and Friese see three specific kinds of maps generated in situational analysis, namely Situational Maps, Social Worlds/Arena Maps and Positional Maps (ibid, pp. 366), the concepts they integrate are open to interpretation and adaptation. I chose to follow my own intuitions as a visually educated researcher in how to visualise observations and situational relationships. Situational analysis takes into consideration

> 'people and things, humans and nonhumans, fields of practice, discourses, disciplinary and other regimes/formations, symbols, controversies, organisations, and institutions' (ibid, pp. 364),

which can all be influential on a given situation through their presence. They do not merely represent the context for but are part of what constitutes a situation.

For the Building Project, the map (see Figure 3.3) represents the stakeholders and groups and their development and interactions along a longitudinal time line. Interactions are

represented by lines and arrows that link correlating groups while their spatial arrangement follows an approximate distribution of occurrences in time. In addition to these levels of information, this allowed me to identify the decision-making bodies and group meetings during which significant decisions for the ongoing development of the project were made. Furthermore, the map helped me to understand the complexity of the organisation and the factors that influenced its development (such as internal and external stakeholders, as well as funding, legislation and processes).

Familiarisation with the Performance Project required a different set of dimensions to be taken into consideration. I focused on the performance itself as a situated event, an event that took place in a specific context with specific, changing set of stakeholders and at varying locations (see Figure 3.9). This situated map provoked questions regarding what might be considered as performance and why, in comparison and contrast to the series of rehearsals that took place. It made me more attentive to those variations in group dynamics and interactions that characterises the different episodes in this performance. This helped me to think in a more focused and sensitive way about the observations made at the performance.

As such, maps of the cases support the 'thick description' (Geertz 1973) of dynamics, relationships and interactions and are intended to help

> '(…) the reader and those researchers who would build upon a study understand the factors that gave rise to the research's observations' (Rousseau & Fried 2001, p. 6).



### 4.6.2 Phase 2: Exploration – First and Second Cycle Coding

In Phase 2, an exploratory approach to coding was taken. A preliminary selection of materials was coded in two cycles – first cycle coding and second cycle coding. First and second cycle coding refers to the iterative nature of coding as described by Miles et al. (2013) who segment the coding process into cycles. While during the first cycle of coding, codes were generated, the second cycle of coding resulted in patterns, clusters and themes.

This phase of the analytical process responds to the first set of preliminary research questions, which centre around more general concepts of creating organisations, rather than the specifics of design.
The Preliminary Research Questions are repeated here for reference:

1. What do people create when they organise and what aspects of organisational design do they contribute to during this process?
2. What activities contribute to the design of temporary organisations?
3. How emergent or intended is the involvement of other

**1st Cycle Coding – Open Coding, Generating Codes (see Appendix E, p. 227)**

My initial approach to coding was partially intuitive, but I later realised that I was able to identify similarities with the techniques described in the coding literature. While I went through a small, initial set of interview transcripts to test codes before applying the process

to a larger sample of materials, I read the transcripts with the following concepts in mind: stakeholders, groups, meetings, functions, tools (for participation), issues of discussions, projects and organisational procedures. These concepts can be considered as codes in what Miles et al. (2013) describe as a process during which 'symbolic meaning' is assigned 'to the descriptive or inferential information compiled during a study'. Codes here are researcher-generated labels that attribute meaning to phenomena or an individual datum 'for later purpose of pattern detection' (Charmaz, 2001), thereby representing part of the reflective and interpretative activities which are central to analysis (Miles et al. 2013). Besides this list of codes I allowed for codes to emerge *in vivo*, as they appeared in the interview transcripts. I had intuitively started to adapt a mix of coding techniques, resembling the following found in Miles et al. (2013):

- *hypothesis* coding – this describes my initial approach, where codes are pre-defined and based on the researcher's hypotheses. The above mentioned concepts are such codes.
- *descriptive* coding – while reading through the materials, I would come across sections that didn't seem immediately useful, but interesting. Here I added codes that are descriptive, giving a summarised account of a section in the transcript.
- *holistic* coding – similarly, I coded larger sections of text in preparation for further, more specific coding.
- *process* coding - is used to extract 'participant action/interaction and consequences' (Miles et al. 2013, p. 75). I used it in combination with the other techniques.
- *simultaneous* coding – some passages would be characterised by the overlap of several different codes, therefore simultaneously coded.



These sub-forms of coding contribute to the overall character of this first cycle of coding, which resembles the intentions of open coding as described by Berg (2001) when he states that the purpose of open coding is 'to open inquiry wide' (ibid, p. 251). In this process, I treated both my own observations and notes and informants' accounts as equally important.

While I started with the interview transcripts from the Building Project, I subsequently widened the coding exercise to the Meeting Notes. I did this initially analogue, using print-outs and different coloured markers, and applied the same techniques of text-based procedures to secondary material from the Performance case. I started to use Nvivo software for the transcription, annotation and coding of video material. Nvivo allows not only the selection of specific instances or events from videos to be marked and annotated, as well as transcribed, it also allows annotations to be added to specific sections of visual materials, such as photographs. This way, the differences between materials can be overridden, without limiting the additional information visual materials provide. Both cases were coded independently from each other, using a cross-case approach by applying the same hypothesis codes initially. I then collated all the codes from both cases in a code book that documents the coded instance of material, the code and the description of the code.

This list also included memos of thoughts and ideas evoked during coding. Memos help to capture questions, insights and ideas that surface during analysis which otherwise would be difficult to remember (Corbin and Strauss, 2008). Memos support the 'analyst's creative boost, which comes from concepts and ideas emerging from the data' (Glaser 1978, p. 20).

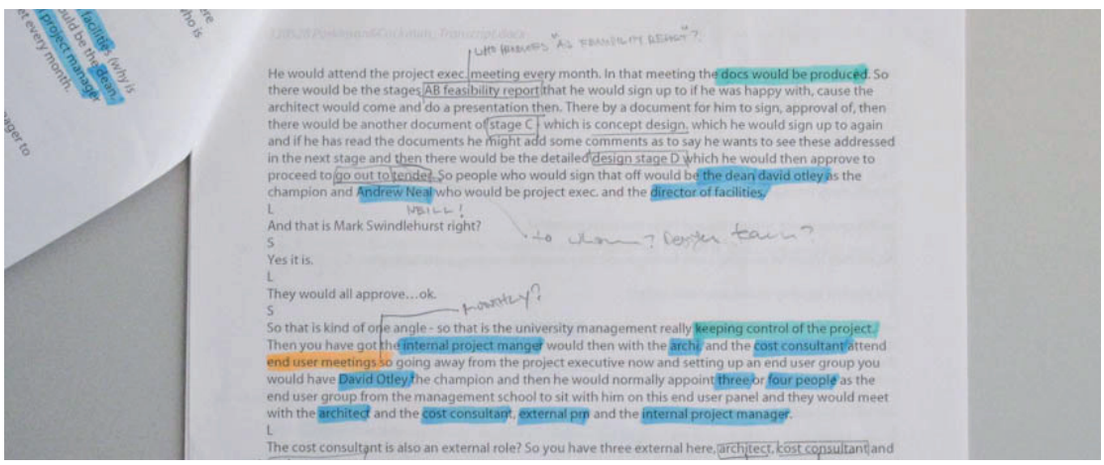



***Figure 4.4*** *An example of initial coding*

One limitation of this approach is that, since the cases are significantly different, not many themes cross both cases and if they do so are quite generic (e.g. "language"). The more specific the codes the more likely they seemed to be allocated to one case only.



As I went along I built up a repertoire of codes that I subsequently applied to other sections of the materials. In addition, the body of codes grew with new codes added where appropriate.

**2nd Cycle Coding – Generating Categories and Patterns (see Appendix F, p. 230)**

The generation of categories and patterns is the first step towards the elicitation of insights from the context and towards interpretation and a further step in the organisation of codes.

To further transcend the context I went through a process that shares similarities with Stake's (2006) account of cross-case analysis. Specifically what he calls 'finding strips' shows parallels with the mechanism used here and can be translated into 'coding strips'. (see Figure 4.5 and Appendix F). What I did correlates with his description of bringing findings across cases together (ibid, p. 60). Attention paid to the specific cases is here reduced, the overarching clustering of findings and observations, or in my case codes, is what is emphasised. Similar to his account, I arranged codes according to their fit with established categories of design, organisation and participation. I then moved on to establish relationships between the remaining codes. Finally drawing out shared aspects, placing those that share more characteristics closer together and identifying outliers that do not fit in any category. I should mention here though, that, in contrast to Stake's procedure, my approach is less descriptive, more interpretative and less based on the use of pro-formas and pre-defined methods, such as worksheets or case reports (ibid, p. 60).

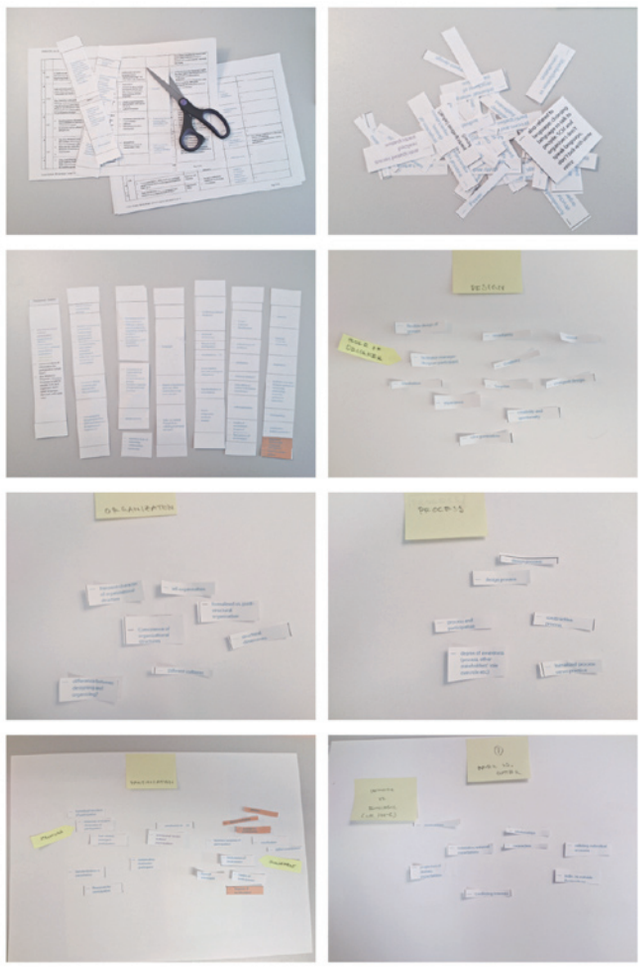




***Figure 4.5*** *Generating categories using Coding Strips*

I first collated all the codes that were produced during the first cycle of coding. I printed the list of codes out and cut the list into strips, each containing one code.

I played with different arrangements, moving strips between categories, reflecting on suggestive and less obvious, surprising relationships between them that might suggest new categories. Some of the categories were projected from my research interests: such as design, participation and organisation. Others emerged from this activity. Through an immersive and reflective process I created patterns that suggested specific categories. This I did intuitively, relying and trusting my so far acquired knowledge of the case study contexts they originated from and the 'theoretical sensitivity' acquired during the literature research. Eventually, I would go back and check the specific empirical context to clarify meanings and relevance of the categories and revise the codes. The categories are a way to support the management of a large number of codes and provide access to the underlying materials in a structured manner.

Patterns on the other hand also consist of a combination of codes, but in contrast to categories they are not primarily an organising tool but support the abstraction of meaning towards theme generation. Patterns combine related codes under descriptive headings,

thereby increasingly directing the researcher's perception towards the interpretation and re-interpretation of the raw materials. Patterns are combinations of codes around an umbrella term that is specific to each case study, but not necessarily specific to each research question.

**2nd Cycle Coding – Generating Clusters Around Research Questions (see Appendix G, p. 231)**

The aim of this coding process was not to maintain the situated meaning of the patterns and codes, but to use them to inform the development of a re-articulation of the Conceptual Sketch as a response to the preliminary research questions (see Conceptual Sketch #2, pp. 102). By mapping categories and patterns against the research questions I was able to think about the relationship between patterns, the codes they contain and questions more freely, and fill in missing links. This is a first step towards the integration of categories as described in grounded theory literature (Heath & Cowley 2004).

Mapping patterns against research questions happened to advance interpretation: reading through the patterns of codes with the specific research question in mind, looking for contributions a pattern can make to the further understanding of the question and the further, more detailed articulation of the Conceptual Sketch. But I would also include patterns that seemed vaguely relevant, where the link to the question was not immediately clear. Some patterns and their codes would provide answers, something like: What do people design when they organise? Mechanisms of Involvement, Notes as Artefacts, Flexible Design of Groups. Others are less straight forward, e.g. respect and trust. During the observation of the rehearsals the way artists interacted with participants showed respect. So respect and trust might be aspects of interactions that are involved in creating organisations. This interpretation is more of an idea at this point and its relation to the research questions still ambiguous. The usefulness of this stage of coding lies in the generation of new ideas, as part of the creative process in Grounded Theory (see, for example Glaser and Strauss 1967; Suddaby 2006). Appendix G (p. 231) shows an excerpt of some of the clusters generated.



This type of clustering, therefore, had a variety of functions for and effects on analysis. It provoked new thoughts through unexpected combinations and emergent ideas. Linking patterns and individual codes to questions provided angles from which the question could be better understood and ideas for answers developed. At the same time, this also provoked new questions and a critical reflection on the existing research questions and their fit and relevance. The varying degree to which the allocation of clusters was intuitive and associative created space for ideation through unexpected combinations and juxtapositions. At the end, this stage resulted in the generation of themes.

In this process I took the first steps towards abstraction and interpretation. I isolated the phenomena attached to the codes from their situated, case specific context, making the codes and patterns potentially relevant to other contexts. This allowed me to articulate themes in response to the research questions. In the Grounded Theory literature, this step is referred to as 'axial coding' (Glaser & Strauss 1967; Harry, Sturges and Klingner 2005) in

which codes are clustered around significant axes or 'points of intersection' (Harry et al. 2005, p. 5).

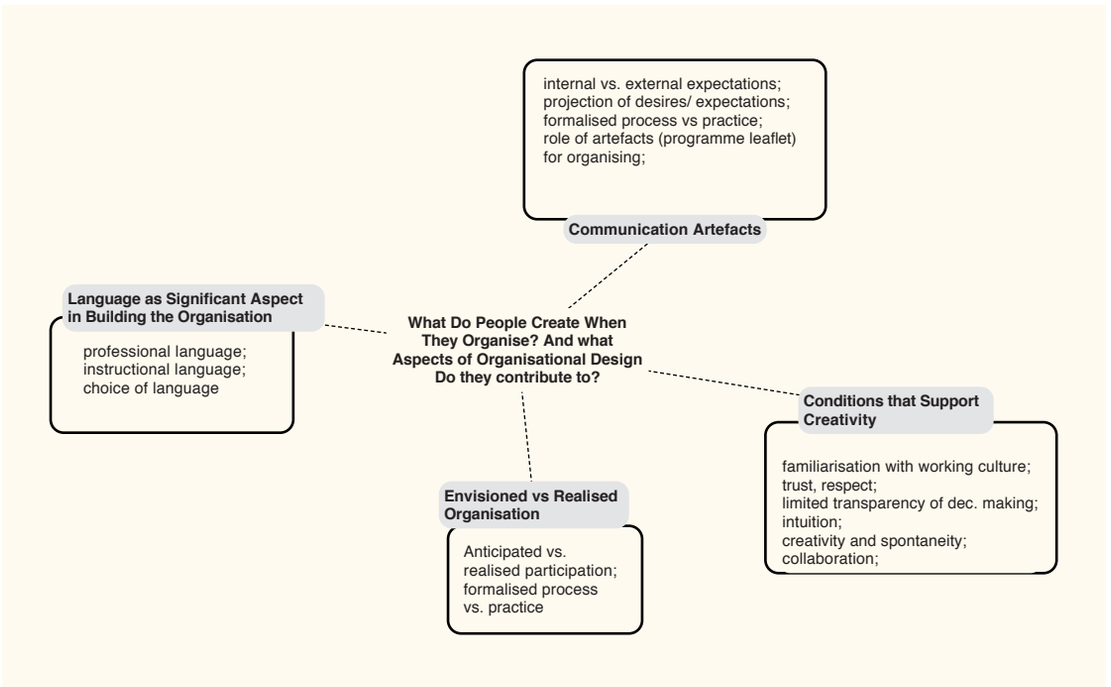



***Figure 4.6*** *An example of a cluster formed around preliminary Research Question 1*



**2nd Cycle Coding – Generating Themes (see Appendix H, p. 233)**

Theme generation is the next step in the process of abstracting meaning from the primary material (Strauss & Corbin 1998; Harry et al. 2005). Harry et al. describe themes as the 'underlying messages and stories' (ibid, p. 5) that are constructed when the researcher starts to relate

> 'various code clusters in a selective fashion, deciding how they relate to each other and what stories they tell.' (Strauss and Corbin 1998, p. 145*).*

*Themes* can further be described, in contrast to *categories*, as a sentence or a phrase that describes 'more subtle and tacit processes.' (Rossman & Rallis 2011, p. 282), while *categories* are words or phrases that describe more explicit segments of materials (ibid). Two approaches to theme generation where taken. The first one identified themes shared between the research questions through a comparison of the codes between clusters. The second one generated cluster-specific themes, by tying codes together and creating threads across categories (Miles et al. 2013).

The first approach led to the identification of two main themes, which were shared by all or two of the research questions. One theme was centred around the code "motivation", the other around the code "purpose". While the first ("motivation") did not lead to insights relevant to the further development of my research (a "dead end"), the second ("purpose") helped me to draw out the subtle and hidden dimensions of organisational development in

each case, thereby informing the conceptualisation of a three-stage model of organisational creation and development (see Chapter 5, pp. 91) and the second review of the Conceptual Sketch. A matrix (see Appendix K, p. 236) helped me to reflect on and reconsider the preliminary research questions and their development, as it highlighted mismatches and shortfalls of the initial set of questions.

The second approach to theme generation was more holistic and resulted in a variety of themes that relate to each research question. I didn't follow the previous approach to identify the most frequent commonalities between clusters, but took a reflective approach, trying to tie codes and patterns together to stories that would allow me to draw out the details and nuances within each cluster. Here I referred back to the memos taken during previous coding stages and used my creative capacities as the analyst to look for meaning by considering different combinations of codes with the research questions in mind. This led to the articulation of themes that were directly related to the research questions, but it also provoked thoughts and stories to surface that pointed to themes beyond the research questions.

### 4.6.3 Phase 3: Reflection 1 (Final Research Questions)

In accordance with Grounded Theory scholars (see for example: Strauss & Corbin 1998; Harry et al. 2005), the Conceptual Sketch combines diverse aspects of previous analysis, brings them together and draws out contradictions, makes weakly supported categories obvious and highlights further strands of research to meet identified weaknesses and contribute to consistency. In this way, it progresses the integration of themes into a more cohesive concept, but at the same time, provides a space for the further development of the research. Combining the comparative element of Grounded Theory by referring back to the previously articulated Conceptual Sketch with the identification of novel perspectives and insights, this resulted in a further, more nuanced and substantiated articulation of an organisation as artefact and the diverse aspects and dimensions that contribute to its creation. It incorporated a larger number of 'analytic observations' (Miles et al. 2013) into propositions that I am confident to articulate at this point of the research.



**Final Research Questions**

The reviewed Conceptual Sketch #2 serves as a comparative element – relating back to the initial propositions and research questions and incorporating results from the preliminary analysis. The review of the Conceptual Sketch represents another reflective stage in the analytical process. At this stage I consulted the previously articulated Conceptual Sketch, with reference to observations and interpretations made during the first two cycles of coding. As a result, the research questions were reviewed and re-articulated. Shortcomings in research aims and objectives were identified and fed back into the re-articulation of the research questions, acknowledging the co-evolution of the researcher's theoretical sensitivity and the focus of research (Charmaz 2006). Consequently, a revised set of research questions could be articulated, addressing explicitly the occurrence of design during activities of organising. These will be found below.

So far I had opened up and familiarised myself with the cases and conducted the first two cycles of coding. Besides the theoretical insights gained, analysis revealed limitations of the chosen research questions. Relationships between research questions do not support a deeper inquiry into specific phenomenological and conceptual aspects, they aimed at initial and comprehensive exploration. A closely coordinated set of questions is needed, that build on each other and specifically inquire into the way hidden design activities are represented in both the cases and preliminary observations. Further, inquiry so far had provoked novel questions that helped to narrow down the focus of research towards more specific areas in the materials and in theory, namely, a three stage model of organisational development that enabled me to identify relevant areas for further inquiry ("significant events").

The following set of revised research questions took these points, written at this stage of the analysis, into consideration:

- Creative activities that point towards design are identifiable, but so far I haven't matched them with a wider body of existing design and organisation theories.
- While the previous coding activities were open and holistic, a more focused approach to coding is necessary.
- I will deepen the cross-case analysis to 'enhance generalizability or transferability to other contexts' (Miles et al. 2013).

The revised research questions focus on the discovery and definition of design activities and behaviours in both case studies, specifically aiming at further substantiating a nuanced view of the characteristics of design that emerge from materials. Propositions are articulated in previous findings and the Conceptual Sketch. A final set of research questions redirects research efforts towards the deeper exploration of meaning regarding these diverse appearances of design activities.



The Final Research Questions:

1. Which design traits are evident in temporary organisations?
2. How do these compare and contrast with established design concepts?
3. How does the identified design impact on the organisation?
4. What is the value of identifying such emergent, hidden and distributed design behaviours and activities, for practice and theory?

These are the Final Research Questions that stand in direct relation to the gaps identified in Chapter 2: Literature Review (pp. 33) and the overarching research interest in the way organisations as artefacts can be considered designed artefacts and the activities involved in designing them.

#### 4.6.4 Phase 4: Convergence – Third Cycle Coding

The third cycle of coding is characterised by the movement towards closure. After revising the research questions, the identification of phenomena in relation to the existing literature

became one aim. Third cycle coding takes themes of design theory, identified in literature, and applies these as a combined pattern code to the primary materials. This procedure integrates an element of thematic coding, where existing, pre-defined codes are applied to analysis. In this case though, the codes resemble themes, as they are more complex and extensive than individual codes. This cycle revisited previously articulated propositions about the way an organisation could be considered created or even designed.

**3rd Cycle Coding: Selecting Significant Events Through Coding (Appendix I, p. 234)**

While design indicators are based upon fundamental design concepts taken from design theory, they did not dictate the selection of instances they got applied to. I tried to avoid 'forcing' (Glaser and Strauss 1967) meaning on instances of primary materials, as this would not have allowed nuanced design indicators and instances to emerge, which would have been a concern if design indicators guided the process. Instead, events that had an internal relevance to the development of the case were chosen. I then analysed these, using design indicators.

While scepticism regarding pre-existing theories as the starting point for research plays a role in defining emergent knowledge, so does the importance of 'research and *discovery*' (Locke 2001, p. 34). In relation to Grounded Theory, this could be understood as what scholars might understand as 'forcing' meaning onto observations. Emergence is the concept that describes theory development based on discovery arising from immersion in the research context. It can be better understood in contrast to the potential *forcing* of meaning onto material found in the social world. The concept of forcing again can be attributed to analytical methods, such as thematic (Glaser 2004) or content analysis (Easterby-Smith et al. 2012) that take previously developed concepts and codes into the research field and analysis of material.



Focussing on events as units of analysis has its tradition in Organisation Studies. It is part of a constructionist perspective on organisational processes and acknowledges the uncertainty and complex nature of organisations as social actors (Peterson 1998). Peterson states that debates in Organisation Studies indicate that 'managers' work is to participate in a social process of making sense out of events' (ibid, p. 16). My research resonates with this emphasis on the contextualisation of events described as a close relationship between events and context: 'context is integral to event' (Pedigrew in Peterson, 1998, p. 19). Further, acknowledgement of subjectivity and the significance of the individual's perceptions and interpretations as the basis for research, coheres with my approach. This analysis situates empirical cases by combining rich description with aspects of event studies, drawing out significant events in order to

> '(…)specify the actors, roles, relationships, and setting characteristics (physical, social, and cultural)' (Rousseau and Fried 2001, p. 9).

The events selected are based on the preliminary findings and the situations they emerged from. I oriented the elicitation of events along criteria established during the previous analytical steps. In addition, I now looked at the whole set of materials available to me,

including transcripts of the interviews conducted in the meantime. For the Building Project, the Stakeholder Meeting Group Notes became a particularly rich and valuable resource. In this manner, I aimed to avoid forcing deduced theoretical design indicators onto materials rather than matching implicitly relevant events with design theories. This allowed the material to point me to those sections that are intrinsically relevant to the cases.

Characteristics of events:

- Creational activities: formational and foundational events that allow insight into the interactions that take place in the very early stages of an organisation's existence. Further, situations that influence the way an organisation develops.
- Interactions: significant interactions that affect the organisation, its development and decision-making. Interactions that take place at the intersection of the above are of interest here.
- Events have to be part of processes that shape an organisation not those processes that aim at designing the final physical artefact or performance.

For the Building Project I identified five significant events, while for the music performance case four events were significant (these are presented in Chapter 5, Section 5.7.1, pp. 105).

**3rd Cycle Coding: Generating Pattern Codes**

Fundamental understandings of design are used to respond to the revised research questions and integrate relevant published knowledge. This is what I call *reversed pattern coding* in reference to coding for patterns (Miles et al. 2013), with the difference, that in this case I apply an existing pattern to the material to identify related or divergent themes. Themes generated from the literature are used to provoke the identification of categories and patterns in the primary materials, but this should not be mistaken for a close interpretation of thematic analysis. It is more a reverse pattern coding, a way to provoke and stimulate the identification of relationships within the collected materials or identify contradictions between empirical context and theoretical concepts.



The distinctive feature of reverse pattern coding is the selection of events within primary material. Rather than "scanning" materials for thematic codes, I first selected events within both cases for their significance for each case's development, not for their match with pre-defined themes or codes. Only then were pattern codes applied in an open and exploratory manner to stimulate the emergence of additional aspects that would contribute to the further definition of observations. This helped me to develop

> 'an evolving, more integrated schema of understanding local incidents and interactions' (Miles et al. 2013, p. 86).

This coding practice then moves between the deduction of themes from the literature for coding, their combination into patterns, and their role in supporting the inductive generation of themes from the materials (a combination of deductive and inductive coding techniques, although different, is described by Fereday & Muir-Cochrane 2006).

**Themes: Design Indicators**

Themes are taken from the established literature and discussed in relation to significant events in the data. The first step in this analytical sequence is to articulate and justify the selection of themes, the fundamental design indicators.

How did I select the indicators of design? I considered a number of design theories that correspond to the driving interests of my research. Interests in the distributed, participatory qualities of design and its application to organisations – processes, structures or cultures. Here, I focused on those design debates that have articulated, promoted or contributed to debates that see organisations as subjects for design, such as Human-Centred Design, Design Thinking, or Designing Business. From these approaches I identified aspects that cut across several of these theories. Design indicators are themes taken from theories that apply not primarily or exclusively to the design of physical products, but have, e.g. in the case of Herbert Simon, influenced the application of design to other, immaterial and social domains, such as systems (Buchanan 2001), social innovation (Manzini 2015) or discourses (Krippendorff 2005).

**Pattern Code: Design Change**

Design is fundamentally about change and individual aspects of design change provide a framework for the analysis of previously identified events. Consequently the pattern code "design change" consists of three themes: design indicators 1, 2 and 3.



Design indicators that form the pattern "design change" are explained below. In order to qualify as a design event, I suggest that design change should be understood as a combination of several of the themes, as a pattern. Changing a current into a preferred situation alone does not qualify as design change, i.e. closing an open window to change the situation in a cold room into the preferred situation of a more comfortable room by keeping cold air out, can hardly be called design. It would qualify to be coded as "changing current into preferred situations" though. But envisioning alternative, new ways to change the current state other than closing the window would qualify for design change. This would involve other dimensions in addition to the change of the situation itself, such as proposing alternative solutions.

> **Design Indicator 1: Directed Actions Towards Changing an Existing State into a Preferred One**

Design is about change, about the development of something new, the transformation of existing situations into preferred ones (Simon 1996b, p. 111), not primarily about solutions. Thinking of change in relation to design the often cited phrase of Herbert Simon's

> 'Everyone designs who devises courses of actions aimed at changing existing situations into preferred ones' (ibid, p. 111)

comes to mind. An important addition to this definition is made by Simon when he states that design is interested in 'how things ought to be' rather than how they are (in comparison to traditional sciences) (ibid, p. 114). This addition is essential as it points to the

uniqueness of design activity in relation to change. His core statement alone, without this addition, could be understood as describing a developmental task, it does not necessarily include the activity of envisioning those preferred situations that change should lead to. Considering the interest of design in what should be rather than in the current state adds a more specific role to design in the face of change. Design becomes involved in the development of the perspective, the anticipated "preferred situation".

**Design Indicator 2: Creating Something New, Something That Otherwise Wouldn't Exist**

Preferred situations are not *per se* considered design solutions. Human-Centred Design scholars articulate conditions: design solutions have to represent something new (Junginger 2008), or something that 'wouldn't come about naturally' (Krippendorff 2005). Krippendorff argues in his critique of Simon that design has to result in something that otherwise wouldn't exist:

> '(…) there would be no point in designing 'courses of actions' unless design brings forth what would not come naturally' (ibid, p. 25).

Actions initiated, supported and conceived have to be provoked, active interventions. They have to be part of the artificial world, not the natural, and I understand this more as the emergent quality of development rather than of being confined to the natural world, of the shaping efforts of humans rather than the result of emergent, accidental developments. Here taking an initiative is relevant, not so much the achievement of a previously defined objective. The articulation of objectives itself is part of this design effort.



The abductive, constructive and synthetic quality of design is relevant as a defining dimension, as pointed out in comparison to strategic thinking (Liedtka 2004) and scientific inquiry (Cross et al. 1981).

**Design Indicator 3: Propose Solutions, Envision Alternatives**

Simon's definition of design has been subject to criticism, specifically with regard to the quality of change he describes. It is stated that Simon suggests design is about choice between existing alternatives rather than the exploration of alternative possibilities (Junginger & Faust 2016). Other design scholars suggest that designers develop and propose variations of solutions (Jonas 2012; Manzini 2014) and envision future states (Evans 2011). Design has developed methods to prototype such future solutions (Lawson 2005) and the creative, abductive potential of design is what management scholars regard as valuable for the management profession (Boland & Collopy 2004). Evans (2011) states that thinking about the future and eventually building future solutions is an integral part of designers' work.

Design creates the new not necessarily as a physical or realisable manifestation (Krippendorff 2005). Instead ideas for solutions or propositions for change are characteristic of design. Whether these become realised, and manifest as preferred situations is not the primary concern. An element of vision, of imagination, of projection, the construction of variations of what seems to be a preferable state are all characteristic and distinctive.

Realisation is not the primary concern here. Not simply choice between but generation of alternatives (see, for example: Simon 1996; Lawson 2005; Jonas 2012)

As stated earlier, designerly activities that contribute to change have to do with ideation, the development of alternatives, scenarios (Evans 2011) and proposals for a variety of solutions. This is the creative contribution that design can specifically make to change. Design has developed processes to deal with ambiguity and strategies to turn messiness into solutions (Jonas 2012). Here I am looking for similar approaches in the material. i.e. do stakeholders develop a variety of solutions to a given problem by referring to the specific, unique conditions they are facing?

I am aware that these are quite fundamental themes within design studies, and I intentionally chose such basic definitions in order to establish the presence of design in the materials.

**3rd Cycle Coding: Coding for Design Indicators (see Appendix J, p. 235)**

During the final coding cycle, I applied the design indicators to every single event in each case, carefully assessing the appearance of each pattern. During this process I stayed open to the variations and nuances that emerged from the materials, refraining from imposing meaning onto the material, and rather using the theme codes as guides that do not represent absolute meaning but a specific perspective on the materials. I was surprised by the richness of novel insights that I was able to generate. An aspect of comparative analysis got bound into the analytical process, as I integrated more literature into it to ensure that the observations are grounded in the primary materials and respect the existing knowledge and theories. As Grounded Theory scholars state, the literature becomes an integral part of the iterative comparative analytical activity (Glaser, 1978; Corbin and Strauss, 2008). By comparing generated theory with existing theory, Grounded Theory treats other theories as 'a kind of data' (Glaser 2004, p. 5). The aim of this procedure is not to test one or the other but to arrive at and improve 'category and property generation.' (ibid, p. 5). This time using a qualitative analysis software, Nvivo, I coded the primary materials.



Observations were compared across events in each case. Additionally observations were compared between cases with the aim of making connections, identifying shared observations and themes. I then compared those new insights gained with the previous state of my understanding by referring to the previous Conceptual Sketch, and articulating an evolution of the Conceptual Sketch, informed by observations.

After applying these basic understandings of design, I continue by documenting the variances, activities and behaviours as well as interactions that happen around these forms of design. These are then contrasted with an extended discussion of design in the theoretical body of literature in Chapter 7.

### 4.6.5 Phase 5: Reflection 2

Observations are elicited through the event-specific comparison of design indicators with empirical phenomena. Observations from this stage are captured as situated and

rich descriptions of design phenomena. They are articulated as themes which represent a combination of phenomena that either occur in a number of events in each case, or in events across cases. Others appear to cohere or contrast with design indicators in a relevant and significant way. Through theoretical sensitivity and reflection as well as adequate creativity in making connections between observations I elicited observations that show significant potential to inform the following discussions. They integrate several case-specific observations into themes and a 'smaller number of analytic units' (Miles et al. 2013, p. 86). Although the themes are partially derived from observations specific to one of the cases, they cut across and combine various design indicators. They emerge from 'single-case or cross-case observations' (ibid 2013, p. 88).

I continued with a revised reflective element, furthering the generation of the concept of an organisation as artefact. This I did by carefully confronting observations with the previous Conceptual Sketch, which allowed me to further integrate a comparative element, creating continuity and progressing through the integration of previous, preliminary observations. While the second articulation of the Conceptual Sketch helped to further specify the research direction and rearticulate the research questions, the third version of the Conceptual Sketch represents the closure of the analysis phase. It is intended to draw out specific propositions that describe the case study organisations as designed artefacts. These serve as the basis for the comparison with existing theories in the succeeding chapters.



### 4.7 Conclusion

In Chapter 4 I introduced the research design, methodology, methods and analytical process of this research. The chapter started with the allocation of this thesis to the realm of research *about* design and social constructionist traditions, and continued to justify the selection of Case Study methodology over Mixed Methods or Participatory Action Research. This research is a qualitative inquiry that is based on an understanding of the social world as constructed through the experiences, perceptions and actions of individuals. The subjectivity of the researcher is characteristic of this view point and reflected in Grounded Theory, which forms part of the methodological framework for analysis. By combining principles of Grounded Theory methodology, such as Theoretical Sensitivity and Creativity with convergent coding mechanisms, such as the introduced reverse pattern coding, the analytical framework is adapted to provide closure while respecting the evolving character of this research.

I continued by introducing the five phases of analysis which comprise three cycles of coding and two reflective phases, of which one resulted in a revision of the primary research questions. I would like to remind the reader of the final research questions here, before moving on to the next chapter.

The final set of five research questions reads as follows:

1. Which design traits are evident in temporary organisations?
2. How do these compare and contrast with established design concepts?

3. How does the identified design impact on the organisation?
4. How are the phenomenologically emergent design behaviours and activities evidenced?
5. What is the value of identifying such emergent, hidden and distributed design behaviours and activities, for practice and theory?

Now that an overview of the research methodology has been given I will move on and present the outcomes of analysis in the following chapter, Chapter 5.

# 5 Presenting the Outcomes of Analysis

## 5.1 Introduction

The structure of this chapter follows the analytical phases introduced in the previous chapter in Section 4.6 (pp. 72), and presents the case-specific outcomes of the analysis in relation to Phases 2 (*Exploration)* to 4 *(Convergence).* A brief reminder of these phases of analysis might be helpful at this point:

| | |
|---|---|
| Phase 2: Exploration | First and Second Cycle Coding |
| Phase 3: Reflection 1 | Preliminary Findings, Conceptual Sketch #2, and Final Research Questions |
| Phase 4: Convergence | Third Cycle Coding - Reverse Pattern Codes, Identifying Events, Coding for Design Indicators |

(Please note that the outcomes of *Phase 5: Findings* are presented in a separate chapter, Chapter 6).

This chapter is divided into two parts; the first part is dedicated to Phases 2&3, and in the second part I present the content and outcomes of Phase 4. As Phases 2 & 3 respond to the preliminary set of research questions, which address the creation of an organisation rather than its design, I start this chapter by introducing observations that relate to the creation and development of each case study organisation. At the end of the first part, I present a model of organisational creation and development that is grounded in the first and second cycles of coding. Subsequently, the presentation of Preliminary Findings and a review of the Conceptual Sketch lead on to the final set of Research Questions. In the second part of this chapter I share observations made during the third cycle of coding in which I applied specific design indicators to significant events in each case.



> Here the identification of design features in the cases is addressed and observations suggest that, yes, design is identifiable, but it surprises due to its unique and varied appearance.

## 5.2 Part 1 – Results of Analysis – Phases 2 & 3: Creation and Development of Case Study Organisations

In order to identify to what extent organisations are designed, I first had to understand the more general characteristics of their creation and development.

I will in the following section introduce and present an understanding of the creation and development of organisations, based on the second phase of analysis, first and second cycle coding. As I was able to identify, the creation of each case study organisation can be segmented into three stages, starting with its very creation, the initial bringing together of an organisation. Both organisations subsequently progress towards stages of development and maintenance. The resulting framework of organisational creation distinguishes between three stages of creation and development, as I explain below.

**A Three-Stage Model of Organisational Creation and Development**

A three-stage model of organisational development is suggested by the themes that emerged from Theme Generation 1 during Second Cycle Coding (which is part of the analytical phase 2, see pp. 76). For example, *purpose definition* surfaced as a theme that captures the distinguishing characteristics of each case study organisation in relation to the way the purpose of an organisation is established. This suggests that the creation and development of both cases can be described by referring to their organisational purpose, the alignment of its resources to this purpose and the achievement of an established organisational formation. The following sections provide evidence for the occurrence of these three stages in the empirical material.

From the rich descriptions of organisational development in the following paragraphs I suggest that the creation of each organisation goes through the three stages which are observable across both cases: "purpose definition", "alignment to purpose" and "established formation". While both organisations continue to exist beyond these three stages (e.g. both dissolve at some point), these three are significant in relation to the overall focus of organisational creation.

This does not represent an exclusive model of organisational development or lifecycle[1], it is, though, a model of organisational design that emerged from analysis and is appropriate to describe the specific characteristics of both case studies while reflecting the research interests, such as the involvement of stakeholders in organising.

The three stages form a longitudinal framework of organisational creation, which helps to identify case-specific themes that respond to each research question, providing more in-depth detail.



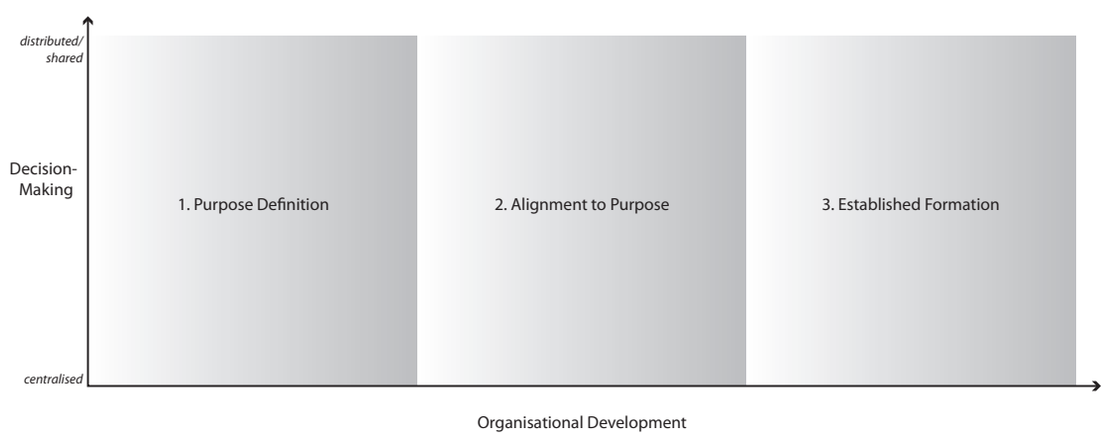



***Figure 5.1*** *The three-stage model of organisational creation and development*

### Evidencing the Three Stages in Each Case Study

In the following I first present the three stages of creation as they are evidenced in each case study. This then leads to replies to the research questions by eliciting what people create when they organise, what activities they do this through and how involved members

1 See, for example Daft's (2015) four stages of development (ibid, p. 325): *Entrepreneurial Stage, Collectivity Stage, Formalization Stage, Elaboration Stage*

of each organisation are throughout all three stages of organisational development. This allows me to further specify how each case evolves throughout its creation and development with a specific emphasis on involvement in decision-making.

This approach is part of the grounded character of the analysis. Rather than looking for pre-defined design understandings in the materials, I first inquire into the intrinsic characteristics of each case to discover each case's individual "anatomy" through a non-biased view of the activities that contribute to their existence and maintenance as potential artefacts.

The result is a better understanding of an organisation as an artefact that is created by humans, and this understanding is then compared to the first Conceptual Sketch, allowing for a more refined and empirically informed sketch to evolve.

Mapping each case onto the developmental model (see Figures 5.2 and 5.3) also allows me to identify events that are intrinsically significant for each case's development which I then take forward to the inquiry into the occurrence of design indicators in the second part of this chapter.

## 5.3 CS1: Building Project – Evidence for the Three Developmental Stages

In the following paragraphs I will evidence the appearance of the three stages of organisational creation and development in the Building Project.

### 5.3.1 CS1 Stage 1: Purpose Definition



Creating the organisation around the Building Project started with a first meeting of interested stakeholders, the Stakeholder Committee. A number of stakeholders met and they all shared their interests in the Building Project.

**The Stakeholder Committee is Created Out of Informal Interactions**

The purpose of the group was introduced by its chair, the former Head of the Graduate School, as

> 'to discuss the expansion of the school in conjunction with the proposed building extension' (extract from Stakeholder Committee Meeting Notes, 1/11/2000).

Further, the committee was formed to 'get ideas, to get a group to get people together to sort of flesh out ideas' (interview with the Building Manager, 10/05/2012). Ahead of this meeting, which formally establishes the purpose of the organisation, informal conversations took place that can be interpreted as part of the purpose-definition stage of this organisation. As the former Head of the Graduate School, states,

> 'I have been talking with people about quite a lot of these things for some time and other people have been talking and people have been complaining about things.'

Conversations had been taking place for quite a while before the Stakeholder Committee was set up and people were complaining about the lack of space for teaching students which was colliding with the growing number of postgraduate students. The Head of the Graduate School then organised the first group meeting, channelling his colleagues'

concerns into an open meeting format. It is not completely clear from the interviews, whether participants got specifically invited or an open call for participation was circulated. While the Head of the Postgraduate School, an Associate Dean role, initiated the first meeting, there was no incentive other than individuals' motivation to participate.

**Stakeholders Share Their Individual Interests**

As becomes apparent during the first meeting, every stakeholder had a specific view on the requirements of a new building, based on their individual expertise and experience and everyone was encouraged to voice interests and concerns. These ranged from IT questions ('whether students should be expected to bring their own laptops') to levels of ownership ('He would like to explore what levels of ownership of the building exist within the school'). Others voiced concerns regarding the image of the school: 'He stated we need ability to project ourselves as a first class management school'). Stakeholders then represent the complexity of the issue at hand, its strategic dimensions (such as its public image) as well as its operational challenges (e.g. IT equipment and construction). This project then can be described as self-organising in terms of its inclusiveness and lack of imposed decision-making. It is a structure that forms within an enduring organisation, the university, as part of a stakeholder-driven initiative.

**The Purpose of the Organisation is Established Collaboratively**

At the beginning of this organisation stands the identification of stakeholder interests and concerns and the further specification or exploration of the organisation's purpose. The definition of the organisation's purpose is initially proposed by a group of stakeholders and further specified through the inclusion of additional stakeholders' contributions.



The stakeholders are involved from the very beginning of the organisation's life and adopt a collaborative approach to the definition of the purpose of the organisation and its aims. Decision-making is distributed amongst all members of the organisation.

The motivations of each member to join the organisation are discussed and individual interests voiced.

While this section gave evidence of shared decision-making leading to the articulation of an organisation's purpose, the next section will detail how its structure begins to form.

### 5.3.2 CS1 Stage 2: Alignment to Purpose

**Operational Requirements Are Introduced**

Next in the process of creation is the alignment to the established purpose of the organisation. In the Building Project this is indicated by the introduction of parameters such as a specific building budget, specific aims and objectives. The project becomes more operational, and is joined by experts from the University. One such expert from the Estates Department informs the group on the process of procuring contractors and stresses the need for pragmatic decisions in a meeting one year into the project (Stakeholder Committee Meeting Note 4/7/2001).

> 'He reminded everyone that the school would need to purchase the furniture and carpet to match the existing lounge(…).'

He further informed the group 'that tenders would be sent out' for a minor part of the building work. The group is now becoming more operationally involved in the process.

**The Project Grows**

Even further into the lifespan of the organisation the project has developed. While initially the stakeholder group anticipated raising £80,000 of funds, in the end this grew to £10million. The project also grew in terms of supporters within the School and the University, as the Head of the Postgraduate School says, 'as we moved along we gathered people up in the hierarchy' (conversation, 01/10/2013). As the project grew, more parameters get introduced and eventually the architects arrive and document the Stakeholder Committee meetings (they now take the Meeting Notes as of 5/9/2002). Resources are being redistributed and aligned in order to meet the aim. Established processes take over.

**Professional Roles Dominate The Project**

Next, the project moves away from the initial Stakeholder Group and becomes dominated by people in established roles in the enduring organisation, the School and the University. This is represented by the intensified exchange between the group and other functions within the university, e.g. the chair of the Stakeholder Committee takes part in meetings of the university wide Estate Group and reports back to the stakeholders (meeting note 23/01/2002). Further, the Dean of the Management School now takes over leading the project and establishes structures and roles, by e.g. appointing a member of academic staff to replace the initial chair of the Stakeholder Committee. While the Dean stated in an interview that the former chair had other matters to attend to, the Head of the Graduate School himself interpreted this move as a development towards "professionalisation". The new chair was the Associate Dean of Finances and therefore had a contribution to make beyond the initial interest of developing the Postgraduate School. But he also 'had the authority to go and talk to people', because he was a senior member of staff, as the Building Manager states (interview 10/05/2012). Further, the new chair of the Stakeholder Committee also joined the group of academics that represented the management school in the wider university.



### 5.3.3 CS1 Stage 3: Established Formation

**The Project Adheres to Established Processes and Structures**

The Building Project has now achieved a specific formation, meaning that its structure is established and represented by meetings, procedures and responsibilities. Members of the University's Estates Department point out that an architectural design process should be applied, following the official Royal Institute of British Architects (RIBA) recommendations. This is segmented into stages from A to D. Meetings are held on a regular basis across the collaborating parts of the established organisation, responsibilities have been distributed and roles established. The Vice Chancellor, for example,

> '(…) would attend the executive meeting every month. In that meeting the docs would be produced. So there would be the stages AB feasibility report that he would sign up to if he was happy with, 'cause the architect would come and do a presentation. Then there would be a document for him to sign, approve of, then there would be another document of stage C - which is concept design' (Interview with staff members from the Estate Department).

The organisation is diversified into several different regular meeting groups, please see Chapter 3 (Section 3.3.3, p. 42) for more detail.

**The Stakeholder Committee Becomes a User Group**

The Stakeholder Committee is now the User Group and rather than driving the project is on the outer perimeter of it. Members of staff get consulted through the User Group. The account of its chair characterises some of the dynamics of these consultations:

> '(…) here are the plans that are proposed, now everyone has a chance to look at these. and if you don't have any problems by the end of next week this is what is going to happen guys. Don't complain after this stage.'

Another example of consultation characteristics concerns changes in the way teaching would be organised in the new building:

> 'We decided, again, centrally, without much consultation, that it appeared that the programmes could be accommodated on a one-hour block system.'



Based on the previous accounts of organisational development and decision-making I will now move on and provide replies to the Preliminary Research Questions.

### 5.3.4 CS1: Building Project – Responding to Preliminary Research Questions

In the following I will reply to the three initial research questions that aim at (1) understanding the aspects of organisations people create when they organise, (2) through which activities they do so and (3) how people are involved in creating an organisation. This leads to the population of the Three Stages model with the Building Project case study and hints at factors that potentially could provide insights into dynamics of design.

**Response to RQ 1: Stakeholders Create a Self-Motivated and Transient Organisation**

- A group is created, which is manifested at specific times in a specific place by its members. Participants hereby create a space for discussion and the exploration of interests.
- Physical artefacts, like the meeting notes, are created to support and document the existence of this group.
- Although intentionally created, the Stakeholder Committee represents a transient structure, exposed to influences from the established organisations it depends upon.
- Along its development, roles are created and again dissolved as appropriate.

In Stage 1, though, responsibilities are not oriented according to formal role descriptions, but to stakeholders' interests.

**Response to RQ 2: Dispersed Activities Influence the Organisation**

- Informal activities, like conversations between school staff members, initiate the creation of the Stakeholder Committee.
- Personal as well as shared activities contribute to the creation and development of the organisation. An example of an individual activity is the invitation to the first meeting sent out by Paul (Head of the Postgraduate School). Shared activities are the meetings themselves and further activities that are based on shared decision-making.
- But the creation of the organisation is not only influenced by activities from within its own set of stakeholders. It is to an even greater effect exposed to activities that take place in the established organisation it is reliant on. For example, when a new Dean is appointed, the project begins to change towards central ownership and decision-making.

**Response to RQ 3: Involvement Changes from Stakeholder-Driven to Professionalised Coordination**

- Involvement is self-motivated and holistic in the early stages of the organisation's existence
- The level and intensity of involvement of stakeholders changes over the development of the organisation, when it changes from being stakeholder-driven to professionally coordinated.
- While at the beginning the organisation is open to the involvement of all stakeholders the assignment of a gatekeeper who mediates between stakeholders and the Management School, limits the involvement of stakeholders.
- In Stage 3 stakeholder involvement becomes managed. Thereby the consultation of stakeholders follows the dynamics of established decision-making structures and hierarchies where previously the stakeholders were the ones who created the project.



### 5.3.5 CS1: Summarising the Creation and Development of the Building Project along the Three Stage Model

Figure 5.2 visualises the case-specific development of the Building Project. While the three stages sit next to each other on a longitudinal axis, an additional dimension of "stakeholder involvement" appears that characterises organisational development in each stage. The framework reflects this by incorporating a vertical axis representing from bottom-up ("distributed") to top-down ("centralised") decision-making across the three sectors of organisational development.

A curve that starts on the upper end of the *decision-making* axis and continuously descends reflects the shared and distributed decision-making that is characteristic of the *Purpose*

*Definition Stage*. The involvement of the stakeholders, or the Stakeholder Committee, is reduced throughout the *Alignment Stage* and decision-making eventually becomes centralised when the project reaches the *Established Formation Stage*.

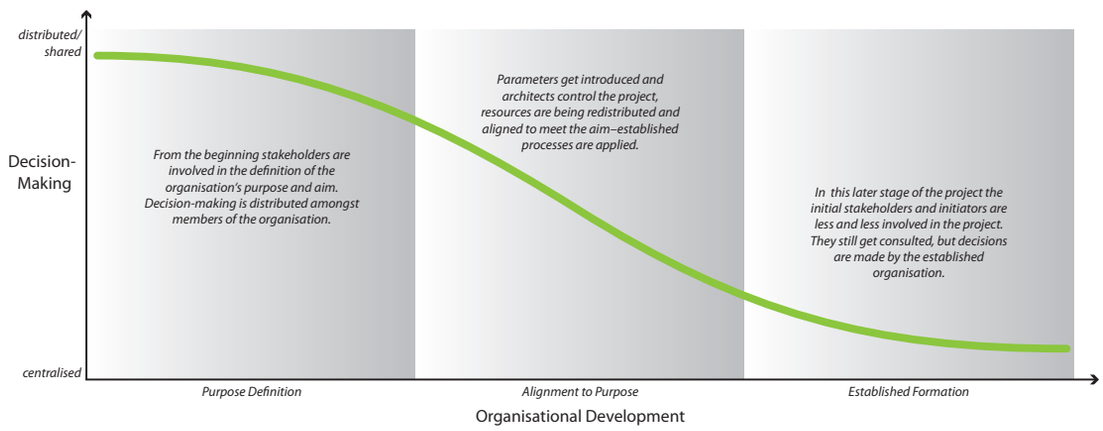



***Figure 5.2*** *Organisational development of the Building Project*

## 5.4 CS2: Performance Project – Evidence for the Three Developmental Stages

Now that an account of the creation and the development of the Building Project has been given, I will continue by providing an overview of the creation and development of the Performance Project below.



### 5.4.1 CS2 Stage 1: Purpose Definition

#### Artists Pre-Define Aims and Objectives of the Performance

In the Performance Project the early stage of creation is not directly observable. The purpose of the music performance has been established previous to the event. The performance is part of an ongoing action research project, which inquires into the relationship between orchestra, audience and space. The purpose of each performance therefore is a site-specific contribution to this research effort. Still, as the artists state,

> 'groups in different cities seem to have a culture that you have to tap into, and so do different musical groups, singers (…) have a particular kind of attitude (…) the brass players have a bit of a different attitude about things, so that we have to find another way to relate to them.'

#### Stakeholders Influence Purpose of Organisation Indirectly

This portrays that stakeholders indirectly influence the organisation through their implicit cultures that require adapting to. Still, the artists maintain a decision-making power – in their own words 'You always need someone to say: this is how we are doing it.' – thereby limiting the degree of stakeholder involvement in defining or contributing to the *purpose definition* of the organisation. This also seems to apply to the stakeholders of collaborating organisations, such as the festival or conference, who procured the artists' work.

### 5.4.2 CS2 Stage 2: Alignment to Purpose

**Participants Join an Existing Organisation**

The visible part of the Performance Project started with the rehearsal, during which the artists made the participants familiar with their way of working. During the first rehearsal, which took place one week ahead of the actual event, the artists welcome participants. Three musicians turned up, including me, one amateur musician and one professional brass player and me, another amateur musician.

Previous to the rehearsal, the media conference organisers had advertised the Performance Project in an email newsletter presenting it as a 'mass participation performance' (newsletter, 12/04/2012). This gives an insight into the organisation that existed around the music performance. In a second newsletter, sent out one day before the rehearsal date (newsletter, 11/05/2012), the event got re-advertised and potential participants encouraged

> 'If you'd like to take part there are still spaces available for singers, choirs, and brass instrumentalists (from beginners to professionals).'

Once again it was mentioned that the artist group would stage a mass participation performance. The character of the organisation is roughly described in these emails and it becomes apparent that potential participants would be joining an already existing project (a mass participation performance) with a specific aim. This is articulated by the artists in an interview held directly after the performance. They state that their overall interest lies in the removal of the 'classical orchestral structure'.



**Participants Become Familiarised With Existing Working Culture**

Artists embrace skill levels of all kinds, as advertised in the email newsletter, and include them through a process that builds on a 'light touch' (Matthew) approach to their performances, which includes very simple instructions for tunes and rhythm.

Participants have to be familiar with the tonal system but are not required to do any rehearsing up to the performance. This is based on improvisation, and will happen without any sheet music being involved. The artists are aware of the fact that the improvisation and the way the instruments will be played will be guided by rules and principles specific to them and unfamiliar to their participants. They therefore use the rehearsals to make the participants familiar with their way of working, so that the participants can play and react in accordance with their instructions. They align the participants to their working culture. This doesn't exclude a certain artistic freedom participants have while performing. As the artists recognise 'some want to have (…) more agency (…) than others' (Matthew). Still, with regard to forming an organisation, the instructions are clearly the artists' responsibility.

### 5.4.3 CS2 Stage 3: Established Formation

**An Established, But Iterative Formation**

The organisation is established once the artists have initiated the participants. From this point on the core organisation stays the same. It consists of the two artists and ten

musicians and one project manager. The formation goes through iterations with regard to musical instructions and their arrangement in space. In total, five of these spatial iterations are observable. These iterations follow the artists' working process. It is a repeated process, one which they had applied previously, yet, at the same time, open-ended and specific to the setting of the performance and the results that emerge.

**The Organisation Maintains Relative Independence**

In contrast to the Building Project, the artists maintain relative independence from other organisational structures around them. The performance, for example, does not follow the advertised schedule, communicated through the Festival programme. The Festival programme suggests two set performances at specific locations by stating

> '1-1:30 (…) sonic arts company that brings together 'masses' of musicians playing identical instruments, within public spaces' and '4:30 – 5pm Listen up for (…) - 100 Brass Band players will lead you to the water front for the spectacular finale!'

Instead, the group moves across five different sites between 11am and 2pm.

**The Formation Supports a Flexible Process**

Further, the organisation stays open to input from musicians as well as from outside stakeholders. In one event the arrangement of participants is discussed and changed after input from participants. In another, the artists and their way of interacting is influenced by photographers who join the group. They keep the organisation flexible in order to react to their open-ended process and consult participants continuously. The musicians become involved in decision-making on how the organisation should pursue its aims.



### 5.4.4 CS2: Performance Project – Responding to Preliminary Research Questions

As previously done for the Building Project case, I will reply to the three preliminary research questions (1. what aspects of organisations do people create when they organise, 2. through which activities and, 3., how are people involved in creating an organisation) based on evidence from the Performance Project. This results in the further population of the Three Stages model with insights from the Performance Project.

**Response to RQ 1: Divergent Projections of the Organisation to be Created contrast with its Realisation**

- A music group is created, consisting of temporarily collaborating participants with the intention to perform an improvised music piece.
- Different structures are created by different stakeholders:
  - the festival organisers intentionally create a festival programme that specifies times and places where performances are expected to take place
  - the artists don't adhere to that structure, but follow their own, open-ended process to create the music performance.
- Artists create a group based on a shared working culture.

- Physical and digital artefacts promote the organisation and raise expectations towards the shape of the organisation e.g. when the music group is promoted as a mass event in the festival programme and email communication.
- Artists have to create the conditions for the organisation to come into existence.

**Response to RQ 2: Instructional yet indiscriminate – Communication and the Familiarisation/Integration of the Group**

- Artists have to conduct a variety of activities in order to be able to create the organisation for the music performance, such as organising funding, communicating with music groups and making themselves familiar with the spatial context.
- Activities that contribute to the creation of the organisation around the music performance are instructional yet indiscriminate.
- Artists educate or familiarise participants with their own working culture through encouragement and the suspension of judgement. They align and integrate the musicians.
- Artists orchestrate communication with the participants. Not all decisions are being shared, some decisions are made between the artists and then communicated.
- Musicians accept and respect the artists and their way of working.

**Response to RQ 3: Intentional but Open Involvement Provides Challenges**



- Intended, but open and non-selective involvement provides challenges to those who create an organisation. A novel organisation that attracts intrinsically motivated participants can become dependent on already existing organisational structures (such as existing music groups).
- Intended involvement along pre-defined structures (such as the festival programme) can conflict with the intrinsic motivations of participants. As is observable when the artists, as participants, take part in the festival, but refuse to align with its structure, which does not reflect their specific working culture (e.g. iterative cycles, changes of location).
- Involvement can be unpredictable, but impactful. Participants contribute to the development of the organisation by affecting its shape and decision-making dynamics in unpredictable ways (see, for example, the impact of photographers on the formation of musicians).

### 5.4.5 CS2: Summarising The Creation and Development of the Performance Project Along the Three Stage Model

In the light of these considerations, the Performance Project appears to be rather pre-defined, inhibiting the holistic involvement of stakeholders. It is rather prescriptive and structured towards pursuing a pre-defined purpose with a newly created organisation, but the characteristics of the organisation and its processes remain semi-structured for longer.

In the latter stages of the organisational development, apart from moments of interference, it stays relatively independent from existing structures or hierarchies, thereby maintaining a similar level of involvement across its development. This development is reflected in a curve that starts at the lower end of the decision making axis, representing centralised decision-making, and then ascends to a higher level of involvement towards the end of the graph when musicians and other stakeholders become involved in decision-making (Figure 5.3).

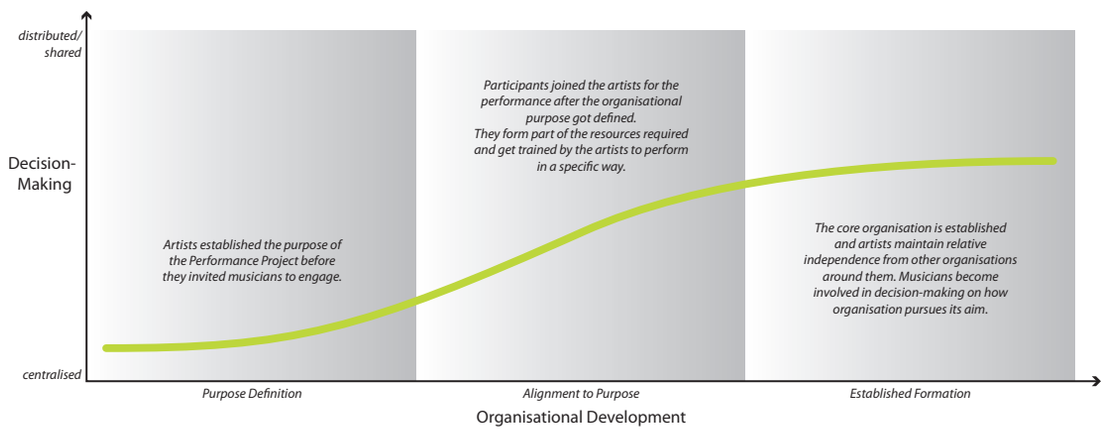



***Figure 5.3*** *Organisational development of the Performance Project*

Now that the results of analytical Phase 2: First and Second Cycle Coding have been introduced, I continue by presenting the outcomes of Analysis Phase 3 (Reflection 1) the Preliminary Findings and the Conceptual Sketch #2.



## 5.5 Summary of Preliminary Findings

- Organisations as created artefacts can be flexible and transient.
- Physical artefacts are used to promote and manifest an organisation.
- Artefacts can raise expectations and create uncertainty through ambiguity between envisioned and realised organisations.
- Activities that influence the creation of an organisation are dispersed amongst stakeholders from inside and outside the organisation
- Activities intended to create an organisation can result in trust and collaboration or conflict
- The quality of involvement can change throughout the development of an organisation – from self-motivated and holistic to formalised and sporadic.
- Intended involvement can be challenging if open and unstructured.
- Involvement can be unintended, but still have a significant impact on the development of the organisation

## 5.6 Conceptual Sketch #2 – Reflecting on the Organisation as *Created* Artefact

The preceding analysis enables me to redraw the sketch of an organisation as artefact with more confident "strokes", based on observations from the field.

My understanding of what an organisational artefact might be defined as has been further informed as a result of the previous observations on the creation of both case study organisations.

In this section I refer back to the previous Conceptual Sketch as a theoretical starting point. With the insights gained from the analysis so far, I will compare my present understanding of an organisation and the process of its creation with this first Conceptual Sketch. This is done in the format of a numbered list, where proposals from the first Conceptual Sketch are listed and re-thought through reflections based on my current knowledge.

In the following paragraphs brief summaries of the propositions articulated in *Conceptual Sketch #1* are followed by further elaboration, which are informed by the preceding observations and preliminary findings:

**1. A post-structural understanding of organisations suggests that members of an organisation are involved in its creation and development through constant activities and interactions, suggesting that this artefact is better described by its social dynamics than structures.**

**External Social Dynamics Add Uncertainty and Require Flexibility**

Social dynamics, such as interactions, actions and reactions, are what shape both organisations. But the observations suggest that these are not only initiated by stakeholders inside each organisation, equally important for the creation and development of an organisational artefact are those social dynamics that exist around it. Such external dynamics appear to be less predictable, but equally or even more influential, adding a dimension of uncertainty while requiring flexibility. This suggests that neither of these temporary organisations exists independently from enduring organisations and their structures.



**A Participatory Organisation Can Integrate Hierarchical Relationships**

An organisation that is open-ended and strives for a spontaneous and open arrangement of stakeholders, like the Performance Project, isn't necessarily free from the requirement for internal structure or hierarchy. This indicates that novel forms of organisation, which declare themselves as participatory, do not automatically show a high degree of shared decision-making. While structures are not necessarily as strong and hierarchical as in established and monolithic organisations, flat or horizontal relationships still can accommodate the central allocation of decision-making power over activities.

**2. The organisation as artefact is closely related to its creators, it does not exist independently from them, as other artefacts do.**

**The Relationship Between Creator and Creation Alternates and Changes**

The relationship between creator and creation alternates throughout the different stages of organisational development. On the one hand, the early stages of the Building Project show

a close interaction between the Stakeholder Committee and its members. On the other hand, this project then changes ownership during the second and third stages, going on to exist independently from its initial creators, the Stakeholder Committee.

In the Performance Project, the organisation around the performance alternates between independent existence from and interdependent existence with its creators. When, e.g., the artists give instructions and step back to listen to the musicians performing, the organisation exists independently, and the creative impulse transfers to the musicians themselves with regard to their musical interactions and improvisations.

**An Interdependent Relationship Seems More Likely at the Early Stage of Organisational Creation**

A pattern then emerges which specifies the relationship between creator and created. In the Purpose Definition Stage, a tight interdependence between creators and the result of their activities, the organisation, is possible. As both projects enter the Alignment Stage, imposed instructions, as well as the introduction of pre-defined processes and parameters, limit or partly dissolve the inter-dependence between creator and created.

**3. Design of the organisational artefact appears to be influenced by a conflict between imposed, extrinsically motivated policies and the needs of stakeholders as creators to contribute via their self-expression and intrinsic motivations.**

This refers to the conflict between individuals' actions and behaviours, through which they assign meaning to organisational complexity, and imposed decisions that limit the individual's freedom to make sense of the organisation.



**Integration of Individual Motivations Appear More Successful at Stage 1**

This conflict is rather difficult to elaborate on, given the state of observations at this point. It seems, though, that the explicit inclusion of stakeholders' own interests during early stages of an organisation, leads to the successful integration of individuals' intrinsic motivations, as demonstrated in the Building Project.

This proposition is supported by the conflict that can be observed during Stage 2 in the Performance Project, when the artists' flexible, spontaneous and open-ended approach to formation collides with the overall imposed structure of the Festival programme.

**Organisational Structures and Individual Contributions Don't Exclude Each Other**

But this doesn't mean that an organisation either exclusively allows for individual freedom or restricts it. Even where individual contributions successfully inform an organisation's decision-making in Stage 1, as demonstrated by the Building Project, this involvement might be reduced as the organisation moves towards a higher degree of formality in Stages 2&3. Furthermore, an organisation, which is characterised by formalised relationships, such as an established separation into instructing artist and executing participants, can support individuals' abilities and freedom of expression.

I now move on to Part 2 of this chapter in which I present the outcomes of the 3rd Cycle of Coding and Reflections 2. The chapter starts by introducing the events that will serve as the

basis for the third cycle of coding.

## 5.7 Part 2 – Identifying Design in Case Study Organisations

In Part 2 I move from inquiring into the creation and development of both case study organisations to the identification of specific design traits within each case. I base this on the preliminary findings and observations made during the previous analytical phases, specifically those that inform the identification of events that are significant for the creation and development of both cases. While I evidence for the coding process in this part of Chapter 5, in the subsequent chapters (Chapters 6 to 8) I introduce findings and discussions that respond to the final set of research questions.

### 5.7.1 Identifying Significant Events

From the observations collated so far I can identify significant events that have an intrinsic meaning and relevance to each case, which I will then analyse by applying pattern codes (Design Indicators), such as described in Chapter 4 (Section 4.6.4, pp. 83). The events portray situations and activities that are significant to the creation and development of each case. I will briefly introduce these events in the following to then move on and share observations made during the application of design indicators to the events. This I did by analysing each event in relation to the occurrence of Design Indicators.

### 5.7.2 Significant Events in the Building Project (Figure 5.4)

**Event B1: Formalising Discussion Space – Creating the Stakeholder Committee**



The group's creation followed partially invitations, and partially self-nominated participation. The Associate Dean invited colleagues to participate in a first meeting that would establish the Stakeholder Committee as a representation of the main interests within the school, as one interviewee stated. It can be understood as a projection of the wider organisation (the Management School). Although some colleagues were invited, the group held open meetings for others to join on their own initiative. This committee met at regular intervals over the coming one and a half years.

**Event B2: Information-Oriented Re-Formation**

Once that space for discourse got created by setting up the first meeting and coming together as a group for the first time, discussions take place and the existing situation of having one group is being reviewed and considered to not be ideal for facilitating the kind of discussions needed to further explore issues raised by participants. This is then addressed by the formation of two new sub-groups which would reconvene after the next committee meeting. Also, at the end of a number of meetings, small groups of two persons agree to take on a specific task, for example to develop a business plan for the next meeting or a financial overview (I.e. during the first and second committee meetings) and a central person was assigned to monitor the progress of both groups. Further, a group member was chosen to liaise the person in question.

**Event B3: Consulting Up- and Sideways**

Further into the project, the Stakeholder Committee decides to consult with members of the school and the university on expert issues. They realised that the knowledge and the limited experience with building projects that existed within the group was not sufficient to address specialist issues such as questions of funding. The group further called on the support of the Dean of the Management School to promote their case.

**Event B4: Consolidation**

This event represents a significant change in the project's ownership, away from the initial Stakeholder Committee to the architects who were employed by the University and worked closely with the Dean of the Management School, responding to her vision of the new building. She also articulated additional drivers for the design of the building, such as a representative 'stature'. For the organisational side of the project, this meant that the hierarchical procedures got reinstalled after a rather bottom-up driven initiative, now the project was significantly driven by the head of the school - the Dean.

**Event B5: Professionalisation of the Project and Process**

Activities of the Stakeholder Committee during this period begin to phase out. It is now the architects who conduct research into aspects of the project, report back to the group and document discussions. The architects consult the group to learn about issues, requirements and previous inquiries undertaken. The Stakeholder Committee becomes the 'End User Group' which is chaired by an academic that was appointed by the Dean. A number of expert groups and decision-making bodies are set up within the University and Management School as well as between external contractors.



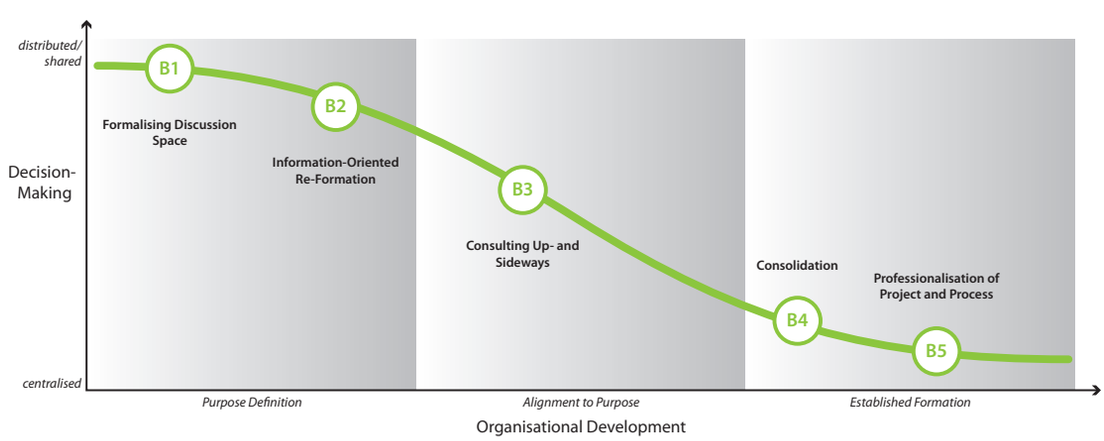



***Figure 5.4*** *Significant events during the Building Project*

### 5.7.3 Significant Events in the Performance Project (Figure 5.5)

**Event P1: Managing for Creativity**

The Performance Project involved a large and diverse variety of stakeholders, who the artists had to negotiate with to create the conditions for the rehearsals and the performance. These activities included the organisation of funding, it involved interactions

and communication with a set of stakeholders from the Festival and the media conference. As one of the artists stated 'We have to manage a lot before we can be creative'.

**Event P2: Initialising Outside Participants, User-Centred Organising**

Before the final event the artists invited potential participants to rehearsals. As the artists said, they use these rehearsals mainly to make participants familiar with their way of working, and also to get a feeling for what they can ask participants to do and what participants feel comfortable with. Although the artists do not adhere to a predefined, formalised process, they have their internal processes. These are not formalised or put down in text. They are more lived and relived experiences from past performances which get reconsidered and adapted constantly through interaction with each other and the participants.

**Event P3: Iterative, Open-Ended Process; Flexibility, Experience-Based**

A significant characteristic of the Performance Project is the nature of its development. The quality of this process is characterised by the artists' intention to keep everything flexible and open for as long as possible. This refers to decisions they make on the musical and spatial arrangements. As their performances are site specific they often have to deal with existing circumstances and contexts and work with the resources available. A central quality of this process is emergence and iteration.

**Event P4: Introduction of External Interests**

The arrival of photographers, videographers, audio professional and media conference organisers marked the performance out from the series of rehearsals. The final arrangement of performers followed instructions not only oriented according to the artists' intentions and aims, they were negotiated between the photographers and the artists and then communicated to the performers through the artists. At one point, the performers were asked to arrange themselves within a square, outlined by lines on the floor of the outdoor space they were performing in. At another moment the performers were sat on stone benches, distributed across a compact area at one end of the same outdoor space.



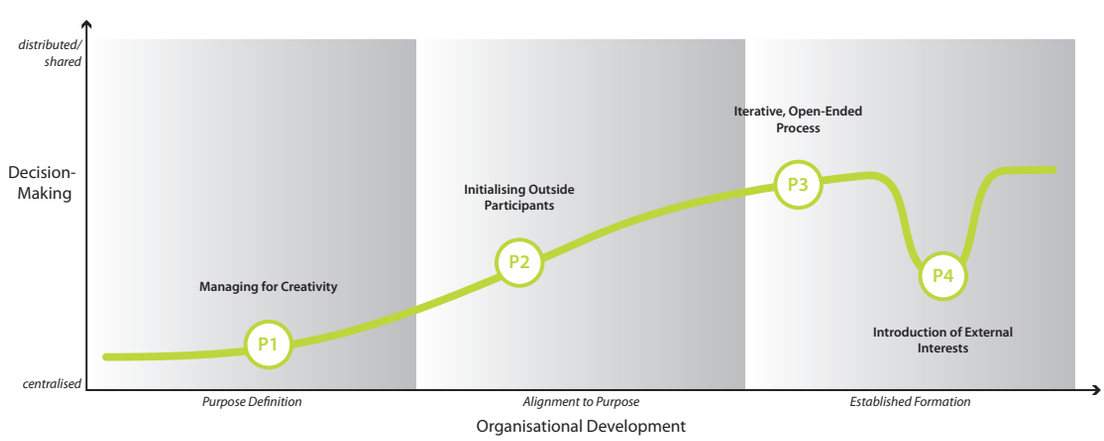



***Figure 5.5*** *Significant events during the Performance Project*

## 5.8 Applying Design Indicators to Events

In this section I will present the observations from Analysis Phase 4: *Coding Cycle 3- Reverse Pattern Coding*. As described in detail in Chapter 4, Section 4.6.4 (pp. 83), Reverse Pattern Codes were generated from design theory and include Design Indicators that represent three dimensions of design change: *taking directed actions, creating something new* and *developing alternative solutions* (see Table 5.1 below). The application of Design Indicators to significant events provides insights into whether, and if so, how design appears in the creation and development of both organisations.

Thereby I provide evidence for the identification of hidden design activities in the materials which will serve as the basis for the findings and discussions in the following chapters. At the end of this section I will highlight the specific occurrences of design in each case, and I will do so by providing evidence for the appearance of Design Indicators across the development of each case. Below is a brief reminder of the Design Indicators introduced in Chapter 4:

| Design Indicator | Summary |
|---|---|
| **DI 1: Taking Directed Action** | This indicator describes the identification of existing and preferred situations and actions that actors take to achieve these preferred situations (Simon 1996b). |
| **DI 2: Creating Something New** | Preferred situations are not per se considered design solutions. Human-Centred Design scholars articulate a condition: solutions have to represent something new, something that otherwise would not exist (Cross et al. 1981; Krippendorff 2005; Junginger 2008). |
| **DI 3: Developing Alternative Solutions** | This indicator focuses on how stakeholders arrive at a vision of the preferred situation and pursue it by developing and testing alternative solutions (Lawson 2005; Evans 2011; Jonas 2012). |

***Table 5.1*** *Design Indicators*



### 5.8.1 Identifying Design Indicators in the Building Project

In the following I give an account of the appearance of the Design Indicators in each of the events, by referring to the empirical material that I coded for design indicators.

**Design Indicators in Event B1**

**DI 1: Stakeholders Identify Existing and Preferred Situations**

In the purpose definition stage of the Building Project the articulation of an existing situation is evident in the conversations about a lack of teaching space for postgraduate PG) teaching and what Paul describes as a lack of political awareness in the Management School with regard to PG students. Staff members have complained about this situation to Paul for a while and thereby established an existing situation that requires change. The existing situation can be described as a growth in number of PG students and a lack of resources to meet this increase. But another situation is being established by recognising that informal conversations take place and action is required to bring people together more formally. In addition, the realisation that such informal, spontaneous conversations would

require action, demonstrates an awareness of an existing situation that requires change.

The creation of a formalised space for discussion can be regarded as the preferred situation. The idea was to 'have a group which would represent the main interests', as Paul states and 'explore ideas together', as Karen adds, ideas for the further accommodation of growing Postgraduate teaching programmes. As Paul explains, the lack of space could be interpreted as a lack in political awareness, another dimension of the existing situation.

> '(…) the whole school was really driven by undergraduate teaching (…) structurally the graduate side was not really catered for.'

And although the PG programmes were growing in numbers quickly,

> '(…) timetables and all the structures and power structures in the university gave precedence to undergraduate things and so there was a political view we had to do something more for the PGs' (Paul).

Additionally, accommodation was needed for newly created executive programmes. The Meeting Notes describe the purpose of the Stakeholder Committee as 'to discuss the expansion of the school'.

**Individual and Shared Initiatives for Design Change**

Stakeholders across the Management School were invited by email, and Paul was the main driver for this, as Karen confirms. The format of the first meeting is described as a 'very open format, at least open for other people to get involved' (Paul). Here an individual with an official function, Paul, as Head of the Postgraduate School, takes the initiative to change an existing situation into a preferred situation. This individual action is later turned into a shared action, as the Stakeholder Committee as a group maintains the organisation.



**DI 2: The Creation of a New Organisation**

The Stakeholder Committee represents a newly formed organisation, something that didn't exist before and that wouldn't have come about without intentional actions. It is observable, though, that the "new", in the form of the Stakeholder Committee, requires the existent. It is based on the particular interests of participants, existing interests and on established relationships and functions, as Paul, as the Head of the Postgraduate School, is the initial driver, and participants had interacted with each other before.

From the information collated it is not apparent whether the formation of a Stakeholder Committee was a result of the development and prototyping of alternatives, as design indicators would suggest. It is though, the realisation of a vision.

**Design Indicators in Event B2**

**DI 1&2: Preferred and Existing Group Formations are Identified and Change is Initiated**

As the Stakeholder Committee continues to meet, it undergoes changes (see Event B2). At the end of the first meeting, the group decides to split up into working groups 'an educational group to investigate possible teaching scenarios' and a

> 'physical group (…) to review social needs, access, office space etc.', a third group

would 'revise and update the current business plan.' (Minutes of Meeting 1/11/2000).

This represents a preferred state (working groups) as well as directed actions (allocating members to working groups). The existing situation was identified in a preceding discussion during which 'concerns were raised whether the lecture driven format would still be relevant in 5 years time' and the need for specialist expertise was identified.

Here it is possible to identify the emergence of a preferred situation through discourse and shared decision-making. The group identifies existing situations and subject matters (teaching and physical facilities) and then organises itself around these, devising directed actions to form sub-groups.

The sub-groups are, again, new formations, based on the existing structure of the Stakeholder Committee.

**DI 3: The Preferred State Does Not Seem to Follow From Consideration of Alternatives**

The development of vision appears in a discussion about future teaching styles, but is less articulated when it comes to the development of alternatives for the group's formation. The group decides to achieve a preferred state by splitting up, but the discussion or development of alternative ways to do so is not documented.

**Design Indicators in Event B3**

**DI 1: Realising the Preferred State Can Have Unintended Consequences**



In this event, the existing situation can be described as a lack of expertise within the group which is identified.

The Stakeholder Committee starts to consult up and sideways as it enters the Alignment stage (see Event B3), and based on the required expertise identified, starts to contact experts from outside the Stakeholder Committee. The group acknowledges that specialist knowledge is required and should be integrated in its formation (preferred situation). Intentional actions to achieve this include the invitation of specialists from within the school and across the wider organisation.

At this time the School Administrator, representing the School's Dean, joins the Stakeholder Committee, as Paul explains: 'once he decided there was something significant going on, he joined the group.' Paul and he then 'developed a plan. So that is where we agreed the interim priorities (...)' (Paul).

At a later meeting, the group calls directly on the Acting Dean to promote their case within the wider organisation. 'The group urged the involvement of the Acting Dean to take these issues forward with Central University.' (Meeting Notes, 21/03/2001). With regard to the consequences of Directed Actions, the integration of specialists suggests that intended actions and the involvement of outside stakeholders can lead to the "import" of actions, introduced by these outside stakeholders.

For the third meeting of the Stakeholder Committee, two members of the Estates Department of the university were invited and joined the group. These experts then

introduce requirements and conditions for the decision-making of the Stakeholder Committee:

> '(one expert) assured the group money was available to spend on development but School would need to plan both short term and medium to long term. (…) (the expert) suggested that the School should lay down short, medium and longer term aims in a document incorporating the School business plan and a schedule for decision-making.' (Meeting Notes, 24/01/2001).

These stakeholders set parameters and requirements that have an impact on the further activities of the group.

**DI 3: Intentional Consideration of Alternatives is Not Observable**

Again, a vision or the development of alternative futures is not observable. Although, calling on the Dean shows a strategic capability.

**Design Indicators in Events B4 and B5**

**DI 1: Ownership Over Directed Actions Moves Away from Stakeholder Committee**

It becomes more difficult to identify design indicators from Event B4 onwards, as the Stakeholder Committee gets less involved in decision-making, and responsibilities are moved further into the existing structure of the management school and the university.

As the project advances, more professional stakeholders get involved (see Event B4). The arrival of the architects (Meeting Notes, 4/9/2002) represents a turning point in the dynamics and ownership of the project. As Paul states:



> 'Whereas I was in control of the whole thing really until early 2002, so everything went through me and I chaired the meetings (...) suddenly, when (the architects) came they were not relating to me they were relating to Estates primarily. So we were sort of treated like any other client. And that is where the ownership started to move.'

Soon after their arrival, the architects start compiling the Meeting Notes, which is described by Paul 'as a real watershed change.' While the vision for the new building become more pronounced and detailed, the organisation follows established procedures, such as the RIBA stages. Decisions are now made in decision-making groups within the School and the University, for example by the Dean of the Management School. She changes an existing situation, Paul being the chair of the Stakeholder Committee, and takes action by replacing him with the Associate Dean for Finance and Resources, Gabriel (see Event 5). Paul recalls:

> 'I think I stuck with it for a while but suddenly Gabriel was given the job of being the academic contact for the school.'

**DI 2: Novelty is Reduced as the Stakeholder Committee Becomes Part of Established Structures**

The novelty of the Stakeholder Committee decreases as the project gets integrated into the existing hierarchy and established structure of meetings and groups. The formation of the Stakeholder Committee now becomes integrated into the building process as its end user

group.

> 'Normally, what would happen, there would be an end user group set up within the Management School...so basically there would be a champion within there (...)'.

This account by Philippa from the Estates Department demonstrates the reduction of novelty, as the Stakeholder Committee becomes part of a routine, established process.

### 5.8.2 Identifying Design Indicators in the Performance Project

Now that an overview of the occurrence of Design Indicators in the Building Project has been given, I move on to identify Design Indicators in the Performance Project.

**Design Indicators in Event P1**

**DI 1: The Realisation of the Preferred State is Dependent on the Situated Context**

The articulation or identification of an existing situation in the Performance Project is related to the planning of a performance. Simplified, the existing situation is the lack of conditions for a performance and the preferred situation is the running of a music performance, having created the conditions for it at a specific location. It is centred around clearly articulated ideas of location and context and flexible ideas of performers, music piece and instrument choice. As Matthew emphasises:

> '(…) we cannot just go to city x, let's (…) and say we want to build a super mass of 100 trumpet players and there we go, just do it because we only discover when we get to (city x) and work on the ground that actually that's not really going to emerge out of the situation, there aren't for instance a 100 trumpet players that just gonna be available at that time. We have actually found that where we have gone into particular places and the end product is being quite different even in terms of how big the ensemble is or the type of instrument we have gone into a city (...to work) with brass and we end up working with flutes or we come in thinking we are going to work with (…).'



The artists take directed actions to make the performance happen, to bring people together, to form an organisation around the project and create the conditions that will allow them to practice their specific form of music performance. Many of these actions are not related to the development of the musical piece, as Matthew says:

> '(….) in the last three months nothing of it was spent on any creative thought. It was all about applying for a grant for travel, booking, working out when we are coming, email contracts, insurance….'

Intentionality is limited, as the artists' work is highly site and resource specific. As Matthew explains:

> '(...) we work so site specifically (...) it is resource specific too, you know, it is like, well, if *that* is there could we do *that*?'

**DI 2: Existing Relationships Help to Create a New Organisation**

As the artists manage the conditions for their performance, they create an organisation that includes newly created connections and resources (e.g. funding), but they also build on previous relationships between themselves and those who commission their work (e.g. the existing relationship to the Media Conference organiser).

**DI 3: The Situated Context Appears to Reduce the Ability to Develop a Detailed Vision**

The vision of a preferred situation partially emerges out of the context and the situation, as not all parameters are known to the artists beforehand. This makes it difficult to develop a specific, detailed vision of a performance and of the organisation that will be necessary to realise it (e.g. the available musicians). As exemplified by Matthew's quote above, thinking in alternatives and flexible arrangements becomes a necessity.

**Design Indicators in Event P2**

**DI 1: Enabling Collaboration as Preferred Situation**

It is difficult for artists to plan for an existing situation before they encounter it and meet with participants, because it is dependent on an unpredictable congregation of musicians with various backgrounds and different skill levels.

The preferred situation can be described as enabling this body of musicians to collaborate with each other and the artists to build music pieces together. As Peter explains:

> 'We create (…) and build up pieces with performers as we go, (…) we actually create pieces with the people we work with.'



To achieve this, the artists require flexibility and 'streamlined', simple ways to work with participants.

> 'We found ways of working really streamlined so we give a few simple instructions that produce really beautiful and complex results (…)' (Peter).

Actions to achieve such a degree of collaboration involve rehearsals during which the artists establish a common familiarity with their work processes as well as the simple instructions and algorithms which they employ.

> 'We have come to tell performers, look we not gonna create a piece from day one, but (...) we will show you how we work (...) and then once we teach you the piece near the end, you have such familiarity with the logic of how we work that us tweaking the algorithm and saying well play seven notes, (...) they can just respond to it immediately because they already know, that is what they have to do.'

**DI 2: 'Building Something That Wasn't There Before'**

This alignment then really creates the new organisation around the performance, as something that didn't exist before. Artist create a new organisation,

> 'it's about building something that wasn't there before through very low-fi means in a way you can't just prescribe all that at the very beginning' (Matthew).

Still some participants are familiar with each other, as they are members of the same band. Furthermore, the newly established group builds on established individual skills, existing motivations (to play an instrument), confidence (in playing it), an existing pool of instruments and the artists use proven procedures to familiarise participants.

**Design Indicators in Events P3 & P4**

**DI 1: Conflicting Visions of Preferred Situations Appear**

On the day of the performance different established situations can be identified. Firstly there is the Festival programme, which represents an established situation of how the Festival is supposed to unfold and has been articulated and designed by the Festival organisers. The artists ignore this established situation, they don't follow the programme, but instead follow their own schedule and process.

Conflicting articulations of preferred situations are also observable when photographers arrive and introduce their requirements. In order to achieve the preferred situation articulated by the photographers, the artists adapt to their requirements, as the transcript of one of the videos of the performance demonstrates:

> 'Artists and photographers communicate about arrangement. Photographers suggest that musicians should not be too far apart. Photographer*: I would prefer not too far apart*. Matthew almost immediately instructs the musicians to position themselves in a specific area.' (Video transcript)

This arrangement limited the achievement of the artists' overall vision of an arrangement that would allow people to walk between the musicians. As one of the participants recalls:

> '(...) they kind of explained their vision and since what they wanted was a large group of people spread out across a large area just creating noise that people had to walk through (...).'

But the compact arrangement that the photographers suggested didn't allow for people to walk between musicians.

**DI 1&3: Constant Iterations Between Existing and Preferred Situations Enable the Exploration of Alternatives**

The artists repeatedly articulate preferred situations, and realise them, thereby creating new, existing situations and then review those as part of a cyclical process. The iterative process of reviewing existing and articulating preferred situations is described by one of the artists:

> 'I tried one option, which I invented sort of off the top of my head and that didn't really work and again Peter was like, ok, it sounded better if they were all the same note to start with, 'cause I just knocked off different notes in the sequence (...) so the solution was to start on different starting notes (...).' (Matthew)

Directed Actions artists implement while cycling between situations (existing-preferred-existing) are to 'make a decision on everything as late as possible' (Peter) split tasks

between themselves,

> e.g. 'there does need to be a single communication channel sometimes and then the other person stands back. Doing two things, firstly making sure that that other person is saying the right thing and occasionally actually you might need to re-explain that... but also, if we are doing a workshop, the other person might be more listening (...).';

refer to their repository of past experiences: 'Peter in the car said, maybe we should do the stabbing sounds which we did in New York'; and take any opportunity that allows them to experiment:

> '(...) when (...) they needed to stand there for five minutes I thought, well they need to play something they have been playing the other stuff for a while, maybe I just mix it up and then I just remembered what he said, oh let's just try that and suddenly it sounded awesome and I was like, ok cool.' (Matthew)

The artists develop visions and alternative solutions constantly during this process, some they explore verbally others through rehearsals. Matthew gives an account of a conversation about different visions:

> '(...) we just spent ages talking about that, because Peter was wanting a sort of particular effect and explore (...) randomness and I was coming from a completely other direction (...) doing something geometric (...).'



**DI 2: Variations of an Existing Formation Replace the Creation of Something New**

The novelty of the organisation at this stage is limited and can be identified in new arrangements of an existing group rather than the creation of something that didn't exist before. With regard to the musical arrangement, the artists develop something new based on existing solutions, like previous performances.

## 5.9 Conclusion

In this chapter I presented the outcomes of analytical phases 2 to 4, starting with the exploration of both case study organisations as created artefacts and then leading on to the convergent phase of analysis, in which I elicited the specifics of organisations as designed artefacts by coding the materials for Design Indicators.

As the outcomes of the analysis have shown, both cases support the articulation of a three-stage model of organisational creation and development, but they differ regarding the involvement of stakeholders throughout these stages.

The three-stage model of organisational creation and development allowed me to compare the way in which each case is created, reply to the preliminary research questions and identify preliminary findings in relation to the questions. Further, a second Conceptual Sketch has been articulated as a result of a comparison between the first Conceptual Sketch and considerations arising from analytical phases 2 and 3.

In the second part of this chapter I gave an account of the results of Phase 4, Coding for

Design Indicators, by providing evidence of Design Indicators in selected events. While not all three indicators are evident at the same time or during all three stages of organisational creation and development, I can conclude that design specific characteristics are identifiable across both cases.

The reader will have noticed that responses to the preliminary set of research questions are included in the first part of this chapter, while responses to the final set of Research Questions are still outstanding. These will be addressed during in-depth discussions in subsequent chapters (Chapters 7, 8 and 9).

Moving on from the account of outcomes of analysis the next chapter present the main four findings.

# 6 Findings: Identified Design Traits

## 6.1 Introduction

The findings in this chapter are the result of the previously presented outcomes and observations of analysis.

> They respond to Research Question 1 from the final set of research questions (see Section 4.6.3 for the complete set of final Research Questions): which design traits are evident in temporary organisations?

The findings are articulated as themes, which are a combination of phenomena that span across a number of observations made in each case, as well as across cases. They are relevant to design indicators as well, in the sense that the findings respond to the research question by being based on significant occurrences of design in each case. The findings were elicited by converging observations from both cases into four major themes.

The application of design indicators allows for an initial empirically grounded attempt to interpret the organisational development process as design. From this I can conclude that aspects of design change can be identified.

> This means that design indicators, as a whole or in their individual parts (e.g. defining an existing situation or articulating a preferred situation, devising directed actions etc.), map onto interactions, activities and processes, which are not called or thought of as design, but lead to the creation and development of each case study organisation.



While it seems that a certain match between design indicators and the empirical materials can be established, observations reveal a rich variety of manifestations of design in each case, suggesting interesting variations between fundamental design definitions and empirical phenomena.

I will here draw out some of the main themes that became apparent during the analysis. In the next chapter I will compare these to a wider body of established design theories and integral concepts in more detail.

The appearance of design indicators can vary between the two cases. I will therefore signify the specific case and developmental stage I refer to while giving an account of the observations.

## 6.2 Findings

### 6.2.1 Finding 1: Design Indicators Change as Projects Evolve

Case-specific observations show that design indicators change as each case goes through the three stages of organisational development. In the early stages of organisational creation, design appears as a rather spontaneous and flexible movement between existing and preferred situations. As the organisation evolves it becomes more intentional, planned and less exploratory. This is evident in the Building Project, as, at the beginning, the articulation of preferred situations is often an immediate consequence of discussions between members of the Stakeholder Committee. Later, the distinction between existing

and preferred situations becomes more pronounced and their articulation part of a highly structured process of organisational design, as represented by the number of official committees and meeting groups that follow an established design process.

Directed actions, actions towards a preferred situation, emerge at the beginning of the Building Project, and become more planned and intentional, as the project moves towards stronger structures and allocation of ownership, and the initial Stakeholder Committee loses control as well as ownership over decisions.

Where this ownership allocation is more centralised from the beginning, as in the Performance Project actions start out as more directed and intentional and therefore their characteristics change less over the course of the organisation's development.

In both projects we can observe changes in design activities, evidenced by the changing character of directed actions and the way preferred situations are articulated. Directed Actions change from emergent and evolving actions to intended and planned actions and the articulation of preferred and existing situations changes from emergent and distributed decision-making to planned and centralised decision-making.

In the Building Project the development from emergent to intended actions happens in parallel to a development from distributed to centralised decision-making. In the Performance Project actions and situations change in parallel as well. They do, though, continue to alternate between intended and emergent actions and centralised and distributed decision-making in contrast to the more longitudinal and continuous shift observable in the Building Project.



It seems then that the way changes in design are represented in both cases is specific to the character of each project, its aims and conditions. One similarity between both projects appears to be the interdependence between changes in the character of directed actions and changes in the way decisions on preferred situations are reached.

> From the above observations I can deduce that articulations of preferred situations and the situations themselves change continuously. Further, directed actions adapt to changes of preferred situations and their development and stakeholder relationships have an impact on the way design is used and applied and appears.
>
> The changes design undergoes appear specific to each project, suggesting that they are dependent on the situated organisational context.

### 6.2.2 Finding 2: Directed Actions Show Varying Degrees of Spontaneity – from Emergent to Intentional

In the early stages of the Building Project, where the shared decision-making of the Stakeholder Committee is dominant, the almost simultaneous appearance of existing and preferred situations is apparent.

The iterative movement that turns existing into preferred and preferred into existing situations, is supported by **three types of actions**:

1. Firstly **intended and planned action**, for example when the existing and

preferred situations are clearly identified and articulated and actions are taken to e.g. set up a stakeholder group and thereby create a forum for discussions. Here designerly activity is initiated by one key stakeholder, the Dean of Postgraduate Studies, when he invites participants to form a user group.

2. Secondly, **actions can be emergent and opportunistic**. This seems to be a more common form of decision-making in a distributed setting. Decisions on actions are made during discussions and emerge out of discourse e.g. when the group decides on sub-topics that require specific attention. This represents a socially distributed form of decision-making and action-taking. All members of the group are involved in the decision-making process and the execution of actions.

3. Thirdly, **emergent actions become intentional**. Actions can emerge within the group during discussions. They weren't planned, therefore emerge. Still, once they are articulated and agreed, they become intentional and the group decides how to implement these actions. The group then realises the articulated preferred state which then becomes the existing state and again provokes considerations of a subsequent preferred state. This fluctuating movement calls for spontaneous, ad hoc actions. During the course of actions new, intentional preferred situations surface and entail intended actions. Roles are being distributed consensually: for example one individual kept track of what the sub-groups discussed and reported back on this.



These observations show that the intentionality of Directed Actions can vary and calls those definitions of design into question which suggest that design is an intentional approach to change defined situations (see, for example, Design Indicator 1, p. 86).

### 6.2.3 Finding 3: Design Activities Show Reflective Qualities

The way that the change between existing and preferred situations comes about appears to be influenced by a complex set of procedural factors (as described in Finding 1) and divergent forms of design activities (see Finding 2). Finding 3 builds on Findings 1 and 2 and further exemplifies the complexity of design change by describing the observed reflective qualities of design activities. Previous analysis suggests, that in each case different qualities of reflection are prominent.

1. A reflective quality which is based on outside observation, comparable to an emic, analytical perspective. Here, one example of this is the way the artists reflect on the musicians' performances from a distance, they listen, reflect, discuss and change instructions. Their position outside the organisational formation becomes apparent when they document the performance audio-visually as well.

2. Reflection which is based on inside experience characterised by discussions about the organisation by members of the organisation.

While the first kind of reflection is based on observation, the second is based on how members of an organisation experience a situation and how this experience then leads to

the articulation of a preferred state. In the first kind of reflection, the reasoning that leads to the articulation of a preferred situation is based on distant observation of members of the organisation. Here reflection is part of the procedural occurrence of design, a step in the iterative formulation and re-articulation of the preferred situation or design solution. The artists in the Performance Project employ a process of instructing musicians, listening and observing before they reflect and change instructions on organisational formation in space and musical performance. Their reflections are part of a cognitive process of the artists as outsiders watching the performance and then being realised.

The second type of reflection is observable in the Building Project. Reflection is based on the experiences of members of the Stakeholder Committee. The group members experience the situation and based on this experience enter into dialogue and discussions through which they decide on forward actions. Reflection here is a shared process, one that takes place through interaction and communication amongst members of the group. Those who make decisions on preferred situations are those who experience these situations and manifest them.

> Each type of reflection appears to support a specific form of decision-making, shared or centralised, in addition, this finding informs my knowledge about the relationship between the creation and its creators (see Section 2.4 , pp. 19). While reflection through observation suggests a partly independent relationship, reflection through experience appears to describe an interdependent relationship. This finding than provides empirical insight into the social dynamics that are involved in designing the organisational artefact.



While scholars have acknowledged reflective qualities as significant and inherent to design (see, for example: Schön 1987 & 1992), the identified forms of reflection point towards extended notions of established concepts, such as *Reflection-in-Action* (Schön 1987). This suggests that a further exploration of reflective qualities of design in this specific research context is a relevant undertaking.

### 6.2.4 Finding 4: Design Change is Influenced by the Unpredictability of Involvement

Both case study organisations interact with and depend on stakeholders from outside their group of core members (e.g. the Stakeholder Committee or the group of musicians and artists). These interactions appear to be partially intended, but may also be imposed, as observed interactions between the Stakeholder Committe and specialists during the Building Project suggest. Here outside stakeholders are invited to the group meetings at a variety of opportunities. Also, the group reaches out to other members of the established organisation, the University. These experts then join the Stakeholder Committee and introduce new dimensions and parameters, contributing knowledge that is required to further specify the existing situation. Further, members of adjoint and established organisational structures, such as the Management School, articulate preferred situations and take directed actions to realise them. The Dean of the Management School makes decisions that directly affect the formation of the Stakeholder Committee, e.g. by

appointing a new chair. In a way then, the group not only invites experts, but with them "imports" actions and requirements for preferred situations.

Also the more centrally coordinated Performance Project appears to be permeable to unpredictable stakeholder impact. Photographers and videographers seem to have an interest in a specific group formation and representation, thereby interfering with the artists' process of evaluating the existing situation and articulating a preferred one and their way of devising directed actions. They provide an alternative set of requirements and values for the arrangement of the group, e.g. visual arrangement prevailing over spatial and musical interactions.

> These outside stakeholders bring about change to a situation envisioned and articulated by people other then themselves. Consequently ownership of design change becomes ambiguous and not conclusively identifiable in a temporary organisational setting. This ambiguity and resulting uncertainty remains over the three phases of organisational development in the case study contexts.

While this finding is based on phenomena that share similarities with those observed in other temporary organisational contexts and are described in management literature[1], it is the impact of the described quality of interactions on the control and distribution of design that makes this finding significant for this thesis.

The observations of Design Indicators in the case studies informed not only the findings, but also supports a re-formulation of the Conceptual Sketch, in which I consider organisations as designed artefacts.



### 6.3 Conceptual Sketch #3 – Reflecting on the Organisation as *Designed* Artefact

Observations that I made while looking at the creation of case study organisations are confirmed by and relevant to the occurrence of design as well. I will here compare and review Conceptual Sketch #2, which resulted from the inquiry into the creation of both cases, while taking previous observations about design into consideration. Conceptual Sketch #3 then represents a first informed and nuanced articulation of organisations as designed artefacts. Again, I will start with a brief summary of the propositions articulated during the second Conceptual Sketch.

**1. Social dynamics or organisational structures are proposed as opposing principles for organisational design. Previous propositions suggest that, in both cases, structure and dynamics do influence the creation and development of an organisation, not one or the other exclusively.**

**Permeability of Both Case Studies Explain Impact of External Social Dynamics**

An organisation is not a refined, finished product, quite unlike physical artefacts. In fact the social character of an organisation implies a certain degree of uncertainty about the actions and behaviours of those involved in shaping the artefact. This uncertainty is on the one hand caused by the people who make up the organisation but it is to a considerable degree

1 See, for example Bakker (2010) on the relationship between temporary organisations and related organisational actors.

also a consequence of temporary organisations' *permeability* that manifests itself in their dependence on outside relationships.

Permeability may be proposed as a characteristic of the organisational artefact, as it is reinforced by the occurrence of design indicators, and while in the previous Conceptual Sketch, the impact of outside stakeholders on the creation of both cases became apparent, it appears that a similar effect on design activities can be observed.

**Creating Structure Doesn't Limit Permeability**

A post-structural interpretation of each case is called into question as well as confirmed by the permeability of both temporary organisations. In the early stages, the reliance on interactions and their dynamics supports the interpretation of these organisations as socially dynamic artefacts. Indeed, the perspective on directed actions adds detail to the social dynamics that shape the design of the Building Project. At the same time permeability might be seen as furthering the imposition of structure on the organisation, as it progresses and becomes more dependent on processes and expert roles. Still, permeability persists even as the organisation enters a structured formation and leads to continuous uncertainty about stakeholders' actions that might impact the organisation.

In the Performance Project we can observe the momentary influence of structure, in the form of outside demands and requirements, but the organisation then returns to its more socially dynamic format. Structure is established, as well, through the artists' working process which is applied to the organisation and forms the basis for interactions. Flexibility within established structures, then, is apparent in both projects.



**2. The organisational artefact is characterised by a close interdependence between its creators and their creation. This interdependence changes and diminishes as the organisation evolves and involvement is reduced.**

**Close Interdependence Enables Swift Moves Between Existing and Preferred Situations**

Relationships between the created and creators, as elaborated on in the previous Conceptual Sketch, were further refined through design observations. The observation of close or even simultaneous occurrences of an existing and a preferred state, provides insight into the activities and behaviours that characterise the relationship between the created and its creators. Specifically the movement between existing and preferred situations in the early stages of the Building Project substantiate this interdependence. As stakeholders make shared decisions about the organisation, they can immediately realise novel forms of an organisation, demonstrating the close relationship and dependence of the created on the creators.

This ability of the organisation to manifest through its members is reduced as the project grows in size and complexity. The organisation becomes more formalised and thereby emancipated from its initial creators. It continues to exist through pre-defined processes and attached deliverables and deadlines, making it less dependent on a group's shared decisions.

**An Organisational Design Can Integrate Moments of Independence**

But an organisation can also be *designed* in a way that allows a constant movement between a more dependent and independent existence of an organisation, as the Performance Project shows. Here the artists assemble the group, give it their instructions but then treat it as an independent object that they observe from a distance. Although the organisational artefact frequently enters states of independence, without the interaction between the artists as its creators and the musicians as its members, the organisation would dissolve, as it does after the end of the performance event.

**3. Reflection and freedom of movement: the conflict between individual and group. The conflict between imposed decisions, requirements and the ability to realise the creators' ability to design is reduced by existing structures and enabled where social dynamics are prevalent.**

With respect to design observations, one might conclude that flexibility and uncertainty are maintained even in a formalised and structured organisation. Structure appears to be interacting with organisational design or creation and it seems that specific questions and open problems provide the context for a more shared and intrinsically motivated contribution and therefore more freedom for design activities to be shared.

## 6.4 Conclusion

At this point specific design characteristics have been articulated as findings which will be discussed and further interpreted in relation to existing design theories and debates in the next chapter.



> Concluding from the analysis as presented in Chapter 5 and the findings and Conceptual Sketch #3 in this chapter, I can state that design characteristics can be identified in organisational activities. They are hidden, silent, often not articulated as design but share aspects with theoretical design concepts and go beyond traditional design artefacts, such as programmes, leaflets or buildings.

Design characteristics can be identified in both case studies and resemble those articulated in the Design Indicators. Specifically, for the following reasons, change is an inherent part of both case study projects, existing and preferred situations are articulated and actions taken to achieve these, organisational development processes show similarities with design processes and iteration influences organisational creation as well as design actions. Beyond these confirmations we can observe the altered appearance of design change indicators. We can observe relationships between existing and preferred situations which are less strategic than they are articulated in the literature. We are more likely to observe the distributed articulation of a preferred and emergent situation as well as shared decision-making about actions at the purpose definition stage rather than towards the formation stage (referring to the developmental model in Chapter 5, p. 92). Intentionality is not always existent but the lack thereof does not affect the development of actions and the achievement of the preferred situation. On the contrary, emergent actions are carried out with group support and shared motivation. Supporting these preliminary observations,

we can conclude that uncertainty is an integral part of a temporary organisational artefact. Finally, organisations considered as artefacts show a degree of reflexivity related to the fact that those who create also establish and are part of the created artefact.

While this chapter introduced the final findings, the next chapter discusses the findings in relation to existing literature, thereby refining them.

# 7 Refining Findings: Discussing Design Traits

## 7.1 Introduction

While in the previous analysis chapter I used a fundamental definition of design change to identify design in the empirical materials gathered from the two cases, in this chapter I will compare the identified design characteristics with concepts in the literature.

> The aim of this chapter, then, is the identification and further specification of particulars of hidden design activities evident in the empirical materials, in accordance with Research Questions 1 and 2: what design traits are evident in temporary organisations and how do these compare and contrast with established design concepts?

The findings elicited from Chapter 5 are here now discussed, refined and put into perspective by confronting them with concepts from ongoing debates in design studies. This chapter first refines each finding individually in juxtaposition with relevant literature from design studies before discussing it by relating the findings back to the research gaps and the above mentioned research question. The second section of this chapter therefore centres around the following discussions:

- Relationships between those involved in organisational design are re-considered and a community of silent designers is identified and described.
- The specific relationship between silent designers in an organisation and the artefact they create is discussed, proposing that silent designers design from the inside out.
- It is suggested that design in the case studies is influenced by unexpected impacts from unplanned involvement, contributing to the socially-distributed characteristics of design.
- The relevance of experience over observation in silent design activities is discussed.
- The specific characteristics of the fuzzy stage of the design process are discussed with referral to the previously identified experience-based design activities.



By comparing empirical findings with concepts from literature I am able to distinguish between those design characteristics that resemble ***existing concepts and unique, novel aspects of hidden design.*** This allows me to establish how design indicators are evident when people organise, but also show nuances and differences that might reveal more about the specific ways in which people practice design in this reflective context. This, then, is not only a discussion about the parameters of design actions, activities, design change and its directed actions, this is a discussion about the wider context of design in organisations. The relationships between those who contribute to design, the process of designing, as well as the details of behaviours that appear to be characteristic of the organisational situations represented by each case study.

## 7.2 Refinement of Finding 1: Design Changes as a Project Evolves

Finding 1 describes how design indicators themselves change during the process of

organisational development, which is observable in both case studies. The changes design goes through occur while each case study project evolves over the three stages of organisational development. In each case study the changing character of design is represented differently, as I will now explain. The comparison between established concepts and the empirical findings focuses on the change from existing to preferred situations and the attached directed actions. Other indicators of design, like the development of alternatives and the creation of something new, have not been considered as core dimensions necessary to describe the changes that appear during the design process.

**A Human-Centred Model of the Design Process**

Human-Centred Design strategies confirm that design approaches change as they are employed at different stages in a product development process. Although this overall development complies with my observations, the specifics of the indivdual processes differ.

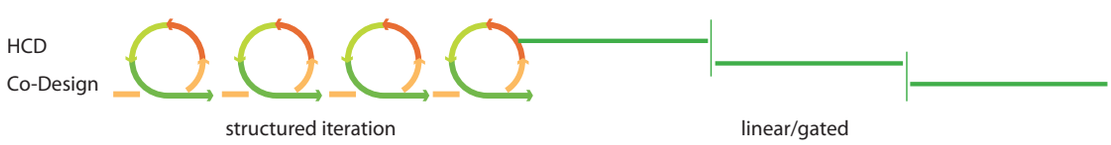



***Figure 7.1*** *Design process stages according to Norman (2013)*



In Human-Centred Design two design strategies can be distinguished: the linear 'waterfall' method and the iterative human-centred approach (Norman 2013). Linear design processes work towards rigid, pre-defined requirements and develop in a single direction (Norman 2013) being separated into subsequent stages that eventually will lead to a realised product. Human-Centred Design defers the articulation of rigid requirements. It explores the adequacy of requirements through iterative process stages until the requirements can be articulated. The iterative cycle of Human-Centred Design, according to Norman (2013), consists of four stages: 1. Observation, 2. Idea Generation (Ideation), 3. Prototyping, 4. Testing (see, Figure 7.2), which represent a structured form of iteration. This doesn't mean, however, that Human-Centred Design excludes the more linear, structured part of product development processes, which is combined with the fuzzy front end (Koch & Leitner 2008; Russell & Tippett 2008) (see Figure 7.1).

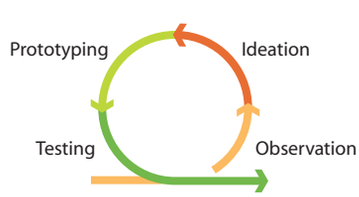



***Figure 7.2*** *Iterative process according to Norman (2013)*

Requirements, in this context, can be interpreted as aspects that determine fundamental characteristics of a preferred design solution. Understood as such, changing characteristics of design are identifiable in Human-Centred Design along the dimensions of preferred situations and directed actions. Requirements specify the vision a project is working towards. This vision is fuzzy at the beginning of the iterative part of the design process and becomes more defined towards the transition to a linear process. The linear waterfall process then works on the basis of articulated specifications and requirements towards the achievement of the vision. Within this process, existing and preferred situations are still being identified and articulated and continue to change. The overall vision, though, is defined.

**The Design Process as Identified in the Performance Project**

Considering the development of the Performance Project, the project begins with a period of linearity, in which management of resources, financial support and networks becomes the main activity (see Figure 7.3). Requirements for the performance are established at this stage, but stay flexible until the artists encounter the context of the performance. The fuzzy, iterative part of the project, characterised by ideation around potential participants, locations and music pieces, and the movement between existing and preferred states, takes place in the second stage of organisational development. It then follows the third stage, in which iterative cycles and moments of linearity alternate, as iteration is interrupted by linearity when outside stakeholders, like photographers, introduce requirements.




***Figure 7.3*** *The design process in the Performance Project*

Iteration in the Performance Project comprises the following activities: imagining (discussing arrangement), shaping (instructing, guiding participants), testing (observing, listening), reflecting (consulting each other, sharing impressions), reshaping (consulting, discussing, instructing), documenting (audio and video recording). In accordance with the concept of iteration taken from Human-Centred Design mentioned above, these can be interpreted as 1. Ideation (imagining & shaping), 2. prototyping/testing (testing) , 3. observation (reflecting, reshaping), 4. documentation (see Figure 7.4).

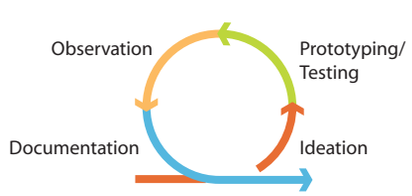



***Figure 7.4*** *Structured iteration in the Performance Project*

This then portrays a design process in which a linear phase is followed by an iterative phase which is interrupted by moments of linearity.

**The Design Process as Identified in the Building Project**

The Building Project follows a development from an iterative front end (at Developmental Stage 1) to a linear process of design realisation (at Developmental Stages 2&3); from emergent preferred situations and spontaneous actions to intended and planned situations and well-defined directed actions. As such it resembles the overall change from fuzzy, iterative to linear, gated design processes as described in Human-Centred Design theory (see Figure 7.5).


***Figure 7.5*** *The design process in the Building Project*

The actions through which preferred situations are articulated and realised at the fuzzy front end, though, differ, and iteration is less defined and more emergent, evolving. Iterative movements between existing and preferred situations are spontaneous and opportunistic, they don't follow defined stages, rather, they emerge as is appropriate, and are characterised by a sequence of three types of actions (as identified in the previous chapter, see pp. 118): (1) intended and planned actions, (2) emergent and opportunistic actions and (3) emergent actions that become intentional (see Figure 7.6).



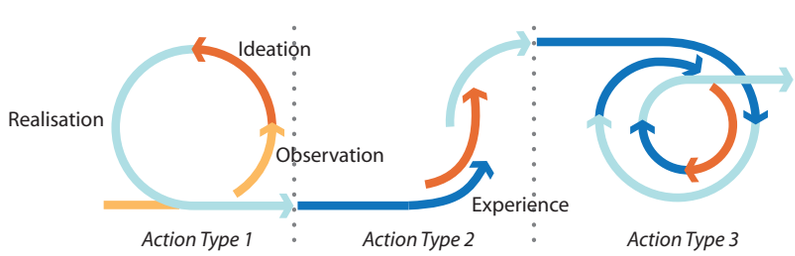



***Figure 7.6*** *Unstructured iteration in the Building Project*

In Type 1 actions, which are observable at the beginning of the project, observation leads to ideation and subsequently realisation of a preferred situation – the Dean of PG Studies observes colleagues complaining and develops the idea of a discussion group, which becomes realised in the form of a Stakeholder Committee. But once this group has been established, ideation is no longer based on observation, but on experience, which inform Type 2 and Type 3 actions. These actions show the following iterative steps: *experience*, *ideation* and *realisation*, whereby experience, ideation and realisation are not always

sequential steps, but can appear almost simultaneously. This is the case in Type 2 actions, where the experience of a situation, ideation and realisation are not clearly distinguishable from each other. Here experience can inform ideation (e.g. for organisational change), but it can also lead to the immediate realisation of a preferred situation (e.g. by forming sub-groups). Actions of type 3 are characterised by a fluctuating movement between the experience of an existing situation and the realisation of a preferred one, and which iteratively informs the sequence of actions involved. As appropriate, the organisation moves from *experience* to *ideation* and *realisation* or from *experience* directly to *realisation*. Such a flexible and dynamic appearance of iterative steps seems to be related to the descriptions of self-organised, unstructured dynamics at the fuzzy front end of innovation processes (Koch & Leitner 2008).

One difference to the HCD model of iterative actions, it follows, is the replacement of the stages of *prototyping* and *testing* with the ability to immediately realise preferred situations without prior testing.

**Comparing Design Processes**

Fundamentally, then, the design processes in HCD and in both projects undergo changes. Similar to accounts in design theory, the Building Project changes from an iterative and fuzzy front end to a linear stage gate or waterfall process. When looking closer at the character of the iteration involved, though, differences between theory and the type of iteration, as identified in the Building Project, become evident, since the character of iteration in the Building Project is fuzzy and not structured into a specific sequence of stages.



In the Performance Project, however, the sequence of process stages differs, while the iterative steps appear similar to those in design theory. In the Performance Project a linear phase precedes iterative cycles, which integrate a linear phase.

**Similarities:**

- Design processes undergo changes and can be segmented into iterative and linear stages.

**Differences**

- Iteration appears varied. In addition to structured iteration, as articulated in the literature and found in the performance case, a fuzzy and unstructured type of iteration that emerges out of interactions and discourse can be identified. This type does not follow established process stages, it rather evolves along the stakeholders' developing experience. Individual stages of iteration are not replicable.
- Both types of iteration, though, share a characteristic that differentiates them from the concepts of iteration in HCD. Prototyping and testing exist almost simultaneously and lead to immediate responses.
- Design process stages appear as a flexible and in parts unpredictable sequence of iterative and linear sections.

- Observation is not necessarily part of a design process.

### 7.3 Refinement of Finding 2: Directed Actions Show Varying Degrees of Spontaneity – from Emergent to Intentional

Finding 2 suggests that directed actions are not always intentional, nor planned, but emerge out of social interaction and discourse, which makes emergence a central feature of organisational design activities. Emergence is specifically prevalent in the early fuzzy and open stages of design as observed in the Building Project. Here actions evolve out of discourse between members of the stakeholder group and are not only intended or planned but opportunistic and emergent. While I introduced the three types of actions identifiable in the Building Project in Chapter 6: *Findings* and discussed them as part of the design process in the previous section, here now I focus on emergence in design.

In the performance case study, mainly intended actions dominate. The artists instigate a design, evaluate it and reconsider their decisions for further improvements or alterations. Design therefore evolves through a sequence of intended changes that turn existing into preferred situations, but, even in this context, there are occasions where the move from an existing to a preferred situation is influenced by discussions arising between the artists and their participants or wider stakeholders. Further, the organisational formation in the form of a performance is shaped in an open-ended process, throughout which the artists give space to the emerging contribution of stakeholders.

#### Emergence and Evolution in Literature



The body of Human-Centred Design literature, which I initially consulted for the articulation of Design Indicators, describes design as intentional when stating that design has to result in something that would not come about naturally (Krippendorff 2005). This attitude towards design then contrasts with the appearance of emergence as part of the design activities identified in the case studies.

It is though still questionable whether emergence is acknowledged in Human-Centred Design or the wider body of design theory. When considering the trajectory of artificiality (Krippendorff 2005) and the design task of creating and coordinating projects or discourses, designers engage with groups of people which could include communities as well. Here, then, the increasing focus on design in communal or distributed contexts comes into play and theories of Social Design (Cottam & Leadbeater 2004; Manzini 2007; Murray et al. 2010), Participatory Design (Schuler & Namioka 1993; Simonsen & Robertson 2012) and Service Design (Stickdorn & Schneider 2011; Meroni & Sangiorgi 2016; Sangiorgi, Prendiville & Ricketts 2014), as introduced in Section 2.7 (pp. 30), gain relevance. This suggests that in design circumstances, where control is limited, emergence is part of the design process.

#### Emergence and Evolution in Design

But what is emergence? Emergence can be interpreted as an evolutionary process (Gero 1996). Evolution, then, is something that design scholars sympathise with as a generic term that describes a stage of further development in a design process. Design and innovation scholars and practitioners talk about evolutionary, incremental changes in contrast to

radical changes (Von Stamm 2008). Press and Cooper (2003) use the term *evolution* to describe a stage of further maturation of ideas, as they state:

> 'Evolution deals with the idea, concept and detailed design generation' (Press and Cooper 2003, p. 106).

It sits between the stages of 'formulation' and 'transfer' meaning realisation. Here evolution is used to describe a further development of a previously formulated design idea. In another context Dorst and Cross (2001) talk about the co-evolution of solution and problem spaces during a product design cycle, as a design project evolves. But these interpretations do not necessarily acknowledge the significance of emergence for design actions, they see evolution as a stage within a structured process.

**Emergence and Ideation in Design**

Another interpretation of emergence in design is articulated in relation to ideation (Halskov and Dalsgaard 2007). Here the emergence of ideas through design mediation is described (ibid) but the emergent quality of the design process and activities within is less explored and potentially conflicts with accounts of intentionality and the prescriptive nature of design. Halskov and Dalsgaard (ibid) hint at emergent qualities of the design process that are related to the emergence of ideas, when they state that

> 'ideas emerge (…) through ad hoc improvisation in continuous adaptation to the unfolding of the design situation.' (ibid, 205)

This statement correlates with the observation that when designing an organisational artefact, people create something that is constantly evolving and manifests itself in temporally limited moments.



**Emergence as Integral Dimension of Design Activities**

Actions in emergent forms of design change, such as observed in the Building Case at Stage 1, are not separated into clearly distinguishable steps, like the design processes described in Human-Centred Design or Design Management suggest, but resemble an organic flow between evolving and emerging variables. This type of evolving design decision-making poses questions about the appropriateness of describing design as intended and planned in an organisational context. The evolutionary character of design, the evolving, organic emergence of design actions and situations, represents a form of designing that is adaptable, flexible, changing, iterative and interdependent, optimised to deal with the continuously changing dynamics of discursive situations and interactions.

Here emergence becomes a fundamental characteristic of designing. It differs from intentional and purposeful design, gives more space to the social dynamics of collaboration and is capable of reacting to the fast changing dynamics of social interactions and discourse.

In addition, the observations suggest that open-ended forms of design consist of evolutionary processes and yield emergent actions, but at the same time can incorporate intended and goal-oriented forms of design to shape the same social artefact.

**Similarities**

- Design for Social Innovation and Service Design reflect findings, but do not explicitly incorporate emergence as a principle of design beyond its acknowledged occurrence in ideation.

**Differences**

- Emergence is a core characteristic of design actions in self-organisation. It differs in this from Human-Centred Design theory. Emergence questions the interpretation of design as always intended and purposeful, as articulated by scholars from HCD backgrounds.
- The appearance of emergence suggests that design in an organisational context integrates evolutionary and opportunistic qualities.

### 7.4 Refinement of Finding 3: Design Activities Show Reflective Qualities

Finding 3 states that hidden design activities show reflective qualities. In the previous chapter I have described two types of reflection that can be identified: one type is directed towards observable, independently existing phenomena, while the other is based on experienced, immediate phenomena (see Finding 3, Chapter 6, p. 119).

**Design Can Facilitate Reflection-in-Action**

Design artefacts are used to mediate ideas (Halskov et al. 2007) and allow for explicit reflection and discourse amongst a group of decision-makers, stakeholders, users, designers or managers by making discussions tangible, so that meaning becomes more defined and explicit to others (Schön 1992; Marzano 2005). Such prototyping of ideas then allows for reflection on the created tangible artefact and consideration of its features, purpose and individually perceived and potentially differing meanings. In other contexts, such as the design facilitation of discourses (referring to Krippendorff 2005), the projection of thoughts and meaning onto an artefact is used to facilitate group discussions around sensitive topics such as work relationships. Prototyping mechanisms are used in Co-Design and form a core aspect of an applied understanding of design thinking (Owen 2007; Brown 2008; Kolko 2015). This can be specifically valuable for sharing ideas, but even more for solving problems that require unique solutions.



In this context I would like to introduce the concept of *Knowledge-in-Action*, a term that Schön (1995) uses to describe non-reflective actions, which can lead to automisation and routines and thereby make knowledge tacit. Consequently, practitioners can become reliant on proven methods rather than being capable and open to developing and exploring new approaches as they go along, losing the ability to reflect on their practice and the unique properties of the problems they face. Here the concept of *Reflection-in-Action* (ibid) represents a strategy that embraces surprise in everyday life, something we haven't developed a solution or approach to yet. Design, one could argue, has the potential to support *Reflection-in-Action* through the creation of reflective artefacts and prototypes that can make routinised behaviours and tacit knowledge explicit.

### Two Types of Reflection in the Performance Project: *Reflection-on-Action* and *Reflection-for-Action*

Two types of reflection are observable in the Performance Project. In reference to Schön's (ibid) concept of Reflection-in-Action, I identified one type of reflection as *Reflection-on-Action*. It is observable in instances of the Performance Project, where the artists reflect on the performance of the musicians. They distance themselves from the group of musicians, listen, observe and reflect on what they see and hear. Here the artists take the position of outsiders observing others and reflecting on the actions they observe. Following from this, they enter another state of reflection when they review the existing situation, communicate and agree on a modified preferred situation and appropriate directed actions. This is what I understand as *Reflection-for-Action*, a type of reflection that shares characteristics with reflection-in-action, as it relies on prototyping a situation, observing it and reflecting on the observed. It is more distant than Reflection-in-Action, as reflection takes place on someone else's actions. The second type, Reflection-for-Action (see Figure 7.7), resonates with accounts that assign a projective quality to the fundamentals of designing (Grand & Jonas 2012). Reflection-for-action, I suggest, can support design activities by informing anticipated, projected actions.

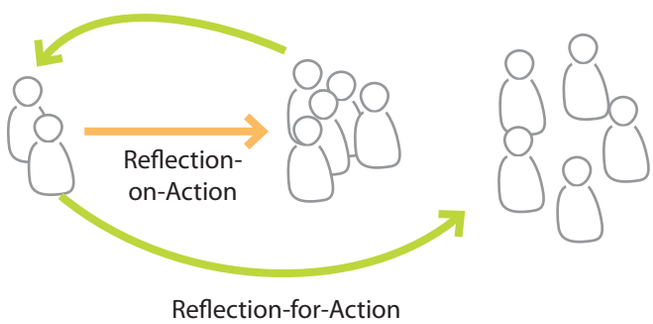



***Figure 7.7*** *Reflection-on-Action and Reflection-for-Action*



### Two Types of Reflection in the Building Project: *Reflection-Through-Experience* and *Reflection-for-Action*

In the Building Project *Reflection-for-Action* is observable with even more immersed and immediate moments of reflection, based in experiences. This immersion in experiences is what I consider the factor that distinguishes reflection as it appears in the Building Project from the two types of reflection identified in the Performance Project. I call this *Reflection-Through-Experience*, as it is related to the direct, emic perspective of someone who has an experience or a group of individuals who do (Figure 7.8), and allows for reflection through and, at the same time, in experience. Again, referring to Reflection-in-Action, the model introduced by Schön (1995), similarities with the concept of Reflection-Through-Experience can be identified, specifically concerning the conscious reflection on one's own actions, which is part of Reflection-Through-Experience as well. Still, Reflection-Through-Experience

goes beyond the conscious reflection on one's own actions and embraces a self-reflexive dimension within decision-making, where decisions are based on experiences of social interactions between members of a group.

**Designing for Own Experiences versus Designing the Experiences of Others**

This direct experience of a current situation, which is not necessarily explicitly articulated, forms the implicit basis for the development of a preferred situation. It also forms the space in which actions are articulated and executed. This is a less conscious form of reflection, which is rather intuitive and individual, contributing to an overall directed action, and is also informal, not guided by structures or regulations or rules. This is what I refer to as experience-based reflection because it incorporates an element of self-reflexiveness, as the group experiences a situation that it has created, and makes decisions that affect its own formation and will be realised through its members. It is not the experiences of others that contribute to the articulation of preferred situations, it is the experiences of group members that determine directed actions.

Reflection-Through-Experience

***Figure 7.8*** *Reflection-Through-Experience*

In design theory experiences do not necessarily appear self-reflective, but are a subject of research and analysis. Human-centred and user-centred design scholars articulate an interest in how others, the users, experience the interaction with artefacts or systems[1]. This empathic approach is another core concept of design thinking (Kolko 2015) and other design approaches (e.g. empathic design). Experience-Based Co-design (Donetto et al. 2015) describes a holistic design approach that is relevant to service design. Here stakeholders are not only users of a designed solution but contribute their experience of a service to the design process. Specifically in design disciplines where the attributes of the design result are not materially manifested, but implicit in a fabric of interactions, behaviours and actions, individual experiences provide a window into other peoples' perspectives on a design solution, which helps to exemplify the interest of designers in the experiences of those they design for.

1 See, for example, the literature on User-Centred Design (Norman & Draper 1986; Newell & Gregor 2000; Newell et al. 2007; Chamberlain & Yoxall 2012), Human-Centred Design (Buchanan 2001b; Krippendorff 2004; Steen 2011; Junginger 2012; Giacomin 2014) or Co-Design (Battarbee & Koskinen 2005; Sanders & Stappers 2008; Donetto et al. 2015)

**Reflection-Through-Experience is Informed by a Pragmatist Interpretation of "Experience"**

But what is an experience? In the spirit of Dewey's (2009) work on *Art as Experience,* experiences are in the first instance emotional and only in hindsight rationalised. They are an exploration of individuals' emotions, conflict and struggles and not exclusively aimed at 'efficient action' (i.e. the effective accomplishment of a design) and the application of skills. People have an experience when they, for example, encounter an object of art. Dewey continues to describe experience as:

> '(…) the result, the sign, and the reward of that interaction of organism and environment which, when it is carried to the full, is a transformation of interaction into participation and communication.' (ibid, p. 22)

Considering Dewey's definition, experience-based reflection would entail the encounter of an object and the emotions provoked by this encounter, which result in participation. Considering that, according to Dewey, emotions become rationalised only in hindsight adds to the spontaneous and immediate character of actions. Reflection-through-experience then is less about outside reflection but about self-reflexive decision-making based on the encounter with changing situations and the emotional reactions provoked through this encounter. Part of experience-based reflection in a social setting are self-initiated actions that lead to situations that those who reflect embody and encounter at the same time.

But immersive and experience-based reflection appears to be self-centred and to have limitations attached. As we can observe in the Building Project, designing happens from within a community and through the close encounter with a design situation, therefore the ability to observe design actions from outside is limited. Development of actions results out of an immersive perspective based on the experiences of individuals who are part of the community, which might limit the ability to articulate and externalise ideas about potential design solutions.



**Two Ways in Which this Finding Extends Design Knowledge**

Firstly, it provides empirical evidence for a projective, rather than retrospective, form of reflection, or Reflection-for-Action through the Performance Project case.

Secondly it describes a self-reflexive and immersive type of reflection, based on the experiences of a group of people, as observed in the Building Project Case. Here the overlap between individuals who experience a situation and then actively shape these experiences points towards a self-referential dimension of design. Group discussions allow individuals to express their experiences and rationalise reflections to then turn them into actions. These actions provoke new experiences which again will serve as basis for reflection. Experience here integrates a dimension of self-centredness through which the designer and the designed merge in a way that is not evident in established design theories. Designed artefacts, even experiences, are mainly considered externally designed and planned, while in the Building Project people design their own experiences.

**Similarities:**

- Reflection-in-action can be identified in an organisation
- Prototyping as a mechanism to support reflection is applied in the Performance Project
- Reflection-for-action is related to projective reflection as articulated in design studies.

**Differences/Extension**

- Experience-based reflection-through-experience in non-material design contexts is based upon the inside perspective of design contributors, in contrast to the externalisation of ideas through prototyping that supports an outside perspective and reflection on an idea. Reflection *through* experiences rather than reflection *on* experiences.
- Reflection-through-experience is characterised by self-reflective perspectives on experienced situations. This makes existing and preferred situations part of this experience. They exist in close proximity to each other. This stands in contrast to the more separated existence of existing and preferred situations in the literature (see also finding 1).
- The organisation as an experience is encountered and embodied at the same time by the same actors. This self-reflexive dimension extends existing accounts of reflection in the theories mentioned above.
- Designer-designed relationship: self-reflexive relationship between those who create and the creation, emphasising the interdependence between the artefact and a community of designers.



### 7.5 Refinement of Finding 4: Design Change is Influenced by the Unpredictability of Stakeholder Involvement and Permeability of Organisations

In both case study projects, not an exclusive group of decision makers but a variety of stakeholders articulate preferred situations, and these stakeholders can be guided by divergent interests and purposes and can reside inside or outside an organisation. In both cases internal as well as external stakeholders can have an unpredictable, yet significant impact on each organisation.

These observations call into question traditional and clearly identifiable designer-to-stakeholder or user relationships, in which designers are experts and interact with amateur users.

**Facilitated and Guided Involvement of Stakeholders Has Little Effect on an Organisation**

In Human-Centred and User-Centred Design, designers as experts inquire into the users' world to 'understand the needs, requirements and desires of the stakeholders in the product' (Press and Cooper 2003, p. 104). Here stakeholders are the ones whose lives are shaped by the designer's products. They are outside the design process, consulted to allow

the designer to gain a better understanding of how his professionalised service can better serve the needs of non-designers. This relationship is specifically relevant to Buchanan's (2001) first two orders of design that comprise symbols and things.

This interaction with users already represents a departure from more manufacturer-, or producer-focused ways of designing as they can be typical for the creation of products, goods, services and identities, as Krippendorff (2005) states in his 'trajectory of artificiality'. With the arrival of digital technology and human-interface design, interactions became a novel area for designers, meaning that 'for designers, a key concern is that interfaces are *understandable'* (Krippendorff 2005, p. 9), which requires the designer to learn about the way users operate their products, their behaviours. Here the user is being consulted and their feedback integrated into the development process. As design moved further towards concerning itself with systems (Buchanan 2001a) it entered the fourth order of design, environmental design. Here the integration of amateur designers into the design process becomes necessary. Co-design can be understood as a re-definition of the relationship between designers and users in which designers are not the only experts. Users are regarded as experts of their own experiences and integrated as collaborators in the product or service development process (Sanders and Strappers 2008). However, the designer still remains the professional who is in control of the overall design process and the one who eventually integrates "amateur" contributions into the design of an organisation's offer.



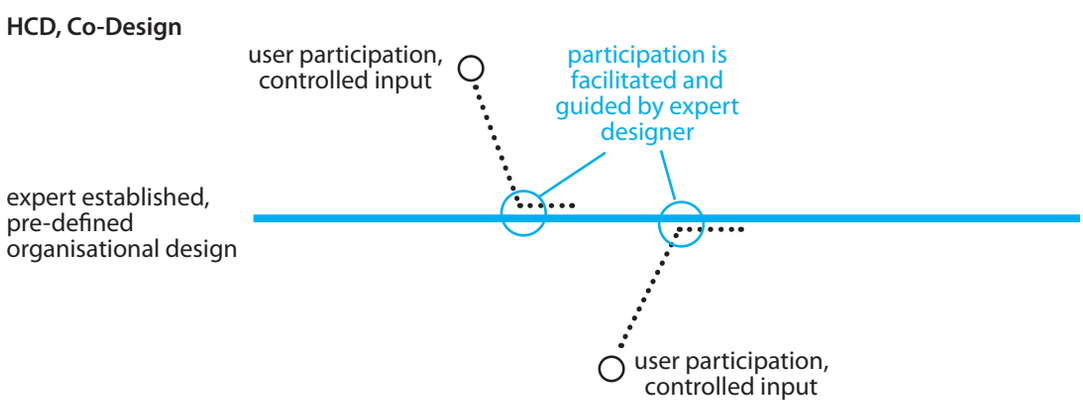



***Figure 7.9*** *Facilitated involvement in Human-Centred Design and Co-design*

Here designers and clients pre-define the purpose of a project and stakeholders are invited to participate. The organisation around such a design project is established before stakeholders join and less likely to be affected by stakeholder involvement. Instead, stakeholders' involvement is controlled by designers and aligned along the purpose of the organisation. As Figure 7.9 illustrates, the continuity of an organisational design (visualised as a blue line) is not affected by the facilitated and guided involvement of stakeholders that aligns involvement of stakeholders (dotted lines) along the blue line.

**Involvement of Outside Stakeholders Temporarily Affects the Design of the Performance Project**

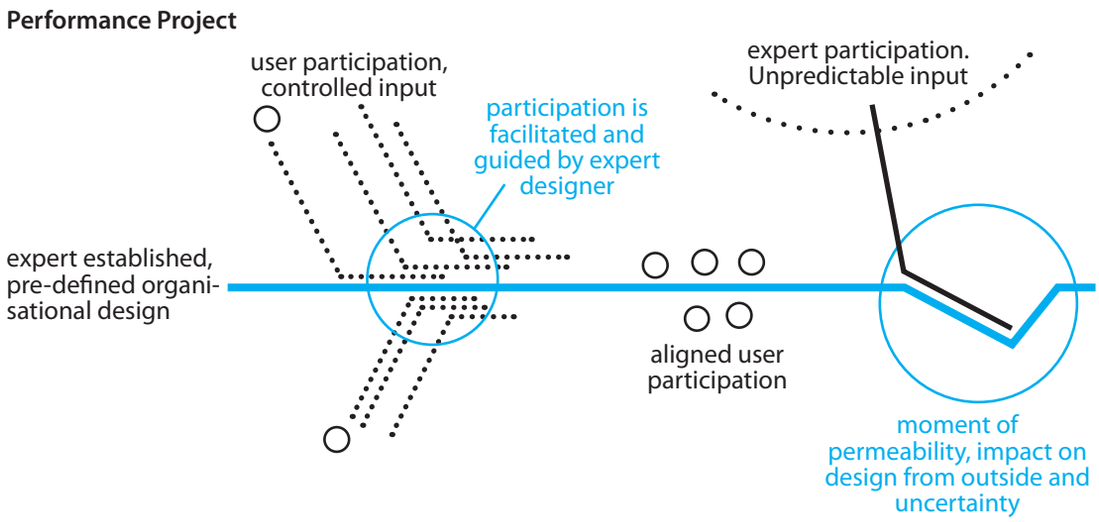



***Figure 7.10*** *Facilitated and unpredictable involvement in the Performance Project*

In the Performance Project we can observe a combination of the flexible permeability of the Building Project and the controlled involvement of stakeholders, as representative of HCD or Co-Design. As Figure 7.10 demonstrates, the purpose of the organisation is maintained while stakeholder input (dotted lines) becomes aligned. In the following development of the organisation an outside impact from experts (solid black lines) who carry their own motivations, such as the photographers, momentarily affects the orientation of the organisation. It becomes more prescriptive and directed rather than circular and iterative, but after this intervention, the organisation returns to its previous orientation and maintains its original purpose orientation.



**Expert Stakeholders' Involvement Affects the Design of the Building Project**

During the Building Project, stakeholders form and shape the organisation, as they participate in purpose definition through discussions and experiences. Stakeholders are integral to the organisation, they embody the Stakeholder Committee and are on the one hand those who are the users of the design and at the same time those who have direct influence on the design of the organisation. But internal stakeholders are not the only ones who affect the design of the organisation, external stakeholders also have an effect on the way the organisation is designed (Figure 7.11). Input from invited experts introduces new requirements and changes the organisation from an exploratory to a more goal-oriented operation, which affects the purpose of the organisation to a degree that members of the group have to align around this change. Later, during Developmental Stages 2 and 3, outside stakeholders impose decisions that bring about disruptive change in the relation between the Stakeholder Committee and the project, when moving the committee from the centre of the project to its periphery (by turning it into an end-user group).

Figure 7.11 illustrates this development as the organisational design (blue line) is shaped collaboratively by the internal stakeholders and the organisation forms around their

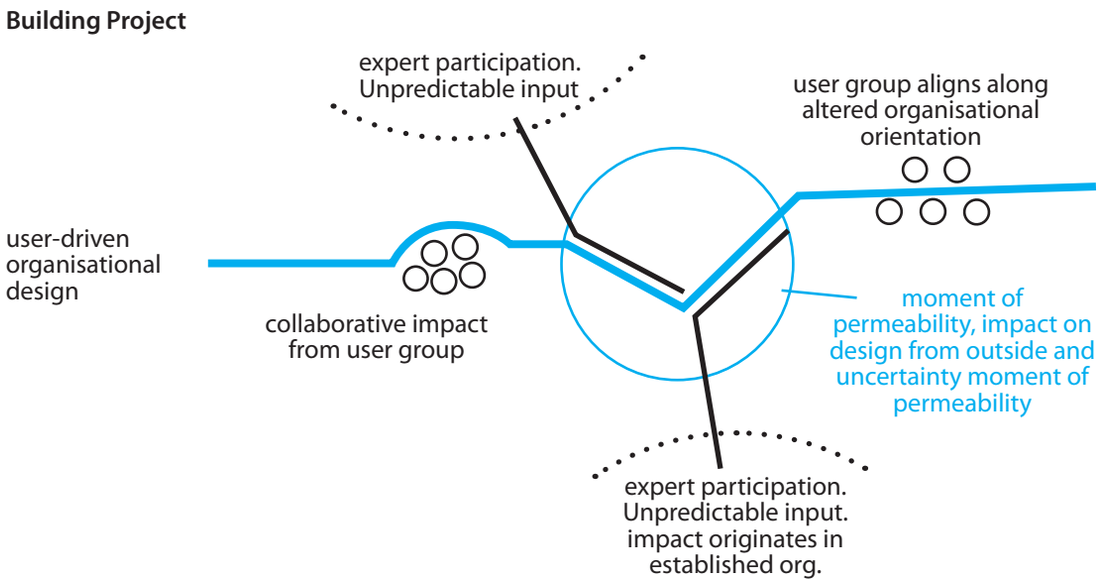



***Figure 7.11*** *Collaborative and unpredictable involvement in the Building Project*

ideas. Later, when experts join the group (solid black lines), their involvement changes the orientation of the organisation and the Stakeholder Committee then aligns around the changed orientation of the organisation.



**Uncertainty is an Integral Part of Designing as Social Activity**

Observations suggest that a certain diffusion of design actions remains prevalent in both projects across all three stages of organisational development. This diffusion is caused by the unpredictability of social actors' behaviours and actions that impact on the design of an organisation. Even in an expert-led design setting, like the Performance Project, outside stakeholders are able to change design activity from iterative and circular to linear and directive. This suggests a form of unintended distribution of responsibilities for design activities. Rather than being distributed amongst a clearly defined group of responsible people, activities that impact on the design of the artefact are unintentionally distributed amongst a number of varying stakeholders, which join an organisation at different stages.

**Design as a Social Accomplishment**

Design activities then resemble more those described as forms of social accomplishment and activities taking place in distributed community settings. While design in communal settings can foster diffused, communal creativity (Manzini 2015), it is the unintended diffusion of design practice or impact on design that seems significant in both cases. Design being a social accomplishment, social aspects being part of design work (Buchanan 2001) and design regarded as a social process (Krippendorff 2005) acknowledge the social characteristics of design. But Finding 4 centres on the fact that the intentional change from an existing to a preferred state is easily influenced or disrupted, and places the

emphasis not only on the fact that design is a social endeavour but that the social process of designing entails highly unpredictable and distributed activities as a result of its social characteristics.

Design decisions are influenced by a constantly changing and, to a degree, random community of stakeholders. Design in this context is not always intentionally initiated but evolves along patterns of interactions, which are emergent and diffused.

The findings then acknowledge that design can be influenced by a somewhat random and unpredictable set of stakeholders, making it a diffused and in parts uncertain social activity. Apart from invited involvement, there is a substantial amount of self-motivated participation apparent in each case. And even if involvement follows an invitation, stakeholders contribute according to their own or their affiliated organisations' values, requirements and goals, such as the experts in the Building Project and photographers in the Performance Project.

**Similarities:**

- Roles that resemble that of an expert designer can be identified in amateur design contexts. Experts who devise plans of actions can be identified specifically in the Performance Project and their role corresponds to that of an expert designer.
- Design emerges as a social process or social accomplishment.

**Differences/Extensions:**

- Design actions are carried out and are influenced by an unpredictable set of stakeholders with divergent interests, resolving a clear expert-amateur relationship.
- No expert designers are involved in either project. Users or stakeholders have ownership over the actions that contribute to the design of the artefact in the Building Project.
- Control over stakeholder contributions is limited, even in settings where stakeholder involvement is intended.
- Even in projects where an expert-amateur relationship is evident and design actions therefore are not as distributed and more controlled and structured, uncertainty persists. This uncertainty is related to the unpredictable impact on the organisational design by outside stakeholders. This is another dimension of the social diffusion of design, unintentionally transferring design impact to experts from outside the core organisation.

Analysis demonstrates that hidden design conforms with existing design indicators to varying degrees and therefore can be identified in both organisational contexts. Apart from this, closer examination unearthed additional characteristics, those that hidden design indicators share with existing theory but also those that distinguish it. Subsequently, the identified instances of hidden design activities have been compared with existing design theory and potential contributions to theory have been drawn out.

## 7.6 Emphasising Significant Dimensions of Hidden Design and Relating Them Back to Research Questions and Gaps

I now continue with a further discussion of the unique and significant traits of design, which I identified during the previous juxtaposition of findings with literature.

> While the previous refinements are arranged along the four findings, I now summarise identified design traits in response to Research Question 1: which design traits are evident in temporary organisations?

I do so by drawing out notable factors that underline the specifics of design activities found in the cases, which are selected in accordance with their ability to address aspects of the Conceptual Sketch (the interdependence between creator and created; how stakeholders contribute beyond role understandings) and research gaps. I then conclude by summarising how these design traits help to respond to Research Question 1.

### 7.6.1 Design Amateur to Amateur Relationship – A Community of Silent Designers

This section refers back to the literature review in which I ask, whether organisational design can be interpreted as *design without designers* (see Section 2.7, pp. 30), given the suggested interdependence of an organisational artefact and its creators, who are not necessarily professional designers. It therefore responds to Research Gap 4, which states that design studies have not yet extended the notion of Silent Design (Gorb and Dumas 1987) to other processes beyond Product Development and does so by drawing on refinements of Finding 1, where I describe the design process of non-professional designers, and Finding 3, in which I elaborate on the specific dynamics that are employed when members of an organisation practice hidden design.



Based on these findings, I suggest that a group of members of an organisation can be interpreted as a community of silent designers.

**Cases Represent Communities of Silent Designers**

> In the sense of Silent Design, we can identify a community of individuals who carry out design activities, but do not consider them design nor consider themselves as designers.

The forms of hidden design in the case studies, though, differ from those described in literature (see Chapter 2, Section 2.6, pp. 27). In the Performance Project, one can identify varying degrees of "silence" in design: first there are the artists, who exercise a role that one can interpret as overt design, similar to the facilitating role of a designer in project organisation, as outlined by Krippendorff (2005), but is not recognised by themselves or their environment. Then there are the musicians who resemble the silent designers described by Gorb and Dumas, integrating and interacting with a design process (the formation and development of a music orchestra) unacknowledged as design. Here then we have a community of silent designers that shows distinguishing characteristics within.

In the Building Project, a community of silent designers is identifiable as well. None of the individuals in the Building Project called themselves designers nor were aware that they

demonstrated design activities. Individuals in this case interacted and integrated with a development process – the development of the organisation, the Building Project. The Building Project then constitutes a community of silent designers, which is characterised by relationships between interested and motivated design amateurs. Although they are not design experts, individuals possess knowledge about the conditions, aspects, principles and functions of the different appearances of the artefact, an organisation. Most of the participants in the Stakeholder Committee are organisation or management scholars and are therefore experts in the activities, processes and dynamics that influence organisations (such as organisational learning, finance, economics or strategic management).

No professionalised design knowledge seems to be required where participants take on the role of the professional designer when, in a translated sense, they 'visualise and make tangible new ideas' (Cottam and Leadbeater 2004, p. 6) through modified organisational formations. Participants in a collaborative effort then share the design effort. There is a distinction here between the professional role of designers and the acknowledged characteristics of design and its principles, which can be executed by non-designers as well. Their interests, as well as their specialist, non-design expertise shape their relationships as a community of silent designers and allow them to build a shared problem-understanding quickly and devise design actions accordingly. Relationships form around problem matters, regardless of hierarchical position or the most efficient way to organise work performance.

> As this discussion exemplifies, in an organisational context, the ability to prototype and create design solutions does not require specialist design knowledge.



In extension of Findings 1 and 3 the concept of Silent Designers appears appropriate for the description of the Stakeholder Committee and the Performance Group as bodies of non-professional designers, thereby supporting the interpretation of organisational dynamics as design and stakeholders as designers.

### 7.6.2 Designing from the Inside Out – Silent Designers and Their Relationship to the Artefact

Now that an argument for an interpretation of members of an organisation as silent designers has been given, I will move on and describe the relationship between silent designers and the organisation they are creating. This section integrates Proposition 2 of the Conceptual Sketch (see p. 32), in which I suggest that organisations as artefacts differ from other artefacts, as they have a close and interdependent relationship with their designers. This discussion draws on the refinement of Finding 3, where I describe the self-reflexive dynamic in a group of silent designers (the Stakeholder Committee) as characteristic of this specific relationship. Here now I summarise the implications and opportunities that are implied in such a relationship.

**Silent Designers Design for Their Own World**

Organisational designers are described as entering situations as experts who 'value their non-involvement' (Hedberg 1976), joining an organisation to then develop solutions in separation from that context (ibid). In this spirit, efforts to immerse designers in the worlds

that they are supposed to design for, represented by Co-design, Human-Centred Design, Participatory Design or Empathic Design, can be interpreted as strategies to overcome this division. In other places, designers are described as observing the context they are about to enter (Norman 2013; Murphy et al. 2015) to understand the uniqueness of problems (Schön 1992) at hand before suggesting a solution or a strategy to approach a problem. Silent designers, though, design while being on the inside, as suggested by Gorb and Dumas (1987) and appear to design for their own world, when devising design actions, which are informed by experience-based reflection (see pp. 132).

**Discussing the Implications of Silent Design for the Creator-Creation Relationship**

The literature research raised doubts regarding artefact-creator relationships that account for artefacts of organisational culture as independent from their creator (Gagliardi 1992, p. 3). At the same time it raised an interest in the potentially self-referential character of an organisation as designed by those who are its members. During the previous analysis and comparative articulation of Conceptual Sketch 2 and 3, it became apparent that silent designers and their creation are interdependent. It has also been established that design is taking place and is practised by members of an organisation as silent designers – not as external design experts that join an organisational context.

I will now elaborate on the role of silent designers and the specifics of their relationship with the artefact they design to describe this special relationship.

**An Organisation as Artefact Can be an Outcome of and Mechanism for Design Actions**



Reflection-Through-Experience and for-Action emerged as concepts from a further interpretation of the finding that design actions possess reflective qualities. Based on the importance of experiences for the definition of design actions in contrast to outside observation, self-reference becomes a design principle in the Building Case. Furthermore, the group of silent designers does not take the organisational artefact as the end result or static solution, rather, they integrate with it in a dynamic and proactive relationship, suggesting an understanding of the organisation as a modifiable vehicle for actions. Such an understanding shares aspects with double loop learning principles: the deeper embeddedness of reflection on the organisation's behaviours that leads not only to problem definition but solution invention and production (Argyris & Schön 1978). The artefact is used to realise solutions by integrating new knowledge as much as adopted values and aims in iterative cycles of change. The artefact is the integral mechanism by which people make things happen and change situations. Beyond this it is also and at the same time the manifestation of this change as much as a learning prototype. The uniqueness of design problems (Schön 1992) is thereby, implicitly and unknown to the community of silent designers, respected. The community of silent designers as part of the artefact reacts to the uniqueness of challenges through actions which are based on implicit knowledge and

> 'cannot be described within the prevalent methodological paradigm of technical rationality' (Valkenburg & Dorst 1998).

'Design goes beyond the focus on a self-bounded end-product that exhibits desirable qualities' (Storni 2015, p. 170), becomes de-centred and is constantly adapting (ibid).

**An Interdependent Relationship Between Creator and Creation Can Support Flexibility**

A self-motivated organisation as artefact can provide an immersive design experience, a further integration of creator and created, although within the boundaries of a defined set of stakeholders, therefore diverging from the definition of open or mass creation or design (see, for example Leadbeater 2008; Shirky 2008; van Abel et al. 2011; Cruickshank 2014). This self-reflexive form of design, based on the inside perspective which is characterised by reflection-through-experience (see Refinement of Finding 3) shows characteristics of design without designers and can be translated into organisations without organisation (Shirky 2008) as they lack classical hierarchical relationships and structures. Such self-reflexivity makes these organisations potentially more self-centred than open, while the ability to design from the inside, to devise actions through the direct encounter with the context of design, allows for design actions to develop in an unusually flexible and immediate manner. This allows the artefact to integrate new stakeholders, their values and motivations and preserves a group's ability to constantly adapt the organisational design to changing requirements as they emerge. This, I should state, applies to the early stages of the Building Project, where requirements are explored and the character of the organisation is still self-motivated and de-centred.

### 7.6.3 Socially-Distributed Design Actions Through Involvement



This section addresses the conflict between the scholarly debates, where involvement is predominantly based on the intentional invitation of potential users of new design solutions from inside or outside an organisation, and insights from Preliminary Findings and the refinement of Finding 4, which suggest that participation of stakeholders is not always a result of intra-organisational decision-making or invited involvement, but the unpredictable result of decision-making processes that take place in associated organisations – like the university conference organisers. Further, this section refers to the Literature Review and concepts of empowerment (see Section 2.6, pp. 27) to describe the motivations that can underlie involvement. The potential conflict between individual freedom and organisational interests, as described in the Conceptual Sketch, is part of the description of involvement.

**The Dynamics of Involvement and Its Impact on the Organisation**

Some stakeholders join the organisation in a way similar to the description of non-involved organisational designers (Hedberg et al. 1976). They join temporarily while remaining members of collaborating organisations. They do help the organisation solve problems, but in contrast to designers, who try to establish requirements through iteration, these stakeholders hold and introduce the information and requirements that are relevant for the organisation to progress its understanding of the design problem. In this sense they resemble a client in a traditional, industrial designer-client relationship (Krippendorff 2005). As a result, the interventions of outside stakeholders in both case studies appear to be

for the introduction of design requirements, not their creative exploration, as Co-Design or Human-Centred Design would suggest (see for example: Sanders & Stappers 2008; Buchanan 1992).

Another aspect that differentiates observed design from design theory concerns the intentionality of stakeholder involvement. While Participatory Design involves users through a structured process, and HCD or Co-Design represent an intentional and facilitated process of involvement (see Refinement of Finding 4, pp. 136), the participation and involvement observable in the case studies is based on unpredictable intentions and produces unexpected results. And these are brought about by participants who influence design actions, but have not intentionally been allocated a facilitating role. While in the above design strategies, the designer conducts an inquiry into users' needs (Press & Cooper 2003) or facilitates the diffusion of creativity through dialectical capabilities (Manzini 2015) in both the cases the diffusion of involvement in design decision-making appears partially called for and accepted, but not facilitated.

**The Effect of Involvement on the Building Case**

In both case studies participation has direct implications for the artefact, as the organisations change according to the expert participants and the design requirements they introduce. The involvement of experts does not follow the drive to empower members of an organisation. It is though, almost like a reversed dynamic of participation. As in the Building Project, the community of silent designers represent the members of an organisation who empower themselves. This self-empowering community then invites experts who, to a certain degree, dis-empower the community by introducing decision-making conditions and restrictions. It is this impact that changes the orientation of the organisation and requires re-alignment from the community of silent designers. Referring back to the literature review, this then represents a deviation from the mode of empowerment that is understood as empowering an individual in contrast to the supervision of individuals that is entailed in team participation (Zhang and Begley 2011).



**The Effect of Involvement on the Performance Case**

In the Performance Project, we can identify such a movement between the individual freedom to contribute and supervised participation in a team, supervised by the artists. But this is not the only form of participation, the more uncertain and distributed form of outside impact through stakeholders occurs here as well. The organisation, though, shows more resilience to this impact, reducing it to a momentary event rather than allowing it to have a lasting effect on the organisational design. Alignment of participants continues according to the artists' supervision rather than any requirements introduced by experts (in this case the photographers or the Festival organisers who published the Festival programme).

This demonstrates that contributions to design can come from both one-off involvements or long-term commitments (Cottam and Leadbeater 2004). A temporary organisation becomes a platform for a variety of involvement types, thereby reflecting an open approach to involvement by being more flexible than a consultation or partially structured

approach to participation. Involvement can be based on a variety of qualifications: from an individual's own interests, to their expertise or skills, but the cases also show that established organisational functions can override the communal silent design initiative.

**Design Appears Socially-Distributed**

The unpredictability of impact from stakeholders on design activities adds another dimension of social complexity to design in organisations. In addition to design from the inside, here the organisational artefact becomes exposed to an additional set of design interests, imported from instances that exist beyond the Stakeholder Committee or the core group of silent designers. In this, it resembles design situations that have been described as socially distributed

> '(…) in that multiple practitioners from various domains collaborate in bringing about ideas and concepts' (Halskov & Dalsgaard 2007).

Participation, whether of silent designers or expert stakeholders, can comprise a multitude of functions, expertise, motivations and skill sets (Cottam and Leadbeater 2004), making it socially distributed and diverse. This situation corresponds with a view of social phenomena that, although understanding reality as not objectively existent, but dependent on individual interpretation, sees the world around us as posing restrictions on actions. The world exists through our interaction and, in turn, 'is a condition for intentional action' (Suchman 2007, p. 76). In this sense, the intervention of the stakeholders that joined either case study organisation as members of other, established organisations can be interpreted as the world around each organisation that inevitably becomes part of the conditions for its members' actions and their intentions.



### 7.6.4 Experience-Based Design Actions Appear Adaptable to Changing Situations

This section builds on the refinement of Finding 3, where I specify a specific, reflective dynamic that leads to design actions, which is based on immersive experiences rather than external observations. Research Gap 4, the call for a further exploration of hidden and silent design activities outside of product development processes, is thereby addressed and previous contributions (see Section 7.6.1) are enriched, by adding more detail to the description of a community of silent designers.

**The Interdependence Between Creator and Creation Affects Design Actions**

Experience and experiences have emerged as drivers for design actions in one of the cases – the Building Project. It is linked to the previously discussed dynamic of designing from the inside out. Here the role of observing a context before entering into it (Murphy et al. 2015) in order to appreciate the uniqueness of its problems and acknowledge the situated resources for designing (Schön, 1992, p. 138) is brought into question in a situation where silent designers design from the inside of the artefact – the organisation. They are part of the uniqueness of the artefact and situated within its context. They form part of the unique conditions for design.

The closer the relationship between the creators and their creation, the more design

actions are based on the experiences of those who design, which is suggested by the comparative study of both cases. Experience of those situations of change they are about to create is characterised by forms of design actions that are flexible and emergent. But these characteristics are also observable in organisational settings where we find a more expert-amateur kind of relationship. Moreover, the relationship between stakeholders and the creation is partially independent. This then might lead to the assumption that organisations as artefacts support more flexible forms of design actions.

**Situated Actions Are Described as Flexible and Emergent**

A theory of actions distinguishes between intentional or planned, and situated actions (Suchman 2007). Although actions can be understood as relying on plans and intentions, the value of plans and intentions for situated actions is contested (ibid). Planned actions assume a rational approach to problem solving in a tame environment where actions towards the realisation of a preferred situation are conceived of under the assumption of specific conditions, according to Suchman.

> 'Actions are described, at whatever level of detail, by their preconditions and consequences.' (ibid, p. 52).

Simon's (1996) interpretation of design as change from an existing to a preferred situation, which I used as a fundamental design indicator, can be understood as fitting well with this rational understanding of planned actions.



Situated actions are relatively more responsive to the emergent character of any course of action. A more realistic and pragmatic account of the relationship between plans and actions indirectly assigns relevance to the experience of a situation during a course of actions: 'the link between action and outcome is a set of experiences, not intentions' (Macy 2006). As Suchman explains, using the example of a person with a canoe trying to develop a plan to navigate rapids, in the end, no matter how detailed the plan, a plan won't do the work of steering the canoe through the rapids. The person will eventually be reliant on their 'embodied skills' (ibid, 2007) and their application as the actual experience of the situation requires. Appropriate actions then appear dependent on the changing and only to a limited degree predictable conditions and parameters that constitute a social situation.

**Experience-Based Design Respects the Situated Design Context**

An experience-based understanding doesn't emphasise a rationalised, analytic conception of design, but a more dynamic and exploratory understanding. The findings support an understanding that sees the situated and not predetermined development of social order, in the form of a temporary organisation, as a characteristic that influences design. While existing and preferred situations are identifiable as indicators in the early, fuzzy stages of purpose definition, directed actions lack explicitly articulated intentions or even the conditions for their articulation. Experiences form the basis for actions rather than pre-defined intentions that drive procedural stages of inquiry and motivations alone. This is particularly true in conditions where social order is to be created, as in the Building Project. Design in such a fluid context is efficient in the sense that ideation can lead to almost

immediate realisation of an organisational formation, which is established as a response to ideation, and this realisation can be changed, adapted and regrouped quickly, as situations require.

### 7.6.5 Uncertainty is Part of the Design Process

Here now I integrate a refinement of Finding 1 (see pp. 125), where I provide a detailed description of the specifics of design processes in cases in comparison with a HCD process, with previous statements that identify stakeholders as Silent Designers, to argue that design as practised by Silent Designers shares more commonalities with the practice of design professionals than design theory would suggest. Adding another dimension to the response to Research Question 1 by arguing that not only fundamental design principles or indicators are identifiable in the cases, but that as a result of analysis and preceding discussions it is possible to say that some of the design factors identified resemble those of professional design practice.

**Formalised Accounts of Design Processes Suppress a Dimension of Uncertainty**

While design and innovation study discourses suggest that exploratory and fuzzy stages of design processes are iterative, but structured (Dubberly 2004; Von Stamm 2008; Norman 2013), the practice of designers appears somewhat different. A publication that collates a variety of process diagrams shows them as either linear, cyclical or sequential, but always visualising and defining process stages (Dubberly 2004). The unexpected, uncertain, messy and emergent quality of exploratory work is often missing. As Michlewski (2008) points out

> '(…) the freedom to explore and to follow unexpected but promising leads, while keeping the overall vision as a subliminal yardstick for the project's success' (p. 385)

forms part of the culture of professional designers. His research is based on interviews with practitioners from leading design agencies, such as IDEO or Wolf Ollins. What becomes apparent is the acknowledgment of the unexpected and uncertain in a designer's practical work. This is also applicable to the uncertainty and emergence surrounding design activities in both cases. Such uncertainty, as described in the previous section on imported principles, is controllable and reduced only to the degree that the inherent social permeability of a social artefact allows for, which means that uncertainty persists even in the more structured, linear stages of an organisation, caused by the emergence and unpredictability of social interventions.

**Silent Designers Reflect the Reality of Design Practitioners**

In the Building Project the emergence of the organisational design process brings silent organisational designers closer to design practitioners than a theoretical account of design. I refer to the statement mentioned above to emphasise that in professional design contexts designers negotiate between emergent, unexpected yet interesting phenomena and the overall purpose and vision of a project. This is similar to what occurs in both projects when the organisations are faced with outside impact. In this then, hidden designers contribute like design practitioners to the organisational artefact, rather than resembling

a description of design as planned[2]. We can then conclude that silent designers in the self-motivated organisation of the Building Project show some attributes of professional design practitioners.

### 7.6.6 Conclusion

In this chapter I have first provided a further refinement of Findings 1 to 4 in relation to the literature and subsequently moved on to further discuss identified design traits, focusing on those that are specific to the hidden design characteristics identified in the case studies.

The discussions in this chapter have refined an understanding of organisations as artefacts by focusing on the character of design activities along four dimensions: the design process (Finding 1), characteristics of design actions (Finding 2), qualities of reflection (Finding 3) and the unpredictability of stakeholder involvement (Finding 4).

In response to Research Question 1: which design traits are evident in temporary organisations? I conclude by summarising the traits that emerged during further refinement of findings:

- Design is practised by non-designers who form a *community of Silent Designers*
- Silent Designers' relationship with the artefact is characterised by an experience-based, self-reflexive design dynamic, resulting in the design of their own experience rather than the design of experience for others.
- In a design context which is characterised by an interdependence between creators and their creation experiences form a basis for design actions.
- Experience-based design also allows design actions to be flexible and adaptable to situated organisational contexts.
- Design appears socially-distributed, influenced by an unpredictable set of stakeholders with a variety of motivations and requirements that can have an unintended impact on design actions.
- Hidden design activities identified in the case studies show a degree of uncertainty that is characteristic of designers' practice, but neglected in formalised accounts of design processes.

While in this chapter I have discussed the traits of hidden design, I will continue to bring the previous Conceptual Sketches and these further insights into a final proposition of the concept of organisations as designed artefacts in the next chapter.



2 In management literature design is referred to as a planned approach to decision-making, called *design science* (van Aken 2007; van Aken & Romme 2009)

# 8 Discussing Organisations as Artefacts

## 8.1 Introduction

> In this chapter I discuss the artefactual qualities of both cases by interpreting them through a design lens, referring to the previously identified design characteristics and responding to Research Question 3: how does the identified design impact on the organisation?

In the previous three Conceptual Sketches I gradually integrated results from comparative analysis. While these sketches should be read as a set of theoretical propositions, based on my interpretation of empirical phenomena, it is time to discuss these in the light of the more profound articulation of findings in the previous chapter.

While I looked at the conditions for design in the previous chapter, this chapter is dedicated to the effect of design on the organisation and its consequences for the understanding of an organisation as artefact.

I consider the identified design characteristics in relation to organisational contexts, represented by the cases, and to theory from organisational studies in order to explain phenomena such as the experience-based character of designing an organisation or the self-referential, reflexive forms of organisations.

Firstly I will discuss the cases as designed organisations, further eliciting their characteristics as artefacts and how these are reflected in each organisation's elements, structure, interactions and relationships. This I do, as explained above, by referring to organisational concepts in the literature. This first section describes characteristics shared by both case studies, followed by descriptions of characteristics specific to each case, for example, while one case is open, the other is semi-permeable, while relationships in one are descriptive in the other they are stakeholder-centred. From this follows a categorisation of their individual and specific characteristics according to five dimensions: sense-making, design principles, embeddedness, involvement and resilience.



In the second section of this chapter I continue to discuss both cases as artefacts. This section starts by discussing concepts of artificiality which have gained relevance in relation to organisations, but also those which are relevant to understanding the social role of artefacts and interactions around them.

> I conclude that when considering the theory around artificiality and both case studies as artefact, two main perspectives on artificiality can be identified: a *"making"-perspective*, emphasising the process of creation, and a *"meaning"-perspective*, centred around the meaning of artefacts. These form the basis on which I then describe the two case studies as artefacts and elicit their strengths and weaknesses as organisations.

## 8.2 Setting the Scene

While both organisations share characteristics, like temporality and permeability, they are at the same time profoundly different, e.g. in their decision-making dynamics. Further, they each individually show changing characteristics as they develop and each case study

organisation can be interpreted as incorporating principles of a variety of theoretical concepts, for example, Enactment Theory (Weick 1979), where interactions influence the organisational environment which in turn influences interactions; Stakeholder Theory (Freeman & McVea 2001), where a situated interpretation of individuals in organisations is prioritised over structural accounts of role and function; Open Systems Theory (Scott & Davis 2015) where the relationship between an organisation and its environment is described as interdependent and varied, or Action Theory (Suchman 2007), which differentiates between the observable, emergent characteristics of actions and planned, intended and idealistic processes.

Using the term "*artefact*" can evoke expectations of a qualifiable, comprehensive entity with clearly identifiable qualities, similar to physical or digital products. This, I can state, is clearly not applicable when an organisation is considered as an artefact. An organisation is profoundly complex and diverse in its social dynamics, the way it engages stakeholders and the flexibility through which it integrates with its surroundings. Both cases make an organisational artefact appear as an arrangement rather than a thing (Sandelands & Srivatsan 1993).

These cases offer the rare opportunity to observe an organisation from the very beginning of its existence and its bottom-up dynamics. It is the detailed account of each organisation's design that allows us to identify significant characteristics. The comparison of an organisation with an artefact has to involve a description of its multiple facets.



After drawing out the characteristics which both cases share and subsequently those which are unique to each case, I propose that both case study organisations are highly unique and thereby in themselves comparable to unique design problems.

## 8.3 Eliciting Design Characteristics Which Both Cases Share

### 8.3.1 Permeability and Distribution of Control

Previously articulated design characteristics point to distributed design decision-making which involves unpredictable impacts from social stakeholders with varying degrees of attachment to the organisation (see Refinement of Finding 4, p. 136). The characteristic of an organisation that allows for different ordering principles to affect it can be identified as permeability. This proposition was first articulated as a result of the first phase of analysis in Conceptual Sketch #2 (pp. 102) and further confirmed during the third phase of analysis. Permeability has been described as a core mechanism of temporary organisations (Bakker 2010). Combined with the unintended distribution of decision-making, it leads to sustained uncertainty throughout developmental stages. This has implications for an understanding of the organisation as a vehicle for actions and mechanism for change.

It could be argued that a description of an organisation as a vehicle of actions which are based on members' immersive experiences or their external observations suggests exclusive control over the design of the artefact by those who are part of it and initiate actions. But, as previously established, each organisation is permeable to the unpredictable impact of stakeholders who are not part of the initial core organisation. While such impact

appears to be stronger where the organisation forms a communal setting with low hierarchies, outside impact is still identifiable even after the Building Project develops into a more hierarchically structured organisation. It is possible to explain this permeability with Organisational Culture Theory, for example when considering the *Nexus*[1] model which states that the culture of an organisation is influenced by the individual cultural values that its members hold (Martin 1992). In a similar way, stakeholders who join the core group of members of both case study organisations come with their own set of values and internalised beliefs (Schein 2004), which they have appropriated as members of other collaborating organisations.

Previously I observed that different degrees of freedom of expression and contribution to an organisation exist in each case. In the Conceptual Sketch #2 I reiterate that stakeholder neglect can lead to alienation and conflict or autonomous action (as in the Performance Project). As a temporary organisation operates as part of a larger collaboration of established, temporary and to different degrees interdependent organisational entities (Bakker 2010), throughout this construct individuals have varying degrees of ownership over the decisions through which they can impact on parts of such a collaboration. While research has been conducted on how members of temporary organisations reach out to external stakeholders (Ancona & Caldwell 1992), what both case study organisations share are situations where outside stakeholders reach into each organisation.

The previous findings that suggest a pertained permeability and the resulting uncertainty regarding stakeholders' inputs and impacts, demonstrate that individuals can have quite a strong impact on an organisation even without structured paths for participation. Bakker (2010, p. 481) states that organisational actors can influence the autonomy of a temporary organisation.



As a consequence, permeability and sustained uncertainty about the involvement and impact of stakeholders on the organisation and its development are evident in both projects and across the three developmental stages.

### 8.3.2 Organisation Within an Organisation

The Building Project represents an organisation *within* an organisation, a temporary organisation (the Stakeholder Committee) within an established, enduring organisation (the University), while the Performance Project represents a temporary organisation within a collaboration of temporary organisations (the Festival and the Conference). In both case studies, then, aspects of organising *without* organisation, a concept introduced in the Literature Review on p. 29, can be identified, but at the same time they are both embedded in and depend on other organisations (Jones & Lichtenstein 2008; Bakker 2010). Both represent organisations within other organisations, which has implications regarding the way they are open to other organisations and also try to maintain their independence. But being part of another organisation does not mean a temporary organisation cannot be autonomous or autarkic. Both cases differ in their degree of dependence and integration

1 Please note: the use of the term ‚Nexus' in this context differs from Chapter 3, where I use the word in its generic meaning to describe my perception of the Performance Project and its organisation.

into other, established organisations. Temporary organisations maintain links to their permanent environment (Bakker 2010) as projects are defined

> 'as a nexus of activity that allows multiple organisations to collaborate to achieve their individual and collective goals' (Jones & Lichtenstein 2008, p. 234).

While the Building Project represents an organisation within an organisation and actively reaches out to other organisational actors, such as the Management School or the Estates Department, the Performance Project welcomes the involvement of some but refuses to integrate the requirements of others (e.g. the Festival organisers in that they refuse to acknowledge the Festival programme). As such it represents a temporary organisation that moves between organising within organisations and organising without organisations.

### 8.3.3 Organisation Around Informal Dynamics and Tasks Rather Than Official Functions and Structure

Silent designers organise around problem matters in a manner based on informal social dynamics, not functions and official role understandings. They organise around tasks that emerge out of discussions around existing and preferred situations, for example, when the Stakeholder Committee faces a lack of information and forms topic-related sub groups. This correlates with Bakker's description of temporary organisation as task-focused (Bakker 2010). In addition, silent designers represent informal arrangements of people within formal, established structures. As Bakker explains, interactions in temporary organisations take place around opportunistically developed role behaviours (ibid, p. 475).



Another dimension of informal dynamics emerged during the second phase of analysis, in the form of tacitly experienced forms of respect and trust (see Section 4.6.2, pp. 76 and Preliminary Findings, p. 102), which support the creation of an organisation in the Performance Project. Theory suggests that temporary organisations, due to their time-limited existence, have less time to develop structures comparable to enduring organisations (Bakker 2010). They are by default less hierarchical, shaped by democratic participation and an emphasis on interpersonal relations (ibid) and leadership in this context is described as focusing on soft aspects of 'interpersonal liking'. Another representation of the organisation around informal, social dynamics is the concept of 'swift trust' which suggests that the way temporary groups operate is based on a presumptively emergent form of trust (Bakker 2010, Meyerson et al. 1996). In the Performance Project such swift trust is scaffolded by the respectful behaviour of those in charge, the artists, when interacting with the musicians. In the Building Project, informal dynamics develop around a combination of swift trust and a legacy of relationships that have developed over a longer period of time between some of the group members as colleagues.

### 8.3.4 Organisations as Vehicle for Design Actions and a Mechanism for Design Change.

From the analysis of the primary materials, organisations appear as vehicles for actions and mechanisms for people to make things happen and bring about change (see Section 7.6.2, p. 142). They appear as mechanisms through which people bring about change and realise actions which are based on reflection. As mentioned in Section 7.6.2, in the Building Project

a group of people demonstrate an interdependent relationship with the organisation. They are immersed in the organisation and the organisation becomes their means of pursuing design actions and the artefact through which they create manifestations of preferred situations.

Through this arrangement of people and discourses about the purpose of the organisation as well as the immediate realisation of actions, the organisation is a vehicle that allows them to conceive of and carry out their actions, a mechanism for realising design decisions, bringing about change and at the same time it is the result of design actions. While this applies to the shared organisation of the Building Project, it is also true for the Performance Project, but here the members of the organisation have a less immersed and interdependent relationship, as decision-making is allocated to a few and decisions are made based on observations rather than experience. Here *reflection-on* and *-for-action* informs decisions and actions rather than *reflection-through-experience*, as is the case in the Building Project. Still, here too the organisation is a vehicle for change and design actions.

### 8.4 Eliciting Design Characteristics Which Are Case-Specific

Now that an account of the design characteristics that both cases share has been given, I will continue by introducing design characteristics that are specific to each organisation.

#### 8.4.1 Semi-Permeable versus Open System: 'Molding' and 'Filtering'



Rieple, Haberberg and Gander (2005) introduce the notion of a 'semi-permeable membrane' between two organisations. It is used as a metaphor to describe the selective exchange of elements between organisations – while in collaborations, the exchange of some elements is enabled, others are blocked. Permeability in both cases is related to the direct impact of individuals. Individuals have been described as envoys and the embodiment of attached organisational cultures (Martin 1993) who facilitate the exchange of information between organisations. Between the two case study organisations this inter-organisational interaction ranges from a more open and indiscriminate style to the above indicated semi-permeable style.

The Building Project reaches out to its externally existing and embedded organisational environment, in a way that resembles 'molding' (Ancona & Caldwell 1992), influencing people to shape their perceptions and intentions to promote the interests of the group. As an 'open system' it is 'part of a larger network rather than an independent, self-standing' entity (Freeman & McVea 2001).

The semi-permeable Performance Project practices 'filtering' (Ancona and Caldwell 1992), which supports the creation of a semi-permeable boundary. Filtering is an activity where an individual decides what information from outside the organisation will be shared with the organisation. This happens when the artists convene and negotiate with the photographers on how to arrange the musicians, but it also happens between the artists, when they step away from the group to reconsider and discuss the arrangement and then communicate only a fragment of that information to the group. Further, where they fail to engage or attract the necessary social resources for their organisation, they reach out and reduce

uncertainty by taking advantage of institutional safeguards, such as the network of Festival organisers, and existing organisational structures (Bakker 2010), such as a local Brass Band.

### 8.4.2 Situated Actions versus Intentional Plans

The Building Project demonstrates that organisations are shaped by situated actions not intended plans alone (see Chapter 6, Finding 3 on experience and observation, pp. 119). This insight is derived from the importance of experiences for design actions identified as part of the fuzzy front end of the design process in the Building Project (see section 7.4). Actions are not represented as a structured sequence but as dialectical (Clancey 1993) and emerging out of conversations. The relevance of experiences for organisational formation and behaviour leads to associations with experience-based theories such as experiential learning. Here the role of conversations for the transformation of experiences into knowledge has been articulated (Kolb 1984; Baker et al. 2002). New forms of organisations are based on the creation of conversations and the involvement of stakeholders in conversations is considered more relevant than the 'rank, title or the trappings of power' (Webber in: Baker et al. 2002, p. 5)- a point of view that places experiences over structure and emphasises the relevance of interactions.

Situated actions and their characteristics, touch upon the importance of experienced situations (see Section 7.6.4, p. 146, for the importance of experience for design actions) and the uniqueness of problems in design. As Buchanan (1992) states, the social reality of designers is captured by the notion of wicked problems and every wicked problem is unique (Rittel & Webber 1973). This can also be considered applicable to organisations as design problems and it seems that the inclusive and self-referential form of designing observed in the Building Project is adequate to address this uniqueness. Its uniqueness is further increased through a number of ongoing changes of the artefact which can each require an individual response, as is exemplified by the developmental stages of each project and the significant events that describe their individual development. The ability of the organisation to integrate new stakeholders, for example, is one such design response. In this then, the Building Project appears as a series of design problems that require unique solutions, emphasising the role of situated actions. This consideration resolves the paradox that the Building Project as an organisation shows characteristics of both an open system and a self-referential closed system at the same time. While its openness is related to the permeability of its boundaries, the self-referential character concerns the way decisions on actions are made.



In the Performance Project actions are situated as well, but they are co-ordinated by artists. Here reflection does not take place across a group of people, instead, one part of a group (the artists) reflects on another part of the group (the musicians) – a segment of the organisation reflects on an organisation within. It is the appearance of actions and the decision-making leading to actions which distinguish whether an organisation is treated as an intentionally "made" artefact or an artefact that is situationally "formed". The Performance Project appears to be intentionally made whereas the Building Project is situationally formed, based on the character of their design processes (see pp. 125) and

reflective qualities (see pp. 132).

### 8.4.3 Creator-to-Creation Relationship – Immersion vs. Externalisation

This section relates to the finding that an organisation is characterised by a close relationship and interdependence between the artefact and its creators (see the Conceptual Sketches and Section 7.6.2, pp. 142). Further, the cases suggest that this artefact is designed in a shared decision-making process and not exclusively by a founder or leader, as some authors suggest (Mintzberg 1981; Jelinek et al. 2008).

As Gagliardi (1992) suggests, artefacts exist independently of their creators, which is only partially true for the case study organisations and not an exclusive characteristic or conclusive measure of organisations' artificial qualities, as this thesis demonstrates. As is apparent in the comparison of the two case study organisations, the relationship between the creator and the created has multiple facets and variations, as each case demonstrates that the organisation is manifested by those who are its members and thereby shaped by them.

Despite this relationship, the cases show different degrees of interdependence demonstrated by the differing characteristics of their decision-making processes. Decision-making in an immersive setting (e.g. the Building Project) is shared, while in an externalised setting (the Performance Project) it is guarded by a group of decision-makers (the artists). While the Building Case is characterised by immersive experiences which create a close bond between the community of silent designers and their creation, in the Performance Project the artists, as one part of the organisation, distance themselves from another part of the organisation, the musicians. The artists instruct and arrange the organisation to then step back and observe the artefact they have intentionally made. This way, the part of the organisation that is intentionally made resembles an externalised manifestation of ideas comparable to the principles of prototyping in design ideation (Marzano 2005; Halskov & Dalsgaard 2007; Brown 2008; Kolko 2015).



### 8.4.4 Stakeholder Roles and Relationships – Stakeholder-Centred vs. Descriptive

Stakeholders in organisational design are members of an organisation. Different relationships become apparent in organisations understood as communities of silent designers. Stakeholders define themselves not through profession, but interest, motivations and responsibilities. Stakeholders appear in a variety of roles, as individuals with intrinsic motivations, as facilitators amongst equals, but also as more detached and abstract representatives of extrinsic interests and organisational structure. Some stakeholders span boundaries and others stay within.

In the case studies all of the stakeholders have other obligations besides fostering the Stakeholder Committee or the Performance Project. In the Building Project we have a rather fluid distribution of responsibilities, driven by stakeholders and part of the flexibility and fluidity of the artefact at the beginning of the project.

During the Performance Project we can identify a clearer allocation of roles and

responsibilities and here the individual does not stand out but is more integrated into the group of musicians or the group of artists, but still has a freedom to act and improvise within a set of requirements. In both cases, participation is highly individualised and specific to the context. Stakeholders participate in a way that is rather different from traditional hierarchical organisations which are defined through roles and positions. While this emerges as one way of designing an organisation in the Performance Project, it also shows its limitations, when conflicting interpretations of an organisation exist. In the Building Project we can observe participation in organising that is more inclusive by continually integrating the actions of all members and and imposing parameters for decisions that come from experts.

While in the Building Project, individual stakeholders play a role similar to *boundary spanners* (Rieple et al. 2005) in that they move between different organisational entities, they differ in that they don't try to protect the stakeholder organisation from the influence of the larger organisation, but actually have an integrating role. They actively and deliberately create connections with other organisational instances. In the Performance Project, the artists can be interpreted as protecting their creative way of working against imposed, potentially limiting structure. Artists can be interpreted as innovators who 'challenge the status quo' (ibid, p. 51) and are driven by intrinsic motivations (ibid), in contrast to boundary spanners. In addition, roles in the Performance Project are more descriptive, with clearly articulated responsibilities attached, while in the Building Project the focus is on the interests and motivations stakeholders bring with them, which the organisation can help to pursue.



### 8.4.5 Varying Levels of Resilience in the Face of Change – Adaptability versus "Rebouncability"

As previously mentioned, both organisations are exposed to sustained uncertainty which is introduced by the unpredictable impact of stakeholder involvement. But each organisation has different ways of dealing with these introduced changes to the organisational orientation. As exemplified in Section 7.5 (pp. 136), the Building Project reacts quite differently to the impact of expert stakeholders than the Performance Project. Resilience to maintain the organisational orientation along a defined purpose appears stronger in the Performance Project. Here, the orientation "recovers" from interference and the project regains its overall direction along the defined purpose of creating an iterative, open-ended series of performances. Its organisational orientation "rebounces". In the Building Project, however, the organisation reacts to the requirements introduced by expert participants by adapting its orientation, becoming more goal-oriented, more pragmatic and internalising the values that were introduced by the experts. The resilience to change is not as articulate as in the Performance Project, the project changes incrementally until its social dynamic is dominated by hierarchical structure.

The Building Project shows flexibility while the Performance Project demonstrates "rebouncability". While organisational resilience is an ambiguous concept ( Burnard & Bhamra 2011, p. 5583), traits have been defined as the ability of a system to withstand

disruptive events as well as adapt to changing environments (ibid). As theories around organisational resilience suggest, organisations are exposed to 'unpredictable change' as part of the complex environments they exist in (ibid). According to these definitions, the two organisations are distinguishable in terms of their resilient capability. While the Performance Project manages to withstand prolonged manifestations of changes, the Building Project invites disruptive change makers and integrates changes through adaptation.

## 8.5 Summarising Both Cases as Designed Organisations

Both cases can be considered as shaped by design activities and actions, but the picture that emerges is not a unified understanding of an organisation as a qualifiable "thing" or a static result, the end point of a development process. Each case study organisation is unique in its structure, decision-making principles and interaction with its variety of stakeholders. From the previous analytical steps and interpretations it follows that each case study has a set of distinguishing characteristics. Their individual characteristics can be described as sets of contrasting attributes, derived from the previous discussions. These appear on five design dimensions: sense-making, design principles, embeddedness, involvement and resilience.

- sense-making: externalisation vs. immersion
- design principles: situated actions vs. intentional plans
- embeddedness: open to semi-permeable
- involvement: descriptive versus stakeholder-centred
- resilience: continuous/strong (bounce back) – adaptive/weak (change)

Along these five dimensions, each case study displays unique characteristics, which I summarise in the following by referring to dimensions identified during the previous stages.

### 8.5.1 CS1: Design Dimensions of the Building Project: Immersive, Situated, Open, Stakeholder-Centred and Adaptive

This section briefly summarises the case-specific design dimensions of the Building Project.

**Sense-making: immersion**

The approach of members of the organisation to making sense of situations and information in the Building Project is characterised by the immersion of members in the organisational context. This is based on experiences and reflection-through-experiences as outlined before. Immersion describes the close interconnectedness between the creators and the organisation they create. In this case, the members of the organisation are not distanced from the organisation but an integral part of it. This can be compared to an emic approach to meaning making, where meaning emerges out of a cultural context itself (Barnard 2009). Ideas are manifested by the group itself.

**Design principles: situated actions**

The Building Project is not primarily a made thing or intentionally designed artefact that is supposed to manifest a specific, envisioned shape, structure of orientation. The elements that establish the Building Project, its members, come together with different parts and elements to form the organisation. Although initiated by the Head of Postgraduate Study, the group forms on the self-initiative of its members and continues to thrive on their intrinsic motivation. The drive to form the organisation emerges out of conversations and its development is characterised by situated actions that continue to surface through conversations.

**Embeddedness: open**

The interaction and relationship between the Stakeholder Committee and the wider organisational context it is embedded in is close and actively endorsed. Members of the organisation actively promote their initiative and invite experts from other organisational actors to join the group and provide information.

**Involvement: stakeholder-centred**

Stakeholders of the Stakeholder Committee get comprehensively involved in defining the organisation's purpose and its actions. The stakeholders determine through discourse and their experience what role they are going to take on in the organisation in order to fulfil identified tasks. Involvement therefore is based on the consideration of individual stakeholders' interests and motivations.



**Resilience: adaptive/low**

Throughout its development, the Stakeholder Committee demonstrates high adaptability to changes from inside and outside its core group of members. Resilience to significant events in its environment or internally is low, instead the organisation is flexible and open to change and re-orientates itself by internalising changes. The Stakeholder Committee thereby maintains its relevance in relation to changing requirements and conditions.

### 8.5.2 CS2: Dimensions of the Performance Project: Externalised, Planned, Semi-Permeable, Descriptive and Continuous

This section briefly summarises the case-specific design dimensions of the Performance Project.

**Sense-making: externalisation**

Artists in the Performance Project predominantly take an observer position during the rehearsals and the performance. They distance themselves from the organisation within the organisation – the musicians – in order to review the arrangement and instructions. By doing so, the artists treat the group of musicians as an external manifestation of their ideas, thereby representing a decision-making dynamic comparable to etic principles, where outside meaning is applied to phenomena (Barnard 2009)

**Design principles: planned actions**

As the artists point out, they have to do a considerable amount of planning before they can enter a specific context. In addition, the responsibility to make design decisions is allocated to the artists. They have a certain process in mind and base actions in parts on previous experiences and previously established aims of the organisation.

**Embeddedness: semi-permeable**

Embeddedness in its surrounding organisational network is characterised by selective interactions. The artists regulate the degree to which they adhere to expectations from different actors in their collaborative environment. They don't comply with the Festival organisers' expectations but do so with the photographers. Further, the flow of information between themselves and the musicians as an organisation within the organisation is guarded. They choose words carefully to communicate the results of their reflections, often shielding the process of reflection from the musicians.

**Involvement: descriptive**

I choose the term "descriptive" for the kind of involvement observable in the Performance Project. By this I refer to the clearly described roles that artists, musicians and other members of the organisation, like the project manager, participate in. One part of the organisation develops a description of roles and tasks for the other members of the organisation, as can be observed when the artists instruct the musicians.



**Resilience: continuous/high**

Resilience to changes to the organisational orientation is high in the Performance Project. Although outside stakeholders, such as the photographers, introduce changes to the organisation's values and its orientation, the organisation integrates them only momentarily. It quickly regains its initial orientation demonstrating a high degree of resilience and "rebouncability".

### 8.6 Discussing Artefactual Qualities of Designed Organisations

At the outset I was critical towards the understanding of an organisation as artefact and product of design, as suggested by some authors from the design as well as the management community (see Chapter 2: Literature Review). This discussion and the preceding evidence for design activities within both case studies enabled me to confirm that organisations can be understood as designed artefacts. But describing an organisation as artefact could be understood as related to a specific participatory structure where creators are identifiable and do create 'the other' (Dant 1999) – the organisation as an externalisation of their ideas, at least to a degree independent from themselves, which would cohere with accounts of artefacts in organisations (Gagliardi 1992). I find it also relevant to articulate the specific characteristics of this artefact and pay respect to the unique and complex dynamics of designing an organisation and the principles that differentiate an organisation from other artefacts.

It appears that the term "artefact" or "product" is an ambiguous one and not without the

potential for misunderstanding when applied to describing an organisation. It is, more generally speaking, the question whether the drive to label an organisation as "design product" provokes expectations that this product can be conclusively and comprehensively described in a way that we would be able to describe other objects which we can see, touch and experience, such as physical or virtual artefacts. It further appears deterministic to try and find a conclusive answer to the question "what is the organisational artefact?". Consequently, this research provides answers to questions that are interested in the dimensions of an organisation if considered designed and what the implications for our perception of an organisation are.

Different accounts of what constitutes an artefact, their traits and how they interact with the social world can be identified in the literature. From prominent, heavily cited sources such as Simon's (1996) 'The Sciences of the Artificial' to Krippendorff's (2005) trajectory of artificiality, Jelinek et al's (2008) adaptation of Krippendorff (ibid), socio-material accounts of things and accounts of artificiality in social materiality (Gagliardi 1992, Dant 1999), a differentiated picture emerges.

**The Making and the Meaning of Artefacts**

Opinions about artefacts and what type of objects and creations should be included in this category vary. Material artefacts, for instance, such as products with material qualities, tables, cars, things that one can touch and see, represent an assembly of artificially and intentionally combined materials and created forms. Such artefacts are part of organisational life and have been considered in organisation and management research, such as Actor-Network-Theory (ANT) (e.g. Latour 2005; Turner 2009) or organisational materiality [2]. I take inspiration in eliciting conceptual building blocks for each organisation's artificiality from, for example, social science research into the social meaning of artefacts (Dant 1999).



Previously introduced definitions of organisations as 'human-made artefacts' (Rollinson 2008) and products of design as social action (Junginger 2005, based on Margolin 1995) seem to imply that artefacts are *made* and *designed*, that they are brought into existence through intentional activities. The definition for the verb 'to make' is given in the Oxford English Dictionary as

> 'to produce (a material thing) by combination of parts, or by giving a certain form to a portion of matter, to manufacture; to construct, assemble, frame, fashion' (Anon, 2016).

The above definitions also present a procedural definition of an organisation as artefact, determined by the character of the process that an organisation is created by – human making or designing. While this research shows that organisations can be considered designed and therefore a result of design actions, such actions are not always intended or planned. Apart from this, describing an organisation as artefact through the process of its creation alone excludes other aspects of an organisation that tell us more about the

2 The *British Journal of Management*, for example, dedicated a special issue to the role of materiality for and in organisations (BJM 2015, Vol. 26, Issue Supplement S1).

dimensions of this artefact, like its relationship to the environment and its creators.

Other authors define artificiality according to the changing tasks and contexts that professional designers operate in. Krippendorff's (2005) trajectory of artificiality is an example, where organisations are included as projects and discourses and form stages on the trajectory of artificiality. They shift the character of design problems and their conditions, as well as the language involved in their articulation (Jelinek et al. 2008), away from material objects to systems and discursive interactions. While artefacts are described as created in our heads and enacted through our behaviour (ibid), the consideration of a designed artefact as a manifestation of ideas is interesting in relation to an organisation.

An artefact, it emerges, is initially dependent on the human, on a person who has an idea and creates an artefact in their head. After this invisible envisioning different relationships are identifiable. Some artefacts are manifested as designed, produced and physically manifested products, which can exist independent from their creators once created (Pratt & Rafaeli 2006). Other forms of artefacts, like experiences (Spence 2016), services (Sangiorgi & Prendiville 2014; Meroni & Sangiorgi 2016), discourses (Weick 1979; Krippendorff 2005), or organisational systems (Banathy 2013) are manifest in multiple, tangible and intangible dimensions and are closely intertwined with the social dynamics that created them and which are necessary to maintain them. In general, according to Krippendorff (2005), an artefact is open to appropriation by a multitude of actors through individually assigned meanings when considered social constructs. As Dant (1999) states:

> 'All artefacts are treated by human beings as having meaning: we recognise them, understand what their properties are, and treat them as having particular cultural significance' (ibid, p. 151).



Artefacts can be physical constructions that give rise to a variety of meanings that were not intended by their creators (Pratt and Rafaeli 2006). In this, control over the assembly of the physical elements that come together to form the artefact is opposed by the lack of control over the social construction of meaning by those who encounter the artefact after its creation. Here we can define a clear separation between the relationship of the creator with the artefact and the post-creational life and relationships the artefact has, mediates or replaces in the social context it is placed. It follows then, that even physical artefacts possess an uncontrollable dimension of uncertainty once released into the "open". The relationship between a physical artefact and humans is bi-directional, on the one hand objects mediate social relationships, they transfer information and communication by acting as placeholders of those that cannot be with us, at the same time, our relationship to artefacts can be understood as resulting from the relationships we have with the social world around us (Dant 1999). In this sense, artefacts mediate the social relationships through which we assign meaning to them.

While Krippendorff (2005) emphasises the dependence of artefacts on professional creators of artificiality, such as designers, neither of the two cases can be described as artefacts based on the involvement of professionally trained designers, instead two overarching principles are identifiable that represent umbrella terms for an understanding

of organisations as artefacts. These two perspectives are based on previously introduced discourses in the literature about artificiality and empirical observations, of which two contribute significantly: the differing degree of intentionality that influences the design of an organisational artefact and the varying relationship of the creators to their creation.

The two perspectives that surface are a "meaning"- perspective, which is mainly informed by insights gained from the discussion of empirical findings at the beginning of this chapter, and a "making"-perspective, which collates positions mainly articulated in literature.

### 8.6.1 Two Perspectives on Artificiality: The "Making-" and "Meaning- Perspective"

The **"making"-perspective** summarises discourses that define artefacts through the process of planned creation and assume that control can be asserted over the conditions and elements that form the artefact and as such most of the elements that contribute to the artefact can be named and determined. Statements that contribute to the "making"-perspective:

- an organisation is a human-made artefact (Rollinson 2008)
- formalisable and analytic perspective: 'Science of Design' (Cross 2001 on Simon)
- organisations as designed products, as results of social action (Junginger 2005)
- artefacts are described by the process of their creation or the result thereof
- involvement of professional designers (see Krippendorff 2005) or/and
- the definition of controllable elements that constitute the artefact (see Jelinek et al. 2008)
- artefacts exist independent from their creator once manifested (Gagliardi 1992)

A **"meaning"-perspective** places emphasis on aspects of an artefact that evade control, such as its meaning, it acknowledges that an artefact is situated and complex and therefore defined through a multitude of elements and the diversity of relations around it. Statements that contribute to the "meaning"-perspective:

- once manifested, interpretation is open to subjective perception (Krippendorff 2005) and evades control
- based on the fact that meaning making is diverse and situated (Dant 1999; Pratt and Rafaeli 2006)
- artefacts can have interdependent relationships with their creators (see Building Project)
- mediating role of artefact (Dant 1999)
- organisations evade clear definitions as things (Sandelands and Srivatsan 1993)
- they are designed through uncontrollable impact of stakeholders (see Building and Performance Project)

The *making-perspective* combines rationalised and process-oriented interpretations of

artificiality while the *meaning-perspective* summarises situated, emergent and action-oriented forms of artificiality. Considering the three discourses of design thinking articulated by Johansson-Sköldberg, Woodilla and Çetinkaya (2013) the practice-based approach (based on the work of Schön, Buchanan, Lawson and Cross), the rationalised, systemic study of design (based on Simon's work) and meaning creation (based on Krippendorff's work), the reader might be surprised that Krippendorff's interpretation of artificiality not only informs the meaning-perspective but also the making-perspective, since he emphasises dialectical artefacts (projects and discourses) and the importance of meaning. Still, it is Krippendorff who also emphasises the role of intentionality for design in his critique of Simon (Krippendorff 2005) (see design indicators) and suggests that elusive elements such as conversations consist of elements that can be influenced (Jelinek et al. 2008) and are intentionally designable.

Following these two perspectives it is possible to further specify the two organisations as artefacts. While across the previous paragraphs the discussion focused on the artefactual qualities of each organisation which were based on the elements of design activities elicited during analysis, in the following I reflect on the strength and weaknesses of artefacts from the meaning- and making-perspective respectively.

### 8.6.2 CS1: Discussing the Building Project from a "Meaning"-Perspective

The Building Project as artefact is connected to the established hierarchies of the enduring organisations that form its environment, but the Stakeholder Committee, as part of this project and the main focus of this case study, is an artefact in accordance with the meaning-perspective which implies that it embraces uncertainty and permeability and shared decision-making, hence is characterised by flexibility in its informal dynamics.



The type of organisational artefact that the Building Project represents is adaptable to organisational change. This ability for adaptation at some point endangers the existence of the initial organisational design – the Stakeholder Committee. The Stakeholder Committee adjusts to changing requirements and the shift of decision-making power from the group to the enduring organisations around it (see Events B4 & B5, Section 5.7.2, pp. 105). The Building Project then develops from an artefact that can best be described through the meaning-perspective to an artefact that is better described through a making-perspective, reflecting changes in its design from being self-motivated to centrally co-ordinated and corresponding with the previously introduced distinction between an organisation as situationally "formed" or intentionally "made". But its flexibility also enables the organisation to embrace uncertainty and complexity in its environment and internally and allows the organisation to integrate not only new knowledge, but new stakeholders with their own organisational experiences (Martin 1992) and the requirements they introduce.

It is then, as an artefact, not a final result, but a transient arrangement or assemblage of elements that are tied together by self-motivation and experiences. It evades a clear and definitive articulation of elements, such as roles, relationships between members of the Stakeholder Committee or attempts to structure its decision-making process and messiness

and emergence are integral parts of its behaviours.

A variety of meanings are embraced and integrated, making individuals' attempts to make sense of the organisation part of the organising process and ongoing discourses. This can be observed in the first meetings, when individuals' interests are heard and when ongoing discussions lead to shared decisions on actions. One can conclude that the ongoing attempt to better understand the problem the organisation tries to solve, for example through the collection of information on requirements for the new building, represents the flexible and responsive way in which the organisation responds to changing environments that have an effect on the organisation's meaning (such as developments in other parts of the University that concern the development of the new building).

Further, respecting individuals' experiences allows the organisation to develop agile actions out of authentic and deep understandings of its native culture rather than through imposed, rigid and rationalised, distant descriptions of a problem, functions, roles and strategies, which suggests similarities to concepts of improvisation (see, for example Weick 2012)[3].

### 8.6.3 CS2: Discussing the Performance Project from a "Making"-Perspective

The Performance Project is placed within the making perspective where externalisation of parts of the artefact allows for observation and description of its meaning by artists and a nexus of stakeholders (Martin 1992), including photographers and conference organisers. Their actions are descriptive and intended, grounded in a wider, pre-defined purpose. It is semi-permeable, thereby maintaining its independence and even demonstrating rejection of imposed decisions made by some organisational actors in its environment. It behaves therefore more autarkically within its partner organisations but establishes clearly defined relationships amongst its internal stakeholders.



During sequences of the musical performance, the group of musicians exists as an independent artefact, an artefact that can be observed from outside, that can be felt, experienced and seen, even touched, an artefact that allows other parts of the organisation to make changes, to establish and name elements that require adaptation or dismissal. This then allows the organisation to change in intentional ways, based on desired and imposed actions. This ability to create distance and observe active parts of the organisation and their interaction with the environment increases resilience. It allows the organisation to pursue the vision of an artefact whose externalised features can be envisioned in reflection on its current state from the outside, thereby allowing the artefact to react to outside impact and return to its original trajectory guided by those members of the organisation which can be called the "guardians of organisational orientation". These guardians maintain the integrity of the organisation and its behaviour according to its overall purpose. But an organisation like this is also in danger of creating moments of confusion about its meaning. This seems apparent where the organisation is not playing or moving, when, e.g. the artists break off to discuss with the photographers or Festival organisers and the musicians are left standing

3 A detailed discussion about the role and character of improvisation follows in Chapter 9, Section 9.4.2.

on their own. Conversations between the musicians then unfold that show puzzlement and slight irritation. Where an organisation communicates cohesiveness and determination, frustration and irritation might follow if experienced and situated meaning differs from that envisioned. But an organisation that is based on intrinsic motivation, such as playing music, can draw on its stakeholders to support and mutually achieve the organisation's initially anticipated meaning.

### 8.7 Concluding Thoughts on the Case Organisations and Their Artefactual Qualities

During the preceding discussions I articulated the character of both case organisations. It seems plausible to assume that across its development process and related changes, the same organisation can incorporate different designs, from open, stakeholder-driven to hierarchical. This consideration then suggests that an organisation as artefact can be better described by the arrangement of interactions, experiences, decision-making processes, actions and their dynamics rather than by the deterministic articulation of qualities that would apply to a monolithic object (Sandelands and Srivatsan 1993). Instead, it is the dialectic character of the artefact that enables the integration of different shapes, stakeholders and requirements through continuous design adaptation.

> Even in a small sample of two temporary organisations, it is difficult to conclusively describe each case study organisation as a specific object or product. They are, indeed, characterised by a variety of aspects, conditions, requirements and stakeholders. As Sandelands and Srivatsan (1993) point out: 'instead of *the* organisation, we have images of disparate objects and events that are supposed to constitute an unseen whole' (ibid, p. 3). Treating an organisation as an entity 'ignores the wide differences between an arrangement and a thing' (ibid, p. 4).



**Cases Represent Unique Design Problems**

Both case study organisations appear as unique artefacts which are designed in a social process of diverse qualities, involving different stakeholders, based on distinct decision-making procedures and portraying contrasting relationships between stakeholders and between stakeholders and the artefact.

In this, they can both be understood as unique design problems (Buchanan 1992) that have to react to unique problems. The ability to do so differs given the characteristic of an artefact as either belonging to the realm of "making" or the realm of "meaning". These two distinctive perspectives summarise the conflict, highlighted in the previous Conceptual Sketches: whether a temporary organisation is dominated by structure or social dynamics. As becomes clear and even more evident, while both organisations can be allocated to one of the above perspectives of "making" or "meaning" they are not monoliths, corresponding with Weick (2012) who claims that 'flows of experience are not monoliths.' Both organisations change frequently, one in an agile, improvised manner the other in a structured and cyclical way. Still, both are evolving and go through different forms of decision-making characteristics, iterative and linear, in differing sequences. Structure and social dynamics are part of each in some form, either as defined relationships that exist

between artists and musicians or as hierarchies and bureaucracies that dominate other organisational actors, as in the Building Project.

It follows that temporary organisations as artefacts are highly individualistic and situated, dependent on a complex set of influences and elements that determine how they interact with the environment, how design decisions are made and by whom and what relationship they have to their creators.

**Different Approaches to Organisational Change Become Apparent**

This has implications for the way each organisation behaves in the face of changes. It also allows us to identify the fundamental principles that set each apart and describe their artefactual qualities. The conclusion from previous discussions is that organisations as artefacts can take more or less determined forms of artificiality, thereby resembling artefacts as made products when tending towards fully determined characteristics, products that are described by their process and the involvement of professional makers or designers and defined through elements that we can touch, see, feel, hear or otherwise clearly label or comprising elements that are in flux, that are difficult to pin down as they are part of situated forms of behaviours. Both ways of being an artefact have strengths and weaknesses in offering an organisation possibilities to integrate its stakeholders and react to environments.

They are further distinguished by the possibilities of sense-making on offer to their stakeholders. In response to Weick's (2012) question: 'how people in general make sense of an indeterminate situation and how the ways they are organised affect this sensemaking' (ibid, p. vii) each organisation offers a specific answer. The Building Project demonstrates the immersive and continuous efforts of its community of silent designers to make sense of the organisation by integrating new information and requirements swiftly. This provides the Stakeholder Committee with an effective agility in the face of continuously changing outside conditions. It, though, also increases its permeability to a point where the organisation becomes integrated into the enduring hierarchy of other organisational actors.



The Performance Project, in contrast, offers pre-defined interpretations of the organisation and introduces new stakeholders to these through rehearsals. They, however, enable the participants to make sense of the organisation by educating them in how the meaning of the organisation can be understood (by understanding its overall purpose and the specific character of its actions). This organisation maintains its meaning, but also provides moments of confusion about its meaning, when artists appear more concerned with their own interaction than with the musicians.

Overall, this organisation maintains its self-understanding even beyond significant impacts from outside and develops resilience, supported by "guardians of organisational orientation" – this mainly applies to the artists, but eventually to the musicians as well, who suggest ideas during the performance that in their eyes reflect the purpose of the organisation as communicated to them by the artists. For example, during the series of rehearsals the musicians remind the artists of a profound aim of the organisation: to

arrange the group in a way that would allow pedestrians to walk through the group, thereby "safe-guarding" the initial purpose and orientation of the Performance Project.

It appears then that where the artefact is based on the shared exploration and continuous re-consideration of its purpose, the organisation appears to stay open longer and remain more adaptable to environmental changes. Indeed the organisation not only reacts to changes in its environment but similarly provokes changes as well. When, for example, the Stakeholder Group reaches out to the Dean of the Management School to promote their case, they initiate change in the wider nexus of organisations. In comparison, where organisation is based on a pre-defined purpose, it is less good at collaborating with other organisations, but provides a clearer, less ambiguous sense of the orientation of the organisation to which the organisation can refer back to once the impact of change has been absorbed. Since the purpose of the organisation is established and shared between different stakeholders of the organisation, throughout the organisation members can become guardians of its purpose – strengthening its resilience.

### 8.8 Conclusion

In this chapter I have replied to Research Question 3: How does identified design impact on the organisation? by identifying the shared and individual design characteristics of the case study organisations. It has emerged that design characteristics impact on each organisation differently and portray them as differentiated artefacts, which can be described along five dimensions: sense-making, design principles, embeddedness and resilience to change.



Through the description of each case referring to these dimensions, and further consultation of the literature on artefacts and artificiality, I was able to identify two overarching perspectives on artificiality that support the allocation of each case in the realm of the artificial. While the making-perspective derived from scholarly understandings of artefacts as human-made and their emphasis on the descriptive quality and deterministic character, the meaning-perspective is informed by empirical observations and supported by the literature. Here an artefact evades a clear and ubiquitous determination of its parts and qualities, instead reflecting the subjective appropriation of artefacts when individuals project their own meaning onto them.

I conclude that design impacts on each organisation differently and design within each organisation can lead to changes in the characteristics of artificiality across an organisation's lifespan. One organisation, for example, starts out as an artefact which can be interpreted using a meaning-perspective, but during its existence develops into an artefact that shows similarities with factors that resemble the making-perspective. In this, then, a common trait of organisations as artefacts becomes apparent and confirmed: that even though organisations are highly situated and unique artefacts, they share factors that differentiate them from other categories of artefacts, such as their manifestation in complex formations of interpretations, sense-making, motivations and interactions which make them arrangements rather than things (Sandelands and Srivatsan 1993).

# 9 Contributions

## 9.1 Introduction

> In this chapter I draw out the contributions this thesis makes to theory and practice, responding to Research Question 4: what is the value of identifying such emergent, hidden and distributed design behaviours and activities for practice and theory?

The contributions are presented in three sections:
Firstly, I will reflect on current discussions in design management studies that describe the application of design to organisational contexts, such as design thinking being applied to managerial decision-making and organisational change. Here this research contributes by shifting the predominant logic that suggests an organisation can benefit from design approaches that are directly translated from design practice to management theory. This procedure can be interpreted as non-specific design principles being pushed onto unique organisational contexts. The argument this research supports is that design already exists in organisations, in a manner similar to silent design (Gorb and Dumas 1987) and is a dimension of the unique context that designers should consider when developing designerly approaches to organising –as scholars as well as practitioners.

Secondly, the existing form of design in each case study organisation is described as a contribution that extends our understanding of social forms of designing. I argue that current debates around social design (see, for example: Cottam & Leadbeater 2004; Cooper 2005; Murray et al. 2010; Thorpe & Gamman 2011; Manzini 2014) have yet to further specify the fundamentally social character of the design process. They concentrate instead on the social dimensions of design results. An important part of my reflections is the significance of socially distributed design as a form of design that is practised by communities of silent designers, lacking the involvement of design professionals.



Thirdly, I argue that the preceding discussions and contributions suggest an understanding of organisations as socially designed artefacts. Here I refer to the specific characteristics of each case study organisation as artefact and suggest benefits that such an understanding can have on current issues management practitioners face. Here I highlight issues that are currently discussed in the literature and that challenge organisations. These are, for example, uncertain and fast changing environments and the advent of technology that enables organising without organisation (Shirky 2008). Both case studies provide insights into how different organisational formations and their respectively differing design activities tackle similar challenges and thereby provide opportunities for organisations and managers.

The chapter then closes with a summary of the limitations of the research and suggestions for further research directions.

## 9.2 Contribution 1: Pull versus Push – "Design Before Design"

This contribution promotes the acknowledgement of the specific, situated conditions that designers encounter when interacting with organisations. This section responds to

Research Gap 3 (Chapter 2, p. 34) that questions whether existing design approaches are adequate to be transferred to complex social systems like organisations. I refer here to debates that discuss the application of design to managerial practice and the drive for organisations to change around user-centred business models. Although contested (see, for example (Kimbell 2009)), Design Thinking is the dominant logic in this context.

This research then provokes reflections on whether such approaches have so far neglected the design potential hidden within organisations to the benefit of standardised and pre-defined design concepts. Rather than pushing pre-defined design understandings onto unique and complex contexts it could be advisable to inquire into and understand the dynamics behind existing design cultures.

Suggesting routes into an organisation by equipping designers and consultants with the sensitivity to spot design potential and articulate its characteristics can limit the potential damage caused by imposed design policies, as suggested by Gorb and Dumas (1987), and /or by decisions that run counter to an organisation's existing culture. This contribution should enable designers to become or stay curious and inquisitive about the contexts they enter and allow them to make informed choices and statements about an organisational artefact and its dimensions, ultimately strengthening the ability of designers to identify pathways to successful and meaningful interventions.

**A Critique of Design Thinking**

Findings from this research question the universal applicability of design methods and methodologies to profoundly distinct situations, such as products and organisations. It aims to raise awareness of the richness and distinctness of hidden design activities within organisations and promote their relevance for theory and practice.



As previously stated, some scholars ask whether user- and human-centred approaches are adequate to address complex problems. Norman (2005) voices doubts about the possibility to transfer user- and human-centred design approaches from development processes that aim at static solutions to the development of dynamic and complex systems of products or services.

**Design Thinking Assumes the Transferability of Design**

The assumed transferability of design forms the basis of the Design Thinking approach. One strand of discussion around design thinking promotes 'managing as designing' (Boland et al. 2008). Boland and Collopy (2004, 2008), in their seminal work 'Managing as Designing: Lessons for Organisation Leaders from the Design Practice of Frank O. Gehry', draw conclusions from the practice of star-architect Frank Gehry and apply them to the practice of managers and leaders. They conclude that leaders have lost the capability to generate innovative, creative responses to problems and have become comfortable in selecting the most appropriate from a set of available solutions rather than designing the solution that would be most beneficial and adequate to the uniqueness of the problem at hand.

Here, Boland and Collopy (ibid) argue, managers can learn from the design process observed in Frank Gehry's practice. Aspects of the practice of an architect might be

transferable to managerial practice, but the task of designing a building and managing an organisation also involves a number of differences. One being that the buildings this specific architect designs have been criticised for their lack of consideration for their contexts and for supporting gentrification based on physical rather than more complex socioeconomic aspects (Vicario & Monje 2003) termed the 'Guggenheim Effect' in reference to his museum project in Bilbao, Spain. This lack of contextualisation questions the adequacy of such practice to maintain its relevance in the context of an organisational artefact that is inherently social (Banathy 2013) and complex (Morgan 2006) and in many ways influenced by actions and their situated conditions (Macy 2006; Suchman 2007), as this research confirms.

**A Simplified Understanding of Design**

Further, design thinking is based on simplified and standardised principles derived from design practice, such as prototyping (Coughlan et al. 2007), including the creation of physical artefacts, embracing failure, emphasising and inquiring into the user's experience and striving for purposeful simplicity (Kolko 2015). These have been articulated by IDEO's founding member, Dave Kelley in IDEO's deep dive approach (ABC News 1999) and further specified by its CEO Tim Brown (Brown 2008). Organisations have increasingly looked towards such simplified principles of design to become more innovative and successful in meeting customers' demands. But design thinking has also led to a variety of considerations of how organisations and management can learn from design practice (see, for example Liedtka 2004; Martin 2004; Jelinek et al. 2008; Michlewski 2008), succeeding debates that centred mainly around the significance and relevance of a more rational understanding of design for management – e.g. Design Science (van Aken & Romme 2009; van Aken 2007; Pandza & Thorpe 2010)



While design thinking has been the subject of ongoing debate and criticism from the design studies community (Kimbell 2009) only recently have scholars started to become interested in the proliferating application of design principles to organisational practice. Scholars are increasingly looking to understand what happens in practice when organisations adopt design as a cultural principle. They have identified a number of barriers (Rauth et al. 2014), one being the interaction between established organisational culture and newly introduced design principles, often requiring individually adapted strategies.

**Design Before Design – Understanding Organisations as Design Cultures**

Here this research would like to promote an approach of "design *before* design" – embracing the fact that design activities can be identified in an organisational context before an official design intervention takes place. While design scholars have articulated the occurrence of 'design *after* design'-activities (Ehn 2008) only recently has a plea been articulated for designers to be aware (as opposed to ignorant) of existing design legacies in organisations (Junginger 2015). In addition to the concepts of design legacies and silent design (Gorb and Dumas 1987) that relate to products or services an organisation offers and the processes and integration of stakeholders into these, this research suggests that organisations have design cultures and traditions, which are independent of production

or offers. Design culture emerges within or throughout the activities of organising and is highly situated and context-specific. As the case studies exemplify, different approaches to sense-making during organising are apparent through experience or observation.

An observational attitude has been described as typical of designers by some scholars (Murphy et al. 2015), and others emphasise the user-centred approaches through which designers gain insight into peoples' lives (e.g. Press and Cooper, 2003; Sanders and Strappers 2008; Norman 2013). Here designers, for example, momentarily and iteratively enter a design context to observe and document relationships around artefacts through methods such as design ethnography (Salvador et al. 1999; Julier 2013). Other scholars focus on the quality of involvement of designers with organisations, stating that designers cherish their non-involvement, as they momentarily enter the design context to then develop solutions in separation from that context (Hedbergh 1976) which might reduce the ability to observe and learn.

Design-before-design promotes a reflective and open attitude in designers towards the organisational context they enter. It raises awareness of the possibility that organisations possess a culture of design that is hidden and unacknowledged by organisations and their members themselves, suggesting that methods such as surveys or focus groups are not adequate to reveal deeper insights, and encouraging designers to become part-time anthropologists (Julier 2013). As this research shows, organisational design activities are identifiable by looking at an organisation through a design lens, suggesting, in turn, that design concepts are adequate for the analysis of the dynamics that inform organisational culture. Design thereby extends its realm and relevance for organisations as not being exclusively about simplified and standardised principles through which innovation can become more user-centred and expected to be more successful. Design becomes a strategy by which organisations can make sense of their activities and an interpretation of organisational culture.



Design-before-design extends the ability of designers. It mediates between the non-involvement and the observational attitudes by offering a pathway towards the deeper understanding of organisational contexts before interventions are considered. This should allow designers to make decisions about how complementary or disruptive their interventions may have to be by incorporating the knowledge about existing design cultures into the decision-making process. As both case studies reveal, the design identities of both organisations are tightly intertwined with other cultural dimensions and structures, such as decision-making procedures, stakeholder relationships or the definition of organisational boundaries.

Designers' interactions with organisations can then include the intended engagement as an outsider, but it will require knowledge of existing design cultures through immersion when dealing with a self-reflective form of artefact, which is immersive and situated and difficult to understand through observation. To achieve this, designers might have to become more like ethnographers, integrating the somewhat considered distant activity of research and analysis (Jonas 2011) into their practice.

Design has developed a myriad of methods and strategies to inquire into other peoples' lives (Gaver et al. 1999; Laurel 2003; Hanington & Martin 2012; Kumar 2012; Sanders & Stappers 2014) to learn about their relationships with physical artefacts (Salvador et al. 1999; Crabtree et al. 2012) to understand how they interact with organisations through pathways (Buchanan 2004) or to manifest tacit forms of knowledge and discourses (Schön 1992; Marzano 2005; Brown, 2008). These capabilities can be directed towards systemic artefacts like organisations. But this requires the definition of significant and relevant indicators that describe the organisational artefact.

> The question is what should designers look for when inquiring into the organisation as artefact in order to identify existing design cultures and the determinants of hidden design cultures?

**A Proposed Outline of an Inquiry Into Existing Design Cultures**

Following from this research, it appears realistic that organisations have hidden design cultures that are closely linked to other organisational dimensions, such as decision-making, stakeholder involvement or permeability. Therefore the emphasis should be placed on enabling design practitioners to elicit such situated characteristics. Rather than defining another structured design approach I will, in the following, summarise the approach I took in this research to elicit design cultures. This might serve as a guideline for inquiries that aim to uncover the determinants of design culture while understanding the individual distinctiveness of an organisation. These suggestions are based on a revised version of the analytical process applied during this research combined with insights gained during the preceding discussions. It is anticipated that the outcome of such an inquiry will allow for better adaptability of interventions to individual, unique organisational conditions.



1. Understand the past and present of the organisational artefact. Combination of retrospective and live inquiry.
2. Identification of events that promise to provide insights into the appearance of design activities. These events will be characterised by a movement from an existing to a preferred situation, e.g. situations of organisational change, bottom-up initiatives or group formations.
3. Identify occurrence and appearance of set of design indicators.
4. Analysis of artefact characteristics according to five dimensions: sense-making, design principles, embeddedness, involvement and resilience.
5. Position the artefact on a trajectory from a "making" to "meaning"-perspective on an organisation as artefact.
6. According to an artefact's position on the "meaning" to "making"-axis, it will become apparent what kind of design culture best describes the artefact and its design activities.

Using an analytical process as the above, designers can then build on existing cultures and at the same time help organisations become aware of the potential for change amongst

their own members.

While one can argue that this research describes design beyond the involvement of professional designers, it is not a plea for the pursuit of non-professional design futures. But it highlights the necessity to broaden the realm of design research and face the questions that discussions around organising and managing, silent design, open design and organisations as artefact raise with regard to the role of the professional designer.

### 9.3 Contribution 2: Design by Non-Designers – Socially Distributed Forms of Design and Their Facets

In this section I will summarise the forms of design observed in both case study organisations. I will also point out the contribution this can make to a) existing design discourses around social design as design directed towards social impact and to, b) debates around design without designers, based on open innovation and mass participation arguments. This contribution then summarises aspects discussed mainly in Chapter 7: Refining and Discussing Design Traits and responds to Research Gap 4 (Chapter 2, pp. 34) that suggests that when organisations are considered as artefacts, involvement of members of an organisation in design activities happens beyond role descriptions and imposed actions. Silent designers take the initiative over design actions, not necessarily professionally trained experts. Further, the compelling argument that the relationship between the creators and their creation might be self-reflective in an organisational artefact has been discussed previously and is part of the following articulation of socially-distributed forms of design.



**Current Discussions That Informed my Thinking about Social Dimensions of Designing**

I acknowledge the extensive research and the ongoing discussions that are contributing to the growing body of knowledge in the area of Social Design. These debates have taken place over the last few decades within the design as well as social science communities (Thackara 1989; Schuler & Namioka 1993; Simon 1996a; Margolin & Margolin 2002; Papanek 2005; Simonsen & Robertson 2012; Manzini 2015). This thesis is extending this body of work rather than critiquing its scope.

Considering the debates mentioned above, different strands of social design can be identified:

- for social good (see, for example Tan 2012; Wang et al. 2016),
- for sustainability (see, for example Walker 2006; Thackara 2006), and
- related to issues of ethical and moral concern to society (see, for example Cooper 2005; Sangiorgi 2011; Simonsen & Robertson 2012; Manzini 2015).

But social design is not restricted to the outcome, the purpose or the application of design to issues of social relevance. Other interpretations of design acknowledge the social characteristics of aspects of design. These characteristics include design being a social accomplishment (Kimbell 2009), social aspects being part of design work (Buchanan 2001) and design being understood as a social process (Krippendorff 2005). Again other

researchers, mainly from the social sciences, have been interested in the social dynamics surrounding new artefacts in organisations and here, specifically, new technologies (Pinch & Bijker 1984).

As demonstrated, the above research approaches explore design in social settings and the role of the designer within them. From this I conclude that social design has become associated with design for the greater good. In extension to such interpretations, this research provides insights into the social character of designing when practised in socially complex and collaborative contexts – such as organisations. This is the context in which I propose that design is practised through distributed activities, without being called "designing" or involving professionally trained designers. As previously mentioned, the concept of silent design (Gorb & Dumas 1987; Candi 2010) provided initial insights into the wider, hidden involvement of non-designers in design activities across different parts of organisations, beyond the product development department (Walsh 1996). The foundational research into silent design, conducted by Gorb and Dumas (ibid), is frequently cited, but researchers have so far been reluctant to conduct additional empirical research into silent design (see, for example Walsh 1996; Candi 2010; Lee 2015).

**Socially-Distributed Design is a Silent and Shared Design Effort**

Socially-Distributed Design, as identified in this study, is design which appears in a socially systemic context, sympathising with the following understanding of socially-distributed design situations as ones where

> '(…) multiple practitioners from various domains collaborate in bringing about ideas and concepts' (Halskov and Dalsgaard 2007, p. 205).



Scholars have described distributed forms of design in relation to the application of new technologies to the creation of artefacts of digital or physical materiality by non-designers (Cruickshank & Atkinson 2014). When considering an organisation, the "materiality" of the artefact is rather difficult to establish and complex. Some authors argue that an organisation is better described as an arrangement of various elements rather than a qualifiable thing (Sanderlands and Srivatsan 1993). Others state that organisations are social systems (Banathy 2013) *and/or* open and organic systems (Morgan 2006; Scott & Davis 2015). Indeed, the variety of the characteristics of both case study organisations suggest design contexts that are flexible, dynamic and adaptable configurations of elements, rather than defined by a qualifiable thing with static roles and responsibilities.

Consequently this thesis articulates an extension of social design, which shifts the focus from designed products, end results, or aims of a design project. I, instead, propose that socially-distributed design is observable within the process of designing itself, thereby giving the attribute "social" a different meaning. It is not confined to design approaches that aim at societal change, but indicates collaborative ways in which people are designing with each other, and without the involvement of a professionally-trained designer. To encompass the different forms of social designing identified I propose the term "socially-distributed design".

Here, the focus is on the process of designing in a social and participatory context without the articulated presence of consciously-recognised design activities, as well as traditional designer-stakeholder relationships. In the field of design management, the traditional designer-client or -customer/user relationship seems to dominate (see, for example Press and Cooper 2003), but social entities like organisations are not always characterised by clearly determined relationships and are indeed said to change towards more distributed structures (Balogun & Johnson 2004). As this doctoral research shows, when considered as artefacts themselves, the formation of an organisation can provide insights into novel aspects of design actions executed by a wider number and more diverse dynamic of stakeholders, in the absence of a professionally-trained designer.

In the following sections I specify the indicators for socially-distributed design and the factors that support it. These centre around two findings, the reflective qualities of design (see Finding 3, pp. 119) and the unpredictability of involvement as the result of organisational permeability (see Finding 4, pp. 120).

### 9.3.1 Indicators and Factors Related to Socially-Distributed Design

This research contributes to debates around social design by offering a) indicators of socially-distributed design activities in organisations carried out by non designers; and b) the factors which enable this social design activity to happen. By being aware of how and under which conditions this type of social designing happens, and the value that it can create for organisations, it is proposed that this kind of design activity can be legitimised and recognised within organisations, thus enabling organisations to take advantage of social designing as a form of competitive advantage. Finally, this research has implications for strategic design by designers. For example, being aware of the conditions under which this kind of design thrives means that professionally-trained designers can overcome cultural barriers and propose more appropriate design interventions. However, I pose the possibility that the potential of socially distributed design activities may well be recognised and harvested from within the organisation itself, without the involvement of a professional designer.



Socially-Distributed Design shares characteristics with Transformation Design (Burns, Cottam, Vanstone & Winhall 2006; Sangiorgi 2011); the design is never finished and the design work happens in-situ, immersed in the context. It is,though, important to remember that transformation design involves the role of a designer who joins and leaves a context, in contrast to socially-distributed design, where silent designers form a community, immersed in the design context to varying degrees, but are always part of the imminent design situation – the organisation and its developmental events.

This then represents a contribution to the body of theory around forms of design that are called social design and its extended application and meaning. The significant insight gained from this analysis in respect to silent, hidden design is the recognition of a socially dispersed type of design that adds to the knowledge about non-professional design activities.

**Different Types of Reflection Describe Socially-Distributed Design**

The three types of reflection identified in Chapter 6: Findings and refined in Chapter 7, provide an overview of different nuances of socially-distributed design and its conditions. The overarching purpose of reflection is action, in both cases. In models of experiential learning, reflection and observation provoke the acquisition of knowledge and the articulation of purpose (see. e.g. Dewey 1938 in Kolb 1984). Lewin (Lewin in Kolb 1984) suggests that reflection and observation lead to experiences which function as real-world feedback to implemented and tested concepts (Kolb 1984). Dewey, in extension of this model (Dewey 1938 in Kolb 1984), suggests a developmental model, where direct experiences are translated into purposeful actions through learning (Kolb 1984). Purposeful action is differentiated from impulse through its intentionality and planned character. In Dewey's model, the role of judgement based on previous observations and consultations of others who can contribute 'wider experiences' (Dewey 1938, p. 69 in Kolb 1984) is important in making actions purposeful. Schön's (1995) concept of reflection-in-action can be interpreted as a concept that builds on these models. It represents a solution to the problem that practitioners fail to learn from observations and previous experiences or better, that they consolidate their learning after a number of experiences and retreat to apply the learned actions repeatedly.

Reflection in these accounts is not necessarily a social or communal effort. Take for example Schön's (Schön 1987) work on the reflective practitioner and it becomes apparent that he is concerned with individuals' practice and their reflection on their practice. Dewey (Dewey 1938 in Kolb 1984), on the other hand, includes consultation of others in his concept of reflection, and thereby addressing a potential limitation of reflection in general: the danger of becoming restrained by one's own experiences when purposeful actions require being purposeful for others as well.



Next, I briefly summarise the three types of reflection identified during the research and point out their contribution to socially-distributed design.

**Reflection-on-Action: Observational and Shared**

Reflection-on-action is reflection on actions that are part of externally existing phenomena. Reflection-on-action is part of decision-making in the Performance Project. It supports iterative processes of decision-making that lead to actions and change. In this, we can identify an iterative, repeated and structured process. Reflection-on-action is a structured representation that contributes to reflection-for-action. Its stages consist of ideation, prototyping and testing, observation and documentation. In the Performance Project this is a shared effort, where those who observe and reflect do so in consultation with each other.

**Reflection-Through-Experience: Immersive and Shared**

Reflection-through-experience is reflection on own actions, similar to Schön's concept of reflection-in-action, but in this case it is a shared, social form of reflection. In fact, reflection-through-experience is not an intended effort to reflect on otherwise routinized, unconscious actions, but shows how an organisation avoids routine by constantly adapting

its actions to changing requirements. This kind of reflection, as identified in the Building Project, represents an immersive, self-referential kind of reflection for action which is at the same time shared by a group of people. The simultaneous role of individuals as those who experience a situation and then actively shape these experiences together, by integrating multiple individual experiences, points towards a social and reflective dimension of design. Group discussions allow individuals to express their experiences and provoke shared actions that create new experiences, which again will serve as the basis for reflection.

**Reflection-For-Action: Turning Shared Reflections Into Shared Actions**

Reflection-for-action is based on the previous two types of reflection which suggest that people in organisations have different approaches to developing actions based on experiences (reflection-through-experience) or observations (reflection-on-action) which stand for different qualities of engagement with and amongst stakeholders. Reflection-for-action then is reflection on immersive or external phenomena through experience or observation that informs actions that create experiences or observable phenomena. Future actions are the aim of and result from reflection and in turn create situations that become the subject for reflection, thereby making reflection-for-action a projective form of reflection.

How are these aspects of reflection significant for socially-distributed design? As previously demonstrated, reflection and experience have been acknowledged as elements in the acquisition of knowledge and as such have been integrated into the experiential character of design research and education. Experiential learning, for example, forms an element of studio-learning, which attempts to emulate aspects of design practice (Green & Bonollo 2003) and is widely applied in design education. Experience and reflection are therefore important elements of design - as research, education and practice.



Reflection, as identified during this research, allows for the articulation of conditions and factors that influence specific forms of socially-distributed design.

**Reflection as Indicator of the Degree of Social-Distribution**

While one form can be portrayed as the co-ordinated distribution of design amongst a group of stakeholders (based on reflection-on-action) the other represents an inclusive and agile distribution of design amongst a community of stakeholders or silent designers (based on reflection-through-experience). Reflection also allows for a differentiated view of the factors that define the social distribution of design actions. Reflection-through-experience is characterised by an equal distribution amongst members of an organisation. Reflection-on-action is not distributed across all stakeholders, but only a few, who can observe the others, therefore making it less widely shared. It appears then that in an organisational context, where purpose-definition is not pre-defined, but open to being established by stakeholders, and stakeholders share a common interest (as in the Building Project), design can be more holistically shared, while an organisation that aims at achieving a pre-defined aim is steadier in pursuing a purpose, but more restricted regarding the distribution of design activities and less flexible. These considerations then show that

reflection-through-experience and -on-action are indicators of the degree to which design is socially and equally distributed, enabling a community of silent designers, or shared, but co-ordinated along a designer-stakeholder role understanding.

**The Unpredictability of Participation is Characteristic of Socially-Distributed Design**

Design distribution includes the internally distributed activities of design, distributed amongst a group of members of an organisation, but it also includes the unexpected and unpredictable impact that people from outside this core group of members execute on design actions. Such distributed design shares characteristics with Open Design (van Abel et al. 2011; Cruickshank 2014; Tamminen & Moilanen 2016) and Design for Social Innovation (Manzini 2015) in that it fosters social creativity, but in contrast to the above, in Socially-distributed Design ideas emerge from within a self-organised group rather than through a facilitated process. Specifically, during the experience-based design activities of the Building Project, design actions emerge out of discourse and preferred and existing situations are identified and embodied through shared activities.

Distribution is enabled through the integration of individual group members' interests that contribute to the collective articulation of the organisation's purpose that then becomes a result of distributed design actions. Distributed design then builds on the intrinsic motivation of participants and gives them the ability to contribute through open discourse and the shared construction of what the organisation means to its members.

**External Stakeholders' Contributions to Design**



Another significant dimension of socially-distributed design is the permeability of temporary organisations, which allows external stakeholders to engage. As the literature on temporary organisations suggests, the Stakeholder Committee as a temporary organisation seems

> 'inextricably interwoven with an organisational and social context which provides key resources of expertise, reputation, and legitimization' (Grabher 2004, cited in Bakker 2010).

This permeability of the organisation allows for interventions by stakeholders that are in some instances recruited from the enduring parent organisation – the University or the Conference. Such permeability of an organisation's boundaries evokes interventions by stakeholders that are intentionally invited or otherwise authorised (e.g. as members of a collaborating organisation).

Understanding organisations as permeable artefacts suggests that unpredictable involvement is an inherent part of the reality of design activities within them. This involvement, as exemplified in the Refinement of Finding 4 (p. 136), is difficult to co-ordinate from within the organisation. It represents a type of social distribution that is unpredictable, sometimes imposed and impactful and dominant in contexts where temporary organisations interact with stakeholders from other organisations, mainly those from established or collaborating organisations. Hierarchical relationships appear to support permeability as stakeholders from outside the core organisation contribute to

its decision-making processes with their specific expert knowledge or as representatives of established hierarchies and interests. These stakeholders have the knowledge and extrinsically justified motivation (Krippendorff 2004) that makes their impact highly relevant to and impactful on the temporary organisation.

This research then suggests that change from an existing to a preferred state, although intentional, is easily influenced, disrupted or redirected by social behaviour and individuals' input. This highlights design in an organisational context as a socially-distributed endeavour that is characterised by a sensitivity to interventions which are carried out by an unpredictable and random community of stakeholders. Design actions, as a result, are not always intentionally initiated but evolve along patterns of interactions which can be emergent and diffused.

**Limitations of Socially-Distributed Design**

Socially-distributed design adresses a potential paradox resulting from the above mentioned elements: that design actions are self-referential and therefore to a limited degree purposeful but still socially-distributed. According to Dewey (Dewey 1938 in Kolb 1984), design actions which are purposeful are based on the wider experience of members of an organisation, actions which are directed by outside interests are therefore potentially not purposeful in Dewey's sense, as they do not take into consideration the wider experience of others.

> Still, specifically, this combination overcomes the limitations of a self-reflective form of design that concentrates on the creation and alteration of experience for those who design and can therefore itself be understood as neglecting the experience of a wider group of people. Socially-distributed design therefore, is not without its contradictoriness, but represents a contribution that extends the repertoire of social forms of design and our understanding of its conditions and complexities.



## 9.4 Contribution 3: Organisations Can Be Considered Socially-Designed Artefacts

This contribution highlights the position of organisations as artefacts in relation to other interpretations of organisations and the implications of this research for organisational practice. This section responds to debates in the literature that discuss whether organisations are created by a founder rather than a group of people or through distributed control (see Chapter 2: Literature Review, Section 2.4, p. 19). It takes into consideration the specifics of the creator to creation-relationship that were identified as part of the Conceptual Sketches (see pp. 31, 101 and 120) and is further discussed in Section 7.6.2 (pp. 142). Furthermore, the different perspectives on organisational artificiality, articulated as the *meaning* and *making* perspectives in Chapter 8: Discussing Organisations as Artefacts (pp. 163) are positioned within existing organisational theory and suggested as an alternative interpretation of organisations.

### 9.4.1 Suggesting a Position in Organisational Theory

As Jelinek et al. (2008) state, a design science point of view should consider organisations

as ''natural facts' and 'socially created artifacts'' (ibid, p. 320). The concept of the socially-designed artefact and its appearance is placed within this ontological space – acknowledging managerial research traditions that have their origin in the natural sciences , but recognising the artificial character of organisations as social systems and highlighting the relevance of a design research perspective.

**Positioning Organisations as Artefacts Between Natural Facts and Social Systems**

This work proposes an understanding of an organisation that centres around individuals and their experiences, critically examining notions of organisations as designed products and artefacts. Although design management discourse has opened up discussion about organisations as designed products (Martin 2004; Junginger 2005; Krippendorff 2005 ; Jelinek et al. 2008) there is work to be done to understand the way these are designed from a design perspective and what specific characteristics these artefacts possess.

They can be considered as human-made, since they are initiated by humans. But what does 'human-made' imply? Is the persistent occurrence of emergence, evolution and uncertainty, that I identified in this research, as exemplified by Findings 2 and 4 (pp. 118 and 120), part of the intentionality of something made by humans or is it an indication that organisations "happen" out of social action as much as they are "made"?

An organisation can be understood as a melange or assemblage of elements that integrates moments of improvisation (Weick 2012). This questions interpretations of organisations as primarily intentionally designed artefacts and the ways professional design and in fact the designer informs or contributes to this artefact. A human-made artefact suggests some sort of control over the process of "making" that artefact. A product of social action as a description comes closer to the reality of the Building Project, where interactions shape the organisation (Weick 1979; Taylor 2011).



Interactions and conversations don't necessarily unfold as planned or predicted, but represent an interplay between action and reaction. Weick (1979) uses the concept of 'double interacts' for his theory of enactment to demonstrate that interactions shape an environment that in turn influences actions. This highlights the unpredictability of discursive artefacts, caused by the iterative nature of interactions and conversations, which leads me to critically examine an understanding of artificiality that emphasises the intentional creation of discourses and organisations as artefacts (Krippendorff 2005).

Such a conception of artificiality seems to avoid a wider discussion about the emergent and uncertain characteristics of some artefacts by describing various dimensions of artefacts as if they were predictable and controllable – therefore designable. In this way, it ignores the more controversial, difficult to integrate, but nevertheless critical dimensions of flexibility, openness and self-reflection. Artificiality then can be interpreted as a concept that is dominated by rational understandings of design (see, for example, Simon 1996; Krippendorff 2005) and is loosely placed between the scientific paradigm of natural facts and the complexity of social systems and actions.

This research suggests a perspective on organisations that is informed by design theory

and design observations, but sees the unpredictability and fuzziness of individual and group experiences as a driver for organisational development and an important aspect to be considered when trying to understand organisations as artefacts. It further specifies the characteristics of an organisation as a socially-created or designed artefact, as opposed to a natural fact and here the "meaning"- and "making"-perspectives allow to allocate both case study organisations on a continuum that ranges from organisations as natural facts to organisations as socially dynamic systems.

The "making"-perspective can be positioned towards the scientific end of this continuum, still describing a social system, but sharing similarities with scientific knowledge that can be described as the qualifiable and quantifiable production of repeatable, transferable scientific knowledge (Cross, Naughton and Walker 1981; Dewey 1948). The "meaning"-perspective correlates with an understanding of organisations as social systems (Banathy 2013) and the exploratory, messy and situated character of inquiry into social and artificial phenomena (Cross 2001; Jonas 2012) through social construction (Berger & Luckmann 1991; O'Dowd 2003; Easterby-Smith et al. 2012), as well as situated accounts of design (Rittel & Webber 1973; Buchanan 1992; Salvador et al. 1999; Grand & Jonas 2012) and research (Mintzberg 1979; Rousseau & Fried 2001).

The theoretical contribution this research makes is the articulation of a concept of temporary organisations as artefacts, which highlights the necessity to recognise the informal processes and interactions that are ongoing within an organisation and underlines them as highly relevant in the context of an organisation's innovation potential as well as adaptability to change. This stands in contrast to the notions of design science in Organisation Studies, where design is understood as a strategic, intentional and more conscious approach to decision-making that can inform the intuitive practice of management (van Aken & Romme 2009).



### 9.4.2 Contributing to Organisational Practice

As I discuss in Chapter 2: Literature Review, Section 2.4 (p. 19), and then further specify in Conceptual Sketches 1-3, the creator-to-creation relationship can be of an interdependent nature, which promotes the distribution of design activities that lead to the creation and development of an organisation. Conceptual Sketch #2 (pp. 102) proposes dimensions and conditions that support such a distributed involvement of members of an organisation in creating the organisation and eventually designing it as artefact.

Furthermore, the findings suggest that an organisation as artefact is designed by a community of silent designers who design from the inside out (see Section 7.6.2, pp. 142), rather than intervening from the outside in, which would imply the external position of a professional consultant or designer. This has implications for the understanding of the innovation potential that resides within an organisation.

From these insights I derive practical recommendations for recognising and fostering the conditions of internal design activities that can help organisations to respond to changes in their environment.

**Different Strategies for Organisations to Respond to Change**

The two different types of artefacts represented by the two case studies show different strengths in dealing with complexity. The first, although existing within a strongly structured context, maintains flexibility; the second, as an art performance, has freedom over its own orientation and purpose but then operates on a structure within itself. Both organisations are exposed to

> '(…) the genuine unpredictability of action and outcome, both inside and outside the organisational artefact' (Jelinek et al 2008, p. 322).

But each develops different ways and mechanisms to react to the uncertainty imposed by actions that were either internally generated or externally contributed.

**"Meaning"-Artefacts Adapt To Change Swiftly and Embrace the Environment**

A close relationship with the environment can be seen as enabling or inhibiting the exchange and integration of new knowledge and information, as Jones and Lichtenstein (2008) state:

> 'social embeddedness refers to the relational embeddedness and the structural embeddedness of organisational actors, which generates the likelihood of shared understandings between and among organisations. Variance in structures and patterns of relations tends to facilitate or impede the flow of communication and knowledge-sharing among organisations' (ibid, p. 238).



What seems apparent with reference to Section 7.6.4 in Chapter 7, though, is that adaptability to change in the environment is supported by distributed decision-making and close relationships amongst group members. The discoursal quality of decision-making in the Building Project (as part of the "meaning"-perspective on artificiality) appears to allow for the organisation to adapt swiftly (see Refinement of Finding 4, pp. 136). As stakeholder theorists state, with reference to a case study,

> [the company] 'saw the support of all stakeholders as central to the success of the firm. Therefore, successful strategies are those that integrate the interests of all stakeholders, rather than maximize the position of one group within limitations provided by the others' (Freeman and McVea 2001).

This thereby allows an organisation to integrate new knowledge deeply, and members of an organisation to experience the uniqueness of new situations that arise due to the new input. The close interconnectedness appears to allow stakeholders to respect such uniqueness and immediately and continuously develop responses by adapting themselves and the organisation to the re-defined organisational requirements. As previously stated in Chapter 8 (p. 153), the uniqueness of problems is acknowledged, and the organisation turns into a vehicle to practice design that is not aimed at the creation of a well defined result but is de-centred and capable of constantly adapting to changing circumstances (Storni 2015).

**"Meaning" and "Making"-Artefacts React to Changes Through Improvisation**

The emergent and immediate quality of actions in the Building Project shows elements

of improvisation. As Weick (2012) states, systems that are capable of adapting to difficult environments develop their capability to improvise, 'to act without knowing what will happen in advance' (ibid, p. 124). As Weick further states, improvisation can help organisations to 'bounce back after dangers materialize' (ibid, p. 124). Therefore improvisation from this perspective becomes a core capability for resilience, but also adaptability to change, if resilience is interpreted as the recovery from changes that pose a threat to an organisation.

Some of the elements of improvisation are recognisable in the Building Project, the development of swift trust, in situ learning, and past experiences (Weick 2012) that are integrated over the course of the project through discussions and the involvement of external experts. The Building Project then represents an open system that flexibly reacts to its environment and requirements by integrating them. Here change is not considered as a threat to the organisation but as a necessity to further develop the shared purpose of the organisation and the effectiveness of its operation. This situation differs from those articulated in discourses around resilience of organisations, where change is represented as 'turbulent' or 'disruptive' (Burnard and Bhamra 2011). In the Building Project, the environment provides no disruptive changes itself. It is the openness of the Stakeholder Committee that attracts novel requirements, expert knowledge and conditions that are then internalised and provoke the articulation of new situations and change. Change then becomes a dimension of the artefact itself, not exclusively of its environment. In this then, curiously enough, the Building Project resembles an organisation built around improvisation – a jazz group. As Pasmore (1998) observes,



> '(…) it seems that jazz is designed and intended to allow maximum flexibility within a minimum framework of commonality'.

It thus allows an organisation to act beyond strict requirements and organisational frameworks, such as performance charts, and to constantly challenge the familiar way to operate (Pasmore 1998).

The Performance Project shows different forms of improvisation and resilience. It is selectively responding to its environment in contrasting ways. Improvisation itself is less spontaneous but follows an overarching articulation of purpose. An outside impact that tries to divert the organisation from its orientation to this purpose, such as a prescriptive timetable, and proposes orienting to another organisation's aims, is considered as non-integratable. The artists refuse to comply with such outside demands. Instead they impose change on their environment as they limit the environment's impact on the artefact they create. By following their own rhythm, dynamics and work culture, they apply an iterative process that is open to involvement from inside stakeholders but resilient to outside impact. As the appearance of stakeholders with extrinsic interests shows (e.g. photographers, documenters), the organisation only momentarily reacts to impact but then absorbs it or better, repels it, and returns to its original orientation. The artefact thereby shows more stability but only a limited ability to integrate novel information. It maintains, though, a flexibility that allows it to integrate internal stakeholder contributions while

maintaining its direction and cultural values.

Resilience in this case is supported by the clearly articulated purpose of the organisation which is shared amongst all members of the organisation. As previously outlined, the artists as well as the musicians act as guardians of the organisational purpose, maintaining its orientation by acting as an organisational memory. Further, the external position of the artists, while observing the musicians perform, allows them to develop ideas and plan actions towards preferred situations, thereby giving strategic direction to the artefact.

**Factors That Appear to Influence Adaptability or Resilience to Change**

While in the previous sections I have exemplified the significance of an understanding of organisations as socially-designed artefacts for their behaviour and reaction to change, I will now specify the factors that influence different organisational behaviours, whether to adapt to change or be resilient.

Factors that enable adaptation (based on CS1):

- shared motivation to support the organisation,
- integration of members' interpretations of the organisation and the different forms of meaning that each member attaches to the organisation (demonstrated by the Building Project when members voice their interests, see Chapter 5, pp. 93),
- involvement of members of the organisation in articulating or informing the purpose of the organisation.
- establishment of a shared organisational culture, allowing experience-based reflection for action,
- design actions that are based on experiences rather than observations (see design processes in Chapter 7, Section 7.2, pp. 125),
- relative autonomy from formalised organisational structures and autonomy over the consultation of experts,
- permeability and awareness of necessity for the integration of knowledge that exists in its environment,
- 'boundary spanners' (Rieple et al. 2005), stakeholders that reach out to other organisations, promote the interests of the organisation and attain new knowledge (see Section 8.4.4, pp. 156).
- the flexible allocation of roles and responsibilities (as demonstrated by the Stakeholder Committee).

Factors that support resilience (based on CS2):

- articulation and internalisation of a shared organisational purpose,
- sharing that purpose amongst members of the organisation and being flexible enough to integrate their concerns,
- "guardians of organisational purpose" can support the orientation of an

organisation in the face of change. They are stakeholders who have internalised the organisation's aims and purpose (e.g. the musicians in the Performance Project. See Chapter 8, pp. 165),

- a defined separation between the inside and outside of an organisation and an understanding of the independence required from the environment (as demonstrated by the artists when they refuse external structure, see Section 5.4.3 pp. 99),
- respect for members of the organisation and awareness of the situated context the organisation operates in (e.g. the artists have to build the organisation around the conditions they face at a specific location. See Chapter 5, pp. 98)
- a clearly articulated and supported organisational purpose can support a flexible and iterative development process and resilient organisational culture.
- facilitated and controlled involvement of stakeholders limits the uncertainty that can result from involvement (see Section 7.5: Refinement of Finding 4, pp. 136),
- the ability to externally observe and review the performance of parts of the organisation and intentionally instigate changes. This requires a distribution of responsibilities across defined relationships.

Hopefully this research will enable organisations to better understand and identify any developments towards distributed forms of decision-making and work that take place unrecognised and build on informal initiatives (similar to the Stakeholder Committee, for example) to foster their internal potential for change and organisational innovation (Murphy et al. 2015).



### 9.5 Conclusion

In this chapter I have outlined the three major contributions which this thesis makes to research and practice.

First there is the observation that design principles have been simplified and standardised in order to be transferred to complex, social contexts such as organisations and related activities of management. Here I ask whether it is appropriate to take approaches that, for example, originated in an architect's practice and transfer them to the management of organisations. Or whether design thinking and its simplified set of design principles allows for adaptation to unique contexts, such as different organisations. The concept of ***design-before-design*** is introduced as a critique to the assumption that we can transfer standardised articulations of design to contexts so unique that they differ from organisation to organisation. In this research I have identified that even two temporary organisations show significant differences in their artificiality. They are not only unique as organisational entities but also face a sequence of unique challenges throughout their development. From this research I can conclude that both case study organisations show design characteristics and that members of each organisation can be regarded as stakeholders in a community of silent designers. Therefore I propose the acknowledgement of existing design cultures

within organisations is necessary when designers engage with organisations. Rather than applying pre-defined processes and design principles, knowledge on how to elicit information about existing design cultures and how to interpret them can help designers to conceive of appropriate, relevant and uniquely suited interventions.

Secondly, I articulate a definitive proposition of design as it surfaces in each of the case studies, thereby specifying the situated appearance of design-before-design in each case. Emphasis here is on design as a process and activity that is shaped by the changing and varying involvement of stakeholders, which is not always invited, anticipated nor controllable. Even so, this unpredictable involvement has a significant impact on design decision-making. Another aspect of the socially-distributed design identified are the different characteristics of reflection that contribute to design actions and their manifestations in both organisations. These range from reflection through the observation of externalised phenomena to reflection based on immersive and immediate experiences of those situations that become the subject of design change. The self-reflective qualities of organisations as artefact become apparent in this context. The identification of ***socially-distributed design*** contributes to discussions about the social dimension of design. While debates mainly centre around social design as design being directed towards the greater, social good, this contribution extends social design debates by eliciting the social aspects of design as process and activity.

Thirdly, the interpretation of an organisation as a designed artefact follows previous considerations of socially-distributed design and silent design in organisations. Both case study organisations are interpreted as artefacts through the elicitation of their respective artificial qualities. I then refer to an interpretative continuum that ranges from scholarly debates that make sense of organisations through scientific theories to, at the other end, discussions that interpret organisations as social systems. It appears that organisations, when considered as artefacts, have different characteristics which determine their position on the continuum with a tendency towards the social system end. As criteria for making this allocation I applied two previously articulated perspectives on artificiality: a more deterministic ***"making"-perspective and a rather dialectical "meaning"-perspective***. This section thus contributes to the knowledge and scholarly debates around organisations as artefacts and their ontological location within the realm of science and the social world.



Acknowledging the difficulties that arise when trying to describe the kind of object that an organisation is (Sandelands & Srivatsan 1993, p. 3) this work might help designers and researchers to describe and identify and understand more fully an organisation.

This research then contributes a more nuanced view of design activities that take place within organisations by identifying previously unacknowledged design traits, articulating novel design phenomena (see *design-before-design*) and proposing an understanding of the design process as socially-distributed. Further, I contribute empirically evidenced insights to ongoing debates around artefactual qualities of organisations and create perspectives (see *meaning*- and *making*-perspective) that hopefully will support a better understanding of organisations and their silent design cultures.

# 10 Conclusions

## 10.1 Introduction

At the outset of this research I raised questions that aim at a deeper understanding of the character of an organisation as artefact. I was critical towards the interpretation of organisations as artefacts and designed products (Martin 2004; Junginger 2005; Krippendorff 2005; Rollinson 2008; Jelinek et al. 2008). Initially the interest in organisations as artefacts placed an emphasis on the mechanisms of involvement of members of the organisation in its creation. Over the course of this research it became apparent, though, that the type of organisation that I chose to enquire into, temporary organisations, proved rich in at least two respects. Firstly, it allowed me to extend design management beyond the established, monolithic and large organisation, secondly it turned out that in such settings, involvement is characterised by the relationship between creators and their creation – between the members of an organisation and the organisation they created. This insight received further support as the research developed and shifted the focus of the research away from formalised types of participation, which are dominant in the literature on participatory design and organisational participation, to the informal and flexible, often unintended ways that members of an organisation and outside stakeholders appeared to impact and thereby participate in temporary organisations.

> Another aspect that I have found intriguing from the outset of this research project, is the suggestion that, if organisations were considered artefacts and, indeed, designed artefacts, some kind of design activities would have to be observable. This thesis demonstrates that design is observable in the case study organisations and is practised by people who are not professional designers.



It also articulates two distinct notions of organisations as artefact, one corresponding with statements in the literature that see organisations as made and definable artefacts, but beyond this, this thesis suggest another view on organisations as artefacts, one that sees artefacts as being characterised by the meaning that is attributed to them.

To conclude this thesis, I respond to the research questions in the following sections and subsequently explain how this research addresses the identified research gaps. Finally, limitations are highlighted that inform the identification of further research opportunities.

## 10.2 Addressed Research Questions

This research inquired into the occurrence of design activities within organisational events that are not identifiable as design situations as such, as they are not part of product or service development and do not involve professional designers. The development of theory in this thesis then is characterised by two strands: the identification of design activities within empirical contexts and an ongoing articulation and further definition of organisations as artefacts, through the systematic refinement of an initial Conceptual Sketch.

### 10.2.1 A Concluding Account of Responses to Research Questions 1 and 2

The final findings (see Chapters 6 and 7) respond to Research Question 1 (Which design traits are evident in temporary organisations?) and 2 (How do these compare with established design concepts?). The discussion of the findings evolves around four dimensions that confirm that design actions can be observed in both organisations, but, beyond this, suggest that each organisation demonstrates design through unique variations of existing, articulated principles and behaviours. To clarify, observed design actions deviate from established concepts and vary between each other. How can this thesis then claim that they are design, one might ask? Neither case fully involves all of the three design indicators, which were applied to identify design actions. Still, current design definitions, such as Open Design (Van Abel et al. 2011) or design as socially distributed situations (Halskov and Dalsgaard 2007) allow for a wider interpretation of design. Further, the depth of insights gained from applying design indicators and the nuances elicited show a variety of opportunities to connect observed organising practice to design theory.

A fundamental insight that applies to design activities and subsequently to the definition of each case study as artefact is the realisation that both organisations and the design actions identified are highly situated. By this I mean that design actions can be identified according to a fundamental set of design indicators (Chapter 4), but beyond such fundamental similarities the nuanced occurrence of design actions and dimensions varies between each case study organisation.

Both case study organisations offer insights that respond to the first two research questions along four design dimensions:



1. Design changes according to the longitudinal development of each project. In each project linear and iterative stages are observable. But linearity and iteration can appear at different moments and in alternative combinations along the design process. They are not rigidly grouped into a succession of iterative stages and linear, gated stages, as accounts from Human-Centred Design would suggest (Norman 2013). Furthermore the appearance of iteration differs between both projects.

   Significant here is the observation that one organisation shows unstructured iteration, iteration that is not planned but intuitive and improvised, as opposed to iteration that consists of identifiable, repeated steps.

   This type of iteration contributes to the achievement of design change, the movement between existing and preferred situations, nevertheless, through agile, immediate realisation of the preferred situation.

   Such an ability to immediately and repeatedly manifest realisations of preferred situations, then, it could be argued, replaces prototyping. This applies to the Building Project, the self-motivated organisation that establishes its purpose through the integration of stakeholders' interests. The repertoire of design actions, thereby, appears to be wider and more adaptable to unique situations than pre-defined design processes are.

2. The finding that design actions display different degrees of spontaneity and

emergence (Finding 2) represents an important extension of existing theory. It suggests that emergence is an integral part of hidden design in organisations in contrast to the promoted intentionality of design (Krippendorff 2005). While it has been recognised that ideas emerge (Halskov and Dalsgaard 2007), design is often represented as intentional planning as opposed to non-strategic managerial practice (van Aken 2009).

But design in the contexts of these temporary organisations reveals an inherently emergent and evolving characteristic which resonates more with formulations of design practice than theory.

As Michlewski (2008) found during research that involved design practitioners, designers' practice is characterised by emergent conditions and elements.

3. The third dimension forms a core element of Silent Design identified in both cases: reflection. In Chapter 6 I identified three different types of reflection: 1. Reflection-for-Action, 2. Reflection-on-Action, and 3. Reflection-through-Experience.

   While Reflection-for-Action is a projective type of reflection, reflection in anticipation of future actions, and shared by both cases, the other two types of reflection are what distinguishes them as artefacts.

   These not only define design actions, they also, as I will conclude below, signify the different types of artefacts each organisation represents. Reflection-on-Action is characterised by an external standpoint of the observer who reflects on action. Reflection-through-Experience, on the other hand, represents an immersive, self-reflective type of reflection. Observations suggest that silent designers who practice the latter type of reflection have a closer, interdependent relationship with the organisational artefact they design, enabling them to design from the "inside out".

4. Design is influenced by unpredictable actions from external stakeholders.

   Both organisations are permeable to the organisational environment they are embedded in and external stakeholders join each organisation and introduce requirements that affect design actions and the orientation of each organisation. This insight has significant consequences for the interpretation of design as socially-distributed and an organisation as artefact, as I conclude below.



While findings and discussions presented above centre on design, they already highlight touch points between design and the organisation. They suggest that the situated occurrence of design indicators in each case study has implications for their individual interpretations as artefacts.

While responding to the first two research questions, the concept of Silent Design (Gorb and Dumas 1987), that describes the involvement of non-designers in design and product development processes, gained relevance together with recent debates around mass participation (Leadbeater 2008), Open Design (van Abel et al. 2011; Cruickshank 2014) and organising without organisation (Shirky 2008). Informed by these debates I was able to

identify silent designers within the process of creating and developing an organisation itself. This insight extends previously published research that focuses on silent designers and their contribution to product development (Gorb and Dumas 1987, Walsh 1996).

### 10.2.2 A Concluding Account of Responses to Research Question 3 – Organisations As Socially-Designed Artefacts

In addition to the interest in hidden design traits, this research debated interpretations of organisations as artefacts. In Chapter 7 I discussed both case studies as designed organisations, responding to Research Question 3 (How does the identified design impact on the organisation?). By referring to the existence of silent designers in both cases and discussing specific characteristics of the organisations that resonate with the literature on artefacts and artificiality I was able to articulate five dimensions that describe each case study as a uniquely designed artefact:

1. Sense-making
2. Design Principles
3. Embeddedness in Organisational Environment
4. Involvement of Stakeholders
5. Resilience to Change

These dimensions are informed by the previously identified design traits. Together with literature on artificiality, from design studies, social science and organisation studies, they advanced interpretation and led to the creation of two perspectives on organisations as artefacts: a 'meaning'- and a 'making'-perspective.



- A 'meaning'-perspective on artificiality is based on the proposition that the meaning of artefacts is subjectively attributed and not controllable, thereby open to subjective perception (Krippendorff 2005), suggesting that artefact are situated, diverse and evade clear definitions as things (Sandelands and Srivatsan 1993). The close relationship between creator and created, though, limits outside observation and the ability to describe the artefact.
- A 'making'-perspective on artificiality derived from understandings of artefacts as human-made (Rollinson 2008) or designed products (Junginger 2005). This perspective suggests that artefacts consist of definable, qualifiable and clearly describable elements. Such an artefact, once completed, exists independent of its creators and can be observed from outside.

Given the previously established traits of each organisation it is possible to allocate each on a continuum between these two perspectives. I proposed that the Building Project can be interpreted as artefact from a 'meaning'-perspective while the Performance Project shows traits that correspond with the 'making'-perspective. The emerging distinctions between the two cases suggest that organisations as artefacts show variations that correspond with their unique design traits. In one organisation design resembles a planned and intentional endeavour, demonstrating characteristics of Design Science,

while in the other design appears as emergent, flexible and situated activity that results in an artefact similar to an open, complex and self-reflective system.

These two organisations and their characteristics as artefacts together with their specific traits of silent design contribute to an understanding of the relationship between hidden design actions and the behaviour of an organisation. While one is adaptable and open it is also self-reflective and communal. The other is semi-permeable, facilitated and resilient to change.

### 10.2.3 A Concluding Account of Responses to Research Question 4– Three Contributions

As suggested in the previous chapter, this research contributes to theory and practice in three ways, responding to Research Question 4 (What is the value of identifying such emergent, hidden and distributed design behaviours and activities, for practice and theory?).

Firstly, it provides insights into existing design cultures within non-professional design contexts. This, I argue, supports the work of design and management practitioners who interact with organisations as external consultants. Inquiring into a context before implementing policies can overcome barriers to change and help interventions to be adequately designed – either in accordance with existing cultures, or intentionally disruptive. I articulate the concept of 'design-before-design' which promotes the acknowledgement of existing and hidden design cultures within organisations and is anticipated to enable interventions which are meaningful to an organisation.

Secondly, this thesis contributes to understanding design as a socially-distributed activity. It extends the body of literature on social design by specifically inquiring into the social characteristics of the design process. Two main characteristics determine the degree of social distribution of hidden design activities. Firstly, the type of reflection that is practised indicates the degree to which design decision-making is distributed internally. Secondly, the permeability of an organisation is related to the distribution of design decision-making between the organisation and its environment. To summarise, where an organisation is self-reflective and permeability is high, design decision-making is based on shared experiences and is distributed between internal and external stakeholders. Where reflection is based on observations rather than experiences and permeability is controlled design decision-making is selectively shared and its social distribution limited. This doesn't mean, however, that external stakeholders can't still have a profound impact on the design of either type of organisation, making them both socially-designed artefacts.

Thirdly, the interpretation of organisations as socially-designed artefacts contributes to theory, as it offers a middle ground between an understanding of organisations as natural facts or social systems. An interpretation of oganisations as designed artefacts offers a perspective on organisations which considers their situated, artificial and social character and thereby can help to overcome the limitations of approaches derived from the Natural Sciences.

But this interpretation is also considered useful for organisation practitioners in harvesting the internal potential for change and innovation that currently goes unnoticed. Further findings might be useful to organisations in fast changing environments that see the need to build a unique culture that is difficult to copy and can become an important competitive advantage (Shapiro 2002). It will also enable an organisation to capitalise on its internal potential in an effort to design the organisational conditions that foster innovation (Junginger and Rind Christensen 2015; Murphy et al. 2015).

### 10.3 Addressed Research Gaps

While in the previous sections an account of the responses to the research questions has been given, I will now turn to the research gaps and how they have been addressed by the thesis (please refer to Chapter 2, Section 2.10, pp. 33 for an overview of the research gaps).

In response to Research Gap 1, the final findings (Chapter 6) provide empirical evidence for hidden design actions in organisations. More specifically they provide evidence of design actions that contribute to the creation and design of organisations themselves.

Gap 2 is addressed by the inquiry into temporary organisations, which demonstrate different forms of distributed ownership and decision-making. While the Building Project represents a self-motivated and inclusive organisation with no official, static structure, the Performance Project demonstrates an organisation that is again rather independent but includes internal structures. Regarding the Refinement of Findings 1 to 4 (Chapter 7) it is possible to conclude that distributed and temporary organisations provide rich contexts for design inquiries and the extended application of design theory.



At the same time the findings also address Research Gap 3, which critically questions the transferability of design approaches to systemic contexts like organisations. In both cases design traits appear highly situated and not simply transferable. This is a triangulated finding, as it is supported by a comparison between the observed design phenomena and the literature, and a comparison of design actions between the two case studies.

Contribution 1 (Chapter 8) "design before design" further establishes that organisations can be interpreted as design situations that show unique design traits, thereby changing the perception of an organisation from a recipient of supposedly transferable design principles and mechanisms to a context that provides novel insights on situated and hidden forms of design.

Considering Research Gap 4, it becomes apparent that members of an organisation contribute to design beyond their role description. Firstly, neither case involves professional designers. Secondly, participation is voluntary in both case organisations and where members are recruited from an established organisation they contribute beyond and regardless of their official role description. Such behaviour is enacted in the form of Silent Design, which appears to occur within a participatory, self-motivated and horizontal culture (Building Project), but also in a more centralised structure (Performance Project).

## 10.4 Limitations and Further Research

This research represents an attempt at understanding and describing the hidden and non-professional design activities that exist within organisational culture. The application of design indicators appears as an adequate method to inquire into the nuances of design actions that are practised by members of an organisation without the involvement of professional designers. One limitation of this research is its lack of insights into the way design practitioners make sense of organisations as design contexts when they engage with them. This would have required another extensive research project centred around a project-based inquiry into the practice of designers. This, I propose, is an opportunity for future research. Potential research questions could inquiry into the knowledge design professionals hold about the organisations they interact with and identify the mechanisms they use to make themselves familiar with existing design cultures.

Such research could inform the further development of methods to help designers inquire into organisations and learn about their specific culture and existing design practices. But it would also inform design research and design studies and debates within that concern the design of business as well as design management. Thereby strengthening a much needed competency that designers require as they increasingly solve problems related to organisational culture, change and innovation.

Furthermore, while this research is based on case studies of small and temporary organisations, its transferability to large and enduring organisational settings would be another strand of future research. How do we describe "design-before-design" in a hierarchically structured organisation and can the determinants articulated above be identified in such contexts as well or do they differ? I suggest that the situated behaviours observed in this study can inform an inquiry into additional organisational settings.



This research also addresses a lack of design research into distributed and temporary organisations from within design management and business design communities. I suggest that design management debates would benefit from research into distributed and participatory organisations in order to better understand the wider distribution of design activities throughout an organisation and potential implications thereof. While this thesis looked at specific phenomena that occur at defined instances of each case, further research could extend this inquiry to the extensive network structure a temporary organisation operates in with the aim to understand how hidden design activities reverberate throughout the wider network of connected organisational actors and potentially become adapted or changed.

## 10.5 Conclusion

From this research then, it is possible to establish nuanced characteristics of silent design activities within an organisation, as well as the factors that influence their social distribution. Further, dimensions of an organisation as artefact have been discussed around elements of control, flexibility and permeability.

> I can conclude from this research that organisations can be considered as artefacts. However, as much as theoretical discussions around artefacts and their role in organisations, and the relationship between the social and artificial world are characterised by a complex and diverse set of criteria, so are organisations when considered as the results of human actions.

It is therefore advisable to treat the definition of organisations as artefacts with care while being aware of the deterministic pitfalls the use of words like 'artefact' and 'product' might provide – potentially evoking associations of materiality, static states and end results. Organisational artefacts are inherently dynamic, complex and evolving and might be more adequately understood as assemblages and flexible formations.

I conclude with the proposal that to give an appropriate account of organisations as artefacts cannot be achieved by articulation of a formal definition, a definition that combines several causes in a single balanced formulation (Buchanan 2001), but by accounting for the various elements that describe such artefacts through the formulation of multiple descriptive definitions (ibid). This, I hope, has been achieved in this thesis by unfolding the complexity and situated richness of organisations considered as artefacts, in front of the reader's eye.

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# Appendices

## Appendix A: Initial Interview Schedule

*Interview Schedule Final.docx*

**Inteview Guide | Lorenz Herfurth, PhD Candidate, Design**

### 1. Introduction

Short introduction to the project. The emphasis on participation and design or participation and management will vary, depending on the interviewee. It might be useful to tailor the introduction in such a way that it is understandable to the interviewee. This means, respecting her or his professional background and the character of the project that is being investigated.

— personal introduction as PhD student
— brief overview of research project, and role of pilot study for data collection and contribution of interview
— how data from this interview will be used (anonymised, according to university guidelines)
— consent form

### 2. Project

2.1. Could you give me a short overview of the project?
2.2. When did it start, when did it finish?
2.3. what stages in the process could you name?
  2.3.1. conceptualization, problem synthesis, problem solving, etc.
2.4. Did the focus of the project change over time?
  2.4.1. if yes: What was the initial focus of the project, and how did the purpose change over time?
  2.4.2. if no: What was the overall focus of the project?
2.5. Could you think of different groups of people that you know were involved in the project?
  2.5.1. architects, academics, administrators, cleaners, students
  2.5.2. who were the main representatives? names
2.6. Who out of those people have you been in direct contact with?
2.7. In what way were you involved in this project? What was your role?

### 3. Area 1: Roles

3.1. Would you say the process was participatory?
  3.1.1. if yes: in what way was it participatory?
  3.1.2. if no: what is your understanding of a participatory process?
3.2. How participatory would you say was the process over all?
  3.2.1. Manipulation - no participation
  3.2.2. Consultation - tokenism
  3.2.3. Delegated Power - power and control
  3.2.4. how would you describe your choice - what makes you choose one over the other?
3.3. In what way was participation encouraged or hindered? By people, structures, processes?
3.4. How were stakeholders involved? from your perspective where mechanisms of involvement used?
  3.4.1. yes: what, how, when? Who designed those (project manager)
  3.4.2. no: could you think of a specific way in which involvement was managed?
3.5. Was there a specific group of people or individuals in control over the process of participation?
  3.5.1. Yes: who, did it change over time, iteratively?
  3.5.2. No: how did it work otherwise?

3.6. Who designed the participatory processes and who managed them?
  3.6.1. is there a difference between both and if so, how would you describe it?
3.7. Who would you say or think, initiated and/or maintained participation?
  3.7.1. group of people, individuals, outsiders, from internal or external?
3.8. can you think of the purpose to which stakeholders got involved in the process?
  3.8.1. i.e. to find out about the current use of the building
  3.8.2. or the intended, future possibility and demands of potential users?
3.9. were stakeholders involved in the articulation of aims and objectives in the brief?
  3.9.1. or were they involved in the later stages to approve concepts or alternatives?
  3.9.2. how was this practiced? How were people included and engaged?

## 4. Personal Involvement

4.1. From your perspective, how would describe your role as participant - active, passive, leading, managing, designing, facilitating?
4.2. How did you feel represented in the process - did you have the opportunity to
  4.2.1. voice concerns
  4.2.2. take on the responsibility of parts of the process
  4.2.3. have an input through articulating your opinion
  4.2.4. taking part in decision making processes
  4.2.5. shaping the overall direction of the design
  4.2.6. giving your opinion on minor changes to the final design
  4.2.7. no influence on the final outcome at all.
4.3. From your own experience, would you think that all necessary stakeholders where involved in the project?
  4.3.1. if yes, how would you describe the different groups of stakeholders
  4.3.2. if no, who do you think should have been included and why do you think they were not?
  4.3.3. How were decision about participants made - by one person, by a group of people, where in the organization?
4.4. Could you think of anyone else who should have been involved?
  4.4.1. yes: who and why
4.5. With hindsight, what would you have changed in terms of involving others?

## 5. Process Design and Participation

5.1. At any stage of the process, did participatory design play a role?
  5.1.1. yes: what is it, who was responsible for it
  5.1.2. no: have you heard of it in another context, project? which?
5.2. Was the involvement of stakeholders intended or did it just happen?
5.3. Did you hear about co-design, co-production in context of this project?

## 6. Documentation

6.1.1. Are there any documents available on this project
6.1.2. Any one else I should talk to?

## **Appendix B: List of Informants** (Anonymised)

| Code | Name | Organization | Role During Project | Case Study |
|---|---|---|---|---|
| MA 1 | Matthew' | Artist Group' | Artist | Performance Project |
| MA2 | Peter' | Artist Group' | Artist | Performance Project |
| MI1 | Catherine' | Festival Organiser | Director/CEO | Performance Project |
| MI2 | Liz | Collaborating Organisation | Programme Coordinator | Performance Project |
| MI3 | Tom | Graphic Design Studio | Graphic Designer | Performance Project |
| MI4 | Christopher | Brass Band | Musician: Contest Secretary/ Bb Bass | Performance Project |
| MI5 | Irene | Brass Band | Musician: Principal Cornet | Performance Project |
| MI6 | Robert | Brass Band | Musician: 3rd Cornet | Performance Project |
| MI7 | Andrew | Brass Band | Musician: Eb Bass | Performance Project |
| BI1 | Karen' | Management School | School Administrator, formally responsible for the building (Buildings Manager) | Building Project |
| BI2 | Marianne | Management School | Head of School Administration | Building Project |
| BI3 | Gabriel' | Management School, Accounting and Finance | Assistant Dean of Finance | Building Project |
| BI4 | Rachel | Management School | Employed by Management School to interact with Estates department of University, Building Project Coordinator | Building Project |
| BI5 | Philippa | University, Facilities department | Wasn't directly involved in the project. Now: Senior Project Manager | Building Project |
| BI6 | Sarah | Management School | Dean of Management School | Building Project |
| BII7 | Paul' | Management School | Head of Graduate School | Building Project |

## **Appendix C: Performance Project – List of Recordings** (Anonymised)

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Rehearsal | Video | 120512_PS_SCM_J&L-1.MOV | 12.05.12 | 19:43 | 07:33 | Artists | Theatre, Changing Room downstairs (name?) | Introduction to rehearsal | three participants, including me, Peter, Matthew in off | Peter introducing their kind of work, what they have done so far, character of their projects and pieces that they ask others to play, tuning. Matthew giving futhre instructions on what to play, Peter silent. instructions include tune to play and how to play it. J&L check recording level. Instructions to play crescendo. |
| Performance Project | Rehearsal | Video | 120512_PS_SCM_J&L-2.MOV | 12.05.12 | 20:03 | 02:29 | Artists | | rehearsal | three participants, Peter, Matthew in off | different arrangement, same location, every participant facing towards the wall. Peter wants Saxophone and one brass instrument to play same note: "cool". Matthew thinking aloud about what to do next, waiting for confirmation from Peter. Matthew developing new instructions aloud. Using third person "let's just... ". ; Matthew giving instructions, Peter clarifies, asks questions about specific order of tunes to be played. |
| Performance Project | Rehearsal | Video | 120512_PS_SCM_J&L-3.MOV | 12.05.12 | 20:40 | 14:03 | Artists | | rehearsal | three participants, Peter, Matthew in off | new spatial arrangement, reflecting out of sync playing as stated by Matthew in contrast to previous in sync playing (no recording of that). Matthew giving instructions about order of tunes and crescendo but emphasises timing is down to intuition. Peter tries to be more specific but Matthew says it should be intuitive. Peter gives more precise instructions (count till ten in breaks/close your eyes). Quite long piece. At end Matthew: "cool", Peter: "hm" (6:48). Instructions Matthew: two more things to add to that. lets try one first. "find what feels naturally in this group". (08:25) Matthew instructs: present a sound in a way that you feel is right, not second guessing how it will connect with others. Matthew is giving a frame for participants to behave in intuitively. the sound is what connects all participants/ performers. At end of third piece. Matthew ends play with "great". Peter remarks: remember A is always the first note. Matthew giving another set of amendmends. Says to Peter he doesn't know whether it is where he sees it going but just wants to try it. (12:24) Wander through your register as you feel is right and you feel it corresponds with group. Talking of "rule". Peter suggests to "break up" the sound again by using the space differently, walk around. |
| Performance Project | Rehearsal | Video | 120512_PS_SCM_J&L-4.MOV | 12.05.12 | 20:26 | 08:46 | Artists | | rehearsal | three participants, Peter | playing another piece: Matthew giving feedback on the character of what just got played and how he sees it changing; instructions to spread out in room and play louder; instructions on where to stand; "I liked that" comments on the previous piece; "I will conduct you for a few" and then you go back to do it with your eyes closed; Matthew: start together, end individually acc. to breath; Peter: is the ten count still being used? Discussion in whole group follows. Peter opened the discussion to whole group while Matthew is giving instructions more one-directional. Another try/piece. Matthew suggests to try it out in the hall way. Both positive about the sound. Trying to make group familiar with thought of playing in hall way, looking for response: "how does that sound?". |

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Rehearsal | Video | 120512_PS_SCM_J&L-5.MOV | 12.05.12 | 20:50 | 10:39 | Artists | Inside Theatre, downstairs hall way | rehearsal | three participants, Peter, Matthew in off | playing another piece, Peter giving more isntructions; Playing again, Peter giving instructions by first giving positive feedback, then explaining their process of developing material till it sounds confident, then going on to say what we should change. Swap spatial arrangement. Further instructions: we will try this and it may or may not work. INtroducing to play low notes. Matthews adds, this is low for you not the low for the group, it might be different.<br>Service person walking through group.<br>awareness of individual vs. group. how did the pieces change over time? did they become more complicated or simpler, easier to play, more perfomer-focused or piece focused?<br>Does interaction between J&L and group change? |
| Performance Project | Rehearsal | Video | 120512_PS_SCM_J&L-6.MOV | 12.05.12 | 21:09 | 05:40 | Artists | | rehearsal | three participants, Peter, Matthew | 05.04.13 |
| Performance Project | Reflections | Audio | 120512 PS_SCM_AudioNotes-1 | 12.05.12 | direclty after rehearsal | | Researcher | | | | |
| Performance Project | Reflections | Audio | 120512 PS_SCM_AudioNotes-2 | 12.05.12 | direclty after rehearsal | | Researcher | | | | |
| Performance Project | Reflections | Audio | 120512 PS_SCM_AudioNotes-3 | 12.05.12 | direclty after rehearsal | | Researcher | | | | |
| Performance Project | Reflections | Audio | 120512 PS_SCM_AudioNotes-4 | 12.05.12 | direclty after rehearsal | | Researcher | | | | |
| Performance Project | Reflections | Audio | 120512 PS_SCM_AudioNotes-5 | 12.05.12 | direclty after rehearsal | | Researcher | | | | |
| | | | | | | | | | | | |
| Performance Project | Performance | Video | 120519_PS_SCM_J&L-1.MOV | 19.05.12 | 20:07 | 00:00:06 | Artists | | | | very brief, showing band tuning, sitting in a circle inside Theatre |
| Performance Project | Performance | Video | 120519_PS_SCM_J&L-2.MOV | 19.05.12 | 20:07 | 14:21 | Artists | | Introduction, Instructions for first rehearsal, first rehearsal | Participants, Matthew and Peter (in off), guardian | Matthew giving clear and detailed instruction what keys to play in what order, also that it is down to participants breath rythm for how long they will play one tune. Matthew is talking. At one point to Peter "and Peter if you could time that again" (05:14).<br>Refers to specific instruments in the way they can play specific tunes better or worse than large instruments. (familiarity with subject). |
| Performance Project | Performance | Video | 120519_PS_SCM_J&L-3.MOV | 19.05.12 | 20:23 | 04:09 | Artists | Inside, Theatre, Changing Room downstairs (name?), Rehearsal 1, | End of first rehearsal, | Participants, Matthew and Peter (in off), guardian | Band playing, end of first rehearsal, PM entering the room, feedback from Matthew, saying this is the basic material they are going to work with.<br>Asks participants whether anyone had questions about that.<br>One participant (individual) has questions, needed clarificaiton. it seems as if band had played this before but individual participant not.<br>Matthew says they will go outside now, Peter suggests a specific site as a request to Matthew who agrees.<br>participants get up.<br>I ask Peter whether they rehearsed this last time with band. He agrees. Although pointing out that it was an instant piece. |
| Performance Project | Performance | Video | 120519_PS_SCM-1.MOV | 19.05.12 | 10:55 | 00:51 | Researcher | | First Rehearsal (?) | Participants,Peter at door, Guardian | band playing, Peter standing with mobile phone (?) in hand |
| Performance Project | Performance | Video | 120519_PS_SCM-2.MOV | 19.05.12 | 10:58 | 01:13 | Researcher | | First Rehearsal (?) | Participants | band playing |
| Performance Project | Performance | Video | 120519_PS_SCM-3.MOV | 19.05.12 | 10:58 | 00:01 | Researcher | | snippet, not relevant | | |
| Performance Project | Performance | Video | 120519_PS_SCM-4.MOV | 19.05.12 | 11:01 | 01:02 | Researcher | | First Rehearsal (?) | Participants, Matthew and Peter, guardian, | Band playing, Peter standing, Matthew standing, project manager enters the room after a while, Matthew moving around (as reaction to project manager's arrival?) |
| Performance Project | Performance | Video | 120519_PS_SCM-5.MOV | 19.05.12 | 11:02 | 00:16 | Researcher | | First Rehearsal (?) | Participants, Matthew and | End of rehearsal, Matthew starting to speak |

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Performance | Video | 120519_PS_SCM-6.MOV | 19.05.12 | 11:12 | 00:51 | Researcher | **First Location, Rehearsal 2,** | Preparation for second rehearsal | participants, Artists | Matthew and Peter talking to each other before giving instructions to participants. Matthew is giving instructions on how participants should arrange according to instruments, determined. Peter seems a bit insecure, not determined, lost. |
| Performance Project | Performance | Video | 120519_PS_SCM-7.MOV | 19.05.12 | 11:17 | 02:56 | Researcher | | Preparation for second rehearsal | participants, Artists | Matthew is giving participants instructions for the next music piece for each instrument group. Peter interrupts to check with trumpets whether they are used to play high or low notes. Two groups of trumpets are being identified and rearrange spatially. One participant is dominant in communicating with Peter. Artists have quite discussion about other sites. Matthew turns to part. and explains they will move on after a short rehearsal. Peter asks part. to stand in a specific way for photo shots. Artists standing frontal to participants. very much like instructors. |
| Performance Project | Performance | Video | 120519_PS_SCM-8.MOV | 19.05.12 | 11:19 | 00:27 | Researcher | | break | participants, Artists | 1. Matthew and Peter talking to each other in low voice, gestures, part. standing in front of wall, waiting, some kneel down.<br>2.Matthew raising his voice, addressing the participants giving instructions using hand gesture for "highest peak", participants standing in front of wall; |
| Performance Project | Performance | Video | 120519_PS_SCM-9.MOV | 19.05.12 | 11:21 | 00:16 | Researcher | | break | participants, Artists | 1.Matthew explaining why they want to test other site; overall process of testing sites.<br>2.Peter giving specific instructions where to go next, pointing to other site<br>3. Matthew goes ahaed, Peter follows then the parti. |
| Performance Project | Performance | Video | 120519_PS_SCM-10.MOV | 19.05.12 | 11:27 | 00:52 | Researcher | **Second Location, Rehearsal 3,** | preparation for third rehearsal, arranging participants spatially | participants, Artists | Matthew giving instructions where participant should stand, moving about. Peter on one side, Matthew on other. Matthew actively moving around towards Peter and it seems he is checking the spatial arrangement. Matthew giving instructions on next music piece. |
| Performance Project | Performance | Video | 120519_PS_SCM-11.MOV | 19.05.12 | 11:30 | 00:17 | Researcher | | third rehearsal, not relevant, snippet | | band playing. Camera directed towards radio station building. |
| Performance Project | Performance | Video | 120519_PS_SCM-12.MOV | 19.05.12 | 11:34 | 00:25 | Researcher | | third rehearsal | participants, Peter, some pedestrians | band playing. Camera sviwels, tram is seen and heard, police in background, kiosk stand, Peter moving between participants taking pictures. |
| Performance Project | Performance | Video | 120519_PS_SCM-13.MOV | 19.05.12 | 11:48 | 00:27 | Researcher | **Third Location, Rehearsal 4,** | fourth rehearsal (?) | participants, Artists, some pedestrians | band playing, sitting on stone benches in front of radio station building, Artists talking to each other in low voice in a distance from band. Matthew has camera now. |
| Performance Project | Performance | Video | 120519_PS_SCM-14.MOV | 19.05.12 | 11:50 | 00:13 | Researcher | | fourth rehearsal (?) | participants, some pedestrians | band playing, sitting on benches, youngsters sitting on side of square, some people cross square, no one stops. Food booth, large radio station building news display. |
| Performance Project | Performance | Video | 120519_PS_SCM-15.MOV | 19.05.12 | 11:50 | 00:15 | Researcher | | fourth rehearsal (?) | participants, some pedestrians | band playing, sitting on benches, youngsters sitting on side of square, some people cross square, no one stops. Food booth, large radio station building news display. |
| Performance Project | Performance | Video | 120519_PS_SCM-16.MOV | 19.05.12 | 11:59 | 01:17 | Researcher | | Conversation with site manager | Peter, site manager, participants | Band moving away from stone benches |

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Performance | Video | 120519_PS_SCM-17.MOV | 19.05.12 | 12:05 | 02:28 | Researcher | **Fourth Location, Rehearsal 5,** | conversation with photographers; arrangement for photo shooting, band standing in middle of square | Peter, Matthew and two photographers, participants | 1. Matthew and Peter talking to two photographers about arrangement of participants/band for photo shooting (who is deciding, who is designing set up?)<br>2. Artists instruct band members/participants how to arrange according to agreement with photographers.<br>Peter starts instruction, Matthew refines, jumps in to determine final arrangement. they use graphic layout of square for arrangement.<br>Rap music in background.<br>3. band starts to play, photographers take pictures, Matthew and Peter step back and talk to each other |
| Performance Project | Performance | Video | 120519_PS_SCM-18.MOV | 19.05.12 | 12:09 | 01:46 | Researcher | | band plays, photographers shoot, photographer talks to Matthew, Matthew instructs | Matthew, participants, 2photographers | Matthew at end of instructions for band: "go" |
| Performance Project | Performance | Video | 120519_PS_SCM-19.MOV | 19.05.12 | 12:09 | 00:11 | Researcher | | band playing, Peter running across square | | |
| Performance Project | Performance | Video | 120519_PS_SCM-20.MOV | 19.05.12 | 12:10 | 00:02 | Researcher | | snippet, not relevant | | |
| Performance Project | Performance | Video | 120519_PS_SCM-21.MOV | 19.05.12 | 12:30 | 00:36 | Researcher | | Break, band gathers around benches; media conference organiser arrives | Participants, photographer, media conference organiser and company, security guards | media conference organiser in a distance from band with company (keynote speaker), photographers talk to participants, music from other stand on square can be heard, security guards can be seen in middle of square, Matthew joins group of participants, some participants gather further away from main group. media conference organiser points towards the middle of the square where he then moves with his company. |
| Performance Project | Performance | Video | 120519_PS_SCM-22.MOV | 19.05.12 | 12:53 | 01:25 | Researcher | | Set up for video recording; | Artists; 1 video crew, 1 audio crew, project manager, participants/band, pedestrians | band seated on stone benches; rap music in background; J&L prepare camera on rolling tripod, video crew is setting up, audio guy is setting up, project manager (PM) talking to video crew, J talkinig to audio guy, photographers standing a bit away, Matthew testing tripod movement, two spectators (?), J&L moving away from group, rap music in background.<br>who is in charge here? it seems there is no one coordinating the whole arrangement. |
| Performance Project | Performance | Video | 120519_PS_SCM-23.MOV | 19.05.12 | 12:53 | 00:42 | Researcher | | Peter preparing camera | Peter, Matthew, Project manager, 1 audio, 1 video crew, participants, security guards, pedestrians | Artists testing camera on movable rack, in the middle of square; project manager talking to audio guy; rap music in background |
| Performance Project | Performance | Video | 120519_PS_SCM-24.MOV | 19.05.12 | 13:05 | 07:47 | Researcher | | Participants Playing, actual performance? | participants, photographers, video person, ca. 15 audience | participants seated on stone benches, Matthew giving instructions, Peter asking if that was ok for participants, some confusion articulated, Peter tries to clarify with Matthew, rap music in background, stops when participants start playing the final "piece", Matthew and Peter talking to Audio guy in middle of square, Matthew shooting video, Peter talking to security: "we did a big thing in the cathedral last night. About 45 (..) this is a smaller version with a handful of brass (...) we do these different things in different locations (...) bring together some community musicians (...)" (7:05) |

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Performance | Video | 120519_PS_SCM-25.MOV | 19.05.12 | 13:06 | 00:20 | Researcher | **Back to Third Location, Rehearsal 6/ Performance** | conversation with Security personell/ performance | Matthew, Peter, 2 security staff, project manager | 1. Matthew and Peter talk to each other and security staff while participants are playing in background, Matthew sharing difficulties with video shooting with Peter, Peter asks him whether Matthew wants him to try it, Matthew " well you can try it". Both move away from security guards towards their tripod, project manager is approaching, wanting to talk to them. |
| Performance Project | Performance | Video | 120519_PS_SCM-26.MOV | 19.05.12 | 13:08 | 00:16 | Researcher | | final part of Performance | Peter | Peter shooting video, participants playing in background, two women greeting each other, square seems less busy than before. |
| Performance Project | Performance | Video | 120519_PS_SCM-27.MOV | 19.05.12 | 13:17 | 01:50 | Researcher | | | Participants, photographer, vido crew | participants seated, playing final bits of performance, photographer moving about, people moving about, maybe two or three people seated or standing to listen and watch. |
| Performance Project | Performance | Video | 120519_PS_SCM-28.MOV | 19.05.12 | 13:17 | 00:02 | Researcher | | end of performance | Participants | applaus |
| Performance Project | Performance | Video | 120519_PS_SCM-29.MOV | 19.05.12 | 13:20 | 02:49 | Researcher | | conversation with video crew | Matthew, video crew, participants, project manager | Matthew talking to participants, talking to video crew about capturing vox pops, video crew negotiates with Matthew, Matthew asks Peter. Matthew communicates decision to take some vox pop with "performers". Says to participants that if they were able to stay longer they would like to test another site where they expect to get more echo effect. Video crew taking vox-pops.<br>I didn't capture the vox- pop! Damn it! |
| Performance Project | Performance | Video | 120519_PS_SCM-30.MOV | 19.05.12 | 13:22 | 02:15 | Researcher | | Peter talking to media conference organiser | media conference organiser, keynote speaker, Peter, Matthew | Matthew and Peter talking to media conference organiser and Keynote speaker, Matthew moving away. media conference organiser asks Peter how it is going, Peter answers it is fine, they have a solid team, the piece went well, that is was different to yesterday night (cathedral). media conference organiser saying that was fantastic. Peter telling media conference organiser and company that he saw them dancing the night before, media conference organiser and company seem a bit uncomfortable about that. Peter asking media conference organiser whether they are feeling alright today. media conference organiser answering that the big days are over for him (refernce to Futureeverything festival). Talk about after parties that evening. Peter saying people on square have been cooperative, things go well, but not a lot of people, seems the start of the day. media conference organiser saying it is a bit unfortunate, he was expecting tenth of thousands of people (laughing) "maybe they will get that towards the end of the day". |
| Performance Project | Performance | Video | 120519_PS_SCM-31.MOV | 19.05.12 | 13:26 | 00:11 | Researcher | | snippet, not relevant | | |
| Performance Project | Performance | Video | 120519_PS_SCM-32.MOV | 19.05.12 | 13:43 | 00:31 | Researcher | **Fifth Location, Rehearsal 7** | Participants playing at fifth location | Matthew, media conference organiser, participants, photographer, 3-4 spectators | participants playing while standing in different places. Matthew and media conference organiser moving between them, amongst them. Two to four people actually standing watching the music and taking pictures of performers. |
| Performance Project | Performance | Video | 120519_PS_SCM-33.MOV | 19.05.12 | 14:03 | 00:27 | Researcher | **Back to Location 1 Feedback/ Reception** | participants having coffee | Matthew, Peter, project manager, participants | participants having coffee, Matthew shooting video, project manager packing stuff |
| Performance Project | Performance | Video | 120519_PS_SCM-34.MOV | 19.05.12 | 14:13 | 00:20 | Researcher | Theatre dressing room | participants watching video of choir performance | | no talk |

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Performance | Video | 120519_PS_SCM-35.MOV | 19.05.12 | 14:15 | 00:03 | Researcher | | snippet, not relevant | | |
| | | | | | original time plus 1hour (wrong time setting on camera) | | | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-1.MP3 | 19.05.12 | 10:06 | 00:59 | Researcher | In front of Theatre | | | Audio notes |
| Performance Project | Performance | Audio | 120519_PS_SCM-2.MP3 | 19.05.12 | 10:21 | 04:55 | Researcher | Porters Lodge, Signing In, Rehearsal room, changing room | | | Conversation with porter about room allocation, Matthew and Peter and project manager coordinating their activities before participants arrive. |
| Performance Project | Performance | Audio | 120519_PS_SCM-3.MP3 | 19.05.12 | 10:49 | 15:25 | Researcher | Downstairs, Theatre, changing room | | | Matthew giving instructions for first rehearsal |
| Performance Project | Performance | Audio | 120519_PS_SCM-4.MP3 | 19.05.12 | 10:41 | 31:40 | Researcher | Outside and inside, on way to the changing room , Theatre | | Peter, Matthew, project manager, Abbey, me, Participants | Conversation between Peter and Abbey, introduction of day's structure and activities by Matthew and Peter, first rehearsal inside, instructions by Matthew; feedback & questions about piece; move upstairs; Matthew giving overall instructions re music and procedure; Peter at end of Matthew's talk indicating exact spot for meeting after leaving the rehearsal room.<br>Conversation Matthew and project manager - organisational.<br>Peter: "and see how it feels for you" ... "why don't we just meet on the other side at the tram" |
| Performance Project | Performance | Audio | 120519_PS_SCM-5.MP3 | 19.05.12 | 11:13 | 04:55 | Researcher | First Location, | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-6.MP3 | 19.05.12 | 11:18 | 00:15 | Researcher | First Location, | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-7.MP3 | 19.05.12 | 11:19 | 06:57 | Researcher | **On way from first location to second location** | Conversation with one of the band members | | talking about other special occasions the band had played at before, played at gay parade (3:44); mentions rehearsal with J&L in which 25 band members took part, people excused themselves, cannot make it, for rehearsal; "before you know it you are down to seven"; complete band is 25; Blakely, North Manchester; why he wanted to take part in this: he took part in the Commonwealth Games Finale in 2002 which was a brass band mass performance and really interesting; what was interesting was the site, stadium and .... poor recording quality<br>Arrival at second site:Matthew giving instructions on how participants should arrange on platform, referring to experiences made during rehearsal with band |
| Performance Project | Performance | Audio | 120519_PS_SCM-8.MP3 | 19.05.12 | 11:26 | 00:47 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-9.MP3 | 19.05.12 | 11:28 | 00:19 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-10.MP3 | 19.05.12 | 11:29 | 00:46 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-11.MP3 | 19.05.12 | 11:30 | 11:17 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-12.MP3 | 19.05.12 | 11:41 | 03:52 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-13.MP3 | 19.05.12 | 11:46 | 01:13:39 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-14.MP3 | 19.05.12 | 13:00 | 10:14 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-15.MP3 | 19.05.12 | 13:17 | 02:23 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-16.MP3 | 19.05.12 | 13:20 | 06:21 | Researcher | Outside, | Conversation Peter with media conference organiser, keynote speaker and later photographers | media conference organiser, keynote speaker, Peter, Photographers | see notes on 120519_PS_SCM-30.MOV; beyond that Peter mentioning security guards' opinion of advertisement of event; looping the loop "experiment"; good setting for them (SCM); media conference organiser was hearing the music while approaching the site but didn't think it was them; keynote speaker: we thought is was the local brass band (laughing); Peter giving account of head of security taking to him, asking him whether this is music or warming up; photographers joining, conversation about last night's going out, laughter casual jokes and athmosphere; media conference organiser and photographers think about leaving, Peter tells them that they will try another and asks them to stay, Peter leaves to talk to Matthew |

| Project | Event | Type | Filename | Date | Start Time (as on file) | Duration (min) | Recorded by | Location of Band/Participants; main activity | Themes/Keywords | People | Summary |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Performance Project | Performance | Audio | 120519_PS_SCM-17.MP3 | 19.05.12 | 13:27 | 01:59 | Researcher | Outside, | Conversation with Matthew | Matthew | Matthew mentions the way they came up with the idea for the last, main piece of music. Peter mentioned an idea in the car on their way to the site in the morning, Matthew said they had photography time wo why not try it out and it "turned out to be the most magical thing"<br>interesting language they use |
| Performance Project | Performance | Audio | 120519_PS_SCM-18.MP3 | 19.05.12 | 13:44 | 03:43 | Researcher | in fifth location | Band playing | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-19.MP3 | 19.05.12 | 13:49 | 10:04 | Researcher | on way back to Theatre | conversation with Amy (IP)? | | Me: what are you taking away from this?<br>She: I have done sth. Like this before but not with these kind of people. I am sure it will have an effect on me, but not sure how yet. Management of orchestras is interesting. It is a political structure, funding is being cut. In America people playing in orchestras also have to have another skill. more like people working together rather than a machine that is being dictated. they don't do it for a living. orchestras like that in lancashire: manchester Halle orchestra, lancashire sinfonietta, aurora orchestra – different structure, more in America.Usually conductor tells them what to do. |
| Performance Project | Performance | Audio | 120519_PS_SCM-20.MP3 | 19.05.12 | 14:00 | 02:40 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-21.MP3 | 19.05.12 | 14:02 | 01:15 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-22.MP3 | 19.05.12 | 14:04 | 04:39 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-23.MP3 | 19.05.12 | 14:09 | 00:17 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-24.MP3 | 19.05.12 | 14:11 | 01:01 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-25.MP3 | 19.05.12 | 14:13 | 29:14 | Researcher | | eba | | transcription notes |
| Performance Project | Performance | Audio | 120519_PS_SCM-26.MP3 | 19.05.12 | 14:43 | 04:04:41 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-27.MP3 | 19.05.12 | 14:57 | 02:52 | Researcher | | | | |
| Performance Project | Performance | Audio | 120519_PS_SCM-28.MP3 | 19.05.12 | 15:01 | 09:23 | Researcher | | Converstaion with artists about expectations and the way festivals market their performance in contrast to themselves. Often without checking back with them | | transcription notes |
| Performance Project | Interview | Audio | 120519_PS_SCM_Interview.MP3 | 19.05.12 | 16:17 | 02:06:09 | Researcher | | | | |
| Performance Project | Pre-Performance | Audio | 120519 PS_SCM_AudioNotes-1 | 20.05.12 | before event | | Researcher | | | | |
| Performance Project | Pre-Performance | Audio | 120519 PS_SCM_AudioNotes-2 | 21.05.12 | before event | | Researcher | | | | |
| Performance Project | Post-Performance | Audio | 120519 PS_SCM_AudioNotes-3 | 22.05.12 | after event/interview | | Researcher | | | | |
| Performance Project | Post-Performance | Audio | 120519 PS_SCM_AudioNotes-4 | 23.05.12 | after event/interview | | Researcher | | | | |

| Document Name | Type of Document | Date of Meeting | Group | Author | Attendees Management School |
|---|---|---|---|---|---|
| Stakeholder Committee 2000: Wednesday 1st November 2000, 12:30 P.M., Syndicate Room C4, Graduate School: AGENDA | Agenda | | | | |
| Notes of Stakeholder Committee 2000 Meeting held on Wednesday 1 November | Minutes of Meeting | 01.11.00 | Stakeholder Committee | Management School | Paul (Chair), Karen (Secretary) and 7 others |
| Notes of Educational Sub Group Meeting held on Friday 24 November 2000 | Minutes of Meeting | 24.11.00 | Educational Sub Group | Management School | Karen (Secretary) and 4 others |
| Notes of the Fabric Sub Group Meeting held on Monday 27 November 2000 | Minutes of Meeting | 27.11.00 | Fabric Sub Group | Management School | Gabriel, Karen (Secretary) and 2 others |
| Notes of Buildings Committee Meeting held on Wednesday 24 January 2001 | Minutes of Meeting | 24.01.01 | Buildings Committee | Management School | Paul (Chair), D. Gabriel, Karen (Secretary) and 9 others |
| Notes of Stakeholder Committee Meeting held on Wednesday 21 March 2001 | Minutes of Meeting | 21.03.01 | Stakeholder Committee | Management School | Paul (Chair), Gabriel, Karen (Secretary) and 6 others |
| Notes of Buildings Committee Meeting held on Wednesday 4 July 2001 | Minutes of Meeting | 04.07.01 | Buildings Committee | Management School | Paul (Chair), Karen (Secretary) and 8 others |
| Notes of Buildings Committee Meeting held on Wednesday 21 November 2001 | Minutes of Meeting | 21.11.01 | Buildings Committee | Management School | Paul (Chair), Karen (Secretary), and 10 others |
| Notes of Meeting to Discuss Proposed Break Out Space on A floor held on Wednesday 5 December 2001 | Minutes of Meeting | 05.12.01 | sub group as result of meeting 21/11/01. Topic: Break Out Space | Management School | Karen and 3 others |
| Notes of Meeting to Discuss Restructuring of A Floor held on Wednesday 12 December 2001 | Minutes of Meeting | 12.12.01 | Sub group as result of meeting 21/11/01. Topic: administration on A-floor, restructuring A-floor | Management School | Karen and 10 others |
| Notes of Buildings Committee Meeting held on Wednesday 23 January 2002 | Minutes of Meeting | 23.01.02 | Buildings Committee | Management School | Paul (Chair), Karen (Secretary) and 8 others |
| Notes of the New Building Working Party held on 15 February 2002 | Minutes of Meeting | 15.02.02 | New Building Working Party | Management School | Paul (Chair), Karen (Secretary) and 4 others |
| University of University Management School Feasibility Study | Agenda/ Study/ Presentation | 04.09.02 | Stakeholder Committee | Architects | Paul (Chair), Karen (Secretary) and 8 others (incl. Architects) |
| Notes from the Stakeholder Committee Meeting hed on Wednesday 4 September 2002 | Minutes of Meeting | | | Management School | Paul (Chair), Karen (Secretary) and 7 others |
| university Management School: Job Diary No.1: Notes of Meeting Held at university on 5 September 2002 | Minutes of Meeting | 05.09.2002 *same meeting as 04/09?* | | Architects | Paul (chair), Karen (Secretary) and 6 others |

| Document Name | Type of Document | Date of Meeting | Group | Author | Attendees Management School |
|---|---|---|---|---|---|
| university Management School: Stakeholder Committee Meeting - 25 September 2002, 1.00PM – 3.00PM: Agenda | Agenda | 25.09.02 | Stakeholder Committee | Architects | |
| University Management School: Stakeholder Committee Meeting - 16 October 2002: Agenda | Agenda | 16.10.02 | Stakeholder Committee | Architects | |
| University Management School: Job Diary No.4: Notes of Meeting Held at university on 5 February 2003 | Minutes of Meeting | 05.02.03 | | Architects | (no distinction between Management School and LU only "university") [redacted] |
| university Management School: Briefing Workshop: 10 February 2003 – 2.30PM: Agenda<br>+ The Briefing Process<br>+ Value Planning Procedures | Agenda/Presentation | 10.02.03 | Briefing Meeting/ Workshop *(which group?* | Architects | |
| university Management School: Job Diary No.5: Notes of Briefing Meeting Held at university on 10 February 2003 | Minutes of Meeting | | | Architects | (no distinction between Management School and LU only "university") [redacted] |
| Notes of Buildings Meeting held on Wednesday 12 February 2003 | Minutes of Meeting | 12.02.03 | Stakeholder Committee ? | Management School | Gabriel (Chair),l Karen (Secretary) and 7 others |
| Management School university: Schedule of Accommodation: Revision F | Table | 19.02.03 | | Architects | |
| university Management School: Job Diary No.7: Notes of Meeting Held at university on 24 February 2003 | Minutes of Meeting | 24.02.03 | | Architects | Gabrie (chair)l, Karen (secretary), and 5 others |
| university Management School: Job Diary No.8: Notes of Meeting Held at university on 03 March 2003 | Minutes of Meeting | 03.03.03 | | Architects | Dean, Gabriel (chair),Karen (secretary) and 8 others |
| university Management School: User Group Meeting - 17 March 2003 9.30am: Agenda<br>+ Schedule of Accommodation:Revision G: 14 March 2003<br>+ CeFLEX Functional Relationship Diagramme<br>+ Job Diary No. 10: Mid C Stage Cost analysis (14 March 2003) | Agenda, other documents | 17.03.03 | | Architects | |
| university Management School: Job Diary No.12: Notes of User Group Meeting Held at university on 17 March 2003 | Minutes of Meeting | 17.03.03 | User Group | Architects | |
| Presentation of C Stage Report to Project Executive | Presentation | 02.04.03 | Project Executive | Architects | |
| university Management School: Job Diary No.13: Notes of User Group Meeting Held at university on 16 April 2003<br>+ Job Diary No. 14: What is BREEAM? | Minutes of Meeting | 16.04.03 | User Group | Architects | Gabriel (chair), Karen (secretary) and 7 others |

| | Project | Raw data | Source | Codes | Code Descriptions |
|---|---|---|---|---|---|
| 1. | Perf. | "We will stage a 'dress rehearsal' with the other groups that are involved (possibly up to 150 people in total!) before the performance at 1.20pm on the day of the 19th May" | Email (Project Manager), 03/05/2012 | 1. anticipated versus realized participation<br>2. internal vs. external expectations<br>3. motivations<br>4. projection of desires, expectations<br>5. relevance of information<br>6. communication<br>7. choice of language | 1. The advertised, expected number of participants differs significant from actual turnout (150 to 10).<br>2. Expectations of organisers are articulated in account of event as 'spectacular' and 'mass participation'. High expectations are provoked in those who read festival announcements. Exaggeration intended to motivate potential participants and spectators to join the group and attend the festival?<br>3. planned and emergent participation differs. Intentions differ from reality.<br>4. Desires of organisers are reflected and manifested in marketing materials and communication.<br>5. Words require careful choice in relation to information and audience. Information needs to be well targeted.<br>6. mismatch between organizing bodies and artists in the way the performance is communicated and advertised<br>7. Artists see language as an important and very conscious part of interacting with participants |
| 2. | | "Australian sound-artists (…) are coming to *(the city)* for a two-week residency, featuring workshops and rehearsals and culminating in two spectacular public performances at *(the)* Cathedral and *(the festival)*" | *Conference* Newsletter, 12/04/2012 | | |
| 3. | | *"(the artists)* host a mass participation performance on 18 & 19 May at *(the)* Cathedral and at *(the festival)* (…)." | *Conference* Newsletter, 11/05/2012 | | |
| 4. | | **1 – 1.30 PM** Super Critical Mass / FutureEverything, sonic arts company that brings together 'masses' of musicians playing identical instruments, within public places.<br>**4.30 – 5 PM** Listen up for Super Critical Mass – 100 Brass Band players will lead you to the waterfront for the spectacular finale! | Excerpts from *the festival* Program, 19/05/2012 | | |
| 5. | |  <br>actual turnout for performance: 10 | Photo of participants at performance, 19/05/2013 | | |
| 6. | | Festival projects its own desires into marketing materials before checking back with us | Conversation with artists after performance, 19/05/2012 | | |
| 7. | | We spend a lot of time choosing words. part of research to learn what information to give to someone. | Conversation with artists after performance, 19/05/2012 | | |

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| | DING | | | "design process")<br>16. construction process | stages, these are defined by the official body of architects and the university applies this to every building project. |
| 13. | BUILDING | *'It is really important in our job at the beginning of the stages to get the end user involved to make sure we are delivering to their requirements. And then once we get through tender stage (…) it just runs through the various stages and finishes at practical completion.'* | Interview BI5 | 17. function/ purpose of participation<br>18. task related, emergent participation<br>19. flexibility of groups<br>22. Parallel/multi-layered structure of participation (prev: "informal structure of part.")<br>23. Mechanisms of participation | 17. Involvement of users in project differs according to stages of project. Design phase: consultation of users. Construction phase: project runs through |
| 14. | BUILDING | Architect would join groups as needed, when expertise was required, so would other contractors | Interviews | | 18. members of groups would change according to tasks and expertise required.<br>19. groups are integrating members flexibly and responsive to requirements |
| 15. | BUILDING | " whe had a committee (…) were on the estates departments building committee which is pretty much technical (…) but we also met with the architects directly just a couple of the architects and two or thee of us" | Interview BI3 | | 22. Informal meetings would take place in addition or in parallel to formally established meetings.<br>23. meetings as mechanisms for participation. They facilitate the involvement of stakeholders at specific times and in specific spaces. |
| 16. | | Open meetings: invite anyone | Interview notes BI1 | | |
| 17. | PERF. | MA1 mentioned that the idea for the final piece emerged in the car on their way to the *festival* on the morning of the performance. MA2 had the idea. | | 24. emergence (prev. 'Emergent Design')<br>25. creativity and spontaneity<br>26. idea generation<br>27. Intuition | 24. Ideas that contribute to the final performance emerge unplanned, spontaneous and intuitive.<br>25. creativity in the music case is intentional unintentional. The artists respect the spontaneous nature of ideation.<br>26. individual ideation contributes significantly to the performance. Somehow intuitive ideas come about. There is no formal process, as far as I can tell.<br>27. As stated at 26. intuition is a dimension that brings about new ideas. |
| 18. | PERF. | During the rehearsal, MA1 and MA2 constantly switch between creating new musical pieces and instructing, arranging participants in new ways. | Observation of rehearsal and performance | 28. organising and creating as flow (prev. "organizing and designing as flow") | 28. Artists switch between operational modes: they create new musical pieces and have to organise musicians accordingly. These modes require different actions: ideating, instructing, arranging. |

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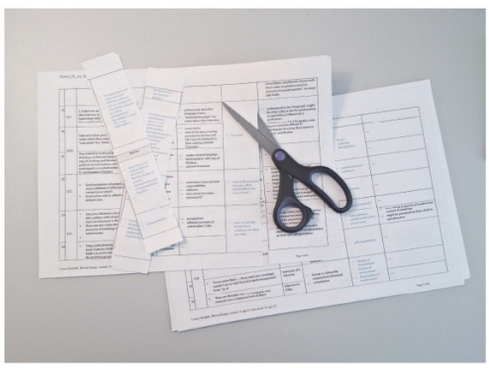
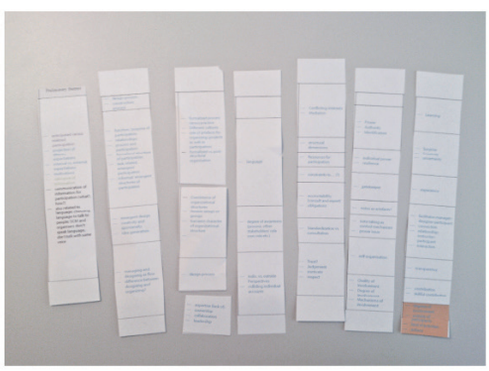
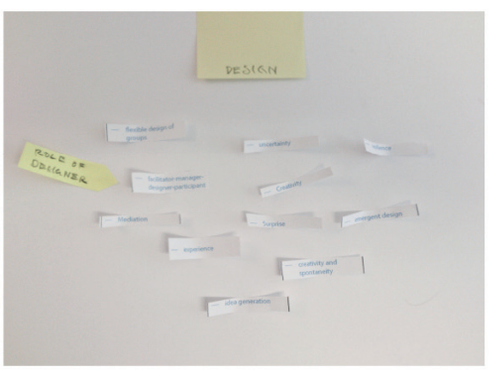
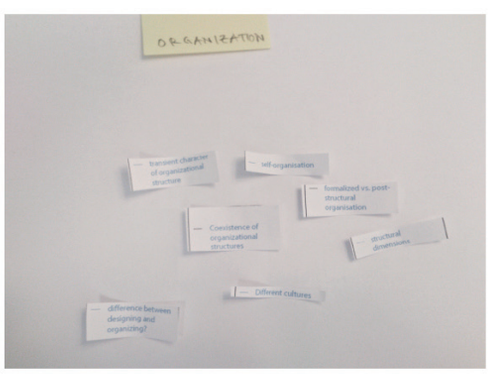
|---|---|---|---|---|---|
| | | | | | participants undertand instructions?). |
| 43. | | • MA1 and MA2 would have times when they spoke to each other during the rehearsal and performance without participants being involved | | 59. transparency | 59. Decision making is characterized by varying degrees of transparency. While some decisions and discussions between the artists took place in front of participants. Others were taken in a distance from participants, both artists putting their heads together, almost whispering to each other. |
| 44. | | • "I think the instrument is an important aspect (..),. they were able (…) and keen to play their instruments. (…) so we all had a skill we could contribute (…)" | | 60. contribution<br>61. skillful contribution | 60. For participants a major motivation to contribute was the fact that they were able to play their instrument. Everyone was able to make a significant contribution by playing their instrument. A contribution to the whole.<br>61. Participants were able to contribute in a way that reflected and was appropriate to a specific skill they p possessed: playing a specific instrument. |
| 45. | | • "This event is an experience. (…) participating here is about experiencing something new that we would otherwise not experience. And it is not about having a say in something. It is not about shaping the process. This is more about experience of a process that I wouldn't be able to create, that I would have not been able to design or manage and I wouldn't want to, because experiencing it will make me reflect on different aspects". | | 62. degrees of involvement<br>63. activitiy of participants | 62. Involvement in conceiving an experience can limit its novelty and attractivity to participants. On the other hand non-involvement can lead to the exposure of something exciting, something beyond ones own imagination. Participation can lead to more of the same.<br>63. Active involvement is not crucial to participation. |
| 46. | | • "(Artists) had to orientate themselves in the Lowry rooms, had to ask for the toilets. (…) since we participants also didn't know the location, this helped to avoid a hierarchical relationships. We were all in the same situation. (…) they didn't represent an authority that possessed more knowledge than the participants." | Audio Notes Transcript 12/05/12 | 64. distributed ownership<br>65. collaboration<br>66. leadership | 64. Distribution of ownership in a situation can be the result of unintended improvisation and spontaneous situations. A lack of expertise or knowledge by supposed leaders can draw participants into solving, facing a situation. Lack of knowledge thereby reduces hierarchies.<br>65. Facing a shared challenge increases collaboration, triggers collaboration.<br>66. While a lack of knowledge creates opportunities for collaboration, the lack of control is a sign of a leadership style that is comfortable in revealing and sharing own weaknesses. |

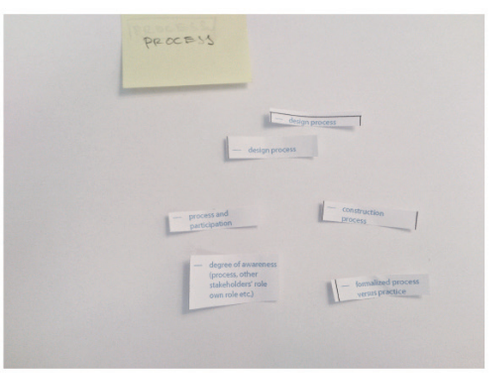
**Appendix F: 2nd Cycle Categories and Patterns** (Excerpt)



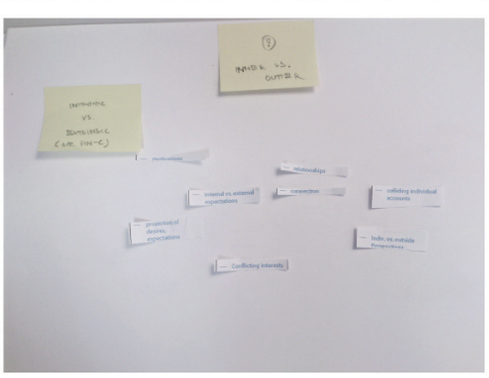





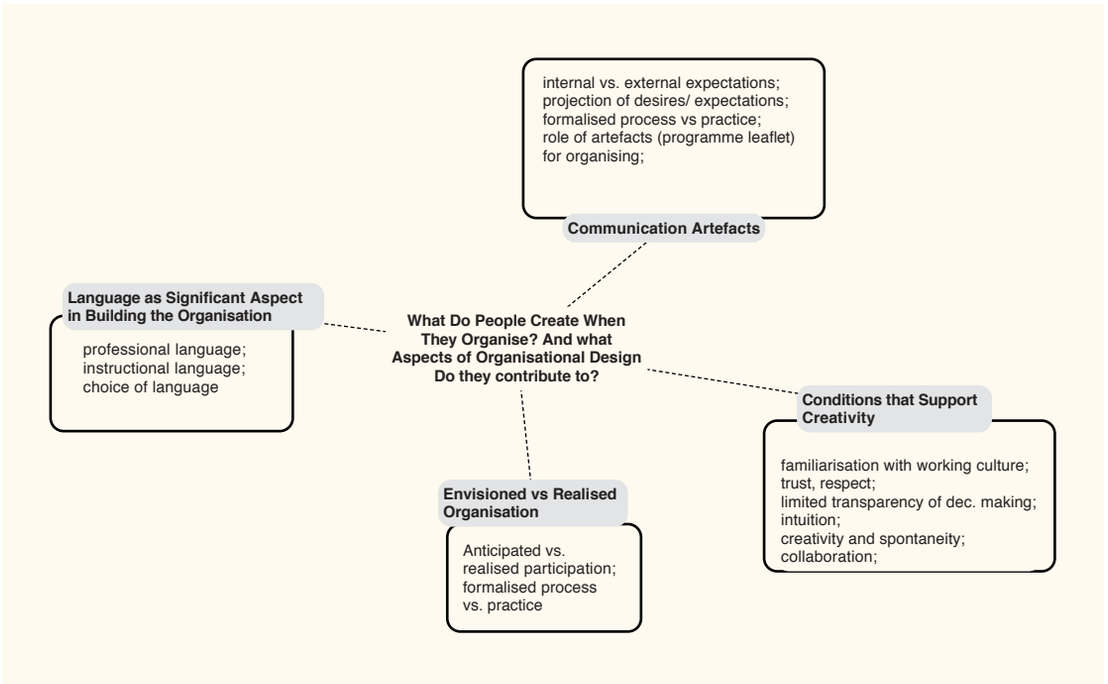





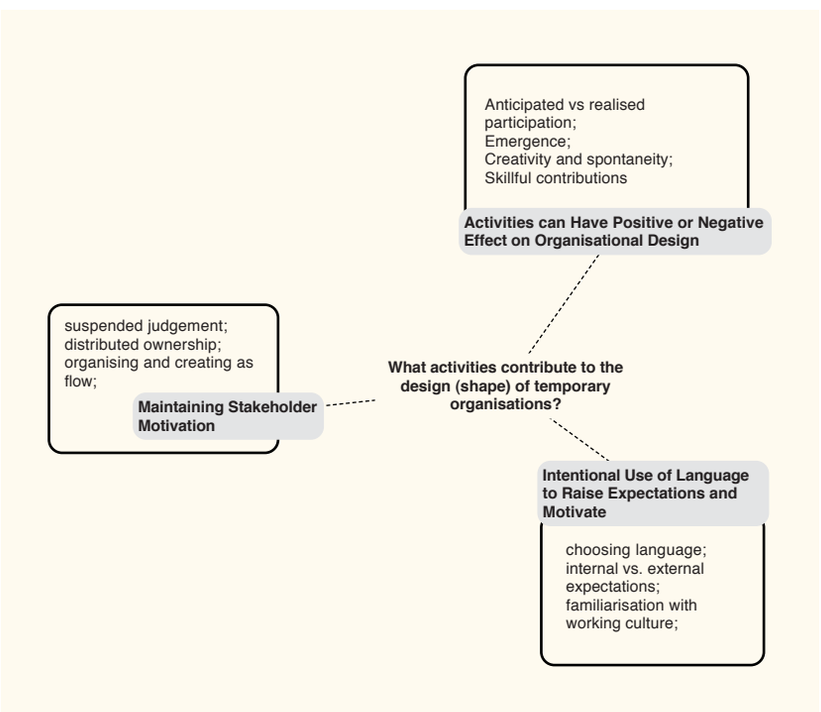


**Appendix G: 2nd Cycle Clusters** (Example from the Performance Project)

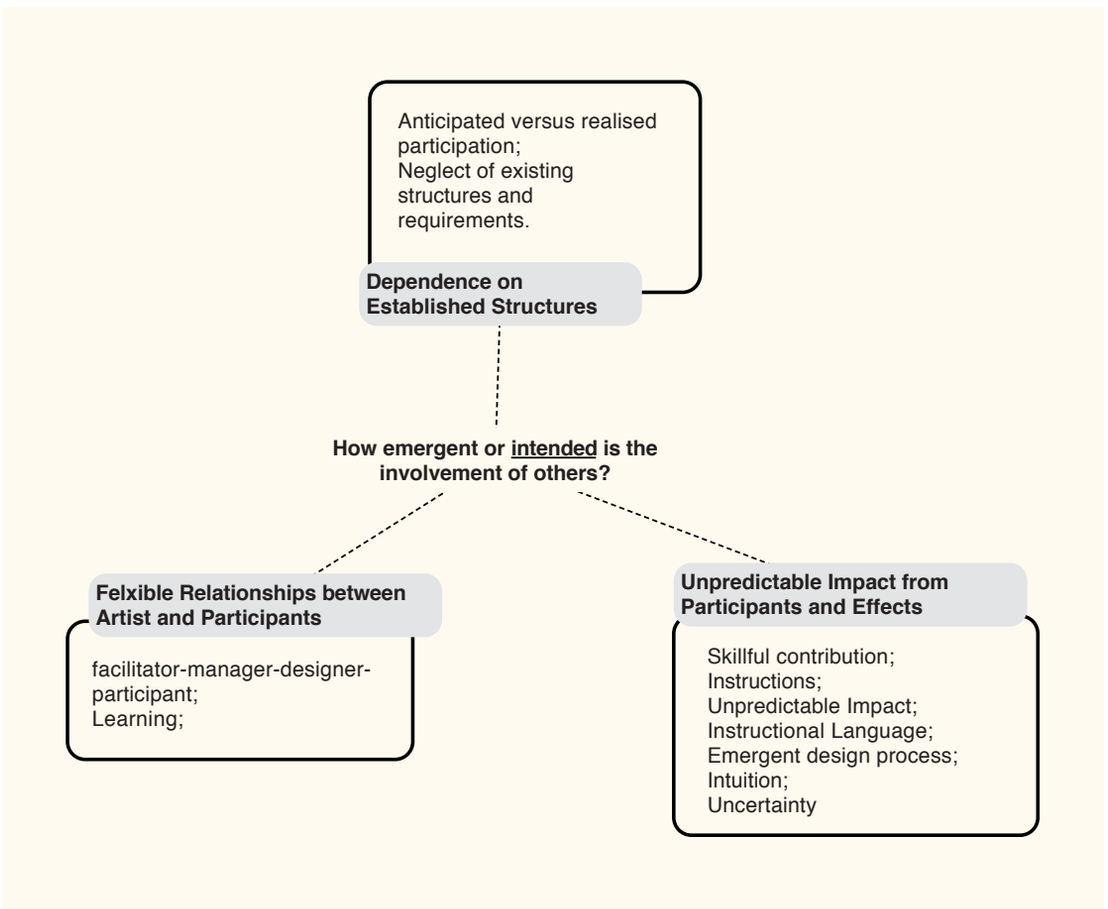



*Clusters formed around preliminary Research Question 1*






*Clusters formed around preliminary Research Question 2*




*Clusters formed around preliminary Research Question 3*

## Appendix H: 2nd Cycle Themes

| Research Question | Clusters | Themes |
|---|---|---|
| RQ1 Creation | Dominance of Pre-Defined Processes | Creation of a Self-Motivated and Transient Organisation |
| | Language is Related to Organisational Design | |
| | Physical Artefacts Support Organisational Formalisation | |
| | Evolution and Interdependence of Organisational Structure | |
| | Managed Participation Requires Mechanisms and Resources | |
| | | |
| RQ2 Activities | Formal vs. Informal Activities | Dispersed Activities Influence the Organisation |
| | Individual and Group Initiatives | |
| | Integration of Accountability | |
| | | |
| RQ3 Involvement | Stakeholder-Driven Involvement | Involvement Changes from Stakeholder-Driven to Professionalised Coordination |
| | Professionalisation of Involvement | |
| | Intended Involvement can Still be Emergent | |
| | Involvement is not necessarily desired | |

*Themes (Building Project)*



| Research Questions | Cluster | Theme |
|---|---|---|
| RQ1 Creation | Envisioned versus realised organisation | Divergent Projections of the Organisation to be Created and its Realisation |
| | Language as Significant Aspect in Building the Organisation | |
| | Conditions that Support Creativity | |
| | Communication Artefacts | |
| | | |
| RQ2 Activities | Maintaining Stakeholder Motivation | Instructional yet indiscriminate – Communication and the Familiarisation/Integration of a Group |
| | Intentional Use of Language to Raise Expectations and Motivate | |
| | Activities can Have Positive or Negative Effect on Organisational Design | |
| | | |
| RQ3 Involvement | Felxible Relationships between Artist and Participants | Intentional but Open Involvement Provides Challenges |
| | Dependence on Established Structures | Involvement can be Unpredictable and Impactful |
| | Unpredictable Impact from Participants and Effects | |

*Themes (Performance Project)*

| Name | Name | Coded Text |
|---|---|---|
| PP Event 2 | 120512_PS_SCM_J&L-5 | MA2 (moving from outside the picture into the picture and to a position where he faces all artsits): Just stop there. Can we just try that one more time.this time I want to take out the (...?) notes, so this time you come in with one single long note, nice and confident, just keep your note and play for a full breath's length. and remember to count once you (...?), so if Lorenz were playing and you come out for two seconds an you are hearing Rupy and Abbey still playing wait until the last person, abby in this place, stopped playing and then everyone starts to count to ten in their own time and then try and start again together.this time just one note. lets see how it goes. Sounded good. (MA2 moving away from group). |
| PP Event 2 | 140417 MI4-7_Interview | MI7: we did two, we did one inside and one outside. But they really just boroughed the last half an hour of our rehearsal just to go through some stuff and they used that time as well to kind of develop their understanding of the sound of a brass band as well.and after that.. a lot of people were keen to be fair ... it was just because of the time and because and when it fell there was only a small group of us eventually turn up on the day. |
| PP Event 2 | 140417 MI4-7_Interview | I: So you did two rehearsals here and then you went to the performance |
| PP Event 2 | 140417 MI4-7_Interview | MI4: Those (...?) note to a certain degree import came here at the rehearsal because the.. at some point I was not sure they had a view... they had done it before so they were going after what they had done before but with the choirs and things but once they had us all in here and out the back they would then start to refine what they were doing. and I think because we ended up being the majority should we say stakeholders in the group they stuck with what we had already gone through in rehearsal so the same things we have been doing they did out on the concert. |
| PP Event 2 | 140417 MI4-7_Interview | MI5: It was a pattern ..., so he would give you starting (...?) like go up in thirds or whatever go up in thirds all the way up until you get to the top of your range and then come back down and stop when you got no more breath just stop, don't take a breath and start again, just stop. So then that was what he had rehearsed out the back here with us and that was out the back here it was where he started to understand the scope of the range the different tonalities of each instrument ... |
| PP Event 2 | 140417 MI4-7_Interview | MI4: (....?)they found out rather than trying to get (....?) to move at the same time you just let them do it at their own speed give them just a passing note (?) |
| PP Event 2 | 140417 MI4-7_Interview | MI/: They showed us some work they had done previously as well with [redacted] University .. and there were similarities between the two but they weren't identical they .. because they had more people for the [redacted] University job. They could develop it a bit more. It was quite a...to be fair it was quite a simple ...idea that they gave us but the way that they used the numbers of people, how ever many it was, 11 of us ..., to create... it never sounded the same no matter how many times we played it so it was a .. the way they melded(?) that sound or even just turned the way we faced, we never stood in the same place or looked in the same direction, did we.... |
| PP Event 3 | 140417 MI4-7_Interview | MI7: the event was quite... |
| PP Event 3 | 140417 MI4-7_Interview | MI4: ..cold (laughing)... |
| PP Event 3 | 140417 MI4-7_Interview | MI7: It was freezing but they obviously had a plan didn't they... |
| PP Event 3 | 140417 MI4-7_Interview | MI4: I think the numbers didnt help. Because I think the initial plan was to having a lot more people they would have been able to occupy larger spaces but with the smaller number what they tried to do was use buildings to help with reverbs and echos and stuff like that. so make it sound as if there were more people. so (...?) we are doing a bit by the water at the [redacted] and then we moved into sort some garden area standing in different places but then the ... one where we spent most time seemed to be in front of where the BBC where it had buildings on three sides. |
| PP Event 3 | 140417 MI4-7_Interview | M7: I think we did three bits in front of the [redacted] we did a square, again near the water at the front end and directly in front of the bbc and then the one in the corridor with buildings on both sides and that was probably the ... |
| PP Event 3 | 140417 MI4-7_Interview | MI4: Those (...?) note to a certain degree import came here at the rehearsal because the.. at some point I was not sure they had a view... they had done it before so they were going after what they had done before but with the choirs and things but once they had us all in here and out the back they would then start to refine what they were doing. and I think because we ended up being the majority should we say stakeholders in the group they stuck with what we had already gone through in rehearsal so the same things we have been doing they did out on the concert. |
| PP Event 3 | 140417 MI4-7_Interview | MI7: It wasnt new to us because we had already done.. |

**Appendix J: 3rd Cycle Coding for Design Indicators** (Nvivo Excerpt/Anonymised)

| Name | Name | Coded Text |
|---|---|---|
| Propose solutions, develop alternatives | 120522 BI3_Transcript | so the original design brief for the building said we will have two big teaching rooms capacity around 70, and threre would be occasions where we would need a lecture room to seat more people ... so we ... a 150 people lecture room. but the lecture room would be traditional that is tiered , shuffeled into seats , but nice, but the teaching rooms would be Harvard u-shaped such that any student could leave their seat and leave the room or come to the front without disturbing any of the students. and the leadership centre would be on top. well there were various modifications to that as it went on the most major was that the leadership centre needed to be bigger thatn the rooms that it sat on top of. what we had promised the [redacted] were a number essentially open plan office desks ... and you couldn't sensibly fit those on the foot print so we actually made the lecture rooms a little bit bigger - and they are actually 80 seaters and that is good , it turns out they even be for an 80 seater on the edge of being too big |
| Propose solutions, develop alternatives | 140327 BI7_Interview 1 | This document should be agreed internally throughout the school and provide the basis for an external document to be used as a negotiating tool at University level. He reassured [redacted] that the idea for building another floor in the existing building" that was another possibility, put another floor on the existing building "was not now feasible and any new development would take the form of a new building". There we go, that is important. So [redacted] and I then agreed to do a lot of the School Plan.So I mean we had sort of two ideas for increasing the space. ONe included putting a roof over that and having a big atrium. |
| Propose solutions, develop alternatives | 140417 MI4-7_Interview | (...?) you could see that with just twenty or thirty players how much more you could have done and how much you could have had multiple groups in slightly different places or like in that square in front of the [redacted] you would have one sat down, one further down where we were originally and maybe one down the water so that you would have had the echos of one merging with the sounds of the others and so... |
| Articulation of Preferred Situation | 120510 BI1_Transcript | and our need as a faculty were quite different to perhaps other faculties on campus we have sort of specific ...ähm....deliver it.. our deliver is . . . this is... obviously I am not an academic so, but this is what was kind of voiced at these meetings that we have a sort of very different delivery style so we wanted more sort of facilities that were (?) for that type of ... to meet our needs as a faculty. |
| Articulation of Preferred Situation | 120510 BI1_Transcript | we explored..there was quite a lot of...ähm...exploratory..ahm.. looking at options as we are sitting sort of here we were thinking we could do something with the quadrant as we call it (?) . Because what we were trying to get, what we were wanting, we quite a lot of group work, break out we wanted sort of some sort of we needed some actual lecture space, but we wanted some communal type based as well for people, for groups to get together. and to (?) project work in groups. that was one of the key drivers, this is what the faculty cried out for. that is a result of these meetings these regular meetings with the committee, this is what the departments were telling us. that is the type of accommodation we wanted. |
| Articulation of Preferred Situation | 120519 MA1&2_Interview | because if we say lets work with the lots of performers of the one instrument and lets get rid of conducters... and lets not have to have huge overheads and funding to make it happen, lets make it happen as simply and easily as we can |
| Articulation of Preferred Situation | 120519 MA1&2_Interview | that this group of performers always are playing in space in a way that somehow talks or connects to a space. |
| Articulation of Preferred Situation | 120522 BI3_Transcript | and the extension was designed .. well primarily to get more teaching space particularly lecture theatre space |

*Codes from both cases*

K Matrix.docx

## The Research Question Matrix

RQ 1: **What do people actually design when they organize?**

Character of Question:
Interested in the way people design, what they do, the phenomena that are evident in the data.

Data-Theme: **Motivation,** Theme Category: **Internal vs. External**

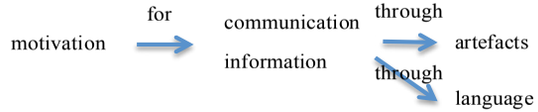
Procedural Questions:

- Do I look at one theme at a time or at all data?
- The question about novel and surprising stuff is related to all the data hence all the themes, but this is unrealistic I would think.
- Further, if a theme is related or relevant to a research question, does that mean that it somehow answers aspects of it? Or is a representation of concepts that form part of the strategy to answer that question
- What is novel? In relation to emergent themes in data or in relation to theory, sth. that hasn't been mentioned in literature?

Description of Theme 'Motivation':
**Motivation 1:** A conflict in motivation is expressed by looking at the way the performance is advertised and described in communication released by festival organisers and in described in the festival programme. It also is expressed in the way that artists describe their work and how they would usually very carefully choose the words to communicate their work.
Here it is the motivation to run the performance, the underlying motivation that differs for different parties involved in the organization of the event. It is a motivation that is expressed through communication. Motivations for choosing a specific expression can only be assumed from the researcher's perspective when regarding the organisers, the motivation for artists becomes clear during the interview. But is this the motivation for choosing specific words or the motivation to run the event in general? How do they talk about it, more from an outside perspective or from an inside perspective (how would I describe both)? This kind of motivation concerns the organisers and performers side of a project or event. It is related to the motivation which is expressed through communication, language and artefacts, the motivation of those who organize.
**Motivation 2:** Is the motivation to participate. The motivation behind the intention to participate in a project. This type of motivation is more related to RQ3, which addresses issues of participation. This type of motivation relates to both, those who organize and involve others and those who take part, get involved. It is a comparative dimension of analysis. Comparing the two groups and their motivations.

Data Sample: **PP**
Data Examples: A conflict in motivation is expressed in the communication of organisers and the character of the actual event as well as the attitude of artists.
Data Sample: **BP** (not mentioned in context with original theme, going back through data and initial analytical documents with theme in mind)
Data Example: motivation changes throughout project: from motivation to create space for teaching to accomplishing a construction project on time and whithin budget. These are only two examples of different motivations that occurred during the BP projects. More are likely to be identified: i.e. representation, multiple functionality, departmental level, faculty level, university level, etc.

Links to other themes

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| Answers to research question/ Can theme answer research question? | Surprises/ new insights |
|---|---|
| In relation to RQ1, motivation refers to the motivation to communicate in a specific manner. Communication is what is being intentionally articulated and therefore designed and motivation is part of that design process.<br>It conflicts with motivation of artists and their way of communicating.<br>Although I do not know how the artefacts came into existence that communicated organisers' expectations and desires.<br>Relates to the design of artefacts (newsletters, programme) and choice of language. | • Motivation as design asset itself, as suggested in paper for PIN-C 2013<br>• Potentially new lens to look at design from? |
| Theory answers refer to/ are informed by | Additional, emergent questions |
| Krippendorff: motivation and intention of design<br>Participatory organization theory:<br>International Handbook of Participatory Design<br>*check literature review* | How can different types of motivation be described and categorized?<br>What type of motivation is relevant? Motivation to involve, to design, to organize?<br>Motivation for…?<br>How are motivations expressed?<br>Is motivation designed?<br>Driver for design?<br><br>How intentionally is communication designed? |