THE FOUND OBJECT: DOCUMENTING THE ARTISTIC JOURNEY FROM DECAY TO SUSTAINABLE LIFE THROUGH DESIGN THINKING

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by

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at the Cape Peninsula University of Technology

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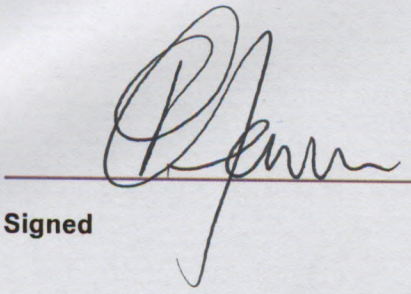
Cape Town

Date submitted: 24 AUGUST 2015

DECLARATION

I, Peneria Venessa Ansley George, declare that the contents of this dissertation/thesis represent my own unaided work, and that the mini-thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.



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24 AUGUST 2015

Date

ABSTRACT

This mini-thesis aims at exploring the process of *design thinking* in the transformation of a decayed *found object* into an artwork, with a narrative of sustainability and life, thus creating awareness around the role and function of decayed objects by repurposing them to give them new life.

The scope of this study will be limited to the use of art to create awareness around repurposing *found objects*. However, these repurposed *found objects* will not become physical utility products. Rather, this study aims to discuss and explore ways in which art can be used to generate an ethos of 'redesigning' into a work of art which gives it an aesthestic value. An undertone of this study is the dilemma encountered in attempting to establish clear delineations between art and design in both pedagogic and professional practice domains.

Key topics discussed in this mini-thesis are the noticing of and engagement with decayed *found objects* and sustainability. Other topics explored are repurposing and design for repurposing. Debates around the concept of 'design thinking' are ever current. *Design thinking* was employed in the study, which resulted in a process that examined the richness of my individual artistic journeys.

My ontological stance is that all chosen *found objects* should have a life. This study is epistemologically situated within the interpretive paradigm since the study makes meaning of my experiences as I interact with *found objects*. The study drew on a qualitative design paradigm of *embodied experience*, ***phenomenological research*** and employed qualitative methodologies of *reflective journaling, lived experience* and a ***process-orientated*** art approach.

The research method adopted a convenience or accidental sample, which is not representative of a population of *found objects* as the objects were presented by accident. All artworks created for the purpose of the study incorporated *found objects* that were selected randomly. The design analysis and findings verified the likelihood of a thematic approach by using comparisons of the choice of collected *found objects*.

The general contribution(s) of this mini-thesis to the knowledge toward the direction design needs to take is three-fold: firstly, the study confirmed an awareness of using discarded banal *found objects* and giving these objects new life through *design thinking*; secondly, it emphasises

the awareness around the critical concerns of sustainability and social responsibility; and, lastly it engages curricula development in robust dialogue that advances the sustainability agenda in a multi-disciplinary context in the Faculty of Informatics and Design, at the Cape Peninsula University of Technology, Cape Town, South Africa.

In order to initiate further dialogue, this study argues and proposes that student learning can be enhanced through using a *found object* as catalyst to ignite creative expression and as a result positively contribute to the sustainability agenda. Typically the study could also propose through means of arguments in literature that creative practical activities structured around *found objects* and *design thinking* will allow students to adopt a deep approach to learning.

These educational arguments will exceed the objectives of this mini-thesis. They are, nevertheless, considered a worthwhile theme for further research or a doctoral thesis.

KEYWORDS

- Decay
- Design Education
- Design Thinking
- Documenting
- Found-objects
- Lived experience
- Phenomenology
- Sustainability

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Terms / Acronyms / Abbreviations	Definitions / Explanations
Action research	Action research is also referred to as participatory research and action learning. Action research is simply "learning by doing" (O'Brien, 2001:2).
Aesthetics	Concerned with the pleasing appearance (Soanes & Stevenson (eds), 2006:21).
Artistic journey	A path taken from the first engagement with *found objects* and what has been gained as an artist at the end of the project.
Assemblages	A work of art made by grouping together found or unrelated objects (Soanes & Stevenson (eds), 2006:78).
Auto-ethnography	A process of self-reflection and writing that explores the researcher's personal experiences (Ellis, Adams & Bochner, 2011).
Cognitive arousal	A process of acquiring knowledge through thought, experience and the senses.
CPUT	Cape Peninsula University of Technology, Cape Town, South Africa.
Decay	To undergo change to a different form or state; to decompose; to diminish in quality (Soanes & Stevenson (eds), 2006:370).
Deductive reasoning	Also called deductive logic, is dependent on its argument. Therefore, a false argument can possibly

lead to a false result, and an inconclusive argument will also yield a result (Martin, 2009:2).

Design thinking

Design thinking refers to the methods and processes involved in designers' thinking and work. It investigates problems; acquires information; collects evidence stemming from observation; experiments; analysing knowledge and reflection (Cross, 2011:1).

Document

Matter that provides information or evidence in written, photographic or other form (Soanes & Stevenson (eds), 2006:421).

Ecology of Knowledge

Conceptions of the world rooted in basic cognitive structures (Davies and Meskimmon (eds), 2003:14).

Epistemology

Philosophy of knowledge: what we know and how we come to know (Trochim, 2000, in Krauss, 2005).

Focusing

A method and technique developed by Eugene Gendlin to improve therapy not just from cognitive concepts and ideas but more often than not the client's ability to speak from a certain bodily-felt experience. A connection that is felt naturally within ones body (Friedman, 2007:xii).

Found object

The term *found object* refers to an existing object or artifact that is picked up or found, and, generally, not bought or originally intended to be art, yet it is also believed to have certain value e.g., aesthetic, innovative and embodying memories for the finder (Camic, 2010:82).

FID

Faculty of Informatics and Design of CPUT, Cape Town, South Africa.

Garbage	Rubbish or waste, especially domestic refuse (Soanes & Stevenson (eds), 2006:586)
Immanence	Existing or operating in all parts of the universe or operating (Delmos, 1988:37).
Inductive reasoning	Also called inductive logic, which is the process of formulating general principles derived from the observation of detailed facts (Martin, 2009:2).
Journaling	Reflective journaling provides key insights that may be difficult to document. Reflective journaling also presents the opportunity to capture reflective insights, to record learning experiences and reflect observations and responses to situations (Phelps, 2005: 42).
Lived experience	Phenomenology and Lived Experience are closely interwoven; its purpose is to describe a phenomenon as lived experience. Assessing lived experience is to gain better understanding of the unique nature of each human situation (Pascal, Johnson, Dore & Trainor, 2010:175).
Objet trouve	French expression to describe an object found by an artist and displayed with no, or minimal, alteration as a work of art (Soanes & Stevenson (eds), 2006:985).
Ontology	Ontology is closely related to phenomenology and methodology, ontology involves the philosophy of reality (Krauss, 2005:758).

Phenomenography	A qualitative research method, it investigates the different ways in which people understand and think about something (Larsson & Holmström, 2007:55).
Phenomenology	Phenomenology reflects on one's lived experiences to establish how individuals are engaging in the world through various forms of intentionality. It does not accept any methods of study that ignore or abstract ways of knowing away from actual experience (Poulsen & Thøgersen, 2011:32).
Ready-made	Made to specifications or size (Soanes & Stevenson (eds), 2006:1196).
Reflective practice	To be able to reflect on a action, being engaged in a process of constant learning (Cross, 2011:22).
Rubbish	Waste material, refuse or litter or unimportant worthless material (Soanes & Stevenson (eds), 2006:1256).
Sustainability	The capacity to endure, to manage human consumption and resources (Button, 2011:1).
Waste	Eliminated or discarded as no longer useful or required (Soanes & Stevenson (eds), 2006:1630).

CHAPTER ONE: WHAT THE STUDY IS ABOUT

1. Background to the research problem

1.1. Introduction

I always wanted to study Graphic Design but changed my mind after having completed my first year of undergraduate studies. I completed my studies as a printmaker majoring in etching. I then began to produce etchings that depicted narratives about death and rituals.

Burial rituals are intriguing to anthropologists, sociologists, social scientists and to artists like me. As an artist, I have often compared the burial preparations other ethnic groups' to those among the Coloured people. It seems that Coloured people have adopted some elements from the Western and some from African culture, integrating these elements into burial practices of their own. Because of my own history, culture and experiences, I have been influenced considerably by these cultures.

My visual repertoire as an artist, spanning over nine years, imitates my primary attraction or fascination with the rituals of death and burial practices. Almost all of my earlier works were inspired by the investigation of the material culture and imagery of the Basotho: their rites and ceremonies, and how they were influenced by Western tradition (Crampton, 2006:n.p).

My initial pre-occupation with the theme of death continues to reflect in images echoing the cycle of life and death. On numerous occasions, these works suggest decay, the *found object* going through the physical changes that occur with death. This responds to Borjesson (2006:4) who became fascinated with discarded objects and produced a range of artworks combining existing discarded forms in a new purposeful way.

As early as 2004, I also started to produce images that included discarded and banal *found objects*, suggesting deterioration and decay. In these works, which incorporate *found objects*, the formerly valuable item has become a metaphor for the status of death, but, at the same time, the object is gaining new life in the process (Crampton, 2006:n.p).

The main topic of this mini-thesis is to a explore the process of *design thinking* involved in the transformation of decaying *found objects* into artworks with a narrative of sustainability and life.

1.1.1. Spiritual aspect of creative process

Delmos (1988:37) argues that, "the individual mind is immanent in pathways and messages outside the body; and there is a larger Mind of which the individual mind is only a sub-system. This larger Mind is comparable to God and is perhaps what some people mean by 'God', but is still immanent in the total interconnected social system and planetary ecology." Since I am involved in a process of creation, I am part of the larger context and universe.

Davies and Meskimmon (eds), 2003:14) "recognises that thinking crucially happens not in an isolated human subject, but in conceptions of the world rooted in basic cognitive structures". Likewise, an ecology of knowledge would not function without an aesthetic dimension. The work of art is a material example of my reflective practice. Art is a form of practice that reflects on itself. As "an elementary precondition of sensory awareness", aesthetics is indispensible to an intellectual ecology (ibid.). The process of thinking makes essential links between mind, body and the social and natural environment. Consequently, my artworks are evidence of my own artistic practice and ecology of knowledge.

Understanding the entire process of thinking described above is as if one were in a state of perceptual motion and as a result, one is constantly making and re-making meaning and creating continuous possibilities for change. Human cultural systems endure because we are always exposed to change. A constant state of modification occurs and therefore individuals are tolerant to change (Davies & Meskimmon (eds), 2003:81).

Davies and Meskimmon (eds), 2003:10) maintain that thinking is not automatically spontaneous; especially thinking that occurs within disciplines does not usually reflect on itself or the wider world. A discipline can easily decline into technical formalism. The discipline presumes how its objects make sense because it has already decided what is meaningful.

Reflection explores the relationship between knowledge and the reality it is meant to explain. It is the experience of what it is like to be conscious and it dwells on the foundation of sense and the production of meaning. The ecology of knowledge begins with one's thinking reflecting upon itself.

Being in a constant state of reflection as an artist, I am always thinking about what has been before and what changes could be made. My ecology of knowledge, as Davies and Meskimmon (eds), 2003:10) poses, also begins with thinking reflectively upon itself. I am continuously in a dynamic process of standing in reality, reflecting, and creating novel ways to express old realities in an innovative artistic manner. I thus want to transform existing discarded forms in a new purposeful way.

The ecology of knowledge is essential and, consequently, an intellectual necessity to reflect, explore and express oneself. All things considered, thinking cannot discredit itself, as Kant (1786 cited in Davies and Meskimmon (eds), 2003:10) maintains in his essay 'What is orientation of thinking?". Kant argues that thinking must look after itself when it predominantly explores the virtual supra-sensual territories beyond experience and intellection. He concludes that the mind has its own sense of direction just as a person has primary orientation in a landscape or in a darkened room by means of physical location Davies and Meskimmon (eds), 2003:14).

Because I am exploring territories beyond experience and understanding, I concur with Kant that the mind has its own sense of direction as the artist decides and predetermines what is meaningful. Consequently, I do not share Davies's and Meskimmon's viewpoint that a discipline presumes and already decides what is meaningful.

It is clear that there is a spiritual aspect to my creative process; however, this spiritual aspect is of minor importance in this study. It is, therefore, stressed that my focus is to transform redundant items to gain for them a second life, extending their lifespan into a work of art, which gives it an aesthetic value.

1.2. Background to the research

Albert Einstein's quote and thoughts on change resonates with my thinking: "The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking" (Caldwell, 2013).

Aguirre (2010:7) states that design for repurposing introduces a new approach, namely, to include in product design the notion which strives to prolong the durability of products by intending to design features or details that aids repurposing. Summing up Einstein's thinking 'process', repurposing allows for the transformation of products or sections of a product, to gain a second purpose after their first has expired. In my case, it would mean that I could make use of a discarded polishing brush and transform it into an artwork (**Figure** 1.1.).

Figure 1.1. Wooden Brush Series: Penny George, 2006.

Repurposing places emphasis on the desire for flexibility and increases awareness of our limited resources. This applies to both *found objects* that are given a new utilitarian purpose as well as those transformed into works of art. Sometimes the latter transformation presents us with new and unexpected benefits (Brownell, 2008:8).

Repurposing is closely related to reuse, meaning "to use an item more than once". Reusing products is done on assumption that they still have life, and could arguably save time, money, energy and resources. The assumption is intensified because an object is passed along with little or no life, and used again for the same function, sometimes without undergoing any transformation (Aguirre, 2010:8).

However, it must be noted that a recyclable material can be used in numerous other forms as well (Shedroff, 2009:54). Most often recyclable material is considered reusable only when it is ruined or deemed less valuable, because some aspects in its quality have vanished.

Shedroff (2009:54) affirms that an up-cycled material is one that can be reused with the same material characteristics; it can also be reclaimed and improved to have better characteristics than the original material.

Like Aguirre, I will be repurposing and reusing redundant items to gain for them a second life or allow them to be reborn in order to extend their lifespan (Aguirre, 2010:38). On the other hand, as Brownwell (2010:9) reflects, the purpose of using these redundant items may also lead me to new and unexpected outcomes.

2. Statement of research problem

There is a growing awareness around the role and function of discarded *found objects* and how they can be given a new life and thus contribute to sustainability. Living in a society which has brought about such serious depletion of materials, the focus on creativity in utilising discarded objects, giving them new life and meaning, and thus creating a narrative of sustainability is now paramount.

2.1. The purpose of the study

The purpose of this study is to explore the process of *design thinking* involved in the transformation of decaying *found objects* into artworks with a narrative of sustainability and life. I endeavour to document my process of *design thinking* by recording the physical transformation of decayed *found objects* into a work of art and simultaneously reflecting upon the narrative of sustainability embedded in the artifact and which directs the process of transformation.

The aims are, therefore, to explore decaying *found objects*, to create artworks with a narrative of sustainability and life, and to apply and explain when a method of *design thinking* is applied, as reflected in Figure 1.2.

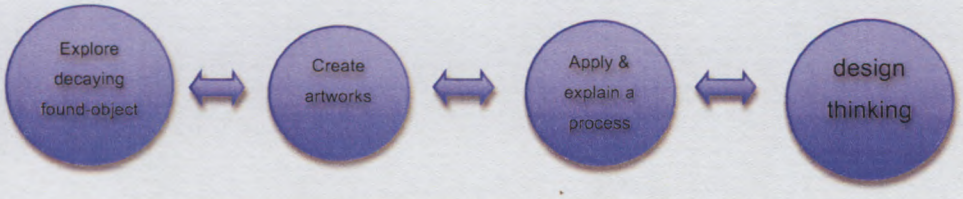


Figure 1.2. The purpose of the study: Author's construct, 2012.

The primary focus of this study is practice-based research which is a unique exploration undertaken to gain new knowledge by means of practice and the outcomes of that practice (Candy, 2006:1). The nature of this research is also practice driven (Candy, 2006:2), and as a result, the creative exploration and how I transform decaying *found objects*, is the foundation of the contribution to new knowledge (Candy, 2006:3). Similarly, Sullivan (1951, xxi) confirms that art practice as an inquiry in the visual arts of the imaginative and intellectual work undertaken by an artist, is a form a research.

3. Research question, sub-questions and objectives

Research problem	Even though objects are discarded, could they have some potential life that can be rekindled into a new and sustainable life?	
Research question	What specific features can be identified in a decayed object that triggers the process of *design thinking* and which can transform the object into an artwork with new life and a message of sustainability?	
Research sub-questions	**Research method(s)**	**Objectives / Aims**
Why is it necessary to create a narrative of sustainability in a deteriorating environment, and why is the decaying object being considered worthy of a new life through a process of *design thinking*?	Reflective journaling provides key insights that may be difficult to document. Reflective journaling also presents the opportunity to capture reflective insights, to record learning experiences and reflect upon observations and responses to situations (Phelps, 2005: 42).	My journal will be used to explore and analyse ways of thinking to create a narrative of sustainability in the deteriorating environment, and to determine why the decaying object is considered deserving of a new life which is not utilitarian or functional but aesthetic comment.
How can an object of decay carry a narrative of conscious awareness when a method of *design thinking* is applied around sustainable life and social responsibility?	Lived Experience	Identifying an object of decay to collect and to create a narrative around sustainable life. By using the lived experience method I will investigate and explore the unique nature of each human situation.
How can the application of *design thinking* and Fine Art further enhance the understanding issues of sustainability through narratives of decay and life that is socially responsible?	Literature analysis Practical art exhibition	To determine how Fine Art can further enhance the understanding of issues of sustainability through narratives of decay and life and present my findings.

Table 1.1. Research questions, sub-questions and objectives: Author's construct, 2012.

4. Delimitation of the research

In this study the disciplines of Fine Art and modern *design thinking* are both prominent and part of the argument for recycling and redesigning. Although both these subjects are of major importance in this study, the emphasis will be the process of *design thinking*, as Design is the discipline in which this study is registered.

The focus of this study is delimited to the use of art to create awareness around repurposing *found objects*. The aim is not to provide a physical utility product but rather to explore ways in which art can be used to present an ethos of 'redesigning'. By focusing on the process of using discarded 'junk' for which people no longer see a purpose, this study endeavours to change the mindset of people regarding the functions and outcomes of *design thinking*. It is, therefore, stressed that this study discusses only the redesign of a *found object* into a work of art which gives it an aesthetic value.

The study does not use theories and models which are not art-related, such as the systems theory, to mention but one. Gascoygne's (1939) theory was used to validate psychological processes when I transform a discarded object to a valued aesthetic artifact. A typical theory and model which was considered for the study is grounded theory. It was, however, decided that this methodology would exceed the objectives of a mini-thesis. It is, however, considered as an appropriate tool should this study be taken further for either research or a doctoral thesis.

This study presents an application *design thinking* processes which would result in the transformation of a *found object* of decay into an artwork with a narrative of sustainability and life. The study, furthermore, does not endeavour to demystify and unravel the process of *design thinking* as a subject or theory, or even a model, but will portray the artistic journey, extensively, as been documented in the journaling and lived experience of the artist (or designer). It therefore does not attempt to define the inter-disciplinary subject field of *design thinking*, but merely to use guidelines from existing literature in order to understand and document the process of how an object of decay is transformed into an artwork carrying a message of sustainable life and renewal.

The research is in the form of a mini-thesis (which constitutes 50% of the total mark) complemented by an exhibition, possibly a travelling exhibition (i.e. a body of practical work will be completed from *found objects*). This accounts for the remaining 50% of the total mark.

4.1. Basic assumptions

In connection with the contribution of the research to the body of knowledge about *design thinking*, the following assumptions are being formulated:

- The first assumption is that the chosen decayed object can gain new life.
- The second assumption is that the process of seeking a discarded *found object* can be explored and identified by possibly reflecting on psychological mechanisms such as motivation, cognitive arousal, and emotion.
- The third assumption is that I am able to apply a *design thinking* process and method to a *found object* through reusing and redesigning.

5. Significance of the research

This research is relevant and significant in view of the fact that research into *design thinking* is at a nascent stage. The aim is, therefore, to document my journey by means of formulas and processes of *design thinking*.

This study attempts to place renewed emphasis on sustainability and social responsibility. Heath Nash (2012), one of South Africa's young prolific designers, is an example of someone who creates artworks from refuse which he refers to as 'rubbish'. He uses 'other people's rubbish', especially domestic refuse, such as plastic bottles, creates various shapes from these and turns them into light-fixtures.

In contrast to Nash (2012) who uses garbage which is rubbish or waste, especially domestic refuse (Soanes & Stevenson (eds), 2006:586) to create objects with a utilitarian purpose I will be using waste material that is eliminated or discarded as no longer useful or required (Soanes & Stevenson (eds), 2006:1630) to produce artworks. Nash's message is two-fold: he has created a successful sustainable business, and he created awareness of the usage of refuse.

The fact that Cape Town, South Africa, has been selected to be the World Design Capital in 2014 also makes this study urgent. Cape Town, as World Design Capital 2014, will be accountable for delivering on the local population's needs, guaranteeing this city's successful position with the World Design Capital 2014 vision.

The city committed itself to transforming lives by design, restore community cohesion, reconcile communities through infrastructural development, and repositioning the city for the knowledge economy around sustainability (WDC2014, 2012).

Certainly one of the most pressing design challenges is the crisis around collecting and removing refuse in the townships. The intention is to co-design a workable solution with the community, for the community, and by the community taking challenges around refuse into account. In this study a conscious effect will be made to encourage communities to become conscious of consumption and refuse collection (WDC2014, 2012). This design challenge relates to my work, as my artwork could encourage other designers and artists to use discarded objects which will bring about awareness around sustainability.

The theme "Live Design, Transform Life" focuses strongly on socially conscious design, and my study will contribute to social responsibility.

The WDC 2014 Board Selection Committee Chair, Mr Luyanda Mpahlwa, articulates: "Part of why Cape Town won the World Design Capital 2014 bid is because we demonstrated collaboration between government, the design community, business leaders, academics and the broader public. Now we have been given an opportunity to put this into practice. It's about bringing the benefits of the designation to communities, to practitioners and policymakers, and, proving that design can in fact be used for social good, to achieve an inclusive city. It's a big responsibility for any city. We need passionate, committed, partnership-minded Board members to help the World Design Capital 2014 implementation company – and Cape Town – to live up to this challenge" (WDC2014, 2012).

5.1. Expected outcomes, results and contributions of the research

The expected outcomes of this study are three-fold: firstly to create an awareness around sustainability by using discarded, banal objects and giving these objects new life through *design thinking*; secondly, to create an awareness around social responsibility towards resources; and thirdly, to contribute to projects and /or research to which engages dialogue through curricula development for advancing the sustainability agenda in a multi-disciplinary context in FID and CPUT.

The result will be that all artworks created for this study will incorporate *found objects* which places emphasis on sustainability and social responsibility.

A qualitative process of *design thinking*, as well as action research processes and practice-based research previously mentioned, will be documented which makes this study current because of the present re-curriculation efforts in the departments of FID.

Action research is also referred to as participatory research, action learning, and contextural action research to name a few. Simply articulated, action research is "learning by doing" (O'Brien, 2001:2), which is the primary motivation for the study.

A body of practical work will be completed for the exhibition. The collection of artwork will encompass a selection of artifacts including works completed during the past few years, including work of art on paper (etching and drawings) and new artworks produced from *found objects*. Artworks produced earlier will have to be loaned from the owners for the duration of the exhibition.

6. Outline of research document

This proposed study will be a study of the process of *design thinking* which would result in the transformation of a *found object* of decay into an artwork with a narrative of sustainability and life. It incorporates the concept of repurposing to create a work of art, by transforming a *found object* to gain a second purpose after its first has expired.

Evidently, designers, artists and researchers around the globe are already engaging with these ideas. My focus is to place renewed emphasis on sustainability and social responsibility. I will be using discarded material to produce artworks. Cape Town, winning city as World Design Capital 2014, will be accountable to provide on the local population's needs, as mentioned earlier one of the most pressing design challenges is the refuse collection and removal crisis in the townships.

The study undertakes to encourage communities to become conscious of consumption and refuse collection.

As for my methodology, I draw on a qualitative design paradigm that is driven by *embodied experience* and *phenomenological research*. Qualitative methodologies will be employed including the *reflective journal*, *lived experience* and a *process-orientated art* approach. The study is epistemologically situated within the interpretive paradigm since the study makes meaning of the phenomena as I interact with of the *found objects*. As stated earlier my ontological stance is that all chosen decayed objects should have a life. The interpretive paradigm makes reference to the Burrell and Morgan Research Framework (1979).

This study is structured into six chapters.

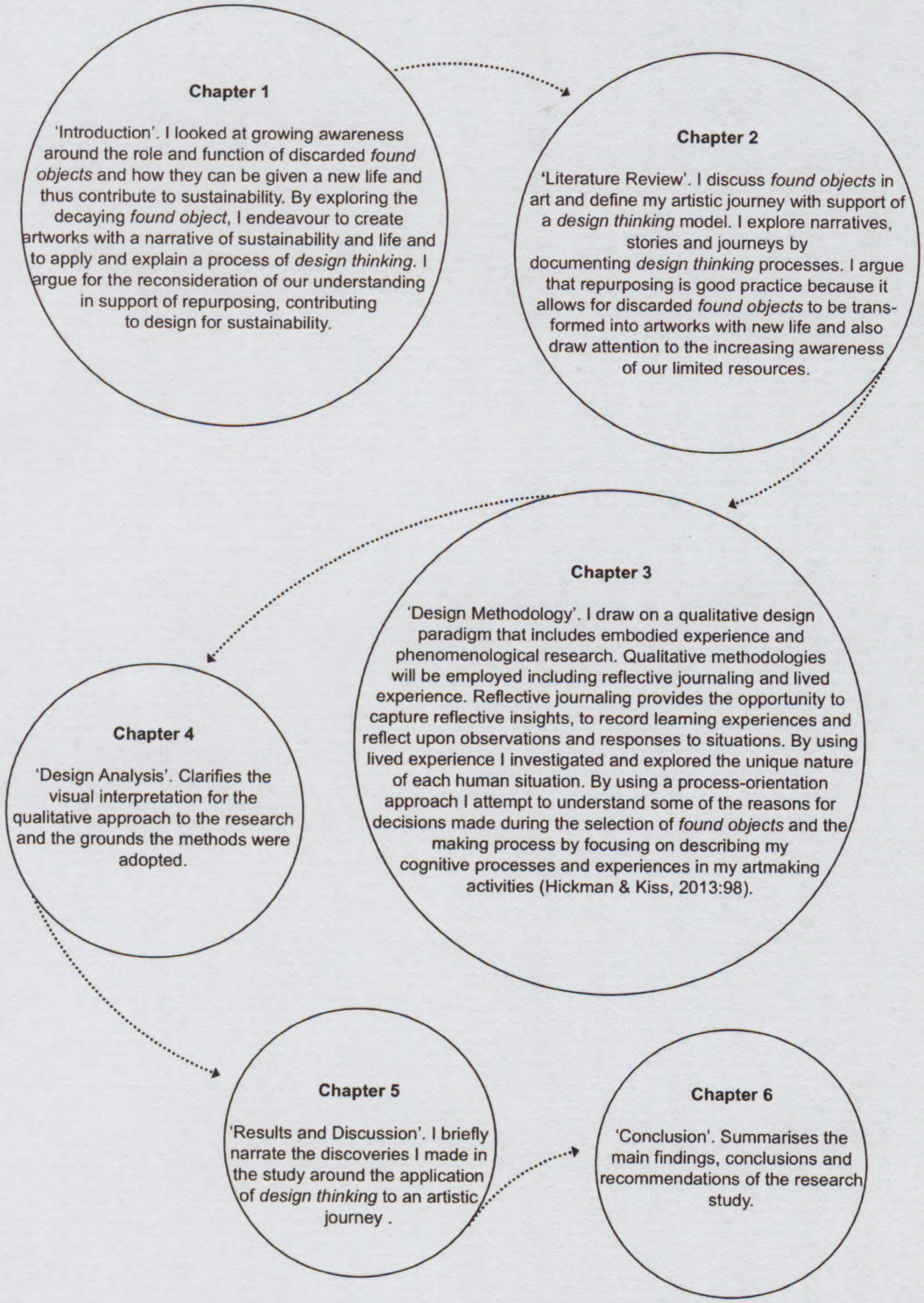


Figure 1.3. The structure of the mini-thesis: Author's construct, 2014.

7. Summary

The basis of this study is to explore the process of *design thinking* involved in the transformation of a *found object* of decay into an artwork with a narrative of sustainability and life and to create awareness of the role and function of decayed objects by reusing these to give them new life. The nature of this research is practice-based thus which will contribute to new knowledge.

In order to investigate this I draw on a qualitative design paradigm that include *embodied experience* and *phenomenological research*. Qualitative methodologies employed included the *reflective journal*, *lived experience* and a *process-orientation art* approach.

The study is epistemologically situated within the interpretive paradigm since the study make meaning of the phenomenon as I interact with *found objects*. My ontological stance is that all chosen decayed objects should have a life.

The study investigated my initial attraction to *found objects*, in addition to the decision-making process involved in how they are used after having been found. My process of seeking a discarded *found object* was explored and identified by possibly reflecting on Gascoygne's (1939) theory using psychological mechanisms such as motivation, cognitive arousal, and emotion. The inquiry in the visual arts, the things I do as an artist, will also be explored and inform the study.

As a result Gascoygne's (1939) theory could be helpful because it allows one to consider the psychological drivers in the artist which initiate him/her the creative process of an object from a discarded piece of item to a *found object* and on to becoming a valued aesthetic artifact. Reference will be made to artists, who use discarded *found objects* to create artworks in Chapter Two. My *found objects* created meanings through narratives and storytelling. My narratives, stories and journeys ultimately led me to tell a story about my research rather than present it in a case to be argued and proven.

Through this analysis the outcomes of this study are three-fold: firstly that an awareness of repurposing will be created by using discarded banal *found objects* and giving these objects new life when a method of *design thinking* is applied; *secondly* to create an awareness around sustainability and social responsibility, and, thirdly, to contribute to projects and/or research to stimulate dialogue through curricula development, in order to advance the sustainability agenda in a multi-disciplinary context in FID, CPUT.

CHAPTER TWO: REVIEW OF LITERATURE

2.1. Introduction

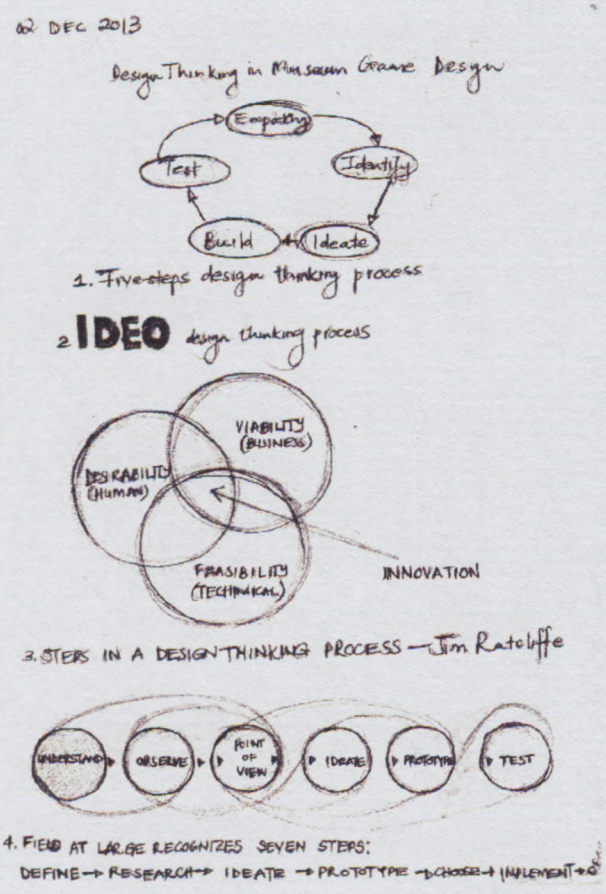


Figure 2.1. Drawing of Design Thinking Steps based on the IDEO model: Penny George, 2013.

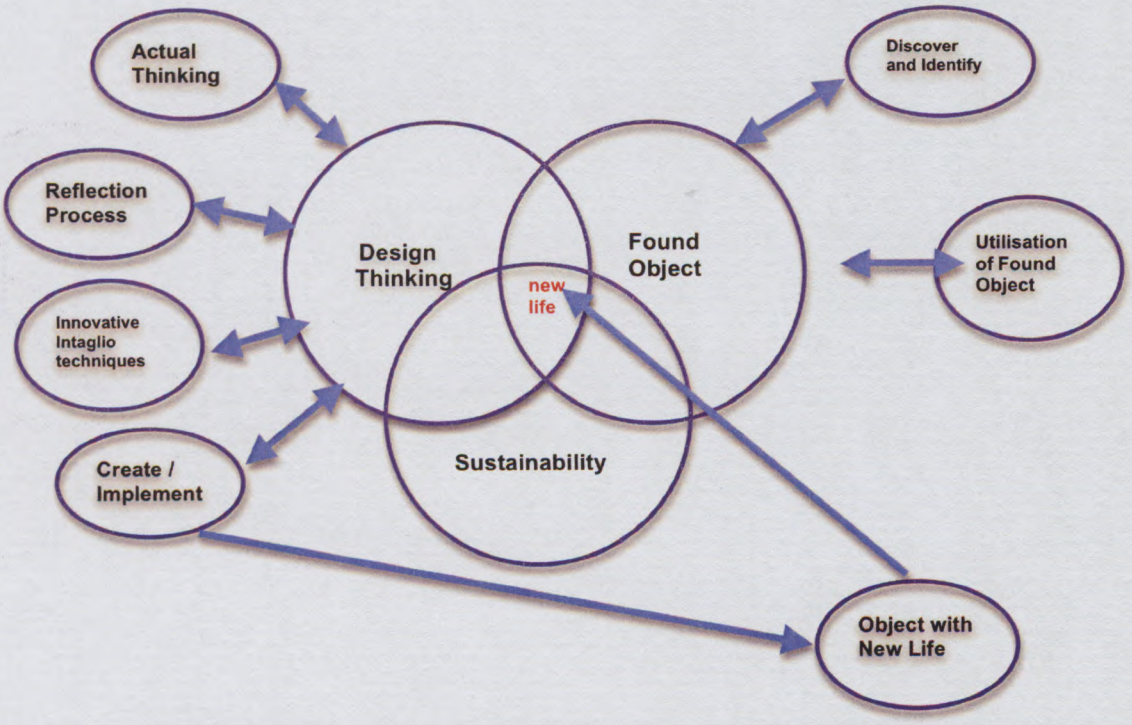


Figure 2.2. Model of Design Thinking Steps / processes based on the above representation of referenced authors' understanding of the Design Thinking Steps from various sources: Author's construct, 2013.

In this chapter I will attempt to draw on literature from various *design thinking*, art and psychological fields to consider the emotional, social and aesthetic factors involved in *found object* utilisation and transformation. Camic's (2010:81) data identified results that the discovery and the utilisation of *found object* involves processes, namely the interaction of aesthetic, cognitive, emotional, environmental and creative factors.

Many designers classify *design thinking* processes in different ways as visually portrayed (in Figure 2.1.). The above diagrammes indicate that *design thinking* processes all have certain steps in common (as shown in Figure 2.2.). David Kelly, founder of IDEO articulates that the field at large recognizes seven steps: Define ➔ Research ➔ Ideate ➔ Prototype ➔Choose ➔ Implement ➔ Design ➔ Learn (Laybourne, n.d. :2). I associate some of my *design thinking* processes with Tim Brown's steps: Inspiration ➔ Ideation ➔ Implementation ➔ Design, which is applied by a human-centered design methodology that taps into the abilities of a designer to integrate the needs of people, to make technology possible and achieve success (Brown, 2008:88).

My findings through reflective journaling and *design thinking* processes will provide key insights (as explored in Figure 2.1.) when a method of *design thinking* steps is applied (in Figure 2.2.) as well as processes identified by Camic (2010:81), mentioned above.

I will be exploring *design thinking* ways to create a narrative of sustainability in the deteriorating environment and to determine why the decaying object is being used to increase its value and giving it new life. My journal findings and *design thinking* processes will be discussed in Chapter Four.

Each of us gathers or collects items because it makes us happy. Gathering and collecting of objects for the purpose of preservation is a phenomenon that has been taking place for thousands of years. Collecting has become a persistent occurrence reflecting on many aspects of modern consumer culture (Belk, Wallendorf, Sherry & Holbrook, 1991:178). Our possessions, in my case the collection of decayed *found objects*, are also main contributors and reflects our identities.

To understand consumer behaviour one must comprehend what the meanings are that consumers attach to some collectable items (Belk, 1988:139). There are more obvious collectable items such as food, clothing, weapons and plants, but aesthetically pleasing objects that arouse curiosity stimulating the imagination have also been sought after (Camic, 2010:81). Many of these aesthetically pleasing *found objects* stimulated my imagination and informed my visual repertoire as an artist.

Individuals are stimulated in different ways. Social scientists, archaeologists and anthropologists such as Miller and Wilk (2005:404) acknowledge this in their paper '*Home Possessions: Material Culture Behind Closed Doors'*. Others have written about various aspects of material objects and what roles they have played within individual development and social life. In the paper '*Collecting for a consumer culture'* Belk et al (1991:178) offers a synopsis of Sigmund Freud not as a psychoanalyst but as collector.

After the death of his father in 1896, Freud began collecting artifacts of Chinese, Assyran, Egyptian, Greek and Roman antiquities, which he kept in his private practice studio. The collection ultimately amounted to approximately 2300 pieces. Gamwell (1988 cited in Belk et al, 1991:178) quotes Freud (1908) in saying: "The core of paranoia is the detachment of the libido from objects. A reverse course is taken by the collector who directs his surplus libido onto an inanimate object: a love of things."

John Dewey (1910:247 cited in Camic, 2010:81) wrote about the metaphysics of experience and stated that "*things* are what they are experienced to be and that every experience is about *some* thing". Dewey believed that a much of human experience is about things and people's interactions with them.

To place collecting in the context of this study, one must understand what collecting means to designers, artists and me. Collecting of things is not a new concept. Let me briefly showcase a few collectors, collecting similar or the same objects for various reasons.

Patti Gaal-Holmes has taken collection to another level. She has been collecting her used tea bags for the past 15 years after moving to England in June 1999. Her collection is composed of teabags or loose tea. The first 'English' teabag she collected was just placed casually onto a strip of paper to dry. She numbered the paper on which the teabag lay '#1', and decided at that point that she would collect her used teabags (Joffe-Walt, 2010).

It is speculated that she has about 32,000 tea bags (Figure 2.3.) and (Figure 2.4.), which she stores in old suitcases once they are dry. She collects only tea that she used herself or shared in a pot with someone. In this way the collection becomes a kind of record of personal consumption (ibid.).

Figure 2.3. Patti Gaal-Holmes collection of tea bags in COLORS online magazine, 2010.

Figure 2.4. Patti Gaal-Holmes collection of tea bags in COLORS online magazine, 2010.

Patti believes that these teabags are full of memories, some of which she writes down in notebooks, especially the ones shared in a pot with others. It has become a diary of consumption, in which she records of the cups of tea drunk (Figure 2.4.) – and these cups of tea are not necessarily associated with an occasion. The teabags or loose tea are taken to the studio and placed on strips of numbered paper (Figure 2.5.)

Figure 2.5. Patti Gaal-Holmes strips of numbered paper in COLORS online magazine, 2010.

Her collection can also be seen as an attempt to preserve or recall memory and the value it has to the sense of self. One comes away with a sense that events, which outline a lifetime, have been documented (Joffe-Walt, 2010).

In an interview for the publishers *'Jotta'*, she is quoted in saying, "I think that my tea project is linked to my interests/studies around identity...and this is very much a lived experience. I have no idea when, or if ever, it will end... but I think there may be a moment that I will realise that I have explored all that I wish to explore in relation to the collection and tea history. That moment hasn't come yet...and this really is an unrealised project as yet" (Jotta, n.d.).

Her work is informed by her cross-cultural background. Philosophical, theoretical and literary questions on the meaning of exile and 'home' underpin recent work, informed by Vilém Flusser, W.G. Sebald, Breyten Breytenbach and Walter Benjamin. Processes of thinking which connect theory and practice are integral to her methodological approaches and materiality forms an important part in directing the outcome of visual work (Papastergiadis, 2009).

Understandably her work is informed by the literary critic, Walter Benjamin. He lived his entire career with a particular kind of obsession, a man who preserved his correspondence, kept copies of manuscripts (his own and those written by friends), diaries, notebooks, drafts, drawings, outlines and other miscellany, and who offered unremitting reflections, theoretical and personal, on the significance of collecting (Isenberg, 2008).

Collector Lèa Ricorday has been a collector of plastic bags for a while now (Figure 2.6.). She speculates that she has collected about 500 printed and plain bags. Her artistic vision focuses on the society of consumption (Jotta, n.d.).

Figure 2.6. Lèa Ricorday's collection of plastic bags in COLORS online magazine, 2010.

Lèa believes plastic bags interacts with individuals through different elements specifically the graphics, the physical attributes, sound and the visible design features, such as the construction with a gusset or a double point collar (Figure 2.7.). The plastic bag has become a very important item of our cultural heritage and will fade out with time. The attraction to plastic bags is diverse; it could be the transparency, humorous slogans, logos and historical or social relevance. For Lèa they sum up all of these aspects (Jotta, n.d.).

Figure 2.7. Lèa Ricorday's collection of plastic bags in COLORS online magazine, 2010.

Plastic bags were produced in the 1950s and distributed extensively by the 1960s. Minnesota grocer, Walter H. Deubner, saw a need for customers to transport their purchases and invented the craft paper bag already in 1912. The French group Carrefour was the first to distribute free plastic bags with logos (Jotta, n.d.).

Froud, a South African artist, is one example of someone who creates artworks from various recycled materials. Online journalist de Freitas (2012) posted an article on Art.co.za which featured works exhibited at 2012 ROOFTOP Sculpture exhibition reflecting on the theme overconsumption.

Using discarded household items, mass-produced plastic hangers (Figure 2.8.) and electronic waste in their creations, the artist reflect on issues such as poverty, crime, instant gratification. The large-scale works reflect the scale and apathy of mass and private consumption in contemporary society.

In Froud's work we see the use of mass-produced plastic hangers creating large-scale sculptures of majestic animals (de Freitas, 2012). In Gordon Froud's show, *Plastic by Nature* (Figure 2.9.), he creates a constructed Legoland out of white plastic plates, cups, bowls, knives, forks, spoons and other disposables in his characteristic innovative use of *found objects* (ibid).

Figure 2.8. Gordon Froud's plastic hanger animal sculpture in art.co.za, 2012.

Figure 2.9. Gordon Froud's Legoland in art.co.za, 2012.

Jan van der Merwe is another example of a visual artist, who has been producing artworks in which he incorporates junk materials - *found objects* that he purchased, picked up or inherited (Fig 2.10). Preserving memories (van der Merwe, n.d.), together with the shapes and textures of these objects, induces the starting point of his art-making processes which is similar to Patti Gaal-Holmes teabag collection mentioned above, in which she preserves memory.

Figure 2.10. Jan van der Merwe's Luggage Trolly in art.co.za.

Willie Bester expresses his political views by incorporating paint, his own photographs and *found objects* he collects from the rubbish dumps in the township he lived in his artworks (Fig 2.11.). The conscious use of material and where the material is gathered plays an important role in his working process and simultaneously pays homage to his past (NLA Design and Visual Arts, 2013). Already previously mentioned in Chapter One, in this study a conscious effect will be made to encourage communities to become conscious of consumption and refuse collection which resonates deeply with the Bester's working process.

Figure 2.11. Willie Bester, Social Engineering: NLA Design and Visual Arts, 2013.

Miller and Wilk (2005:404) contend that individuals are stimulated in different ways, as demonstrated by these three collectors. This resonates with Dewey's beliefs that much of human experience is about things and people's interactions with them.

As pointed out previously, collecting is an extension of one's identity of the unique way each one of us collect certain items that we value, seek or stumble upon. This desire sums up Dewey's (1910) belief system and echoes why some artists collect certain items to create artworks. Arguably, the artists I made reference to who use discarded objects, consider that something valued can come from what is regarded as rubbish, creating an awareness around sustainability and social responsibility which is an outcome of the study.

2.2. The repurposing of found objects through an artistic journey of design thinking

2.2.1. The decayed found object

Rosenthal (2004:n.p.) quotes Duchamp's (1881-1968) famous statement: "I am interested in ideas, not merely in visual products". Rosenthal (2004:n.p.) states that Duchamp's most striking iconographic gesture, the 'ready-made', is without a doubt the most important influence on the creative processes of the 20th / 21st century. Duchamp did not perceive his work with ready-made objects as radical experiments then, partly because he considered paint to be an industrial made product, and consequently labeled a painting as 'assisted-ready-made' artifacts.

In the *Bicycle Wheel* (1913), the first known ready-made artwork, a work of art shifted Duchamp toward a creative process that was unreceptive to traditionalists. He decisively detached himself from traditional modes of painting to highlight the conceptual value of a work of art, drawing the viewer in through satire and visual puns rather than depending on the technical or aesthetic appeal.

The artist decided that the object become a work of art because the artist made a conscious decision. Margetts (2006:132) quotes Boontje as saying: "Using clever ideas done from nothing", which sums up Duchamp's attitude to the creative process. *Bicycle Wheel* is an artwork that rests upon an ordinary stool only consisting of a fork and the wheel of a common bicycle as portrayed (in Figure 2.12.).

Figure 2.12. Marcel Duchamp, Roue de bicyclette (Bicycle Wheel), 1913 / 1964 in Rosenthal (2004:n.p.).

Ordinary products manufactured in large volumes and the everyday character of these objects, are why Duchamp chose them (Rosenthal, 2004:n.p.). Expressing his use of satire, allows him to bring about awareness on the leading political and economic systems of his time.

The term *found object* refers to an existing object or artifact that is picked up or found, and, generally, not bought or originally intended to be art, yet it is also believed to have certain value e.g., aesthetic, innovation and memories to the finder (Camic, 2010:82).

An object that was once considered to be junk or rubbish becomes valuable during the locating and finding process. The redundant object is transformed into the valued *found object*, as I transformed a street brush into a valuable artwork, (Figure 2.13.).

Figure 2.13. Street Brush Series:
Penny George, 2006.

English poet and writer David Gascoygne (1936:170 cited in Camic, 2010:83) believes that the person who finds the object forms a new boundary around the object when it is removed from its environment and placed in a new one. This empowers the person in his / her endeavours to create a new reality for the object.

Gascoygne (1936:170) argued that the *found object* has a zero-value aesthetically and states that the value increases when the object is found and increases yet more when the object is placed in another context.

Gascoygne (1936:170) further states that the process of noticing an object would thus appear to engage psychological mechanisms such as motivation, cognitive arousal, and emotion to increase the value of the object from zero-value.

This study investigated the process of discovering new uses of discarded objects. Consequently, Gascoygne's theory proved to be valuable because I am in agreement with the concept of increasing a *found object* with zero-value into an artwork with value. The psychological mechanisms mentioned was also considered (Camic, 2010:83).

My move toward sustainable design has been informed by my personal approach to transforming a *found object* into an aesthetically pleasing artwork. Cradle-to-grave designs generate vast amounts of waste, which deepens the current environmental crisis. The concept of cradle-to-cradle is to eliminate waste. It signifies the understanding from the very beginning of a design process that waste does not exist whilst designing objects, according to McDonough and Braungart (2002 cited in Rossi, Charon, Wing and Ewell 2006:194). I argue for our understanding of design for sustainability as meaning the adoption of the cradle-to-cradle concept by transforming a *found object* with zero-value into a valued aesthetic object.

Gascoygne (1936) and Fairbairn (1938/1939) investigated new developments in the Western art world, specifically with regard to the use of *found objects* in art (Camic, 2010:83). Gascoygne (1936) advocated the possibility of finding something hidden in the *found object* through an experiential process of discovery, which would differ from object to object, depending on its context. Fairbairn (1938/1939), in a later article, *Prolegomena to a psychology of art*, elaborated upon this personal experience of the maker or artist elicited by the decayed *found object*. Dewey (1934) discussed the same experience in his groundbreaking book *Art as Experience*.

Anthropologist Schiffer (1999 cited in Camic, 2010:84) maintains that we live in a world of objects that play on us through direct, indirect and fantasised contact. He argues that objects can have as much impact on human growth as do social relations with other humans.

Similarly, Iverson (2004 as cited in Camic, 2010:85) was very interested in *found objects* and supports Schiffer's (1999) argument. In the same fashion this study will investigate the initial attraction to *found objects*, as well as the decision-making process involved in transforming the *found object*.

Specific materials in an object that one is drawn to are able to communicate aspects of the designer's or artists own identity. Consequently, the process of finding an object or a class of objects such as *found objects* made from specific materials may also be an indication of a specific symbolic identity.

In this study my process of seeking specific decaying *found objects* was explored and was identified by reflecting on Gascoygne's (1936:170) psychological mechanisms namely motivation, cognitive arousal and emotion.

2.2.1.1. Noticing and engagement

Camic (2010:89) believes that there are three identifiable phases in the process of discovering an object. The first phase he calls the *Seeking Phase.* Camic's data analysis reveals that respondents mentioned certain values to seeking an object by using responses such as thrill, instant surprise, joyous discovery, the adventure of looking for new treasures, the rewarding moment of discovery, marveling at what you have come across and finding something you did not know you wanted. These responses point out that emotional arousal, motivation, and cognitive engagement are aspects of this process.

Throughout the remainder of study I based my analyses and experiences on Gascoygne's theory of a *found object* with zero-value (Figure 2.14.) to becoming a valued aesthetic artifact as mentioned in Chapter One.

Figure 2.14. Single brush. Found object:
Penny George, 2013.

Other key motivators are the hunt and the thrill when discovering a *found object.* Some of Camic's (2010) respondents indicated, "the search for an object can sometimes be more enjoyable than the acquisition." Likewise, how and where the object is found can be as important as the object itself.

Already mentioned in the introduction, searching for an object or certain type of objects is a phenomenon called 'collecting'. It has been confirmed that collecting is a particular form of

consumer behaviour for instance obtaining, utilising and retaining the discarded item of which the latter I am interested in.

Brown (1999 cited in Belk et al., 1991:179), believes that collecting is a natural acquisition because its key focus is on gathering more of something. Belk (1988) considers our possessions as parts of ourselves and defines them as things we call ours. He examines the relationship between possessions and the sense of self and believes that collections, such as coins, pets, other people, body parts and objects are a part of the extended self (Belk, 1988:140).

My artworks may become a part of my extended self, because I have by design created artworks with new life, investing both energy and self in them (Belk, 1988:151).

My latest discovery was found in a tray in a box of discarded, never used objects in the Industrial Workshop in the Design Building (Figure 2.15.) and (Figure 2.16.). This motivated me to search or collect more of the same object, which connects to Gascoygne's theory mentioned above.

Figure 2.15. Single brush.
Found object:
Penny George, 2013.

Figure 2.16. Brushes.
Found objects:
Penny George, 2013.

In this instance, the hunt for the same object is a key motivator and the thrill of finding similar objects will allow me to consider the transformation of these specific unused discarded *found objects*, by giving them an aesthetic new life. Ironically, the *found objects* that appear to be new although discarded, were used.

Affirming Camic's assumption that transforming discarded *found objects* into aesthetically pleasing items play a very important role (Fig 2.17.).

Figure 2.17. Collection of brushes.
Found objects: Penny George, 2013.

The second phase Camic (2010:89) describes as enjoyment, excitement and stimulation in finding the unexpected. These sensory feelings take place when one discovers an object and consequently "there is a strong sense of satisfaction in finding something one did not know was wanted, the imagination is captured, curiosity is heightened, intrigue develops and creative possibilities are considered" (ibid.).

The place where the object is found allows one to become more connected to the locale and could remind one of past experiences and also contextualise the object's use. Willie Bester assembles his artworks from the rubbish dumps in which he lives and also comment on everyday life in the township of people in the Western Cape (NLA Design and Visual Arts, 2013), contextualising the use of the *found object* when giving it new life is an important element in his design process.

The third and final phase that Camic (2010:89) describes is **metamorphosis**. Finding the *found object* can "create a breach in predictability of what is expected," which breeds creative responses "that seeks to imagine a new use or a new life" for the object. Camic (2010) calls this an active, cognitive-emotional progression.

An object is seen to have the potential to be "transformed, transfigured and reconfigured," and becomes part of a creative engagement when the object is removed from its found place and placed in a different situation or environment (Camic, 2010:89).

In Camic's journal, *From Trashed to Treasured: A Grounded Theory Analysis of the Found Object,* his data analysis releaved that many of his participants reported the entire process as a kind of "pre-aesthetic" emotional arousal. This arousal is generated when an object is found and discovering the aesthetic qualities becomes apparent. This arousal could possibly also occur at the beginning of the search for the same object, which at that moment triggers a discovery.

Certain features in an object that I discover trigger in me the desire to transform the object with zero-value into a valued aesthetic item. Camic (2010:89) believes that triggers are sometimes one of the important aspects of discovering an object in a particular place. In this case, the *found object,* the polish brushes (in Figure 2.18.), was presented to me by a colleague in Bloemfontein.

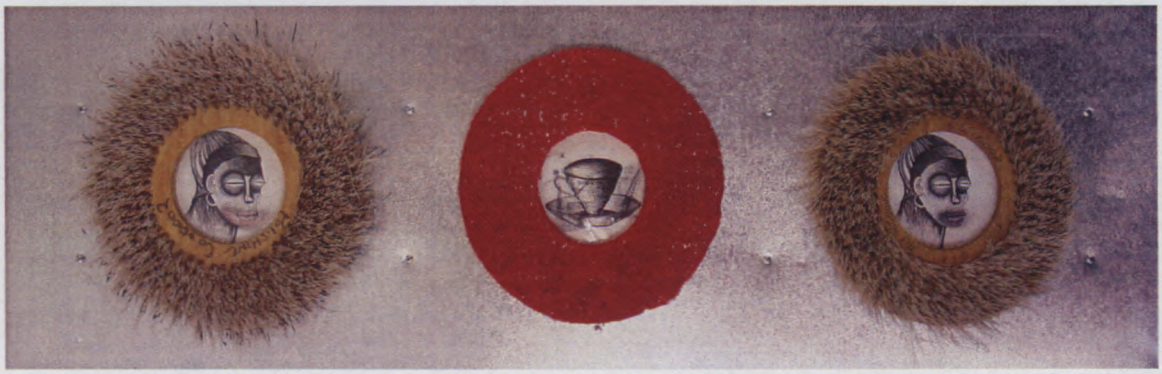


Figure 2.18. Tea Time. Etching & mixed media: Penny George, 2004.

On presentation the object triggered in me, as Camic (2010) describes it, the desire to consider its transformation from what it was and where it came from, to what it was going to become. I reflected on the future use of the object which I had already determined in my mind and then made a decision to use the *found object* instead of searching for another, similarly to Sarneel, a Dutch jewelry artist, who's working process relates to her thoughts. Den Besten (2010) quotes her as saying "I never make sketches, I only take down notes: a word, a little scrawl. Most of the creative process happens at the workbench. Things blurb up in my head, like found objects in my mind".

This process as mentioned above could be recognised as a model of aesthetic findings that involve mechanisms such as cognitive and emotional arousal, as well as creative action at different points in time according to Camic (2010:89).

Leder, Belke, Oeberst, and Augustin (2004 cited in Camic, 2010:89) describe aspects of this same model and confirm that the process is "seen as an ongoing cognitive and affective evaluation and mastering at different levels" (Kuchinke, Trapp, Jacobs & Leder, 2009:156).

Arguably, artists and designers who make use of *found objects* transforming them by giving them new life, are stimulated by the object's physical and aesthetic properties. The hunt for the object, the place in which the object were found, its history, the personal meanings projected on the object by the finder, the material of which the object is made and the challenge of transforming it into a aesthetically pleasing item plays a very important role (Camic, 2010:98).

Reflecting on the various materials of which an object is manufactured and their effect on the decisions I take to re-use it is a way of directly engaging with its 'materiality'. Material relates to the physical matter that objects are made of. 'Materiality' as a concept has gained considerable currency in the last decade (Fisher & Shipton, 2010:33). Focusing on the materiality of things Miller (1998:7) insists we must instantly 'tackle' the different structure of objects and what they represent. In other words, the materiality of a specific chosen material presents various benefits that can inspire one to examine its material specific process, form, structure and to place it in one's own context in order, to create new ways of using the material (Schmid, Rümelin & Richter, 2013:97).

There has been a increased awareness of 'things' in the last twenty years (Digby, 2008:170). This growing cultural hostility towards things and the fascination with the experience of materiality disquietens Charlesworth (2012:52) as he considers it to be the cause of the increase in the digital image culture.

Today, the underlying tension pertaining to 'things' derives from the notion that our 'consumer culture' represents supposed evil and this indicates that objects arouse in one a blurred sense that they are in some way corrupt and politically incorrect. Charlesworth (2012:52) strongly believe that there are just too many 'things' in the world and consequently my study will prove that giving unwanted objects new life also offers them a rightful place in the world.

To the contrary, Miller (1998:9) regards his approach unique because one focuses on the object

that is being examined within a tradition to avoid any fixation with material form. By deliberating on the ordinary physical material qualities of the object one is able to unravel the slightest links with cultural lives and values that are objectified through these forms partially because of the specific features these objects possess.

2.2.1.2. Process art

The process-orientated approach through process art is a creative sentiment where the end product of *art* and *craft*, the *object d'art* is not the principal focus. This process is also used as a qualitative tool to discover the nature of the cognitive processes involved in one's art-making activities described in Chapter Four (Gatto, 2009:7). The process is related to the visible process of a *found object* or natural phenomenon.

Process art refers to the creation of art; gathering, sorting, collating, associating, patterning and moreover the initiation of actions and proceedings (Macleod, 2014).

Process art is concerned with the actual *doing* and how actions can be defined as an actual work of art, seeing the art as pure human expression and its relationship to everyday life (Lumley, 2004:13). Process art often entails an inherent motivation, rationale and intentionality. Therefore, it is viewed as a creative journey or process, rather than as a deliverable or end product (Macleod, 2014).

Arte Povera is a typical example of process art, where *found objects* or nature in itself is lauded as art and the artist then explores the objects further. Through engaging with objects creatively the artist makes visible a process that lives in the object (ibid.), to uncover the nature of the cognitive processes involved in art-making activities and describe how I interact with *found* objects to validate Gascoyne's theory (Gatto, 2009:7).

Arte Povera simply means 'poor art' but in this context it is referred to an Italian movement introduced by the Italian art critic and curator, Germano Celant, in 1967. Many artists followed the movement in the late 1960 to 1970 (Dewyer, 2008:2). The movement's signature exploration was the utilisaton of a wide range of unconventional throwaway materials and objects, materials that was used on an everyday basis (Figure 2.19.) and (Figure 2.20.) on the next page. The aim of the movement was to challenge and disrupt the values of the commercialised contemporary gallery system (Dewyer, 2008:2).

Figure 2.19. Giulio Paolini, Musical stands, 1970-1971 in (Dewyer, 2008:15)

Figure 2.20. Jannes Kounelis, Untitled, 1969 in (TATE, n.d.)

Through this personal process-orientated approach, I am not only hoping to reveal cognitive processes but also uncover personal changes pertaining to the choice of *found objects* which can lead to changes in how I utilise the objects and will be discussed in Chapter Four. Emphasis on storytelling – also critical in design thinking - could be highlighted during this process which will strengthen and add value to the research.

2.2.2. Narratives, stories and journeys

Susan Pearce (1992: 47 cited in Digby, 2008:174) articulates that "objects hang before the eyes of the imagination, continuously re-presenting ourselves to ourselves, and telling the stories of our lives in ways which would be impossible otherwise."

Josselson (2006:4) argues from a hermeneutic stance that narrative psychology recognises human experience as a form of text construction, assuming that humans construct their lives through an autobiographical process resembling a production of a story. Not only are the material facts considered in narrative research but also the meaningful shapes emerging from selected inner and outer experiences.

The narrative research approach allows psychology to view and analyze peoples lives as lived and has presented us with a range of intriguing, very detailed explanations of life as lived - insight that is suitable for the intricacies of human lives (Josselson, 2006:4). Using narrative analysis involving objects is a potential aid to making sense of the layers of storytelling about these collected objects. Digby (2006:183) illustrates how objects create meanings that are attached to them through storytelling, and how collections of objects play an important role in storytelling.

Connecting stories to *found objects* from earlier in our lives, as well as from most recently, one can also create stories of the newly discovered object and or the acquisition (Digby, 2008:175).

Miller (2001 cited in Camic, 2010:85) argues that the mystery of space is personalised by placing objects within that space as a way of establishing an identity. Camic (2010:85) cites Digby (2006) and agrees with him that the *found objects* contain stories but also act as biographical media, intimating some of their own history, as well as maintaining some semblances of their own former self, to negotiate new identities.

Kimbell (2009:3) cites and quotes Cross (2006:9): "Designers are immersed in this material culture, and draw upon it as their primary source of their thinking. Designers have the ability both to 'read' and 'write' in this culture; they understand what messages objects communicate, and they can create new objects which embody new messages."

Similarly to Digby (2006 cited in Camic, 2010:85), my *found objects* will create meanings through narratives and storytelling. My process of narrating and journeys will lead me to convey the story about my research rather than present it in a case to be argued and proven (Jacobs, 2008:95).

Adams, Hoelscher and Till (2001: xiii cited in Digby, 2008:171) eloquently states: "Since time and space are intangible and dauntingly infinite, we cling intellectually and emotionally to our experiences and memories of the material world that is so reassuringly solid," which links to Dewey's belief system referred to in section 2.1., that your personal experiences are about things and your interactions with them.

2.2.3. Defining the artistic journey

According to Julier (2006 cited in Kimbell, 2009:3), designers who are skilled in the arts are increasingly aware of the visual appearance and the use of *found objects*, it has become a vital element of their practice and process. The aesthetical appearance of my artwork matters while other designers will pay less attention to aesthetics.

Boontje (cited in Margetts, 2006:124) refers to his *found objects* as Rough-and-Ready, or 'the idea of beauty in everything'. Margetts quotes Boontje in saying, 'there is no need to buy a lot of expensive things, but you can give old things new life'. He believes that design needs to be pushed forward from a technology and materials point view. Similar to Boontje, Hesh also

chooses old material: cheap throwaways that have been consigned to society's junk heap, but uses throwaways which people also remember fondly from their childhood (Maclough, 1997).

Many of Bullin's creations have been guided by chance inspiration (McNulty, 2008:13). He does not necessarily start out with a specific design in mind. He usually finds an item that sparks his imagination and then he builds on this inspiration. I follow a similar process in which chance encounters with discarded objects inspire me.

Buthelezi does not use randomly collected waste, but specifically found materials (Seipel, 2009:13). He uses second-hand materials as well as recycling discarded everyday material. One may well consider him part of the modern recycling process as he transforms waste into art. Seipel (2009) points out that he reached a crucial stage in his development as a artist when he conceived of the experimental idea of melting plastic foils together by means of a customary heat gun. This creative process cannot be compared to 'Objet trouve', the 'assemblages' or the 'ready-made'. The wrapping is not just combined but melted together in a process the result of which resembles a painting.

Bourlanges (cited in Malarcher, 2012:22), is an artist who engages with aesthetic effects of chemical changes. Her '*Decay*' project explores how the use of an object over time can be mapped out and embedded in textiles. One of her recent works experiments required a person to wear a carbon fiber suit over a white blouse. Wearing the outfit secures gestures of the body whilst bending, stretching, scratching, and rubbing, documenting these gestures as imprints on the blouse. The imprints were translated on a fabric into a lace-like pattern of lines that flow.

The coherent personal artistic journeys articulated from the artists above, resonate with me deeply. My own artistic journey will not only reflect how I explore and transform my ideas over time, but this journey could also lead to new ideas and stories in Chapter Four.

2.2.4. Sustainability and future repurposing

The most agreed-upon or used definition of *sustainability* (Button, 2011:1) comes from the Brundtland Commission and dates back to 1987 in which it is described as *"development that meets the needs of the present without compromising the ability of the future generations to meet their own needs"*. The Oxford Dictionary associates sustainability with the quest to conserve an ecological balance by avoiding the depletion of natural resources (Soanes, Catherine & Stevenson (eds), 2009:1452). The word 'sustain' comes from the Latin word 'sustinere' (Borjesson, 2006:6), which means 'to hold up' and, as part of the concept of

sustainability, the dictionary meanings of 'nourish', 'keep up', 'prolong' appear to be the most appropriate. According to Borjesson (2006:6), Fry (2003) defines sustainability as actions to secure not only the future of the world but also our well-being, as well as that of future generations. This definition concurs with the most agreed-upon definition.

Marcuse (1998:105) challenges the widely accepted Brundtlands definition of sustainability. He strongly suggests that the purpose is 'meeting the needs' and what remains is, "making it sustainable", which is a clear constraint on what sustainability signifies. Others define sustainable development as passing on to the future the same resources as we have today, which in his view seem to reduce the broad goal entirely. He argues "no one who is interested in justice wants to sustain things as they are now. Sustainability plays very differently in the environmental sphere, where the whole point is simply that conditions as they are cannot be sustained and the only question is how rapidly to improve them. If the environmental status quo were sustainable, environmentalists would be without a cause".

Button (2011:1) confesses that in her 20-year career, as an architect who focuses on green building, she has come to believe that the building's occupants are the most important factor in the success of a green project. Everything is interconnected with one another, to design anything effectively is to consider what it connects to (Shedroff, 2009:2). In other words, everything that we, or any individual do or not do has an impact on achieving sustainability (Button, 2011:2).

It is a disconcerting fact that normal advertising is more trusted than green ads. Werbach, highly controversial environmentalist, mentioned in Chapter One, firmly believes that the term 'green' has become so problematic that he suggests using 'blue' instead (Arnold, 2009:1). He states that green-wash advertising is simply not sufficient and, in many instances, misleading. We are lead to believe that they are making a difference when they really are not. The green lobbyists have perfected the skill of making consumers and brands believe that 'green' is good when it is not. Arnold (2009:2) quotes him saying "the real challenge is to get people to change their view of the world, not use small token acts as a form of salvation". The individual for both Button and Arnold becomes the most influential factor in strengthening the impact of sustainability not specifically the green movement.

Sustainability is not well-defined, Shedroff (2009:xxi) argues. Many believe it is identical to the idea of *green* or *eco* considerations which take the environment into account. Some groups of environmentalists are more (or only) concerned with plants and animals than with people, and

ever so often the 'green' movement is portrayed as a way to promote old, flawed economics in order to ensure 'business as usual'. This could be a threat to our present way of life and could possibly result in society having less of everything. Balancing both large and small ecosystems in the environment, in a manner which provides for human needs on all levels and systems is the solution.

Sustainability is difficult to discuss because it means different things to different individuals and groups. Shedroff (2009:2) believes the only way to approach sustainability effectively is from a systems perspective. Because most things are connected to most other things, to design anything effectively is to consider what it connects to.

Cross (2011:75), too, informs us that innovative designers adopt the 'systems approach'. From his studies of innovators, Maccoby (1991 cited in Cross, 2011:75), expresses that, "the innovator has a systems mind, one that sees things in terms of how they relate to each other in producing a result, a new gestalt that to some degree changes the world."

Design is equally part of the problem and the solution to sustainability agendas (Shedroff, 2009:284). *Design thinking* processes are currently being employed in some South African educational fields, businesses and government policies / initiatives, to name but a few areas, to resolve sustainability issues which the country is currently facing.

One of the expected objectives and outcomes of this study is to create awareness around effective sustainability and social responsibility towards resources, through design.

Design for sustainability represents different things to different people. It is a fact that resources are being depleted, and the awareness that must design should be used as a tool to contribute to effective sustainability must be cultivated. Because I am creating artworks from discarded *found objects* I am hoping to strengthen the desire among designers and artists to use *found objects*. The public is also made aware that it is possible to rekindle discarded objects into esthetically pleasing artworks which I believe contributes to sustainability.

Ezio Manzini campaigner, in field of design for sustainability, states that we should "not (to) look to something new but look around to what exists" (Manzini, 2014). Because of his involvement for more than two decades in the design for sustainability arena he strongly believes that "design

for sustainability is the future, it's everything on every level. It is not a discipline". I concur with Manzini's beliefs which sum up both my thinking and working process.

The following topics will discuss sustainability agendas in detail.

2.2.4.1. Affective sustainability through design

Design can bring many benefits to several areas but these benefits are very difficult to measure, especially positive developments that are projected into the future. Designers are deemed powerless in their efforts to convince variety of groups, from government officials, to business leaders, to managers, to investors, to educators, and even to the individual, of the value that these design process can present solutions (Shedroff, 2009:22).

Sustainability debates and discussion are taking place not only in the professional realm but also in education about the need for educating at grassroots level (Heroux & Eason, 2012, n.p.).

Heroux and Eason (2012, n.p.) quotes Shriberg (2004) as saying,

> "Beyond simply adding a few classes on environmental issues and sustainability, a growing cadre of individuals and organizations concerned about the fate of our ecological and social structures are calling for a fundamental rethinking of how institutions of higher education educate students, conduct research, interact with local communities and ecosystems, operate campuses, and provide a model for other institutions. Institutions of higher education clearly have the ability to be leaders in sustainable thought and practice."

Let me briefly address the reservations expressed by Borjesson (2006:12). The designer considers affective sustainability and the real world to be generally ever-present where design is involved. Intentions to design or produce objects with a long life are expressed, frequently conveyed as lasting for generations or with staying power.

Both designers and manufacturing companies are still making these statements even though in the marketplace there are policies regarding design and manufacture which directly counteracts the longevity of product (Borjesson, 2006:12). Arguably both the designers and the manufacturing companies should implement responsible design if we want to strengthen the impact of sustainability as Arnold (2009) and Button (2011) are advocating.

Borjesson (2006:11) makes references to a few inspirational timeless objects. There are grounds to believe that many designers have good working ethics and the emphasis on the importance of responsible sustainable design in their endeavour to create for sustainability. Borjesson also refers to Papanek's book, '*Design for the real world: Human Ecology and Social Change*', which according to her was a revelation for many designers when it was published in 1971.

Papanek (1971) believed that responsible design is a significant strategy for coming to terms with a wasteful society. There are a few designers contradicting their professional social responsibility. Borjessen (2006:13) states the design of everyday objects is guided largely by fashion and style. These objects are, therefore, considered to be 'occasional' dissimilarly to buildings, which Lavelid (2003 cited in Borjessen, 2006:13), argues are designed to last for centuries.

Many objects have successfully lasted as long as buildings, numerous examples are to be found among furniture. However, a multitude of objects are produced daily, consequently one can assume that society can afford a general wasteful attitude towards product design.

Sustainable consumption does not generally mean consuming less. Charter, Peattie, Ottman and Polonsky (2002 cited in Fisher and Shipton, 2010:7) explain, it can mean consuming differently and in a smarter way. All aspects and priorities must be carefully considered and distinguished to design a sustainable environment.

Borjesson (2006:13) quotes Wood (1997:5) who maintained that it was more advisable "to quantify materiality rather than celebrating a temporal experience of Being", which Borjesson considers to be a discourse on sustainability. Our current economic system discourages the longevity in designed objects. Admittedly, if products were designed to last longer our wasteful consumer society would be at risk because our nation has become very dependent on consumer goods with a short life span.

Scanlan (2005 cited in Fisher and Shipton, 2010:3) comments that in current societal and cultural theory on certain aspects of consumption (as part of modern material culture) waste has not featured very strongly. Strasser (1999) and Roger (2005 cited in Fisher and Shipton, 2010:3) remarks that studies exist of the history of waste and the ways in which the consumer deals with unwanted things in his or her home (Gregson, Metcalfe & Crewe, 2007).

Hill (2003:44 cited in Borjesson, 2006:13) quotes her in saying, "it is not because we are committed to a particular economic ideology that we desire *the new* even if it is upon *the new* our market economy depends". From this quote one can therefore deduce that South Africans is obliged to desire new objects. It is human tendency and behaviour to state individuality through possessions and take the increasing production of ranges of objects and their diversity for granted. Designers constantly desire to express their talents by designing new user-friendly objects thus enticing people to desire the new.

Hill (2003:44) argues that newness becomes less of an attraction than the quest for 'care' and well-being. Hill is referring to 'care' as physical support. Seemingly well-being is a very basic human need and care addresses this need. When one feels comfortable with an object the desire to replace this object with a new one is reduced (Borjesson, 2006:13).

If we want to contribute to effective sustainability by possibly reducing the desire for the new through designing more timeless products, it might slow down the wheels in the economic system thus preventing a wasteful society. On the other hand it is very important to stress that effective sustainability should not hinder innovation (Borjesson, 2006:14).

Debatably to strengthen the impact of responsible sustainable design, designers, artists and manufacturers need to implement responsible design without limiting innovation, and the individual as well as the consumer at large must be made aware that artworks can be made from discarded objects.

Mentioned earlier the challenge is to educate at grass root level, encouraging students to understand that even though we face numerous challenges, doing something about these challenges on a smaller scale is the starting point to resolve bigger problems (Heroux & Eason, 2012).

Although many authors are committed to responsible sustainable design, we should in reality actually be asking, how an object of decay can carry a narrative of conscious awareness when a method of *design thinking* is applied around sustainable life and social responsibility? Efforts will be made to constitute a growing awareness around the role and function of discarded *found objects* by innovatively giving them a new life when a method of *design thinking* is applied and thus contribute to sustainability. As articulated by Borjessen (2006) I believe my process will not only contribute to sustainability but effective sustainability in a small way by increasing the desire for the rekindling of a new and sustainable life for the discarded object.

Researchers in other disciplinary areas supports the efforts being made by other designers but proposes that the quest for effective sustainability can be approached in different ways. They advocate that storytelling can be a useful method to advance change. Grace and Kaufman (2013) examined attitudes toward sustainable agriculture through storytelling to promote positive change.

The assumption of the study, *'Effecting Change through Storytelling'* mentioned above, is that a story-based approach will be more valuable than an information-based approach to promote positive change. Stories are rich in meaning, and are powerful tools for communicating desired behaviour. The richness found in narrative analysis involving *found objects* will also promote positive change in a South African context and society's attitude toward consumerism as I make sense of the layers of storytelling.

Digby (2006 cited in Camic, 2010:85), confirms the same sentiment, namely, that *found objects* contain stories which can be used as an effective sustainable method to encourage change but also act as biographical media, intimating some of their own history, as well as maintaining some semblances of their own former self, to negotiate new identities.

Norman (1990 and 1999 cited in Fisher and Shipton, 2010:4) considers the 'user-centred' principles in design as another sustainable system to improve new technologies which can easily integrate into their lives.

Designing in this way has proved to be very effective especially with information and communication technologies influencing the ways in which people work, interact and fill their leisure time.

Hirschman and Holbrook (1982); Holbrook (1996); Jordan (1997); Blythe, Overbeeke, Monk and Wright (2003); Desmet and Hekkert (2002) have all been cited in Fisher and Shipton (2010:4) for the acknowledgement of the emphasis on human experience which embraces both positive and negative feelings that one can have about and with objects.
Other designers have been criticizing the 'user-centred' design model as being an over-simple and mechanistic approach to people's experience with objects.

Richard Buchanan (2001:37 cited in Fisher and Shipton, 2010:4), highlights the importance of 'the central place of human beings' in design and concurs with the authors mentioned above,

which he believes corresponds with that of a 'human-centred' ethic which respects the variety of ways in which we live with and experience material things and how other influences, such as politics and shared culture affects those experiences concurring with Tim Brown's human-centered *design thinking* methodology mentioned in Chapter One.

Similar to Digby (2006) and Grace and Kaufman (2013), my *found objects* will create meanings through narratives and storytelling. The inherent narratives, stories and journeys inform my research rather than presenting them as a case to be argued and proven (Jacobs, 2008:95).

2.2.4.2. Future repurposing

Deliberating on things we regard as worthless assists us to appreciate what we value, and why. Transforming *found objects* from one state to another overlaps with the relationship of their usefulness and challenges their predictability (Fisher & Shipton, 2010:3). To place repurposing in the context of this study one must understand what repurposing means. It means to create a second or new life for an existing decayed object by transforming it into an artwork with a message of sustainability. Generations have been transforming objects in ways that give them new life. There is historical evidence that this phenomenon goes back at least as far as the Stone Age (Aguirre, 2010:8).

Aguirre is not the only designer that further remarks that repurposing of existing objects can also be noticed through the Post-war period in Germany when the population suffered a shortage of products or materials. During that time some objects experienced significant transformations.

The magazine 'Guter Rat fur Haus und Kleid (Good advice on housing and dress)' commenced immediately subsequent to the war. The magazine provided patterns the community could use from uniforms to make children's clothing (Brandes, Stich, and Wender 2009 cited in Aguirre, 2010:8).

Aguirre as many other designers has already proven that repurposing of objects takes place. Repurposing memories is a Combat Paper Project that transformed traumatic memories into therapeutic artworks (Roscoe, 2011:27). Combat Paper is made from military clothing worn during war. Veterans were requested to cut the fabric into small pieces, cook them, and place them in a Hollander beater which reduces them to paper pulp (Roscoe, 2011:24). The process of deconstructing a garment is quite physical and a slow action that can invoke memories and

suppressed thoughts attached to it. Combat Paper engages people in meaningful experience that helps heal the wounds of war (Roscoe, 2011:27).

Previously mentioned repurposing emphasises the desire for flexibility and increases awareness of our limited resources. This applies to both *found objects* that are given a new utilitarian purpose as well as those transformed into works of art. And sometimes the latter transformation presents us with new and unexpected benefits (Brownell, 2008:8).

However, what we actually should be asking is why is it necessary to create a narrative of sustainability in a deteriorating environment, and why is the decaying object being considered worthy of a new life through a process of *design thinking*? One can safely presume that repurposing presents several beneficial results that can be observed in multiple ways: it is energy saving; it is green and decreases pollution; it assists with decreasing the energy spent on industrial production; it is economically beneficial; it invokes memories and relieves space needed to dispose of waste. First and foremost, repurposing prevents the discarding of objects by extending their lifespan (Aguirre, 2010:8). Secondly, the employment of *design thinking* processes in my study could prove to be valid and sustainable benefits can positively be measured.

I am very fond of incorporating discarded glass (Figure 2.21.) to transform *found objects* into works of art. Because the properties of glass make it impermeable and fragile, it has a mysterious character (Fisher & Shipton, 2010:42,43).

Figure 2.21. Discarded glass: Penny George, 2013.

Glass also relates closely to its physical qualities which affect its use and re-use for what seem more like 'techno- functions' Fisher and Shipton (ibid.). Examining your material will help you understand how one can explore with the material and how it can be used. The transparent nature and surface of glass promotes interaction naturally as a result the quality of glass can present one with numerous possibilities in interaction design (Schmid, Rümelin & Richter, 2013:92).

The good qualities for example the smoothness, sheen and translucency are qualities I am attracted to and gives me the confidence to utilise glass. Some bad qualities are that glass is brittle and unforgiving. A craft element to the best design training is that I come to understand the properties of the material by using them (Fisher & Shipton, 2010:33).

On the other hand, assuming that the connotations of glass are fixed by its material properties is inaccurate. Physical attributes like form, colour, texture and so on can acquire meanings that have no necessary relationship to it as words do in a language (Fisher & Shipton, 2010:45).

In contrast to Fisher and Shipton (2010:45) the engraved glass (Figure 2.22.) features prominently and has a relationship with the artwork.

Figure 2.22. Wooden brush series – detail.
Found object with un-inked glass engraving: Penny George, 2006.

The glass engraving one could say becomes the microscope to reveal the etching amongst the decaying matter which in this case is the *found object* seen in this wooden brush.

Glass can be recycled many times. Consequently, it saves water, replenishes our natural resources and decrease waste landfill (Glass Recycling Company, 2014).

Utilising cullet representing recycled glass, converts tone-ton of cullet into one ton of bottles. Consol, the glass recycling company has contributed a vast amount of money for the revival and recycling of used glass. Consol is devoted as part of their social responsibility and community development programmes to guarantee that recycling of glass remains beneficial to both the environment and entrepreneurs throughout Southern Africa (Glass Recycling Company, 2014).

There are several reasons why glass recycling is beneficial: firstly it conserves our irreplaceable natural resources; secondly it saves energy through lower melting temperatures; thirdly it conserves landfill space. It also reduces litter, has educational value and is associated with creating employment and offers individuals an income. Lastly it generates financial support for various organisations in need. Statistics show that Consol Glass and Nampak Glass manufactures an estimated one million tons per annum of which only 40.1% of the glass containers manufactured in South Africa is recuperated and recycled (ibid.). Statistics could be improved, because additional glass can be recovered and recycled to contribute for the remainder of the 59.9%.

One of the expected outcomes of this study is to create an awareness around sustainability by using discarded, banal objects and giving these objects new life through *design thinking* processes thus also expanding longevity. The result will be that artworks created for this study will incorporate not only *found objects* but also discarded glass that further place emphasis on sustainability and social responsibility. Similarly like Consol, I demonstrate a strong commitment to ensure that recycling of glass remains beneficial to the environment, entrepreneurs, designers and artists by incorporating discarded glass in my artworks (ibid.).

Both Brownell (2010) and Borjesson (2006) are in agreement, to affectively contribute to sustainability that repurposing presents beneficial results and emphasis is placed on the objects longevity.

2.2.4.3. Design for repurposing

Many designers and artists recognize that repurposing is an effective sustainable practice. Using *found objects* transforming them into different things, thus giving them a new life, is different from recycling (Aguirre, 2010:11). Recycling is to alter waste into a material to be re-used or to return materials to their earlier state in a repeated process (Soanes & Stevenson (eds), 2009:1203).

People with no particular qualifications apply significant creativity in finding ways to reuse or repurpose objects; they come up with creative designs which demonstrate that items or objects can be rescued from a fate of becoming waste (Fisher & Shipton, 2010:viii). Modern designers and artists are increasingly adopting Duchamp's attitude to the creative process and continue to use the process of assemblage, transforming *found objects* no one else wants into objects of desire (Yablousky, 2010).

Fine artist Marcus Kenney from the Isle of Hope collects objects that occupy all his space in his home. Paskevich (2013) quotes Kenney as saying "I work intuitively. Very rarely do I start out with a specific idea in mind. I let things evolve and I never try to stay in one place too long." He further adds that "I'll find something without really thinking about how I'm going to use it ... then one day it hits me" (ibid.).

This is a phenomenon that many artists and myself can relate to. To this end, the Ohio-born artist Carol Williams still finds uses for the remnants, boards that have been washed up by the sea that she prefers to call "assembly" instead of the French-accented assemblage.

She prefers to keep things simple without tampering with the natural elements of reclaimed items. "I just see things that are old and weathered as beautiful, and I used to have to find everything by myself," she says (ibid.).

Karin Olah became an emerging Charleston artist as she refined a process she calls "fabric-collage-paintings," often employing "retired" fabrics to highlight her paintings (ibid.). These processes aid the artist in recalling a childhood devotion to quilting and everything else fabric in a distinctly phenomenological manner.

Garner uses *found objects* to make compelling and provocative statements about a grab bag of social and political issue (production and consumption, education, unemployment, and post-colonialism) thus enlivening dialogue. Unlike Duchamp's perennially stimulating *Fountain*, Garner's *found objects* are placed in an autonomous junkyard of a performance. *Future Tense*, a configuration of ready-mades, has a presence so much circumscribed by the artist's foregone conclusions that they have little chance of a future in our imaginings (Heuser, 2012).

Various artists, as well as myself, already recognise that repurposing is beneficial. However, the question is how Fine Art can further deepen the understanding of issues pertaining to sustainability through narratives of decay and life?

Design for repurposing is a design strategy that constantly evolves and it allows for the possibility to design a product or create a artwork with specific characteristics and details that facilitate repurposing (Aguirre, 2010:11).

In my art career I have identified and worked with decayed *found objects*, and for the prospects of this study I will be identifying decayed *found objects* to transform them into new artworks with new life thus promoting and facilitating repurposing in order to better understand issues of sustainability.

For me, the process of discovery of and engagement with the *found object* could be triggered by various phases as mentioned by (Camic, 2010:89) and was discussed fully in the previous section. Gascoygne's (1936:170) theory will later be investigated in Chapter Four, as it could be helpful because it allows one to consider the psychological components involved in the transformative process of an object from a discarded piece of *found object* to becoming a valued aesthetic item (Camic, 2010:83).

Naturally it is easier to repurpose some objects than others and sometimes the direction of repurposing is not identified beforehand (Aguirre, 2010:11). Aguirre articulates that, when one designs for repurposing, the direction of ultimate repurposing is not necessarily controlled, because sometimes the transformation presents us with new and unexpected benefits (Brownell, 2008:8).

I support Aguirre's notion that the direction of ultimate transformation is not always controlled; in my case it just feels right to use the object, and I act and think intuitively when I discover a *found object*. Retaining and transforming these redundant items may also lead me to new and unexpected outcomes, which will be elaborated upon in Chapter Four.

In this study design for repurposing aspires to deal with the large quantity of products we discard of on a daily basis (Brownell, 2008:8). The benefits of using these redundant items is to create an awareness around effective sustainability by giving these objects new life through design thinking narrative thus also expanding their longevity advocated by both Borjessen (2006) and Aguirre (2010).

My exhibition of used and unused found decayed objects imitates the cycle of life and death. Each individual work suggests decay, but during transformation, the *found object* gains new life.

My working process links with the above artist's ideas as reviewed and resonates with design for repurposing.

2.2.5. Design thinking and art thinking

In an interview with Saville, Shaunessy (the graphic designer) mentioned something valuable he learned ten years into his career: "that there is so much more to design than just designing" (Bierut, 2009:n.p). In his article, Bierut confirms that "designing is the most important thing, but it is not the only thing".

A designer's work is multi-faceted, one has to approach it with intelligence, enthusiasm, dedication and love. All of these elements together create the backdrop, that makes the resultant work valuable because it has been well executed (Bierut, 2009:n.p).

Cross (2011:75) argues that three key strategic aspects of *design thinking* emerge to be universal to designers, firstly "taking a broad 'systems approach' to the problem, rather than accepting narrow problem criteria; secondly 'framing' the problem in a distinctive and sometimes more personal way; and thirdly designing from 'first principles."

Design or *design thinking* has the capacity to stimulate innovation and alter organisations (Kimbell, 2009:2). Boontje cited in Margetts (2006:80) articulates that Weil, a Professor of Industrial Design, first made him aware of the fact that design could be a 'cultural activity'. He now believes that the boundaries between art, craft and design are unclear, they are embedded in theoretical dialogue.

Coles (2005:17) agrees with Boontje and confirms that the boundaries are unclear and for that reason many discussions have been taking place between art, design and craft. For art to survive it must preserve what is specific to it but also push beyond its boundaries and design is arguably an appropriate follower (Coles, 2005:18). Liikkanen (2010:18 cites Fallman, 2008) who has recently analysed the area of interaction design using a triangular model of design research. His model positions design, rotating around three points: design research or studies; art and exploration; and design practice. He argues that design research typically creates a path that always connects with the other two points in the model (Figure 2.23.) on the next page.

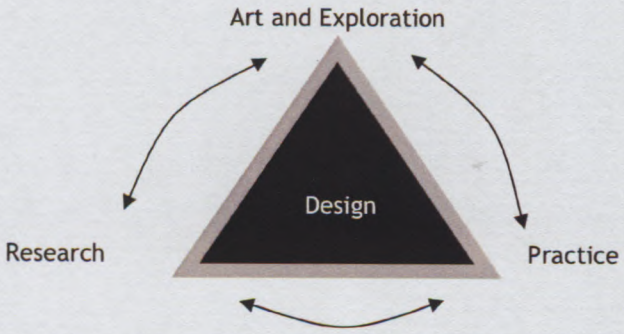


Figure 2.23. Triangular model that positions design research by Fallman (2008) showing how research can connect to other design activities (**Liikkanen**, 2010:18).

According to Fallman's (2008) design research model, scientific methods employed by design research, attempt to produce new knowledge about design:

- Firstly, this makes design **research** distinct from the **explorative** and practical dimensions of design.
- Secondly, explorative or **artistic** design seeks to provoke thoughts of critics and citizens at large by displaying new and radical ideas.
- Thirdly, it rises above the existing state of the art and explore possible futures.
- Fourthly, design *practice* aims to create and refine artifacts (**Liikkanen**, 2010:19).

This resonates completely with my own journey.

During the mid-19th century a clear division was made between the arts and technology. This split resulted in the latter being considered more technical and quantifiable namely '*hard*', the former more aesthetic and evaluative which Coles (2005:17) called '*soft*'. The split became irreversible toward the end of the 19th century and as a result the word "**design**" formed a link **between** the two.

Coles (2005:19) cites Flusser's writings, indicating that only later in the 20th century design became the link between art and technology to create **new** forms of culture. Consequently, design plays a crucial role in the spirit of the arts. Thinking about 'design-**art**' brings one to the realisation that all art is also designed, even if it endeavours to appear like something else. **Ultimately** for artists, it is simply a matter of emphasis; is one open to or reserved about **engaging** with design (Coles, 2005:19).

Consequently discussing the term 'design-art' implies transgression of boundaries. Because the boundaries between and design are unclear, I challenge the rules, whether consciously or subconsciously and engage in the boundaries between art and design to explore ways in which art can be used to present an ethos of 'redesigning', which is outlined in Chapter One of this mini-thesis as one of the delineations.

An undertone of this study is the dilemma encountered in attempting to establish clear delineations between art and design in both pedagogic and professional practice domains. Arguably this remains debatable and a complicated unresolved situation. As for debating the above subject, it will exceed the objectives of this mini-thesis but would recommend the subject for further research study.

Kroeter (2007:n.p.) and Kimbell (2009:2) believe that the term *design thinking* is confusing. Kroeter (2007:n.p.) is convinced that the use of the term 'design thinking' is incorrect and believes that the word 'critical' should be attached to the word 'thinking' resulting in 'critical thinking'. This is a term, he believes, which has a clear, well-defined and well-understood meaning. Design practitioners, consultants, magazines columnists to name but a few experts still argue over what the term *design thinking* means. These professionals are questioning like Kroeter (2007:n.p.), whether other terms, such as creativity, invention, innovation and systems thinking are more supportive (Kimbell, 2009:2).

The two dominant forms of logic are deductive and inductive reasoning. In an educational environment, students are often exposed to these two dominant forms. Deductive logic is the logic of what must be, given certain truths. Inductive logic starts with several specifics and uses them to justify making a general statement (Martin, 2009:2). American philosophers William James and John Dewey explored the limits of inductive and deductive reasoning (Cross, 2011:10).

The above mentioned American philosophers argued that one could gain understanding only through one's own experiences. Pragmatist Charles Sanders Pierce cited in Martin (2009:2) argued that ideas could not be proved deductively or inductively by utilising past data. He reasoned that, if novel ideas are not the result of deductive or inductive forms of logic, there ought to be a third important logic mode.

Pierce cited in Martin (2009:2) points out that new ideas come to mind by way of 'logical leaps of the mind', and that new ideas occur when one examines new data that do not match earlier model or models. To make sense of such observations Pierce called for an 'inference to the best explanation' (ibid.). He named this form of reasoning abductive logic.
Abduction suggests that something may be. The first true phase of reasoning, he deduced, was not to observe but to wonder.

Cross (2011:10) states that designers are perhaps right to call their thinking 'intuitive', meaning that it is not based upon conventional forms of logical inference. He believes the concept of 'intuition' is shorthand for what really happens in *design thinking*. Intuition is a concept that has been used by design researchers to explain the reasoning process of designers.

Although deduction and induction are reasoning tools of immense value, several design researchers agree with Pierce's notion of abductive logic. The acquisition of knowledge is not theoretical, purely a conceptual exercise, but one involving interaction with and inquiry into the world around them.

Academic arguments are rapidly progressing, confirming that there is a difference between design reasoning and the usual recognised forms of inductive and deductive reasoning, as pointed out by Pierce cited in (Martin, 2009:2) and supported by Cross (ibid.).

March (1976) celebrates design's rationale of reasoning as something unusual and distinct from logic and science. March points out that 'logic' is beneficial in conceptual forms and that science investigates existing forms. He argues that design has the potential to activate novel forms by using decaying objects that contain a narrative that stimulates an awareness of sustainability (Cross, 2011:27).

My lay person's understanding: not all design deals with repurposing decayed *found objects*, but design has the potential to follow different channels of creativity namely repurposing allowing for it to activate novel forms.

March (1976) further points out that deductive and inductive way of thinking apply logically to only systematic and evaluative type of activity. But the type of activity that is predominantly connected to design is that of synthesis, for which there is no universal accepted form of reasoning.

Debates about the term *design thinking* are ongoing and current, especially among practitioners, scholars and educators exploring design as an intellectual and practical resource (Kimbell, 2009:4). In Kimbell's (2009:2) paper '*Beyond design thinking*' she revisits the origins of *design thinking*, articulates the main problems with the term and introduces two concepts called 'design-as-practice' and 'designs-in-practice' which in her view could be a substitute for *design thinking* which debatably can solve various problems confronting researchers in design.

However, not only is *design thinking* a debatable term; currently there is an awareness that its meaning is threatened. Keynes (1969:99) considers *design thinking* to be emerging into several forms of thinking and intelligence.

Interpreting *design thinking* as a form of intelligence was based on the work of Gardner (1983 cited in Keynes, 1969:101). Gardner's (1983) view is that there is several autonomous human intellectual competences not just one form of intelligence. Initially he distinguished six forms of intelligence namely, "linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic and personal" but these six forms later evolved to better identify specific cognitive activities (ibid.). Consequently there is a much stronger case for *design thinking* 'as a form of intelligence'.

Considering *design thinking* 'as a form of intelligence' is useful and beneficial. It identifies and clarifies characteristics of the integrity of *design thinking* and it presents structure to grasp and facilitate design ability by means of design education. Viewing *design thinking* as a distinct form of intelligence does not essentially mean that some 'have it' and some do not. Design ability or intelligence is something that everyone has to some extent, and this ability may be stimulated in some candidates more than others. Any other innate abilities and forms of intelligence that is comparable to design intelligence can be taught and developed (Keynes, 1969:103). In my experience as an artist, design thinkers simply need appropriate development and experiences to unlock their own personal *design thinking* processes (Brown, 2008:87).

My intention is not to exhaust all insightful *design thinking* theorists but an application *design thinking* processes which would result in the transformation of a *found object* of decay into an artwork is emphasised as outlined in Chapter One. The approach to visual arts research is based on my experiences also stated in Chapter One, reflecting my own working processes as an artist (Sullivan, 1951:xxi). My process of reflective thinking provides me the opportunity to step back and think about my artistic activities (Hmelo, Kinzer & Secules, 1999:43).

From this viewpoint, art has become a form of knowledge and cognitive experiences which has manifested into my thinking process (Ambrožič & Vettese, 2013:68) discussed in Chapter Four and Five.

2.3. Summary

This chapter reviewed literature from various *design thinking*, art and psychological fields to consider the emotional and aesthetic factors involved in found object utilisation and transformation. The classification of *design thinking* processes has been investigated and has been found that the field at large recognises seven *design thinking* steps and all have certain elements in common.

Possessions, in my case the collection of decayed *found objects* are also a major contributor and reflection of my identity. To understand consumer behaviour one must comprehend why consumers attach meanings to certain collectable items.

Key topics discussed in this chapter are the noticing and engagement with decayed objects and sustainability. Gascoygne (1936:170) argued that the *found object* has a zero-value aesthetically and states that the value increases when the object is found and increases again when the object is placed in another context. I argue for our understanding of 'design for sustainability' as being the process of transforming a *found object* with zero-value into to a valued aesthetic item.

Sustainability is not well-defined, Shedroff (2009:xxi) argues and is difficult to discuss because it means different things to different individuals and groups. Debates and discussion are taking place not only in the professional realm but also in sustainability education. Effective sustainability is approached in different ways in other disciplinary areas, it is my belief that my process will not only contribute to sustainability but effective sustainability in a small way by increasing the desire for the discarded object to be rekindled into a new sustainable life.

To strengthen the impact of responsible sustainable design, designers, artists, manufacturers need to implement responsible design without limiting innovation and individuals and consumers at large must be made aware.

Other topics explored were repurposing and design for repurposing. It has been proven that repurposing of objects takes place. Modern designers and artists are increasingly adopting Duchamp's attitude to the creative process and continue to use the process of assemblage, transforming items no one else wants into objects of desire (Yablousky, 2010).

Debates about the term *'design thinking'* is still ongoing but it remains current, especially among practitioners, scholars and educators exploring design as an academic and a hands-on resource (Kimbell, 2009:4). But design or *design thinking* is still effective and has the ability to incite innovation and transforms one's thinking (Kimbell, 2009:2).

Fallman's (2008) triangular design research model proves to valuable, it affirms Coles and Boontje's idea that the boundaries between art and design can be explored (Liikkanen, 2010:19).

Discussions about artistic research or research-based are already employed by artists, as a result extending the boundaries of my research methodology (Ambrožič & Vettese, 2013:194). Already in the 1970s, Deleuze and Guattari tried to investigate and develop 'thinking in art', the nature of its investigations and research, and its relations with sciences, technologies, and philosophies using aspects of the image (Ambrožič & Vettese, 2013:195).

I am focusing on the phenomenology of (Merleau-Ponty, 1945;1962) and his view of the body. By reflecting on our lived experiences, through an embodied engagement in the world. Davies and Schon resonate with Merleau-Ponty's reasoning and recognises that thinking does not happen in isolation.

In Chapter Three Design and Methodology, I will draw on a qualitative design paradigm of Phenomenology. Qualitative methodologies will be employed which includes the *reflective journal*, *lived experience and a process-orientated approach*. Reflective *journaling* also presents the opportunity to capture reflective insights, to record learning experiences and reflect upon observations and responses to situations (Phelps, 2005: 42). By using *lived experience* I will investigate and explore the unique nature of each human situation (Pascal, et el., 2010:175). Employing a process-orientated art approach as a qualitative tool, I will be learning more about my own experiences, to uncover the nature of the cognitive processes involved in art-making activities and describe how I interact with *found* objects to validate Gascoyne's theory (Gatto, 2009:7).

CHAPTER THREE: RESEARCH METHODOLOGY AND DESIGN

3.1. Introduction

This chapter discusses the fundamental ideas that underpin the chosen epistemological point of reference and illustrates the research methodology employed to achieve the aims outlined in Chapter One of this mini-thesis. This study adopts qualitative methods and is uniquely explorative in its nature (Waters, 2013). A description of the methods used in collecting the required data will follow.

I am employing phenomenology to learn more about my experiences, to capture and describe how I interact with *found objects* (Gatto, 2009:7). Additionally I will make use of a process-orientation art approach as a participatory qualitative tool to gain more insights into the cognitive processes involved in art making. This process analysis will reveal significant facts as I interact with *found objects* in Chapter Four.

3.2. Research design

Epistemology is the study of knowledge stemming from the Greek word epistêmê. Simply, "epistemology is the philosophy of knowledge, what we know or how we come to know", Trochim (2000 cited in Krauss, 2005:758).

Ontology is the philosophical study of the nature of being and involves the philosophy of reality. Epistemology is closely related to ontology and methodology. Epistemology, then, is how we come to know that reality while methodology identifies the particular practices used to attain knowledge of it (ibid.).

Epistemology asks the following questions: What do we know? Why do we know what we know? Is what we know true, and what are the limits of knowledge (Krauss, 2005:759)? My ontological stance is that all chosen *found objects* should have a life. Epistemologically, seen in Figure 3.1 the study is situated within the interpretive paradigm since the study makes meaning of my experiences as I interact with *found objects* (Burrell & Morgan, 1979).

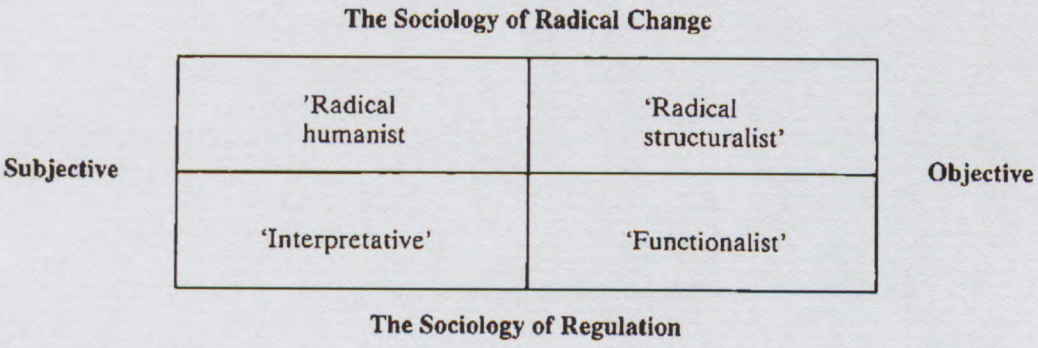


Figure 3.1. Four Paradigm model of Social Theory (Burrell and Morgan, 1979 in Hassard, 1991:276).

An 'interpretive' approach primarily highlights the subjective nature of the society and strive to understand it for most part in context of those being studied. Laing (1967:53 cited in Hopper and Powell, 1985:446) points out, "persons are distinguished from things in that persons experience the world whereas things behave in the world".

Roode (1993) concurs with Laing's (1967:53) quote, and in his view the interpretive paradigm is distinguished by a concern to understand the world as it is, to understand the fundamental nature of the social world at the level of subjective experience. The clarification is within the realm of individual perception and prejudices, from the standpoint of the participant in contrast to the observer of action.

Emphasis is placed on individual meaning and one's perceptions of 'reality' as opposed to some independent 'reality' that might exist outside one (Hopper & Powell, 1985:446).

The study will be infused with personal meaning as I attempt to understand better my attraction to certain decayed objects, possibly resulting in a process that taps into the wealth of my personal experience. Through my study I am hoping to achieve a greater understanding of this indefinite concept.

3.2.1. Phenomenology and aesthetic artworks

German philosopher Edmund Husserl (Husserl 2001; Pietersma, 2000; Sokolowski, 2000 cited in Poulsen and Thøgersen, 2011:32) is the founder the philosophical movement, Phenomenology. Pure phenomenology is essentially called a science and observation of 'phenomena', (Kersten, 1983:2). Poulsen and Thøgersen inform that phenomenology research is diverse because it has been developed in numerous directions and disciplines.

Mikel Dufrenne's view presented in *The Phenomenology of Aesthetic Experience* (1953), cited in Pedersen (2013:15), states that "the aesthetic object can itself be defined only as the correlate of aesthetic experience." This statement suggests that the aesthetic object and the experiencing subject are closely interrelated (Ibid.). According to Dufrenne, the aesthetic experience is a essential aspect of human existence which is valuable because it conveys truth. Camic, (2010:98) refers to noticing and engaging as an important aspect when a *found object* is transformed into a work of art perceived as an aesthetic object in Chapter Two.

However, Dufrenne in his writing, proposes a critical distinction between the work of art and an aesthetic object. The work of art is an aesthetic object only when it is perceived aesthetically but when a critic analyse a work of art, the experiential aspect of the work of art is other than aesthetic. In this study, it is the same: while the works were of an artistic nature it was not purely created for the sake of aesthetics but for insight on the artistic *journey* to comment on sustainability. Yet when the object is perceived as aesthetic it becomes a work or art (Casey, Casey, Anderson, Domingo & Jacobson, 1973).

The view of Casey (et al.,1973) of Dufrenne's, *The Phenomenology of Aesthetic Experience*, outlines three clear outcomes that encompasses Dufrenne's work: one, the aesthetic object, two, the perceiving object, and three, the reconciliation of subject and object. Since not all works of art are aesthetic objects, Dufrenne offers a phenomenology of aesthetic experience and focuses on the perspective of the spectator or public. Dufrenne's theory to aesthetic meaning is complex, but presents valuable merit and can be relevant for further interdisciplinary study (ibid.).

The tradition of philosophers influenced by Heidegger, Merleau-Ponty, and Sartre using one of the characteristic traits of the existential-phenomenological tradition in philosophy, engages seriously with the fine arts (Parry, 2011:9). The works of art is dependent of the understanding of the method and the undertaking of phenomenological inquiry. Phenomenology can present such

descriptions: since I am utilising my artwork, the description of the phenomena will reflect my lived experience (Parry, 2011:10).

Diverse thinkers, such as, Edmund Husserl, Martin Heidegger, Jean-Paul Sartre, and Maurice Merleau-Ponty have made enormous contributions to phenomenology. Parry (2011:31) boldly states, "of all philosophical approaches to aesthetics, it is phenomenology that best accounts for why art matters to us". From this statement, Parry, advocates that phenomenology uncovers the meaning of art and I concur with his idea.

For the purpose of this study my focus is on the phenomenology of Merleau-Ponty (1945; 1962) and his view of one's body. To Merleau-Ponty, phenomenology is the reflection on our lived experiences to ascertain how we align 'ourselves' in the in the world by means of impulsive pre-reflective or reflective actions as we naturally engage 'toward the world' of diverse forms of premeditated methods of positioning ourselves.

Merleau-Ponty's (1945 & 1962) key argument is that one is essentially connected to the world by means of embodiment. Merleau-Ponty's thinking is that one's reasoning and actions does not take place in isolation, but are situated in our experience of an embodied engagement with the world. In Chapter One, I refer to Davies and Meskimmon (eds), 2003:14) who concurs with Merleau-Ponty's reasoning and recognises that thinking does not happen in isolation. To identify how humans think we need to understand ourselves as bodies (Poulsen & Thøgersen, 2011:32).

Merleau-Ponty's phenomenological viewpoint also resonates with Schön's 'reflection in action' both agreeing with the notion that human ideas and thoughts do not work in isolation (ibid.). We are inhabited by a knowledge of our embodied "being-in-the-world", which always functions in our situated experiences of the world (Poulsen & Thøgersen, 2011:39). Barbour (2006:87) plainly articulates that embodiment is the relationship between body and mind. In order to provide evidence that serves as a record, the embodied engagement must be documented. The importance of documentation is a valuable aspect of this research by means of reflective journaling and photographing my artworks.

In this mini-thesis I explore what insights Merleau-Ponty and Schön can bring to light with reference to *design thinking* processes and documentation of the process (Poulsen & Thøgersen, 2011:33).

Supplementary to the documentation of *design thinking* processes, the study drew on a qualitative design paradigm (Figure 3.2.) that included *embodied experience*, *phenomenological research* and also employed qualitative methodologies (Figure 3.3.) of *reflective journaling, lived experience* and a *process-orientated art* approach.

3.2.1.1. Reflective journaling

Reflection provides scope not only for teaching, learning and assessment that is consistent with complexity-based education but it also provides a valid research methodology (Phelps, 2005:39). In my study, the written reflective journal a sound recording research approach. It proves to be practical, workable and a theoretically sound approach. Later case studies will illustrate this.

Phelps (2005:38) defines reflection, "as a mental process in which one thinks about things by going back over them". Schön established his theory of reflective practice in the 1980s, or 'how professionals think in action' (Cross, 2011:22).

Schön's study has been very influential because his analysis of what he observed in his personal reflective practice is finely tuned and has proved to give a "sense of worth" to many designers, design researchers and artists. The latter recognises the authenticity of his analysis because it has become part of the language of education. He established his theory of reflective practice as a contradiction to the prevailing application of scientific theory of constraint and technique to solve practical problems (Cross, 2011:23). The Theory of Constraints (TOC) is an management philosophy introduced by Goldratt in 1984 (Marton & Paulová, 2010:71). A constraint is something that stops a system from accomplishing more of its goal.

Unlike Goldratt (1984), Schön was searching for a new "epistemology of practice" that would explain for how well-informed practitioners are when they engage with their practice – in other words, a "kind of knowing". He argues that it is unlike the data found in textbooks (Cross, 2011:23). Phelps (2005:38) plainly articulates this stance and concur with Schön's theory that reflection causes one to engage in the challenge of identifying problems and irregularities and to be willing to confront one's personal morals, attitudes and beliefs.

The activity involving a written reflective journal, in which one captures one's own opinions and reflections on one's research work, has proved to become a valid qualitative process in research study. I perceive my journal to be a beneficial resource for final reporting (Yin, 2011:175).

I consider myself to be the key research instrument, introspection and perceptiveness of my own reactions or feelings about my study as a whole in my written reflective journal may later reveal unwanted biases. Issues can surface in my own organising system or personal preferences that I may not have been aware of before/during my design practices. By recognising them, it may lead to valuable ideas about how to move forward in later analyses (ibid.).

The reflective self-expression is "how you know" what your declarative self has presented. Using the reflective self in qualitative research methods is in my view quite complicated, because I am the major research instrument in collecting my data (Yin, 2011:270). Phenomenology is a reflective practice (Parry, 2011:33): it is not primarily a reflection on concepts but on experience as discussed in Chapter Four.

Epistemologically, this study is situated within the interpretive paradigm since the study makes meaning (in journaling as reflected in Figure 3.2.) of my experiences as I interact with *found objects* (Burrell and Morgan, 1979).

Journal documentary entry: June 2010

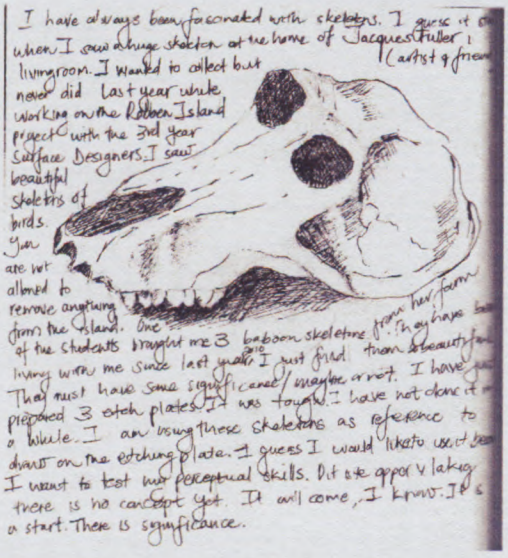


Figure 3.2. Reflective Journal entry: Penny George, 2010.

Presenting one's reflective self poses the need to discover several of my *lens's* characteristics as Yin (2011:270) refers to as research data. I am confident that my *lens* will reveal sufficient information to the audience the latter can make its own assessment.

Consequently I will provide insight into the *lens* by reflecting on the relationship between what I am reporting and the circumstances of the data collection. The circumstances - which represent one of Yin's (ibid.) lenses – include my inspiration, prior interests (Figure 3.2.) and observations that might support the topic of study. The methods will be discussed as a formal component in Chapter Four and Chapter Five.

3.2.1.2. Lived experience

Employing qualitative phenomenological research is to describe a "lived experience" of a phenomenon (Waters, 2013). A fundamental aspect of phenomenological methodology is to gain more knowledge about my lived experiences, to capture and describe how I interact with *found objects* (Gatto, 2009:7). van Manen (1997 cited in Laverty, 2003:4) states that phenomenology is essentially the study of lived experience.

This research is focused on exploring how I make meaning of my experience and transform experience into awareness around the role and function of discarded *found objects* and how they can be given a new life and thus contribute to sustainability. Penner and McClement (2008:93 cited in Gatto, 2009:7) notes: "a phenomenological analysis does not aim to explain or discover causes"...it is "to clarify the meanings of phenomena from lived experiences". This Supports Parry (2011:10 mentioned in section 3.2.1.) that the undertaking of phenomenological inquiry will expand my understanding of the phenomena and present valuable knowledge.

In view of the fact that the study is a qualitative analysis of narrative data, the methods to analyses the data will be unlike the conventional quantitative methods of research (Waters, 2013).

The data collection of lived phenomenological experience can be gathered in various ways to describe experiences. My intention is to describe my experiences by using reflective journaling together with my aesthetic expressions through art, and my ecology of knowledge supported by story telling. Already mentioned earlier, to achieve this, I have kept a personal journal in which to capture my feelings, reflections and knowledge regarding my research work. A final reflection on my artwork will follow in Chapter Five and will be discussed comprehensively including coverage of my reflexive self (Yin, 2011:175).

3.2.2. Qualitative design (paradigm)

Figure 3.3. Qualitative design (paradigm): Various sources, 2012.

3.2.3. Qualitative methodologies

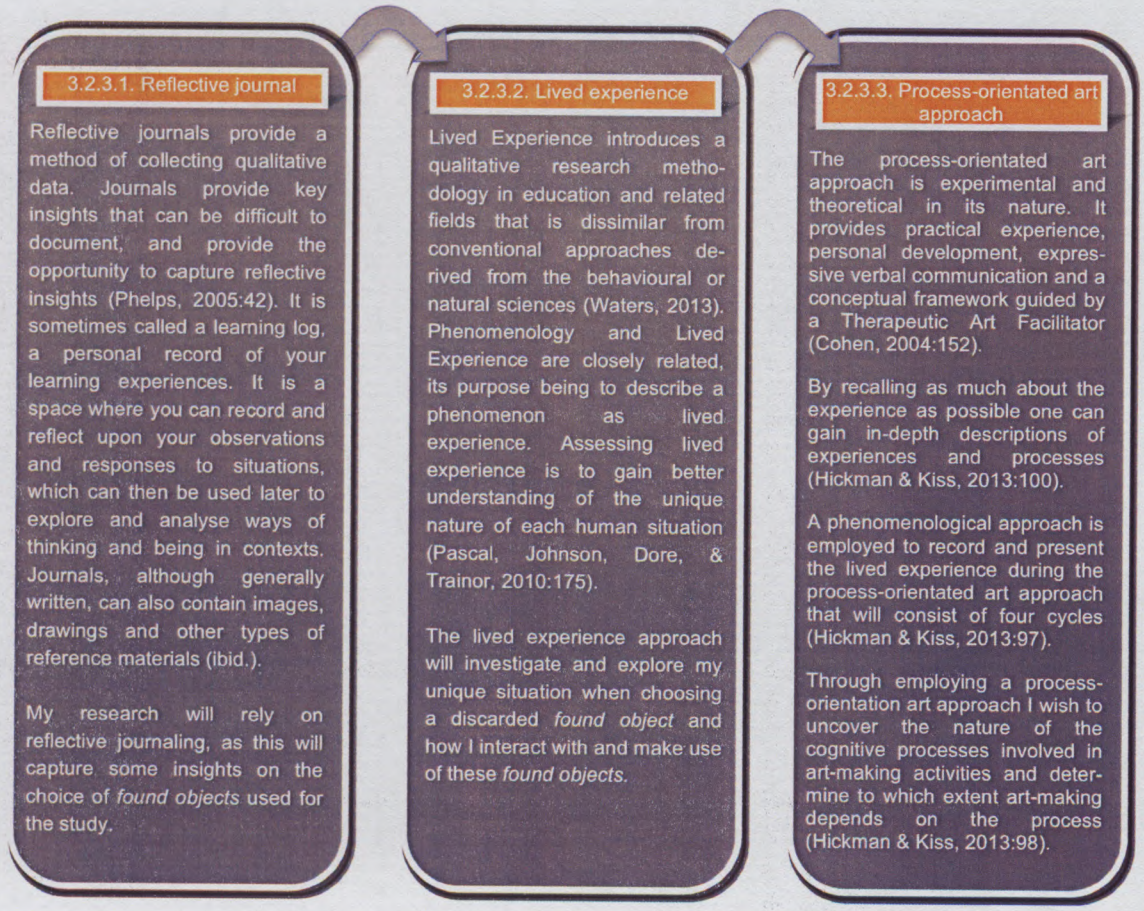


Figure 3.4. **Qualitative** methodologies: Various sources, 2012.

3.2.3.1. Embodied experience

As outlined in Chapter One, Davies and Meskimmon (eds), 2003:10) recognised that thinking does not happen in isolation but rooted in basic cognitive structures and, as a result, an ecology of knowledge would not function without an aesthetic dimension.

My ecology of knowledge is essential and, consequently, the design analysis will reflect on Davies' stance regarding the aesthetic dimension to an ecology of knowledge and will later confirm the possibility of a thematic approach to my personal artistic and phenomenological experiences, by delving into the subconscious which influence the choice of collected *found object* together with data collection of lived phenomenological experience gathered through reflective journaling to describe the 'phenomenological experience' (Yin, 2011:149).

My ecology of knowledge has been informed by the training I have completed as a printmaker specialising in etching. Looking back, I realise that my visual repertoire as an artist, spanning over nine years, and combining the elements of glass and etching on the surface of the glass, give me the confidence to use the material. There is a craft element to the best design training which means I come to understand the properties of materials by using them (Fisher & Shipton, 2010:33).

The first intaglio prints were done in the 15th Century European metal craftsmen work (Figure 3.5.). Goldsmiths and armorers practiced engraving on metal long before the first engravings were printed on paper. The highly refined art of engraving was done on precious metal using specialised sharp tools (Ross, Romano & Ross, 1990:65).

Figure 3.5. Master LCz (Lorenz Katzheimer) The Temptation of Christ, c. 1492 in (Ross *et al.*, 1990:66).

Many Masters, including Albrecht Durer, Francisco Goya and Pablo Picasso, used this technique, which evolved over the centuries into an ever more sophisticated process.

The term *intaglio* (from the Italian intagliare meaning to "carve or to cut into") and includes a number of processes employing metal plates for techniques already established, such as *engraving*, *etching*, *dry-point*, *aquatint*, *soft ground*, *lift ground* and *mezzotint* (Ross *et al.*, 1990:75). There are two broad categories of intaglio processes namely *nonacid* and *acid* techniques (ibid.).

Diane Victor, the 20th century artist has experimented with unusual materials and continues producing works with more unconventional materials that push the boundaries of her printmaking in other ways Figure 3.6 and Figure 3.7 (Rankin & von Veh, 2008:32).

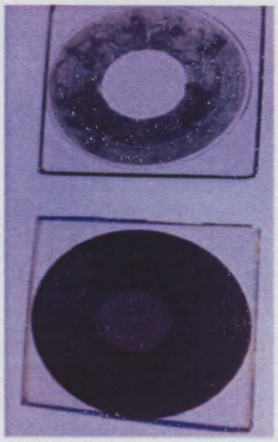


Figure 3.6. Diane Victor (2004) Music to Raise the Dead.
Drypoint in (Rankin & von Veh, 2008:32).

Figure 3.7. Diane Victor (1995); Practice Box for Martyrs. Engraved cleavers, velvet – lined presentation case and etching in (Rankin & von Veh, 2008:32).

Figure 3.8 shows my experimentation with unusual materials by engraving or etching on glass. As mentioned before the glass replaces the etching plate that I chose to leave un-inked. It appears that in the bulk of my artworks I am drawn to engraving on glass.

Figure 3.8. Hanging Tessellation:
Penny George, 2012.

My work of art is a tangible proof of my reflective practice and my ecology of knowledge. Being in a constant state of reflection, I am continuously in a dynamic process of standing in reality, reflecting and creating novel ways to express old realities in an innovative artistic manner.

3.2.3.2. Process-orientated art approach

The approach has several objectives in groups and for individuals. It includes; "learning process-oriented counselling skills, gaining integrated experiential and conceptual knowledge, personal growth, learning about group process and development, and the connection between individual and group growth" (Cohen, 2004:152).

The counselling method itself will not be discussed, but the underlying rationale of the approach to this kind of learning will be considered. The approach is however reflective of the counselling method. The process-orientated approach is experimental and theoretical in its character. It provides practical experience, personal development, expressive verbal communication and a conceptual framework guided by a Therapeutic Art Facilitator (ibid.) .

For the duration of these sessions feedback is promoted, which is part of a continuous evaluation procedure and change, and generates a lived experience that is reflective of the approach (Cohen, 2004:152). Recalling as much about the experience as possible one can gain in-depth descriptions of experiences and processes (Hickman & Kiss, 2013:100).

A phenomenological approach that consists of four cycles is employed to record and present the lived experience during the process-orientated approach (Hickman & Kiss, 2013:97). The research is aimed at expanding one's understanding of how one learns or applies learning while one engages with one's *found objects*.

Through process-orientation I wish to uncover the nature of the cognitive processes involved in art-making activities and to which extent art making depends on the process (Hickman & Kiss, 2013:98). Gascoygne's (1936:170) theory pertaining to the activity of seeking decayed *found objects*, that include psychological mechanisms such as motivation, cognitive arousal, and emotion can be validated.

To examine the cognitive processes, I will adopt a phenomenological case study approach by documenting my experiences during the activity (ibid.).

Blatt-Gross and Tavin (2010 cited in Hickman and Kiss, 2013:98), mention that the connection between art and cognition has been formerly highlighted in literature, and current debates about the characteristics of art making and its association with cognition are continuing. It is generally believed that art activities can be classified as 'cognitive' (Hickman & Kiss, 2013:98, citing Dorn 1999; Efland 2002; Eisner 2002, 2004; Hickman 2010; Perkins 1994; Perkins & Gardner 1988)

Reflective journaling already fully discussed in Section 3.2.3.1 is a valuable method for uncovering the processes during the making of artworks using *found objects* and will provide insights into the nature of my art making. The data collected from the process-orientated art approach I consider to be valuable and could reveal additional cognitive insights.

Employing cognitive processes may be subconscious, and may be difficult to describe or to identify (Hickman & Kiss, 2013:99). It is my belief that phenomenological research is the most suitable for cognitive studies as it can give me the ability to uncover 'inner' processes (ibid.)

By using a process-oriented art approach I attempted to understand some of the reasons for decisions made during the making process by focusing on describing my cognitive processes and experiences (Hickman & Kiss, 2013:106).

Participants whom have engaged with the process have expressed these experiences to be significant and in some instances life changing (Cohen, 2004:152).

3.3. Ethical considerations

3.3.1. Ethical issues relating to the researcher

The following ethical issues was dealt with relating to the research and researcher have been taken into account:

- The researcher undertook to ensure that the data collection procedure and interpretation was not biased. I tried often to distance myself from the journey and discussing it with others a higher level of objectivity became possible.
- Appropriate methodology was used whilst conducting the study. I drew on a qualitative design paradigm that is driven by *embodied experience* and *phenomenological research.* Qualitative methodologies will be employed including the *reflective journal*, *lived experience* and a *process-orientated art* approach.
- The study did not involve human subjects, and materials used were not physiologically harmful to humans. Salvaging and the process of using found and second-hand objects have potential implications for health care practice in psychology and related disciplines. This study has no potential implications for health care practices as it does not focus on this area.
- The researcher endeavoured to uphold an accepted and expected code of ethical principles incorporating, amongst others, the guidelines of beneficence, respect for human dignity and justice.

3.3.2. Ethical issues relating to the sponsoring organisation

Funding for this study was secured from CPUT from inception to completion. There was no chance of manipulation of the study by the sponsor because the research was not commissioned by nor conducted for the sponsor but for academic purposes. Advice was sought from Academic Supervisors concerning unforeseen ethical implications.

3.4. Validity and reliability of the research

Strengthening a qualitative study's validity is possibly the most important quality control attribute to justify the study and its conclusions (Yin, 2011:78). The validity is not only restricted to a study's findings but appropriate descriptions of the use of a *found object*, as well as of one's experiences around it must be relevant.

Maxwell (1996:87 cited in Yin, 2011:78) draws attention to the outcomes of validity by referring to "the correctness or credibility of a description, conclusion, explanation, interpretation, or other

sort of account". Maxwell has summarized and compiled at least seven ways to tackle validity challenges. I integrated one of the strategies into my design study: an intensive long-standing "field" engagement to achieve a comprehensive in-depth knowledge of field situations, as well as the prospect to repeat observations (ibid.).

As stated in Chapter Two, my ontological stance is that all chosen *found objects* should have a life. My reflective journal revealed the following; firstly the combination of natural elements in a *found object* is what triggers me, secondly; the process of transformation in my mind to give the *found object* new life and; thirdly the incorporation of discarded glass which allows me to stay true to printmaking techniques explored on glass.

The study benefited from this research approach because using my own methodological or personal tendencies I was over time made aware of my experiences as I interact with *found objects*. Further, the integration of Maxwell's intensive long-term involvement to gain in-depth understanding of my field through lived phenomenal experience by acknowledging the feeling while interacting with the discovery.

Additionally, the employment of the process-oriented art approach proved to be valid because I understood some of the reasons for decisions made during the making process using *found objects* by focusing on describing my cognitive processes and experiences (Hickman & Kiss, 2013:106).

The next chapter will elaborate specifically on these findings and the possible thematic approach when transforming a *found object* giving it new life.

3.5. Summary

This chapter explored epistemological research as this study is situated within the interpretive paradigm by making meaning of my experiences as I interact with *found objects* (Burrell & Morgan, 1979). The study has also transformed my experience into awareness around the role and function of discarded *found objects* and how they can be given a new life and thus contribute to sustainability. Emphasis is placed on individual meaning and one's perceptions of "reality" as oppose to some self-regulating "reality" that might exist outside of me (Hopper & Powell, 1985:446).

Self-examination and insights into my own reactions to or feelings about my study as a whole, reflected in my written journal, revealed unwanted biases. Three aspects became apparent (triggers, the process and the ultilisation of glass) in my own methods or personal tendencies that I have not consciously been aware of over time. Acknowledging them lead to valuable insights into how I should approach my analysis in Chapter Four.

Because this study adopts qualitative methods and is uniquely explorative in its nature, I employed a phenomenological methodology to acquire more information about my experiences, to capture and describe how I interact with *found objects* (Gatto, 2009:7). Using a process-orientation approach through art facilitation revealed additional cognitive insights describing my interacting with *found objects* (ibid.).

Chapter Four, 'Design Analysis', clarifies the visual reasoning for the qualitative approach employed to validate the research and the grounds for methods adopted.

CHAPTER FOUR: THE ARTISTIC JOURNEY AND DESIGN INSIGHTS

4.1. Introduction

This chapter introduces the visual execution for the qualitative approach to the research and how the methods were adopted. The research methodologies involved in this study include reflective journaling, lived experience and a process-orientation art approach.

Throughout the study I have been 'collecting' or accumulating additional *found objects* and documenting the process of *design thinking* by employing some of IDEO's (Siew, 1978; Ratcliff, 2009; Gestwicki & McNely, 2012) *design thinking* steps outlined in Chapter Two of this mini-thesis.

Over time, the collected *found objects* produced a variety of insights of my inner creative process about non-tangible aspects for example triggers, feelings, experiences and awareness (Yin, 2011:147). These *found objects* presented other forms of primary evidence that is invaluable to my qualitative study. Additionally, using narrative analysis involving my *found objects* proved to be valuable in the process of making sense of created meanings as I work through narratives and storytelling.

Resonating with Davies's and Meskimmon's (eds), 2003:14) belief that 'thinking' does not happen in isolation but is rooted in basic cognitive structures, my ecology of knowledge would not function without an aesthetic dimension and consequently this knowledge informed my insights regarding my creative process/reaction to *found objects* and confirmed the possibility of a thematic approach using comparisons of collected *found objects* together with the research methods advanced by (Yin, 2011:149).

It is once more emphasised that the study does not provide a physical utilitarian collection of thematic artwork but the findings highlighted ways in which art can be used to demonstrate and enhance an ethos of 'redesigning' or 'repurposing'.

Gascoygne's theory of a *found object* with zero-value becoming a valued aesthetic artifact was relevant and supported my findings. His theory and the employment of a process-orientated art approach allowed me to consider the psychological components involved in the transformative process of an object that will be reflected in Section 4.3.1 (Camic, 2010:83).

4.2. Design analysis

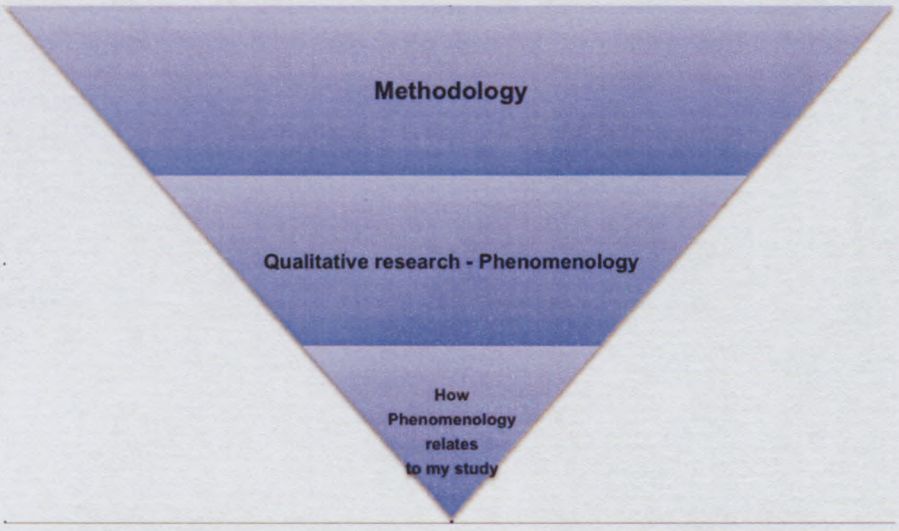


Figure 4.1. Methodology funnel diagram: Author's construct, 2014.

Phenomenology provides a excellent framework for studying the lived experience of human beings (Halldorsdottir, 2000:48). The main task of phenomenology is to investigate the phenomena, and the purpose of phenomenology is to describe my lived experience and the documentation of the experience must be documented in such a way that it truly reflects the description (Figure 4.1 illustrates how I implemented this method).

To gain access to these experiences I explored and also questioned the themes that emerged from my descriptions. Finding what is common and unique in these themes allows the basic structure of the phenomenon to develop and, as a result, the phenomenon to be studied as will be explored and discussed later (Halldorsdottir, 2000:50).

4.2.1. Reflective journaling through lived experience

Arguably the authenticity of reflective practice has been widely recognised because it has become part of the language of education and design.

My intention is to describe my experiences by using reflective journaling together with my aesthetic expressions through art, my ecology of knowledge, as well as narratives to make meaning of my experiences (Waters, 2013). An overview of selected journal documentary entries follows.

Journal documentary entry: June 2010

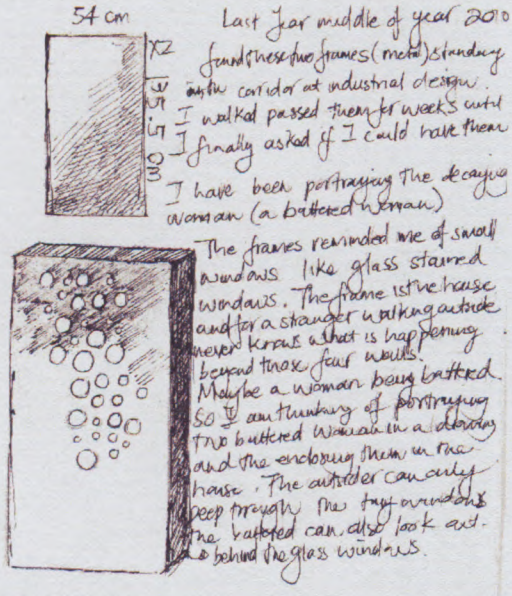


Figure 4.2. Reflective Journal entry: Penny George, 2010.

In 2010, about June, I saw these two metal frames standing in the corridor at Industrial Design. They have been standing there for a weeks without me noticing them, until later it finally came to that I could use them for an artwork and give them new life.

I guess the reason for me only noticing them took awhile because I am always drawn to found objects that has natural properties and not metal. I was not sure that I could have them and finally asked if I could.

The metal frames with the perfectly round wholes in different sizes reminded me of small windows like stained class windows. The frame became a metaphor for a home. A stranger never knows what happens beyond the four walls of a home.

My thoughts are to portray battered woman that will be encased by these found objects as if they are enclosed behind four walls. The outsider or stranger is invited to peep through the windows to really see what is going on in the home.

Because I am drawn to using glass in combination with my found objects, the holes will be enclosed with glass panels so I can engrave or etch on the glass. The size of the metal panels is 1.355m x 54cm and I have to re-think the use of glass. The works will be very heavy and I will have to use perspex to give it the same quality.

Engraving fine etching like detail on glass is quite challenging because the material is unforgiving but from previous experience engraving on perspex is equally difficult and could prove to be a welcoming challenge.

I have been portraying the theme of decaying woman or battered woman in previous artworks using other found objects like cleaning mops, together with glass engravings and other media (Figure 4.3.). In this work the found objects, the floor mops, also has natural properties or elements in found objects I am drawn to.

Figure 4.3. D'Kay Police Report. Drawing & mixed media: Penny George, 2004.

Journal documentary entry: February 2013

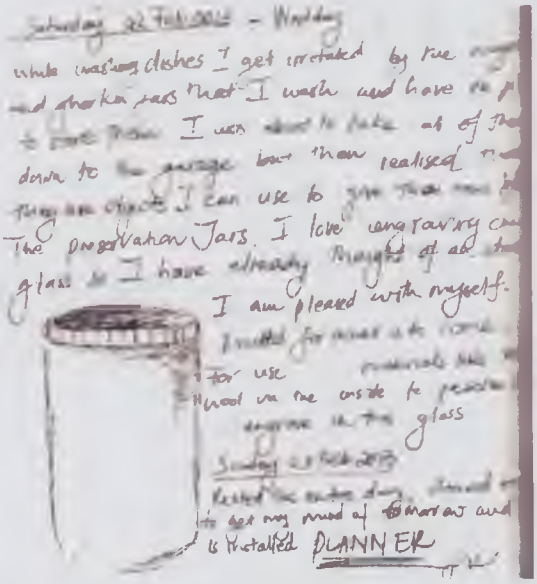


Figure 4.4. Reflective Journal entry: Penny George, 2013

On Saturday, 02 February 2013, while diligently washing the dishes, amongst them were mayonnaise (Figure 4.5.) and gherkin jars. These you have to soak to remove the labels. I find myself storing so many of these in my kitchen cupboards and was about to discard them when at that very moment they presented themselves to me.

In my experience working with found objects it is not necessarily the hunt for the object but the instantaneous surprise and the delightful sensory feeling when I stumble across an object, which frequently is at an unexpected place or time. Like an elemental surprise revealing itself to me. Camic (2010:90) also reveals in his data analysis that instantaneous surprise was one of his unanticipated findings.

Figure 4.5. Mayonnaise glass jar.
Found object: Penny George, 2013.

I presume the experimentation with unusual materials by engraving or etching on glass triggered me. The glass replaces the etching plate that one can either choose to ink or to leave un-inked (Figure 4.6.).

Figure 4.6. Mayonnaise glass jar transformed: Penny George, 2013.

Journal documentary entry: June 2013

Figure 4.7. Reflective Journal entry: Penny George, 2013.

In 2013, one of my third year Surface Design students used this object (Figure 4.8.) to retrieve some texture for a ceramic project they were busy with at the time. I have always been drawn to similar looking found objects (Figure 4.9.). When I first noticed the found object (Figure 4.8.), it triggered past memories and experiences. My natural reaction was to collect more of the same object.

Figure 4.8. Single polish brush: Penny George, 2013.

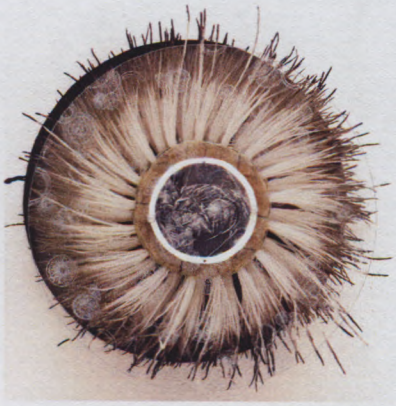


Figure 4.9. Street brush series: Penny George, 2006.

I proceeded to look for more of the same object (Figure 4.10.). In my mind I started to process the transformation of the object and need a collection to produce a visually pleasing artwork with new life, mentioned earlier just like Sarneel, a Dutch jewelry artist, who's working process relates while she is thinking (Den Besten, 2010).

Figure 4.10. Collection of polish brushes: Penny George, 2013.

What triggered me is the brush aspect of the found object, the wooden inner and the prospect of finding more. Because I rarely work with just one, my artworks are always in a collection of odd numbers 3's or 5's, and collected more of the same object surprisingly more than anticipated.

The use of glass will be incorporated to finalise the artwork. I love the mystery and the translucency of glass and the challenge of engraving on glass like one would do on an etching plate. The image engraved on glass is never random but very specific.

I have noticed that there are three very specific aspects that draws me to certain found objects (Figure 4.11.).

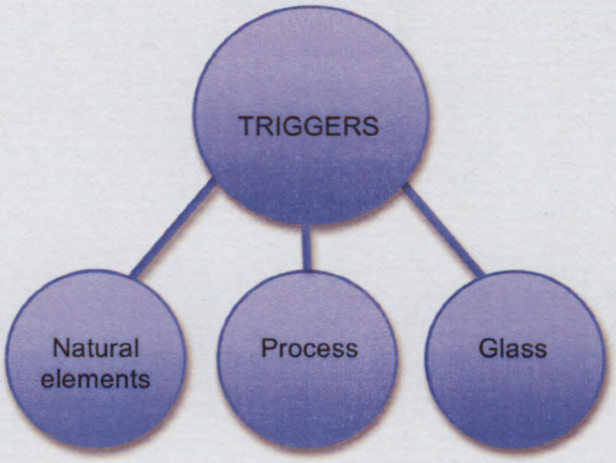


Figure 4.11. Three triggers from reflective journal:
Author's contruct, 2013.

The natural elements in a *found object* trigger the process of transformation in my mind and the desire to combine the use of glass with my artwork.

Without noticing how I transform a decayed object with zero value to becoming a valued aesthetic item, the combination these three elements of natural object, process and the use of glass are always prominent. The feelings and reflections captured through my written reflective journal (Yin, 2011:175), revealed my attraction to the ultilisation and combination of these three elements.

4.3. Research process

Already discussed in Chapter Two I developed my own model of Design Thinking Steps or processes based on IDEO (Siew, 1978; Ratcliff, 2009; Gestwicki & Mcnely, 2012). The model (Figure 4.12.) illustrates the *design thinking* steps or processes I engage with while transforming a *found object* giving it new life or how the practical component of the study evolves.

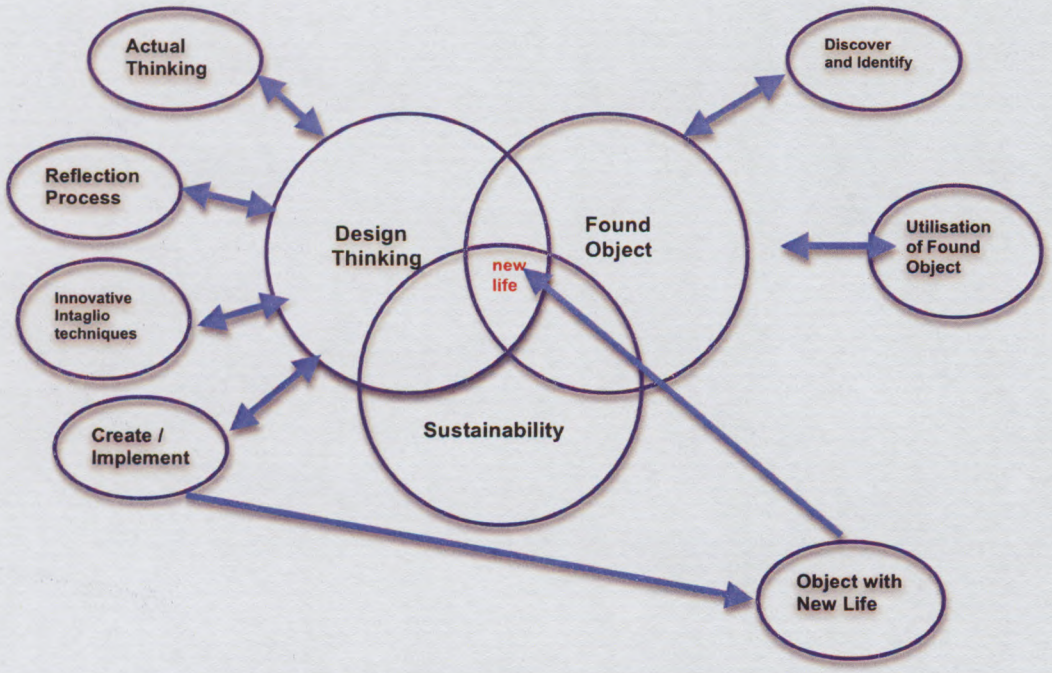


Figure 4.12. Model of Design Thinking: Author's construct, 2013.

My findings through reflective journaling and *design thinking* processes provided key insights. Camic (2010:81) already indentified proof from his sample of 65 participants that emotional, social and aesthetic factors are involved when transforming a *found object*. Previously mentioned the field at large recognises seven steps (Laybourne, n.d. :2). However, I associate some of my *design thinking* processes with Tim Brown's steps which is applied by a human-centered design methodology (Brown, 2008:88).

I recognise the following seven *design thinking* steps: Discover/Identify ➔ Ideate ➔ Reflect ➔Implement intaglio techniques ➔ Create/Design with effective sustainable practices ➔ Give a *found object* new life ➔ Learn about my processes. Prototyping never takes place.

When I discover or identify a *found object*, I am drawn to shape as well as the material of the piece. The aesthetic factors of the *found object* play a major role in how I will utilise the object. Prototyping never takes place.

Design thinking processes almost happens instantaneously in my mind. First I think about how I will transform the *found object*. Next I reflect on new and past processes and experiences and thirdly then I consider how I will utilise my expertise to give the item new life. I almost never scribble my ideas on paper, my ideas emerge from the *found object* and one can call this process intuitive.

This is a phenomenon that many artists using *found objects* can relate to. Intuition is not a new concept; it is also been used by design researchers to explain the reasoning process of designers (Cross, 2011:10).

Responsible sustainable design debates and discussion are taking place in the professional realm and in education. Because I am using discarded *found objects* it is important to instill in society a growing awareness of the role and function of discarded items by innovatively giving them a new life and thus contribute to sustainability. As a result it is essential to create a narrative of sustainability in a deteriorating environment because I strongly believe my process contributes to effective sustainability in a small way, by increasing the desire for the discarded *found object* to be rekindled into a new and sustainable life.

However, I have to make mention of the fact that not all artists and designers follow these *design thinking* steps or processes. Individuals work in different ways to achieve a sustainable end result, this model explains how I personally reason and relate to other artists and designers.

4.3.1. Insights: process-orientated art approach

I was too close to my design and creative process, and heard about a Therapeutic Art Facilitator, Mirjam Macleod, who assists learners, students, artists and designers uncover the nature of their cognitive processes involved in art-making activities. From her I obtained reflectivity, reliability and objectivity.

'Visual knowing' examines the cognitive of artistic practice. Sullivan (1951:xix) argues that visual arts practice is a form of human understanding whose cognitive processes are distributed throughout various media and contexts used to frame the creation and interpretation of images.

This is described in framework of visual arts knowing. Mirjam facilitated four, one on one, sessions with me which took place at her work place in Muizenburg. Each session gradually unfolded a deep understanding of my cognitive processes in my art-making activities and reflected patterns that surfaced as general themes in my artwork. The process is described below.

4.3.1.1. Insights: Session #1

Wednesday 17 September at 12:00, I had my first process-orientation art process session. The focus of the therapeutic art facilitator was to carefully guide and observe me throughout the art making processes, initiating the transformation of abstract cognitive processes into concrete works of art. During and after the process insights will be gained into my art making activities, insights into my artworks and my own innate creativity and wisdom.

On arrival I had to place all my *found objects* on a long white table in order to be able to reflect upon the items and engage into a dialogue. Mirjam carefully observed the objects and projected her thoughts on what she saw. During the session questions pertaining to the *found objects* were posed by Mirjam to guide her thinking subjectively.

Important issues were discovered, aspects of my personal art processes that I had not been aware of. In this session Mirjam made a critical discovery: I mentioned several times that I almost never alter the state of the *found object*. I collect the object and superimpose my artistic treatment on it without altering the state in which I found it. I only add qualities to obtain a aesthetically pleasing result - which is a critical aspect of my *design thinking* and working processes (Macleod, 2014).

This could perhaps be an aspect to interrogate as some artists who use *found objects*, alter the items to obtain a preferred outcome, such as Froud and Gascoygne. Froud's artwork has, for many years, been based on the reworking and altering *found objects* and images and eventually placing them into another context (Froud, 2012). Similarly, Gascoygne's (1936:170) *found object* zero-value theory mentioned earlier, when the object is placed in another context which resonates which Froud's working process. This highlighted aspect could be interrogated for later/further research.

Mirjam pointed out that my artwork represents a metaphoric process rather than a cyclical process. She likened the final outcome to a metamorphosis and related it to the mythical process of a seed transforming into a flower or the cycle of the growth of an insect. The found

object, which was formerly a valuable item, but is now decayed, can be compared to a seed 'sleeping' in its pod, waiting to be discovered and given a new life. The work mimics nature, flowing in a cycle like a life cycle. The rotation of nature/plants is compared to how objects are rotated through cycles of growth, decay and re-growth.

Paying attention to plant growth one notices that certain external parts of the plant undergo frequent change. These changes can be visibly seen which makes us aware of nature's regular course of action. We familiarise ourselves with the laws of metamorphosis, by which "nature produces one part through another, creating a great variety of forms through the modification of a single organ" (von Goethe, 1790; republished by Miller, 2009:6).

Further observations were made that the work could relate to fynbos, which has an insect-like feel, making reference to my obsession with insects, especially the fly.

It was observed that my artwork has a very strong rhythmic aspect, which is another important working process. My love for using circles could represent a feminine aspect or the woman as such. Most of the collected *found objects* were objects used for cleaning, could portray physiological aspect of domesticity and being a woman.

I reveal the *found object* like a process of metamorphosis and yet the jar (another *found object*) is related to preservation. This could be seen as a contradiction. Am I protecting the *found object*? The object remains un-altered; I am adding value to the jar.

Mark making was another discovery. Working with objects used for cleaning reminds one of cleaning away marks. How does this relate to me or woman in general. How are marks made? I am allowing the *found object* to make its mark. What is making a mark? It is my identity and therefore the *found object* receives an identity.

When breaking down graphic arts to its most fundamental element, one finds the mark. Through mark-making one can explore identity (O'Toole, 2013). Through one's visual language, one's marks can be highly gestural and expressive, or controlled and mechanical.

An artist can achieve desired effects by the choice of tool, medium, and the quality of gestures (FAU Galleries, 2010). The lines embody the individual's lived experiences (O'Toole, 2013), to determine our personal style, an identity or a signature (FAU Galleries, 2010).

The small brushes remind Mirjam of time, like a clock or the cogs of the clock.

4.3.1.2. Insights: Session #2

Monday, 13 October, 9:30 second session.
In the last session an observation was made that the subject matter I use in my artwork relates to that of fynbos. I interrogated this aspect prior to the session. I drew fynbos utilising a very fine paintbrush combining household bleach with black quink technique and then printed the fynbos using two printing techniques (embossing and collagraph) on paper. I wanted to see the relationship.

A collagraph is a print made from materials pasted on a cardboard which is inked and the raised surface after printing will be captured on paper. An inkless impression can also be printed to obtain embossing effects Figure 4.13 (Ross, Romano & Ross, 1990:131).

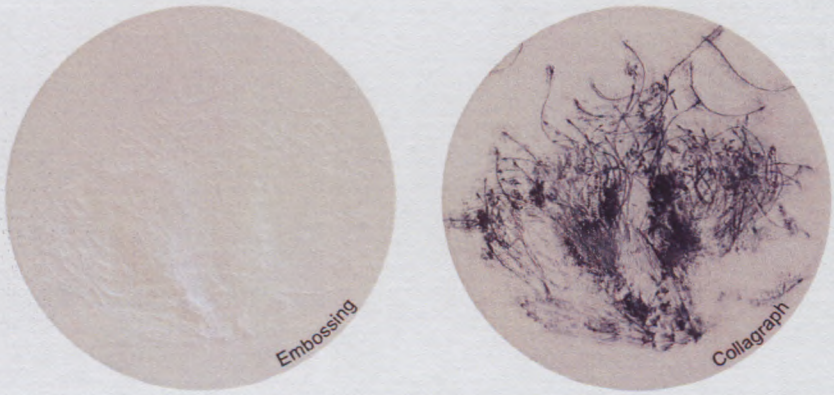


Figure 4.13. Printing techniques, embossing and collagraph: Penny George, 2014.

On arrival I placed the works on paper, together with the fynbos, on the long white table to reflect upon the items and engage into a dialogue.

Both Mirjam and I looked at the work and came to the realisation that the answer I was seeking (why I am attracted to brush-like objects and the fly) lies within my creative process. We both agreed that my creative process does not reveal a tangible answer accept that my working process lies between art and design.

My engagement with something new (fynbos) brought me new insights; and from this a new creative process started and therefore a unique response to fynbos was created.

She noticed during the sessions that we were carefully observing the objects and made reference to a Goethean way of knowing. We were engaging our eyes into a seeing process (Macleod, 2014). Goethe's theory of knowledge could be called conscious-process-participation. His epistemology focuses on process and relationship and allows for intuitive perception of direct knowledge of the world. Attention is focused on the phenomena and on the dynamic connections one form in space, time and between the observer and the observed. Goethe later recognised the observer as a participant (Wahl, 2005:59).

Observation plays an important role in my creative process. Mirjam names this observation a thinking process or a *design thinking* process because I am recognising and making reference to prior knowledge. I am allowing the object/s to reveal itself; as a result I am actively engaging and so is the object. Mirjam quoted Goethe in saying, " one only learns to understand that which one loves" (Macleod, 2014). This resonates with my working process.

In the fynbos series a great number of pattern and rhythmic elements were noticed; this was also perceived in my other artwork in the first session.

Mirjam believes that my work is "developing love or interest as a force of cognition".

My love for decaying *found objects* and the metaphor of the battered woman/people as a general theme could be seen as an analogy of fynbos. Fynbos in the plant realm is designed to be exactly what it is. Plants do not possess free will like human beings. Therefore, similarly to fynbos, battered women are restricted and often trapped in situations. Their lack of movement can be compared to the restrictedness of plants in nature (Macleod, 2014).

Two aspects of decay were revealed: the life cycle of a plant and the life cycle of a fly. The plant undergoes metamorphosis, which is, in essence, 'order created from chaos'. The fly generates a decaying process. Flies are attracted to where there is neglect, a mess or death. The compound eye of the fly also relates to selected fynbos. There is a directed focused movement between the fly, fynbos and my use of brushes.

The concept of time as a process could be investigated. Thinking, creating, designing and decaying of objects are all processes that takes time.

At the end of the session Mirjam tasked me to think about what 'decay' and 'decompose' mean so that we could discuss these concepts in the next session.

4.3.1.3. Insights: Session #3

Wednesday, 15 October, 12:00 third session.
On arrival I placed the new works on paper on the long white table to reflect upon the items and engage into a dialogue. The new works I am referring to were the embossing's of the doilies I used to enclose the 'preservation series' - the glass jars.

Both Mirjam and I looked at the work and observed that doilies when embossed, have a heightened tactile quality because the technique captures every single fibre. Printed, they also look like mandala symbols. In my view doilies have become collectable items and, when used in an art form, they are re-born similarly to discarded *found objects*. I am giving them new life. The doilies were used as they were found and not altered. The doilie series is a record of the process documented, and will be exhibited. Mirjam mentioned that the doilies refers to domesticity and evoke connotations of 'home', reminding her of cake and tea.

My engagement with something new (doilies) brought me new insights; and from this another creative process started and therefore a unique response to doilies was created (Figure 4.14.).

Figure 4.14. Embossing of a '**doilie**': Penny George, **2014.**

We again noticed symmetrical and rhythmical patterns. In this we realised that I am instinctively drawn to round shapes. This could have connotations of wholeness or be a good example of a complete design.

Decay and the fly as a symbol were discussed. Mirjam read and quoted Chevalier and Gheerbrant (1994:397) and their notion of the symbolism of a fly: "Their ceaseless buzzing, whirling around and stinging makes flies unbearable. They breed from corruption and decay, carry the germs of the foulest diseases and breach all defences against them. They symbolise a ceaseless quest".

At the beginning of my art career I portrayed the fly in stages of decay and how they breed decay, my fascination now with the insect is its visage. I am attracted to the bristle-like hair of the fly which is similar to my *found objects* the brushes and to recently discovered fynbos (Figure 4.15.).

Figure 4.15. Bristle-like qualities of the large bristle brush, fynbos and fly's eye: Penny George, **2014.**

During the remainder of the session I completed an observation task consisting of three observation activities.

The first activity was called the 'thinking observation'. I chose the Australian Banksia (Figure 4.16.). The aim of this activity was to objectively observe the object, by strictly writing down all the facts, describing the object and making no assumptions.

Figure 4.16. Australian Banksia from the fynbos family: Penny George, **2014.**

The 'thinking observation' revealed the following: the plant consists of a single flower, cone-like shape with a inner darker cone. It has a spongy look. The colour of the flower is red with complimentary green leaves. The leaves look as if they had been cut out with a pair of zig-zag scissors. The flower is attached to a thick wooden stem.

The leaves grow from nodes in an alternative pattern. The leaves are straight and long with a central vein. The outer furry/hairy petals seem to protect the inner cone. The outer cone feels dry. The single flower is made out of many smaller petals. Each petal is attached to the inner cone on a thin needle-like stem. The flower has elements of symmetry and rhythm. It is perfectly mathematically designed.

This 'thinking observation' exercise leads to *design thinking* processes. My *design thinking* processes revealed all the steps involved when I transform a *found object* with zero-value into a valuable item. This revelation was factual and the steps were described.

The second activity was called the 'imaginative observation'. The aim of this exercise was to be subjective by making associations and assumptions (Figure 4.17.).

Figure 4.17. Association with the shape of the Australian Banksia and hand-felted form: Penny George, 2014.

The imaginative observation revealed the following: the flower has an insect-like feel, its shape reminds me of a squashed spider. For Mirjam it had a bird-like quality. The shape of the cone is that of the pupa of a fly. The hairs on cone are similar to that of a fly; they have a velvety feel to them.

A frontal view of the flower presents qualities of that of a probing eye. The visage and design of the flower (Figure 4.18.) resemble the design of a flies eye (Figure 4.19.).

Figure 4.18. Design of Australian Banksia: Penny George, 2014.

Figure 4.19. Upclose detail of a fly's eye in (Phantom-XP, n.d.).

My activity of artmaking can be related to this observation. A creative process was initiated when I noticed the similarities between two distinctly different objects. Because of my engagement with fynbos, I noticed the similarities with the bristle-like hair of the brushes and the fly. From this new creative process I could visually observe the similarities (the bristle-like line quality in each). Big brush➔ bleach drawing of fynbos➔bleach drawing of fly eye➔embossing of fynbos➔collagraph, (Figure 4.20.).

Figure 4.20. Similarities observed between brush, Pincushion protea, fly's eye, embossing of fynbos and the collagraph of the fynbos: Penny George, 2014.

The third activity was observing by doing. The aim of this exercise was to capture all the elements of the flower on paper by completing a blind contour drawing (Figure 4.21.).

Figure 4.21. Engaging in activity of blind contour drawing: Penny George, 2014.

The result of this exercise was that associations could link all three activities. A blind contour drawing is about becoming anchored in the moment and learning to observe. The drawing is not representative of the object. There is a certain emotional connection while you are drawing. The drawing reflects my personal mark-making, the hair-like qualities that I am attracted to (Figure 4.22.).

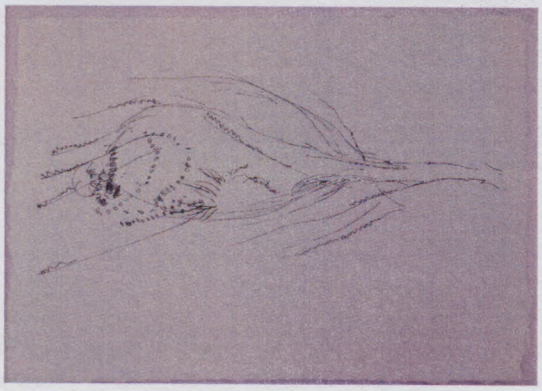


Figure 4.22. Blind contour drawing: Penny George, 2014.

4.3.1.4. Insights: Session #4

Monday, 20 October, 13:00 fourth session.

On arrival I placed the new embossings of dollies and fynbos on the white table. A clear association was made between the printed fybos that captures similar marks as the marks I had made on the blind contour drawing of the Australian Banksia. We reflected on the three-phase observation activity that I completed in the third session.

In Chapter Two I referred to Camic (2010:89) who mentioned that there are three identifiable phases in the process of discovering an object. We compared the three-phase observation activity in the process-orientated art approach sessions to Camic's three phases and found them to be quite similar. However, I do not concur with Camic's first *Seeking Phase*, because I do not seek *found objects;* they are presented to me. His respondents pointed out that emotional arousal, motivation, and cognitive engagement are aspects of this process, and these three aspects are similar to what I experience when objects are presented to me.

Camic's second phase describes how "the imagination is captured", and my imagination was captured in the imagination observation activity. The third and final phase Camic describes is a metamorphosis (ibid.). In session one, Mirjam associated my working process and my final artwork with a metamorphosis. The process of transforming decayed items, giving them a new use and a new life, is reminiscent of a metamorphosis. Camic (2010) calls this an active, cognitive-emotional progression. I am actively and creatively engaging with the brushes as well as the doilies. I am imprinting the memory of the doilies on paper comparable to all the *found objects* I have used in my artworks, giving them a new life and placing them into a different environment.

Mirjam posed a question: "How is the brush or doilie linked to your identity?" We reflected and deliberated on this for a moment. We briefly tapped into my subconscious psyche when I interact with certain *found objects.* The theme of domesticity was already referred to in the earlier sessions, and I realised at that moment why I am perhaps choosing these discarded cleaning items: I am an obsessive compulsive cleaner - another valuable revelation.

Throughout the study I based my analyses and experiences on Gascoygne's theory of a *found object* with zero-value to becoming a valued aesthetic artifact. My process of discovering an object it appears I engage with psychological processes that involve the interaction of aesthetic, cognitive, emotive and creative factors.

4.5. Summary

In this chapter I have attempted to gain deep insight into my own processes of *design thinking*. I intend to understand what themes triggers my artistic journey from the point where I find my (*found*) *object*, go through the "brainstorming" and "unearthing" processes of giving words and messages to inanimate objects. By employing a process-orientated art approach, I made significant discoveries with reference to my own tendencies and inclinations of which I had not been aware while being triggered by, and then engaging with, a *found object*. Novel stories of newly discovered objects, supported Digby (2008:175) in Chapter Two was also gained.

Through the process-orientated art approach I unpacked the following: I examined, established, clarified and understand my creative working process and identity. My emotional cognitive observation activities yielded new creative processes by my using fynbos and doilies. I explored the dynamic between design and art / function and aesthetic. The interaction of aesthetic, cognitive, emotive and creative factors in the search, discovery and the utilisation of *found objects* was captured and, therefore, Gascoygne's theory validated.

This process of unpacking relates well to reflective practice. Boud et al (1985); Boyd and Fales (1983); Mezirow (1981) and Jarvis (1992) have all been cited in Finlay (2008:1) to acknowledge that reflective practice is a process of learning through and from experience towards gaining new insights of self and or practice as validated through the implementation of the process-orientated art approach. Already mentioned in Chapter Two, Dewey's (1933) concept of 'reflective practice' which gained influence with the arrival of Schon's (1983) 'reflection in action' mentioned in Chapter Three offers further validation (Finlay, 2008:3).

In this next chapter, I will discuss my findings and insights that I arrived at through untangling the artistic journey and associated *design thinking*. The reader will realise that there are specific patterns inherent in my search, finding and selection of objects that intrigue me. What happens in my conscious and subconscious at the time will be unpacked to establish whether there is indeed a verifiable *design thinking* process underlying my artistic journeys. As *design thinking* is always associated with sustainability and awareness of our environment, I will also uncover the ways in which, I believe, my artistic process and artefacts can be used to send a message to society regarding the problems of sustainability.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1. Introduction

In the 1960's Picasso was deemed the most influential artist of the 20th century (Flam, 2002:219). At the time Sutherland, and other artists, were influenced by Picasso, and the lessons he had learned from Picasso clearly show in his work. Sutherland felt that Picasso's lessons were valuable because Sutherland confirms "that one's emotions when facing an object could transform that object and give it a new vitality, transcending ordinary appearances" (Flynn, 2012:6). Sutherland related this lesson to his painting career.

In this chapter I will attempt to condense the laborious "birth" of artistic *design thinking*, from finding an object to giving it new life as articulated by Sutherland from the lessons he learnt from Picasso.

The works, imbued with 'new vitality' that I am going to display at this exhibition entitled "Found Object Re-born", were carefully chosen from the larger collection of artwork which became the subject of our discussion of the process of *design thinking*.

5.2. Tracing my choices of found objects and the triggers of design thinking

Referring back to Chapter Four my journal revealed, that there are three very specific aspects (or triggers) that draws me to certain *found objects*. They are the natural elements in a *found object*, the process of transformation in my mind from a zero-value item to a valued artifact and the ultilisation of the object in combination with **glass**. This revelation is an integral aspect of my *design thinking* and my working processes.

To find commonalities between the *found objects* I have been using to create artworks, I constructed a spider diagram of *found objects* and materials (Figure 5.1.) and a colour coded chart (Figure 5.2.) to find possible themes to describe the fundamental structure of the phenomenon. Both the diagram and chart is an overview of all *found objects* used since 2004.

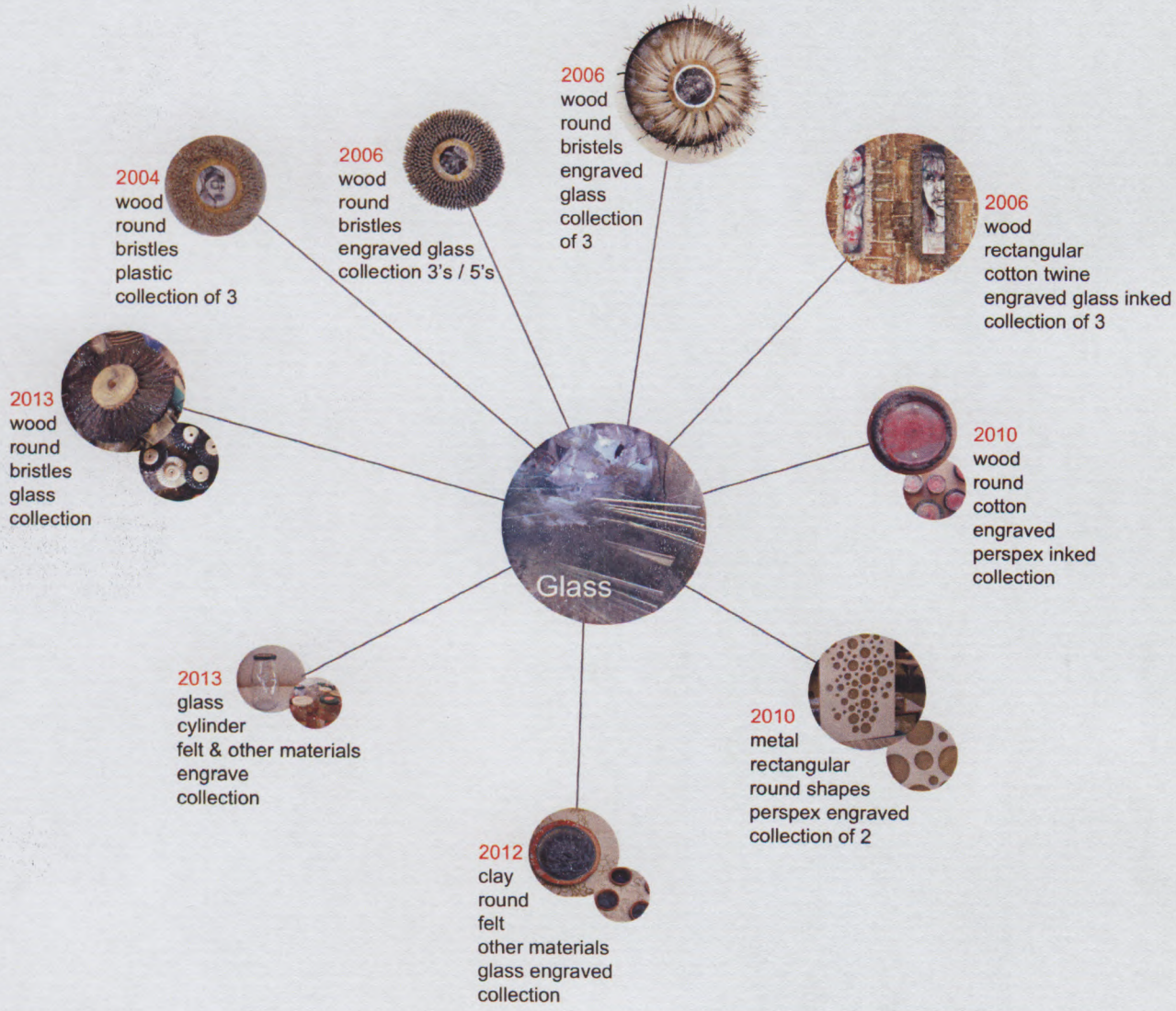


Figure 5.1. Spider diagram of found objects and materials: Author's construct, 2014.

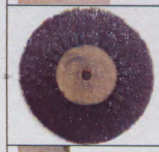
Found-Object	Collection	Year	Medium	Medium	Medium	Shape	Glass engraved	Texture
		2004	wood	bristles	plastic	round		
		2006	wood	bristles	engraved glass	round		
		2006	wood	bristles	engraved glass	round		
		2006	wood	cotton twine	engraved glass inked	rectangle		
		2006	wood	cotton & leather	engraved perspex inked	round		
		2012	clay	felt & other material	glass engraved	round		
		2013	glass	felt & other material	glass engraved	cylinder		
		2013	wood	bristles	glass	round		
		2010	metal		perspex engraved	rectangle with round shapes		

Figure 5.2. Colour-coded chart of found objects and materials: Author's construct, 2014.

No.	Medium	Colour indicator	Number of similar materials used
1	Wood		6
2	Bristles		4
3	Clay		1
4	Glass / engraved glass		7
5	Cotton twine		1
6	Cotton & leather		1
7	Plastic		1
8	Metal		1
9	Felt and other material		2
10	Perspex		2
11	Round		6
12	Cylinder		1
13	Rectangle		1

Table 5.1. Colour indicator and similar material use for Figure 5.2: Author's construct, 2014.

Essentially I am drawn to round shapes rather than cylindrical or rectangular shapes. The combination of discarded glass I have used seven times with the *found objects*. Other materials like clay, cotton twine, cotton and leather, plastic and metal I used once and perspex and felt I used twice.

To further explore and capture in depth descriptions I have selected a sample of four *found objects,* discussed and analysed in Section 5.4, which, in my view, featured most prominently in my art career and will be beneficial for the purpose of the outcomes of the study.

Table 5.1. indicates that the material which most attracts/inspires me is wood, as six of the *found objects* were made of wood and four of them also had bristles.

5.3. Reasons underlying my selection of found objects: unpacking the attraction and associated thoughts / feelings

Camic's (2010) data analysis further reveals that participants responded that *found objects* have both symbolic value and functional uses.

> "With more character than new objects; they can be unique, quirky, beautiful, tactile, original, quaint, deteriorating and decayed, but also used in art projects and as art objects, in the garden, in home decoration, as gifts, as toys and games, in combination with other objects to have a practical or utilitarian use, as comforting forces," (Camic, 2010:89).

I agree that *found objects* can carry symbolic value but I am opposed to Camic's further data revelation because one of the aims of this study to provide products which are not industrial but rather aesthetic. My reasons underlying my selection of *found objects* are explored in the diagrams to follow. I discovered in my work an attraction to similar looking objects. This allowed me to capture an emerging thematic approach and also to increase the understanding of the phenomenon.

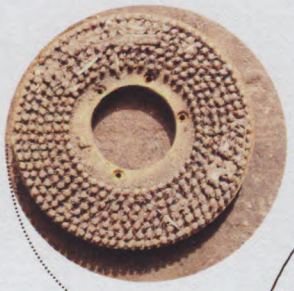
5.4. The found objects of decay: thematic analysis and discussion

The research method adopted a convenience or accidental sample which is not representative of a population as the objects are presented to me by accident (Leedy, 1993:200). Artworks created incorporated *found objects* that were selected randomly. A thematic approach was revealed when I described my choice of *found objects*. The inclusion of engraved discarded glass and or perspex also plays a major role and will also be discussed.

The case studies of this selected sample will discuss my findings and the implications which these have for a deeper understanding of the particular phenomenon (Yin, 2011:100), namely, that I am drawn to particular objects and collect them in sets. This method is suitable for small samples, and allowed me to write up a single case or an exploration of themes shared between cases (Fade, 2007:648).

In the following four case studies I describe how the attributes of and the materials originally used in the manufacture of each object offered me insights into emerging themes in my work. The combination of glass with the *found objects*, as revealed in my journal (Chapter Three), is one of the three triggers that are an integral part of my working process. This will also be discussed. An overview of the final artwork was reflected on in Section 5.7. Reflections upon other physical, and possible physiological, aspects pertaining to the selected *found object/s,* follows in case studies #1 - #4.

Case Study #1
2004



Describing attributes

How: a brush was presented to me at work by one of the cleaning ladies.

The inspiration: I used two similar brushes in a previous artwork and looked for more of the same, because I was drawn to their appearance and my gut feeling was that I wanted to explore further possibilities with the brushes.

Why: I felt at the time that the brushes had so much aesthetic value. My theme was 'decay' and in many instances, my artworks suggest decay - the subjects undergoing the physical changes that occur with death.

Additionally my obsession with imagery of the fly, larvae and pupae become clearly inspirational forces. I continued to work with these brushes for two years until I exhausted all the possibilities. It was time to move onto something new but I never went looking for something new.

Material description

Shape: Round
Mediums: Wood and short bristles

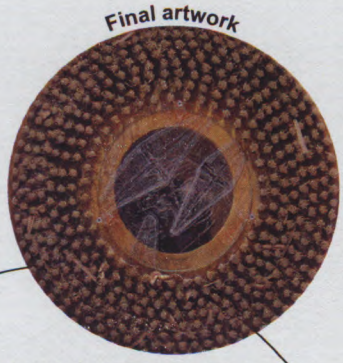
Engraved glass

The incorporation of the round engraved glass was a material that I always wanted to explore. Because of my prior printmaking knowledge, I wanted to capture almost the same quality of etching on glass.

My ideas emerged from the *found object* and it was clear that another element was needed in the centre of the piece. Engraving on glass is challenging because the material is very unforgiving. It does not allow for mistakes and is brittle and expensive.

Smaller pieces of glass are easily handled than larger sizes. The thickness of glass is vital, 6mm glass was used to engrave on.

Final artwork



In the final work I combined all the elements (the brush, the discarded engraved glass and etching) to create an aesthetically pleasing artwork. I almost never buy new materials to enhance the artwork.
The *found object/s* was not altered but given a new life. I felt drawn to objects (especially objects associated with cleaning) which had been used to their fullest extent and were dirty. This is a metaphor I played on: the portrayal of woman in society. There is a certain rhythmic quality to the work. The subject matter enhances qualities of the brush. Other physical and possible physiological attributes pertaining to the *found object* will follow in the thematic analysis and discussion.

Case Study #2
2006

Describing attributes

How: Two years later one of my colleagues was driving along a farm and saw these street brushes on the property. The brushes, she said, "reminded her of insects' hairs". She told me where to find them and I later asked the owner if I could have them. Like the first *found objects*, they were presented.

The inspiration: Because of my previous success with brushes, I wanted to explore possibilities with bigger brushes. The present brushes looked similar to the previous ones, and the bristles did remind me of insects.

Why: As an artist, when one produces a body of work one is associated with certain elements which one uses in one's artwork, and viewers relate to one's signature style. The brushes resonated with me, I felt they portrayed a rawaesthetic value that I had to transform. Additionally, they were much larger in size and this challenged my thought process.

Material description

Shape: Round
Mediums: Wood and long bristles

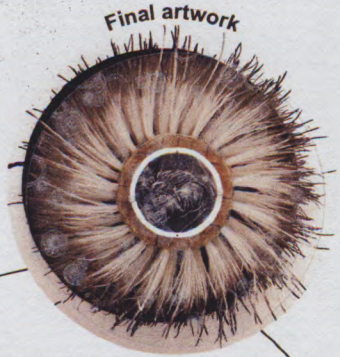
Engraved glass

Engraved glass was an element I always included in my work in order to produce and aesthetically complete artwork. Glass has a very translucent and mythical quality, a quality that I am drawn to.

To capture almost the same quality of etching on glass is not easy because of the very nature of the material. Understanding the properties of the material makes one feel confident to use and there is a craft element to the best design training.

Once again my ideas emerged from the *found object*. Engraving on glass, 50cm in radius 6mm thick is heavy when attached to the brush.

Final artwork



In the final work I combined all the elements (the engraved glass and etching) to create an aesthetically pleasing artwork. The *found object* is not altered but given a new life.

There is a certain rhythmic quality to the work. The subject matter (mites and insects) engraved on the glass and the etching enhance the insect-like features of the brush.

Other physical and possibly physiological attributes pertaining to the *found object* will follow in the thematic analysis and discussion.

Case Study #3
2013

Describing attributes

How: I find myself storing so many of these in my kitchen cupboards. While washing the dishes, I was about to discard them when at that very moment they presented themselves to me.

The inspiration: Experimentation with unusual materials by engraving or etching on glass triggered me. The glass replaces the etching plate that one can either choose to ink or to leave un-inked.

Why: The combination of discarded glass with *found objects* I have used seven times (in Figure 5.2.). This indicates I often include glass in my designs in order to achieve an aesthetically pleasing artwork.

I love the mysteriousness and the translucency of glass and the challenge of engraving on glass as one would do on an etching plate.

Material description

Shape: 3-dimensional sphere

Mediums: glass, felt and other material

Engraved glass

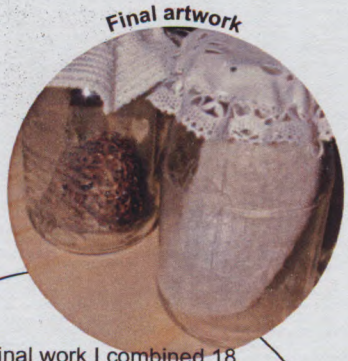
The use of engraved glass was a material that I always included to contribute to successfully complete the artwork. Glass has a very translucent and mystical quality, a quality that I am drawn to.

To capture almost the same quality of etching on glass is not easy because of the mere nature of the material. Understanding the properties of the material gives one confidence in using the material.

My ideas emerged from the *found object*. Engraving on 3-dimensional objects proved to be difficult.

Different resist tests were done on the glass jars to obtain a preferred end result. The test results are discussed in Chapter Six.

Final artwork



In the final work I combined 18 engraved glass jars that are placed in a discarded post box consisting of eight shelves. All the jars are covered with old doilies to preserve the natural *found objects* and other elements made from natural materials as well as collected items housed within the jars.

The mites and insets elements engraved on the glass create a juxtaposition with other works produced earlier. The artwork still remains aesthetically pleasing containing certain rhythmic qualities. Once again the *found objects* are not altered but given a new life.

This preservation series could be seen as a contradiction to my working process. Other attributes will follow in the theme analysis and discussion.

Case Study #4
2013

Describing attributes

How: One of my third year Surface Design students used this object to obtain some texture for a ceramic project with which they were busy withat the time. My natural reaction was to collect more of the same object. I found one in a box of junk in Industrial Design working station. I asked the technical staff whether there were of these brushes, and he directed me to the back of his office where we found several more. He was going to discard them; I had just arrived in time.

The inspiration: When I first noticed the *found object* it triggered in me past memories and experiences, I knew that I wanted to use the object. And find more of the objects.

Why: Figure 5.2 suggests that I used *found objects* from 2004 until 2013, of which six are made of wood, and four of the six *found objects* have bristles. The data show that I have been drawn to similar looking *found objects.*

Material description

Shape: round

Mediums: wood and short to medium bristles

Engraved glass

The use of engraved glass was a material that I always included in my artwork because of its translucent qualities. In this instance I used perspex. The qualities of Perspex are very similiar to those of glass, except that it is made from polymethyl methacrylate acrylic sheet.

Capturing almost the same quality of etching on perspex is easier because the material is softer. I have come to understand the properties of the material.

Perspex also offers exciting effects such as gloss, silk, matt, frosted, fluorescent and pearlescent - as well as a diamond surface texture.

Final artwork

In the final work I combined the collected brushes and placed them on a circular background. The artwork is a triptych. In all three I combined engraved perspex and included some frost motives. Once again my ideas emerged from the colated *found objects.*

Stages of the life cycle of the fly are engraved on the perspex. Because of the placement of the brushes and the subject matter engraved on the work it reminds one of a cyclical process. The zero-value items gained an aesthetically pleasing life containing the rhythmic qualities of the cogs of a clock.

The *found objects* were not altered. Other attributes pertaining to this artwork will follow in the theme analysis and discussion.

Figure 5.3. Case studies numbers #1 - #4 diagram: Author's construct, 2014.

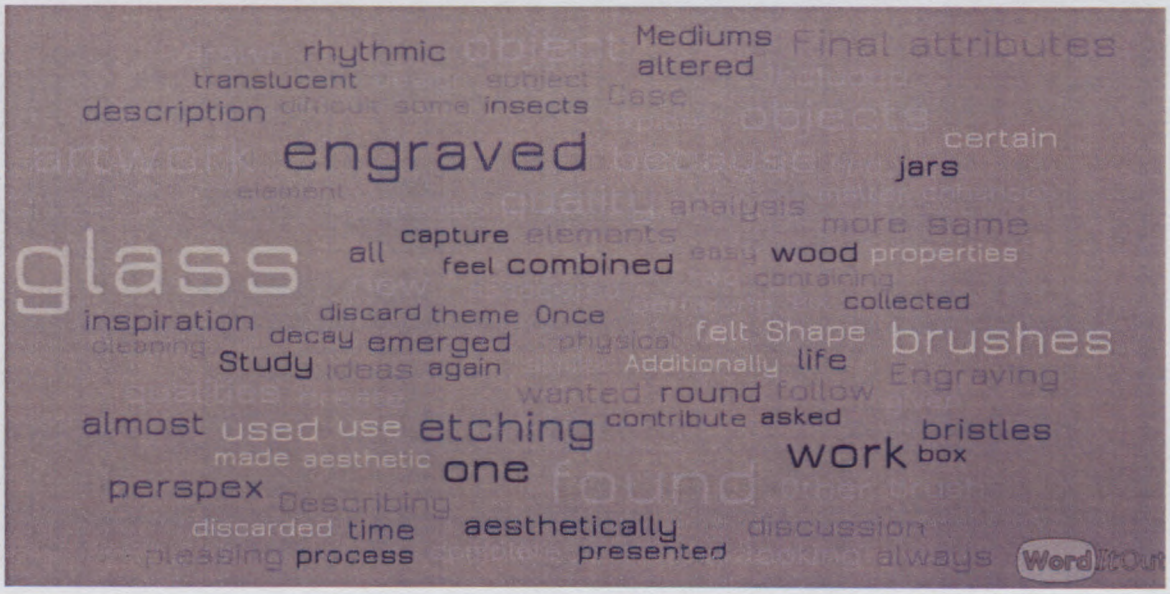


Figure 5.4. WorditOut – word cloud of the four case studies: Author's construct, 2014. [Generated online, Davies, 2014]

Word clouds can be an effective tool for data analysis and validation of findings. A word cloud is a special visualisation of text (Figure 5.4.) in which the more frequently used words are highlighted in the representation. The most frequently occurring words of importance in a text are differently sized to reveal their frequency. The product demonstrates a visually rich way to enable one to have some basic understanding of the data compiled for the four case studies and additionally allows one to have an overview of the main topics and the main themes in a text (McNaught & Lam, 2010:630) .

The four case studies revealed the following themes. An overview of the years revealed that I have used *found objects* ever since 2004. The describing attributes revealed the 'How': in case studies #1, #2 and #4, the *found object* was presented to me by colleagues or students, and case study #3 the items presented themselves to me. The 'inspiration' indicated that in case study #1 and #2, I had used similar brushes in a previous artwork and had wanted to look for more such brushes. In case study #2 the bristles, which reminded me of insects, attracted me.

In case study #3 the experimentation on unusual material, by engraving and etching on glass triggered me and in case study #4 the *found objects* triggered in me past memories and experiences. The 'Why' revealed that all the objects presented a raw aesthetic value that I wanted to transform. Additionally, it revealed my love for the mysteriousness and the translucency of glass.

In the final artworks, all case studies revealed that glass was a material that the inclusion of glass adds a final important and extra dimension to my artwork. A very important revelation was that in the four case studies all the *found objects* were not altered but given a new life. Rhythmic qualities and elements features greatly in the transformed *found objects*.

Tying together all the aspects releaved, the word cloud illustrates that 'glass' and 'found' is the most prominent themes in my utilisation of *found objects*. Material, engraved, brushes and objects are frequently occurring words of importance that are represented in my word cloud revealing additional themes.

5.5. My messages to society through my art

One of the expected outcomes of this study is to create awareness around effective sustainability and social responsibility towards resources, through art and design.

We are aware that Cape Town, South Africa, has been selected to be the World Design Capital 2014 and one the most pressing design challenges is the crisis around collecting and removing refuse in the townships. The intension is to co-design with them in order to encourage communities to become conscious of consumption and refuse collection (WDC2014, 2012). Additionally communities must be made aware that redundant objects can be repurposed and given new sustainable life. In my working process and artwork of this process is evident. Other designers and artists using the same concept which I have referred to in Chapter Two.

Everyone gathers or collects objects for various personal reasons. This is a phenomenon that has been taking place for thousands of years. But not all refuse or *found objects* can be used and transformed for future use. Transforming or repurposing skills can be stimulated and developed because design ability or intelligence is something that everyone possesses to some extent.

The richness of storytelling and narrative analysis, involving transformed *found objects*, aids one in the endeavour to make sense of the layers of storytelling about these collected objects. I have created personal meanings that are attached to my *found objects* through storytelling. Communities can be made aware of how these objects play an important role in storytelling. Everyone as the ability to connect stories from past experience, as well as from most recent ones, to *found objects*; one can also create stories of the newly discovered.

5.6. The exhibition

An exhibition of works made from *found objects* is being hosted at Oliewenhuis Art Museum in Bloemfontein from 04 December 2014 to end of January 2015. Find attached (Annexure A) a DVD of the completed artworks for your perusal.

5.7. Summarising factors influencing choices of found objects: a historical progression from found to new life

Commonalities between the *found objects* revealed the following. Referring to Figure 5.1., I started using *found objects* in 2004 and am still using *found objects* to giving them new life. The word 'found' featured prominently as a main theme and 'object' as another theme (in Figure 5.4.). I am attracted to more bristle-like natural objects that have a round shape or objects that have round shapes imprinted on the item.

Colleagues and students presented some of the *found objects* to me and sometimes they present themselves to me, such as the glass jars. In 1936, Sutherland quotes Picasso in an article entitled '*A Trend in English Draughtsmanship*', '"I do not seek," said Picasso, "I find" (Flynn, 2012:6). Both the lessons which Sutherland learned from Picasso, as well as Picasso's remark mentioned above sum up my thinking process: I never seek the objects; they are presented to me. Sometimes the object can be a subconscious find.

Because of my attraction to these insect-looking bristles and brushes, they trigger in me past memories and experiences. These memories inspire me to transform objects that present a raw aesthetic value into valuable items. The word 'brushes' frequently occurred (in Figure 5.4.) as a theme.

'Glass', the most prominent theme illustrated (in Figure 5.4.), is included adding a final important and extra dimension to my artwork. My love for the mysteriousness and the translucency of glass, as well as the experimentation on unusual materials (in this case, by engraving and etching on glass) which I refer to as my ecology of knowledge as a printmaker, also trigger in me a transformation process.

A very important revelation was made from my working process: namely, that all selected *found objects* were not altered but given a new sustainable aesthetic life. I referred to Gordon Froud's working process; his artwork is based on the reworking of *found objects,* but he alters their appearance (Froud, 2012). Rhythmic qualities and symmetrical elements features greatly in the transformed *found objects*.

During the process-orientation art facilitation, other outcomes about my creative and working process were discovered. Through mark-making I embodied my lived experiences and explored my personal identity and style (O'Toole, 2013). Utilising the fly as a subject matter in my artwork relates to qualities of fynbos. Observation plays an important role in my creative process. Through observation my engagement with new inspirational items (the doilies and fynbos) triggered new creative processes.

My working process is embedded between art and design. My love for decaying *found objects* and the metaphor of battered woman/people emerged as a general theme. The theme of domesticity also emerged. The outcome of my final artwork relates to the mythical process of metamorphosis similar to that of a flower or growth of an insect.

The three-phase observation task, I completed as an activity during the process-orientated art facilitation, confirmed Davies's and Meskimmon's (eds), 2003:14) belief that 'thinking' does not happen in isolation but is rooted in basic cognitive structures.

My process of discovering a *found object* confirms that I engage with psychological processes that involve the interaction of aesthetic, cognitive, emotive and creative factors. My subconscious psychological processes exposed the reason I am choosing not just any *found object/s*, but discarded cleaning items: it is my obsessive compulsive cleaning behaviour.

In this next chapter I will summarise my research journey and findings.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction of dissertation subject: bringing design thinking to artistic life

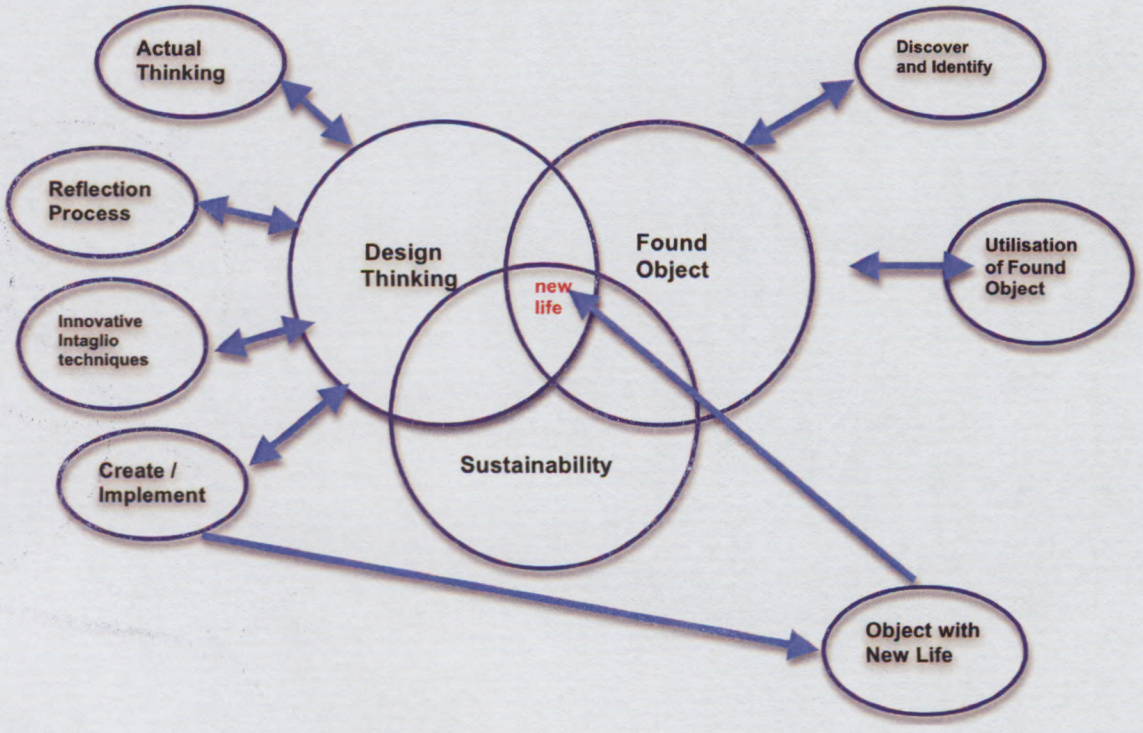


Figure 6.1. Model of Design Thinking: Authors construct, 2013.

One of the expected outcomes of this study is to create awareness around sustainability by using discarded, banal objects and giving these objects new life through *design thinking*.

We are aware that *design thinking* is a debatable term and that it's meaning is threatened. In Chapter Two, I refer to Keynes (1969:99) who considers *design thinking* to be emerging into several forms of thinking and intelligence and I concur with this thinking.

My model of *design thinking* (Figure 6.1.) already revealed that I recognise in my own work, when I transform a *found object* into an aesthetically valued artwork, most of the *design thinking* steps that the field at large recognizes. Because my *design thinking* processes emerge instantaneously and clearly in my mind, I find myself to be in two minds, because, when I create an artwork, I in no way consider *design thinking* processes.

By documenting my *design thinking* processes I disclosed the steps that I take in my subconscious mind while I am immersed in my creative process. As a result, action research, which is in essence 'learning by doing', also happened instantaneously. This is the primary motivation for the study. I have gained positive insights into my *design thinking* processes and have come to grasp the concept that my art is also designed. My working process, bridging art and design, was also exposed during my process-orientated art approach sessions in Chapter Four.

Ongoing debates regarding the boundaries between art and design are still ongoing. As a result I challenged the rules, whether consciously or subconsciously, and engage in the boundaries between art and design, exploring ways in which art can be used to present an ethos of 'redesigning'. Ultimately, because of the insights gained from *design thinking* processes I am open-minded about engaging with design.

6.2. Reflections on the research questions

The study was designed according to a qualitative design paradigm that included *embodied experience* and *phenomenological research.* Qualitative methodologies were employed including the *reflective journal*, *lived experience* and a *process-orientated art* approach. The qualitative approach provided a more complete understanding of the research problem and research questions.

Phenomenology presented a sound methodology for examining my lived experiences, and, as a result, the answers to the research questions were lived (Halldorsdottir, 2000: 48)

Why is it necessary to create a narrative of sustainability in a deteriorating environment, and why is the decaying object being considered worthy of a new life through a process of *design thinking*?

The data regarding lived phenomenological experience were gathered in various ways to describe my personal experiences. Reflective journaling, together with my aesthetic expressions through art, and my ecology of knowledge, and supported by storytelling (dealt with in previous chapters), validated the belief that repurposing presented several beneficial results. Repurposing is a design strategy that constantly evolves, and it allows for the possibility to design a product or create artwork. Most importantly, the discarded objects are being retained, as a result extending their lifespan giving them new life (Aguirre, 2010:8).

How can an object of decay carry a narrative of conscious awareness when a method of *design thinking* is applied around sustainable life and social responsibility?

For many years I have identified and worked with decayed *found objects*, and for the prospects of this study I have identified particular decayed *found objects* and successfully transformed them into new artworks with new life, thus promoting and facilitating repurposing. These specific unused discarded *found object (Figure 6.2.)*, was given an aesthetic new life (Figure 6.3.).

Figure 6.2. Single brush. Found object: Penny George, 2013.

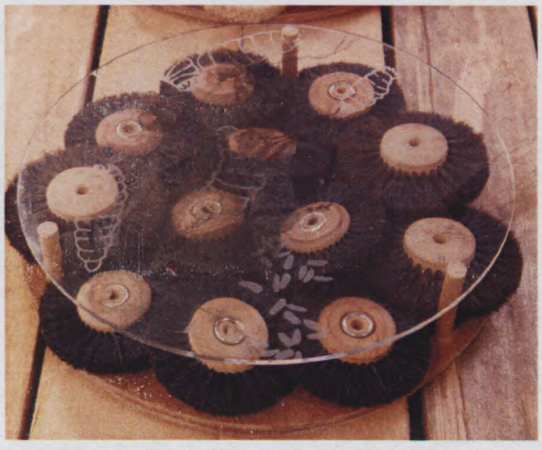


Figure 6.3. Collection of brushes. Found objects artwork with new life: Penny George, 2014.

I have become consciously aware that repurposing can be employed as an effective sustainable system.

How can the application of *design thinking* and Fine Art further enhance the understanding issues of sustainability through narratives of decay and life that is socially responsible?

Various artists and designers, as well as myself, already recognise that repurposing has numerous benefits. There was sufficient evidence from authors, in the literature review for the study, to reveal that many designers and artists are striving to understand issues of sustainability holistically. In Chapter Two I made significant reference to artists, using discarded objects, that something valued can come from what is regarded as rubbish, creating an awareness around sustainability and social responsibility which is an outcome of the study. Storytelling has become a rich and useful method to advance change around many sustainable issues in my case storytelling around the benefits of using newly discovered decayed *found objects*.

Both Fine Art and Design can enhance the understanding of issues of sustainability by bringing about a greater awareness of using discarded objects by educating people at grass roots levels.

6.3. Contemplations on the research process: from decay to new life

Reflecting on the research process, it has become to me in this study that disciplines of Fine Art and contemporary *design thinking* are both prominent and part of the argument for recycling and redesigning.

Considering that the focus of this study is delimited to the use of art to create awareness around repurposing *found objects*, a physical utility product was not provided. However, the option of providing physical utility products is not excluded. Reversing the process of an item of no value to a valuable artifact, the embossings of the doilies in Chapter Four could in future, if desired, be transferred into design as patterns for a textile or wall paper, thus becoming a utility product.

The process of *design thinking* resulted in the transformation of a *found object* of decay into an artwork with a narrative of sustainability and life. The portrayal of my artistic journey, as been documented in journaling and my lived experience, revealed how an object of decay is transformed into an artwork carrying a message of sustainable life and renewal. Yet, in spite of the valuable insights gained from the process of *design thinking*, journaling and lived experience I felt the need to deepen the findings.

As a result I employed a process-orientation art approach which, in my view, successfully uncovered the nature of the cognitive processes involved in my art-making activities (Hickman & Kiss, 2013:98). Time constraints allowed me to attend four short cycles to record and present the lived experience during the process-orientated approach (Hickman & Kiss, 2013:97). I would, in future, consider completing seven full cycles to gain a broader understanding of how one learns or applies learning while one engages with one's *found objects*. Additionally we reflected on the fact that no progress had been made on specifically the 'decaying' process and the link of the fly to this process.

Since the outcome of this research is in the form of a mini-thesis and an exhibition, both complementing each other, my art making process informed my research process. It was, however, quite challenging for two reasons. Firstly, as one progresses with one's creative tasks, this activity throws new light onto one's theory, and vice versa. Researching the theory causes a shift in one's practical work. Secondly, it is not easy intellectually to move from focusing exclusively on theory to focusing exclusively on one's practical component of the thesis. This is not a criticism of the format of the thesis, but simply an observation.

The following section contains considerations for my working process.

6.3.1. Practicalities and possibilities

The experimentation with materials (Figure 6.4.) allows one to understand the properties of materials while using them (Fisher & Shipton, 2010:33).

Figure 6.4. Resist experimentations: Penny George, 2014.

The resist experiments on glass for sandblasting purposes was done to obtain the best intaglio technique (normally employ on metal plates) on glass, because I wanted to steer away from using the more conventional vinyl resist. By investigating these resists I not only learnt about using different resists for sandblasting but also became aware of the practicalities and possibilities of the technique, which added valuable insights to my ecology of knowledge.

Staying true to my etching knowledge, I wanted to etch insects, mites and flies on the round glass bottles, (case study #3) to which I made reference in Chapter Five. Naturally, it is easier to work on a flat surface than a round one. I used an electric engraver to capture the fine line quality that the subject matter requires but was not entirely satisfied with the result. Fine line quality was obtained but, because of the hammering action on the glass, the line quality was not crisp.

The investigated sandblasting techniques yielded the following results: My first tests involved enamel, etching resist and spray-paint. The enamel and spray-paint allows for etching and scratching on the surface, but the etching resist was too rubbery. The spray-paint could not withstand the pressure of the sandblasting because the resist was to thin. Both the enamel and etching resist fared better than the spray-paint but can be classified as poor resists because, after the sandblasting, most of the etched line were lost. Both resists created an uncontrolled texture that could be used in the future.

Armour etching cream is not a resist for sandblasting but can be painted directly on the glass to secure an image that looks sandblasted. Fine line quality can be obtained. The strength of this substance is weak and, as a result, the image is embedded superficially on the glass which is not deep enough to ink up, like an intaglio printing technique.

The experimentation with cold glue was exciting. I realised that the resist needed to be more flexible for three-dimensional glass items. The cold glue was somewhat successful. It allows one to either (a) paint on the glass and not achieve a fine line quality because one has to apply the glue quite thickly or (b) etch in a layer of cold glue while wet. Etching into the cold glue is a fast process because the glue dries quickly. Once it is dry one is not able to etch or scratch an image into it.

After sandblasting, the cold glue withstood the abrasion in the areas where it was applied thickly and not in the areas where it was applied too thinly. Sadly, this resist was not suitable for the outcome envisaged but could be investigated further because the outcome had a pleasing hand-made quality (Figure 6.5.).

Figure 6.5. Sandblasted hand painted and etched cold glue resist: Penny George, 2014.

The liquid etch resist I applied with a brush, but can also be applied with a sponge. The disatvantage of this resist, in my view, is that it is best used for bold designs and the advantage is that it is a solid resist. Plascon Velvalgo paint is not a solid resist.

I recognised that thicker, tougher and more flexible resists are advantageous in the case of sandblasting. Finally, vinyl, the more conventional resist, proved to be the best for sandblasting. It is strong and tough enough to withstand the length of time while sandblasting. The fine line hand-made quality I was striving for is difficult to obtain from vinyl, but images are embedded deep within the glass so that I can leave it un-inked, or ink it (Figure 6.6.).

Figure 6.6. Sandblasted vinyl resist: Penny George, 2014.

Resist possibilities are endless, and the experimentations I have done and results obtained presented a valid learning curve. Further investigations can be done to achieve better results for finer line qualities, but the aim of this study was not to test resists but to establish a personal preferable technique for the glass jars to gain aesthetic value.

6.4. Design thinking on the found objects: implications on sustainability

Ezio Manzini (2014) referred in his lecture to a forum entitled 'Our Common Future' established in 1987. The forum campaigned to reduce the carbon footprint by employing eco-design as a sustainable design solution to combat issues that society was facing then and still is facing. Essentially eco-design means to 'green' everything.

I can safely agree that design can bring many benefits to several areas of society but these benefits are very difficult to measure, because sustainability is not well-defined. As a result the 'green' movement came under scrutiny because many believed that not all green products are necessarily sustainable. Eco-design, as a sustainable design solution, has brought many benefits but we, as artists and designers, should not focus on making things 'greener' because they are already 'green' Manzini believes that we have to create sustainable solutions (ibid.).

The employment of *design thinking* processes in my study proved to be valid and sustainable benefits were measured positively. The benefits are three-fold.

Firstly, in Chapter Two the literature review sketched that repurposing presented several beneficial solutions. My body of work validates this opinion, and it is my belief that repurposing presents an effective sustainable solution, because repurposing prevents the discarding of objects by extending their lifespan, giving them a second life. As a result, all artworks created for this study, incorporated *found objects,* which places emphasis on sustainability and social responsibility.

Secondly, my message is that there is a need for society's understanding, from grass roots level upwards, of design for sustainability. Society needs to adopt the cradle-to-cradle concept, which, amongst other things, involves the transforming of a *found object* with zero-value into a valued aesthetic object.

Thirdly, if sustainable design needs to become a vital and integral part of a curriculum, then it is imperative that there be collaboration among those who draw up design curricula. Only then can teaching yield new and effective sustainable solutions to major environmental challenges.

6.5. Introspection on the research journey: a journey lived and embodied through phenomenology

As already mentioned in Chapter Three in this mini-thesis I explored the insights that Merleau-Ponty and Schön brought to light with reference to *design thinking* processes and their documentation. They believe that human ideas and thoughts do not work in isolation, and that we are inhabited by a knowledge of our embodied "being-in-the-world", which always functions in our situated experiences of the world (Poulsen & Thøgersen, 2011:33).

I concur with this notion, because embodiment is the relationship between body and mind (Barbour, 2006:87). Strengthening phenomenology as an appropriate qualitative lens in this study was validated because my journey of transforming a decayed *found object* from zero-value to having aesthetic appeal was lived and embodied.

In Chapter Four a record of the embodied engagement was documented and provided by means of reflective journaling and photography. Additionally, I integrated one of Maxwell's strategies, cited in Yin (2011:78), into my design study: In order to achieve a comprehensive in-depth knowledge of 'field' situations through lived phenomenal experiences, one must acknowledge one's feelings while interacting with the discovery of, in this case, found objects. This is only possible through intensive long-standing 'field' engagement.

As stated in Chapter Two, my ontological stance is that all chosen *found objects* should have a life. My reflective journal revealed important insights into my working process, but, first and foremost, the study benefited from phenomenology because, using my own methodological or personal tendencies, I was, over time, made aware of my experiences as I interact with *found objects*.

Larsson and Holmström (2007:59 cite and quote Strandmark and Hedelin, 2002:79) as saying that "the goal of phenomenology is to uncover the essence of the phenomenon, its inner core, what the 'thing' is, and without which it could not be what it is". The purpose of research in phenomenology is understanding people's lived experience of a phenomenon (Larsson & Holmström, 2007:59.

As a result phenomenology provided a excellent methodology for studying my lived experience (Halldorsdottir, 2000:48). A phenomenological approach was employed to record and present the lived experience during the process-orientated approach (Hickman & Kiss, 2013:97). The research not only expanded my understanding of the phenomenon of how I engage with certain *found objects* but also uncovered the nature of the cognitive processes involved in my art and working process.

Gascoygne's (1936:170) theory pertaining to the activity was validated. I realised accidentally why I am choosing these discarded cleaning items, because of my obsessive compulsive cleaning behaviour. This revelation has however not been sufficiently interrogated during the process-orientated art facilitation sessions.

Additional themes emerged from describing my selected *found objects*. The commonalities of these themes allowed me to investigate the phenomenon of my engagement with particular *found objects* (Halldorsdottir, 2000: 50).

After having come to these conclusions, I feel academically that Dufrenne's phenomenology of aesthetic experience corresponds to a critical distinction between the work of art and the aesthetic object. His theory to aesthetic meaning is incredibly complex but applicable.

Philosophers using existential-phenomenological tradition in philosophy and engaging with fine arts mentioned in Chapter Three presented valuable outcomes to the study. Diverse thinkers, such as, Edmund Husserl, Martin Heidegger, Jean-Paul Sartre, and Maurice Merleau-Ponty have made enormous contributions to phenomenology and helped me to uncover the meaning of my phenomena and why my art matters.

6.6. Recommendations for future research

Art and design education in this study is defined as learning by observing and creating works of art (Favre, 1981:3). Although this study is not focusing on the different learning approaches that students adopt when confronted with the production of an artwork made from a *found object* as a learning activity, it is recommended that art facilitation practices in the formal design class would enhance learning through a deep learning approach (George, M'Rithaa & Hattingh, 2014:18).

As each of the approaches to learning is also linked to academic achievement it is worth mentioning (Burton & Nelson, 2005:143) findings which indicate that the deep approach is

positively related to academic success, while the surface approach was negatively related to achieving good results at an institution of higher learning (Zhang, 2003:1432).

Focusing was a method and technique that Gendlin discovered and developed for therapy (Friedman, 2007:xii). Gendlin and Rodgers discovered that the answer to successful therapy involved more than just cognitive concepts and ideas; more often than not the pivotal element in the process of recovery was the client's ability to speak from a certain bodily-felt experience. It appears that these clients connected naturally with the experience within their body through focusing. By investigating their bodily-felt experience they were accessing new frontiers, relating to the situation or issue that they were exploring (Orner Oliver & Wernich, 2012:3). It emerged that this approach of being with one's bodily sensed awareness could be taught.

Pausing to pay attention to the bodily quality of what we can sense vaguely but do not yet have words for, we can find new creative ways to articulate the experiences that are forming inside us in the body mapping. Making a body map, we outline the shape of the human body as a starting point so we can make life-size pictures of ourselves. Personal body maps embrace all that we feel to be most important about ourselves.

It is a very personal approach to expressing oneself, and trust is an important feature. Body mapping is not an entirely new concept; it has been used for many thousands of years by people who wanted to achieve a better understanding of themselves, their bodies and the world they live in (Solomon, 2007:2).

Body mapping can be used in many different ways, in a group or individually. It can be used as a healing tool, to remember things from one's life, to find answers to problems and, most importantly, it is a way of telling a story (ibid.).

From my previous and first experience (Figure 6.7.) with body mapping on the next page, I came to the conclusion it is a good feeling to work in a group of people because you can support and inspire each other.

Figure 6.7. Body map drawing: Penny George, 2012

In research, body mapping works well as a participatory qualitative tool. Because I employed a phenomenological methodology to learn more about my experiences, to capture and describe how I interact with *found objects*. A deeper understanding of my experiences can be gained by employing focusing and body mapping as additional research tools (Gatto, 2009:7). It is, however, considered as an appropriate tool should this study lead to further for research.

Dufrenne's theory to aesthetic meaning presents valuable merit and can be relevant for further interdisciplinary study (Casey,1973).

6.7. Conclusion

The basis of this study was to explore the process of *design thinking* involved in the transformation of a *found object* of decay into an artwork with a narrative of sustainability and life, and to create awareness of the role and function of decayed objects by reusing these to give them new life. Epistemologically, the study is situated within the interpretive paradigm, since it makes meaning of the phenomenon as I interact with *found objects*. My ontological stance is that all chosen decayed objects should have a life. The interpretive paradigm makes reference to the Burrell and Morgan (1979) framework.

I drew on a qualitative design paradigm of Phenomenology. Qualitative methodologies employed included the *reflective journal*, *lived experience and a process-orientated art*

approach. In Chapter Three, my reflective *journaling* presented profound, previously hidden insights and provided the theoretical underpinning of the research methodology. Self-examination and insights into my own reactions to or feelings about my study as a whole, reflected in my written journal and revealed three triggers (natural elements, the process and the ultilisation of glass) as I interact with *found objects*. I had not consciously been aware of them before I embarked on this research. The collecting of these decayed *found objects* reflected my identity.

Using *lived experience* as a research method, I investigated and explored the unique nature of my situation (Pascal, et al., 2010:175). I based my research and focused on phenomenology (Merleau-Ponty, 1945;1962) and his view of the body by reflecting on my lived experiences, through an embodied engagement in the world. In Chapter Two I mention that Davies, Meskimmon and Schön resonate with Merleau-Ponty's reasoning and recognise that thinking does not happen in isolation. This reasoning resonates with my creative and working process.

Employing a process-orientated art approach as a qualitative tool, I learnt more about my own experiences. I made remarkable discoveries regarding the nature of the cognitive processes involved in art-making activities and how I interact with *found* objects. In Chapter Five, through the utilisation of a process-orientated art approach, I unpacked numerous discoveries about my creative and working process.

The findings and insights that I arrived at through unravelling my artistic journey and associated *design thinking* have revealed valuable insights. Underlying themes, specific patterns inherent in my search, selections and finding of objects that intrigue me, emerged from *design thinking* processes and the process-orientated art approach. The process-orientated art approach validated what happens in my conscious and subconscious psyche, and there was, indeed, a verifiable *design thinking* process which underlies my artistic journey.

Because the study investigated my initial attraction to *found objects*, my reviewed literature from various *design thinking*, art and psychological fields considered the emotional and aesthetic factors involved in *found object* utilisation and transformation. In addition to the decision-making process involved in how the objects would be used after having been found, I established, through a process-orientated art approach, that in my personal manner of discovering an object I engage with psychological processes that involve the interaction of aesthetic, cognitive, emotive and creative factors therefore Gascoygne's theory validated.

Through this analysis the outcomes of this study, as outlined in Chapter One, are three-fold.

Firstly, an awareness of repurposing was created by using discarded banal *found objects* and giving these objects new life through *design thinking*. I believe that repurposing presented a sustainable solution because repurposing retains discarded objects by extending their lifespan, giving them a second life. As a result, all artworks created for this study, incorporated *found objects*, which places emphasis on sustainability and social responsibility.

Although debates about the term *'design thinking'* is still ongoing, the concept itself remains current (Kimbell, 2009:4). The classification of *design thinking* processes has been investigated and has been found that the field at large recognises seven *design thinking* steps. I recognise six of the *seven design thinking* steps when I transform a *found object* into a valuable artifact, the exception being that of prototyping. I have gained deep insight into my own processes of *design thinking* because of the employment of *design thinking* processes in my study. *Design thinking* proved to be a valid descriptive tool, and sustainable benefits were measured positively.

Secondly, another outcome was to create an awareness around sustainability and social responsibility.

The study has transformed my experience into awareness around the role and function of discarded *found objects* and how they can be given a new life and thus contribute to sustainability. Sustainability is not well-defined, Shedroff (2009:xxi), and debates and discussions regarding this issue are continuous.

Already modern designers and artists are increasingly adopting Duchamp's attitude to the creative process and continue to use the process of assemblage, transforming *found objects* no one else wants into objects of desire (Yablousky, 2010).

It is my belief that my process will not only contribute to sustainability, but effective sustainability, in a small way by increasing the desire for the discarded object to be rekindled into a new sustainable life. In the literature review for the study, I argue for our understanding of design for sustainability as meaning the adoption of the cradle-to-cradle concept by transforming a *found object* with zero-value into a valued aesthetic object. Because of Manzini's involvement for more than two decades in the design for sustainability arena he strongly believes that "design for

sustainability is the future, it's everything on every level. It is not a discipline" (Manzini, 2014). I concur with Manzini's beliefs which sum up both my thinking and working process.

Thirdly, I hope that this research will contribute to projects and/or research in FID in order to stimulate dialogue through curricula development. This would advance the sustainability agenda in a multi-disciplinary context in FID at the Cape Peninsula University of Technology. As mentioned earlier, it is recommended that art facilitation practices be introduced in the formal design class in order to enhance learning through a deep learning approach when students interact with *found objects* (George, et al., 2014:18). It is, however, considered as an appropriate tool should this study lead to further for research.

As previously mentioned in Chapter Two, an undertone of this study is the dilemma encountered in attempting to establish clear delineations between art and design in both pedagogic and professional practice domains. In this study I have established that although I engage within the boundaries of art and design, the subject still remains debatable.

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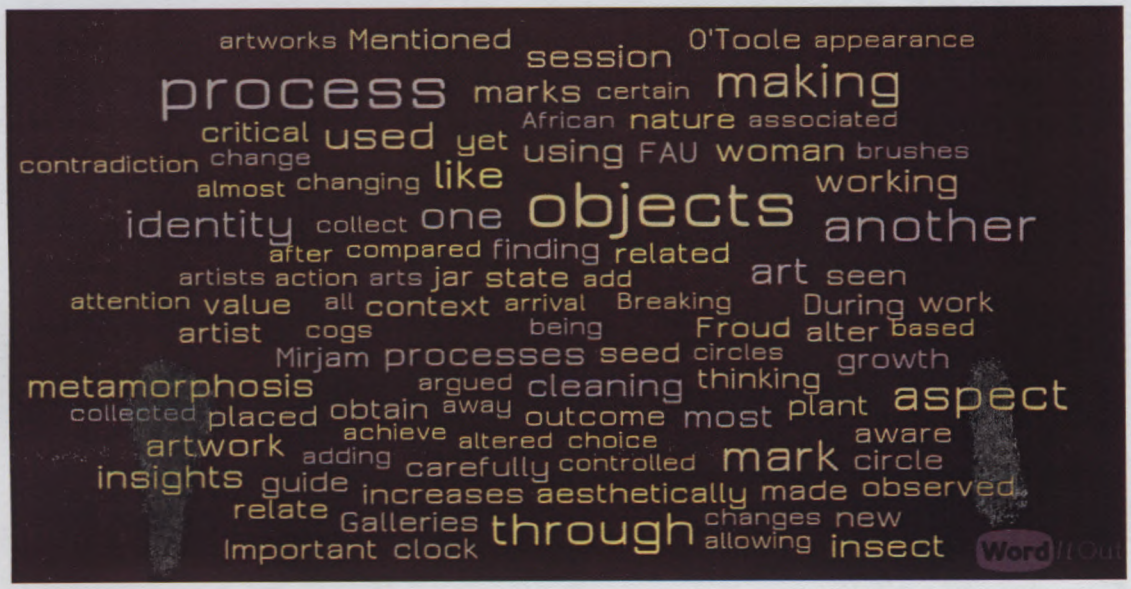
APPENDIX A

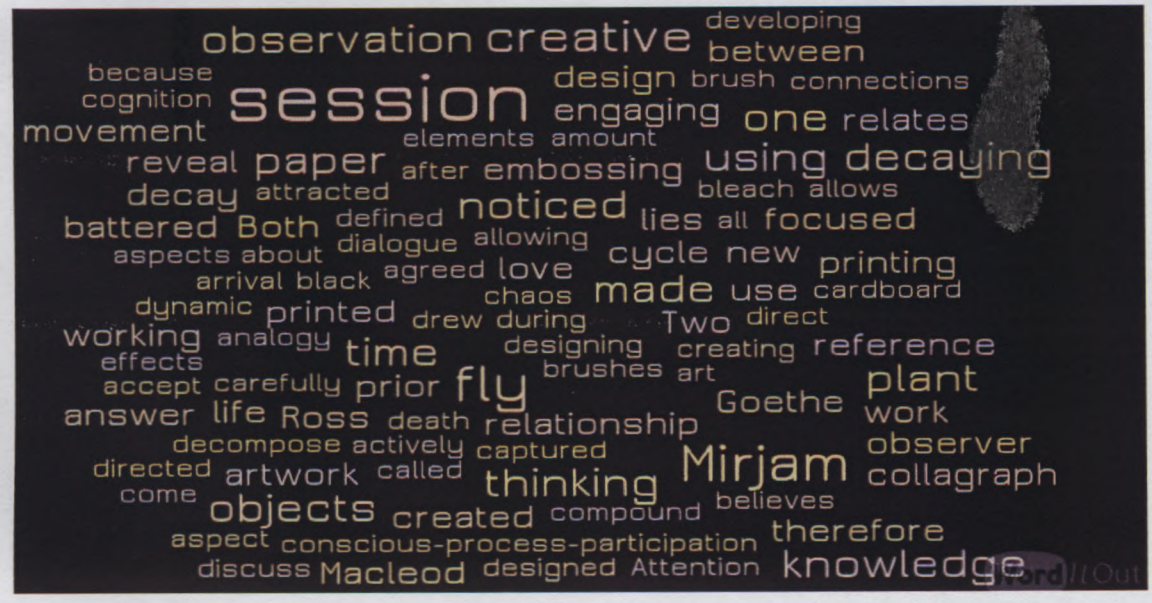
CD enclosed of all the artworks.

APPENDIX B



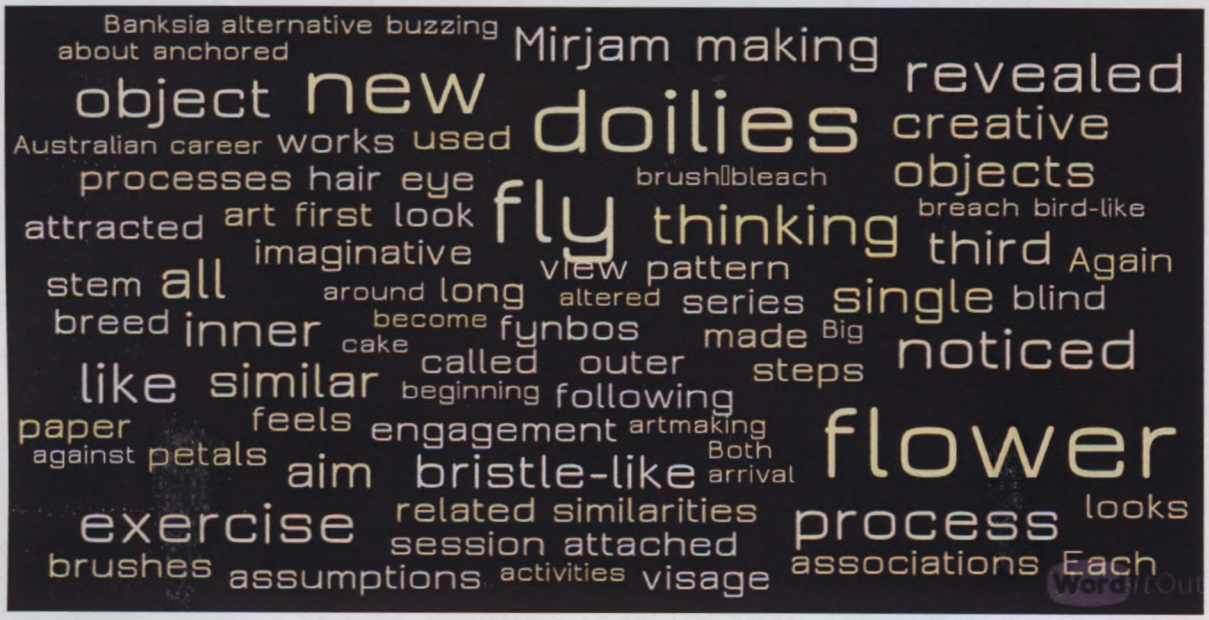
WorditOut – word cloud of the process-orientated approach – session #1: Penny George, 2014.

[Generated online (Davies, 2014)]



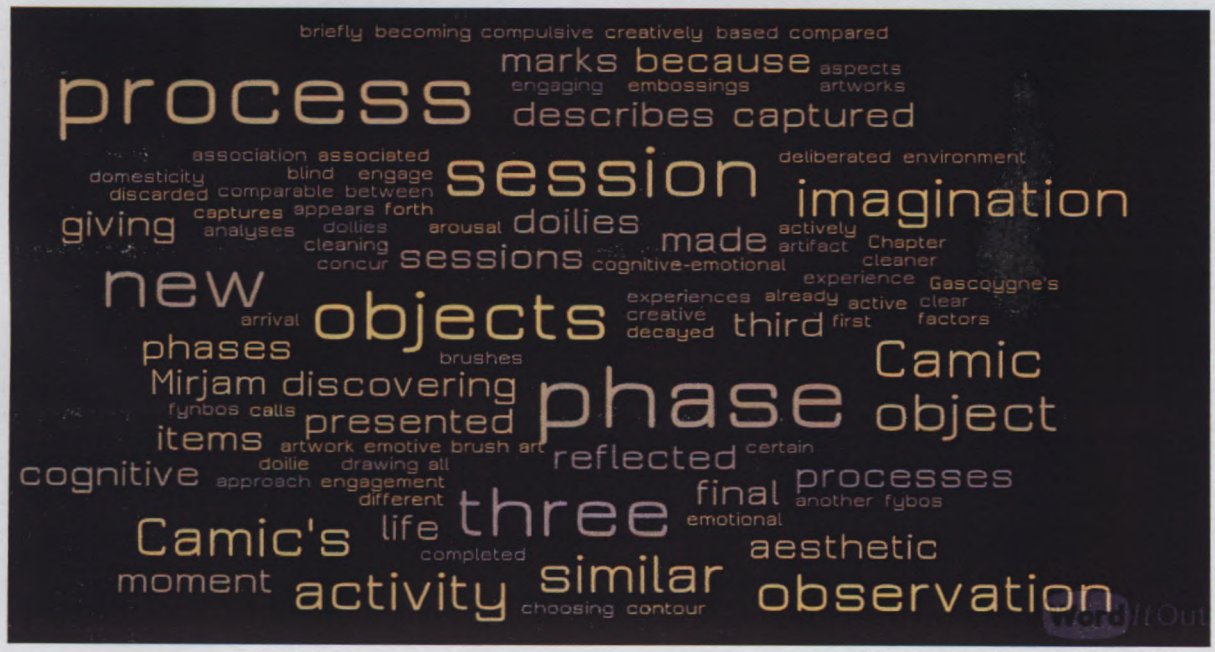
WorditOut – word cloud of the process-orientated approach – session #2: Penny George, 2014.

[Generated online (Davies, 2014)]



WorditOut – word cloud of the process-orientated approach – session #3: Penny George, 2014.

[Generated online (Davies, 2014)]



WorditOut – word cloud of the process-orientated approach – session #4: Penny George, 2014.

[Generated online (Davies, 2014)]

APPENDIX C

Long cleaning brush to be transformed into an artwork: Penny George, 2014.

APPENDIX D

Wooden shelf to be transformed into an artwork: Penny George, 2014.