The main focus of the Practice-based Research (PBR) method lies with the making and documentation of the process and final creative product. However, the method of PBR does not specifically emphasize the iterative nature of producing an object. With this in mind, the dissertation employs a hybrid research strategy. This hybrid strategy employs the Practice-based Research method as the main framework and the Action Research (AR) method as a supplementary and supportive strategy.

This chapter is concerned with the description and justification of the research strategies and techniques applied in the dissertation. The chapter starts with a short discussion on PBR and the role of the artefact in the creation of research knowledge. This is followed by situating the AR method within the framework of PBR. The chapter concludes by applying the key processes of PBR and AR to the dissertation in order to formulate an overall action plan for the investigation.

“a true craftsman is not bound to a single idea, as the formal idea often gives rise to a family of variations”

- Tapio Wirkkala, Pipe models, ‘meerschaum’ (sea foam) and nylon, 1974-6.
2.1. PRACTICE-BASED RESEARCH AND THE ROLE OF THE ARTEFACT

Since the 1990s various creative disciplines such as architecture, design, art and performance have gradually occupied themselves more and more with academic research (Nimkulrat, 2009: 3; Nimkulrat, 2012: 2). The creative practices employed by these practitioners during research, act as the basis for theoretical inquiry and scholarly research and is known as Practice-led or Practice-based Research (Nimkulrat, 2012: 2).

Linda Candy (2006: 1) defines Practice-led Research as research that ‘leads primarily to new understanding about practice’ and

Practice-based Research as research where the ‘creative artefact is the basis of the contribution to knowledge’.

These practice related research methodologies have progressed from being merely supplementary ‘…adopted and adapted social science methods…’ to complex intellectual advancement of creative practice as a basis for theoretical questioning (Sullivan, 2009: 62; Nimkulrat, 2012: 2). Even though these methodologies with their practice related frameworks are fairly new in the history of knowledge production they attribute the artefact with an authentic role in research (Sullivan, 2009: 62; Nimkulrat, 2012: 2). The Practice-based Research method therefore encourages creative practice from the researcher. The researcher, as a designer, executes the creative process and the production of artefacts as the main aim of the research (Nimkulrat, 2012: 2).

For creative practitioners the made object is generally the reason for the initial activity. Therefore, it is often the case that practitioners create artefacts which form a central part of the practice, but is supported by little or no formal research process. However, within the realm of research, the process of exploration and making provides the opportunity to generate research and knowledge (Candy & Edmond, 2010: 5; Makela, 2009: 1). Maarit Makela (2009: 1) also suggests that the artefact can be seen as a method for ‘…collecting and preserving information and understanding’

Even though the artefact is the outcome of creative practice, the knowledge of a creative practice lies within the practice itself (Nimkulrat, 2012: 2). Since the knowledge of the process of making is not evident in the object alone, the creative output produced as an integral part of the research process is accompanied by documentation. This includes a description of the process as well as explanation and textual analysis to support the position. The textual documentation demonstrates critical reflection (Creativity & Cognition studios, 2015).

Therefore the research should:

- Define a series of research questions or problems to be addressed as well as define aims and objectives in terms of contribution.
- Specify a research context.
- Outline the methods applied to answer the proposed research questions.

See section 2.1.1. Practice-based Research, on poster 3 (page 16) for a listed summary of the Practice-based Research method.

Works by authors such as Nithikul Nimkulrat (Hands-on intellect: Integrating craft practice into design research, 2012), Linda Candy (Practice Based Research: A guide, 2010), Maarit Makela (Knowing through making: The role of the Artefact in Practice-based Research, 2009), may be reviewed under the discourse of Practice-based Research.
2.2. ACTION RESEARCH

Action Research emerged in the 1920’s and has since developed on a constant basis to become a dynamic and evolved research method. Action Research gained distinction during times of change (Zuber-Skerrit, 2001: 1). World War 1 and 2 and more recently, a response to globalisation as well as rapid socio-economic change and advancements in technology ensured the dynamic development of Action Research (Zuber-Skerrit, 2001: 2). Zuber-Skerrit (2001:1) states that Action Research (and Action Learning) is more stable and sustainable than other ‘traditional ways of learning, training and research.’

Simply put, Action Research is the cyclical iterative process of an intention or plan, followed by an action, and completed by reflection on that action (Dick & Sweepson, 2013: 2; Zuber-Skerrit, 2001: 2).

Once a cycle is completed, a second cycle starts with a revised plan or intention. See Figure 2.2, Action Research process (following page). Action Research is systematic and rigorous (Zuber-Skerrit, 2001: 2). Zuber-Skerrit (2001:3) also mentions that ‘Through reflection we conceptualise and generalise what happened (action). We can then investigate in new situations whether our conceptions were right, that is, we try to find confirming or disconfirming evidence.’

The incorporation of the Action research method within the framework of Practice-based Research, assists with the act of making. Here, the iterative and cyclical nature of the Action research method contributes to the development of a well resolved artefact as well as assists in the documentation process.

See section 2.2.1. Action Research, on poster 3 (following page) for a concise list of the steps that make up the process of Action Research.
The dissertation’s main concern lies with an investigation focused on the making of space through the manual fabrication of space-defining elements. With this in mind, the dissertation employs a cyclical research strategy. The cyclical strategy is the product of the amalgamation of the Practice-Based Research method and the Action Research method. The Practice-Based Research method demonstrates a contribution to knowledge through the making of an artefact as creative outcome. The method’s success relies on the rigorous documentation of the research process as well as the artefact’s role within the creative process (Creative &ognition studies, 2015).

The incorporation of the Action Research method within the framework of Practice-Based Research assists with the act of making. Here, the iterative and cyclical nature of the Action Research method contributes positively to the development of a well-received artefact.

2.1.1. Practice-Based Research

Practice-Based Research is a research method by which:
- New knowledge is gained partly by means of practice
- The creative outcome is illustrated by means of an artefact
- The significance of the artefact is described in words
- Documentation of the process is of importance
- A textual analysis supports the position
- The textual analysis demonstrates critical reflection

2.2.1. Action Research

Action research is the cyclical iterative process of action and reflection on and in action. Action research is systematic, rigorous, accountable and verifiable (Zuber-Skerrit, 2001: 1). The cyclical process of action research involves the following steps:
- Plan
- Act
- Observe
- Reflect
- Replan
2.3. APPLICATION OF THE HYBRID RESEARCH METHOD

The creative outcome of the project is demonstrated by means of the hand knotted textile element, while the significance of the knowledge obtained through making is described by means of words. The hand knotted textile plays an essential role in the bearing of the research, and therefore the research could not have been conducted without the hand knotted textile. The written description includes documentation of the research process, in other words, the process of making and knotting the textile space-defining element. The documentation takes the form of tables, sketches and photos. This process of research through making is represented in cycles as prescribed by the Action Research method.

The following key elements are identified by the Creativity and cognition studio as part of the process of Practice-based Research. The basic framework includes:

- A motivation for the project
- A time frame for the works to be performed. See Tables 2.1. Plan of Action, part 1 and 2.2. Plan of Action schedule, part 1, on poster 3 (left).
- The role of the creative artefact in the creative process
- Environments and tools needed to achieve the required output
- Information to be gathered
- Methods for the research and design process (Action Research method)
- Expected outcomes of the research process
- The relationship of the practice outcomes to the argument of the dissertation

The hybrid research strategy is initiated with the provision of an articulated and structured plan that incorporates a variety of research techniques. See Table 2.1. Plan of Action part 1. The plan of action table incorporates some of the key elements as suggested by the Creative and cognition studio and forms a basic framework for the process of making.

The plan of action table includes a number indicating the phase, a description of the action performed within that specific phase, the research technique applied and the purpose for the action. Further information such as the primary source used as basis for the action, the time frame to perform the action, as well as the physical manifestation of the action performed is included. The plan of action is divided into two parts. Part one was planned before the mid-year exam and part two was planned as a response to the results of part one as well as in response to feedback received during the exam. See Plan of Action part two in CHAPTER 5.

2.4. CONCLUSION

The discussion on Practice-based Research and the role of the artefact as well as the Action Research method provides the outline for the hybrid research method. Further, the chapter introduced a research strategy based on the plan and act components of the Hybrid research method. The Plan of action indicates foreseeable situations where the Design Process allows for more dynamic situations. The Design Process (observe and respond) is discussed further in CHAPTER 5: Design application.

Reflection follows each round of observation and response, as well as each design cycle. Final reflection on the dissertation follows in CHAPTER 6: Final reflections.