Flow, Resistance and Thinking:

A Phenomenological Study of Creativity

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Certificate of Original Authorship

I, Fiona Campbell, declare that this thesis, submitted in fulfillment of the requirements for the award of a Doctor of Philosophy, in the Faculty of Arts and Social Sciences at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise reference or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Table of Contents

List of Figures and Tables

Figures

Tables

Abstract

Creativity has been identified as an ambiguous and paradoxical phenomenon to research, leading to both generalities and discrepancies concerning its nature, producing definitions and models that frequently do not encompass creativity's complex qualities. It has been suggested that, rather than seeking to explain and reduce this complexity, research should make creativity more intelligible; that is should use creative methods that can generate rich, fruitful data that promotes new understandings rather than new theories. Finding new understandings of the creativity phenomenon by questioning some assumptions of the established theories is the overall objective of this study, itself located in the field of the cognitive processing of information at both the conscious and subconscious levels.

The particular focus of the study is this ambiguous, seemingly contradictory process of creative thinking. Creative thinking has been characterized by existing research as a spontaneous, *flowing* process but also an unpredictable, *resisting* one, so the aim was to explore the tension and interplay of these two processes, in order to understand their relationship. Established research asserts both characteristics are present – this is part of the paradox - but does not clarify their relationship.

To explore flow and resistance in creative thinking, creativity is investigated as a lived experience; the research questions ask: What is the experience of being creative? And how does creativity emerge? using existential phenomenology as methodology. Visual thinking, using freehand experiential drawing, is the technique used to elicit participant responses; data collection methods include field notes and interviews. The fieldwork comprised two workshops followed by a semi-structured interview. The lived experience of individuals wanting to explore their own potentiality through creative expression provided the experiential material for analysis. Participants were adults without training or specialized knowledge in creative practice.

As a result, this study deepens existing research by elucidating the paradox of flow and resistance. In doing so, it provides more nuanced understandings of creativity's process and characterisation and some insights into how new ideas emerge and the conditions required for their emergence. However, the key findings are that it proposes an alternative approach to problem-centred cognitive theories and raises questions about the prevalence of routinised practices in information processing and their effect on the generation of new ideas.

Chapter One: The Introduction

> The activity of thinking is essentially an expression of flowing movement. Only when thinking dwells on a particular content, a particular form, does it order itself accordingly and create an idea. Every idea – like every organic form - arises from a process of flow, until the movement congeals into a form.
>
> Therefore we speak of a capacity to think fluently when someone is skillfully able to carry out this creation of form in thought, harmoniously coordinating the stream of thoughts and progressing from one idea to another without digression – without creating whirlpools.
>
> Thinking that cannot enter deeply enough into every detail becomes a flight of ideas, torn along as though by an invisible torrent in which it can create no permanent forms. On the other hand, thinking that becomes solidified in fixed ideas remains a captive of form, without being able to develop towards further possibilities.
>
> (Water scientist Theodor Schwenk 1996, p.96-97)

Research on creativity can be found throughout most disciplines and domains, but especially in fields where human nature and behaviour is the concern. This is not surprising, since creativity has been the subject for conjecture in the history of human thought since Classical times, because of its roots in our conception of what it means to be human. It holds special value in our cultural psyche since "the distinctiveness of humans lies in (our) self-creative nature" (Noonan 2008, p.157), in our capacity to create and to bring change. In modern times particularly, there has been this desire for personal fulfillment and aspiration towards something beyond the everydayness of ordinary life. Without necessarily wanting to be an artist or inventor, there has been a need to experience one's individuality as something unique and different from all others, and to express this individuality by bringing something different from the norm into being, something singular and meaningful.

Prolific research has generated numerous theories and models to meet this need, a wealth of competing ideas that both reinforces creativity's importance and gives evidence of its complex

and multidimensional nature, in itself a reflection of the complex nature of the human being. Yet Kozbelt (2011) has suggested that the abundance of creativity theories to date has not been as fruitful as it could have been, considering this wealth. The breadth of theories is seen as both a strength and weakness: a strength, because of the extensive range and type of research; but a weakness, because the existing theories and models have not deepened or synthesised our understanding of this phenomenon, especially in the area of creative ideation. Indeed, Kozbelt (2011) wonders if an armchair discussion on creativity with the likes of Goethe may indeed be more productive than contemporary theories have been. Rothenberg and Hausman (1976) consider that it is the contradictory nature of creativity itself that has led to both generalities and discrepancies in its study, since it is a phenomenon "both determined and undetermined" (p. 26).

Part of the problem is that creativity research has sought scientific respectability (Carter 2004). As such, attempts to model it empirically have led to simplifications that gloss over or simply reduce its multidimensional nature, thus giving rise to models that cannot encompass the unpredictable and discontinuous elements of the creative process (Abel 2009). It may be that the modern desire for complete and certain knowledge in research, what Dewey (1929) called 'the quest for certainty', is the foundation of this attitude. In the past, hallowing the scientifically-pursued, valid and reliable outcome that replaces the unknown with the known, has strongly influenced creativity research, a field noted for being resistant to precise definition and explanation (Hodgkinson et al. 2009; Rothenberg & Hausman 1976). Carter (2004) goes so far as to assert that, in academic research, knowledge and creativity have been considered "mutually exclusive" (p.7) due to this focus on reductive, explanatory approaches. An alternative has been suggested: rather than aiming to explain and thereby reduce its complexity, research should embrace creativity's complexity and contradictions. The aim should be to make creativity more intelligible (Rothenberg & Hausman 1976) rather than explicable, in order that more understanding, rather than more theory, is generated.

A lack of congruity between theory and practice has been a particularly thorny issue in creativity research, blamed on the gap between academics theorising about creative practice and creative practitioners unable to theorise their practice, if they lack the language and skills to do this (Carter 2004). The lack of congruity opens up the question of the real-world robustness of the many of the theories and models (Becker 1998), and may account, in part, for the continual generation of new theories on the subject.

The Researcher's Position

This research story begins with the researcher being an artist in an information science world. In her capacity as an experienced, professional painter, she was intrigued by the static and functional quality of many models, particularly mental models, purportedly representing cognitive processing in both information and creativity research. Having experienced the creative process as anything but static and fixed, she questioned the value of such models, especially the delineated, unilinear and segmented structures used to represent cognition. Further, a substantial body of the literature in both fields conceives cognition as being problem-centred: of revolving around a problem or gap that must be bridged, adapted or otherwise resolved. Information science, when it even contemplates creativity, generally follows cognitive science's lead and sees the creative process as a problem-solving one. Whereas such an approach may seem a reasonable premise as the basis of analytical or even innovative thinking, the researcher queried, out of personal experience, whether this premise could be applied to creative thinking.

The alignment of 'creativity' with 'problem' is not limited to creativity's conception: creativity research itself has been regarded as something of a problem, with contradiction and ambiguity present in all aspects of the field. Not only are these qualities noted attributes of creativity, but also the theories themselves frequently seem at variance with each other. For example, despite the extensive field of research, there is much inconsistency and little consensus as to how creativity takes place and where it comes from. This variance in the literature led the researcher to wonder about the study of creativity in relation to the search for certainty, and whether the focus on solving the problem of creativity has itself been part of the problem. This is the background and the foundation of this study of the nature of creative thinking.

The Research Purpose and Aims

This study, therefore, is fundamentally a response to the call for a deeper understanding of creative thinking (Rothenberg & Hausman 1976; Kozbelt 2011; Levy 2007b). The initial impetus was provided by a proposal from Information scholar David Levy (2007b) for a more nuanced approach to the study of creative thinking, which he sees as one of the casualties of an increasing tension between technology and scholarship; but the principal aim was to understand, and hopefully elucidate, some of the existing contradictions inherent in creativity research itself.

Schwenk's (1996) imaginative metaphor for thinking (see the epigraph on page 10) was both the inspiration and launching pad for the research questions and research design. Conceptualising cognition or creativity in terms of fluidity or flow is not unique to Schwenk: these are qualities frequently associated with the creative process. However, this was not a theoretical fancy, but is based on Schwenk's qualitative observation of the intrinsic qualities of natural water flow. Further, he asserts that we can transform our cognitive faculties by observing the phenomenon in this way, making thinking more dynamic. For him, there are certain quintessential forms of movement found in all flowing media, regardless of composition. This is the basis of his assertion that thinking, like water, is a process of flow and congeal, "dissolve and bind" (1996, p.97).

A deconstruction of his assertion reveals four key motifs that have informed this study's research aims and structured its framework:

- Cognitive activity is a dynamic combination of flowing and resisting movement.
- Thinking has an emergent element.
- A metaphor may be a more responsive paradigm rather than a model for the thinking process.
- An experiential understanding of thinking may provide more insight into the creative process than a cognitive model.

The complexity and contradictions inherent in both Schwenk's metaphor and the issues raised in creativity literature therefore have informed this study into the nature of creative thinking.

The Research Approach

Although creativity has been variously conceptualised as a capacity (Rothenberg & Hausman 1976), an attitude, a set of processes, a social act, an economic force (Runco 2014) or as a materialisation of ideas (Carter 2004), this study has taken the stance that it is a phenomenon, and creative thinking is a process that embodies this phenomenon. This stance has implications for the research methodology, as to whether to take a philosophical or psychological approach to creativity. Although there is, of course, no defined boundary between the two approaches, the former identifies creativity as a mode or quality of the faculty of thinking; the latter sees it as a specialised domain in itself, in which cognitive processing is just one framework. Further, a researcher's philosophical perspective is informed by her underlying assumptions and values about the purpose and potential of creativity in human life. This researcher has taken a humanist position regarding the role of creativity in

the life of the individual but brings the background of a creative professional to the study. Therefore, although both philosophical and psychological positions are addressed, this study locates itself in a philosophical approach.

The methodology will be experiential in approach, in keeping with Schwenk's (1996) experiential description of thinking, but also as a response to the predominance of cognitive approaches to studying the creative process and the models this approach has generated. The methods will draw on the researcher's expertise in the visual arts to devise the tools used in the fieldwork to collect experiential material for the analysis. The decision to use artistic techniques to elicit information about creative thinking from the research participants does not necessarily constrain the scope of the research to artistic creativity, since the focus will be cognition during a creative process, not the creative products or practices that manifest this process. Nor will the creative ability of the participants be assessed in any way: this is not the purpose of the study. The aim is to understand the way individuals who seek more creativity in their lives experience it, as they create. There has already been much study of the creative personality and process in creative professionals, and the researcher is aware that she brings her own habits and beliefs about the creative process to her study. For this reason, the researcher positions herself as an observer of the creative process in others, people who are not steeped in creative theories or techniques and so have something fresh to offer creativity research, and for whom creativity still holds the mystery of the unfamiliar and unknown.

In summary, this study will investigate creativity as an experience of flow and resistance in the context of *personal* creativity. The study draws on interdisciplinary sources but is located in the Social Sciences. It uses fieldwork in the form of art workshops to collect experiential material for the investigation. The research design embodies a qualitative, experiential approach.

Concerning the literature

As stated, creativity research straddles many disciplines and professions, and the current trend reflects this interdisciplinary position (Funke et al. 2009; Kozbelt, Beghetto & Runco 2010; Meusburger 2009). In the spirit of this eclecticism, the study draws on literature from a broad range of fields: creativity, philosophy, information, psychology, computer science, design, visual arts, natural science and even contemplative practice, in order to create a context for its contribution to creativity research. Since this is an interdisciplinary study, the researcher has chosen to cite specialists within disciplines, such as leading creativity scholar and cognitive

psychologist Mark Runco, but also a range of interdisciplinary scholars and researchers whose own work and interests span broader fields beyond their own domain, especially integrative scholars who draw on Science and Art for their inspiration. Henry Bortoft, John Dewey, Michael Krausz, David Levy, Theodor Schwenk and Arthur Zajonc exemplify this kind of scholar and have been influential in this study overall, as well as in shaping the literature review. A brief biography[1] of the key scholars is presented below, in order to show the range of disciplines that have contributed to the field of this study.

Organisation of this Thesis

The dissertation comprises seven chapters whose contents are outlined below. This introductory chapter has outlined the purpose, direction, central ideas and organisation of the study. It presents the research background, locates the researcher's philosophical and professional position, and outlines the field of research and its design.

Chapter Two is the literature review, an extensive, broad-brushstroke picture of creativity research, dotted with in-depth discussions on key topics important to this study. The chapter is structured according the ontological, epistemological and practical questions concerning research into creativity: the nature and characterisation of creativity and creative thinking; key theories and approaches to understanding the creative process; and the conditions and practices that support creative thinking. The chapter foregrounds creativity's

[1] Henry Bortoft was a physicist and philosopher of science, best known for his books on Goethean phenomenology. John Dewey was an American philosopher, psychologist, and educational reformer who was one of the primary figures associated with the philosophy of pragmatism. *Art as Experience* and *How We Think* are two of his better-known books. David Gelernter is professor of computer science at Yale, chief scientist at Mirror Worlds Technologies and member of the National Council of the Arts. He has written several books on art criticism and fiction including *The Muse in the Machine* about poetry and AI. Michael Krausz is the Milton C. Nahm Emeritus Professor of Philosophy at Bryn Mawr College. He is also an artist: his artwork has featured in thirty-three solo and duo exhibitions in galleries and museums in the U.S., U.K., and India. David Levy is a computer scientist and professor in the Information School at the University of Washington. He specializes in teaching contemplative practices, the ethics of information and technology and information in relation to the quality of life. His recent research includes work on the contemplative use of technology. Mark Runco founded the Creativity Research Journal over thirty years ago and is a leading creativity scholar and cognitive psychologist. He has published cognitive, economic, genetic, historical, developmental, and educational books and articles on creativity. Theodor Schwenk was a pioneer in water research, founding the Institute for Flow Sciences for the scientific study of water's movement and its life-promoting forces. He is best known for his book *Sensitive Chaos*, written in the tradition of Goethean phenomenology, which views nature as ruled by a single unifying principle, apparent in all movement and form. Arthur Zajonc has worked at the intersection of modern physics, humanities and contemplative traditions for over forty years. He is Andrew W. Mellon Professor of Physics Emeritus at Amherst College and a former President of the Mind & Life Institute. He has written several books related to science, mind and spirit and the use of contemplative practices in higher education.

conceptualisation in light of its ontological foundations, contrasts experiential approaches to its understanding with cognitive approaches, and presents the theoretical background of the fieldwork technique of visual thinking. The chapter concludes with identifying the key issues affecting past creativity research and key motifs informing the research design of this study. The research questions are presented.

Chapter Three considers the methodology guiding this research. It begins with unpacking the research questions. A brief consideration of the range of methodological possibilities follows, before an interrogation of the chosen approach for its fit with the overall aims and intent of the research. The phenomenological world is then introduced: a brief history, the core assumptions of the philosophy and its practical application. An argument for the approach taken in this study is presented; the chapter concludes with a review of phenomenology's strengths and limitations as a research approach to creativity before outlining the framework for the research design.

Chapter Four concerns the fieldwork procedure and data analysis. It considers how the methodology was implemented in the research design, using an experiential approach to explore both the generative and productive contexts of creativity. The fieldwork data was collected in three phases: two workshops then interviews. The choice of methods reflects this approach, with a descriptive observation process for workshop experiences and a more interpretive approach for the interviews. The first part of this chapter concerns the procedure for the data collection; the second part outlines the methodological approach to analysis, describing how this approach was implemented and finishing with a brief discussion of some key issues that arose during the analysis procedure.

Chapter Five is a comprehensive report of the research findings. It describes the multiplicity of ways creativity can be experienced by the participants when engaged in a creative activity. The findings are presented in the form of descriptions, in the manner characteristic of phenomenological research. The unfolding of the descriptions can be seen as a gradual looking deeper, to see into the hidden, authentic meanings of the phenomenon. The chapter is structured in three formats: an overview of the core findings; a detailed report in the form of extended descriptions with substantial use of direct quotations from the fieldwork participants; and a synthesis of the structure and qualities of the experience in the form of a descriptive portrayal. The final synthesis addresses the research questions from an experiential perspective.

Chapter Six seeks to respond to the key issues of creativity research highlighted in this study. Whereas Chapter Five sought to understand the findings from a phenomenological perspective, this chapter reconsiders them in the context of the existing literature. It reappraises the research questions in light of cognitive processing, \ discusses the position of cognitive theories of creativity in light of the experiential findings of this study and considers the limitations of problem-centred approaches to creative ideation. A discussion on creativity as a state of awareness and characterisation of creativity follows, before the highlighting of two new issues that have arisen from the findings of this study. There is a review of the methodology and the general limitations of the research design. The chapter concludes with a reconsideration of the constraining effect on research of the search for certainty, when the subject of the research cannot be defined in terms of certainty.

Chapter Seven presents an overview of the study's outcomes in the context of the contribution and significance of this study to the fields of creativity research, phenomenology and Information Studies. It concludes with a reflection on the importance of recognizing the emergent, unfolding nature of human experience in the context of research.

Notes concerning language, typography and terminology

This study draws on philosophical, psychological, phenomenological and artistic domains and is located in information studies, itself with the field in social sciences. Each of these disciplines uses different language and terminology; phenomenology in particular is very specialised in its use of terms. Although the researcher has tried to maintain the general language of academic scholarship of the social sciences, it is impossible not to use these phenomenological terms, especially in Chapters Three, Four and Five. Further, there are differences in terminology between descriptive and interpretive phenomenology, without any clear consensus between the two streams. For example, Merleau-Ponty's translators use both 'essence' and 'invariant', whereas interpretive phenomenologists often prefer to speak of 'themes'. In this study, 'essence' is preferred to 'invariant', to describe the essential characteristics of a phenomenon. The term 'theme' is also used, but only in its phenomenological sense, where 'themes' is understood as the different ways essential or invariant meanings of a phenomenon are clustered, rather than in the more usual sense of recurring motifs reduced or objectified to a generalisation.

Throughout the dissertation, section headings and subheadings are in **bold** type. Terms in *italics* denote terms specific to certain theories or philosophies, or with specialised meanings

within those theories or philosophies. For example, *reduction* and *description* reference the particular meanings given them in phenomenology; *process* references a particular cognitive theory; *flow* references Csikszentmihalyi's well-known theory and is italicised throughout to distinguish it from the more general use of the term 'flow'. Key terms that describe the *essences* elicited from the findings of this study are italicised from Chapters Five to Seven. For a detailed glossary of terms, see Appendix D.

In the methodology chapter, some terms are joined by a slash (/) to denote a clear continuum between the meanings of two words, for example, 'was/is', that cannot be otherwise expressed in English. It does not denote 'or'. This affectation only appears with reference to phenomenology.

Chapter Two: The Literature Review

> Creative thinking - this combination of words raises the question of whether thinking is possible without creativity, and whether creativity can occur without thinking.
>
> (Funke 2009, p.11)

Historical Background of Creativity Research

Early research centred on creativity as the domain of the 'mad genius' phenomenon (Becker 2011a) or was located in philosophical theses on the nature of the human being. Such conceptualisations of creativity were found within the grand theories of great thinkers, such as Kant, Goethe or Freud (Albert & Runco 1999; Sternberg & Lubart 1999). The middle of the 20th century saw the advent of a more domain-specific approach as empirical theory modelling gradually replaced general 'armchair' speculation (Kozbelt 2011), but the idea that creativity resides in the sudden insight or 'creative leap' (Cross 2006) has persisted into modern times. Even rationalistic modern researchers recognise creativity is a complex, difficult subject to research (Rothenberg & Hausman 1976; Jarvie 2009; Runco 2014); how creative ideas are generated in the first place is still considered something of a mystery (Downton 2003).

This literature review presents both past and current thinking in creativity research to indicate the breadth of the field as well as providing specialised depth. There are four parts, each containing a general overview and a more comprehensive discussion of a topic pertinent to this research followed by a brief conclusion. Each part frames a question concerning our understanding of creativity:

Part One: The nature of creativity. Its conceptual foundations, definition and characterisation are considered.

Part Two: Creativity theories and models. Presents a broad brushstroke overview focusing on specific cognitive frameworks and some alternatives.

Part Three: Creativity in practice. The conditions and practices support creative cognition; tools and techniques for developing creativity are discussed.

Part Four: The key issues affecting creativity research. A discussion on how this study's research questions were established.

The chapter is structured according to these ontological, epistemological and practical questions concerning research into both creativity and creative thinking.

Part One: The Nature of Creativity

Part One discusses the nature of creativity, taking Funke's (2009) stance, indicated in the quotation cited above, that any review of creativity literature requires an accompanying review of the literature concerning creative thinking. Therefore, the first section is centred on cognition in the context of creativity; the second section is focused on the character of creativity, with an in-depth consideration of cognitive and information processing approaches to creativity. Creativity's conceptualisation, particularly its ontological foundations, its definition in light of historical, etymological and disciplinary considerations and its notable characteristics are covered in Part One.

The Paradoxical Phenomenon

Creativity is widely regarded as a universal capacity or phenomenon, intrinsic to what it means to be human (Rothenberg & Hausman 1976; Moustakas 1977; Noonan 2008), although it shaped by individual (Runco 2011), cultural (Runco 2014) and domain (Sternberg & Lubart 1999) constraints. For this reason, it should be investigated using interdisciplinary and multifaceted frameworks (Rothenberg & Hausman 1976; Sternberg & Lubart 1999), in order to reflect in some limited way the deeply complex nature of the human being (Runco 2014).

However, this deep complexity brings its own problems. Regardless of whether creativity is considered as a predominantly rational or irrational phenomenon (Gaut 2010; Runco 2014), researchers agree it contains something of a riddle (Abel 2009) or paradox (Rothenberg & Hausman 1976). It is described as being "both determined and undetermined at the same time" (Rothenberg & Hausman 1976, p. 23), as well as unpredictable, discontinuous and irreducible (Abel 2009; Rothenberg & Hausman 1976), making it a slippery though rich topic to both understand and research. Abel (2009) considers such characteristics to be "phenomenologically and structurally intrinsic" (p.59) to the creative process and therefore

not explicable using the "narrow" (p. 59) terminology of science. Rothenberg & Hausman (1976) consider the phenomenon to be irreducible: research can make it intelligible but it cannot make it explicable, because of the paradox at its heart. Jarvie (2009) agrees, for when an explanation is created to explain creativity, it also must, paradoxically, explain itself. Even creativity's definition encompasses something of this paradox, as will be seen later in Part One: Definition of creativity.

Cognition and Creativity

Cognitive theories dominate creativity research; particularly research on the creative process, since some form of mental processing forms the basis of any human endeavour (Runco 2014). And as Funke's (2009, p.11) opening quote suggests, any research or discussion about creativity and the process of creativity must consider cognition as being intrinsically bound with creativity. Further, there are well-known cognitive theories, such as *divergent thinking* (Runco 2014), so closely associated with creativity, that, despite having implications beyond creativity, they must be considered in the context of creativity. It is therefore essential to first discuss cognition in light of creativity.

Analytic versus holistic approaches to thinking

A researcher's ontological position regarding cognition is the starting point for inquiry into creativity's relationship to the thinking process. Most researchers take the traditionalist dualist stance, and in keeping with the analytic nature of dualistic thinking, seek to explain cognition in isolation from general human experience. By contrast, the holistic position offers perspectives on cognition as part of human experience, seeing the part always in the context of the whole.

The dualist stance divides the cognitive process into two types of thinking: critical or rational versus creative or irrational (Gaut 2010; Henden 2004; Jarvie 2009; Levy 2007b; Williamson 2011), suggesting we switch between different modes of processing for these different purposes (Bruner n.d., in Cross 2006; Koestler 1964; Levy 2007b). Guildford's *convergent* versus *divergent thinking* is an example of this stance (Runco 2014; Sternberg & Lubart 1999). In dualist approaches to cognition, functions such as logic, abstraction, verbal expression, problem solving and mental modelling are usually identified with the conscious, rational processes (Gelernter 1994; Jarvie 2009, Dorst 2011). By contrast, creative thinking is associated with less conscious or seemingly non-rational processes (Gaut 2009, Jarvie 2009) such as

intuition (Claxton 2006; Gallate & Keen 2011) and insight (Gaut 2009, Krausz 2009). The celebrated 'eureka' moments of inspiration or serendipity (Anderson 2011; 2010) so strongly identified with creativity belong to this category, as does any kind of creativity associated with the pictorial realm of metaphor or concrete image (Arnheim 1970; Gelernter 1994, Henden 2004; Lenk 2009) or non-verbal cognitive processing (Runco & Sakamoto 1999; Sternberg & Lubart 1999). The dualist position on cognition has, in the past, clearly divided any forms of mental processing that can be delineated with certainty from those whose workings are unknown and uncertain in nature. More recently, however, it is accepted that creative thinking must entail some level of rational information processing at some stage in the creative process (Gallate & Keen 2011; Gaut 2012; Jarvie 2009; Krausz 2009; Nickerson 1999; Villalba 2011).

However, the dualist position on thinking is more than analytic; it is also reductive (Bortoft 1996), which has had particular implications for creativity research. Indeed, attempting to reduce creativity to the explicable and explainable has been considered by some as one of the primary issues of creativity research to date (Jarvie 2009; Rothenberg & Hausman 1976). Since creativity cannot be "unpacked in any precise way" (Jarvie 2009, p. 55), it does not give rise to clear problems that can be solved (Jarvie 2009). Rothenberg and Hausman (1976) suggest that, rather than aiming for the explicable, research on creative thinking should aim for the 'intelligible'.

By contrast, holistic or synthetical approaches, which by their nature are usually located in philosophical, humanistic treatises (Rothenberg & Hausman 1976), do not isolate the different modes of thinking. Continental philosophy, for example, sees ideation as a "productive act"[2] (Bortoft 1996, p. 134) and thinking is envisioned as one intrinsically unified, dynamic process (Bortoft 1996; Henden 2004) that assumes creativity is inherent. Here, creativity and wholeness are not so different from each other (Bortoft 1996; Maslow & Rogers 1968, in Runco 2011) which is not unlike the concept espoused by both Maslow and Rogers (1968, in Runco 2014) of the healthy, self-actualising human in totality, where the fully realised human potential is considered intrinsically creative in itself. In this type of holistic conception of thinking, cognition is presented in its ideal, but also as one part of the ideal, fully realised human state. It is a kind of *eunoia,* which is sometimes translated as 'well mind' or 'beautiful thinking' (Perloff 2004), where a 'well' mind is innately creative, promoting mental and emotional health as well as productivity.

[2] As opposed to the Analytics' concept of the passive screen on which mental images appear (Bortoft 1996)

The debate about the link between creativity and health goes back centuries (Runco 2014). The view that creativity can only arise out of a 'well mind' is in strong contrast that the better known 'mad genius' debate (Becker 2011; Runco 2014), where some deviation from the norm is seen as prerequisite for creativity (Rothenberg & Hausman 1976). This not only reflects the rational versus irrational divide of the dualist stance on cognition, but also has implications for what we understand the term 'creativity' to mean. This will be more closely examined in Part One: Creativity's Conceptualisation and Part Two: Theories and Models.

The dualist position is often described as the mind versus body dichotomy (Robinson 2017). Philosophical stances that refute this dichotomy belong to a broad category called *embodiment* or *embodiment* of the mind (Wilson & Foglia 2017) or "body-mind" (Johnson 2010, p. 126), descriptions that may be more useful here than the term 'holistic' to describe approaches that do not study the mind in isolation from the body or from bodily experiences, as does the dualist stance (Pihlström 2010). Therefore, from an *embodiment* perspective, creativity, creative thinking and creative practice cannot be considered separate concepts.

However, 'embodiment' is an umbrella term for many diverse theories and approaches that challenge, to different degrees, the dualism of mind and body. In this study, the term is only used in relation to non-verbal representations of thinking.

The phenomenon in *embodiment* and representation

As stated, *embodiment* describes a wide range of theories and approaches that do not subscribe to the idea that cognition can be studied in isolation from the body and the way the self responds to and interacts with the environment. *Embodiment* itself belongs to a broader paradigm called *situated cognition* (Wilson, Johnson and Foglia 2017). *Situated cognition* also challenges Dualism, by externalising the internal locus of thinking, but is still head-centred (Seamon 2015*),* compared to the phenomenological view of the lived body.

Embodiment approaches to thinking creatively range anywhere from 'knowing-in-action' (Schön 1983), where the locus is the dialogue between mind, body and environment; to 'embodied mind' or "bodily intelligence" (Rose 2006, p. 216), which sees cognition and action as being indivisible from the environment in which they perform. Similarly, *material thinking* (Carter 2004), where thinking is performed in the making of products, makes the locus completely external. Many of these approaches utilise non-verbal forms of thinking, such as thinking in images (see Part Two: Models and Images) and see creativity as enacted in action and products (Carter 2004; Runco & Sakamoto 1999). Drawing, in particular, is recognised as a

form of *visual thinking* (Arnheim 1970) or embodied thinking (Montarou 2012). Indeed, Arnheim (1970) defines drawing as "thought in visible action" (p. 129), since drawing and thinking are "indivisibly entwined" (Arnheim 1970, p. v), not only in the Arts, but also in productive thinking generally. Further, Arnheim (1970) considers drawing to be a direct expression of the thinking process, not only a representation of it. In fact, Dartnall (2002) suggests that such representations *are* the creative products of our knowledge, not reflections or containers for them. Part Three: Tools and Techniques that Develop Creativity will elaborate on this idea.

Approaches that see creativity as embodied in process, object or environment could be described as experiential, rather than cognitive, but not all experiential approaches to creative cognition can be categorised under *embodiment*.

Three Experiential Approaches

This section will discuss three experiential approaches to cognition that do not easily fall into of one category. Although they concern cognition, they are they are descriptive of the experience, not abstractive of the process.

Schwenk's metaphor for thinking

Figure. 2.1: Theodor Schwenk, "A meandering stream winds its way between the separate vortices", 1996 (printed 1965)

Holistic theories of cognition are sometimes characterised by quality of movement, such as active (Jung, cited in Henden 2004) or dynamic (Bortoft 1996), rather than by the mode or

type of processing. It is with this conception of thinking in mind that water scientist Theodor Schwenk (1996) compares the activity of thinking with the intrinsic ebb and flow of moving water. This analogy is more than just poetic; he based his aesthetic imagery on his meticulous experimentation and observation of water processes in nature (Clarke 2010; Schwenk 1996; Zubrowski 2009), imbuing empirical methods with metaphoric imagination. The foundation of his concept is that the activity of thinking has the same meander gesture as water flow. In water, natural forms arise out of weaving strands of flowing movement. They are shaped by water's intrinsic dynamic and external constraints that act as resisting forces, resulting in one complex, multi-stranded, dynamic movement. In the same way, thought forms gradually arise, due to the tension that arises between a similar "dissolve and bind" (p. 97) dynamic. This presents us with an experiential picture of cognitive processing as a stream of flow and resistance that has both order and chaos, continuity and discontinuity. Schwenk elaborates:

> The activity of thinking is essentially an expression of flowing movement. Only when thinking dwells on a particular content, a particular form, does it order itself accordingly and create an idea. Every idea – like every organic form - arises from a process of flow, until the movement congeals into a form. Therefore we speak of a capacity to think fluently when someone is skillfully able to carry out this creation of form in thought, harmoniously coordinating the stream of thoughts and progressing from one idea to another without digression – without creating 'whirlpools'. (p. 96)

The image in Figure 2.1[3] shows an example of water flow done under controlled conditions, where oil is dropped into the water, so the flow movement can be seen clearly; then a pencil, acting as a resistance force, is drawn through the water several times, from left to right. The central meander form is clearly visible, as are the vortices created by the repeated dynamic of the moving pencil. For Schwenk, fixed ideas arise from too little dynamic flow, in the way stagnant pools arise from sluggish water flow; whereas thinking that meets few hindrances becomes shallow, "a flight of ideas" (p. 96). The congealing into a form describes the vortices that are formed out of the tension between the flow of water, and the resistances it meets. At the heart of these vortices is a hollow space. In thinking, this space is where ideas can form; "Like water" Schwenk says, "thought can create forms, can unite and relate the forms to one another as ideas; it can unite but also separate and analyze" (p.96).

Schwenk describes water as "the creative substance for the generation of all forms" (Schwenk, Wilkens & Jacobi 2005, p.26) . It is implicit, then, in his analogy of thinking with flowing

[3] Schwenk, T. 1996, *Sensitive chaos: The creation of flowing forms in water and air, 2nd edn,* trans. O. Whicher, J. Wrigley, J. Collis, W. Roggencamp, Rudolf Steiner Press, Forest Row, East Sussex. Fig. 33.

water, that the activity of thinking is also inherently creative. His analogy has similarities with Dewey's description of a direct experience.

Dewey's "an experience"

When Dewey (1980) wrote about "the whirling flux of change … ebb and flow, systole and diastole: ordered change" (p. 16), he was describing neither water flow nor thinking but the type of heightened, direct experience an artist may have when engaged in creating, where there can be a "complete interpenetration of self and the world of objects and events" (p.19) that leads to a sense of fulfillment. Dewey further states, that in the experiential world in which we actually live, our experiences are not logical, delineated progressions moving from one act or thought to the next; rather there is "a combination of movement and culmination, of breaks and reunions" (p. 17). During such an experience, there are no gaps or holes, but pauses that "punctuate and define the quality of movement" (p.36) and gather up what has gone before. This picture he creates of the fully lived, fully interpenetrated experience where "ebb and flow, systole and diastole" bears a resemblance to Schwenk's description of thinking as a dynamic experience with the capacity to dissolve, revise, bind and disrupt.

Both Dewey and Schwenk describe a process of changing dynamics, where polarities meet, interchange and evolve. Dewey's description of "ordered change" fits Schwenk's idea that the flow of thinking is punctuated by order and chaos, continuity and discontinuity. Both are qualitative descriptions of how we actually experience the world when thinking or acting or being, and they reflect the dynamic conception of cognition Bortoft (1996) ascribes to Continental Philosophy. However, though Dewey was "thoroughly non-reductive" (Pihlström 2010, p. 212-213) and it was he who coined the term "body-mind" (Johnson 2010, p.126), he is associated with a naturalistic, pragmatic approach to cognition, not Continental Philosophy or embodied cognition.

Gelernter's levels of focus

Computer scientist David Gelernter (1994) describes the experience of thinking directly in terms of bodily experience. Like Schwenk (1996) and Dewey (1980), he juxtaposes scientific observation with poetic imagination in his explorations of cognition, and like Schwenk, he envisages thinking as a continuous spectrum; not of weaving strands, but of differing levels of mental focus. High focus is typically a penetrating, analytical state of mind, usually experienced at the forefront of the head; medium focus is more diffuse and disconnected, where concrete and pictorial ideation occurs; and low focus is quite diffuse and is experienced

more “at the back of your mind” (Gelernter 1994, p. 16). Low-focus thought leans towards imaginings and is tolerant of logical contradictions. For Gelernter, low and middle foci are the realms of the creative thinker, where cognition grows more ambient and more all-inclusive, and what he calls “affect thinking” (p. 6) arise out the thought stream. In a low-focus state of thinking, you can, as the writer E.M. Forster says, be “taken out of yourself” (Dodds 1951, in Gelernter 1994, p.17). Gelernter places the making of mental models at the high focus level, and states that almost all computing simulations of thought deal only with this level of cognition.

These three descriptive, ‘lived experience’ understandings of how we think and live demonstrate a more integrated approach to human activity, (though Gelernter’s conception is bordering on analytic in its separation of levels of cognition). Schwenk and Dewey, in particular, see the human being as dynamically interacting with the world, through perception, cognition and experience, in ways that cannot be abstracted into theory.

These different ontological positions regarding cognition have been briefly sketched here to provide a foundation for how creativity is defined, theorised and experienced, as will be discussed in the next section. It is impossible to avoid generalisation in such as complex subject, but further discussion on ontological positions is outside the scope of this review. It is clear some of the considered weaknesses in creativity research to date (as discussed in Chapter One: The Introduction) may be attributable to using inappropriate reductive and analytic approaches to the subject. First, splitting cognition into different modes, isolating creative thinking as a separate process in itself, has implications for how creativity is conceptualised in research paradigms and may be the reason why there are so many disparate creativity theories. Second, holistic and experiential philosophies of thinking tend to undermine the uniqueness of the creative process if they make it almost analogous to mental health and wellbeing, and therefore can shed little light on why there have been so many notably unstable creative personalities. Third, where thinking of any sort is identified as ‘residing’ – be it in the mind, body, environment or all three – has implications for understanding how and where creativity is generated. With these issues in mind, the next section discusses the term ‘creativity’ itself.

Creativity’s Conceptualisation

There are two questions to consider here: how important is the conceptualisation of the term ‘creativity’ for research purposes? And can such a complex phenomenon have a simple or

bounded definition that encapsulates this conceptualisation? Although these questions may seem straightforward, creativity's inadequate conceptualisation has been a frequently attributed weakness of research in this field (Hodgkinson et al. 2009; Rothenberg & Hausman 1976; Sternberg & Lubart 1999). This may be another reason for the proliferation of theories in this field, which results in a rich picture of the phenomenon but not necessarily a consistent one. The inadequate or superficial conceptualisation may have led to abundance in information on the subject without increasing our understanding of it.

For Levy (2007b), deep, slow thinking is a condition for original and creative cognition, which, he believes, is in danger of being lost in the current age of information abundance and facile results. His recommendation is for a more nuanced, refined approach to scholarship in general: perhaps the first step then, is to find a more nuanced, refined conceptualisation of the term 'creativity', one that encompasses its complex and subtle nature and brings a deeper understanding to this phenomenon. To do this, there are a number of possible avenues of inquiry into what is meant by the terms 'creative' and 'creativity'. The following discussion concerns its standard definition, the history and etymology of the term 'creativity' and its associated forms, and some disciplinary distinctions.

Definition of creativity

Definitions of creativity usually contain strings of terms that suggest qualities or conditions for creativity, rather than providing distinctiveness or precision. A widely accepted definition of creativity is such a string, but a string whose qualities are dependent on each other. They are 'newness' and 'value' (Gaut 2010; Rothenberg & Hausman 1976); 'value' in the sense of being personally or culturally effective, useful or meaningful. 'Originality' (Gaut 2010) or 'novelty' (Sternberg & Lubart 1999) is another quality often added to this string, 'originality' sometimes replacing 'newness'.

The core quality here is 'originality', without which the other qualities are not meaningful in this context. This undifferentiated definition (more a characterisation than a definition) is considered too broad for a nuanced understanding of the term (Funke et al. 2009; Sternberg & Lubart 1999) but it does reflect creativity's paradoxical nature. For instance, 'originality' implies novelty, but a novelty that must already have antecedents in order that its originality is recognisable as being different (Hausman & Rothenberg 1976). Therefore, it must be original, but not so new and novel that is not meaningful or recognisable as having value in its originality. The term 'original' is in itself ambiguous in this context (Runco 2014).

Being undifferentiated and universal in definition is regarded as part of the weakness of creativity's conceptualisation (Funke et. al. 2009; Sternberg & Lubart 1999), yet conversely, domain-specific definitions are regarded as being too narrow and context-specific for a full understanding of the phenomenon (Funke et al 2009; Sternberg & Lubart 1999). Runco (2014) has, in fact, suggested that the term 'creativity' should not be used at all as a noun, only as an adjective, as in 'creative' thinking, or 'creative' products, since the term is so loosely, yet ambiguously used. In any case, Becker (1998) points out that you cannot define a word by trying to distinguish its traits in isolation; you must look at the concepts in its nomological network, concepts that are closely associated with, yet distinct from, the term in question. A closer examination of these associated concepts can shed light on meaning and usage of the terms 'creative' and 'creativity' by different disciplines and communities, leading to more refined differentiations that support rigorous research (Hodgkinson et al. 2009). To lay the foundation for this, it is worth a brief exploration of the etymological origins of some of the concepts associated with creativity, to see how they elucidate its conceptualisation.

Origins and contexts[4]

This section unpacks the meaning of the term 'creative' in relation to its associated concepts. It gives prominence to the term 'innovative', since this term is frequently coupled with 'creative', as in 'creative innovation', especially in the organisational contexts (Runco 2014), yet they are not synonyms. This section seeks to explore their differences, through comparing their historical, etymological and disciplinary uses. The terms 'imagination', 'invention', and 'chaos' are also discussed.

Historical and etymological meanings

Examining the history and etymology of the different concepts associated with the term 'creativity' is a revealing exercise, as historical usage provides the roots or sources of the term and its early meanings. This can enhance our current understanding, as their origins point to meanings that may still colour the term today. The definitions may become culturally relative, but they still resonate with their historical origins. For example, the Oxford English Dictionary (OED) defines 'creative' as "of or relating to creation" but also "originative", pointing to its origins in the idea of biblical or mythological Creation. This implies a supernatural or mysterious source. Pre-Renaissance, creativity was seen as inspired by this source, hence the

[4] All dictionary definitions in this section were sourced from the online Oxford English Dictionary and Historical Thesaurus (OED 2000) unless otherwise cited, so are not individually referenced after the first citation.

divine origins of the creative power (Dacey 2011). This may place creativity in a transcendental context, as being beyond the individual human capacity, and the human being as simply the vessel that manifests it, but it also points to an originative, generative quality: as something arising out of nothing, out of chaos, or out of the pure potentiality of *ex nihilo* (Albert & Runco 1999; Rothenberg & Hausman 1976). By the early 17th century, however, the term 'creative' was also being associated with 'productive', in the sense of producing concrete results of significance.

By contrast, the term 'innovate' has its roots in the Latin *innovare*, meaning to renew or alter something established and already existing, by bringing something fresh or novel. Innovation then, is a response in the external world, to making anew by altering or changing its nature. Innovation is also required to be "maximally effective" (Runco 2014, p. 398), prioritising value over originality, so it has connotations of social success. In the Oxford English Dictionary (2000), 'innovative' is not given as a synonym for 'creativity', nor vice versa.

Historically, 'creativity' was more closely related to 'imagination' and 'imagine', which means, "to conceive in the mind", in the internal world, out of the thought stream. It was a faculty much lauded amongst poets and writers as the source of their creativity. "Imagination bodies forth the formes of things unknowne, the poet's pen turns them to shapes", says Shakespeare's Theseus, pondering the poets' ability to create some sort of reality out of nothing (OED 2000)[5]. So, we see creativity as first having mysterious, divine origins, then origins located in the imaginative faculties of the inner mind; whereas 'innovation', itself a later term than both 'creativity' and 'imagination', is firmly rooted the external world, and pertains to bringing change to something already concretely existing. However, 'imagination' can also pertain to imagery based on sense perceptions, pictures in the mind's eye, thus also limiting the scope of creativity's conceptualisation.

During the Renaissance, the idea that creativity might be inherited first appears, and so not of divine origins (Albert & Runco 1999). Humanism then envisioned creativity as part of the self-creative man, as sourced within himself, but it was not until the Enlightenment that the faint outlines of its conceptualisation were formed (Albert & Runco 1999). The split between the rational and irrational response to creativity appears as a conflict between intellect and emotion during the 18th century, as epitomised by the scientific rationalists and the Romanticism movement (Albert and Runco 1999; Runco 2014). Darwinism influenced the concept of creativity as adaption, a concept later formalised by William James as *divergent*

[5] Shakespeare's *Midsummer Night's Dream* v. i. 14, sourced from the OED (2000) Online.

thinking (Albert and Runco 1999), prefiguring the characterization of creativity as being original without being wholly new, born out of associative ideation. This definition not only downplays creativity's originative meaning, but also brings it somewhat closer in meaning to 'innovation'. However, the Romanticism notion of creativity as a unique attribute of the unique individual is still with us today (Becker 2011).

Another word historically associated with creativity is the term 'chaos'. For example, the word *khaos*, in its ancient Greek conceptualisation, did not mean turmoil or disorder, but "a chasm or opening in time and space" (Carter 2004, p. 3), out of which creation emerged. This meaning has consequences for the conception of creativity as a 'creative leap': the gap or opening during its process that generates new insights or intuitions. But 'chaos' is also implicated in the idea of creativity as an open-ended, ambiguous, and intuition-based phenomenon (Claxton 2006; Hodgkinson et al. 2009). The allowance of a gap or opening in the thinking process has similarities with both Dewey's (1980) and Schwenk's (1996) descriptions of the experience of being and thinking, of forming out of movement and chaos, arising out of the stream of activity. Dewey refers to "pauses, places of rest" (p. 41) that punctuate, define and fulfill a direct experience; Schwenk speaks of vortices in water as "hollow forms" (p. 40). Carter (2004) also suggests that the gap itself, being a "curvilinear, dialectical" (p. 3) moment between thoughts, is an interruption with potential for new creativity to arise. In this context, chaos is not chaotic and formless; it still has order through "ebb and flow, systole and diastole: ordered change" (Dewey 1980, p. 16). The idea that creativity arises out of chaos, as inspiration, suggests there may be a chaos dynamic at work in our unconsciousness (Runco 2014) but it is not necessarily disorderly chaos.

Disciplinary distinctions

The lack of distinctiveness in creativity's definition allows it to have slightly different connotations in different disciplines. For example, the term 'invention' is associated more with products than processes (Runco 2014); the term comes from the Latin term *invent:* "to contrive" but also "find out, discover", suggesting a closer association with industry or scientific innovation. Yet it also has connotations of both 'originate' and 'devise'. 'Inventive' is a synonym of 'creative': they both have the concept of origination attached to them. Indeed, Huber (1998a, cited in Runco 2014) states that the criteria for a product to be considered 'inventive', is to be "new, useful and unobvious" (p. 406), a criterion that is very similar to that of 'creativity'.

The term 'creative' is found frequently in the Design field, as in the expression 'creative innovation'. This expression assumes creativity is a type of innovation (Cross 2006). For design and innovation researchers, it is present in the ideational stage of development as the 'creative leap' or 'surprise' moment (Dorst & Cross 2001) that bridges the gap between problem and solution. 'Innovation' itself is a problem-centred term, central to the Design world, as well as business and organisational research (Sternberg & Lubart 1999) and is always concerned with the actualisation of ideas, usually at the organisational level, rather than at the individual level (Meusburger 2009). As innovation is primarily *problem-solving* and product-oriented in nature (Meusburger 2009; Runco 2014), it is more subject to external constraints than creativity, as its etymological origins suggest. By contrast, creativity research in Psychology has focused on the individual, particularly on creative personalities and psychological health. Terms such as 'self-actualisation' have become associated with the term 'creativity' (Runco 2014) but also, conversely, 'genius', 'deviance' and 'madness' (Becker 2011; Runco 2014).

It would be strange not to mention the Arts in a discussion about disciplinary distinctions of creativity. Alperson (2003) considers creativity is the "hallmark" (p. 245) of art and artistic creation, if not an essential condition; Runco (2014) states that art is an "unambiguously" (p. 241) creative domain. Indeed, art and creativity are considered so synonymous (Runco 2014) that it is difficult to find literature that questions the relationship. As already noted, the term 'imagination' has had a long, historical association with 'creativity' in the Arts. Schubert (2013) considers creativity in the Arts to be characterised by the ill-defined problem that has no obvious solution, though this concept is also found in Design (Cross 2006) . Creativity in the Arts is often considered a *problem finding* process (Csikszentmihalyi 2015; Kozbelt, Beghetto & Runco 2010), whereas *problem solving* is associated more often with the Sciences (Kozbelt, Beghetto & Runco 2010). Indeed, the problem space or "problem expression" (Runco 2014, p. 17) is a phrase central to both *problem solving* and *problem finding*, two cognitive processes very closely associated with creativity (Runco 2014). Their relationship to creativity is examined in detail in Part Two: Specific Cognitive Frameworks.

We have seen that the terms 'original', 'imaginative', 'inventive' and 'innovation' are very closely associated with the terms 'creative' and 'creativity'; the first three are commonly given as synonyms of 'creative'. But as Runco (2014) asserts, it is important when characterising creativity to also consider what it is not, and he considers that these four concepts, in isolation, do not adequately define creativity. However, the etymological examination here supports the idea that creativity, at least originative creativity, can be generative in nature,

where creativity arises from some unconscious source or space, as both Schwenk (1996) and Carter (2004) intimate; or it can have an imaginative quality, drawing on pictures from the mind's eye. Creativity remains, nevertheless, an ambiguous and indefinable phenomenon (Runco 2014).

However, adding strings of synonyms can provide some nuance to how the term is used in different contexts, thus providing differentiation to creativity's definition if these synonyms are used thoughtfully. It is evident, however, that for all the nuances of the term in different contexts, 'original' and 'originative' remain central to the concept. Perhaps we should distinguish between the generation of new things and the production of new works, since an argument could be made for there being an etymological distinction between creativity and productive creativity. This argument will be revisited in Part Two: Theories and Models, particularly in relation to *flow* theory. The continuum itself is the process of creativity. The next section, Characteristics of Creativity, will look more closely at the attributes and qualities ascribed to the creative process.

Characteristics of Creativity

As stated, a widely accepted definition of creativity includes 'newness', 'originality' and 'value', but these qualities are used to judge the products of creativity (Bawden 1986; Ford 1999; Sternberg & Lubart 1999), not characterise its process. However, there is much research on the characteristics of the creative personality, and, as Runco (2011) states, personality characteristics are analogous to creative thinking attributes, especially if we agree with Funke's (2009) premise that creativity is not possible without cognition.

One of the most common characteristics attributed to creative thinking is flexibility (Funke 2009; Meusburger 2009; Runco 2011; Williams,[6] in Conklin 2011), but fluency (Funke 2009; Meusburger 2009; Williams in Conklin 2011) and flow (Csikszentmihalyi 1996) are often mentioned. These characteristics all have mobile movement in common. Indeed, Csikszentmihalyi (1996) named his well-known optimal experience theory *flow*, because, when engaged in intense experiences, his respondents felt as though a flowing current was carrying them along. Although *flow* is not a creativity theory, it has become so synonymous with the subject, that it is frequently cited in such research (Biasutti 2011; Csikszentmihalyi 1996; Kozbelt, Beghetto & Runco 2010; Nelson 2011) .

[6] Referred to as The Williams Model in Conklin 2011.

Unpredictability is another attributed characteristic of creativity (Abel 2009; Rothenberg & Hausman 1976), as is discontinuity (Abel 2009; Rothenberg & Hausman 1976), spontaneity (Abel 2009; Rothenberg & Hausman 1976; Meusburger 2009) and complexity *(*Funke 2009; Meusburger 2009; Runco 2014). In other words, the creative process shows no obvious, delineable, processing pattern. Rather it has the capacity to disrupt habitual patterns (Collins & Amabile 1999; Bawden 1984; Gaut 2010), which suggests the fluency and flexibility of the streaming movement of cognitive processing is subject to constant change. One of the conditions required for changing or breaking this stream must be that it meets some form of resistance. The composter Stravinsky notably stated, "You cannot create against a yielding medium" (cited in Harnad 2006, p.173). The idea that resistance in some form is necessary, or at least present, for creativity is a concept central to a number of cognitive processing theories, as we shall discover in Part Two: Specific Cognitive Frameworks

Like Csikszentmihalyi (1996), Meusburger (2009) believes that what drives ideational fluency is mental energy, possibly in uneven, chaotic bursts (Drazin et al. 1999; Kazanjian 1988; Peterson 1998, in Meusburger 2009). This presents a picture of the creative process as a swift, dynamic, energetic, if highly variable activity. But other scholars call creativity a soft *(*Claxton 2006*)* or slow (Hodgkinson et al. 2009; Levy 2007b) process, one that takes place at the back or edge of the mind (Gelernter 1994; Claxton 2006) or at a tacit level (Schön 1983). They consider the creative process requires time (Levy 2007b; Meusburger 2009) and a more reflective or *felt* state of mind (Claxton 2006), one that embodies a "softer, slower kind of groping for a way of articulating something that is currently, tantalizingly, beyond our linguistic grasp" approach (Claxton 2006, p. 352). Such 'soft' mental states have been associated strongly with intuition (Hodgkinson et al. 2009) or pre-verbal cognitive processes (Henden 2004; Runco & Sakamoto 1999).

Uncertainty in some form, or at least a tolerance for periods of uncertainty (Anderson 2010; Meusburger 2009; Zajonc 2006), is also noted as a characteristic experience accompanying a creative process. Sudden insights, states Zajonc (2006), like discoveries, may be the "fruit of long, contemplative uncertainty" (p. 47). Other scholars use similar terms from the same nomological net to describe the process, such as 'ambiguity' (Rothenberg & Hausman 1976; Jarvie 2009; Hodgkinson et al. 2009; Meusburger 2009), 'indeterminacy' (Abel 2009; Rothenberg & Hausman 1976), 'fuzziness' (Hodgkinson et al. 2009) or, simply 'not-knowing' (Zajonc 2006). These terms all suggest that the creative process requires some suspension of

focused certainty, accompanied by openness (Gelernter 1994; Meusburger 2009; Runco 2011) or curiosity (Csikszentmihalyi 2015; Meusburger 2009).

Some of the characteristics and states associated with creative thinking, such as flexibility, openness and a tolerance for uncertainty, could just as well be pre-conditions for it, as much as characteristics (conditions will be discussed in Part Three). Nevertheless, they are considered to be essential for the development of creative ideas by many theorists (as we shall discover in the next Part Two: Theories and Models).

About the term 'uncertainty'

It should be clarified how 'uncertainty' and its associated terms are used in the context of creativity. Anderson (2006, 2008, 2010) has explored the term in some depth from the perspective of *information seeking*, linking it strongly with risk-taking, but also anxiety and doubt. She distinguishes these as being either desirable or undesirable forms of uncertainty. Uncertainty is seen as desirable, even necessary, in any research or creative process: working through uncertainty is part of our everyday existence (2006). Anderson's undesirable form of uncertainty is more a *felt* state, where a lack of certainty and knowing may engender anxiety, doubt or frustration, which in turn hinder creativity. 'Uncertainty' in this context is synonymous with 'unsureness'. More broadly, Anderson (2010) conceptualises uncertainty as imperfect information, a potential pathway for creativity stimulation, and one that is characterised by risk, doubt, inconsistencies or ambiguous information that may stimulate or hinder the process. For Anderson (2008), the creative process is about finding a way to balance to the positive and negative aspects of uncertainty.

Zajonc (2006) uses the term 'uncertainty' in a more contemplative context, linking it to the emergence of insight and intuition. In this particular context, Zajonc is speaking of 'discovery', a term often closely related to 'creativity' (Runco 2014). He also speaks of learning to sustain the state of *not* knowing, "with ambiguity and uncertainty" (Zajonc 2006, p.45) in order that new things may arise. However, he also states "open awareness is often experienced as the space of creativity" (Zajonc 2013, p.85). This conception of uncertainty suggests a state that is more a receptive openness than one of doubt or unsureness, where the thinking mind recedes and gives over to not-knowing. Zajonc's (2013) proposition that creativity requires an empty but receptive space, a "happy stillness of the mind" (Wordsworth[7]), is not unlike that of a

[7] from Prelude XIII 9-10, by William Wordsworth

tabula rasa, and is similar to how Carter (2004) conceives of *chaos* as an opening for potential for new things to arise. Likewise, Abel (2009) sees the indeterminacy of creativity as opening up what he calls "the potentiality space of creativity" (p. 63). For Abel, creativity is always a phenomenon of emergence: radical, transformational and perpetually coming into being. It seems clear that this form of uncertainty, pertaining to openness and potentiality, is a characteristic of a generative form of creativity.

Uncertainty, then, may be experienced both a *felt* state and as a mental state. As a *felt* state, it may lead to anxiety and doubt. As a mental state, there may be a consciousness of missing information, ambiguous information or a gap in knowledge. But it may also be a form of not-knowing, where cognitive engagement is set aside for a while, or where a space of emptiness and not-thinking is desirable. Uncertainty as a characteristic of creativity has this complexity about it. There is no clear-cut characterisation; nor is there a clearly defined "boundary between certitude and uncertainty [since] vagueness and ambiguity tend to be the rule rather than the exception" (Boholm 2003, p. 168). But there are clearly two different understandings of the concept of uncertainty here.

Part One Conclusion

Clearly, the nature of the creative process is not easily apprehended. It has been characterised as having plastic, fluid qualities but also as being erratic and disruptive. Some scholars call it a soft, slow or uncertain process; others state it requires vitality and spontaneity. These conflicting attributes reinforce the idea that creativity is complex and paradoxical in nature. However, it is also apparent the range of qualities identified with creative process are by no means particular to creativity, even when linked together as a string. We see similarities to those qualities ascribed to thinking in general, particularly experiential conceptions of cognition such as Schwenk (1996) and Gelernter (1996) describe. But what is also evident is that some scholars are describing the creative process in progress, in full flow, in its production, whereas others characterise the conditions required for creativity to emerge. There is a distinction here between what we might call 'productive creativity' and 'emergent' or 'generative creativity'.

As already stated, defining creativity has been regarded as a critical weakness of the research to date, because inadequate differentiation of its universal definition has a knockdown effect through the theories, methods and tools (Greene 2001; Jarvie 2009), often resulting in poor

operationalisation of major theories. Part Two: Theories and Models will consider a range of major creativity theories and how theory modelling may be affected by this initial weakness.

Part Two: Theories and Models

Although the focus of this study is the creative process, it is worth overviewing the main theoretical frameworks of creativity research, exemplified by some well-known approaches that focus on various aspects of creativity, in order to understand the complexity and diversity of the field. Therefore, Part Two provides a broad brushstroke of a wide range of theories, before concentrating on those specific to cognitive processing and alternatives to this approach. Some of the noted attributes of creativity, such as its paradoxical nature, are considered in the context of the theoretical frameworks of creativity research. Discussion of a key issue regarding modelling the creative process concludes Part Two.

Creativity Theories

General frameworks

The complexity and richness of the creativity phenomenon is evidenced by a plurality of theories and perspective that seek to both describe and explain it (Rothenberg & Hausman 1976; Kozbelt, Beghetto & Runco 2010) . The major theories can be organised under five broad conceptual and methodological orientations (Kozbelt 2011):

- The empirical or scientific approach
- Philosophical and metaphorical perspectives
- Four Ps of Creativity
- Creative magnitude
- Disciplinary approaches

A framework provided by Beghetto, Runco and Kozbelt (2010) is used for this overview. These are not the definitive categories: other creativity scholars classify the theories differently, according to context. This framework is merely a workable guideline.

Empirical or scientifically oriented approaches

These theories seek to develop objectified models of creativity that can be validated, such as standardised creativity scales (Sternberg & Lubart 1999) or computational models (Kozbelt 2011), with the aim of meeting "traditional scientific standards" (Kozbelt, Beghetto & Runco

2010, p. 22). They are frequently applied to research on creative people (Kozbelt 2011) but some theories of creative processing, such as *divergent* thinking (Kozbelt 2011), belong to this category (Runco 2014; Sternberg & Lubart 1999). Some noted weaknesses of this framework are its narrow conception of creativity (Collins & Amabile 1999), its focus on particulars (Kozbelt, Beghetto & Runco 2010), and the reductive methods that have been used to measure it (Sternberg & Lubart 1999). However, the empiricists would argue that the more metaphoric theories are too speculative to be useful for predictive purposes (Kozbelt, Beghetto & Runco 2010).

Philosophic and metaphoric perspectives

Philosophic and metaphoric perspectives are by nature speculative. Though they frequently restrict themselves to focusing purely on the hypothetical (Kozbelt, Beghetto & Runco 2010), they have the potential to open our minds to new possibilities and meanings (Kozbelt 2011; Lenk 2009). Such approaches study creativity within the full scope of human experience, exploring the dynamics and structures that underlie the creative processes (Abel 2009). However, they are criticised for being too metaphysical and without practical application (Kozbelt 2011); for leading to non-rational conceptions of creativity resistant to verifiable testing (Jarvie 2009; Sternberg & Lubart 1999); or for harking back to earlier, mystical speculations (Sternberg & Lubart 1999), even back to Plato, who associated inspiration with divine madness (Abel 2009; Dacey 2011). The Romanticism movement is also blamed for generating the ideal of the creator as a 'lonely genius' (Becker 2011; Runco 2014).

However, a philosophical worldview such as Existentialism allows of the individual to hold or even synthesise diametrically opposing views simultaneously, a position that is sometimes described as central to the creative process (Runco 2014) and, as we have seen, to its paradoxical definition. This way of thinking has been characterised in different ways, for example, "metaphoric logical" (Kozbelt, Beghetto & Runco 2010, p. 32) or "sustaining contradictions" (Zajonc 2013, p.86). Creativity theories that take such an approach are Koestler's (2009) theory of *bisociation* and Rothenberg's (2011) Janussian and Homospatial thinking. Zajonc (2013) suggests a tolerance for unlikeness and contradiction can stimulate the imaginative faculties, but, more significantly, it can act as a disruptive force on pre-existing and habitual ways of seeing and thinking (Rothenberg 2011; Zajonc 2009), opening the way for new experiences and perceptions to arise.

When comparing empirical with philosophic frameworks, it has been suggested that the ideal is to ground the philosophic with the empirical "exploration" (Kozbelt 2011, p. 473) and aim for

fruitful research outcomes, rather than predictive ones (Kozbelt 2011). In a similar vein, Rothenberg and Hausman (1976) suggest researchers consider the determined part of creativity from an empirical approach, but find new ways to study its undetermined parts, such as intuition, in order that creativity as part of the human condition is explored in its fullness, without reducing its essence of humanity.

The Four Ps of Creativity

The Four Ps of Creativity is an alternative framework for categorising creativity theories, based on where creativity resides (Kozbelt 2011; Runco & Kim 2011). The different facets are *process, product, personality* and *place* (Kozbelt, Beghetto & Runco 2010) or *press* (Runco 2011). More recently, two more facets, *persuasion* and *potential* (Kozbelt 2011; Runco 2014) have been added.

The *process* category aims to understand the source and structure of creative processes (Collins & Amabile 1999; Runco & Kim 2011) through studying its underlying cognitive structures. Cognitive theories of creativity are more numerous than any other kinds of theory in the *process* category (Runco 2014), possibly because, as Funke (2009) states, creativity is so closely connected to ideation. Since cognitive research aims to be scientific and explicable, many researchers use empirical methods. These include *associative thinking* (Kogan 1980; Sternberg & Lubart 1999; Runco 2014), *problem solving* (Kozbelt, Beghetto & Runco 2010; Simon [n.d.] in Kozbelt 2011), mental modelling (Johnson-Baird 1983) componential theories (Runco 2014) and computational theories (Boden 1999). Other process theories, such as *problem finding* (Kozbelt 2011) and metaphoric (Simon 1969, in Gelernter 1994; Kozbelt, Beghetto & Runco 2010; Runco 2014), are less receptive to empirical methods (Runco 2014).

Stage and componential theories are amongst the most widely known and used *process* theories (Isaksen 1995; Kozbelt 2011; Villalba 2011). The earliest and perhaps best known is Wallas' Stage theory (1926, in Funke 2009; Richards 2011; Runco 2014) with its four stages: preparation for gathering information and defining the problem; incubation, where unconscious processing takes place and information is somehow transformed (Guilford 1979, in Runco 2014); an insight or "aha!" stage (Funke 2009), where a solution may come to mind; and verification, for testing and implementing (Kozbelt 2011; Runco 2014). More recently, the linearity of such models has been challenged (Kozbelt 2011); sometimes a recursive stage is added to address this (Runco 2014), but Stage theory still remains the exemplar for representing the normal stages of information processing during creative cognition (Funke 2009). However, Stage theories assume creative processing can be modelled (Runco 2014),

although its incubation stage, regarded almost as an inactive 'time-out' from the process (Abel 2009; Kozbelt 2011), cannot be delineated. Lubart (2001) challenges the real-world relevance of such fixed sequence models, in view of the asystematic nature of creative thinking (Runco 2014). Abel (2009) challenges whether creativity can be modelled at all. Componential theories that allow for the different phases to work in an interconnected manner have been suggested as an alternative (Kozbelt 2011), but a key issue here is whether creative thinking uses different mechanisms for conscious and unconscious processing (Kozbelt, Beghetto & Runco 2010) and, if so, how these can be appraised.

From the *product* research on tangible works of art and inventions, comes the common definition of creativity as being 'new, original and of value'. The strength of *product* studies is seen as their quantitative objectivity (Kozbelt, Beghetto & Runco 2010; Runco & Kim 2011) but they need to infer the process behind it, which practitioners and embodiment theorists consider a major weakness of non-practitioner research (Carter 2004). And the influence of *place*, including the historic-social influences, cannot be underestimated (Abel 2009). Likewise, *products* do not reveal much about the creative personality behind it and less about the potential of ordinary people to become creative (Runco 2011).

Much early research focused on the *personality* and behaviours of creative people (Runco & Kim 2011; Sternberg & Lubart 1999), but more recently, *personality* is seen as interrelated to *place* and *press* (Runco & Kim 2011). *Place* includes environment, social, physical, historical and cultural factors (Levy 2007b; Meusburger 2009). *Press* is formed by the interaction between internal and external factors (Isaksen 1995; Meusburger 2009) and is typified by the reframing and restructuring approaches of Design Thinking (Dorst 2011) and Wertheimer's Gestalt Theory (Isaksen 1995).

Since the interrelationship of the different Ps is evident, research using this framework has become more adaptive. For example, *press* is closely aligned to *place* (Runco 2011) and *place* or spatiality has become an increasingly influential stream of creativity research in itself (Funke et al. 2009). Runco (2011) advocates for *potential* to be included with the P's, since realising creative potential has become one of the major goals of education (Runco 2014). Although the Four (or Six) Ps paradigm has been criticised for its analytic tendency of isolating the facets of the creative act, most researchers acknowledge this limitation, but nevertheless find it a very useful framework for comparing theories (Kozbelt 2011).

Creative magnitude

Distinguishing between levels of creative magnitude is another useful way of conceptualising

creativity. This approach includes *historical* creativity (Boden 1994, in Funke 2009), the domain of geniuses; and *personal* creativity (Runco 2011), which suggests we are all inherently creative. *Historical* versus *personal*, also called *Big-C* and *little-c* (Csikszentmihalyi 1996), is a very broad paradigm that embraces many otherwise diverse theories (Boden 2009; Runco 2011). *Historical* refers to the socially recognised creative expressions of gifted personalities (Dacey 2011; Runco 2011; Becker 2011) whereas the universal potential for creativity in the average individual is designated personal or *little-c* (Boden 2009; Runco 2011). Other forms of creative magnitude include *mini-C*, those occasional sudden instances of insights (Kaufmann and Beghetto 2009, in Kozbelt, Beghetto & Runco 2011); *Pro-C*, for creative professionals who do not attain an eminent status with their work (Kozbelt 2011); and *everyday* creativity (Richards 2011), which could be described simply as everyday problem solving (Runco 2011). *Historical* and *pro-C* creativity are more subject to *personality* and *product* analysis (Runco 2011), whereas *personal, mini-C* and *everyday* creativity are more concerned with *process* and creative experience (Runco 2011).

Personal creativity requires no social recognition or concrete product to validate it, nor is it synonymous with self-actualisation, though both have their origins in Western humanistic thought (Runco 2011). *Personal* creativity is closely associated *everyday* creativity (Runco 2011). *Everyday* creativity could be considered a cognitive 'style', states Richards (2011), rather than a specific process. It is about how we do it rather than what we do. Its criteria are originality and meaningfulness only, which may be why Runco (2014) suggests ordinary, everyday creativity may be more problem solving than inherently creative. However, Runco also considers that *personal* creativity uses the same "mechanisms" (2011, p. 221) used by *historical* individuals, pointing to its universal nature. *Personal* creativity, says Runco (2011), is the "prerequisite of all creativity" (p. 220). It concerns creativity in the individual's original construction of meaning (Runco 2011), not society's response to it; and the potential for, but not necessarily realization of, creative outcomes (Runco 2011; Kozbelt, Beghetto & Runco 2010), an important consideration for creativity in the context of educational learning (Runco 2014). *Personal* creativity has been identified with self-expression (Runco 2011), mental enhancement (Csikszentmihalyi 1996) and self-actualisation (Maslow 1968, in Runco 2011).

Not everyone attaches levels of creative magnitude to people. Abel (2009) prefers to take the personal out of the equation and instead distinguishes the levels of creativity by structure and process, these being weak, moderate and strong: weak creativity simply involves recombining old elements; moderate, he calls intuitive thinking; and strong creativity is transformational

and radical. When comparing the Creative Magnitude framework with the Four Ps paradigm, Abel's philosophical approach is more concerned the underlying structure of the creative process; whereas the Four Ps are concerned with psychological behaviours and personal interpretation.

Disciplinary approaches

As already noted, early creativity research was initially the domain of Philosophy, then Psychology, with Philosophy leaning towards a humanities perspective and Psychology aiming for scientific respectability (Runco 2014). This century has seen increasing interest from of other fields, as creativity becomes an organisational attribute and marketable product (Florida 2001; Howkins 2009). However, the disciplinary approach tends to shape its interests to specific contexts. So, for example, Psychology-oriented studies have focused on creative personalities and their creative behaviours (Abel 2009), especially creativity on a normality/pathology spectrum (Abel 2009), whereas, as already discussed, Philosophically-oriented arguments locate creativity within broader human experience, and are primarily interested with the structure of the creative process (Rothenberg & Hausman 1976). The field of Design sees creativity as a subset of innovation; likewise, Science views creativity through the lens of discovery and invention, as noted in Part One: Disciplinary Distinctions. Education and organisational management, however, are more focused on practices for capturing and developing creativity (see Part Three: Creative Thinking in Action) than its theoretical underpinnings. They have opened the way towards group-oriented research, whereas creativity in the past has been seen as an individualistic, even non-conformist, pursuit (Runco 2014). This trend has led to the development of more contextual, "interactional" (Meusburger 2009, p.97) approaches, such as an expansion of the *place* approach; and interdisciplinary theories, such as the Systems theory of creativity (Csikszentmihalyi 2015), as responses to the unifaceted, domain-specific theories that have restricted practical application beyond the limits of speculation or the laboratory (Rothenberg & Hausman 1976; Kozbelt 2011). Nevertheless, all frameworks for categorising creativity theories have strengths and weakness; their primary purpose is simply to bring some order to the plurality of research in this field, as this broad overview has sought to do.

Specific cognitive frameworks

As stated earlier in this chapter, cognitive theories have dominated creativity research, particularly studies on creative process, because some form of mental processing is the basis of any human endeavour (Runco 2014). Therefore, this section takes a more in-depth look at the

approaches of three specific cognitive processing frameworks – computational psychology, information, and problem-centred approaches – before leading into a more detailed exploration of the alternatives, particularly Csikszentmihalyi's influential work on his multidimensional systems model (2015) and *flow* theory (1996; 2014).

Computational Psychology

Computational Psychology is primarily concerned with how structured "conceptual spaces" (Abel 2009, p 59) in the creative process can be modelled or represented in computational terms (Abel 2009; Boden 2009). Boden (2009, 2012) identifies three types of structures that generate creativity: combinational, exploratory, transformational or radical. Combinational concerns the generating of new combinations of structures, the same concept that underlies *associative* thinking; exploratory, concerns how existing constraints or rules are modified or redirected; and transformational or radical concerns how new structures are created, defying all existing ones. These three types of structures are very similar to Abel's (2009) levels of creativity magnitude, except Abel has intuition as a second type, whereas Boden (2009) places a similar experience she calls an "impossibilist" (p. 238) surprise, where the existing structure is transformed in some new and fundamental way.

Computational modelling presupposes generative creativity but can barely explain it, states Abel (2009), particularly exploratory and transformational creativity, because such forms of creative processing cannot be logically deduced or reduced to sets of antecedent elements (Abel 2009). Abel (2009) considers the unpredictable, spontaneous and discontinuous nature of generative creativity questions the cogency of such computational models; whereas Boden (2012, personal communication, 2 October 2012), in her lecture on creativity as a neuroscientific mystery, stated that she considers this weakness to merely lie with insufficient understanding of thinking modes to date. Abel (2009), however, questions as to whether the process of creating new rules is even calculable, since creativity, he believes, is a "phenomenon of emergence" (p. 67), with neither beginning nor end. This understanding of the creative process has implications beyond computational psychology for any formalised, linear model of creativity, suggesting that that the generative aspect of creativity, so central to our "self-creative nature" (Noonan 2008, p. 157), will always elude any theory modelling that aims for calculable sequences or strings.

Information

As noted in Part One: Characteristics of creativity, Anderson (2010) conceptualises creative thinking as an Information issue. Levy (2007b) concurs but has concerns that the current state

of information overabundance could be detrimental to creative thinking, as people fill their leisure hours with pre-processed information at the expense of time for deep, personal reflection (2007b). Cognitive psychologist Runco (2014) agrees, suggesting too much information stifles original thought; but he also asserts that, though creativity adds to the information overabundance, it equally assists us in adapting to it (p. xi).

Otherwise, to date, the field of Information Studies has had little to say on creativity compared to other disciplines cited in this review. The small body of work primarily takes a cognitive approach, seeing creative thinking mainly in terms of *problem solving* (Bawden 1986; Cornelius 2002; Ford 1999; Wilson 1999). When Kulthau (1993) developed an early Stage model of the information search process, she did include uncertainty in different forms as occurring throughout the early stages of her six-stage model and was the first Information researcher to consider affect as an experience of information seeking. But in Kulthau's work, as in Information generally, uncertainty is regarded as a problem, as a negative situation to be resolved (Kulthau 1993, in Anderson 2011; Wilson 1999). However, Anderson (2010), as we have seen, considers uncertainty as a potentially positive force for "kickstarting" (para. 13) creativity, but nevertheless also conceptualises uncertainty as imperfect information (2010), reflecting what Dewey (1929) stated about the modern quest for certain and complete knowledge.

Dervin's (1992) more complex *sense-making* approach to information processing lies between the cognitive and experiential, since *sense-making* takes place in the gap between conceptualising the world and experiencing it (Godbold 2006). S*ense-making* acknowledges problems such as gaps and discontinuity are part of the everyday world (Dervin 1992; Godbold 2006), placing *information processing* in the situational world of experience (1992). However, Dervin's (2000) conception of 'gap' as arising from a person's "struggle through an incomplete reality" (p. 40, cited in Godbold 2006, para 9) distances her theory from experiential approaches with this need to 'fill in' the incomplete. Like uncertainty, gaps are a barrier to complete knowledge. So, though *sense-making* is conceptualised in terms of 'gap' rather than 'uncertainty' or 'problem', it is still concerned with bridging in order to make those experiences graspable and knowable. Complete information or knowledge, even if never realised, is the goal of *sense-making*, not new ideas. As such, the theory is both certainty-oriented and solution-oriented, placing it closer to innovation than creativity; even the use of the term 'strategies' to bridge the gaps suggests an adaptive, rather than creative, response. Dervin's gap-bridging metaphor also resonates with Design Thinking's conception of the

creative leap as a bridge-building exercise between the problem space and the solution space (Cross 2006; Dorst & Cross 2001); both are concerned with problem solving, though the goal of sense-making is knowledge, not innovation.

Information processing has been characterised in Information research as a process concerning missing, problematic or incomplete information that requires resolving. Such a process has a limit for generating new knowledge. Perhaps a more responsive approach, in terms of creative ideation, is that of Kirk (1999), who sees information as potentially a "constitutive force" (para.10) for innovation and strategic thinking. In any case, Meusburger (2009) considers that knowledge and creativity have a "non-linear" (p.6) relationship, because creativity goes beyond knowledge. As the co-founder of Sony, Akio Moriata states, simply processing information is not sufficient to generate new ideas: it also requires "human thought, spontaneous intuition and a lot of courage" (cited in Hodgkinson et al. 2009, p. 278).

Problem-centred approaches

Creative problem-centred approaches conceptualise creative thinking in terms of a "search through a problem space" (Gaut 2010, p. 1042). This cognitive paradigm has two approaches, *problem solving* and p*roblem finding*. These have been developed separately, the latter in response to the former (Kozbelt 2011), but in practice, their processes are less distinguishable (Csikszentmihalyi 2015). Central to both is the idea there is a 'problem', a complication or hindrance of some sort, between the creator and his or her goal (Runco 2014), but the recognition of this complication may be a purely subjective response, "a personal interpretation" (Runco 1994a, cited in Runco 2014, p. 16) of the context. *Problem solving* and *problem finding* have been mentioned as terms strongly associated with creativity in Part One: Disciplinary Distinctions; the following section compares them from a theoretical perspective.

Problem solving is a form of mental processing that concerns closing the gap between what is known and what is unknown (Isaksen 1995). It requires some level of domain-specific expertise (Kozbelt, Beghetto & Runco 2010; Runco 2014) and, though it seeks to explain a type of cognitive process, is basically solution-oriented. As noted in the previous section, *problem solving* approaches are modelled around the concept of some resistance to be overcome, perhaps a gap or barrier to be bridged (Cross 2006; Dewey 1980). However, more sophisticated problem-solving theories, such as Design Thinking, which uses an abductive thinking model (Dorst 2011), nevertheless recognise that, in practice, ill-defined or even paradoxical problems are the norm, rather than the exception (Dorst 2011).

Problem solving theories have considerable support in creativity research (Kozbelt, Beghetto & Runco 2010) but have also been criticised as too computational (Csikszentmihalyi 2015; Kozbelt 2011), since they can only model rational, conscious cognitive processes (Csikszentmihalyi 2015). They do not recognise intuitive or originative elements, making *problem solving* closer in conception to innovation than creativity (Runco 2014). Moreover, *problem solving* cannot account for phenomena such as *Historical* creativity (Kozbelt 2011) and, though acquiescent to empirical study in scientifically orientated research (Kozbelt, Berghetto & Runco 2010), it is less amenable to the more subjectively oriented field of arts-based research (Csikszentmihalyi 2015; Kozbelt 2011) or, indeed, in the natural environment of everyday experience (Runco 2014).

Problem finding is less solution-oriented than *problem solving.* Instead, it approaches the source of the creative process, since a 'problem' must first be discovered (Csikszentmihalyi 2015) or identified (Runco 2014). Therefore *problem finding* also requires a more exploratory and open cognitive framework (Kozbelt 2011) than *problem solving*. Further, the precise nature of the problem, the "problem-expression" (Runco 2014, p. 17), is defined, as in *sense-making*, entirely by an individual's subjective experiences (Kozbelt, Beghetto & Runco 2010), making it less easy to theorise than *problem solving* (Runco 2014), though models based on Wallas Stage theory are sometimes proposed as incorporating a problem-finding stage in the first stage of preparation (Meusburger 2009; Runco 2014). *Problem finding* could be described as "wandering without goal" (Greene 2001, para.10), making it difficult to evidence (Kozbelt, Beghetto & Runco 2010) because the exact structure of the problem-finding process is unclear (Dudek & Cote, 1994, in Kozbelt, Beghetto & Runco 2010). Further, it has a different relationship to the process than *problem solving*, because a solution is not the ultimate goal and because problem-finders, typified by the creative artist, do not necessarily conceptualise their creative process as a 'problem space' (Runco 2014). As Dewey (1980) states, an artist:

> does not shun moments of resistance and tension. He rather cultivates them, not for their own sake but because of their potentialities, bringing to living consciousness an experience that is unified and total" (p. 15).

However, this statement does not indicate that Dewey regarded such moments as 'problems' but it does conceptualise *problem finding* as an experience, rather than as an abstracted process.

The very notion that creativity can be conceptualised as a "search through a problem space" is characteristic of the cognitivist's desire for rational theories that search for certainty. And

whether *problem solving* and *problem finding* in practice are quite distinct processes is still debated (Csikszentmihalyi 2015; Runco 2014). Perhaps they are better seen as a continuum than as distinctive. Schön's (1983) reflective practice, which contains both *knowing-in-action* and *reflection-in-action,* blurs the divide, since "in an action-present our thinking serves to reshape what we are doing while we are doing it" (Schön 1983, p.26). As Nickerson (1999) says, when reflection and action are integrated, finding and solving may be almost indistinguishable. But *problem finding* puts the emphasis on the question rather than the answer; for this reason, it may be important to distinguish them, especially since *problem finding* is often considered to be more important of the two processes (Meusburger 2009). As Einstein said: "The formulation of the problem is often more essential than its solution (Einstein & Infeld 1938, cited in Csikszentmihalyi 2015, p. 2)

The line between *problem solving* and *problem finding* is a fine one. It may depend on how the 'problem space' is characterised (Runco 2014). If a gap or hindrance or some form of constraint is foregrounded, then the process leans more towards *problem solving*. But if the expression of the problem is more important than its resolution or the process is more important than the solution, then *problem finding* is a better conceptualisation of the process. However, the limitation of any problem-centred framework, in creativity research or Information Studies, is that it relies on conscious information gathering and existing knowledge to interpret that information, so cannot adequately account for less rational or less conscious processes, such as intuition. Further, when an approach is framed in terms of a 'problem space,' then it is always conceptualised as seeking certainty and resolution.

The next section considers the creativity research of Mihaly Csikszentmihalyi, who has developed both singular and complex responses to these limitations of cognitive theories. A brief overview of his contribution to a *systems* approach to creativity precedes a discussion of his influential *flow* theory, followed by a reiteration of key characteristic of the creative process, as discussed in Part One: Creativity's Characteristic, in relation to the *flow* concept.

Csikszentmihalyi's Systems approach

Csikszentmihalyi is regarded as one of the pioneer's of *problem-finding* research (Kozbelt 2011), but he is better known for his *flow* theory (Csikszentmihalyi 1996), which, along with *problem finding*, forms part of his complex, multidimensional Systems Theory of Creativity (Csikszentmihalyi 2015).

A more holistic Systems theory of creativity is a response to the increasing recognition that an analytical, positivist approach to research, (as evidenced by many of the theories discussed here so far), produces "psychologically reductionist" (Simonton 2003, cited in McIntyre 2013, p. 86) conceptions of creativity. A *systems* approach sees creativity emerge from a convergence of multiple components (Sternberg & Lubart 1999, in McIntyre 2013), components that are chaotic, non-linear and not amenable to approaches that try to isolate and explain individual aspects without first looking at their interactions (McIntyre 2013). Nevertheless, as in nature, these components act together as systems of unified and organised complexity encompassing all human interactions with the world (Bortoft 2012). When applied to creativity research, a *systems* approach produces multifaceted, dynamic, complex understandings of creativity that reflect the contextual conditions through which it emerges (Meusburger 2009).

A *systems* view of creativity could be described as a theory of *place (*correlating to *place* in the Four Ps of Creativity framework), but more broadly and richly conceptualised. A *systems* view "relegates" (Runco 2014, p. 246) the individual to one part of the process, not as central to it, but already engaged interacting with his or her particular world, before the creative process begins (Csikszentmihalyi 2015). Csikszentmihalyi's Systems Model of Creativity (2015) emphasises domain expertise and societal conditions (such as Michelangelo's Florence or Mozart's Vienna) over other factors, such as environmental conditions, more so than other *systems* models (Kozbelt, Beghetto & Runco 2010) and primarily attempts to account for the historical and cultural influence on *historic* artists and inventors. However, Runco (2014) considers this focus on *historic* creativity to be a limitation for *everyday* and *personal* creativity, since Csikszentmihalyi's approach consequently focuses on the creative products as much as societal conditions.

However, Bortoft's (2012) criticism of *systems* theories in general goes much deeper, stating that they only appear to be theories of "wholeness" (p. 17), since they attempt to fit the parts into a whole, thus separating the parts from the whole and consequently remaining analytical in the process. In true "wholeness", he argues, the whole "presences" (p. 15) within the parts, so the whole always remains implicit in the parts, never a separate entity from them. In this sense, states Bortoft, the *systems* way of thinking is still embedded in a dualist, Cartesian mindset, and therefore is not holistic. (This phenomenologically informed perspective is further developed in Chapter Three: Methodology).

Flow theory

Csikszentmihalyi (1996) was researching the creative experience when he discovered that intense engagement with a creative task led to a form of heightened experience. Many of his participants described this experience as a feeling of *flow* (Csikszentmihalyi 1996, 2015). *Flow*, however, is not a creativity theory but a model for optimal experience (Nakamura & Csikszentmihalyi 2014), itself a driving mechanism behind the motivation required to engage in and produce creativity (Csikszentmihalyi 2015). As an optimal experience theory, it is really too broad to be distinctive for creativity, but *flow* as a concept has become very closely aligned with the field.

Flow can be described as an embodied experience (Biasutti 2011), where an individual enters a non-dualistic "oneness" (Goehr, cited in Krausz 2009, p. 195) state of being carried by a current, like a river flow. A "differentiated and integrated" (Nakamura & Csikszentmihalyi 2014, p. 92) experience, its central quality is an intense, highly focused concentration where a person has a distorted sense of time (Nakamura & Csikszentmihalyi 2014). Other characteristics include a sense of control yet with a loss of reflective self-consciousness; mental energy; and a sense of satisfaction or even happiness (Nakamura & Csikszentmihalyi 2014). Nakamura and Csikszentmihalyi call *flow* an "autotelic activity" (2014, p. 89), intrinsically satisfying in itself. They also describes it an experience that "seamlessly unfolds from moment to moment" (Nakamura & Csikszentmihalyi 2014, p. 90), where awareness and action become one (Csikszentmihalyi 1996; Nakamura & Csikszentmihalyi 2014). Two key conditions for *flow* are a balance of perceived challenge and existing skills, and clear immediate goals and feedback about progress (Csikszentmihalyi 1996).

Initially, *flow* research used the qualitative methods of interviewing and questionnaire but later, the experience sampling method (ESM) was used to capture samples from the stream of experience, on the spot, so to speak, in order to capture "instantaneous moments of internal life" (Biasutti 2011, p. 522). ESM uses a paging device that randomly signals participants, about eight times a day, to complete a questionnaire about their experiences at that precise moment (Nakamura & Csikszentmihalyi 2014).

However, *flow* is difficult to achieve, being a finely balanced state that exists in the space between anxiety and boredom (Csikszentmihalyi 2015). Focused attention is key to holding this balance (Nakamura & Csikszentmihalyi 2014). *Flow* has been described as a 'seamless' state, but also as a differentiated one (Nakamura & Csikszentmihalyi 2014). Ceja and Navarro (2012) have found evidence *flow* does present continuous fluctuations over time and shows

degrees of instability; suggesting *flow* experiences are more unstable and non-linear than Csikszentmihalyi suggests. *Flow* theory also does not account for shifts in the mental state during a creative process, such as periods of lowered concentration; or for the sudden insights that 'break through' during such a state, seemingly at arbitrary moments but particularly when a person is in a more diffuse state of mind (Richards 2011). *Flow* is not limited, either, to creative activities, but has been evidenced in any type or level of experiences of sustained concentration, such as high performance sport, and even while watching television or leisure reading (Nakamura & Csikszentmihalyi 2014).

Flow as a state of consciousness

What is especially notable about the *flow* concept is not that it is an experiential, rather than cognitive, approach to understanding creativity, but that it engenders an altered state of consciousness in the process. Research on creativity as differing states of consciousness is limited (Richards 2011) in a field that prefers to see the phenomenon as a process of the everyday, conscious mind, such as in *problem solving* (Gelernter 1994; Jarvie 2009). Only a few theories to date, such as the incubation stage of the Wallas Stage Theory (Richards 2011; Runco 2014) and Gelernter's medium-to-low focus state of cognition (see Part One: Three Experiential Approaches) attempt to theorise altered states of consciousness (such as intuitive insights), and both these theories require a diffused consciousness, rather than a focused one.

Prominent amongst the few studies is the small body of phenomenological research into creativity. Like Csikszentmihalyi's (1996) early *flow* research, these draw on open-ended interviews with creative professionals, sometimes the researchers themselves, for their data. In Nelson's (2011) review of these studies, *flow*-like experiences are described as being where consciousness of one's self disappears (Conrad 1990 in Nelson 2011; Reinders 1992 in Nelson 2011; Giorgi 1984, in Nelson 2011) and a kind of "non-rational intelligence" (Nardone 1996 p. 4, cited in Nelson 2011, p. 302) operates. Foregrounded in all these studies, however, is the recognition that a dialectical interaction between creator and world takes place: an intertwining of conscious and unconscious processing during creativity, where the artist is not completely in control of what she is creating (Nelson 2011). May (1975), though not a phenomenologist, also describes creativity as an encounter between an individual and her world that becomes a "continual dialectical process" (p. 50), out of which a process of making occurs, a "bringing into being" (p. 40). However, like Csikszentmihalyi (1996), May considers this process of making is characterised by a heightened state of consciousness and a degree of intense absorption that "undercuts" (p. 54) the self and world divide.

Csikszentmihalyi (2015) not only believes that the potential for creativity is enhanced by *flow* type experiences, but that *flow* has a central role in the creative process. Other scholars dispute this, however. Richards (2011) considers that *flow* states pertain more to the "seeing through" (p. 472) of a process once the goal is known, rather than to its inception. Krausz (2009), drawing on his own artistic experiences, questions whether creativity is not hindered or even interrupted during *flow*-type experiences. He suggests the generation of something new, no matter how minor, requires some level of duality between creator and creative work; and further, that non-dualistic 'oneness' states inhibit the critical processes salient to dialectical-type interaction between creator and work. Nelson (2011) supports Krausz's assertion to an extent, stating that there is some kind of "alternation between immersion in the … material and distancing oneself (p. 300). When artists say their work starts "creating itself" (Nelson 2011, p. 299), there must be some shift in the self-world relationship occurring. Therefore, suggests Krausz (2009), such optimal experiences that typify *flow* experiences can "inhibit productivity" (p. 197); and yet, he continues, they may still be fruitful for the overall creative process. *Flow* experiences obviously have a role to play in creative activity, but they are not necessarily, as Csikszentmihalyi (2015) asserts, central to it.

Flow and creativity

When comparing the views of Csikszentmihalyi (1996, 2015) and Krausz (2009) on how the creative process unfolds, it may come down to how creativity is characterised: either as a flowing, flexible, dynamic stream, or as a disrupted process of breaks and unpredictability (see Part One: Characteristics of Creativity). In one view, *flow* carries the creativity impulse; in the other, *flow* inhibits it because of the need for a reflective consciousness of self for creativity to emerge.

Flow has been given a central role in facilitating or fulfilling a demanding process through generating an optimal experience. Whether this experience can be deemed creative, that is, new, original or meaningful, is another question. *Flow* helps take people beyond cognitive limitations, expands their imagination and allows for experimentation (Biasutti 2011); it may foster divergent thinking, deep concentration (Biasutti 2011) and out-of-the-ordinary experiences that inspire creativity (Richards 2011), but is it generative of creativity (Krausz 2009)? Does a *flow* experience "bring something new into being" (May 1975, p. 39)? Creative people may optimise its appearance, but so might 'non-creative' professionals, such as athletes. It is like a workflow experience rather than one that produces surprising, unpredictable, original experiences. Such experiences may occur from going beyond

limitations, not swimming within them or pressing against them. *Flow* may have a central role in the creative process but may not be the element that makes it creative, as opposed to optimal and productive.

Models and Images

Terminology

Any theory or research approach that aims towards being universal or transdisciplinary invariably has interdisciplinary "crosstalk" (Kozbelt, Beghetto & Runco 2010, p 40) confusion. For example, consider the terms 'model' and 'image': in the Sciences 'model' means a framework for a theory or individual mental process. Models, however, may be non-visual images and images may be abstract processes (Becker 1998; Boulding 1956); whereas in the Arts, 'image' usually references visual and concrete forms or actions. An 'image', then, can be a model, a concrete image (Gelernter 1994), a visual representation (Arnheim 1969; Bruner, in Cross 2006), or a process (Bortoft 1996). All feature in processes of perception and information processing (Meusburger 2009).

The model

The reductive tendency of cognitive theories that are analytic in nature has been identified. By seeking to simplify creativity, this tendency subverts the very complexity that is central to this phenomenon. This, in turn, generates theories that "simplify the reality" (Nadeem & Sauermann 2007, p. 219), so compromising their usefulness and value for understanding creativity. This section will examine how this tendency impacts on the models that are often generated from such theories.

As previously stated, cognitive approaches to creativity focus on the process, and this process frequently modelled to reflect a creativity theory (Sternberg & Lubart 1999). Although mental models usually function as bridges between theory and real world, between "the general and the unique" (Shanin 1972, in Downton 2003, p. 85), there are many more models of creativity than theories (Greene 2001; Meusburger 2009). Many are simply formalisations of processes, such as the Stage Model (Runco 2014), and are somewhat light on epistemological foundations (Cornelius 2002; Greene 2009). This suggests they lean more toward the 'unique', and are models that capture one possibility, rather than representing the many (Johnson-Laird 1983). This may account for their great number, borne out by the fact that research into creativity tends to study one or two aspects of creativity or use only a few methods for analysis

(Clapham 2011), thus generating highly contextual models. In addition, where the numbers of models is so great, the cumulative effects of the growing body of research is dispersed, because research "fans out" (Greene 2001, para.5) rather than builds. Both issues are indicative of a gap between creativity research and creativity practice, leading to questions about both real-world robustness and meeting the needs of creative practitioners (Bell & Morse 2005; Carter 2004; Greene 2001).

More pertinently, mental models require automated expertise based on known probabilities and modal reasoning (Gelernter 1994): they model what is done, not what has yet to be done, which suggests that they limit creativity to modelling that arises from certainty and conscious processing. *Problem solving* is an example that draws on existing mental models (Gelernter 1994); *associative* thinking likewise relies on habit and following rules (Koestler 1964, in Meusburger 2009). Further, models not only aim to reduce uncertainty, they are designed to *give* the feeling of certainty (Stone 2008; Wilson 1999). This aim to "simplify the reality" (Nadeem & Sauermann 2007 p. 219), particularly for their use in modelling human-computer interactions, compromises their usefulness for understanding creativity.

This leads to the question of whether creative processes can be modelled and how fruitful, as Kozbelt (2011) might say, they are for understanding the creative process. Zajonc (2006, in Seitz 2009) considers that models should only be "vehicles or aids to engagement" (p. 76); if they become "idols" (p. 76), they promote a largely reductive understanding of the world, which inevitably leads to "partial solutions" (Zajonc 2006, in Seitz 2009, p.82) of problems. Scholars such as Abel (2009) reject modelling altogether, claiming that the creative mind is rule setting, not rule destroying. Holdrege and Talbott (2010) consider models have no real world authenticity since "the world breaks every fixed template" (p. 165) we try to superimpose on it. Other scholars believe that a creative conception arises out of seeing the parts, simultaneous to envisaging the organised whole, as does Gestalt theory (Albert & Runco 1999, Wertheimer 1945, in Arnheim 1970; Gibson 1960, in Meusburger 2009). Some extend this to cognitive perception in general, calling perception a holistic, not mechanistic, phenomenon; in which case the process of creative thinking must be an integrated line of thought, not a segmented one, as implied by a linear model (Meusburger 2009). Therefore, any model that has a fixed structure or sequence will not accommodate the generation of new or transformative structures. However, another approach to the concept of a model is to consider the image as a form of model.

The image

The role of the concrete image figures prominently in non-verbal creativity. In child development, concrete, non-verbal cognitive processing precedes abstract cognition, as children first think concretely; abstraction develops later, along with language (Arnheim 1970; Gelernter 1994). However, concrete thinking is retained, especially as pictorial or symbolic representations (Arnheim 1970; Bruner, in Cross 2006), underlying our understanding of certain universals such as light and darkness, right and left, the circle and cross (Arnheim 1970).

Gelernter (1994) makes an interesting distinction between *mental model* and *image* that has implications for addressing the non-verbal forms of thinking. For him, mental modelling only occurs at the most highly focused, analytical level of thinking; whereas the concrete picture image appears in lower-focus states or *incubation* stages of creativity (Runco & Sakamoto 1999). This concrete or iconic mode of thinking (Bruner, in Cross 2006) is prevalent in the Visual Arts and Design, which rely strongly on visual modes of thinking in the form of drawings, diagrams, etc. (Cross 2006). Experimental studies have shown that images that arise in the mind or appear in pre-conscious cognitive processing (Runco & Sakamoto 1999) can have a significant influence on creative output and metaphoric thinking (Rothenberg 2011).

There is a view in Continental Philosophy that the mind is not a static screen but a "productive act" (Bortoft 1996, p. 134) where thinking is a 'coming into being' process. In this dynamic conception of cognition, the image and process are one and the same. It is reminiscent, also, of May's (1975) proposal that the creative act is a 'coming into being' process. For example, Schwenk's (1996) metaphor of thinking as water flow is also a picture image or a 'shape' of the cognitive process (see Figure 2.1). This 'shape' of the movement of thinking exemplifies a type of thinking that is dynamic, not static. Whereas a formalised model abstractly segments a process into stages or steps, this dynamic image simply captures the form of the process, like a snapshot, and holds the movement at rest.

Universal models

The search for a unifying, universal or meta-model for creativity is not common, but is nevertheless visible in the literature (Zubrowski 2009). This search possibly reflects the desire to overcome the fragmented nature of existing pluralist research and to represent the universal nature of the phenomenon in some way. However, the desire to gain knowledge about what is universal in human cognition concerning the world and what is free to vary

(Stevens & Gentner 1983) would demand a very flexible model to accommodate the indeterminate and unpredictable nature of creative thinking. There are complex, multidimensional, componential models of creativity, such as Csikszentmihalyi's (2015) Systems Model and Greene's (2001) Model of 42 Models of Creativity, that could fulfill this criteria, but they can still only study one factor at a time (Clapham 2011), leading to a parts analysis rather than a holistic one; and their rich complexity and their many variables and levels of analysis make them impractical and time-consuming to implement (Bell & Morse 2005).

Part Two Conclusion

Kozbelt (2011) considers the abundance of theories and models to date as both a strength and weakness: a strength because of the extensive range and type of research; and a weakness because the existing theories and models have not deepened or synthesised our understanding of creativity. Since research on creativity requires ongoing transformation (Lenk 2009), the move towards broadening the research with holistic and multidisciplinary approaches or contextual studies could elucidate and refine existing theories (Kozbelt 2011). However, there remains a key question: What value does this extensive collection of disparate theories and models have for our understanding of how to implementing creativity in the world? Part Three: Creative Thinking in Action reviews the pertinent practices that have been developed to meet this need.

Part Three: Creative Thinking in Action

Despite the proliferation of theories that seek to grasp its secrets, creativity is essentially an "embedded" (Lenk 2009, p. 94) practice, requiring continual exercise (Lenk 2009). It is best observed and understood in action (Carter 2004), and since its commercial value has been recognised (Florida 2001; Howkins 2009), the demand for capturing these secrets is, no doubt, one reason why techniques based on sequential models are so popular, particularly in business, design and education fields (Rothenberg & Hausman 1976). Part Three examines how creativity can be embedded as a practice, by considering the conditions and common techniques suggested for developing and representing creativity. This is followed by a focal discussion concerning drawing, as a technique and medium for exploring cognitive processing.

Conditions that Support Creativity

In Part Two: Characteristics of Creativity, it was noted that some of the characteristics of the creative process are also offered as conditions that promote or hinder creativity's actualisation. Uncertainty has been proposed as having both desirable and undesirable aspects that affect the creative process (Anderson 2006), but there are other attributes, such as an open mind, which may be just as much a condition for creativity to arise, as an attribute of it.

Uncertainty

As noted, uncertainty holds an ambivalent position with regard to creativity. It may lead to risk-taking practices (Anderson 2010; Nickerson 1999) that lead to new ideas and ways of creating. It may open the space for ambiguity, as a "subtle form of motivation that inspires imaginative thinking" (Davis 2011, p. 118.). Uncertainty as a form of not-knowing may open the space for insights or intuitions to arise (Carter 2004; Zajonc 2006).

Uncertainty also generates affective states that may become a barrier to actualising creative products or performing creatively (Davis 2011; Nakamura & Csikszentmihalyi 2014; Runco 2014). Anxiety is a prime example of an emotional state that affect thinking by "making us freeze" (Davis 2011, p. 117) during a creative process. Rothenberg (1990, in Runco 2014) goes further when he proposes that the creative process itself can result in deep anxieties from the unearthing of unconscious material in the psyche. This form of anxiety, he suggests, may lead to mental conflict and tensions in the unfolding of the creative process that can affect, not only the unfolding process and product, but the individual's sense of self. Davis (2011), however, considers that it is the fear of uncertainty, rather than uncertainty itself, that acts as a block.

Openness

Openness is almost a co-condition for uncertainty to be an enhancing experience. Openness to how new information is received, processed and acted upon is an attribute frequently noted in relation to creative ideation (Gelernter 1994; Meusburger 2009), which often involves mental re-modeling or even transformation of the cognitive pathway (Davis 2011). Openness, Seamon (1993) notes, accompanied by curiosity or wonder, allows for the possibility for seeing the world with 'new eyes'. However, since perception is a habitual practice, what Davis (2011) calls a "functional fixedness" (p. 116), how we see and respond to the world can all too easily become routine, blocking our ability to see the world "as strange and paradoxical" (Merleau-

Ponty 2002, p. xv) and inhibiting the generation of the new, original and meaningful expressions of creativity. Davis (2011), in fact, considers habit to be the main barrier to creative thinking. Meusburger (2009) agrees, stating "all creative actions become habitual after a time" (p. 140). Intriguingly, pioneer creativity researcher Frank Barron appears to propose the opposite, stating "originality is habitual" (in Richards 2011, p. 469) in highly creative individuals, suggesting creativity is a cognitive style with which they approach all aspects of their life, not just their work practices. Creativity as a cognitive style has been identified as integral to *everyday creativity* (Richards 2011)

Motivation

Another element indicated as necessary for creative production is individual motivation (Collins & Amabile 1999; Csikszentmihalyi 1996, 2015; Sternberg & Lubart 1999). Motivation can be seen as either an internal or external drive. This points to two differing but fundamental perspectives about how creativity arises: is it an intrinsic capacity of the individual, arising out of one's inner resources, or are extrinsic elements required for creative ideas to emerge? As previously noted, much early creativity research focused on the individual, either as a gifted but unstable personality or as a individual human being striving to fulfill some inner desire to develop oneself, beyond one's everyday personality. The desire for growth through self-expression and self-actualisation has been considered as a major influence on *personal* creativity (Conti & Amabile 2011). Similarly, self-sufficiency (Conti & Amabile 2011) and solitude (Levy 2007a), at least at some stage of the creative process, has been considered a significant co-condition of motivation (Meusburger 2009)

> There is little doubt that in the realm of highest creativity there is only one creative instrument: the individual mind and spirit of the creator. The landmarks of scientific invention have been established by a handful of *lone* investigators. (Raudsepp 1958, p. 71, cited in Meusburger 2009, p.122)

This statement could equally apply to great artists. Creative ability used to be seen as entirely depending on the intrinsic faculties of individuals, but it has been more recently recognised that creative individuals do not function in a vacuum (Funke et al. 2009). There has been a shift to considering the societal, historical and environmental conditions; in other words, *place*. "We cannot study creativity by isolating individuals and their works from the social and historical milieu in which their actions are carried out," asserts Csikszentmihalyi (1988, in Funke et al. 2009). In this context, the effects of time (Levy 2007a; 2007b) and space (Funke et al. 2009) on creative ideation and practice have been given increasing attention.

Time and space

Levy (2007b) has pondered about the loss of time for deep and creative thinking in an information-abundant world and advocates for a more contemplative approach. Certainly Wallas' (1926, in Funke 2009; in Runco & Kim 2011) *incubation* stage suggests that a person needs to take possibly lengthy time away from a creative task, in order that some sort of unconscious processing can take place (Funke 2009; Runco & Kim 2011). But space is a more complex issue, since it includes, in the broadest sense, socio-cultural and organisational factors, as well as location or environment (Funke et all, 2009). When Csikszentmihalyi shifted the core question of creativity research from 'What is creativity' to 'Where is creativity' (Kozbelt, Beghetto & Runco 2010; Csikszentmihalyi 2015), a quite different conception of creativity began to emerge, one that arises out of a dynamic, multidimensional interaction between a creator and her world. Creativity, agrees Meusburger (2009), requires certain conditions of time and spatiality.

Csikszentmihalyi (1996) makes the surprising assertion that it is "easier to enhance creativity by changing the conditions in the environment than by trying to make people think more creatively" (p. 1). Yet there is contention as to the most suitable conditions for enhancing creativity, as to how and where the impetus and desire to create can emerge and develop. Like the contradictory nature of creativity itself, so are the conditions that stimulate it. Whether the conditions must be ideal or not is undecided, since it has been observed, from longitudinal studies that creativity does not always emerge under ideal conditions, and a challenging environment can indeed draw out the creative ability of an individual (Simonton 1994, in Funke 2009). It is evident, though, that there is the increasing consensus that creativity does not arise in the individual, but emerges out of "the encounter of the intensively conscious human being with his world" (May, 1975, p. 54). The location of that world is still hotly debated.

Tools and Techniques that Develop Creativity

There are many tools and techniques promoted as enhancing creativity. Handbooks (Nickerson 1999) and definitive works on the subject, for example, Csikszentmihalyi's (1996) *Flow,* detail tactics and exercises for becoming creative thinkers: analogic thinking, associative thinking, reframing, brainstorming, variations of the Stage model and lateral thinking (Runco 2014), to name a few. These are all marketable and popular, yet many remain relatively untested assumptions (Abel 2009). For example, recent research is inconclusive about the

effects of brainstorming (Meusburger 2009; Runco 2014), since it may inhibit the creativity of the individual at the expense of the 'group mind'. There is also little empirical evidence that techniques such as de Bono's 'thinking hats' are really effective (Greene 2001, Kozbelt 2011; Nickerson 1999; Villalba 2011). Many of these techniques are metacognitive strategies, exercises that rely on procedural knowledge and existing "know-how" (Runco 2014, p. 339), yet, as stated above, Csikszentmihalyi (1996) suggests external factors can be more effective stimulators to changing our thinking patterns than these internally-motivated tactics. Further, these various techniques may challenge routine thinking and enhance creative productivity (Runco 2014), but generative thinking that goes 'upstream' (Bortoft 1996) to the source of creative ideation, and towards developing the potential to be creative, may require deeper and ongoing transformation of habitual patterns or structures (Abel 2009; Downton 2003). Creativity may need to be "continually practiced" (Lenk 2009, p. 94), but it requires the right conditions or techniques for transformation to take place.

It may seem obvious to suggest that traditional creative activities, such as making art, will foster creative ideation or the emerging potential for it. The oft-cited artist Paul Klee said: "Art does not reproduce the visible, it makes visible".[8] Further, artistic practices allow a "higher degree of uncertainty, nonlinearity, and embracing the unpredictable" (Pigrum 2012, p. 766). Yet being artistic is not synonymous with being creative, or rather, continuously creative (Rothenberg & Hausman 1976). Artists are subject to external pressures "freeze" (Gaut 2009, p. 191) their creative process to maintain consistency or financial viability (Conti & Amabile 2011), as occurs in other industries. Nevertheless, methods and techniques used by arts practitioners are inherently more flexible and unpredictable. Runco (2014) points out that the imagery skills often associated with creative individuals can facilitate *problem solving*, and concept mapping may support *associative* thinking and creative *problem solving* (Eppler 2006; Tergan, Keller & Burkhard 2006). But Arnheim (1970) and Cross (2006) both consider freehand drawing to be the most conducive to expressing and developing ideation, which suggests drawing is highly suitable for exploring and stimulating creative cognition.

The following section compares three different forms of drawing as tools for creative articulation and mental representation.

[8] As stated in Paul Klee, 1920, Creative Credo

Freehand drawing

Freehand drawing has long been a traditional tool for exploring ideas in the early stages of creative works (Cross 2006; Schenk 2005). Described as "thought in visible action" (Arnheim 1970, p. 129), freehand drawing make ideas visible in non-verbal ways. Rose (2006) considers the process of drawing as you think may have the same communicative properties as the process of writing down one's thoughts. Similarly, Arnheim (1993) states that freehand drawing is a non-verbal language of cognition that permits theorists "stop-motion glimpses of the flow of creation" (cited in Schenk 2005, p. 202). Montarou (2012) considers drawing a form of unconscious information processing, while for Cross (2006), drawing is a dialectical activity, a reflective conversation between person and context. These collective understandings of the direct connection between thinking, drawing and language suggest freehand drawing is an ideal tool for communicating a creative process.

Freehand drawing can be uncertain and exploratory in nature (Cross 2006). It can be indeterminate, with missing lines, incomplete structures, multiple contours, untidiness, blots that help the mind shift between metaphoric and rational thinking and actively engage perception (Raney 1997, in Montarou 2012). Freehand forms of drawing, such as sketching, support the uncertain, ambiguous, exploratory nature of creative design (Cross & 2006), whereas digital drawing, like representational drawing, is declarative in nature (Rose 2006), meaning its purpose is to unequivocally capture the form of an object.

The linear nature of most forms of freehand drawing also reflects the linear movement of mental activity; thus we speak of our 'line of thought'. Experiential drawing is a form of drawing particularly suited to embodying thought processes because it is not representational or pre-meditated, but directly responsive to the 'line of thought'. Here, the line is more the tool of the artist than the designer. It is both investigative and contemplative (Rose 2006), allowing the artist to ponder or dream while exploring these states through drawing (Rose 2006). To draw experientially is to "take a line for a walk" (Paul Klee, cited in Marks 2009, p. 230); and is especially suited to revealing ambiguous or uncertain information, as "a line that is free to become" (Kandinsky, cited in Marks 2009, p. 230). It is like a form of visual 'wandering without goal', fully focused on each step of the process, without concern for the result. Used in this way, the line in drawing has the potential to engender mobility in thinking processes (Beuys, in Holland, Kugler & Sacks 2008) as well as embodying them.

Digital drawing

When drawing moves to the digital environment, it often becomes more complex in construction, using hybrid combinations of line, image and text (Eppler 2006), as well as incorporating traditional representational forms. It may be more conceptually rich due to the use of interactive digital media but it is less mobile, continuous and experiential than freehand drawing (Schenk 2005). It can no longer be considered *thinking in action* (Cross 2006), because the dynamic qualities of line are lost, when moving from the analogue to the discrete world of the mosaic–like array of pixels that comprise the 'line' in computer graphics (Downton 2003; Marks 2009), thus losing uncertainty and mobility that exemplifies the expressive line. In other words, the drawer "can't do the fuzzy stuff" (Schenk 2005, p. 195).

Despite recognition of the key use of computer-based technology in drawing, it is still strongly believed that the initial, thinking stages of any creative process should be done analogue, so that the uncertain, ambiguous 'fuzzy stuff' can be fully expressed (Schenk 2005). Computer-aided impedes the mobility of dynamic movement, so the indeterminacies associated with creative ideation (Schenk 2005) or "bodily intelligence" (Rose 2006, p. 219) are lost.

Node-link mapping approaches

Node-link mappings are diagrammatic drawings that use link and node, line and text to communicate meaningful relationships between information in a graphic representation (Dansereau & Simpson 2009). Concept mapping and mind mapping are popular 'freestyle' forms of mapping used extensively in both analogue and digital environments (Dansereau & Simpson 2009). Extensive research (Dansereau & Simpson 2009; Eppler 2006; Tergan, Keller & Burkhard 2006) supports their effectiveness for processing, communicating and synthesising information more efficiently than verbal and written language (Dansereau & Simpson 2009), and for representing and developing analytical thinking Eppler 2006). But despite claims that they also support open-endedness and creative leaps (Novak & Cañas 2008), their demand for systematic rules, premeditation, certainty and fixed structure hinder their easy adaption (Novak & Cañas 2008), as well as their flexibility and spontaneity (Eppler 2006; Hilbert & Renkl 2008, in Chiang 2012; Tergan, Keller & Burkhard 2006). Although node-link mappings, like digital drawing, are conceptually richer than freehand drawing, essentially they are tools for capturing what is known and named, but not for what is unknown and unnamed, which counters their use for exploring creative cognition.

To summarise, node-link mapping and digital drawing are popular tools for design work and strategic thinking, but there are questions regarding their suitability for exploring representing and understanding creative thinking in action, as it emerges. Marks (2009) states that the 'dreaming' line has been rudely awakened by the move to computer graphics, replacing the time-based act of freehand drawing with a mosaic–like array of pixels. Downton (2003) suggests something similar, when comparing analogue and digital, because the domain of the analogue is *continua*, but the domain of the digital is *discrete.* Consequently, the line loses its "continual variation" (p. 66).

Since the act of creating may be "one of discovery, of finding something that was there, but required liberation into being" (McGilchrist 2009, cited in Bortoft 2012, p. 25), practices such as drawing that 'make visible', rather than represent, and that have the possibility to wander and dream, appear to be ideally suited for expressing thinking.

Part Four: Issues and Future Directions

Throughout this literature review, a number of key issues have been raised concerning fundamental questions about creativity research to date. Part Four revisits these issues, before identifying the key motifs that informed the research questions, methodology and research design of this study.

Key Issues of the Review

Seven reoccurring issues have been noted in creativity research:

1. The problem of creativity research - what does it solve?
2. The quest for certainty
3. The question of definition
4. New approaches to old theories
5. Can creativity be modelled?
6. The need for richer data
7. New directions

These issues will be examined in turn.

1. The problem of creativity research - what does it solve?

Perhaps the key recurring issue throughout creativity literature is that of the research itself: that its explanations have only created greater paradox and indeterminacy (Jarvie 2009). To be more specific, creativity cannot be "unpacked in any precise way" (Jarvie 2009, p. 55), so it does not give rise to clear problems (Jarvie 1981, 2009). Much of the research has had "poorly articulated aims" (Jarvie 2009, p. 51) that may not be soluble or explicable by traditional methods of research (Rothenberg & Hausman 1976). This issue is reflected in the other six issues.

2. The quest for certainty

The Dewey 'quest for certainty' produces theories and models that do not adequately encompass the unpredictable, discontinuous and ambiguous process of creative thinking. The processes of mental and *felt* states, such as uncertainty and not-knowing, which may precede sudden inspirations or sustain openness to new ideation, have not been given sufficient attention in the research, beyond calling them time-out for incubation. Some approaches, such as *problem finding*, may allow for these indeterminate states, but *problem finding* itself has remained elusive to theorizing.

3. The question of definition

The common definition of creativity as new, original and of value may not be adequate to address the process of creative thinking. This standard definition with a string of three synonyms does not reflect creativity's complexity, though it does reflect its paradoxical nature. There are calls for greater clarity (Sternberg & Lubart 1999), differentiation (Rothenberg & Hausman 1976; Hodgkinson et al. 2009; Sternberg & Lubart 1999) and nuanced refinement (Levy 2007b) in creativity's conceptualisation; a depth as well as a breadth that recognises the complex, ambiguous and multi-dimensional nature of the phenomenon. Levy (2007b) suggests there is a need for new understandings of creative processes; Rothenberg & Hausman (1976) consider there is a need to make them intelligible rather than explicable; replace reductive theories that seek to explain creativity with ones that encompass its indeterminate elements. This could begin with a more careful, descriptive characterization to guide and shape the research design.

4. New approaches to old theories

Considering the number of theories and models, the research has not been as fruitful as it could (Kozbelt 2011). The plurality speaks of breadth that addresses creativity's multidimensional nature, but a deeper examination of the existing theories is required. It is

important that prevalent theories, such as *problem solving* or the Wallas Stage model, have ongoing testing with different contexts and methods, to both deepen and constrain them. Rather than generating more theories, new approaches and methods could be developed to interrogate the existing ones. Gaut (n.d., in Jenkins 2010) maintains that creative acts require an ability to "revise and redirect routine paths in new ways" (cited in Jenkins 2010, p. 186). Perhaps the existing theories could be reexamined in this light. Such approaches should utilise the creative to do so, not just study it (Carter 2004; Rothenberg & Hausman 1976) but they require the rigour of empirical approaches without losing the innate unpredictability (Rothenberg & Hausman 1996) that challenges empirical methods.

5. Can creativity be modelled?

If creativity has such indeterminate, discontinuous qualities, then linear, formalised sets of procedures cannot represent it (Abel 2009; Rothenberg & Hausman 1976; Lubart 2001). However, if models are seen as only as "vehicles … to engagement" (Zajonc 2006, in Seitz 2009, p. 76), then perhaps it is possible to construct working models that allow for creativity's ambiguous, unpredictable nature. It may be that the search for unifying models is more important than finding one, just as identifying new problems and raising new questions may be more creative than solving existing ones (Meusburger 2009, p. 104).

6. The need for richer data

Richer data may help elaborate and constrain existing theories (Kozbelt 2011), so non-verbal tools and techniques could play a greater role in generating this data. As Koestler (2009) states, "creativity often starts where language ends … by regressing to more fluid and uncommitted forms of mental activity" (cited in (p. 263)**.** Freehand drawing is an embodied image of the cognitive process (Arnheim 1970; Dartnall 2002) , which suggests it is a suitable tool for exploring creative thinking. Further, using tools that are used and approved by creative professionals supports the authenticity of data they generate.

7. New directions

The somewhat disregarded, mysterious elements of the creative leap, such as intuition and insight, are slowly being readdressed in current research (Hodgkinson, et al. 2009) and there is increasing focus on the information processing that occurs in the incubation, pre-conscious or 'low focus' modes of cognition (Hodgkinson, et al. 2009; Meusburger 2009). There is also a greater interest in holistic or embodied conceptions of thinking that do not separate rational and creative thinking, or isolate them from the body and the environment in which they take

place. Nevertheless, there remains the question as to whether experiential approaches, such as the Gelernter's levels of focus or *flow* theory, are more fruitful than cognitive models and empirical methods.

To sum up, since creativity is complex and paradoxical to research, experiential approaches to its study can provide a perspective on creativity that cognitive theories cannot, since they do not need to resolve the complexities, only describe them. Experiential approaches can provide these rich pictures, and encompass ambiguous and indeterminate elements but are difficult to model. However, it depends on how creativity is conceptualised, since the conceptualisation guides the understanding of creativity that informs the research. In an experiential approach, a working characterisation of creativity that is receptive of ambiguities could be sufficient guide; the question of definition can be addressed later, in light of the findings of the study. Likewise, non-verbal, creative methods for eliciting data are suited to the unpredictable and non-linear, so would complement using an experiential approach to the study of creative thinking. They may not produce models of the creative process, but perhaps this aim is misguided, and research should seek only to make our understanding of creativity deeper or more intelligible. Using a creative approach to investigate creative thinking, with creative methods, may be ideally suited to this aim. These issues will provide a framework for the research design.

Key Motifs of the Study

The creative process has been variously described. A number of frequently cited characteristics, called key motifs here, have been elicited from the discussion. These motifs helped clarify the research purpose.

Creativity's slippery, ambiguous nature can be seen in the qualities used to describe it: flexible, fluid, mobile yet also unpredictable and complex. It flows yet is constrained, is energetic yet uncertain; has constraints and discontinuities, gaps and bursts of chaotic spontaneity. It has been characterised as both a soft, indeterminate process and an open, transformative one. It is both productive and generative in nature. It is not surprising then, that creativity has been described as paradoxical when it is characterised as both a flowing and resisting process, operating at both conscious and unconscious levels.

However, it is not just a question of direction. Cognitive approaches to cognition often see thinking as being a series of steps, a line of thought, characterised as a rectilinear movement. Such approaches usually conceptualise thinking as dualist and modal, whereas non-dualistic,

embodied approaches see thinking as indivisible from the body or environment. Non-dualistic, holistic theories of cognition picture thinking more as a 'stream of thought', a continuous, multistring spectrum of interaction between different levels of focus, energy or awareness. Here, the quality of the movement and its multistring 'thickness' are important. How thinking is conceptualised from an ontological perspective needs consideration when addressing research methods.

However, non-dualistic approaches to creative cognition have their own critics. Krausz (2009) has asserted that creativity is hindered during non-dualistic experiences and suggests that the generation of something new, no matter how minor, requires some level of duality between creator and creative work. Therefore such 'oneness' experiences that typify Csikszentmihalyi's *flow* are open to debate, about whether they really are central to the creative process. As Schwenk's (1996) metaphor for thinking creatively suggests, both flow and resistance qualities are present in creative thinking. Both have a role to play in creative activity, but not necessarily the same role.

How can we understand this seeming contradiction between flow and interruption of flow in creativity? And can new ideas emerge out of these processes? These two questions form the basis of the research questions.

The Research Framework

The key issues extracted from the literature on creativity and creative thinking form a flowing thread throughout this literature review and the study as a whole. The area of *personal creativity*, where the process of creative thinking and creative practice can be studied in detail, was chosen as the study's scope. Schwenk's metaphor originally inspired the study and was then used to frame the research design. The metaphor suggested the methodological approach to take in this investigation, that of an experiential one. Phenomenology is one methodology that is experiential and embraces an open, descriptive approach, but there are also arts-based methodologies that could have equally suited to this study's purpose, especially since the study used tools and techniques from creative arts during the fieldwork; freehand experiential drawing was chosen as a tool that can make the thinking process visible.

The Research Questions

The key motifs discussed above provided the research purpose for this study: to develop an understanding of the emergent and complex nature of creativity in cognitive processing.

Within this broader purpose, the study's aim was to understand and elucidate the paradox of being characterised by seeming polarities. Schwenk's metaphor for thinking creativity and the key motifs (outlined above) contain similar ideas concerning the process of thinking creatively: both reflect the broader purpose and specific aim of this study, therefore framed the original research enquiry. These ideas can be broken down into these four questions:

1. What roles do flow and resistance play in the creative process?
2. How can we differentiate these roles more precisely?
3. What is the relationship between flow and interruption of flow*?*
4. Does their relationship play a part in the generation of new ideas?

These questions were the launching pad for the research design, but the research questions required congruency with the methodology considered the best fit for the investigation. An experiential approach has been chosen, which implies the creative process will be explored as an open-ended experience, meaning the process of thinking is addressed in the context of the complexity of creativity as a whole. Therefore, the above four questions were recontextualised for the purposes of investigating the creative process as an experience. The questions then became:

1. What is the experience of being creative?
2. How does creativity emerge?

These two experientially-framed questions embody the four questions stated above, but on a more holistic level. They also incorporate the two queries posed at the end of the Key Motifs section and respond to the two different conceptions of creativity held by Csikszentmihalyi (1996, 2015) and Krausz (2009). The four questions concerning flow and resistance informed, as stated above, the research design; the two questions concerning experience informed the analytical procedure. Both sets of questions, asking the same questions but viewed through different frameworks, guided the choice of research methodology. The methodology will be discussed in the next chapter.

Chapter Three: The Methodology

> The world is not what I think, but what I live through.
>
> (Merleau-Ponty 2002, xviii)

Overview of the Chapter

Creativity has been identified as having an "irreducible paradox" (Rothenberg & Hausman 1976, p. 23) at its heart. In the cognitive process, this paradox is characterised by flexibility and mobility, but also by constraints and discontinuity. It is not unrealistic, then, with a nature so dynamic and variable, to describe creativity as 'phenomenal'. We recognise its appearance when already in the world, in its finished form, but how it appears continues to elude systematic inquiry (Nelson 2011). Whether creativity can be considered a 'phenomenon' is another question. Again, it is a question of whether we are concerned with it as a product, recognised for its original qualities, or as an attribute of a gifted person; but if we are concerned with it as a process, and how this process is experienced, particularly how it comes into being and unfolds, then creativity should be regarded as a phenomenon.

This chapter explores phenomenology, the methodology chosen for this study, in three different contexts. Firstly, phenomenology as a whole is examined for its fit for purpose in light of the study's intentions. A discussion of its different parts follows, concerning the different streams within phenomenology and how each interprets the key assumptions and puts them into practice. A justification for the overall approach taken by this researcher, in light of the methodology' strengths and limitations, is discussed. The chapter concludes with a summary of the phenomenological approach in relation to the research framework of this study.

Part One: Choosing a methodology in the context of complexity, paradox and creative ideation.

Part Two: The phenomenological world in theory and practice: its core assumptions and how these shape the analytical procedure.

Part Three: Evaluating phenomenology in the context of the study's research framework; trustworthiness, authenticity, credibility and rigour unpacked.

Part One: Choosing a Methodology

> Man [*sic*] is in the world, and only in the world does he know himself.
>
> (Merleau-Ponty 2002, p. xxii)

Part One deconstructs the research purpose, as presented at the end of the previous chapter, using it as a guide for interrogating the range of methodologies suited to implementing the study's aims.

Unpacking the Research Purpose and Aims

Essentially, there were three concepts driving the research purpose: complexity, paradox and the generation of new ideas. In order to ascertain which experiential methodology would be best suited for the research design, the research purpose and aims were unpacked in a methodological context.

Key creativity considerations

The capture of complexity demands an approach that could allow for, and have the means to uncover, the many interwoven parts of a creative process. Likewise, nuanced understanding - subtle shades and fine distinctions – was also a complexity issue, one that required tools and techniques that could elicit the depth and detail required to understand the complexity. Rich descriptions from different viewpoints can provide such depth.

The investigation of paradox implies addressing inconsistency and conflict, as well as anomalies and enigma. Reductive methods cannot directly address these qualities. Therefore, a research approach that relies on theoretical models, which simplifies the real-world actuality, was not appropriate. As Dewey (1910) said, the very aim of theoretical models is to reduce the uncertainty and the unknown, which limits their use for researching paradox, enigma and inconsistency. As already stated, reductive approaches have not proved sufficiently responsive to creativity's paradoxical element, so methods that can reveal complexity were required.

Perhaps the most awkward aspect to the research question concerned the generation of new ideas: the origins of originality, of emergence and the manifestation of the creative impulse, in its originating. This took the research further into what was unknown and almost unknowable - towards the source of things, where creatively appears, so an approach that gives space to the unknown and emergent was required.

Methodological considerations

The research methodology would also need to encompass the general and particular, both creativity and flow and resistance within the creative process. The emphasis had to be on the phenomenon, and how it unfolded, but also on the human as self who was central to the unfolding, and the situation or world in which the unfolding occurred, particularly the way self and world intermesh. So, the methods needed to be able to generate rich, descriptive characterisations of the processes, of their interplay and of the world in which they were being realised.

It was clear that to explore qualities and subtle characterisations, the methodology should be qualitative and descriptive, but also interpretive, since it is generally agreed in phenomenology that to describe is to interpret (Finlay 2009; van Manen 2014). It must flexible enough to allow for responsive, creative methods and emergent process, yet have the empirical rigour to approach the phenomenon as closely and directly as possible, without recourse to external frameworks of interpretation.

Finally, since creativity's phenomenal nature cannot be "unpacked in any precise way" (Jarvie 2009, p. 55), a methodology that could encompass its phenomenal nature was required to study the process of creativity as an experience. Therefore, since the research questions concerned experience, and as experiencing is a subjective state of consciousness, a methodology that could address this need was required.

The philosophical underpinnings

As stated in Chapter One: The Introduction, this study located itself in a philosophical approach to creativity, where creativity is identified as a quality of the faculty of thinking. Further, creativity is not possible without thinking; and practice is not separate from theory, or from the environment in which they perform (Rose 2006). This ontological position is holistic, seeing all modes of thinking as a continuous process of interaction in an integrated whole (Bortoft 1996; Villalba 2011) and therefore rejects Cartesian dualism. It follows, then,

that this study of flow and resistance in cognitive processing loosely embraced the *embodiment* concept (see Chapter Two: Literature Review).

Since the research's ontological position regarding cognition was a core premise of the study, it followed that the methodology, its exploratory framework, should resonate on this most foundational level. As a research methodology provides the guiding principles for the framework, the philosophical traditions that guide these principles must be understood for their philosophical, methodological and practical implications. Without this awareness, the manner in which the chosen methods and tools are implemented may have no sound direction. The whole research design needed to be responsive and consistent to the research topic: good research is well-knit, integrated at all levels. Ideally, the researcher understands their chosen methodology from within, as a way of seeing the world, even if that way is not entirely congruent with their own worldview.

The methodological options for meeting these three considerations will now considered.

Argument for the Approach

Art-based methodologies

Creativity is a practised phenomenon, best observed and understood in action, usually in artistic practices, since they allow for a high degree of uncertainty, discontinuity, and the unpredictable (Rothenberg & Hausman 1976). Art-based research favours naturalistic, practice-led and pluralist approaches that have a real-world robustness based on authentic, first-hand accounts of 'being there'. They are emergent, reflective and reflexive, often using Schön's *reflection-in-action* as a flexible framework (Ascott, Candy & Edmonds 2011; Gray & Malins 2004) to unite research and practice, thought and action, but can also be tailored to the researcher's professional expertise. Art-based inquiries favour embodied understandings, of materialising unarticulated knowledge with the making of artworks (Carter 2004). They lean towards idiographic interpretations of the particular, special and unique, without concerning themselves with the general or universal.

Social Science approaches

By contrast, Social Science, as the study of the human aspects of the world, takes a broader approach. Methodologies such as ethnography share art-based beliefs in the value of naturalistic context, complex interaction and subjectivity but are concerned with the world of

human experience rather than the shaping of the material world by humans. Autoethnography, in particular, is suited to investigating a researcher's professional practice as the source of rich research material. Self-reports on the subjective aspects of the creative experience can be a productive method for studying individual creative process (Kozbelt 2011), as long as the limitations of bias and subjectivity are recognised. However, though the autoethnographer, like the phenomenologist, seeks to recapture lived experiences through rich descriptions of personal insights and epiphanies (Ellis, Adams & Bochner 2011), her aim is to illustrate aspects of her work as a cultural experience, not as a universal experience that should theoretically be available to any human. Moreover, ethnography is concerned with predictable patterns of thought and behaviour, thus implying *a priori* models, so not suited to exploring emergent contexts.

The Bricolage approach

Many practice-led researchers take a *praxis* approach, one that is derived from and almost entirely responds to the practice and context. Called 'bricolage' (Gray & Malins 2004), this approach draws on and adapts multiple methodologies to form an emergent construction of closely woven practices that appropriates available methods, tools and materials or contrives new ones, as necessary. Bricolage is a very creative approach, one that is as much about the researcher's understandings and interpretations of the world as the phenomenon under investigation.

Bricolage works both in and between multiple methodologies, but often without any real understanding of their ontological and epistemological foundations. Sometimes a bricolage is chosen with the belief that a multifaceted design is required to capture depth and complexity, but this may lead towards a 'pick and mix' approach that, while tailored to the research material, does not have the sound direction of a philosophical or theoretical framework.

In the early stages of this research, a bricolage approach, incorporating phenomenology, autoethnography and reflective practice, was considered. However, as Merleau-Ponty (2002, p. viii) states, phenomenology is accessible only through developing a phenomenological way of thinking about the world. Consequently, phenomenology is launched differently from other methodologies (Moustakas 1994). Therefore all methods, tools and techniques must be phenomenologically shaped and implemented. For this reason, the bricolage idea was abandoned.

Phenomenology

Phenomenology is known as the study of the 'lived experience' (van Manen 2014). It concerns how a phenomenon is experienced, as it is experienced (Nelson 2011) and aims to describe those experiences, rather than theorise them or explain them. Moreover, in studying the experience, phenomenology opens the way to understanding our consciousness of that experience (van Manen 2014). By describing it, a phenomenological approach to research can provide rich, detailed understandings of this experience. Phenomenology and creativity share some similar characterisations: phenomenologists "embrace ambiguity, paradox, descriptive nuance, and a more relational unfolding of meanings" (Finlay 2009, p. 15). And a phenomenological approach could respond the research's purpose at both the general and particular levels by studying both the process and the experience of creativity (Nelson 2011).

The aim of this research was not creativity's relationship to materiality, or of humans as art-makers, but to use art as a creative method to shed light on the unfolding process of thinking. It was not seeking primarily to understand creativity as a cultural or ideographic experience, though these might play into it. Its aim was to study two apparently conflicting states, so required a methodology that offered analysis of mental states. It required a non-reductive approach that allowed for recognition of the subtle and contradictory. Therefore, phenomenology was considered the best fit for purpose for making creativity more intelligible, it being a like-for-like entity that could describe how creativity is experienced, as the experience appeared.

Introducing phenomenology

"The world is not what I think, but what I live through," states Merleau-Ponty (2002, p. xviii), pointing to the fundamental understanding that makes phenomenology so distinctive from other research methodologies. As the study of the appearance of things, phenomenology grants the primacy of experience over knowledge, sense perception over abstract conception. Regardless of its many different conceptions, it is commonly agreed that phenomenology seeks always to "return to that world which precedes knowledge" (Merleau-Ponty 2002, p. 128) - to that amorphous state of coming-into-being that exists, fleetingly, before we determine and delineate an experience as a 'thing' that is known and classifiable.

Like creativity, phenomenology is described as an ambiguous and indeterminate discipline with diverse interpretations (Finlay 2009). It has been called a "discovery-oriented" (Giorigi 2008, p. 42) science, through its exploration of the unknown, without preconceived notion or theory of what it hopes to prove; yet 'discovery' allows for an open trajectory of inquiry in the

manner of artistic or creative endeavours. It has been described as a meditative philosophy (Wertz 2005, in Finlay 2009), for the distinctive *reduction* practice that engenders this discovery; yet it is grounded in the embodied experience of human *intentionality*. And it has been characterised as a poeticising activity, due to its strong narrative tradition, which makes the phenomenon visible through descriptive text (van Manen 2014); yet its purpose is to make grounded contact with the phenomenon, not to fantasise it. According to Merleau-Ponty (2002), phenomenology demands that we see the world anew and grasp it "as strange and paradoxical" (p. xv). By meeting contradictions head-on, phenomenology opens the door to the paradoxical, to the indeterminacy and ambiguity of the not-known and emergent qualities that typify creativity.

Phenomenology has been called a "science of beginnings" (Stewart & Mukunas, 1990, p.5, cited in Seamon 2000, sec. 3.2.1) because the phenomenologist seeks to understand the way the world is lived, in its immediacy as it appears, in its wholeness, before any kind of analysis. Though van Manen (1990, 2014) calls phenomenology the pre-reflective study of the 'lived' experience, Bortoft (2012) asserts that it demands a shift of attention away from within that experience, into the experiencing of that experience. Then it becomes like a stepping back into the past and making it the present: a timeless 'now' that is always present, that was/is before words were found to describe it. In this way, the first 'appearing' of the phenomenon can be approached. This study hopes to capture the unknown and unknowable, as they appear, so Bortoft's (2012) distinction between the experience and the experiencing confirmed the choice of phenomenology as the preferred methodology. However, as a methodology for research, phenomenology still requires a meticulous approach to its methods of description, categorisation, interpretation and analysis of that experiencing. The next part lays the foundation for how this could be achieved.

Part Two: The Phenomenological World

> Phenomenology is a low-hovering, in-dwelling, meditative philosophy that glories in the concreteness of person-world relations and accords lived experience, with all its indeterminancy and ambiguity, primacy over the known. (Wertz 2005, p. 175, in Finlay 2009, p. 6)

In Part Two, the foundation of the phenomenological world, its the core assumptions and the attitude that shapes that world, are described and interpreted according to different

philosophical streams within phenomenology. The discussion then outlines how these assumptions can be implemented.

Apprehending Phenomenology

Classical phenomenology

Before it was ever a philosophic discipline, phenomenology was a movement, "a manner or style of thinking, that it existed … before arriving at complete awareness of itself" (Merleau-Ponty 2002, p. viii). Contemplative and critical reflection on states of consciousness and the lived experience has long existed. Many philosophers (for example, Hegel, Kant, James, Dewey) and many Eastern scholars take a phenomenological approach when addressing states of mental activity in their study and practice. However it was Husserl who formalised the movement as a radical response to what he regarded as a 'crisis' of a positivist science entrenched in Cartesian dualism (Spiegelberg 1994). Husserl's ideal was a rigorous science that would "restore contact" (Spiegelberg 1994, p. 75) with the deeper philosophic concerns of the human being, by returning to the roots of knowledge, to its foundations: "back to the things themselves" (Husserl 1901, cited in van Manen 2014, p. 42)

The basis of Husserl's formalisation of the study of mental activity in the stream of consciousness has its origins in an epistemological understanding of phenomenology, where phenomena are the starting points in building knowledge, especially in the sciences. This distinction is still current in a more general definition of phenomenology, as whatever we observe/perceive and seek to explain (Smith 2013). With Husserl, but even more so with Heidegger, phenomenology as a study of consciousness draws closer to ontology, the study of *'being',* where it directly addresses the mind/body dichotomy. Our experience of the world is informed by our ontology, our relationship to the world and what the world is/means to us. So when choosing phenomenology as a research methodology, it was important to understand the basic ontological distinctions between the different streams of thought.

Knowing and Being

For Husserl (Spiegelberg 1994; van Manen 2014), phenomenology is the study of *essences*. Husserl's *transcendental phenomenology* separates pure or transcendental consciousness from the world of things and persons, putting aside or *bracketing* the natural world in order to study the universal structure or *essence* of a phenomenon. This move has often been interpreted by his detractors as reflecting the Dualist stance, even though Husserl's

phenomenology was purportedly a reaction to the Dualist stance. But in a sense, Husserl *brackets* ontology itself, by not directly addressing the mind/body question. In Husserl's conception, the self is a knowing self that needs to 'step outside' the world to determine the essential nature of the phenomenon. In his later work, he appears to rescind from this position and recognise that a single experience cannot be plucked from the fluctuating stream of consciousness, that the single phenomenon on its own is an abstraction.

Heidegger (Spiegelberg 1994; van Manen 2014) is closely associated with *existential phenomenology***,** which places the self and phenomenon firmly in the world, in concrete human existence. Here, consciousness cannot be separated from the world, but is a going out from the self into the world, a *being-there,* or *Da-sein,* where self and world always exist together. For this reason, Heidegger places less emphasis on consciousness in favour of human being and meaning, and the meaning of *being-there*. Therefore, he does not *bracket* the world, but rather interprets phenomena in the context of the world, and the meanings it holds for us. He moves away from phenomenology as a science of consciousness to an ontological method for interpreting the everyday modes of *being*.

Instead of asking how things are structured, Heidegger asks how things show themselves, how they manifest as a disclosure of *being* itself. Different modes of *being* – time, body, space, relation, materiality – are seen as universal givens, through which we experience the world and our self in the world and make meaning through this experience (Smith 2013). Put simplistically, it is a human *being*-centred approach, where consciousness is an activity of *being*. Therefore, Heidegger's phenomenology is associated with *hermeneutics***,** but it would perhaps be more accurate to call it *hermeneutically* oriented, since *hermeneutic* phenomenology holds a less direct understanding of *being-there*, one where meaning is always mediated through language. In *hermeneutic phenomenology*, the phenomenon is revealed through language, through the device of text. As in *existential phenomenology*, meaning, not knowing, is the focus.

Merleau-Ponty (1964; 1968; 2002) developed an expansive, embodied form of phenomenology that opens the phenomenal field of the human world to embrace the world of nature, but also addresses the multiple experiences of the body. He occupies a position that straddles both the *transcendental* and *existential* streams, in that he reinstates Husserl's *essences* and the position of consciousness as core concerns of phenomenology, but places consciousness in the world as embodied, making it corporeal before intellectual (van Manen 2014). In doing so, Merleau-Ponty (2002) unequivocally rejects Cartesian Dualism: "There is no inner man, man is

in the world, and only in the world does he know himself", (p. xii). Cartesian Dualism is cut off from any recognition of things being described as a fluid state of 'becoming', because it is fixed upon a world abstractly conceived, one composed of discrete things already determined. This relies on a kind of understanding of the world that has distanced itself from the world, as we engage with it (Robbins 2005, p. 121).

Merleau-Ponty, in contrast to Heidegger, gives primacy to perception. Perception is the first and primal relation to the world that a human can have, but it is a perception that takes place at a primal, bodily and preconscious level. Here, knowledge of the world is felt or experienced as corporeal, not intellectual (van Man 2014). In keeping with the Continental Philosophy stance, Merleau-Ponty, like Arnheim (1970), sees perception as a performative act. It is not a passive function of the body, but a "creative grasping" (Arnheim 1986, p. x, in Robbins 2005, p120) at structure, or "a gaze at grips" (Merleau-Ponty 2002, p. 409) with the world. The 'see-ing' and the seen are interrelated; see-ing is a coming-into-being event that is not separate from the object that is seen. For Merleau-Ponty, there is no lived distinction between the see-ing and the seen. Unlike Heidegger, who denies the possibility of a naive 'direct grasp' of phenomena (since we necessarily interpret everything in terms of experience), Merleau-Ponty (2002) believes of phenomenology that all its efforts should be "concentrated upon re-achieving a direct and primitive contact with the world"' (p. vii), even though he admits this is not possible.

A little-known form of phenomenology is *Goethean phenomenology* (Bortoft 1996; Holdrege & Talbott 2010; Robbins 2006; Zajonc 1999), which returns to an epistemological understanding of the phenomenon, towards science rather than psychology. Goethe's approach is sometimes considered to be a proto-phenomenology (Spiegelberg 1994), since it predates the formalisation of the discipline. It moves away from a quantitative to a qualitative scientific study of things in nature, emphasising direct, experiential contact. It uses a particular approach to observation of the natural world Goethe calls *delicate empiricism* (Holdrege & Talbott 2010; Robbins 2006). For Goethe, observation is a type of 'beholding', a term he uses in the sense of 'contemplating receptively'. His *delicate empiricism* uses beholding to go beyond ordinary observation to a perceptual encounter that reveals the patterns or essence of the phenomenon (Zajonc 1999), like a "seeing of the mind" (Holdrege & Talbott 2010, p.227). It is an unfolding observational process, one that aims at intelligibility, not explanation. Goethe foreshadowed Merleau-Ponty by emphasising perception as primary to his approach, as a way of disclosing the world through developing new eyes for it (Seamon 1993). Through beholding

the world, we can become "utterly identical with the object" (Goethe, cited in Zajonc 1999, pp. 421). Geneticist Barbara McClintock describes experiencing a similar sort of "intimacy" (Levy 2007b, p. 244) after long hours spent studying corn chromosomes through a microscope, an experience she described as leading to the development of a kind of intuitive thinking. This interpenetration of self and world leads to a restructuring of consciousness, to transformation through phenomenological seeing/experiencing. Merleau-Ponty (2002; 1968*)* similarly hinted at consciousness being restructured, through his concept of *radical reflection,* a notion that approaches that of the Eastern contemplative tradition, where consciousness itself is not only directed towards the phenomenon, but is shaped, even transformed by it. In this way, the mind/body distinction is dissolved.

Goethean phenomenology has importance for this study because water scientist Schwenk (1996), whose metaphor for thinking as water flow launched it, used a Goethean approach to study the dynamics of water flow. Likewise, Bortoft (2012) special insights into the becoming nature of the lived experience had important implications for fieldwork and analysis in this research (discussed later in Part Three). Although *Goethean* phenomenology orientates to the study of nature, not humans, Robbins (2006) considers Goethean science to "close the gap" (p. 124) between these two fields, as its approach to observation is also a path to self-discovery. Its particular significance for this study, however, is that it provides an enlightening understanding of the direct experience, and how to 'capture' it more directly, which classical, human-centred phenomenology does not provide.

These subtle, different understandings of *being*, self and the world are elucidated in the next section, which considers the phenomenological assumptions central to the approach. It is beyond the scope of this dissertation to delve into the mind/body question, as it is a practice-based study in the Social Sciences, but it is nonetheless evident that these fine distinctions of ontology are central to choosing between the phenomenological streams for research purposes, even if that is not made explicit.

Phenomenological Assumptions

Phenomenology as a philosophy and as a practice can appear quite different conceptions, even though one should inform the other. The different ontological and epistemological worldviews have been outlined, but for a more "authentic grasp" (van Manen 2014, p. 22) of it, a careful examination of its core assumptions is required if the practice is to be more than simply a set of analytical procedures. These assumptions are themselves fluid and ambiguous, even in the

context of one philosophical stream, which is why the "manner or style of thinking" (Merleau-Ponty 2002, p, viii), the attitude we bring to them, is, above all, the prime directive for understanding the phenomenological world. Further, terms such as *intention* and *reflection* have meanings specific to classical phenomenology that they do not hold in our everyday language. The essence of phenomenology as a practice cannot be grasped without understanding what shapes this phenomenological attitude. The following section explores the key assumptions foundational to this methodology.

The *lifeworld*

The *lifeworld* is the centre stage of human experience, the context for the natural attitude we have to everyday life, without any reflection or conscious attention. Here 'everyday' does not mean the ordinary and routine of daily life, but the average 'everydayness' of the taken-for-granted, *selbstverständliches*[9] attitude we hold towards the world, one that is typically, out of sight, a place where experiences just happen. "People are immersed in a world that normally unfolds automatically" (Seamon 2000, sec. 3.1.1). The challenge, says van Manen (2014), is to break with this natural attitude and replace it with a phenomenological one; or, as Merleau-Ponty says, to grasp the everyday "as strange and paradoxical" (Merleau-Ponty 2002, p. xv). Developing this special attitude is essential to the phenomenological way of seeing the world.

The appearance of things

Foundational to phenomenology is the experience, as it is. That is, as it manifests, appears, or is seen in the *lifeworld*. No one states this more clearly than Merleau-Ponty when he says: "the world is not what I think, but what I live through" (2002, xviii), pointing to the first methodological step in a phenomenological process, one that does not begin with theory but goes 'back to the things themselves', with the experience, pre-knowing, as the guide. For this reason, phenomenology is called a study of beginnings (Seamon 2000).

However, Heidegger (Spiegelberg 1994) points to the fundamental unity of people and the world in his conception of the term *dasein*[10], or *being-there*. So, when we experience the world, the experience does not suddenly begin out of a vacuum; nor does thought precede it. Rather, we find ourselves in the ebb and flow of experience, as it is happening. We are always in the 'now' when we are experience/ing. *Being* is also 'becoming', two states that cannot be

[9] German for "self-evident", "goes without saying"
[10] *Dasein* (*da* "there" and *sein* "being". Its opposite is *sosein* "essence". In Heidegger's phenomenology, dasein means *being-there or being-in-the-world* (Spiegelberg 1994).

separated, which has implications for the focus of a phenomenological inquiry. The 'lived' experience is something gone past that cannot be grasped in it fullness. Yet if all efforts in phenomenology are aimed at re-achieving the direct experience, then, Bortoft (2012) suggests we must go *upstream* from the experience, back to the experience/ing; from its appearance to its appear/ing. Then we discover that the world is intrinsically whole. Experience only appears to be separate from the experience/ing when we are *downstream,* isolating the experience, without remembering its 'belongingness' to the phenomenon (Bortoft 1996).

Phenomenology therefore shifts the attention from within the experience, from what is experienced, back into the experience/ing of what is experienced (Bortoft 2012). The phenomenon is not only something that appears, but it appears *as* appearing. "*Being* means appearing" (Heidegger, cited in Bortoft 2012, p. 166), meaning not *what* appears, but *upstream* at the appearing of *what* appears, with the 'happening' of appearing (Bortoft 2012). In this way, the phenomenon is seen as a dynamic, unfolding event, not something that is already past and predetermined.

About *being*

The central and complex role the term *being* has in phenomenology points to its existential interpretation, in that the human *being* is fundamentally ontological and "his [sic] essence lies in existence" (Heidegger, n.d. p. 42, cited in Spiegelberg 1994, p. 364), in his factual existence. Thus, Heidegger's *being* must always be considered in the context of *being-there*, where the human being is inherently 'out there' in the world and knows the world in an unreflected way. *Being-in-the-world* is a state of *being-there* that is not ontologically separate from it.

In his last unfinished work, Merleau-Ponty extends the human-centred *being* towards a *being* that intertwines with the natural world when he begins calling un-reflected experience the brute or "wild *being"* (cited in Trigg 2012, p. 145) that can never be fully articulated, can never be fully expressed, never be captured in its essence, yet must always be aimed towards. For Merleau-Ponty, *being* becomes a thing, which "has yet to attain the status of an object" (Trigg 2012, p. 146) and yet, cannot do so. This increasing awareness of unresolvable contradiction inherent in a phenomenological approach suggests a much more radical response than the strict and scientific transcendental approach of Husserl and his interpreters, and far from the familiar everyday *lifeworlds* of the hermeneutic phenomenologists. It hints at silence, at ineffability, something right at the edge of what can be humanly expressed, or even grasped:

For Merleau-Ponty (1968), language becomes not only the voice of humans, but also "the very voice of things, the waves, and the forests" (p.155)

About *essences*

Husserl and Merleau-Ponty speak of uncovering the *essence* of the experience; Heidegger of grasping what is invariant in it. Each philosopher points to that condition or quality of a thing, without which that thing would not be what it is, the essential core of a thing that makes it what it is, and what it becomes. "A thing's being is its essence," states van Manen (2014, p. 123). But whereas Husserl's term *essence* refers to the essential structure of phenomenon, how it unfolds in its appearance and the relations that characterise it (Vagle 2014), Heidegger is concerned with its essential meaning. For Heidegger, since consciousness is temporal, contextual and perspectival, there is potentially not just one essential meaning that can be accessed, but possibly a variety of interpretations, all of them valid.

Where does Merleau-Ponty stand on this? He suggests that Husserl, in his later work, shifted from his earlier, idealistic stance on the immanence of the *essence* to a recognition that, once a single experience is plucked from the continually fluctuating stream of consciousness, it becomes fixed and atemporal. Yet the very notion that consciousness is fluctuating means that it cannot be fixed, but must be provisional, open and dynamic (Rechter 2007). In searching for *essences*, we are not looking for an idea reduced to a concept or theme, but what is there before any thematisation, "before any falling back on ourselves has occurred" (Merleau-Ponty 2002, p. xvii). Finding the e*ssence* is not an end to knowing, arriving in a pre-existing, universal certainty, but a means to it, a 'laying down' of knowing, to paraphrase Merleau-Ponty (2002, xxii).

Essence is not to be confused with the notion that there is to all things a generality or a common characteristic or *eidos*, somewhat in the Platonic tradition of "Ideas". Goethe directs us to a more flexible understanding of the term, where seeing the *essence* of a thing is to see it comprehensively, rather than generally; to see the multiplicity of ways an *essence* may manifest in a concrete way (Bortoft 1996). Looking for generality or commonality is an abstract way of searching for the *essence*, a reductive move that removes all the differences, rather than them as belonging to the whole of the phenomenon. Seeing comprehensively is seeing the "multiplicity in the unity" (Bortoft 1996, p. 85). Seeing comprehensively is seeing the *belongingness* of the parts to the whole.

Phenomenology does not study the individual but how a particular phenomenon manifests and appears in the unfolding experience and *lifeworld* of the individual. Therefore, it does not point to what one individual's experience is; rather, how it is possible for anyone to experience the world, that is, what is ""intersubjectively accessible" (Gallagher & Zahavi 2013, p. 46). Many *hermeneutic* phenomenologists speak of *themes* rather than *invariants*, or of *invariant themes* (as does van Manen 2014), but agree that all experiences hold essential meanings that are revealed by *intentionality*.

About *reflection*

Phenomenological researchers move between experience and *reflection* throughout their analysis (Halling 2008, in Finlay 2009). However, this is not *reflection* in the ordinary sense of the word, a form of self-observation where the self is "bent around backward and staring at itself" (Heidegger 1988, p. 159). Because consciousness is not a self-enclosed bubble, *reflection* is not introspective, since introspection connotes that experience is internally realised. Just as consciousness is always turned towards the world, "is above all a relation to the world" (Merleau-Ponty, 2002, p. 116-117), so *reflection* cannot be a withdrawing from the world, but must turn towards it. In this way, *reflection* could be called a form of extrospection; a turning of the self towards the world, where things reflect back their own meaning back to us (Heidegger 1988).

Reflection is a form of self-apprehension, which reveals one's presence not only to oneself (Merleau-Ponty 2002) but also to the gaze of the 'other' (Toadvine 2014). Merleau-Ponty (2002) calls *reflection* radical because it must be "conscious of itself in operation" (p. 254) and therefore must interrogate its own possibility of existence. It throws us back on ourselves, making us reach back to the unreflected experience of ourselves, as we are reflecting. Reflection is only possible because our existence is pre-reflectively meshed with the world.

Van Manen (2014) calls *reflection* retrospective and recollective, since the self cannot reflect on lived experience, in the living of it. The self can only reflect on that which has already been lived. This understanding of *reflection* seeks to go back to the past, as it was in the moment of experience, pre-articulative to language; but for Goethean phenomenologists, the moment of experiencing is "a process of *becoming* in which actuality and possibility are fused and revealed to the perceiver" (Robbins 2005). Since *becoming* is always in the 'now', becoming must be already moving towards the future. Phenomenological method must be carried by the structure of the language that describes the experience, but the Goethean approach sees this

as only positive, since only by recognising past structures can the phenomenologist anticipate future forms. Every word means more than it can express, "carries with it the unsaid" (Gadamer n.d., cited in Bortoft 2012, p. 115), and so therefore remains unfinished and open.

About *intentionality*

In phenomenology, consciousness is not self-enclosed but is understood as inherently open towards the world, as something we direct towards the world; this direction is called *intentionality*. *Intentionality*

> is a basic structure of human existence that captures the fact that human beings are fundamentally related to the contexts in which they live or, more philosophically, that all being is to be understood as 'being-in-the-world' (Pollio 1997, p.7, cited in Seamon 2000, sec. 3.1).

Intentionality is our "inseparable connectedness" to the world (Vagle 2014, p. 27) and the foundation of consciousness, because we are always 'conscious of' things in the world. It is made visible by an experience of the phenomenon, through the relations it has with that phenomenon. *Intentionality* is the way a phenomenon appears or shows itself and so places consciousness or self at the centre of the world (van Manen 2014), even though the self itself is not experienced as present in the moment of the experiencing.

There are different aspects of *intentionality* within the structure of consciousness. These structures include temporal and spatial awareness, focal and marginal awareness, self and 'other' awareness, bodily awareness (including kinesthetic awareness of movement), and awareness of intention, as well as the intention to communicate and other everyday actions in our *lifeworld*. Then there are the conditions that enable these experiences to occur, such as bodily skills, habits, social or cultural contexts, and, of course, language (Smith 2013).

However, more recent understandings of *intentionality* suggest that not all actions are intentional, and that the self is not always consciously aware, and consciously directed to the world. Certain forms of knowing and understanding are felt, but not grasped immediately, such as awareness of the "otherness" (van Manen 2014, p. 64) of others. Then there are the non-concrete *intentionalities*, such as imagining, anticipating, dreaming, remembering, and recollecting. Such *intentionalities* are not consciously willed or ordered but are "fleeting, unspecific and evasive" (Saevi 2013, page 10). In non-intentional types of experience, the self is passively receptive and 'things happen', without being intended to happen. That the world itself has agency and its own intentions "that call upon us to respond" (van Manen 2014, p. 65)

draws a certain parallel with Merleau-Ponty's (1968) later belief in language not belonging only to humans, but as "the very voice of things" (p.155).

The lived body

In refuting Cartesian dualism, phenomenology shifts attention away from the body as an object to the body as lived; a sensing living presence where the body is interlaced with the 'flesh' of the world at a primal, direct level. "Knowledge of the world is corporal, rather than intellectual," states van Manen (2014, p. 128). We know the world first through the body, through its gestures, movements, routines, "through my relation to 'things' that I know myself," elaborates Merleau-Ponty (2002, p. 383).

The notion of flesh or *chiasm* is particular to Merleau-Ponty's (1968) later philosophy, where he extends the *lived body* to a conception of the body as a crossing place or *chiasm* between the subject body and the body as object. It follows, then, that since the body and the world are one 'flesh', the world is as capable of intruding on and altering us, as we are of altering it. But Merleau-Ponty (1968) cautions that though we are of the world, and in the world, we are not the world. Mind and body are indivisible, but not self and world: there is interdependence through 'flesh', but not complete fusion.

Smith (2013) calls language and embodiment key enabling conditions for studying the structure of experience. But Merleau-Ponty (1968) does not distinguish language and body so distinctively. He extends the concept of language to include everything that is expressed or communicated, beyond the human sound and graphic markings to the expressive arts, where the sounds in music or gestures in dance are as much language as human words (Busch 2009). The problem of human language, says Merleau-Ponty (2002), is that unlike other expressive forms of communication, it "stabilizes" (p. 452) the meanings of words to habituated, fixed forms that rely on past uses to an "inherited frame of reference" (Adams 2009, p. 159). Consequently, words become like substitutions for the experience of language, and replace it (van Manen 2002).

Yet, meaning is always there for us, and not "on a phrase like the butter on the bread" (Merleau-Ponty 1968, p. 155). That is, meaning is not separate from language, nor is language a mere representation of meaning. Bortoft (2012) sheds light on this notion, by stating that "language is the medium of the self-manifesting world [not] a pre-given world in itself" (p. 167), represented by language. Language is only representational when we take a *downstream* view of it, as something that appears. *Upstream*, in its appear-ing, it discloses the world to us.

This conception sees language as a *coming-into-being* event that connects us to the world, not as an obstacle to it.

In his later works, Merleau-Ponty (1968) extends language further, to include the "whole wild world" (p. 155), to the primal perceptual *lifeworld*, which expresses itself in language that is the voice of the world itself, where "language is everything" (p. 155).

Phenomenology in Practice

Merleau-Ponty (2002) stressed that radical *reflection* must continually interrogate its own possibility to remain true to its own intentions of "never knowing where it is going" (p. xxiii). Therefore, phenomenology must be seen as a movement rather than a formalised method. Without a real shift away from our natural, taken-for-granted attitude to the world, phenomenological inquiry becomes little more than a set of techniques. Rather, it is about developing a certain attitude that embodies a 'never knowing where we are going' perspective. This phenomenological *attitude* is the primary orienting tool for navigating phenomenological research, and one of the four processes foundational to phenomenological analysis. This section introduces these processes in the context of their phenomenological meanings. They are the phenomenological *attitude*, the *immersion*, the *explication* and the *description*.

Phenomenological *attitude*

The phenomenological *attitude* is the "foundation on which everything rests" (Finlay 2014, p. 122), the primary orienting tool of the phenomenological analysis. It breaks our everyday, familiar acceptance of the phenomenon (Merleau-Ponty 2002, p. xv), allowing us to see it "with new eyes" (Seamon 1993, p. 184). This approach is described with different terms and attributes, depending on the stream of phenomenology, but it is agreed that is an open but attentive approach that requires much patience and discipline to achieve (Finlay 2014). However, it is more than simply openness: there are processes by which a certain kind of openness is achieved. How this special kind of openness is achieved is now described, beginning with the phenomenological *reduction*.

The *Reduction*

The *reduction* is considered integral to developing a phenomenological *attitude* but is characterised in somewhat diverse ways, for there is continuing debate on how the tension between the 'taken for granted' and the 'familiar made strange' is understood. Is it simply a matter of adopting an open attitude? Of clearing the ground of pre-existing assumptions? Of

maintaining a "disciplined naivety" (Finlay 2009, p.12) towards the world? Although the *reduction* is a breaking with our familiar acceptance of the world, even transcendental phenomenology does not consider it to be an exclusion of it, but rather a suspension of a certain habitual attitude towards reality.

In descriptive phenomenology, the *reduction* is sometimes given two stages, an *epoché* and then a *bracketing* process. *Epoché* is first the suspension of the natural attitude; *bracketing* is a putting aside of the researcher's biases and existing knowledge about the phenomenon in question. The *epoché* and *bracketing* are not so much separate as essential to each other. The *epoché* suspends belief; the *bracketing* accepts that belief is an acceptedness of 'what is'. The phenomenologist aims to see the world and the phenomenon in question without psychological assumptions or theoretical frameworks of meaning.

> Current experiences are often judged to be the same as past ones or where one posits as facts that things really were the way that a person experienced them. The reduction helps to make access to experiential data more reliable. (Giorgi 2008, p. 41).

Interpretive phenomenologists, however, 'corral' these assumptions rather than clear them, for these are seen as the starting point for the inquiry. In interpretive phenomenology, pre-existing assumptions are used to examine the new evidence to develop an "intersubjective horizon of experience" (Wertz, 2005, p. 168, in Finlay 2009, p. 13) that allows access to the experiences of others. In interpretive streams, the term '*reduction'* is not usually used, but some phenomenologists, such as van Manen, consider their approach to be both descriptive and interpretive, so use the term '*reduction*' (Finlay 2014).

However, this process of identifying and corralling assumptions could be endless. Since Husserl, phenomenologists have questioned whether a totally presupposition-less *attitude* is possible, since as we put one assumption or belief away, we uncover another beneath it. A state of purified, unified consciousness, of wiping away all knowing and past experience, harks back to the notion of consciousness as outside of the *lifeworld*, as something that presupposes it, where self consciousness becomes the ground from which the world is experienced and then constructed (Toadvine 2014). Since consciousness is bound to the world, complete *reduction* is impossible. That is why Merleau-Ponty calls reflection 'radical': it makes us aware that we can never separate ourselves from *being-in-the-world*. However, the task of the *reduction* has never been one of achieving transcended consciousness – phenomenology is not primarily a meditative practice, though it uses some similar techniques - but a path towards

re-achieving, fleetingly, the world of direct experience, pre-knowing, in order to understand its meanings with an unprejudiced approach.

Etymologically, *reduction* had the meaning, now obsolete, to "bring back" or "restore" and also to return "to a natural or previous state or condition" (OED 2000). By attempting the *reduction* process, the phenomenologist has the possibility of finding a way to perceiving the world differently, by restoring a naïve attitude to it.

Cultivating wonder

Merleau-Ponty (2002) writes of the *reduction* that it

> does not withdraw from the world towards the unity of consciousness as the world's basis: it steps back to watch the forms of transcendence fly up like sparks from a fire; it slackens the intentional threads which attach us to the world, and thus brings them to our notice. It, alone, is consciousness of the world, because it reveals the world as strange and paradoxical (p. xv).

Here Merleau-Ponty (2002) lifts cultivation of this crucial aspect of the phenomenological attitude from a businesslike clearing of the ground to one of "'wonder' in the face of the world" (p. xv); by cultivating wonder, we can "see the world and grasp it as paradoxical" (p. xv). This suggests a very different attitude to *bracketing*. Rather than putting aside or corralling pre-existing knowledge for reflective purposes, or developing a neutral perspective, it suggests developing both a receptive passivity (van Manen 2002) and an active attentiveness to the *taken-for-granted* things of the world. Wonder in phenomenology is a gesture, not a feeling. It opens one up to the world, to considering things not yet considered. Rather than trying to remove the past, wonder opens up a way of seeing the world with 'new eyes' for it. To be both receptive and attentive is no easy task. Wonder requires putting aside self-centredness and its accompanying prejudices and perspectives, and "acknowledging the agential or 'being' character of the world around us" (Zajonc 2009, p.56).

Wonder leads to reflection, and reflection "cannot be unaware of itself as an event" (Merleau-Ponty 2002, p. xi). So, by reflecting on the unreflected experience, when cultivating wonder in the face of the world, the structure of consciousness is changed. Contemplative practices have long observed this form of active receptivity; though its goals are different, phenomenology treads a similar path. It is not surprising then, that many phenomenologists, such as Wertz (2005 in Finlay 2009), consider the *reduction* to be a meditative technique, one that must be practised, not once, and not only at the beginning, but continually throughout the inquiry. Indeed, practised in this way it transforms the way the individual views the world (Cogan

2014). As Aristotle stated, wonder precedes and leads into questioning: "All knowledge growth is a product of wonder and the questions that flow from it" (cited in van Manen 2002, p. 251).

Intuiting

Another term that is sometimes used to describe the phenomenological attitude is *intuiting*, a certain kind of awareness that requires openness and wonder, but also requires immersion into the phenomenon (Seamon 2000). Spiegelberg (1982, in Seamon 2000, para. 3.2.1) calls phenomenological *intuiting* the "heart" (1982, pp. 682-687, cited in Seamon 2000, para. 3.2.1) of the *reduction*. This form of intuition should not be confused with the more popular definition of 'hunch' as a "premonition" (OED 2000). Rather, it refers to direct perception of the phenomenon, a moment of "phenomenological disclosure," (Seamon 2000, sec. 3.2.1) that looks beneath the appearance to the essential structure or meaning of the phenomenon of the *essences* (Bortoft 1996; Seamon 2000). The root of the word 'intuit' is *intuitus*, Latin for "contemplation" or "see into" (OED 2000). Willis (2001) calls *intuiting* a more receptive and aesthetic form of thinking, like a contemplative attentiveness; Spiegelberg (1994) suggests it requires utter concentration on the thing intuited, without losing a critical eye. Both characterisations have similarities to Goethe's use of the term 'beholding'.

Intuiting is a continuing act, not a single event, involving "a series of smaller and larger disclosures" (Seamon 2000, sec. 3.2.1) that gradually leads to a more holistic and comprehensive sighting of the phenomenon. It requires practice yet cannot be directed; rather, it arises from developing an intimacy with the object or experience that combines perception with "a sensorial imagination" (Holdrege & Talbott 2010, p. 225). It is like a refining of perception that points towards developing new faculties, or new ways of enhancing our existing faculties. "Every new object, well contemplated, opens up a new organ within us" (Goethe, cited in Zajonc 1999, para. 23). *Intuiting*, like the *reduction* and *radical reflection*, is not a given in our natural attitude to the world, but something that is shaped by it, and yet takes part in its shaping, when cultivating a phenomenological *attitude*.

The *Immersion*

From the cultivation of the phenomenological *attitude*, the next step is the *immersion* into the raw data. This process is one of empathic "dwelling" (Finlay 2014, p. 125), a settling into the data, first at the most general level, through listening, viewing or reading the research participant responses as a whole. Unlike theory-building methodologies, the aim here is to bring oneself closer to the phenomenon, as directly as possible, rather than stepping back

from it to objectively observe it (Holdrege & Talbot 2010; Seamon 2000). But there should be no positing at this point, states Giorgi (2009, in Finlay 2014). Phenomenological intuition rather than cognitive analysis is required here to gain access to the experience through what Finlay (2014) calls "dwelling-analysis" (p. 128). Then, through prolonged, receptive engagement with the data, the researcher gradually becomes what Goethe calls 'at home' with the world being studied, and hopefully, the phenomenon begins to disclose itself. The *intuiting* that arises from this attentive, immersive process continues throughout the analysis through the *explication* and *description*.

The *Explication*

The *immersion* moves into the *explication* as a seamlessly interwoven process, a further step in processing the data and disclosing the phenomenon. Here, the emerging essential elements or (*themes* in interpretive phenomenology) are gathered and synthesised across all participant accounts into clusters of essential structures and meanings. In existential approaches, issues of the participant *lifeworld* are highlighted as further *reduction* is performed, and superfluous and redundant content pruned away (Hycner 1985). The *explication* leads from the particulars of the phenomenon to its universal *essences* (Spiegelberg 1994) or *themes* (Finlay 2014). Sometimes, *imaginative variation* of participant accounts is used to reveal essential elements by changing aspects of the phenomenon (Finlay 2014). However, the focus remains on the nature of the phenomenon as a human experience, not of one individual, even though one individual's experience can illuminate the general human experience. The data needs to be lived with as a whole, not in its parts, even while pondering its parts.

After gaining a sense for the whole, then comes the *reduction*-proper (van Manen 2014). There are several forms of this *reduction*-proper, depending on the stream chosen (van Manen 2014). The phenomenological *reduction* first surveys the phenomenal field. It is our reflective effort to disclose our unreflected engagement with the *lifeworld* and its existential givens, such as temporal and spatial awareness, self-awareness, embodied action, attunement and *intentionality* (Smith 2013). An *eidetic reduction* occurs further along the process and identifies the *essences* or essential structures of the phenomenon. It describes 'what' shows itself in an experience and 'how' it shows itself (Moustakas 1994; van Manen 2014), what is essential to a phenomenon:

> The eidetic reduction is … the determination to bring the world to light as it is before any falling back on ourselves has occurred, … to make the reflection emulate the unreflective life of consciousness" (Merleau-Ponty 2002, p. xvii).

The *eidetic reduction* is used in *descriptive* phenomenology to reveal *essences*. In Continental Philosophy, where the focus is on existential issues, the *explication* is more concerned with the key structures of human existence and what is invariant in these relationships, but this approach is used in both *descriptive* and *interpretive* approaches to analysis (Finlay 2014).

On the whole, the *explication* is a "messy" (Finlay 2014, p. 131) and recursive process, but it must nevertheless be systematic even though it may be punctuated by intuitions that are the "revelatory seeing" (Seamon 2000, sec. 3.2.1) of the phenomenon in its whole.

The *Description*

Description is central to phenomenological practice, not just as the final expression of the explication, but also as an approach that should inform the attitude. "The aim of the description is not a definition of the phenomenon, but a careful description of the structure of the lived experience of that phenomenon in a particular context" (Giorgi 2008, p.41). It seeks to disclose the original experience of the world, not explain it. There is much argument between different schools of thought, whether it is possible to be purely descriptive rather than interpretative when describing, but most agree with Heidegger that "interpretation is not an additional procedure: it constitutes an inevitable and basic structure of our "being-in-the-world" (Finlay 2009, p. 11). Description is already interpretation, because experiencing is already interpretation. "Because we are in the world, we are condemned to meaning," states Merleau-Ponty (2002, p. xxii).

The act of describing

"Description begins in silence," states Spiegelberg (1994, p. 693) pointing to the fundamental impossibility of saying the unsayable; of bringing "into presence" (van Manen 2006, p. 718), that which existed before words, and that which is lost by bringing it to words (van Manen 2002). Here is another paradox, that of phenomenological writing: that *description* may bring insight but it also brings illusion. This is Merleau-Ponty's 'wild *being'*, the primal lived experience that has yet to become an object and be named. For in naming it, the thing in its primal state disappears (Trigg 2012; van Manen 2002). For describing new phenomena - and all phenomena are potentially new when the familiar is 'made-strange' - there is only the old language. Metaphor and analogy can present new perspectives, but ultimately, *description* can serve as a guide only to the phenomenon itself, even if, as stated, we see *description* as a coming-into-being event. *Description* can only point to the phenomenon itself by being an example of it (van Manen 2014). It is also selective and partial, since it is not possible to

disclose all properties of a phenomenon. Nor does it seek to do so, for by forcing us to concentrate on what is most characteristic and invariant, we already are considering its *essence*, or *essences*. So, *describing* is interpretative, experiential, selective, partial, illusory, emergent and disclosive. It overlaps *intuiting*, *reflecting* and '*reducting'*, since each of these processes shapes the describing. Above all, the *description*, whatever form it takes, must be approached with the same attitude as *reduction* - that of openness, attentiveness and wonder (van Manen 2002).

The purpose of describing

Are we describing the general experience or the particular individual experience? Is the focus on the thing or the person experiencing the thing? These two distinct understandings of the use of *description* underlie the description/interpretation argument. One looks at structures of consciousness, the form the unfolding takes; the other looks for hidden meanings from the content. One aims to reveal shifts in structure of experience that are intrinsic to the phenomenon; the other to reflect on the lived meanings inherent in it (van Manen 2006). The first stays close to what is given; the second sees the experience in the context of the *lifeworld* of the individual. And yet, are these to approaches so different? It depends on the focus of the researcher, whether she is concerned with the lived experience as shared by many, or the meanings an individual brings to that experience (Finlay 2009).

The texture in the *description* is the 'what' of the appearing phenomenon, that 'what' which appears; the structure is 'how' the phenomenon is experienced (Moustakas 1994). The two are interrelated: there is always implicit structure underlying texture (Moustakas 1994). The texture/structure relationship is not an object-subject relationship so much as an appearance/appearing one (Moustakas 1994; Smith 2013). Our perceptions bring out textural descriptions, in unfolding the 'what' of our experiences; our conceptions arise out of *reflection*, to reveal the possible meanings, the undisclosed meanings (Moustakas 1994).

This interconnectedness, however, does not preclude the phenomenologist from focusing on one or the other at different stages throughout the study (Keen 1975, in Moustakas 1994). *Interpretive* or h*ermeneutic* phenomenology, for example, focuses on the textural element; *descriptive* phenomenology concerns itself with the structure. Some phenomenologists, such as Moustakas (1994), look at both. Nevertheless, the underlying structure of an experience is core to revealing the basic *intentionality* of it.

As stated earlier, some phenomenologists see description and interpretation as a continuum, especially when the experience is mediated by non-verbal mediums of expression, such as

gesture, dance or painting (van Manen 1990). Here, the interpretative element must be stronger and more explicit (Finlay 2009; van Manen 1990). Regardless, phenomenological interpretation always points to the thing itself, and must be analysed in its own terms; rather than finding meaning through imposing external models or theories (Finlay 2009).

The *description* stage is both a preparatory and culminating activity (Spiegelberg 1994) and should be practised throughout the *explication*. Developing a rich description that is faithful to the phenomenon is perhaps the most difficult stage of the *explication*, since it aims to disclose the phenomena without simply summarising the different experiences. And describing lived experiences is not the same as phenomenological writing: as stated, phenomenology is not concerned with what is common to the participants' experiences, but what is essential to the phenomenon. Above all, *description* is a disclosing experience in itself; one that must be approached with the same open and *intuiting* attitude that the researcher brings to the explication so that the same wonder that guided the *description* induces wonder in the reader (van Manen 2002). However, there is no correct way to present the *description* (Finlay 2014). The aim is to evoke the phenomenon with rich but authentic pictures.

Phenomenological practice as analysis

All phenomenologists engage three levels of analysis: they immerse themselves in the data, *intuiting* a general sense of the phenomenon; they look at particular experiences, the essential structures or *themes* that reveal the phenomenon; and then explore the essential aspects of the phenomenon in relation to being human (Halling 2008, in Finlay 2009). This is a recursive process, not a linear one: there may be "a series of smaller and larger disclosures that slowly coalesce into a fuller sighting of the phenomenon" (Seamon 2000, sec. 3.2.1). So by moving continually between the particular and the general (Seamon 2000), between the *intuiting* and the *reflection*, the researcher is reminded not to isolate the phenomenon from its *belongingness* to the whole (Bortoft 1996).

In summary, there are three important points for a phenomenologist to remember:

1. The phenomenologist must always assume unfamiliarity with the phenomenon throughout the analysis, not just at the beginning, in order that it can be approached with openness, wonder and attention.
2. The phenomenologist must live into the lived experiences of the participants; feel "taken in, seeing from the inside" (Finlay 2000, p. 128), always adapting the methods fluidly to the "things in their appearing" (Finlay 2009, p.8).

3. The processing of the data has three intermeshed operations: the *immersion*, the *explication* and the *description* of the phenomenon. Of the four processes that guide this, *reduction* launches the processing, and *description* transforms the explication into the culminating textual narrative; while *reflection* and *intuiting* are the way in which these are performed.

Reflection, *reduction*, *intuiting* and *description* are all central to developing the phenomenological *attitude*. As stated, there are no prescribed definitions of these terms. That would be odds with the spirit of phenomenological tradition. Rather, variations in interpretation, along with ambiguities, arise out of the different philosophical streams and their interpreters. For example, Merleau-Ponty (2002) approves the term 'wonder' to describe *reduction*, but also interchanges the terms *reflection* and *reduction*, suggesting that they are not discrete processes. Rather, *radical reflection* is the way of thinking used to perform the *reduction*.

Methodological creativity

Despite the vaunted flexibility of the phenomenological approach, is it methodologically justifiable to create a procedure drawn from both descriptive and interpretive perspectives? Novice phenomenologists are specifically warned to distinguish clearly between descriptive and interpretive methods (Giorgi 1997; Finlay 2009; Finlay 2014), yet if a description is already interpretive (in that it is mediated by language), and description/interpretation is regarded as a continuum, rather than as an either/or (as discussed in The *Description*), then surely using both approaches is acceptable, as long as the interpretation remains descriptively grounded (Finlay 2009; Vagle 2014), and as long as it is made clear when it is being used. In any case, even in a *hermeneutic* approach, the priority is still fidelity to the phenomenon (Churchill 2012; Finlay 2014), in staying as close as possible to direct description, before adding layers of interpretation. It may be that, in explicating multimodal data, this continuum of description/interpretation must be given more 'free play' to allow for an especially paradoxical phenomenon to be revealed in its nuances. To attempt to capture the experience of creativity emerging, an approach that explores different dimensions of time may be required. To capture traces of a phenomenon that is not necessarily experienced with average 'everydayness', an approach that is directly responsive to the phenomenon, rather than adhering to a particular stream, may be required. And the term 'approach' in itself suggests "coming near" (OED 2000), its very approximation allowing for the role of wonder, *intuiting* and *reflection* in its

definition that the term 'method' lacks, tied up as it is with "rational procedure" (OED 2000). After all, phenomenology does not believe that human being can be predicted rationally (Hycner 1985), since that which can be rational and predicted is often already the most evident and explicit, and so does not require disclosure. Therefore, being flexible and methodologically creative in approach may be acceptable.

The next section revisits the argument for the chosen approach and methods in relation to the research intentions.

Argument for the Approach Revisited

Phenomenology has been declared "the study of essences" (Merleau-Ponty 2002, p. vii) but also "the study of lived experience" (Adams & van Manen 2008, p. 616), reflecting two fundamentally different orientations to the subject: one focused on the essential structure of an experience, as it appears in human consciousness; the other on the experience "as it is lived" in the *lifeworld* of the human being. The first takes perception, in its broadest sense, as the starting point for revealing the phenomenon; the second, how the phenomenon is interpreted by the individual's experience. It could be argued that these differences are merely semantic, that perception is already interpretation, but it is important to understand that for the purposes of the phenomenological inquiry, these differences point beyond philosophical quibbling over interpretations of Husserl's maxim of 'back to the things themselves'.

Merleau-Ponty (2002) stressed that the purpose of phenomenology should be "concentrated upon re-achieving a direct and primitive contact with the world" (p. vii), suggesting that we need to return to the source, to the manifesting of the experience to recover the wild *being* of unreflected experience from the temporal flux. How can we achieve this? Most phenomenologists refute that it is possible to directly apprehend the phenomenon, since once it is past, we can only grasp at its memory (van Manen 2006; 2014). Reflection by its nature brings about disengagement from the experience (Smith 2013). However, Bortoft (2012) states that to directly grasp the primal experience, we must go back *upstream* to the appearing of the appearance: the focus should be on attempting to capture the experience as it emerges. This capturing the moment in the act may be possible through that special attentiveness that a phenomenological *attitude* can bring to the research, if observation and immediate, experiential articulation document this moment, whether in the form of field notes or audio-visual recording. In contrast, the study of the human *lifeworld* is a *downstream* investigation into how the experiencing of the phenomenon 'sits' within the everyday human *lifeworld,*

recollected through immersing oneself in the memory of the experience. This points to the difference between attempting to capture an ephemeral experience and studying it when it may have become a 'routinised' experience through many recollective conversations. It points to the difference between observing the flutter of a butterfly's wings as you run after it with a net; and studying a photograph of it, looking for some hint of its original "quivering", (2002, p. xvii) as Merleau-Ponty might say. The difference is both qualitative and situational.

However, Bortoft (2012) points to a deeper issue. When attempting to re-live or re-collect the lived experience, there is a tendency to focus on the experience as a fixed and finished thing, in order to account for it, rather than on the experience itself. By latching onto the outcome, we draw on our memory of it, its shape and feel as we recollect it. And if the recollection is a composite of memories of several experiences, then it is likely to be shaped and possibly thematised by habitual practices and existing mental models. The *description* of the experience will be itself affected by the existing knowledge and pre-suppositions of the person recollecting. When recollection through interview or text occurs sometime after the experience/s, then the dynamics of the experiencing, of its *becoming,* can be overlooked.

For this reason, this study chose both an *upstream* and *downstream* approach to the *explication* in order to study the experience on its continuum: both in its now/past immediacy, and in its past/now recollection, so as to capture it at different moments in the fluctuating time stream. So, the chosen approach follows Merleau-Ponty's indications, using an existential, embodied approach but was 'methodologically creative' in its implementation. Although Merleau-Ponty places consciousness in the world as embodied, he also embraces aspects of the descriptive approach in its focus on *essences,* so this study addressed *essences*, *intentionality* and structure, through the eyes of the research participants, with a 'directly descriptive' *upstream* approach. Since the existential form is also interpretive, an approach that allows for an interpretive, *downstream* study of the *lifeworld* of the participants, as expressed in the interviews and discussions, was used to complement the descriptive methods. As Merleau-Ponty himself gave only general indications for method, this researcher adapted the stages of the *explication* from existential and interpretive sources, to explore the different verbal, visual and embodied elements of the multimodal data. (Chapter Four: Procedure and Analysis details this process).

Merleau-Ponty (2002) says phenomenology seeks "to reveal the mystery of the world", what is hidden but also "and of reason" (p. xxiv). So, in the pursuit of reason, a certain process must be followed and documented as having been followed, to justify its claims of being a rigorous,

valid and trustworthy methodology (Lincoln & Guba 1985; Finlay 2009). Phenomenology will now be evaluated in this context.

Part Three: Evaluating Phenomenology

> Let truth be always our goal, but understood as the Greek word 'Aletheia': the unveiling of what lies hidden behind the current phenomena.
>
> (Ciborra 1998, p. 16, in Wilson 2003, pp. 449)

Part Three revisits phenomenology as a research methodology, reviewing its key strengths and limitations in the context of evaluation criteria such as validity, credibility and trustworthiness in qualitative research. It concludes with a summary that provides a framework for the implementation of the research design.

Strengths and Limitations of the Approach

Creativity has been theorised in more than a hundred ways, yet the widely accepted definition incorporates newness, originality and value (see Chapter Two: Part One, Definitions of Creativity). That creativity is nonetheless paradoxical and ambiguous to research has also been established, and this very contradiction points to creativity's inherent mystery.

It has been established that a phenomenological inquiry requires a flexible, open and wondering *attitude* to studying human experience, one that can reveal creativity's nuanced and subtle complexities, but more essentially, can address the irreducible paradox at its heart, by investigating the conflicting processes of *flow* and *resistance* in the context of their *belongingness* to the whole phenomenon. This *reductive* attitude challenges the habitual assumptions and conceptualisations of a natural, taken-for-granted attitude to a phenomenon because it begins its inquiry with the world as it was/is, "before any possible analysis of mine" (Merleau-Ponty 2002, p. x); because it seeks to capture the experience that we actually have, rather than what is our model or concept of it; because the only reality we can have, phenomenology assumes, is the one we directly experience. By examining the experiences of even a small number of people, this study aimed to look afresh at creativity, and prevent its findings being *selbstverständliches* and assumed. This tension between the taken-for-granted and the familiar-made-strange was regarded as an ideal platform for creativity's exploration.

That phenomenology research is also subject to ambiguous, subjective and manifold interpretations in approach, methods and results, was considered both its strength and weakness. Its strength, because it must respond, even if only initially, to the phenomenon under investigation, before thematisation, and therefore stays to close to the way individuals make meaning of it in the world. Indeed, the most commonly agreed upon attribute of phenomenology is that it cannot be understood as an applied theory, and therefore limited by theory; understanding only comes through its practice, in response to a phenomenon. This in itself could be considered a limitation, if the credibility of the study rests solely on the number of years a researcher has practised this methodology.

But this strength – allowing for ambiguity, flexible interpretations and creative methods – can also be considered its weakness. Indeed, the very impreciseness of phenomenology as a practice, particularly to the novice practitioner, makes it a daunting and confusing endeavor to undertake. How will the researcher meet the requirements of scholarly research when they are surrounded by uncertainty and contradictions? Can phenomenology meet the usual requirements for qualitative research of trustworthiness**,** validity, rigour; or account for bias and generalisability (Gray & Malins 2004; Guba & Lincoln 1985; van Manen 2014)? The relevance of some of these criteria to qualitative analysis has been questioned, especially that of bias, but phenomenologists themselves continue to critique them as a requirement (Churchill et al 1998; Finlay 2009; Hycner 1985; van Manen 2014).

This critique is partly due to phenomenology being considered both a human science and a humanities methodology. It straddles Science and Humanities with its diverse interpretations, often shaped by disciplinary concerns. Some streams, such as *descriptive* and *Goethean* phenomenology are epistemologically oriented towards scientific methods and consider their research must be credible and verifiable. More interpretive streams, such as *hermeneutic* phenomenology, with its particular emphasis on poetic *description*, place their research firmly in the Arts and Humanities. Yet, even van Manen (2014), in the interpretive stream, apparently feels bound to address scientific validation criteria, such as reliability and bias, even while rejecting them. However, another reason for this concern with scientific credibility could be that many notable practitioners of phenomenology in the English-speaking world, who have developed accepted variations and procedures, are oriented towards an Anglo-American positivist way of thinking rather than the Continental Philosophical approach, which originally shaped phenomenology (Bortoft 1996).

Whatever the reason, since this research chose to use both a scientifically-oriented descriptive approach and a humanistic interpretive one, discussion of these criteria is included.

About trustworthiness

When phenomenology sidelines theory, embraces subjective accounts and produces such ambiguous results, can the results be trusted? Trustworthiness as a core criterion of quality in qualitative research, in the sense of judging the truth of the findings (Lincoln & Guba 1985), is somewhat at odds with the very nature of a phenomenological approach. An experience should never be taken as a truth, as a given, just because it is part of the human *lifeworld*. Nor should it be taken as a black-or-white, either-or situation; that is, either a person is or is not creative, or that a method can only be descriptive or interpretive. Ambiguity is intrinsic to the human experience, and phenomenology is concerned with possible human experiences, not certain ones. Truth in phenomenology, therefore, lies not in certainty and fixed meanings, but in *disclosure.* The concept of *aletheia*, meaning 'disclosure' or 'unconcealment' (Ciborra 1998, cited in Wilson 2003; van Manen 2014) is foundational to phenomenological truth. The truth of something is not an either-or affair, but a "complex and constant interplay between showing and hiding" (van Manen 2014, p. 343). Therefore *disclosure* is an indicator of trustworthiness in phenomenological inquiry.

Trustworthiness also lies not in the truth of lived experience, but in a sense of fidelity to the object of perception (Churchill 2012; Finlay 2014). This form of trustworthiness can be demonstrated by the rich and complex descriptions, and the depth of understandings intuited from them. Attention to ambiguity can generate these rich descriptions, but depth, says Merleau-Ponty (1968), is what gives things distinctiveness from what I see in them, "while not being what I look at, at present" (p. 219). Depth points to "beyond the taken-for-granted understandings of everyday life" (van Manen 2014, p. 356). Therefore, the depth of the findings should also be a criterion for judging the research's trustworthiness.

About validity, authenticity and credibility

The interpretation of the quality of research validity is another criterion that points generally towards whether the truth is faithfully identified and described (Miller 2008). As phenomenology holds *disclosure* at its heart, through careful, experiential *description*, offering examples and quotations from the data that communicate a sense of *being-there* (Finlay 2014), it would appear to meet this criterion. However, van Manen (2014) warns that the material collected must be authentically descriptive, and not perceptions, beliefs, opinions and such in the guise of *descriptions*, things that tend to proliferate in semi-structured or open interview

methods. The phenomenological interview should be strongly guided so that it stays concrete and close to the experience, so that it *discloses* the phenomenon. Otherwise it may be of little value or lead the researcher to over interpretation of the material. So, the quality of the interview method is one indicator of the authenticity of the research. The quality of authenticity, then, is a validation criterion.

'Validity' originally meant "strength" (OED 2000). The strength of research concerns its deep and thorough scholarly competence as much as the authenticity of the findings. Phenomenological inquiry must be grounded in continual study of original philosophical writings of the phenomenologists inspiring the research, as well as their interpreters, to demonstrate an authentic grasp of phenomenological attitude. Other indicators towards validity sometimes concern the research participants, including their sample size, selection and verification. Unlike many forms of research, quantitative or qualitative, the number of participants required for phenomenological research is not significant, depending on its aims. The intention is to illuminate and *disclose*, not generalise: a single case may shed light on the phenomenon in question, if a sufficient number of variations arising from that case reveal the essential structure of it. Indeed, too many participants may result in excessive amounts of material, and reflection may consequently be shallow and sketchy (van Manen 2014).

A more contentious issue is the selection of the participants. Phenomenology often uses purposive sampling, drawing on individuals who not only will be actively engaged with the research, but who also have the ability to provide the rich, thick material required. However, this may lead to the issue of pre-existing bias or belief informing the selection. That participants must have experienced the phenomenon in some form under investigation goes without saying, but does the researcher have the ability to choose articulate, responsive subjects? The *reduction* seeks to address researcher bias, but if this takes place after the material is collected, then the material may already have limitations. An element of openness is required by the researcher from the moment the research is launched. For example, it is desirable to have participants who can articulate their experiences, but their inability to articulate their experience may also shed light on the phenomenon in question. Silence and inarticulation can speak volumes, whereas every word kills what it seeks to describe, as van Manen (2002) might say.

Similarly, participants who are overly familiar with the phenomenon may also fall back on their own conceptualisations or use routinised frames of reference that stifle the freshness of the *description*. Consequently, the collected material may not have the Merleau-Ponty 'quiver'

that can *disclose* the desired "direct and primitive contact" (2002, p. vii) with the lived world. This is not to suggest that such *descriptions* have no authenticity; it comes back to the purpose and intention of the research. Much of the existing research on creativity has used creative professionals, such as writers or artists as their source of material, which may provide great insights into the *lifeworlds* of such people, but their extensive and professionalised experiences may provide little freshness. Too much intellectual knowledge and routinised expression of a topic may have 'generic-ised' their recollections[11]. For this reason, this researcher sought participants for this study who had no professional training or experience in the chosen artistic method for eliciting experiential responses.

Of greater importance than perceived expertise with a phenomenon, is the quality of situated engagement between the researcher and participants (van Manen 1990). Prolonged engagement is often suggested as a procedure for establishing credibility (Lincoln & Guba 1985). In this regard, this researcher had a substantial background in the phenomenon, at both an experiential and theoretical level. If she had been exploring creativity through her own creative work, then this would be an advantage. However, as the researcher, this would have meant she had more presuppositions, bias and existing knowledge to identify and bracket than if she had been studying a field in which she had less expertise. Moreover, this form of prolonged engagement could be a limitation if insufficient reflexivity is exercised. Quality of the engagement is more relevant to phenomenology. This quality is found in the rich, deep *descriptions,* drawn from the data, but also in the rapport required between the researcher and participants in the research. The ability to articulate experiences relies not only on linguistic abilities, but also on the trust or confidence the participant has in the researcher, which engenders a safe space that allows the sharing and *disclosing* of experiences to occur.

Participant feedback is sometimes used in phenomenological inquiry for verification purposes (van Manen 2014), and as a validation of the credibility of the responses (Finlay 2009; Lincoln & Guba 2005), but it is somewhat contentious in interpretive research, since the momentary freshness of the experience may be compromised by re-interpretations of the original response. This is an ontological argument and one that points back to the difference between an immediate experience/ing of an experience and the recollected experience. Merleau-Ponty (1964) states "reflection on the meaning or the essence of what we live through is neutral to the distinction between internal and external experience" (p. 65). This suggests meaning is disclosed once the experience has been expressed (Giorgi, 2010). However, *hermeneutic*

[11] The researcher is reflecting her own experience here, as a professional artist.

phenomenology believes there is a place for what van Manen (2014) calls the "hermeneutic interview", which "seeks assistance" (p. 317) in interpreting the original lived experience recollection. This type of verification may also be used as a form of triangulation, especially if the original experience involved non-verbal activity, such as drawing, or expressive language, such as in as a poem. Either way, any new feedback adds layers of interpretive richness, but as to its role in *aletheia* or the *disclosure* of direct experience, this again comes back to the purpose of the research.

As mentioned, triangulation is another technique for establishing the strength of the research, enhancing its credibility. In phenomenological inquiry, the rich, comprehensive and detailed *descriptions* are core to the process anyway, whether one method, such as interview, or more is used. The criticism that one method may not be adequate for generating rich thick data (Lincoln & Guba 1985) is itself not particularly valid in phenomenology, since the approach acknowledges, as a core tenet, that the phenomenon can only be recognised partially. It is what this partial 'snapshot' can disclose of its *essence* that is of importance. Nevertheless, as a measure of credibility, the multiple methods used in this study contribute to its validity.

About rigour and the *reduction*

Rigour, which can be used as a measure of reliability in qualitative research, can be established by engaging in systematic and reflexive documentation of the research design, data collection, interpretation and communication of findings. In phenomenology, the *reduction* is central to the rigour of the research. Whether it is in the form of bracketing assumptions or holding the attitude of wonder and relative openness throughout, researcher subjectivity should be held in the foreground at all stages of the inquiry: their assumptions about the phenomenon, their worldview, models that have informed or inspired the original inquiry, their participants, and what they expect to find, even the research question itself must be documented. "Every notion has to be examined in terms of its assumptions" (van Manen 2006, p.720). This is why the *reduction* must be an ongoing process from research conception to its culmination in the final textual *description*.

Phenomenology also demonstrates rigour by applying its method to itself in a circular process in keeping with whole/parts/whole approach (Osborne 1994). This circular process involves a particular rigour at the parts level – careful documented observations, verbatim transcriptions of interviews, systematic line-by-line examination for significant or redundant meanings and a careful attention to the process of the *explication* – yet still the researcher must always remain cognisant that no procedural method is adequate to "ascertain the value, strength, originality,

and significance" (van Manen 2014, p. 348) of a quality piece of phenomenological writing. In the end, rigorous method is a sound framework to support a, *intuiting*, open approach.

About bias and reflexivity

All research demonstrates researcher bias: the way a question is framed, the way a methodology interpreted and its methods operationalised, even the choice of methodology. Having said that, in interpretive approaches, bias is not as relevant. In phenomenology, for example, the phenomenon will always be mediated to some extent by the researcher's worldview, the researcher's relationship to the participant, the participant experience and the researcher interpretation of the participant experience. In other words, a level of researcher subjectivity is always in the foreground. This is the point of the *bracketing* process. This is why the *disclosure* that comes from continually practised and *reductive* reflexivity is so central for scholastic rigour. Self-critical questioning of the distinctiveness of the phenomenon as it unfolds must be guided by a phenomenological attitude that remains open and attentive to the world. The challenge is to hold simultaneously contradictory attitudes at all stages of the research in order to continue to see the world as strange and paradoxical. Part of a *bracketing* (or *corralling*) process involves listing the researcher's assumptions, expectations and existing pre-conceptions that may have shaped the research before any data collection. This list is reviewed and updated as the research progresses and forms part of a more general reflexive journal that demonstrates transparency and rigour in the research.

Some clarification about the term 'subjectivity' in phenomenology is required here. Phenomenology should not subjective in the everyday sense of the term, where it opposed to 'objective'. Rather, it pertains to relating to a person's individual perception of her lifeworld. For researchers, the understanding of the self in relation to the world changes. We no longer see ourselves as self-contained and self-centred subjects facing the world 'out there', but as non-subject-centred selves, open and intermeshed with the world 'out there' (Bortoft 2012). Therefore, calling phenomenology a study of the account of the subjective experience (Gallagher, S. & Zahavi 2013) points not to personal access to the meanings and structures embedded in their experiences, but rather to the "self-givenness" (van Manen 2014, p. 61) of these experiences.

About generalisability and universals

Generalisability is more associated with quantitative, scientific research, than the arts and humanities. However, it is worth considering it here, since it infers a study is hypothesising

general principles from specific cases, and generalisations are sometimes confused with the notion of universals. The term 'universal' is sometimes used in phenomenology in the context of searching for the particular and the universal, or the concrete and the universal (van Manen 2014). Van Manen (2014), in fact, interchanges 'universal' with 'essence', but stresses that universals are not "immutable" (p. 230) in the way generalisations may be considered, since phenomenology is only concerned with a possible and incomplete truth, not a constant one. Therefore, searching for *essences* or universals is not a process of generalisation. As Bortoft (1996) points out, the aim is not to look for sameness or commonality between humans, but what is particular, different and singular about each possible experience. Singularity points to the universal in the sense of essential, but not to the general.

A phenomenological inquiry aims to disclose what is hidden and unseen in a phenomenon, to increase understanding about it by exploring its complexity, not simplifying it with general principles. Understanding the complexity of human phenomena leads to greater understanding of humans themselves. The experiences described, interpreted and analysed do not have to be universally identified, but they may lead us towards a universal understanding of what it is to be human, by documenting their details and differences, not by noting what is similar and common. Looking for similarity can easily lead to abstraction and simplification; however, by seeing comprehensively, we can arrive at a more complete, more diverse, holistic picture, not a general one. Therefore, the aim of phenomenological research is to find the multiplicity in the unity of the experience (Bortoft 1996).

Summary of evaluation criteria

This summary outlines a set of criteria considered suitable for assessing the quality of phenomenological inquiry study:

- Trustworthiness: demonstrated by disclosure of the hidden in the taken-for-granted experience of the phenomenon; fidelity to the phenomenon through rich descriptions; and the depth of insight demonstrated in the findings discussion.
- Authenticity: judged by demonstrating an authentic grasp of the phenomenological approach, which includes scholastic depth, a documented approach to practising the phenomenological attitude and the descriptive quality of the thematic portrayals.
- Credibility: linked to both authenticity and trustworthiness, demonstrated in procedures such as verification, including interview verification of data and debriefing; the researcher/participant relationship and triangulation through multiple methods.

- Rigour: demonstrated by the documentation of the *reduction* and by the recursive whole/parts/whole process of the *explication*.
- Bias: addressed through adopting a phenomenological *attitude* and general reflexivity, as documented.
- Generalisability: replaced with 'multiplicity in the unity'.

Another important evaluation criterion that relates specifically to this study is creativity: was this study on creativity creative in itself? That is, did it offer new, original or valuable understandings to the scholarly and wider community; or new, original or valuable techniques for eliciting nuanced understandings? Did it have a creative research design or use creative methods? These criteria will be reconsidered at the end of this thesis, in Chapter Six.

Limitation as strength

Limitations in a research methodology are usually seen as a weakness that may lessen its contribution to an existing body of research, as much as its scholarly quality. However, Merleau-Ponty, in his later works, came to recognise the open-endedness, future-oriented nature of experience/ing (as discussed in Part Two: Phenomenological Assumptions). He rejected a certain kind of positivist 'quest' for universal truths and immutable certainty by those seeking to call phenomenology as science (Laverty 2003), a tendency that has followed scholastic research in general in the twentieth century. He recognised that reflecting on the unreflected life is a fundamental contradiction at the heart of the phenomenological method, because, in the end, despite our at-homeness with a phenomenon and our intentions towards disclosing the world, the world will always remain strange and 'other': "There is no thought which embraces all our thought" (Merleau-Ponty 2002, p. xv). This limitation of phenomenology to produce certain and universal truths is its strength: it embraces its inability to fully grasp the wild *being*, and so will remain always "on an open trajectory of expression" (Landes 2013, p. 247).

Presenting a Framework for the Research

Phenomenology can reveal new aspects of human experience and the phenomena underlying it. It gives us new eyes for the world and challenges our taken-for-granted understandings of the world by going back 'to the things themselves', as they appear, in their appearing, before any knowledge or theory of ours can shape them. It is a discovery-oriented methodology for recovering beginnings, but also a method for eliciting hidden meanings, which allows for an

open trajectory of inquiry into the manner of artistic endeavours. It is an unpredictable approach, but also reflective, descriptive, intuitive and wondering; yet it always remains grounded in the concrete 'as is' experience, as it was/is lived.

This study in creativity, and its contradictory, distinctive processes of flow and resistance, has required a methodology that could respond fluidly, sensitively and with depth to creativity's complex phenomenal nature, and, above all, respond creatively. Phenomenology was established as a methodology that could be shaped and tailored to creativity's needs. As a universal phenomenon, creativity is present in our personal experience, yet perhaps requires new ways of seeing it, to disclose its riddle. The intention of this study is to develop a nuanced understanding of this riddle in the light of creativity's universality - as a universal phenomenon that we can all access.

This study has taken an holistic position regarding cognition as its starting point (see Chapter Two: Literature Review), using a framework of Merleau-Ponty's existential, embodied approach to phenomenology to direct the research process. An existential approach explores aspects of concrete human existence. An embodied approach sees language as more than human words, and cognition and action as being indivisible from the environment in which they perform. This researcher decided to use a working definition of creativity during the research process, where creativity is phenomenologically conceptualised as a 'coming into being' process, where new things arise that have originality, meaning or value for the person.

The study has taken an *upstream/downstream* approach to exploring the emergent and the recollected contexts of the phenomenon. In this way, both the emergent and ongoing aspects of the creative process could be addressed. Because of this decision, the experiential research questions identified at the conclusion of Chapter Two were reframed as:

1. What is/was the experience of being creative, *in its experiencing/as it was experienced*?
2. How does creativity emerge?

The first question now incorporated an *upstream/downstream* understanding of the experience. The *upstream* element concerns what was experienced, in its experiencing; the *downstream* element concerns what was experienced, as it was lived. In this way, the parts of the experience could be considered for their belongingness to the whole phenomenon. The next chapter describes how this two-pronged approach was implemented.

Chapter Four: The Procedure and Analysis

> Creativity occurs in an act of encounter …
>
> (May 1975, p. 77)

Overview of the Chapter

Phenomenology is a philosophy, a methodology and a practice. Implementing phenomenology as a methodology while remaining philosophically grounded has it challenges, as the length of the previous chapter illustrated. This whole chapter is therefore devoted to describing how the methodology was implemented as a research design. As stated at the end of Chapter Three, the approach chosen explores the emergent and recollected contexts of creativity that occur both *upstream* and *downstream* during the creative experience. The choice of methods reflects this approach, with a descriptive observation process to capture the *upstream* experiences, and more interpretively-oriented interviews to disclose the *downstream* ones.

The chapter is divided into two parts. This first part concerns the procedure for the data collection; the second part describes the analysis of the material. Each part has two sections.

Part 1: Procedure. A summary overview of the methods, process and people is followed by a description and justification for the research design: how the process and methods were shaped and implemented using a phenomenological approach; how the data was collected; and who were the participants.

Part 2: Analysis. A summary overview of the phenomenological analysis of the experiential data is followed by a description and justification for the analytical approach and how this approach was implemented.

Part One: The Procedure

Overview of Methods, Process and People

Creative thinking has been characterised as a dynamic, flowing process, but also as a discontinuous process, typified by intrinsic resistance and constraints. To understand how two seemingly opposed processes could both be recognised as central to the creative thinking process, this study's primary aim was to identify what, if any, relationship these two processes have to each other, and how this relationship is experienced as a person engages in creativity activity. In exploring this relationship, it is hoped that some light may be shed on how creativity emerges, on how new ways of thinking and experiencing are generated. This is the second aim of the study. To do this, the fieldwork needed to provide a context where semi-structured activities allowed participants to explore different types of creative experiences that simulated flow and resistance characteristics.

Freehand experiential drawing, as a form of *visual thinking*, was used as the primary tool for eliciting participant responses. These responses took the form of the drawings and of participant observations on their drawing process and experiences. Experiential artistic activities are suitable for exploring the creative and unpredictable, but consequently are difficult to fix in procedure or form. Therefore, the fieldwork used an unfolding approach that resulted in three phases of data collection, conducted over three months, with the first phase informing the structure, approach and content of the second and third phases, with regard to the strengths and limitations of the primary data collection instrument, the drawing workshops.

A criticism of past creativity research is that it has not sufficiently employed creative or non-verbal methods, leading to a lack of connection between the scholarly approach and the creative experience (Carter 2004; Rothenberg & Hausman 1976). Therefore, the fieldwork component of this research initially took place in the form of semi-guided art workshops - a series of freehand drawing exercises that emulated the processes of mobility, fluidity, constraint and resistance were given to participants to interpret and perform. A third, but lesser, objective of the study, was to see whether some types of drawing techniques elicited more creative experiences than others. Therefore, identifying specific types of drawing techniques that are easily accessible, non-technical and could be practised without supervision was a consideration when developing exercises specifically for the fieldwork,

bearing in mind that they could be also be useful for developing personal creativity outside of expert-led workshops.

The workshops as a whole provided a typical workshop environment conducive to creative practice and to allowing creativity to potentially unfold. There were two-hour workshops in both Phases One and Two of the fieldwork, four in total; the Phase Two workshops were a development of Phase One, designed to deepen the earlier experience and collect more data. During the workshops, participants made field notes describing their creative process and their drawing experiences. Phase Three consisted of semi-structured interviews, each approximately one hour. Additional methods used were researcher reflections in the form of post-workshop notes; audio- and video-recordings; background and debriefing questionnaires; and group discussion. Seven different types of method were used in total to provide a multimodal range of data from the three different phases of the fieldwork. However, the drawings and researcher reflections were used only to inform the design of Phases Two and Three.

Participants were volunteers, adults without training or specialised knowledge in creative practice and were drawn from a specific community. Twenty adults participated in the first phase. Ten people from this first phase participated in the follow-up Phase Two workshop, and nine people were available for the subsequent Phase Three interviews, which took place four to eight weeks after Phase Two. The participants provided feedback after both workshop phases, and this feedback was considered, along with the researcher's observations, when designing the structure and content of the subsequent phases of the fieldwork, in keeping with emerging nature of a phenomenological approach to research.

Description of the Procedure

Developing an approach to the research design

Phenomenological inquiry is not bound by fixed methods (Finlay 2009; Vagle 2014; van Manen 2006). Indeed, phenomenologists are fond of saying that "the phenomenon dictates the method" (Hycner 1985, p. 294), and therefore must be continually reinvented (van Manen 2006). Heidegger (1988) considers that genuine phenomenological method consists of creating the path, not in following one; therefore, method cannot be reduced to a general set of procedures derived from a theoretical framework but must launch from "the things in their appearing" (Finlay 2009, p. 9). The researcher must have an idea of what she is seeking but

remain open to what the experience, and the material that captures the experience are telling her.

Since the much of the validity of phenomenological explication depends upon the adequacy of a rich rendering of lived-through moments, captured like 'snapshots' of the process, a multifaceted workshop structure that used a combination of visual, verbal and written data collection methods was deemed an effective framework for exploring creative experiences (van Manen 2014). Such a workshop must reflect the open-ended and flexibly structured process identified as central to creative thinking, but should also proceed in accordance with a phenomenological methodology. For this reason, the workshop was framed as something more than a venue for research fieldwork. As well as an opportunity for participants to engage in a creative process of exploratory self-development through the arts, the participants were encouraged to adopt something of a phenomenological *attitude* themselves, if possible, to the workshops and its drawing exercises, in their role as observers and documenters of their own experiences. In keeping with the phenomenological *attitude*, the "foundation on which everything rests" (Finlay 2014, p. 122), they were encouraged to remain open and receptive to the type of exercises given, and open to how they interpreted the instructions, but also attentive to their own experiences of their process, as they drew. It was suggested they describe their experiences, not intellectualise or justify them, if possible, when jotting down field notes. By adopting this element of a phenomenological *attitude* themselves, the participants not only entered into the spirit of the study, they also had some freedom to shape their own process. Close observation of participant process formed part of the emergent design that guided the design of Phase Two workshop and Phase Three interviews.

The fieldwork, the two workshops and the subsequent interviews were designed so the phenomenon could emerge and be captured as it emerged, or as close as possible afterwards, by field notes, audio- and video-recording. It should be stressed that the purpose of the fieldwork was to provide the conditions under which creativity *could* take place, where certain types of creative processes could be experienced and responses that reflect the participants' immediate, lived experiences could be captured, as they were experienced, through field notes, video- and audio-recording. In other words, the workshops provided the conditions under which the phenomenon could emerge. It was not assumed that participants *would* have creative experiences, either generative or productive; only that the conditions where this would be possible had been put in place by the researcher. In keeping with the aim of allowing the conceptualisation of creativity to arise from the participants' experience, the researcher

remained open to how these emerged. The researcher assumed, however, that it was possible for experiences of creativity to emerge due to the way the drawing exercises were designed. As noted in Chapter Two: Origins and Contexts, the term 'creative' has two meanings: originative and productive, pertaining both to the possibility of new things being generated and something meaningful or of value to the creator being produced. The potential for both originative and productive experiences of creativity was made possible by the design of the drawing exercises, both as individual exercises and as progressions from the previous tasks.

The main instrument to operationalise the research question/s within a workshop framework was the Workshop Guide (see Appendix B), comprising drawing instructions and a suggested procedure for implementing them. The drawing instructions and the exercises were designed to embody the phenomenological approach of the 'familiar made strange' (as described later in Part One: About the Choice of Drawing Exercises)

About the workshop process

To gather participants for the research, hard copy and digital notices about a free experiential drawing workshop being run for research purposes were placed in the noticeboard and website of an organisation central to the particular community from which the participants for the fieldwork were drawn. The response to the notices produced 20 participants, split into two groups between the two Phase One workshops. From these, 10 people volunteered to participate in Phase Two.

Each workshop had a framework of three processes: expressing the experience; describing the experience; and reflecting on the experience. 'Expressing' was the drawing process, in response to open, semi-guided instructions; 'describing' was the documentation of the experience while drawing; and 'reflecting' was further documentation of any post-exercise thoughts. These three stages were not necessarily procedural or compulsory. The aim was to undertake naturalistic, workshop-based research, not a controlled study. However, as in any workshop led by an experienced professional, there must be some instruction, especially since the participants had come specifically for the purpose to be given help or support in their creative explorations. The workshop was therefore conducted as a class, but with the researcher acting as facilitator rather than teacher. As stated, the instructions always allowed for free interpretation on the part of the participant.

Experiential guidelines as to how to approach the drawing exercises with a phenomenological *attitude* were visible on a whiteboard, and occasionally the researcher drew the participants'

attention to these guidelines during the workshop. These guidelines took the form of questions, such as “Can you describe how you feel when drawing in rhythm”? or “Can you describe this experience from the inside?” or “Can you describe how it feels to add more blackness”? Participants could request technical advice, but there was no feedback given to individuals or the group as to whether they were carrying out the instructions ‘correctly’. It was stressed that there was no correct way to interpret the drawing instructions or the experiential guidelines.

These three processes were not necessarily unknown to the participants, since many experiential workshops use similar techniques, though not necessarily in this combination; but these processes were recommended as techniques that could help them to get the most out of the workshop for themselves. At all times, the researcher strove to find a balance between providing direction and allowing individual freedom of expression.

In an experiential workshop, creativity has the potential to unfold in each participant as a process. Participants were each engaged within their own process, though within a group process. However, the focus was on the individual process, and therefore *personal* creativity. The group element was there to encourage the feeling of being part of a process, but not being part of a group process. It was staged so that people had sufficient personal space, while drawing, to feel separate from others without feeling that they were isolated from them, and therefore under singular scrutiny.

About the workshop procedure

To accommodate the participants’ availability, both phases had two workshops each. The second workshop in each phase used the same exercises as the first one, though the spoken instructions differed in minor ways each time, in order to be responsive to the different groups. To engender a relaxed and somewhat familiar atmosphere and to make the participants feel at ease, the workshops took place in a room familiar to many of them, with paper, pencils, charcoal and other materials set ready for them. Participants were carefully spaced in the room, so that they could not easily see the work of others yet still felt part of a group and not individually under the eye of the researcher. They were then introduced to the workshop purpose and procedure and provided with experiential guidelines, as described in the section above, before the workshop proper began.

All drawing instructions were spoken, though occasionally demonstrations of exercises were done on a blackboard as the researcher spoke. Any such demonstrations were then erased

before the participants began the exercise. It should be noted that the spoken instructions were not fixed in advance, though rough guidelines for the procedure of the whole workshop were made (see Appendix B: Workshop Guide). In keeping with the emergent process, the researcher remained flexible and responsive to how the workshop unfolded, and she adapted her words and actions accordingly.

In the spirit of a workshop-style experience, participants were allowed to interact with the researcher in her role as facilitator, take notes, have drinks or breaks when needed, request more drawing materials, ask for technical advice or cease drawing if they so desired. However, as in a teaching context, casual conversation between participants was not encouraged.

During Phase One, 20 participants completed short questionnaires about their previous creative experiences and their personal relationship to creativity before and after the workshop (see Appendix A: Background Notes and Debriefing Notes). When the workshop was finished and the data collected, participants were given the option of a short, free art class, similar in style to the workshop but with feedback from the researcher in a teaching role.

In the follow-up Phase Two workshops, there were no questionnaires. A group discussion, as requested by the participants after Phase One, took the place of the Debriefing questionnaire used in Phase One. However, participants were still requested to write field notes during the workshop on their experiences.

About the Methods

About the choice of experiential drawing

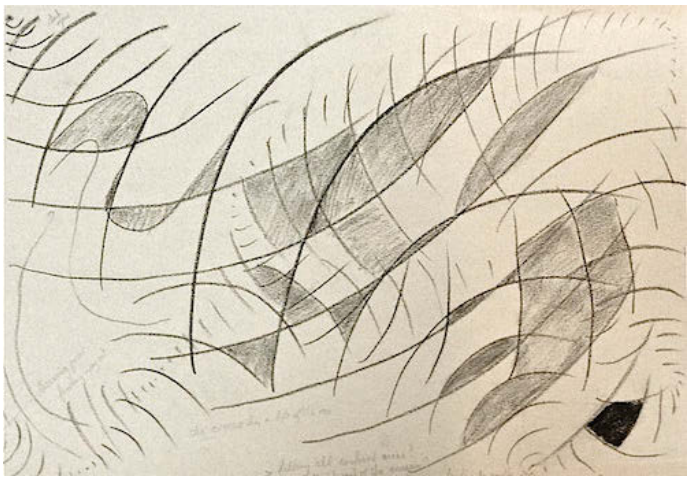


Figure 4.1. Example of experiential drawing from the fieldwork

Drawing is a form of *visual thinking* (see Chapter Two: Part Three) and therefore very effective for embodying cognitive processes. Experiential drawing (see Figure 4.1) is a form of freehand drawing that is exploratory and non-representational, in that it requires one to switch off analytical thinking and explore the "unconscious imagining of things that are not physically present but are sensed and hinted at by traces in the drawing" (Montarou 2012, p. 51). It aims to focus only on each step of the process, without concern or even pre-intention for the result. It has something of a problem-finding, 'wandering without goal' quality, and is suited to revealing ambiguous or uncertain information. Further, it is not pre-meditated, whereas representational drawing techniques, such as life drawing, restate what is already known and usually require some technical skill. Most forms of experiential drawing do not require technical skill. Of more importance for this study is that experiential drawing, as the name connotes, prioritises the experience of drawing over the final product. What a drawing looks like, and whether it would be deemed creative by current societal values or by the researcher herself, was of little importance.

Different forms of experiential drawing were used in the workshops, but one representational set of exercises was included. This was for familiarity's sake, since freehand drawing is strongly associated with drawing objects. However, this set of exercises was changed from being a perception exercise into an experiential one, by using an unfamiliar observational technique

the researcher calls 'beholding' (the technique is explained later in Part One: About the Role of Attentiveness).

Experiential drawing is not doodling, though it may sometimes appear like that to the observer. It requires an attentive, though not necessarily highly focused, state of awareness (Montarou 2012), whereas doodling is an absentminded activity. Experiential drawing originates in response to some internal or external experience. In this study, the participants were provided with the space and impetus to engage in experiential artwork, using drawing techniques that are generally well founded in the Visual Arts, such as one might find in any drawing class. As stated earlier, the participants were encouraged to remain open to how they responded to any given directions. In this way, the drawing exercises used an open, interpretive approach that began always with guidelines as to how to start the drawing, but always allowed for free interpretation of these guidelines as to how the drawing/s progressed and when, if at all, they were regarded as complete. There was no pressure to complete any drawing, and the amount of time given to each exercise was adjusted according to how the workshop progressed. Participant progress was carefully observed to allow for adaption to their pace or response, in order that enough time was allowed for deep engagement in the more complex tasks. In this way, the method was incorporating something of the phenomenological aim of creating a path rather than following one.

About the choice of drawing exercises

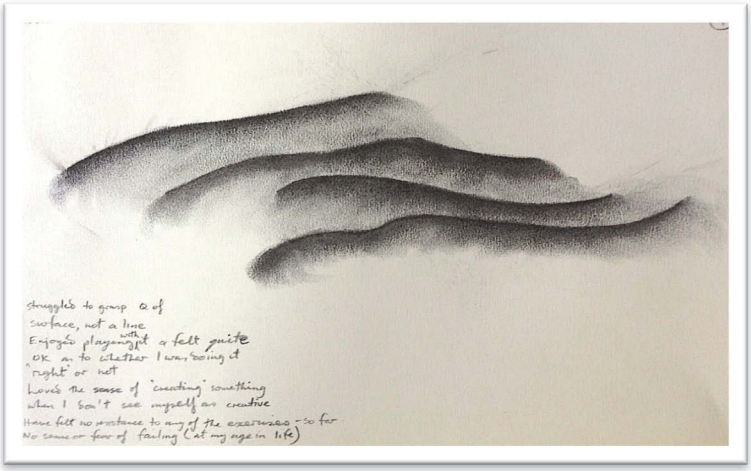


Figure 4.2: Example of surface drawing technique using charcoal

The drawing tasks tried to embody elements of the research questions, in that they simulated the mental processes of different qualities of movement associated with creative thinking: flow, interruption, direction change, dynamic change, choice, pause, ambiguity, forming and dissolving. As discussed in Chapter Two, the Literature Review, drawing embodies the very qualities that characterise the act of thinking. But the line in drawing has "no existence independent of movement" (Marks 2009, p. 230), so the drawing exercises included a range of techniques to explore the 'life of the line'; that is, the dynamic qualities of line. For example, one exercise that playfully embodied 'taking a line for a walk' asked participants to draw skipping lines, strolling lines, resting or confused lines. To augment the embodied nature of drawing, the tactile as well as visual quality of different drawing mediums was utilised. For example, a charcoal medium was used in one exercise so that participants could experience the physically expressive qualities of using a surface technique (see Figure 4.2). Most of the exercises could be described as using an exploratory problem-finding approach but there was also one specific problem-solving task in order to assess how participants responded in the different contexts and what experiences they had with different types of tasks.

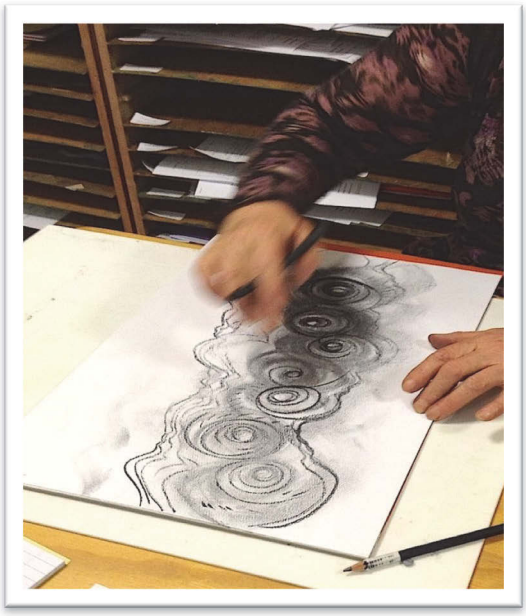


Figure 4.3: Example of free composition

In all, five different types of drawing exercises were organised into sets in order to broaden the range of stimulating creative experiences and promote gradual immersion into the workshop experience (for details of the exercises, see Appendix B: Summary of Drawing Exercises, Phase One and Phase Two). In each of the five sets of exercises, 'the familiar was made strange' by taking recognisable ways of using a pencil or charcoal stick, such as drawing straight or wavy

lines; then making the task novel or different in some way by turning this drawing into a free composition (see Figure 4.3). In this way, the participants were led each time from known into unknown territory in the world of drawing experience, where a task as familiar as drawing a straight line could suddenly become new and different, opening the participants to seeing the familiar with new eyes.

There was a preliminary exercise in each workshop designed to gather the participants' attention and encourage openness. This initial task was then followed by the five sets of drawing exercises, each incorporating different visual and tactile experiences, as described above. In Phase One, each of these sets was comprised of three to five variations on the initial exercise, with the final exercise in each set a free composition based on the earlier exercises, allowing for greater self-expression or creative intuitions to emerge. However, in Phase Two, each set was a direct development of the previous set, allowing for less variation in the type of exercise (and therefore the variety of creative experiences) but the possibility of a deeper, more intense engagement with each task, in keeping with the aim of having a second round of workshops.

Participants were allowed from 10 to 30 minutes to do each set in Phase One, 20 to 30 minutes in Phase Two, there being fewer exercises in most Phase Two sets than in Phase One. In Phase One, the sets became longer as the workshop progressed, the complexity of the exercises increased and the participants acquired different skills, allowing them more opportunity for free expression. In Phase Two, they were able to progress through each set with much less direction from the researcher and work at their own pace. For example, in Phase Two, one participant might spend 20 minutes on one exercise in a set, while another completed four exercises from that set in the same time. In Phase Two, participants had the benefit of familiarity with both the tools and drawing techniques, enabling them to work with deeper engagement and more skill. A brief summary of the content, instructions and purpose of the different exercises can be found in Appendix B: Summary of Drawing Exercises, Phase One and Phase Two. There is also a complete set of spoken instructions for each set of drawing exercise there.

Despite using specific instructions to introduce each set of exercises, it should be reaffirmed that these were instructions were open-ended guidelines only on how to begin each exercise. How each participant interpreted and implemented these guidelines was not directed or monitored by the researcher in any way, other than to conduct the workshop responsively to the overall group process. The free, playful, even experimental nature of the exercises was

stressed. Consequently, individual drawings from the same set, the same exercise, could differ greatly from person to person, especially in the latter stages of the workshop (see Appendix C: Participant Experiential Drawing Examples). The approach to drawing described here aimed to reflect the nature of creativity itself (as described in Chapter Two: Creativity's Conceptualisation) as something new, original or different, yet always arising out of, or having recognisable origins in, the familiar and known.

About the workshop tools

Apart from three different types of drawing paper, each participant was provided with a drawing board, soft and hard drawing pencils, a pencil sharpener, charcoal pencils, charcoal sticks, a soft cloth and a small notebook for the field notes. This gave them a range of tools to experiment with. The charcoal sticks were made of uncompressed charcoal, it should be noted, which is a very soft, flexible medium, suitable for rubbing and creating surfaces of charcoal as well as lines. Hand, fingers, stick and even the cloth were used to move the charcoal round the paper. No erasers were provided.

About the choice of field notes

Freehand drawing has been cited for its ability to capture "stop-motion glimpses" (Arnheim 1993, cited in Schenk 2005, p. 202) of creativity in flow. However, the drawings themselves were not the primary source of data used for the explication. Rather, the field notes made by the participants were considered more valuable and productive. Field notes can capture stop-motion glimpses of the thought process while creativity is in flow, but they articulate this process with words rather than lines. We hear the inner voice of the participant and do not rely on subjective interpretations or judgments of the artwork by the researcher as to whether a work is creative or not. The field notes were the participant responses to their drawing experience, jotted down as they drew or just after they had finished drawing, while the drawing experience was still living in them.

Since the aim of phenomenological research is to "borrow" (van Manen 2014, p. 313) other people's lived experiences, how the participants experienced the drawing process and the workshops in general, were of primary concern to the researcher, not what they produced. Although such drawings could be a source of captured, non-verbal, creative experiences, interpretations would turn the research into the researcher's experiences of the drawings, not those of the participants. Participants were asked to describe their experience of the process of the drawings, not express their experience through drawing. Although these two processes are not entirely separable for the participant, the focus of the research was on how the dynamic

and expressive qualities of drawing were experienced and how the participants were able to articulate this. It should be stressed that there was no intentional art therapy or evaluation of technical skills conducted at any time during the fieldwork or subsequent explication.

At the beginning of each workshop, participants were given guidelines about how to use field notes to document their experience during the workshop (see Appendix B: Workshop Guide). Blank booklets were provided to each participant, but it was suggested it might be less interruptive and more immediate to make notes directly on their drawings (see Figure 2 as an example of this approach). This practical approach is often used by professional artists and designers for capturing essential data about a project work during its preliminary stages. Examples of field note documentation, both in booklet and on the drawing, can be seen in Appendix C: Participant Field Note Examples.

As discussed in Chapter Three: Argument for the Approach Revisited, both the field notes and the Phase Three interviews provided the core of data for the explication stage of the research. The field notes aimed to capture the creative moment in the act, in its freshness, whereas the interviews required a re-immersion in the experience. Although the phenomenological interview is the most common method of eliciting lived-through experiences (Laverty 2003), the researcher hoped that the field-note method could capture the more ephemeral aspects of this complex phenomenon. Therefore, the field note was the tool for eliciting *upstream* experiences, the interview for the *downstream* recollection of the experiences.

About the interviews|

There were two interview techniques used during the one-hour interviews in Phase Three. The phenomenological interview is an informal, interactive process using open-ended questions, aimed at eliciting a full description of the interviewee's experience of the phenomenon. However, van Manen (2014) distinguishes between the phenomenological interview and the hermeneutic one: the first gathers the experiential narrative data drawn from the *lifeworld* of the participant; the second "seeks assistance" (p. 317) in interpreting the original material and is explicitly data interpreting. (It also may play a verifying role, as the participant reflects on her earlier description). Although these two techniques would usually be conducted separately, both forms were used within the one interview period in this research in order to best facilitate the re-immersion into the workshop experiences. The intention was that the participants would be led from remembering to recalling, then to reliving the drawing experiences, by first remembering the concrete aspects of the workshops, then recalling their

general impression of the drawing exercises, before using the original material, the field notes and drawings, to draw them more deeply into their lived experience.

The practice of phenomenology assumes an everyday as-it-is-lived familiarity with the type of experiences to be characterised (Vagle 2014). It does not usually concern itself with trying to describe an experience, as it is being experienced, because we are already somewhat *downstream* of it, even in the act of describing. It draws rather on the familiarity of having had that type of experience multiple times. A phenomenon such as creativity, however, is not such an experience. Even to creative professionals, to use the modern appellation, creativity is not necessarily a given in everyday life. By its very nature, it is a phenomenon that belongs to the special, unusual or even original moments of human life. It cannot be described as familiar since familiarity suggests processed and recurring forms. The creative intention is not something we assume we have a natural attitude to. For this reason, the interview method of eliciting experiential accounts in story or narrative form may not be the most suitable technique to investigate such a phenomenon. "One can live or tell; not both at once" says Iris Murdoch (1953, p. 11, cited in Saevi, 2013, p. 6). The telling of lived events is "to recall the lived in the shape of a memory," (Saevi 2013, p.6). Merleau-Ponty (2002) asserts the phenomenologist should be aiming for a direct description of the world of "as it is" (p. vii), rather than as it is remembered. Collecting experiential accounts in pre-reflective terms is already difficult, but can a recollection be as close to the original experience as a direct description? It was primarily for this reason that the participants were shown their drawings and field notes during the interview, in order to lead them from recollection back into reliving.

About the interview process

The interviews took place where convenient for the nine participants who agreed to be interviewed, either at home or at the workshop venue. During the interviews, a participant first offered general recollections, those first memories that sprang to mind; then viewed her drawings with the accompanying field notes in order to facilitate recollection of each exercise. She was then asked if there was more to add to her first general impression of the overall experience. This threefold structure of visiting the whole of the experience, the parts and then the whole again, deliberately reflected the phenomenological aim of seeing the whole through the parts.

The interview proper was preceded by a short attentiveness exercise, to help the participant relax and put aside thoughts or feelings about their other current activities (for more details,

see The Role of Attentiveness, later in this section). The first recollection of the workshop was part of the phenomenological interview, as was the final recollection. The viewing of the drawing and field notes, which helped the participant relive the experience, formed part of the hermeneutic interview. The whole process concluded with a debriefing stage, which allowed the participant to ask questions about her artwork or voice any concerns. Depending on the participant's interests, this final stage involved conceptual discussions on the nature of creativity and art, as well as suggestions for developing skills. Again, the structure was flexible and responsive to the participant's needs, not strictly imposed, allowing her to gradually re-immerse herself in her recollections. The details of this whole process can be seen in Appendix B, Table B.3: Interview Process, Phase Three.

About the other methods

Audio- and video-recording were the two other methods used as a form of direct researcher observation during the workshops. As the researcher was engaged in facilitating the workshop and responding to its emergent process, she could not take field notes, so the recordings provided a substitute. The recordings provided audio and visual feedback on the workshop process that informed the design of the subsequent phases of the fieldwork. However, the video-recordings also captured the non-spoken word, those gestures and body physiognomy that embody the word (van Manen 2014), material that was to prove significant for the analysis.

More feedback specific to the participants was collected using two questionnaires: the Background Notes were completed before each workshop; the Debriefing Notes after (see Appendix A for images of these documents). The first document provided the researcher with information about each participant's conception of and relationship to creativity; the second reiterated these questions and gave the participants an opportunity to provide feedback about the workshop. In keeping with an emergent approach to the overall research design, this input from participants after Phase One, as well as the researcher observations of the video-recordings, informed the content and process of the Phase Two workshops. Researcher observations also provided verification of some participant responses during the analysis.

This emergent approach also instigated an unanticipated method, a group discussion at the conclusion of the Phase Two workshops. The participants specifically requested this discussion as part of their exploratory self-development through the arts; it was not part of the researcher's original intentions. To keep it focused, the participants were asked to describe their experiences, but otherwise there was no formal structure to the discussion, which took

the form of a relaxed conversation, sometimes descriptive, sometimes reflective and sometimes conceptual. Participants volunteered their thoughts, feelings and experiences to the group, while the researcher monitored and recorded them. People ate snacks and left when it suited them. It lasted approximately 40 minutes and not all participants offered contributions.

About the data collection

A multimodal approach to data collection was required in order to explore the phenomenon of creativity in its parts and in their 'belongingness' to its whole. By doing so, it was anticipated the collected material would potentially generate sufficient "experiential detail, concreteness, vividness, and lived-throughness" (Van Manen 2014, p. 297) for rich, thick experiential *descriptions*. In this way, the research questions were also addressed specifically in their parts through the field notes, yet also holistically through the interviews for their belongingness to the general experience in the *lifeworld* of the participants.

The three phases of multimodal data collection took three months. Phases One and Two generated the freehand paper-based drawings that were the primary expression of the experiences; the participant field notes that were the primary source of material of their *upstream* experience; two questionnaires and an audio-recording of the group discussion that provided some insights into the *lifeworld* of the participants; video-recordings that documented non-verbal responses such as gestures; an audio-recordings of any dialogue between individual participants and the researcher, and of the workshop in general. Phase Three generated semi-structured interviews that produced a mix of descriptive and reflective material, as well as more audio- and video-recordings. These interviews provided the substance of the participants' *downstream* experience. Table B.4 (see Appendix B) provides a tabular summary of all data collection methods, tools and purposes in relation to the research questions and research design.

About the participants

Since the aim of phenomenological research is to 'borrow' other people's firsthand experiences, rich material from a few productive individuals is more important than from large numbers of experiences. This study used purposive sampling, seeking out those who were both open to experiencing the phenomenon in question and could communicate their experiences (van Manen 2014), either in written or verbal form. Adults over the age of 18 years from any educational background and demographic were accepted. The age range of

participants was from approximately 25 to 75 years in age, both male and female. Since this study was conducted in the environs of a community primarily focused on Steiner education, personal development and the Arts, it was anticipated participants would be comfortable and familiar with articulating and sharing their experiences.

A certain empathetic rapport on some level is desirable when accessing the *lifeworld* of others, so participants needed to have some interest exploring their own creative development in an experiential setting and be open to an experiential approach. They had to value creativity and have the *intentionality* required to explore their personal creativity in a workshop context. To this end, the notices advertising the drawing workshops were framed as opportunities to develop *personal* creativity, for people with no professional training or specialised knowledge in drawing of any form. It should be noted, however, that although none of the final participants had professional training in drawing or in the visual arts in general, they had all previously attended experiential workshops involving creative activities in some form, and so had some familiarity with the type of workshop presented in this research context. According to the data from two questionnaires completed at the workshops, all came with an intention to find new ways to develop their creativity for the purposes of self-development. All participants stated they had some prior creative experiences, usually artistic, but also problem solving, and these experiences had taken place at school or in their workplace. Some regarded themselves as already quite creative, but all identified as wanting to become more creative, for personal rather than professional reasons.

The study particularly wanted participants who were not creative professionals in order that the experience of being creative could be 'made strange' and unfamiliar. More usually in phenomenological research, participants who are very familiar with the phenomenon are desirable, since they will have the sufficient depth and breadth of experience of the phenomenon required to generate rich material. However, professionals and even students in the creative arts, have practised techniques in creative expression, and can easily fall back on their own conceptualisations of creativity or use routinised frames of reference, when challenged with ambiguous or uncertain situations. This may inhibit their capacity for new and novel experiences. They may also have practised ways of framing and expressing their creative experiences that can stifle the freshness of the *description*. Consequently, the collected material may not have the 'quiver' that can disclose that direct and unreflected contact with the lived experience so desired in this study. This is not to suggest that such *descriptions* have less validity than those of people without such familiarities. Rather, it comes

back to the purpose and intention of the study. Much of the existing research on creativity has used professional writers, designers or artists as the source of material, which may provide great insights into the *lifeworlds* of such people, but their extensive and professionalised experiences may have little freshness. Too much intellectual knowledge of a topic may have 'generic-ised' their recollections. For this reason, it was anticipated that from among those who volunteered in response to the original notice, the participants accepted for this study would bring the requisite freshness to it.

About the participant community

The community from which the volunteers were drawn is one known for its emphasis on developing creativity in educational settings and one with which the researcher has had a long association. The Rudolf Steiner philosophy attracts a wide demographic of people interested both in the philosophy of its founder and in its 'daughter' movements (such as Waldorf education). Many people in this community know little about the actual philosophy but are familiar with its experiential approach to self-development through the arts. Since phenomenology is focused on the individual experience, regardless of culture, being part of a community interest in Steiner's philosophy was of lesser importance than their willingness to engage in and share their creative experiences. Enrolling participants from this community, where the researcher was known as an experienced adult educator and visual artist, also had the benefit of trust and friendliness, an important factor in collecting experiential material from people who may feel uncomfortable or challenged by the phenomenon being researched (Laverty 2003; van Manen 2014). However, any concerns about feeling pressure to see the researcher in a teaching role 'do the right thing', were met by encouraging them to be free and exploratory in their interpretation of the instructions given for each exercises (see Appendix B: Workshop Guide, for details about the workshop procedures).

About the researcher as facilitator

For the phenomenological researcher, finding the balance between being a participating facilitator and an objective observer requires accommodating a level of comfort and discomfort, of being at-home and yet not at-home in the world. According to van Manen (2014), when a researcher participates in the *lifeworld* of her participants, she can engage in a form of close observation that acts as a method of collecting material from others, (a concept not dissimilar to the Goethean approach to observation). However, the balance between observer and participant must be held carefully in order not to create an artificial environment for the participants. Although the participants in this research were aware of being studied,

maintaining a naturalistic workshop environment was crucial to their being able to engage fully in the workshop experience without feeling vulnerable. Using the video-recordings as a proxy for researcher close observation was invaluable because it meant the researcher could concentrate on facilitating, rather than observing, during the workshops. Throughout the whole process of collecting data, the trust between researcher and participants was supported by assuring the participants that their personal experience was fully valid and true for each individual, in accordance with the methodology, and that their artwork - the drawings - were in no way being evaluated or interpreted, either for artistic or creative merits.

Two techniques to facilitate a phenomenological *attitude*

This subsection describes two techniques drawn from fields outside of Social Sciences were employed to facilitate the phenomenological attitude and adapted for this study.

The role of attentiveness

As it is in all cognitive tasks (Runco 2014), attentiveness – paying close and engaged attention – is an essential component of experiential drawing; the drawing should not turn into non-attentive forms of doodling. For this reason, the role of attentiveness, while engaged in drawing, was specifically addressed in the design of the research and therefore in the preliminary directions given to the workshop participants. It was important that their creative intentions could be maximised in the circumstances of being asked to create in a set time and space, in a group environment, when they were not practised at being creative on demand, so to speak. They needed to feel comfortable with the situation and at ease with the drawing tools and media, but also able to engage their concentration within a relatively short space of time. To support the participants' ability to do this, a brief attentiveness exercise opened each of the three phases of the fieldwork, acting as warm-up exercises. These exercises were adaptions of exercises used by the researcher in her artistic practice. Three different types of attentiveness exercises were used: in Phase One, motor skills and dynamic movement; in Phase Two, non-focal attentiveness and centred concentration; and in Phase Three, a deep-breathing exercise (see Appendix B: Drawing Summary and Interview Process for more details).

The role of *beholding*

As stated earlier, in Phases One and Two, a technique called *beholding* was recommended to the participants to encourage a close, almost immersive, observation during some of the drawing exercises, and a conscious process of embodying the drawing's dynamics and

gestures. The researcher had previously developed this technique for teaching students how to contemplate and draw from fine art. It was inspired by Goethe's use of the term 'beholding' but was adapted to fit the needs of this study. It is a structured, four-step technique of observing an object in its wholeness: Gaze at the object with unfocused eyes, trace the form with the eye, trace the form with the hand in the air, then draw it from bodily memory, without looking at the original image. The technique facilitates deeper engagement, focuses on a creative rather than perceptual approach to observation, and encourages a more embodied approach. It could be described as a drawing observation technique that concretises the phenomenological *attitude*. In any exercise that required an observational technique, such as the representational drawing exercise in Phase One and many of the exercises in Phase Two (see Summary of Drawing Exercises, Phase One and Phase Two), the participants were encouraged to use this *beholding* technique and were given some brief instruction on this process beforehand. However, the *beholding* technique was given simply as a tool to enable a less cognitive and more embodied response to drawing; how the participants interpreted the instructions for the technique and how they implemented these instructions was personal and, consequently, variable.

Preparing for the analysis

After each phase of fieldwork, each type of material collected was reviewed and sorted according to its purpose. Audio- and video-recordings provided insights into the structure and content of the following phase, as did the field notes and reflections made by the researcher. Participant feedback was given consideration, but no material was transcribed or analysed before the fieldwork stage of the study was fully completed.

In preparation for the next stage of research - the analysis - the questionnaires were collated and audio-recordings of the workshops and the interviews were transcribed as close to the original as possible. Silences and significant non-verbal communications were also noted. The video-recordings proved especially useful for documenting the non-verbal elements of the fieldwork process, such as the quiet concentration of the workshops, the gestures of participants while drawing, the silences during the interviews, and the hand/body gestures that punctuated and articulated the silences in non-verbal ways.

As previously stated, not all the material collected was ultimately analysed. Not analysed were the drawings; the researcher's post-workshop reflections that guided the structure and content of Phases Two and Three and provided verification of participant responses at times;

and the audio-recordings that generated the transcripts of the spoken instructions and verified the workshop process.

Part Two: The Analysis

Overview of the Analysis

As stated at the end of Chapter Three, this analysis was conducted within the framework of Merleau-Ponty's existential, embodied phenomenology, which draws on both the Husserlian concern for *essences* and the interpretive issues that concern *hermeneutic* phenomenologists. It was directed by the phenomenological *attitude* described in Chapter Three: Methodology and used a strategy responsive to the emerging nature of the experiential material itself. It should be stressed that Merleau-Ponty was a philosopher, not a practitioner of phenomenology in the sense of research practice; therefore, he does not describe an analytical procedure in practical detail. Such a move would not be in keeping with the inchoative, imaginative mood of his philosophy.

The analytical procedure devised beforehand was therefore a scaffold only; it aimed to address the *upstream/downstream* research design, but it was continually "invented anew" (van Manen 2006, p. 720), to meet the 'things in their appearing', in order to be responsive to the data and to, hopefully, capture something of the natural 'quiver' of the unreflected, direct experience, as Merleau-Ponty might say[12]. In order to do this, the researcher drew on analytical approaches of different streams of phenomenology.

Description of the analysis process

To briefly recap the analysis process described in Chapter Three: Part Two, Phenomenology in Practice, there are four processes foundational to phenomenological analysis: the *reduction*, the *immersion*, the *explication* and the *description* (Finlay 2014; Seamon 2000). The *reduction* launches the processing of the experiential material; the *immersion* embeds the researcher in the phenomenal world; the *explication* reveals its essential elements or qualities; and the *description* seeks to disclose the original experience. During these processes, phenomenologists engage in a number of levels of analysis. They *intuit* a general sense of the phenomenon before looking at particular experiences, they extract essential or invariant

[12] "… we need to find access to life's living dimensions while hoping that the meanings we bring to the surface from the depths of life's oceans have not entirely lost some of the natural quiver of their undisturbed existence, as Merleau-Ponty might say" (van Manen 2014, p. 313)

elements at an individual, then general level, before exploring them in relation to the general phenomenon and, more specifically, to the research questions (Finlay 2014; Halling 2008, in Finlay 2009). This is a recursive, non-linear process, as the researcher moves continually between the particular and the general (Seamon 2000), between wonder and intuition, between the experience and reflection upon the experience (Halling 2008, in Finlay 2009).

The Analysis in Practice

The procedure: how it unfolded

A whole/parts/whole approach guided the procedure for analytical steps outlines below. As the first step, this researcher *immersed* herself into the phenomenal world of the participants, employing the phenomenological attitude: she listened to the interview audio-recordings; watched the videos of both workshops and interviews; and read through the written texts of the field notes and questionnaires. This process was repeated several times before any transcriptions were made. First impressions of the data were noted but no attempt at analysis or interpretation was made at this point. In keeping with maintaining a phenomenological attitude throughout the analysis, a short *cognitive breathing* exercise was used each time to clear the mind and engage an open, attentive 'gaze'.

This *cognitive breathing* exercise was developed by Zajonc (2009), as a contemplative technique that facilitates the kind of active receptivity required for implementing a phenomenological *attitude*. It is a structured, disciplined method for developing mental silence, receptivity and attentiveness, in order to overcome our natural desire to immediately cognitise and order our experiences. *Cognitive breathing* develops the ability to shift at will our awareness between a focused attentive state and an open receptive one. The researcher used this technique during the fieldwork to help her engage a phenomenological *attitude* during interviewing and while processing the data.

For the next step in the *immersion*, the interview transcriptions were addressed. Since the field notes, by their very nature, were the most fragmented parts of the whole experience, it was decided to begin the analysis with the interview texts, since this researcher believed these would most fully express the participant *lifeworld*; its *thematic* meanings would provide an early sense for the wholeness of the creative experience. This did not quite eventuate according to plan, due to the fragmented quality of these interview texts (this issue will be discussed more fully in About the Interviews).

The plan was to use a descriptive analysis method for the field notes and a more interpretive approach to the interviews, the field notes being the *upstream*, direct experience (or as close as one can come to this) and the interviews as the *downstream*, recollected experience, a picture of the *lifeworld*. However, in practice, the boundaries between the *upstream* and *downstream* experiences, and between the descriptive and interpretive approaches, could not be so clearly identified. The field notes were *explicated* using an approach based on a descriptive method with an existential focus; the interviews were loosely and thematically delineated. The interviews were not reduced and pruned line by line, but rather explored in their wholeness for undisclosed *lifeworld* meanings, in the context of the lived experience of creativity during the workshops, as it was remembered and recalled. The group discussions, video-recordings and questionnaires were also treated in this way (as well as providing verification for the elements arising from the field notes and interviews). By contrast, the field notes were rigorously and repeatedly delineated in their parts, down to the smallest units that were meaningful. They were then reconstituted back into 'whole' experiences for further contemplation and *intuiting*, before being pruned and delineated again. *Explication* was a gradual, circular process that ultimately resulted in disclosing both the essential structure and texture of the experience of being creative (before any thematisation occurred). The field notes were also examined for hidden meanings in relation to the existential issues.

After determining early *themes* from the clustered meanings elicited from interviews, preliminary attempts were made at writing phenomenological *descriptions*, in the manner of van Manen's (2014) "textorium" (p. 358). However, the fragmented recollections in the interview texts forced this researcher to reconsider her approach, replacing the individual narratives with general thematic portrayals, illustrated with excerpts from the raw data. The field note *explication* was also used extended descriptive portrayals of the essential elements of the creative experience, clustered according to both existential *themes* and the research questions. From these portrayals, the core findings of this research were elicited.

Steps of the analytical procedure

Hycner's *descriptive* method (1985) provided the basic steps for the procedure but was "invented anew" (van Manen 2006, p. 720) in order to be responsive to the data and research design. This method was initially chosen with the participant field notes in mind because the field notes reflected the research questions orientation to the structure of the creative experience as a process, but it was adapted to accord with both Merleau-Ponty's ideas as philosophical underpinnings and the needs of the research design. A looser version of the

same method guided the interview texts analysis, but this time oriented towards creativity as a whole experience in the *lifeworld* of the research participants. For this reason, the set of steps outlined in Table 4:1 contain contradictory elements, contradictory in the sense that there are elements and terms from both *descriptive* and *interpretive* approaches; some of the terminology reflects this researcher's choice as most illustrative of her unfolding method. The discussion on methodological creativity in Chapter Three flagged her decision to take this mixed approach. Table 4.1 delineates the steps taken, while the next section in this chapter, Analysis of the Texts, describes how the steps were implemented. Again, this was a recursive process, particularly in the *immersion* and *explication* processes. Table 4.1 is simply a linear representation of this.

Table 4.1: Analytical Procedure

Process	**Description**
Phenomenological *attitude*	Preparing a space of attentive receptivity (draws on Merleau-Ponty's (2002) 'wonder' and Zajonc's (2009) *cognitive breathing* technique)
Reduction	Disclosure of own presuppositions through writing about own experience (using both a *descriptive* process and an *interpretive* writing exercise)
Immersion	Repeated *dwelling* on the data for a sense of the whole, then for the parts, then the parts in the context of the whole ('dwelling' is a concept used by both Finlay (2014) and Seamon (2000))
Transcription	Verbatim transcriptions of any verbal data collected
Reductive Analysis	Line by line analysis: pruning non-descriptive or irrelevant content from the data texts
Explication	Extracting elements or statements that elucidate the phenomenon through *eidetic analysis* (draws on Merleau-Ponty's indications) and imaginative variation
Clustering	Clustering the essential elements of the experience into groups of meaning in the context of existential givens (existential phenomenology)
Essential Meanings	Determining essential meanings or *themes* from the clustering in the context of the research questions
Description	Writing descriptive portrayals of the *essences* in this study (draws on Moustakas' *descriptive* approach)
Contextualisation	Relating the parts to the whole, to both creativity and creative processing
Synthesis	Composite summaries in relation to the experience and research questions

The next section elaborates on particular issues that arose during the analysis in relation to the different types of data collected.

Analysis of the Data Texts

About the *reduction*

The *reduction* is initially launched by the phenomenological *attitude*. However, Merleau-Ponty (2002) replaces the business-like *bracketing* of descriptive phenomenology with the cultivation of a kind of receptive, attentive awareness he calls "wonder" (p. xxiv), which allows us to break from our natural attitude and see the world with new eyes. Nevertheless, he considers that some form of self-apprehension is necessary, in order that we are aware of our own presence, as well as that of the 'other', that which comes to meet us from the participants (Finlay 2009). This requires a reflective approach that is self-aware yet always turned towards the experience.

To develop this open, contemplative yet attentive attitude in practice, the researcher first took careful steps to uncover her own experiences herself. Although Merleau-Ponty refutes this type of *bracketing*, this researcher thought it could be a fruitful exercise, creativity being so unconsciously embedded in her own *lifeworld*. However, a list of her presuppositions about creativity was less revealing than a subsequent written *description* of her experience of her creative process. This latter exercise disclosed how much she was 'storifying' her experience with professional idioms, and how little quiver of unreflected experience was actually present. There was a deeply accustomed, taken-for-granted conceptualisation of creativity present behind the words, which suggests that the cultivation of a phenomenological attitude may require a deeper probing of one's natural attitude than techniques such as *bracketing* suggest.

To further this reflective task, Zajonc's (2009) *cognitive breathing* technique, mentioned above, was used to cultivate the openness and freshness required each time the data was addressed. Although this may sound artificial, such mindfulness-oriented exercises have proved effective for both training attentiveness and receptivity. A few minutes spent in purposeful contemplation before 'meeting' the data proved a helpful exercise in maintaining a fresh attitude to the task. This practice also assisted in drawing on the particular form of intuiting required to 'see into' the data during the *immersion* and *explication* processes.

About the interview analysis

The researcher began the first steps of the deeper immersion into the data with what is generally regarded as the richest source of *lifeworld* experiences, the interviews (Osborne 1994; Wilson 2003). In the *immersion* process, one seeks to enter the phenomenal world of the participants and become 'at home' with the data. The aim is to gain such intimacy with the material that the phenomenon begins to reveal itself to the researcher through feeling her way into it. Though an initial reading of the field notes promised moments of concrete, detailed experience, the interviews spoke more immediately of the human experience, so appeared an ideal starting place for becoming at home with the participants. This *immersion* continued through the reading and listening steps into the early stages of the reductive analysis, as the researcher moved between dwelling and reflecting on the data.

As stated, this researcher's intention was to begin the immersion into the interviews, so the essential meanings elicited from the participant *lifeworld* could guide the analysis of the fragmented field notes. This process began with making verbatim transcriptions of the audio- and video-recordings of the interviews, including notable silences and inarticulate communications; they were not yet 'cleaned' of seemingly superfluous material. It immediately became obvious that the frequency of such non-verbal moments could be significant: the audio-recordings revealed many silences and inarticulateness; the video-recordings revealed that these silences were often filled with gestural hand movements that tried to describe what the participants wanted to express when words were inadequate. Even after cleaning the transcripts of these non-verbal communications, now called the Interview Texts, the researcher realised the interviews lacked the narrative continuity considered normal for recollective material, and indeed the detailed substance essential for disclosing the phenomenon (van Manen 1990, 2014). Preliminary attempts at *descriptive* writing seemed to confirm this.

Yet were the interviews inadequate to the task? There was vividness and concreteness to them in the form of gesture and inarticulateness that the field notes did not capture as evocatively as the video-recordings of the interviews. But there also needs to be a 'lived throughness' of the experience, if the interviews are to generate the kind of detail required for writing phenomenological *descriptions* in the van Manen style. The interviews must describe what it is like to be creative or to experience resistance, not just talk about them. There was sufficient concreteness and detail to reveal some recurring meanings that were later evident in other

parts of the data. There was also the overall, intuited sense of such meanings, from repeated viewings of the videos.

As stated, the Interview Texts generated from the interview transcriptions were not analysed line by line, but repeatedly read and pondered for their inherent meanings. Slowly, as these emerged and were clustered into groups, there was sufficient data disclosed to indicate *themes* of the lived experience of the participants; sufficient to generate descriptive portrayals in the place of rich evocative narratives of the van Manen approach. Any routinised contexts of the phenomenon of creativity were (not surprisingly) scarce and difficult to find, but from repeated dwelling on the data, the researcher gradually became aware of their hidden presence, especially in the less structured forms of the data. In the latter part of the interviews, when released from the constriction of only describing, the participants spoke more freely out of their natural attitude. From these freer exchanges, there emerged a few *lifeworld* themes; some of these *themes* appeared later during the *explication* of the field notes.

To reiterate, the original intention to write composite narrative *descriptions* of the participants experiences proved not possible or, perhaps, even pertinent to the material, due to the strong presence of silence and non-verbal communications during the interviews. Van Manen (2002) states that the phenomenological writer enters the space of the text "to bring back what cannot be brought back, what is lost" (p. 244). However, if the inarticulation that substitutes for words was an essential element of an experience, if what was lost was too transient to cognise even at the time of its happening, then a narrative *description* of individual and general experiences may not be the right mode of expression for describing such a phenomenon. For this reason, the meanings elicited from the Interview Texts were primarily gathered into *themes* only. These *themes* were then compared with the essential elements emerging from the field notes *explication*, but in practice it was found that it was not always meaningful to separate the *upstream* from the *downstream* experiences according to the methods used for the collection and analysis of the data. These *themes* concerned both the lived experience of the workshops and the *lifeworld* of the participants.

This suggests a question about the role of the interviews in this study. It could be argued that the interview technique was inadequate to the task because the interviews were conducted with two aims in mind (see Part One, The Interview Process) or because the researcher lacked sufficient skill in eliciting rich *descriptions*; or perhaps it was the participants who did not have the skill or vocabulary to articulate their experiences. That the interviews focused almost entirely on the experience of two workshops only cannot be discounted as an overriding

reason for the lack of much concrete detail. In addition, the participants were not overly experienced in creative practice and consequently did not have the depth of experience requisite for richly described recollections. However, the whole aim of the study was not to elicit narrative stories of familiar experiences, but to capture fragments of direct experience. The focus was always primarily on the experiencing, not the experience, and the participants mostly had little difficulty recalling concrete aspects of the workshops, such as where they sat, or how they felt afterwards. Only when they were shown their drawings and field notes from the workshops did words begin to fail them. Sometimes, they did could not recall why they had made certain comments. There was often a struggle for continuity - not so much a lack of ability or uncertainty about their memories as a groping for the words to fit the gestural expressions that came more easily. There was a sense of shifting from memory and recollection to groping after the lived experience, and of trying to make sense of what they said in their field notes. This experience of groping back towards the lived experience, in its experiencing, was to become indicative of the nature of the phenomenon and revealed something of the general structure of the experience.

About the field note analysis

The raw field notes, by their nature as captured moments of fragmented thoughts and sensations, could not stand alone as texts without providing some context. And since very few participants made notes on all and every exercise, initially, it was almost impossible to get a sense of the wholeness of the experience from the field notes' raw state. During the later *eidetic* analysis, they were analysed first in their parts and annotated with their inherent meanings, then for their individual intentions.

To create more continuity and context, the filed notes were then gathered and restructured, first by exercise, then by person, into larger composite texts, called the Task Texts and the Participant Texts. The Task Texts compiled all comments into the 10 sets of texts, ordered according to the drawing exercise sets, from both phases of fieldwork, in order to view the general response to each exercise (see Appendix C: Example of Task Text by Exercise). They were later used to create visual cartoons of the participant responses, that gave an indication of how each group of participants were experiencing each exercise, as they drew (see Appendix C: Example of Task Text as Cartoon).

The 20 Participant Texts containing all comments made by each participant were gathered into composite texts, one for each phase of fieldwork. These were then cleaned slightly to

fashion narratives with poem-like structures that created a sense of each participant's overall response to the whole workshop (see Appendix C: Examples of Participant Texts). Reconstituting the Task Texts into cartoons and the Participant Texts into unstructured poems are two applications of *imaginative variation*, which enabled the researcher to more clearly and more imaginatively distinguish the essential qualities of the general experience, along with its individual variations.

Having compiled texts with a stronger narrative (and pictorial) element, the researcher could now contemplate them in their wholeness through several readings, while noting down general impressions. Then, using the research questions and existential givens as a guide, they were rigorously delineated in their whole and in their parts, down to the smallest units that were meaningful. There was little pruning required, other than to remove unrelated factual content or purely conceptual reflections, but each line was pondered in the context of its relationship to the wholeness of the experience, as revealed through the two reconstituted texts. Significant quotations that would prove illustrative for the later *thematic* portrayals were now extracted. The *explication* is a messy process at the best of times but it must nevertheless be systematic (Finlay 2014), so it took repeated cycles of stepping into *immersion* and stepping out to reflect again for the essential structure and texture of the experience of being creative to gradually emerge. *Lifeworld themes* that had been hinted at in the Interview Texts were now confirmed and provided a backdrop for the development of the descriptive portrayals that formed the substance of the *description* process.

Van Manen (2014) states that if the material lacks experiential detail, concreteness, vividness, and lived-throughness, there will be insufficient substance for the *explication*. Apart from their lived-throughness, the field notes exhibited these qualities more than the interviews, but only in the fragmented parts of the experience. Only after reconstituting these parts through the manipulations of *imaginative variation* into whole experiences with creative formats, was the researcher able to get a real sense of the phenomenon. For this reason, the field notes were the primary source for experiences of both emergent and productive creativity. The Interview Texts provided useful thematic material and verification of the *upstream* experiences, but it was the video-recordings of what the participants did during the interviews, rather than what they said, that provided a moment of "revelatory seeing" (Seamon 2000, sec. 3.2.1) of the phenomenon in its whole.

About the other data

The remaining data were not reduced but pondered and explicated only for indications of the *essences* and *themes* pertaining to the whole experience. Of these, the video-recordings proved the most unexpectedly revealing of all of the material in that they originally had only been made as back-up for the audio-recordings. In providing that moment of 'revelatory seeing' that disclosed what was, perhaps, the core *essence* of the phenomenon of creativity, they spoke of a whole world of experience between the boundaries of words, a world that the audio-recordings of the spoken word could only hint at. The video-recordings could provide the basis for further, follow-up research. However, it was beyond the scope of this study to delve further into the gestural nature of this data.

The collated, multiple-choice questionnaires provided a bare-bones understanding of the individual participants' *lifeworld* relationship to creativity. Two *themes* that emerged from these questionnaires found correspondence with *themes* elicited from the Interview Texts. Likewise, the group discussion from Phase Two of the fieldwork, reflected, in part, these *themes* but it was more focused on specific drawing exercises; again, an avenue for future, more magnified research into the experience of what types of experiences different tasks might evoke (the drawing experiences have only been treated in their wholeness, as one experience, in this study).

Summary of the Analysis

The analysis was conducted in an intuitive, open and imaginative manner, responsive to the things in their appearing. Although a descriptive method was used as a framework for the analysis, some methodological creativity was required to meet the needs of the research design and the experiential material it generated. It was likewise discovered that separating *upstream* from *downstream* data, like delineating *interpretive* from *descriptive* methods, proved artificial in practice. Just as there are no immutable properties to human experience, there are no fixed methods for exploring them; therefore, some flexibility was deemed necessary to meet the context of this research. Ultimately, it was the experiences documented by the field notes that provided the insights into the unfolding of the phenomenon of creativity, while the visuals provided by the video-recordings defined the phenomenal field.

Although there was attention given to the 'lived experience' elements arising from all the data processed, the essential features of the structure of the creative process were disclosed through the analysis of the Participant Texts and videos of the interviews, while the qualities

or texture of the lived experience of being creative, as it was experienced, were explicated primarily from the Task Texts and Interview Texts. These latter texts contained the primary findings, the core *essences* of the phenomenon of creativity. Although it became obvious that individual participant experiences varied – some described occurrences that were not shared by much of the group – these ideographic details will be used in Chapter Five, The Findings, to offer insights into the general experience, into the phenomenon as a whole.

Chapter Five: The Findings

> I felt like I was working in another space. The mind wasn't judging, but rather wondering. There were no thoughts …
>
> (Participant 14, 2013, Phase One Workshop)

Overview of the Chapter

Phenomenology can be described as the study of the appearing of a phenomenon: what appears and how it appears. At the end of the Chapter Three, the Methodology, these two aspects of a phenomenon were presented as the two research questions that would guide the analysis and findings, experientially framed as:

1. What is/was the experience of being creative, in its experiencing/as it was experienced?
2. How does creativity emerge?

Now the findings of the analysis are presented in response to these two questions. The essential nature of creativity is revealed through 'what' appears during a creative experience: the qualities of the experience, described from many different angles, until a sense of the phenomenon's essential nature begins to emerge. Moustakas (1994) calls this explicating the texture of a phenomenon's appearance; whereas how it appears, is revealed through the structure of the experience. As stated in Chapter Three: Methodology, *Description*, the structure and texture of an experience are intrinsically bound together yet must be considered separately. The findings are presented in terms of the structure and the texture of the experience. As the structure of an experience underlies the texture, it will be considered first, before the qualities of the texture are described. The *themes* elicited from the *downstream* experience are then addressed.

In a manner characteristic of phenomenological research, the findings are presented as different forms of *description.* They do contain aspects of discussion, as descriptive elements are considered in light of their inherent meanings, and their meanings in the context of existential phenomenology, but the discussions are still only preludes to the discussion proper

in Chapter Six. The continuum of *descriptions* throughout the chapter can be seen as a process of gradual disclosure, in order to see "inside-under" (Bortoft 1971, cited in Finlay 2014, p. 128) to the hidden, authentic meanings; past the experience, towards the phenomenon itself, of which the experiences described by the participants are merely ways the phenomenon has manifested. This continuum also reflects the different stages of analysis process: the *immersion* into the whole experience, the *reductive analysis* and repeated dwellings on the parts and then the *explication* of the structure, *essences* and *themes* of the whole.

This chapter presents a complex picture of the participant experience, in order to reflect both the twofold nature of the data collection, *upstream* and *downstream*, and evidence the analysis procedure, so it has been categorised into three parts:

Part One: Overview of the Findings: the first impression of the whole, according to data collection methods. The *essences* of creativity, which are the core findings of this study, are then introduced in their early form; they are disclosed more fully in Part Two, through the parts analysis, then revealed in Part Three.

Part Two: The *upstream* and *downstream* findings. Part Two has three sections, representing different aspects of the findings: the structure, then the texture of the experience, followed by the recollection of the experience and the participant *lifeworld themes*. There is extensive use of direct quotations from the participant field notes and interviews throughout, with referrals to Appendix C, where the examples of full Participant, Task and Interview Texts can be found. Part Two concludes with a brief discussion concerning analysing the data from a problem-centred perspective.

Part Three: The core findings. The experience of creativity is presented as three descriptions than synthesise the structure and texture of the experience together, to bring the parts into an understanding of the whole. The core findings, the *essences* of creativity, are then presented in relation to the phenomenological research questions.

Part One: Overview of the Findings

Part One presents an overview of the core findings of the study, but as they appeared in their initial form, as first impressions. These first impressions, as well as a sense of the whole of the experience, were elicited from the researcher's first *immersion* into the participant responses. Although the interviews were the first to be analysed, all data was read, watch and listened to several times before the analysis proper. As stated in Chapter Four, in practice it was not

always meaningful to simply separate the *upstream* and *downstream* experiences from each other according to when the data was collected. The field notes contained moments of reflection which by their reflective nature suggests the participant was already speaking of an experience in the past, even if it was only the very immediate past; some participants were able to relive, quite strongly, moments from the workshop, bringing back from *upstream* something of the quiver of the original experience. Likewise, the two questionnaires are *downstream* evidence, even though the Debriefing Notes were usually completed immediately after the workshops, whereas the group discussions had something of both an *upstream* and *downstream* quality, where participants still carried active sensations of the experience in them, even as they spoke about particular exercises in relation to their *lifeworld* conceptions of creativity.

First Impressions of the Whole

The field notes

On first reading, the field notes appeared fragmented, irregular and inconsistent in content and form. Most contain descriptions of personal process: feelings, thoughts, and sensations, both inner and outer. Some are concerned with observations about the materials, others with personal sense of self, with others' perceptions or with metaphoric imaginations conjured by the tasks. Many document participants' experiences of inner change and transformation while drawing; some were observations of how such experiences affected them. The field notes vary in structure: some participants use full sentences while others use brief phrases or single words, like captured moments, to document their experiences**.** There are reflections mixed in with descriptions, and there were times when no notes are made at all. Many began writing in the provided booklets and then shifted to writing on their drawings. The former tend towards reflections, the latter to in-the-moment descriptions or observations. All the field notes show a mix of the above structures. (It should be noted here, that Phase Two generated far fewer field notes than Phase One).

The interviews

The interviews had a threefold structure (as described in Chapter Four): a general recollection of the workshops, including the overall impression; a reliving of the exercises, supported by viewing the drawing and field notes; and second general recollection and free discussion where participants spoke about more about themselves in relation to creativity.

As noted in Chapter Four, it became obvious that the Interview Texts lacked a consistent, lived-through, narrative quality of a typical research interview. There were strong impressions and specific recollections of the workshop environment, but initially it appeared as if many participants had little concrete to say about the workshops. However, with subsequently dwelling on the audio-visual sessions, the researcher became aware of another quality of the recollections: it was not that the participants had little to share, but most participants had difficulty in accessing the substance of their creative experience, the recollection of the drawing experience itself. It became apparent, this was not because the experiences were not meaningful and vivid; they simply could not articulate them.

A third notable quality was the 'storyifying' tendency of the participants during the latter part of the interviews. Participants would talk about their past creative experiences as if they were telling a story about themselves. This style of recollection was in strong contrast to their earlier attempts to relive and describe the workshops.

The questionnaires

The aim of the multiple-choice questionnaires was to garner information about the participants' conception and relationship to art and creativity, particularly their perception of their own capacity in this area, both before and after the workshops. At the end of Debriefing Notes, there was the possibility to record any personal thoughts about the workshop.

There was a perceived link between being creative and being artistic but it was variable amongst the group. About half considered it to be strong; the others regarded it as not so strong. This consideration probably informed their perceptions of their own creativity during the workshops, associating artistic qualities with creative ones. Most participants considered themselves to creative or artistic to some degree, but not highly creative; nor did anyone think of themselves as an artist, though several regarded artistic talent as an important part of their identity. A few thought of themselves as being not being creative, but only one considered herself to be neither creative nor artistic, either before or after the workshops. Nevertheless, by coming to the workshops of their own volition, all participants believed they could become more creative with guidance or support. Therefore, there was no external pressure to participate.

It was notable that this perception of being creative was slightly lessened after the workshops, in all but one of those who had previously called themselves creative. Likewise, afterwards, more than half of participants stated it was important to them to find ways of being more

creative in life. For all participants, being creative or becoming more creative was important to them, and not just for professional or personal development's sake. It was a desirable capacity to have for everyday life. It was for this reason they came to the workshops.

In the final, open-ended comment box of the Debriefing Notes, completed after the Phase One workshops concluded, more than half of the participants stated they either enjoyed the workshops, or found them interesting, engaging or otherwise satisfying. This *theme* of enjoyment was found to be the central thread throughout all the analyses. In Part Two, this theme and what is meant by the term 'enjoyment' in the context of this research will be unpacked. The other *themes* of the questionnaires, perception of one's own creativity, the aspiration to be creative, and the self-judgment that invariably accompanies striving to be creative, are found again in the analysis of the *downstream* data in Part Two: The Lived Experience.

The group discussions

As stated in Chapter Four, the discussions that took place immediately after the Phase Two workshops were a mix of *upstream* and *downstream* experiences. The participants led the discussion, but also used the time to request feedback about their artwork and ponder the nature of creativity generally. For this reason, the discussions have been used primarily as support in interpreting the responses in other data formats and for verification purposes. In a sense, the discussions ultimately proved to be more of a 'recompense' for the participants, for taking part in the research, than of analytical value.

Introducing the *Essences* of Creativity

The first general impression of the workshop experience provided the seeds for understanding the phenomenon, as experienced in this research. Much enjoyment, some frustration, a satisfying tiredness, moments of surprise, and a general inability to recall specifics from the workshops were the immediate elements that stood out in the first *immersion* into the interviews. These findings were very general in nature and could be attributes of any workshop experience. Yet after an 'inside-under' look at the findings after the repeated, rigorous analysis of the parts of the experience, it emerged that these early impressions were indeed manifestations of the *essences* of the phenomenon of creativity: they were surface reflections of the essential nature of the creative experience, beneath which the core

constituents of *tension*, *transcendence* and *fulfilled wellbeing* were hidden. These three *essences* are core findings of the study.

Tension took differing forms and had greater or lesser magnitude at times, but was present both before and during the whole experience, especially during the Phase One workshops; afterwards, it was only remembered as frustration or challenge. A sense of *fulfilled wellbeing*, which also had differing characterisations, appeared during the experience as 'enjoyment' but was felt more as satisfaction or as a feeling 'a good tiredness' in recollection. *Transcendence*, however, occurred during the experience but was also recollected afterwards as some sort of inner change that transcended an everyday, familiar way of being.

It would be a simplification to assume the creative process, as one aspect of a creative experience, to be linear in nature; or of *tension, transcendence* and *fulfilled wellbeing* as a continuum of process, where *wellbeing* arises from the lessening of the *tension* or *wellbeing* leads to *transcendence* of the everyday self. The creative experience is not so easily defined and delineated in terms of time and space. It was found to have greater complexity, nuance and diversity than can be encompassed by singular definitions of these constituents, as will be seen in Part Two, which describes the essential elements that characterise these *essences* in their manifold aspects, and the process by which these elements were elicited from the data. Participants experienced the *essences* in different ways: they indirectly reveal the multiplicity of the phenomenon. Or as Merleau-Ponty might have said: "There is no truth that can be written and established once and for all and always" (van Manen 2014, p. 130). Just as truth and falsehood are not opposites, but "aspects of a constantly changing and shifting dynamic of primal human reality" (p. 130), so *tension* and *fulfilled wellbeing* are not polarities but two essential, intertwined aspects of the human experience of creativity that cannot be singularly defined but must rather be characterised.

As stated, these three *essences* of creativity were hinted at in the early stages of the *immersion* into the data, during analysis, when this researcher was getting a sense for the wholeness of the experience, but they could not be seen more comprehensively until the parts of the experience were repeatedly analysed and pondered for their inherent meanings. They were only impressions of the whole, initially suggested from the first *immersion*, when comparing the responses between the different phases of the fieldwork and when comparing differences in response between participants. How the parts gradually revealed their more hidden character is described in detail in Part Two.

Part Two: *Upstream*/*Downstream* Findings

Here follows a description of the emerging, essential elements of creativity, elicited from the analysis of the three phases of fieldwork, both *upstream* and *downstream*. These elements characterise the nature of the experience of the creative process during the four hours of workshops: its qualities and substance, how things show themselves, how they manifest during the experience, and the conditions that enable such experiences to occur. The slow process of their disclosure led to the *essences* of creativity, presented in Part Three.

The descriptions are gathered into two sections that detail the structure and texture of the experience: the dynamics of the creative experience, or *how* it appeared; and the content of the creative experience, or *what* qualities appeared. A third section follows, describing the qualities and *themes* that characterised the *downstream* experience.

The Structure of the *Upstream* Experience

How the experience unfolded

This section describes the essential elements of the creative experience, clustered into groups of meanings, in the context of the universal existential givens through which the participants experienced the workshops. These essential elements are the dynamic processes that account for how the actions, feelings and thoughts that coloured their creative experience emerged. Participants[13] experienced these elements in relation to different states of *being*: the sense of self, the focus of attention, embodied action (including kinesthetic awareness of one's movement), intentionality, desire and aspirations, spatial awareness and temporal awareness, as they created. The intersection of these states of *being* revealed the underlying structure of the experience, as well as the conditions that precipitated and evoked it (Moustakas 1994).

These extended descriptive portrayals of each element link back to the first steps in the *reductive analysis* and the clustering of the essential elements during the *explication* (see Chapter Four, Table 4.1: Analytical Procedure). These elements were elicited primarily from the field notes, where using *imaginative variation* to reconstitute the field notes into the Participant Texts and the Task Texts helped this process of *explication*.

[13] The participants are always referenced by their identification (ID) numbers; all quotations come from the participant field notes in the Phase One workshops, unless specifically noted as otherwise.

The sense of self throughout the whole experience

The self is central to how we experience ourselves in the world. In the context of this study, differing states of awareness were centred around the self: self-awareness, as defined by one's awareness of one's self in the presence of others; awareness of the object that one is creating; awareness of one's experiencing of the drawing process; of the interaction between oneself and the drawing and experiences arising out of their experience of the drawing – these differing states of awareness are centred around the self. They were a constant in the world of the participant, as they drew and created; yet they were not separate states. They can only be described separately. Although the self itself is not experienced as being present in the moment of the experiencing (van Manen 2014), there is always a sense of self present, indicating where the consciousness is directed.

Participants initially began the workshops with their awareness centred on themselves, as they noted their feelings of uncertainty about what was to come. They were also aware of their neighbours, as almost everyone shares a table with another participant, but as they began to draw, to become engaged and active in the creating process, their attention gradually shifted to the drawing, and only the drawing, as their awareness of their surroundings became peripheral. People other than the researcher barely figure in their process and even she became de-personalised, becoming simply 'the directions'. So their world shrank for a time, became bounded by themselves and the drawing and what happened between them and the drawing. This circle was not static, however, but fluid and continually changing in orientation and intention, as attention was shifted from the drawing, to feelings, to questions, back to the drawing, and to self again, with observations, reflections and questions. This was constant shifting, punctuated by moments of uncertainty, surprise, anxiety, pleasure, ease and difficulty, with many variations on these passing feelings, thoughts and sensations. The field notes captured the traces of this fragmented, dynamic and mobile interaction between self and world. To first set the scene, three examples[14] will be given from the Participant Texts[15] that document their whole experience over one of the workshops. The texts were reduced by *reductive analysis* to their essential elements of *being*, intention, sensation and aspiration. Here, self-awareness and the self's interaction with their drawing process is both the backdrop

[14] The full text of the field notes of ID 2, ID 3, ID 5, ID 8 and ID 13 can be found in Appendix C: Samples of Participant Texts, Phase One. The syntax and punctuation is that of the participants, the italics here are those of the researcher.

[15] The Participants Texts are compilations of each participant's field notes throughout one workshop, one for each phase. There are thirty Participant Texts altogether, from the first two phases of the fieldwork.

and stage for each person's perceptions and sensations. These examples provide a general sense for the nature of participant experience, in its experiencing. It also evidences the initial *reductive* process of the analysis. All participants documented in their field notes a range of structures and content in their field notes that had a similarity to each other, though it can be seen from these three examples (and other examples in Appendix C: Examples of Participant Texts) that no participant documented their experience in quite the same way. Some are more observational than others, some are questioning, some try to make sense of what they are doing as they go while others just go with it; some people wrote in single words or short phrases whereas, others wrote in full sentences, or did both.

Here is an excerpt from the Participant Text of Participant 8, documented during the charcoal drawing exercise in Phase One, Set One:

> "*I feel a bit confused.*
> Flowing is *fun*, repeating exactly what I did *seems difficult* to me
> *Concentration*,
> I *can not* reach *perfection*.
> Everything that I create is so easy to destroy,
> to erase and start again with *more fun*.
> *I like it* the flow of the materials,
> My hand is soft, *easy* to create and destroy,
> *Relaxing*." ID 8

The significant elements of her experience are *italised*. Her experience could be further reduced to this structure, using just the italicised elements, but with bracketed [verbs] added, to indicate the unspoken *intentionality*:

> "(I) feel a bit confused; [having] fun; seems difficult; [needs] concentration; can not [be] perfect; [having] more fun; (I) like it; [is] easy to create and destroy; [is] relaxing" (ID 8)

These brief notes about Participant 8's changing experience indicated the mobility of her experience, the changing sensations of uncertainty, difficulty, focal attention, unfulfilled aspiration, enjoyment and ease within one 10-minute drawing period. But it also revealed the shifting between her awareness of herself and how she feels, and her awareness of what the drawing is demanding of her. This participant is able to capture, in brief phrases, what is happening to her, as it happens.

Here is the reduced structure of another participant's experience, revealing underlying dynamics of what is happening in him, and to him, throughout the whole two hours, extracted in a like manner:

> "[Questioning]; [thinking]; [surmising]; [experiencing] lightness of being; [questioning]; [feels] nice/freer; [it is] hard; [it is] boring; [feel] hesitant; [feels] nice; [questioning]; [conceptualising]; [pondering]; [recalling]; [feels] hard; [questioning]; [it is] way too hard; [I am] out of comfort zone! [feels] panic, [feels] frustration!" (ID 5)

Again, there were the shifts in what Participant 5 was experiencing, but also where his sense of self was located. This participant appeared more focused on himself, as evidenced by the more critical tone. He was less at ease with the process then the Participant 8. He did not shift his awareness away from himself much and seemed quite concerned with how his own *being* was responding to his drawing, which he appeared to almost regard as a foreign object, as something quite separate from himself. His sense of duality between himself and his drawing seemed strong, based on his field notes; whereas Participant 8 appeared more absorbed in the moment, more at home with her drawing.

A third participant notes from first sensation to last:

> "[Sense of] openness; [feels] uncertainty; [feels] anxiety; [action of] drawing; (it) seems easy; (am) striving; (an) idea struck; [experiencing] a sense of freedom; [it feels] good; [exploring]; (it) was hard; a desire; [concentrating] (it) took discipline; [action of] drawing; [perceives] things emerged; [non-*intentionality*] (despite actions); [feels] delight; [action of] drawing; [reflects] [was] easier; [observing]; (it feels) good" (ID 3)

Here is more diversity, more mobility between self and drawing, between Participant 3's sense of doing things, and things arising out of his interaction and engagement with his drawings. There is uncertainty, ease, concentration and relaxation, a moment of inspiration, pleasure, but also just letting things happen. In all three participants, this mobility of experience, occurring on different levels of their *being,* was clearly evidenced. Aspirations, thoughts, emotions, sensations appeared. There was no sense of there being one level of experience, one type of feeling or sensation throughout the workshop.

No state or sensation appeared to last long for anyone. Even a breakthrough moment, such as a sudden insight or moment of *transcendence* of 'feeling creative', was fleeting, not sustained. As one participant noted:

> "I found there was a point where I couldn't hold the creating space any longer [yet for a moment] felt like I was working in another space. The mind wasn't judging, but rather wondering." (ID 14)

It was not possible for Participant 14 to consciously hold onto her focus of awareness while engaged in drawing. It was almost as if she lost the "creating space" as soon as she became aware of its presence. The location of the sense of self was continually moving. No one kept their awareness wholly on the drawing or the process of drawing; or only on themself, or on how the process made them feel. Each person moved continually between *self-awareness*, where their attention was on themselves interacting with the process or material; and *self-consciousness*, where they had a heightened sense of their self and less of the drawing.

Even a participant that was almost continually focused on herself, and on the effect of the process on herself, rather than being engaged was what she was creating, noted how quickly the focus of her awareness could shift. During the Phase Two workshop, Participant 2 observed during a brief pause: "I've made myself a hard task. And that is totally ME. I do it with most things …" (ID 2). But then, she stated:

> "As I … got into the experience it all changed. I became less conscious of an outcome, and judging my abilities, it became an experience and a freedom to explore in thought and feeling rather than cognizing, controlling, judging." (ID 2)

It should be noted that second statement was a reflection, written just after she had finished a drawing task late in the workshop. It was not an observation mid-drawing - Participant 2 was already *downstream* of her experience - yet it was still vivid enough for her to capture how her awareness of the situation changed as she became more absorbed in the process. She became less focused on the future and could live into the moment. She became aware of the possibilities that unfold when you become less focused on yourself and more on the process. Nevertheless, it shifted back again to herself, quite quickly, as can be seen in this unattached reflection in her notebook, probably her final comment at the end of the workshop:

> "I can now see the correlation to how I go about my own life. If I see what and where I'm meant to be heading to, I balk, but if it's a concept with no specific outcome, I'm free to explore the event, the opportunity." (ID 2)

Even when the balance between self and world is tipped strongly towards self, a shifting, questing, sensing interaction with the world could still be observed.

As Participant 3 demonstrated, participants could be active in their intentions one moment, receptive to what came to meet them in the next. Each participant moved between focusing on themself and focusing on the world, on awareness of their thinking process, of the feelings and sensations they experienced, and of what is being asked of them by the process they were engaged in. But this movement was not experienced as a linear movement, even though participants frequently shifted from one emotion to its opposite, since there was an awareness of these sensations arising in different parts of the body, with differing levels of intensity, even as they ere engaged in drawing, or had just ceased drawing. And frequently, there was a transitory quality to each instance, a discontinuity from one field note to the next. There were seemingly random thoughts that suddenly appeared, as if out of their subconscious, that they had to note down; and then there were fully formed, conscious observations, where a participant was observing their experience, even as they were experiencing it. It was as though the feelings, thoughts, intentions, desires and sensations were in a state of fluctuation, but with a random quality that defied any sense of logical progression of thought or feeling.

This might indicate the fragmented and multi-leveled ways participants processed instructions and intentions, both from the world (from the researcher, from the environment, from the tools, other people) and from the self (own intentions, desires, habits based on past experience). Non-intentional actions, such as experiencing surprise at how the drawing was unfolding before their eyes, can be stimulated by external factors in conjunction with intentional acts. For example, spreading soft charcoal with the fingers may lead to sudden awareness of textual qualities of the paper, or a sensation of suffocation at the heavy, airless darkness that the fingers are producing with the charcoal.

But, in the processing of documenting this, the unordered movement was subject to time, which made it appear like some sort of linear progression. Only field notes written at the end of a set, as reflections upon the drawing process in that set, had an ordered structure and progression of thoughts. Few of the Participant Texts contained structured reflections, as typical of Participant 2; most demonstrated forms similar to that of Participants 3, 8 and 7 - a mix of short, fragmentary, seemingly disconnected observations dotted with occasional questions. The longer, more structured, reflections of Participant 2 were unusual, since most participants noted down their responses, as they went, not afterwards.

Most participant texts, however, had a dialogic quality to them, though whether participants were conversing with themselves or the drawing was not clear. There was sometimes a puzzling-through quality to them, with almost logical progressions, such as one sees in

problem solving. However, such structuring was primarily found only in the early field notes from Set 1, the introductory exercises; and initially in Set 4, a set of exercises based on the 'thinking line' of the meander form in water flow. It was not so evident in the more affect-oriented Sets 2 and 3. For example, this excerpt from Set 4 demonstrates a more explicitly rational progression of thoughts.

> "Ah! that's better! Now I get it … much more satisfying than seeing separate forms … I've closed in my starting point and don't know where to go next! … Find a solution of sorts – does a curve really become a straight line? Not for long, apparently! … The slower I went the more the liens [lines] curved … building on past experience but not sure where to take it next. … Strong feeling of inadequacy." (ID 11)

This structure, though demonstrating a higher level of conscious attention than most field notes, was still *upstream* and documented in the moment, though the reflective elements, already *downstream* of the immediate experience, still have a vividness of a captured thought from the stream of the experience. Such vivid reflections did not appear in the interviews, without the support of revisiting the field notes.

When considered as a whole, each Participant Text revealed some aspect of the overall structure of the experience, but less of its parts. The parts analysis offered up the *intentionality* of each statement and revealed the dialogic nature of the self, interacting with the world, but also indicated such moments as to when creativity emerged. The parts of the experience will now be considered in detail.

The Parts of the Experience

This sense of self in its interaction with the world has many parts to it: the bodily and spatial sensations, the location and level of attentiveness, the intentions of the participants and their desires and aspirations, and the self's sense of time; these are now considered in isolation in the following descriptions. The whole experience over a full workshop is now considered in its smallest parts, down to the single phrases (since single words are rarely meaningful without a context) that reveal the different parts of the experience, both as it was experienced and how it emerged. This analysis was drawn primarily from the Task Texts[16].

[16] The Task Texts are compilations of the participant field notes, ordered according to the five different sets of drawing exercises. There are ten Task Texts altogether, five from each of the first two phases of the fieldwork.

The Sense of Kinaesthetic or *Embodied* Awareness

Fundamental to the process of drawing was the experience of the body in relation to the drawing - the movement, shifts in dynamic, rhythm, weight and direction – but it was also inherent in the creative experience, since the self must interact with the world through a chosen medium, in order to create, that is, in order to play with, adapt or transform it.

Initially, participants were not always consciously aware of their kinaesthetic sense in this way, before the action of drawing began to engage their bodies. But some kind of bodily sensation or felt sense will arise as a person becomes more engaged with the movements and the medium. Drawing is, after all, movement expressed through manipulating a physical material. Throughout the workshop, participants noted shifts in awareness to and from themselves and the drawing, but often they experienced these feelings somewhere in themselves, in their *being*, even though they weren't always conscious of these feelings being directly connected with their body. They began with the initial feelings of anticipation that everyone feels when entering unfamiliar territory, coloured by uncertainty or anxiety or excitement. Then when they began to draw, their perceptions were drawn first to the demands of the drawing, as to whether their lines are straight, or they were putting them in the right place and so forth; but as they were gradually absorbed into the movement and dynamics of drawing, they became aware of themselves becoming engaged through their *being* with the movements, with the action of drawing. This was often expressed as vague or indeterminate feelings of pleasure, ease (or unease) within themselves:

> "Fun taking the dot for a walk" (ID 4)
>
> "Easier to do because wasn't coming towards body" (ID 8)
>
> "Very enjoyable movement" (ID 3)
>
> "Feels light and easy inside doing this" (ID 12)
>
> "I find it uncomfortable working with the darkness" (ID 14)

These feelings and sensations were also experienced more concretely, particularly if they were not so pleasant:

> "… easy to breath as I did this" (ID 12)
>
> "I feel good, experiencing relaxed sensation" (ID 8)
>
> "The chest feels tighter experiencing this form" (ID 14)

"Felt very difficult: I am not able to copy the form - can feel it in my body, but not in my memory" (ID 17)

"I found it difficult to live into this experience and get the movement in my body" (ID 19)

"Felt I was in the flow of the process, very calming and relaxing" (ID 13)

Rhythm was particularly important in leading a person more deeply into an embodied experience of the drawing, especially during the early stages of the workshops, when repeatedly drawing lines or forms, such as circles or lemniscates (a figure of eight form):

"Created tension in my stomach. Rhythm made it a little [easier]" (ID 7)

"It worked best when I could still the thinking and simply let the rhythm guide the action" (ID 3)

"The lemniscate was relaxing. It is a beautifully balanced form that I feel neutralizes my feeling experience. I can easily and quickly tap into the rhythm of this form." (ID 18, during Phase Two)

Later in the process, this sense of embodying the drawing became deeper, as the movement became part of the person's *being*. Participants experienced this as a process of internalisation that appeared to transcend the physical body:

"I was exploring with the charcoal how to move with the picture" (ID 14)

"Lived into the movement" (ID 10, ID 19)

"I began to feel the movement inwardly" (ID 13)

"How does a line express emotions was a thought – but not for long because it just did when I felt them inwardly" (ID 12)

"I felt the flow of the patterns within my being" (ID 17)

"Felt into the gesture rather than looked at detail" (ID 11)

Having a kinesthetic or *embodied* experience of the process was perceived as central to a satisfactory experience of a drawing task. The more engaged the person became in the process, they more they identified with the movements. First, they felt the movement in parts of their body, then in the whole body, then it became less body bound, a less concrete

sensation that was felt intangibly in their whole *being*. As Participant 13 wrote: "I was the drawing … becoming part of me, an expression of me." (ID 13)

The focus of attention

The intensity and locus of concentration and attention had a strong influence on the quality of engagement and participants' awareness of their stream of cognition. Concentration was needed for an engagement with each task beyond simply carrying out the bare directions, but too narrow a focus on the directions themselves, on fulfilling them 'correctly', rather than allowing the directions only as a guide their own interpretation, affected the type of experience a person could have and its creative potential. When the concentration was narrowly focused, there was more attention paid to their conscious thoughts and less to the more peripheral felt senses, feelings and bodily awareness:

> "It worked best when I could still the thinking and simply let the rhythm guide the action" (ID 3)
>
> "[I felt] more in my head as I thought about where to put the next line" (ID 15)
>
> "'How does a line express emotions was a thought' – but not for long because it just did when I felt them inwardly" (ID 12)

Participant 12 then wrote:

> "After taking time to stop and think the line found a way to flow on. I needed to think about where this line was and how it was relating to the other whereas with the straight lines they just came out with direction and purpose, easily" (ID 12)

Another participant noted:

> "Taking a line and repeating it for me requires too much thinking" but then followed up with "it felt different inwardly. There was movement. I didn't feel like I was in my head." (ID 14)

So there were different qualities to their attention: it could be very focused and, as such, was strongly identified conscious thinking and 'being in one's head'; but sometimes it was also experienced as being more peripheral. An engaged but more relaxed attention span with a broader field of awareness allowed peripheral thoughts and feelings from the general stream of consciousness to be 'heard'; participants 'hear' what the drawing was saying to them, what was coming to meet the self from the world.

"It tells you where to go and I just followed it" (ID 12)

"The lines begin to tell you where they want to go" (ID 14)

"[I] found I'd created something" (ID 15)

"The line found a way to flow on" (ID 13)

Here, participants experienced the drawing as leading them. Either the drawing told them where to go, what to do next; or they simply found themselves doing something, or creating something, without their conscious attention. The experience could be described as an 'I found myself' experience: 'I *found* myself following the process' or I *found* I had created something' exemplifies the kind of experience that characterises both the experience and appearance of creativity, experiences central to the phenomenological research questions.

Similarly, the level of awareness or attention had an impact on the awareness of one's self in the process. Participants spoke of losing themselves in a creative activity, especially after an extended period of working with drawings that had rhythmical, even repetitive, gestures, such as charcoal exercises that used the fingers as drawing tools; or the more contemplative spiral and lemniscate drawing exercises in Phase Two. Consequently, they lost a sense for their boundaries. They became enmeshed with the activity, through the movement, with the object or World: "I felt I was part of the drawing" or " the drawing – becoming part of me" are statements indicative of the experience of becoming at one with the object, of their self intermeshed with the world. However, it was notable that Phase Two, where participants later recalled feeling more at home with the drawing tasks and more immersed in the creative experience, produced far fewer field notes.

But this sense of losing oneself could also result in feeling of loss of control or not being awake to what was happening in the drawing:

"Have to be more present, more creative," (ID 10).

"I've needed more control here, of my emotions and of my grip, I've needed to notice more of what I'm doing, in my fingers, my hand and in me to be able to do this task" (ID 6).

"The rhythm of moving in a circular motion, the sound of the charcoal becomes quite hypnotic." (ID 9).

"How could I be so unaware?" (ID 11).

But participants also had moments of experiencing a heightened sense of awareness, of becoming conscious of themselves having an experience, without losing that sense of the process leading them, or experiencing themselves and the drawing as one movement:

> "I felt like I was working in another space" (ID 14)

> "There was a tender little moment when I decided to use the fingers on both hands … that moment had me enter the creative process on a deeper level" (ID 6)

These moments of heightened awareness acted as transitions to a different level of engagement. Participants had a new type of experience, where they felt they had transcended their everyday cognitive limitations, and where they were left feeling changed by the moment.

Intentionality

Intentionality connects us to the world. It is foundational to consciousness, because our thinking, feeling and doing are all oriented towards and engaged with the world. We have intentional relationships with the world (van Manen 2014) but not all intentions are conscious, and not all actions are intentional.

As we have seen, during a creative process, participants found themselves continually shifting between their own intentions and those that came to meet them from the context (in this case, the drawing directions from the researcher) and from the process itself. They listened to the given directions; they made their own decisions about how to proceed, on how to interpret the directions; but they also found themselves being led by the process itself. This could result in them experiencing a kind of tension as to who to 'listen to'. This tension was present, even if they did not feel anxious about this conflict but felt comfortable and at home with the drawing tasks. They might be almost unaware of this tension or it might become a central concern, but there was a constant need remain attentive, on some level, to a kind of decision-making.

> "So easy being guided then to add my interpretation of cross[ing] the line, was manual until you gave an example then I followed you instead of going [on] in how I had interpreted it" (ID 12)

> "Free to go where I want – unsure part way thru if that freedom was liberating or created other dilemmas" (ID 15), but later noted "just doing as told – felt like a respite – no input from me"

> "… messy, chaotic, interpreting instructions" but then "Different experience because we had less instructions – freer? More freedom" (ID 16)
>
> "Getting caught in process or breaking it to create something different, out of oneself or a different influence? How much is me? from me? How much is something else?" (ID 10)
>
> "I feel tensions between wanting to represent it accurately, wanting to see it to copy it, to making it my own" (ID 9)

Sometimes, this tension was experienced as a kind of constant state of self-questioning, dominating the whole process: "Am I finishing too early? (Am I) not getting the exercise? When is it finished?" asked Participant 20, apparently not certain she could quite trust that what she was producing was valid and 'correct'. However, participants mostly allowed themselves to be carried by the process – if not all the time, if only for a few minutes – by responding to what was happening on the paper in front of them, rather than trying to make it happen as they wanted (see the section on Desire and Aspiration below):

> "It tells you where to go and I just follow it" (ID 12)
>
> "The lines begin to tell you where they want to go" (ID 14)
>
> "What is it? What wants to be drawn? Am I up for it?" (ID 6)
>
> "The exercise has a life of its own" (ID 10)
>
> "… in the process things emerged unconsciously on the page; despite my actions something else was in play beyond my control" (ID 3)

As Participant 3 clearly identified, the experience of being 'told' by the drawing what to do next, without conscious volition on the part of the person, was an essential aspect of something new or different coming into *being*. Participants wrote of becoming aware of an impulse or stimulus that seems not to be coming from the self, but from the object itself. They spoke of 'finding' their self carrying out an action, or feeling their self to be part of the drawing, or even of becoming the drawing. As Participant 13 noted at the end of the workshop, this could be a state that was in continual flux:

> "[Sometimes] I felt I was trying to make something on the page rather than the something on the page coming out of an experience" (ID 13)

This distinction points to the difference between being very focused on what the person *wanted* to express and being receptive to what was coming towards them from the experience, from the world. As Participant 6 observed, for her it was a matter of finding a balance:

> "There is a balancing act between looseness and form, between open and closed, there is attention required, but too much 'tension' makes the progression harder" (ID 6)

This sense of 'tension' describes the experience of being constantly poised between self and world, between higher and lower levels of attention, between focused and peripheral awareness, between stronger and lesser engagement. It is a dynamic relationship without regard for individual's idiosyncrasies.

Desire and aspirations

A sense of longing or desire permeated the whole creative experience, providing a continual, usually low though unspoken, drive throughout the process. It appeared in different forms, according to the individual's aspirations and skills, and influenced how they saw their results, the outcomes of their creative process.

The desire to be more creative, to explore, discover or enhance their creativity, drew all participants to the workshop (see Part One on the *themes* of the questionnaires). Regardless of other motives (wanting to support the research, an interest in self-development), it was the main motivation for being there. But participants rarely expressed this desire consciously and concretely during the workshop, unless a sudden block brought it to the surface:

> "At one stage I felt quite overwhelmed by judgment of myself and lack of artistic ability that I couldn't go on" (ID 15)

Sometimes a person transcended her perceived limits of ability and had an unexpected moment of feeling different from her everyday self:

> "There some surprise that I could draw what I did" (ID 20, at the end of the Phase 2 workshop)

> "Hey! I created something!" (ID 13)

> "I felt I was quite creative doing this" (ID 13)

During her Phase Two workshop, Participant 13 again experienced, and relished, such creative moments: "[I] loved the sense of 'creating' something when I don't see myself as creative" (ID 13).

Sometimes this drive became more conscious when a person's own idea about what 'creative' should look or feel like, conflicted with what was actually appearing on the paper, with what they were producing out of the process. Then their concept of creativity was revealed as something in addition to 'producing something original': it had qualifiers, such as looking beautiful or artistic; as having a pattern or composition or form they recognised; or of somehow satisfying them in some way they could not articulate, but only become aware of, when the work was not meeting their ideal. A wish for beauty, for artistry, for the artwork to look artistic, attractive or pleasing is an aesthetic desire. The wish for the work to have a pattern or composition they could relate to was more a Gestalt desire for holism, but also a desire for meaning, to make meaning out of the unknown or chaos of line and shape they were producing. This desire for holism and meaning, in turn, met a participant's concept of what is beautiful, artistic or pleasing. This, in turn, fulfilled their need for satisfaction, for feeling as though what they were doing was meeting their expectations of the workshop.

Participants described this desire of wanting to express their self through beauty, or, at least, produce pleasing results, in different ways:

> "There is this immediate desire to create something 'artistic' and aesthetically pleasing" (ID 6)
>
> "I felt the flow of the patterns within my being – but failed to bring the beauty on the paper" (ID 17)
>
> "Having done that [*followed the task directions]* may be I could start now to make an artistic image! Or is it done already?" (ID 10)
>
> "Wanted to then take other colours and develop it into a 'complete art work' if there is such a thing. I could see creatures and faces beginning to emerge … Loved it!" (ID 13)
>
> "… felt I captured the idea but not the beauty" (ID 8)
>
> "Ooh! Possibility enters to "let go" of the Artist (capital A). And just be free. Yeah, that's a task" (ID 6)

Sometimes participants wanted to find a pattern or meaning:

> "[it's a] hang glider over ocean – saw these [forms] and made it more so" (ID 7)
>
> "… when the page was full of lines the idea struck to fill in certain gaps with many lines and perhaps create something of a pattern" (ID 3)

> "Tried to find patterns to put an outline of the swirls on paper" (ID 1)
>
> "As I continue to work with the line(s) and notice relationships many lines are speaking to one another" ID 14)
>
> "I wanted to find some meaning some figure, something to recognise in this, and something did appear; I then felt in need to uncover this shape or image if recognition to sort of discover it, give me some life-purpose" (ID 2)
>
> "Sense that it could become anything until recognition of a known object or impression" (ID 10)

Participants wanted to do something more than follow the bare directions; they had the desire to make it something of their own, to interpret it their own way, but also to make the artwork meet their concept of beauty or balance or pattern. Then they might find themselves feeling at odds with the directions or what the process is telling them to do and what they want the drawing to look like. Again, a tension arose between what was actually happening and what they wanted to happen - to create the product they desire.

It then became a question of either trying to meet their preconceived ideals, or of 'listening' to what the artwork as telling them to do. This engendered another type of tension that could become a constraint:

> "I can't not want to develop the line – I wish only to develop the line" (ID 2)
>
> "Taking away didn't feel right and I had an inner resistance to it" (ID 12)
>
> "Rather than focus on pleasing results I tried to follow instructions the best I could and not concern myself about how it looked – I usually draw to a pleasing place" (ID 1)
>
> "The shading exercise i.e. going from line to surface was creating resistance within me. I couldn't picture the outcome. Didn't have direction" (ID 18)

They could not 'go with' the process, if they felt that they were being led by the process to go where they themselves did not normally go, or even wanted to go. As one participant noted:

> "Having to link a line from infinity seems to add pressure to make it more than just myself – having to tune in as well as create" (ID 9)

Participant 9 reveals here a certain understanding of creativity in this statement; of creativity being about herself, of being one's self and expressing that self. To not follow her own

intentions and her own desire for self-expression appeared to have produced some conflict in her.

The influence of space

Drawing, like all visual arts, is a spatially defined activity. Space is primarily experienced as a quality pertaining to the body in relation to movement (as described above) and relationship, rather than being concerned with the surrounding environment. All participants became aware of these spatial relationships when working with line and form, as these field notes from the first half hour of the workshop demonstrate:

> "Initially conscious of straightness of lines and placement on page [relative to other lines and space] … orientation, i.e. continue to right or go either side, alternatively of original line for balance" (ID 7)

> "All directions brought me back to looking at the page and the relation of the lines to each other – seeing what they formed – spaces between" (ID 1)

> "The relationship has an isolating quality about it. The lines do not want to meet. They prefer being apart" (ID 17)

> "Don't they [the lines] relate already? They could do this? or they could do that … The relationship between the lines exist already" (ID 10)

But as the workshop progressed, their awareness of space changed. It became an inner experience:

> "It felt different inwardly. There was movement. I didn't feel like I was in my head" (ID 9)

> "Drawing the picture feel so good: patterns, figures flow, spirals, lines curves movement" (ID 8)

Sometimes, this sensation was associated with a sense of freedom:

> "When I don't have space, there's this feel, this experience of being unfree" (ID 18, during Phase Two)

> "… this flowed more easily, filled the space and I felt freer somehow even though I wasn't very different from the first …" (ID 15)

> "I felt freer with moving anywhere, but still in a certain direction" (ID 2)

Sometimes, it was associated with feeling light inside:

> "Feels light and easy inside doing this." (ID 12, while drawing curves).

> "Lightness of being" (ID 5, while drawing long, slow straight lines into infinity)

Or it was experienced as bringing inner balance:

> "Balancing feeling in the body – lightness" (ID 17)

> "To bring light into heaviness felt like bringing my being back into balance" (ID 17)

As in embodiment, the participants' perception of space was gradually felt as being internalised, as either a moving element or a sense of inner balance. Participants experienced the spatial dynamics of the creative process in themselves, as part of themselves. It could manifest as an or expanding sensation, but it was not always a pleasant experience for them; sometimes it was experienced as constraining:

> "The spiraling-in led to a feeling, a feeling of going down into the depths" (ID 14)

> "…didn't know where to go next – felt very stuck at times" (ID 15)

> "I feel out of my depth" (ID 9)

> "I feel bound by the line, knowing I am the one determining how it will unfold" (ID 14)

Space, then, experienced on an existential level, was also an essential part of the creative process. Space was experienced in themselves; participants felt inwardly moved, but this occurred only when they became more deeply engaged in the drawing, when their sense of self became enmeshed with the object, with the world. Then, their sense of self was transcended, and the duality between self and object overcome.

The effect of time

Awareness of time was also intrinsic to the overall experience of creativity. Like space, time structured the whole experience – all tasks had time limits and participants were warned of this in advance - but participants only became consciously aware of time when they felt the lack of it: "I felt somewhat rushed – will I catch up!" Participant 14 said during the first task. Participant 13 also noted early in the workshop: "Feel like I'm in an exam. Too rushed. Not enough time to reflect" (ID 13); yet her next field note demonstrates she was immediately distracted, suddenly noticing: "Hey! I created something …I'm excited. I think it looks great" (ID 13) - and has forgotten all about her feeling of not having the time she needed.

This sense of having time constraints appeared again at the end of the workshop: two participants (who both identified in the questionnaires as being artistic) felt rushed, pushed out of their comfort zone, unable to follow their habitual way of approaching creative work:

> "I did not like nor enjoy the sensations of having to undertake a task, a creative task, in a short period of time. To complete a creative task I like to be able to go through the full process, until it feels like I am finished, not to be "artistic" but to see a task through to a satisfactory point" (ID 6)

> "I usually draw to a pleasing place – this was fast and less time to plan or change or consider – gesture rather than pleasing results" (ID 1)

This feeling of lack of time has spatial qualities, in the sense of pressure from feeling rushed or wanting to be in a certain place with the creative task when they finish. So, just as participants became conscious of experiencing spatial qualities, when most immersed in the creative experience, when they were unaware of time, this awareness of time appears to be conjoined with feeling constrained or lacking in space. Yet this feeling of not enough time was only documented at the beginning and end of the Phase One workshop. No one commented on time during the bulk of the workshop in Phase One; no one commented on it at all during Phase Two, even though the number of tasks and the time allotted to them was the same in as Phase One. (It was noted earlier, that during Phase Two, participants felt more 'at home' and immersed into the drawing exercises).

Awareness of time and space were experienced as being related to each other during the creative experience: sometimes they appeared to have an inverse relationship to each other.

Summary of the states of awareness

From these different descriptions of the essential elements, seven givens were identified as central to the structure of the creative experience of drawing experientially. These givens are different states of awareness pertaining to how the participants experienced themselves and themselves in relation to the world. They underlie the essential elements of the structure of the experience, accounting for how the overall experience of creative process unfolds, and the conditions that enable or evoke it. These will now be described.

1. **Awareness of Self and World:** The first given concerns the self and its relationship to the world, or object. There is a dialectic, yet unified relationship between self and world, particularly self and object (or medium), throughout the experience, which forms the basis

of the overall structure of the experience - dialectic, in that the self engages with the object in a constantly fluctuating relationship of self-consciousness and self-awareness; unified, in that the dialectic describes the structure of the whole experience. When self-conscious, the self is more centred on its own *being*; when self-aware, the centre of awareness is the interaction with the creative work.

The other six givens characterise this awareness: focal and peripheral (subconscious) awareness; heightened and lowered awareness; awareness of one's own intentions and awareness of things happening to them, not of their own volition (non-intentional). Again, these are not such much dual states or polarities but continuums of awareness that are mobile and transitory. At times, the dialectic is suspended, briefly, as doing is superseded by moments of *being* or pauses for reflection. At other times, the dualistic nature of the dialectic fades into experiences of unity with the object (the drawing) or immersion into the process. This non-duality comes about in different ways, according to the state.

These six states can be categorised as follows:

2. **Focal and peripheral awareness:** there is a sense of the mental state being diffuse, even enmeshed, at times, with the process or object; or of being focused or heightened. At such moments of focused awareness, the self may experience their cognitive process more strongly; during moments of heightened awareness, the self may experience its self as observing itself, even while remaining immersed in the experience.
3. ***Embodiment*:** there is a embodied awareness of the dynamic movement and gesture, that leads to experiencing the drawings, first in the body, then a feeling of 'living into' the drawing, where body-bound sensations are transcended. This may further lead to non-bodily awareness of *being* at one with the drawing, of the self overcoming any sense of separateness from the world with which she is engaging. On the other hand, self-consciousness draws back from the world, to consider itself and so prevents non-dualistic immersion into the process.
4. **Space and time:** there is a conscious awareness of space as a sensation of inner expansion or constraint; and also as living into a world of movement within the drawing. Awareness of time however, becomes conscious primarily when feeling constraint. Theses two types of awareness were found to have an inverse relationship, so are clustered together here.
5. **Mobility and constraint**: at times the self feels mobile, able to flow and respond to changing dynamics; at others, the self may feel blocked or limited by constraints by

internal or external constraints. The first experience may lead to an immersive state; the second prevents it.

6. **Openness and receptivity:** the self fluctuates between activity and receptivity, between being open to what is unfolding and pulling back from it.
7. **Longing and aspiration:** there is an underlying desire for something more. This acts as a drive or inner urge to be something more than one's everyday self, to go beyond one's boundaries or to express oneself freely in new or different ways. It concerns the expression of one's own volition but is less conscious of itself than *intentionality*. These states are conditions as well as qualities of the creative experience.

From the Participant Texts, it can be seen that this experience, as a whole, was experienced as discursive, immersive and reflective. It was also discontinuous in its parts, with a fragmented structure that sometimes read like a modern poem, full of fluctuating experiences that, nevertheless, are still parts of whole that can only be revealed once the experience is over.

The Texture of the *Upstream* Experience

What Unfolded During the Creative Experience

This section describes the texture of the creative experience: *what* qualities characterise the creative experience. The disclosure of these qualities led towards the gradual disclosure of the *essences* of the phenomenon of creativity. The findings described here used *eidetic analysis*, drawing on the line-by-line analysis described in the previous section, The Structure of the Experience.

The Quality of Enjoyment

A sense of enjoyment: this was central to the participants' creative experience. In the field notes, however, the term 'enjoyed' was employed more frequently in reflection, directly after a piece of work was finished: "I enjoyed the discovering the movement" (Participant 2) or "very enjoyable – and challenging" (Participant 11, Debriefing Notes). During the process, participants more variously documented having fun, feeling good about what they are doing, and simply liking it. These sensations and feelings were frequently, but not always, noted down when a participant's process was unfolding without anxiety or confusion. How closely aligned these feelings were to the process, whether the process generated this enjoyment, was

not clearly distinguished by any participant in the field notes, but they did document specific feelings and sensations that most probably were parts of this overall sense of enjoyment.

'Enjoyment', though, is a fuzzy term. Its dictionary definition is primarily that of "pleasure" (OED 2000), yet 'pleasure' has overtones of leisure or recreation, and there was no suggestion in either the *upstream* or *downstream* responses that participants regarded the drawing workshops as a recreational experience. Rather, the experience of enjoyment was characterised as a somewhat undefined felt sense, with overtones of wellbeing or satisfaction, tinged with pleasure and ease of execution. What participants meant by 'liking' or 'enjoyment' was frequently qualified in multiple ways, according to person or drawing exercise, but again, the characterisations of these words in isolation remains fuzzy. But together, these different characterisations build a picture of a more complex understanding of what the participants meant by enjoyment. These characterisations have been clustered into four categories: a sense of liking, a sense of ease, feelings with spatial qualities and the experience of not-thinking. These categories will now be explained.

A sense of ease

People often described the tasks in terms of 'ease', as being easy to execute, but also of experiencing a feeling of ease in themselves: "this feels easy" or "I feel good". The actual term is not used that often: that is, the experience is not consciously identified, but rather suggested as having been present, as in when they suddenly noted that they were finding a new task difficult or hard. Participant 12 described it thus: "adding the charcoal was an experience of ease, formless, shapeless dark substance, easy to move and change" (ID 12). That ease is an element of the sense of enjoyment, and the feeling of a process flowing along, was evident. But ease can mean something other than 'not difficult' or 'not challenging'; it has connotations of 'liking' but it may also have a spatial element, especially when aligned with the experience of movement.

A feeling of liking

Closely aligned with 'ease' is the feeling of liking what they are doing, of feeling some sort of pleasure or having fun, even joy or delight when something unexpected emerges from the process. Even the most articulate participants - those who use specific terms familiar to the idioms of the visual arts - still used the word 'like' at times without qualifying it; suggesting, again, that this was something more felt somewhere in their *being*, a sympathetic feeling rather than a conscious thought. In the previous section concerning how the creative

experience unfolded, it was noted how *embodiment* was strongly associated with indeterminate sensations of pleasure or ease.

But 'liking' was more specifically characterised when *embodied*, such as the experience of the soft, flexible feel of the charcoal or the hardness of the pencil. Conversely, 'not liking' was associated with feelings of frustration, either because they felt overly challenged, or because they experienced time pressures that constrained their personal self-expression or arriving "at a pleasing place" (ID 1). But again, it is difficult to distinguish embodied qualities with spatial ones.

Feelings with spatial qualities

This indeterminate experience of enjoyment was most clearly characterised when it was qualified by sensations with spatial aspects. Participants described feeling freer, being more open, experiencing a lightness in themselves, of flowing out, or being in "the flow of the process" (ID 13). Enjoyment then acquired qualities of expansiveness and freedom.

Those who documented experiences of freedom or free-ness sometimes related it to having open-ended guidance, rather than simply less guidance. They liked guidance with structure, or freedom with boundaries. No one bucked against the instructions deliberately or disregarded them completely and did their 'own thing', but this may have been because they were hoping to learn something new, to have a different experience. Looking at the drawings, some appeared to interpret the directions very freely or occasionally ignored the task directions altogether, but their field notes gave no hint of such intentions.

This spatial experience was also characterised by distinguishing between external and internal experiences. As noted in Part Two: The Influence of Space, many people experienced space inwardly. This was a form of expansion for them. What they mean by 'experiencing inwardly' was different for each, but incorporeal for all. It was described as a sensation of warmth, as relaxation, as being easy to breathe, as levity, as movement, freedom, or simply as being part of the drawing and the drawing being part of them. Some described it as losing themselves in the drawing: their sense of time and place changed and when the drawing stopped, they felt they were coming back to a self, bounded by everyday time and place. This could be a diminishing of self-consciousness with its often companion of uncertainty, but it may also point to a loss of the sense of self-awareness in relation to the drawing. It may be their thoughts were elsewhere, while their body continued to move through the gestures; or maybe they became mesmerised and 'fell asleep' in the rhythm. Certainly some participants noted this in Phase One during the often-rhythmical charcoal drawing movements. Certainly, in all

these states there was a distinction made between inner experiencing and external acting. Experiencing inwardly was central to the enjoyment of the tasks and the overall workshops, even when there was frustration at not being able to articulate it clearly.

Even so, it is making an inaccurate distinction to claim a sensation can be experienced internally or externally. Rather, the distinction could be more to do with experiencing a sensation in a specific part of the body, as opposed to a general feeling that does not have an obvious bodily location or is not body-bound. For example, "I experience my hand moving in rhythmical gestures" may be described as external, as the person is only aware of their hand performing a movement; or it may signal a lack of connection to the task: "Mostly just external feeling," stated Participant 12, as opposed to when she noted during the same exercise:

> "How does a line express emotions was a thought – but not for long because it just did when I felt them inwardly" (ID 12)

What was she describing here? What did she mean by internal and external feelings? She was probably describing the difference between a level of absorption in the drawing where the self and the object are in movement together; and when the self has withdrawn or lost interest in the task, and was just carrying on the movements or carrying out instructions. Sometimes this went one step further: the body mechanistically performed the movement while the thoughts were wandering somewhere else altogether.

Likewise, when participants spoke of experiencing an inner struggle during a task, there was more a general feeling of disturbance in self's experience of its *being*, probably a mix of mental and emotional difficulty. Such general feelings over the whole *being* - feeling relaxed, feeling tense– go beyond precise, physical location and may seem to have no obvious relationship to the body at all, such as the experience of feeling free. But again, what the participants were experiencing had to do with the sense of self being united with, or being separate from, the creative work. They might have felt more interactive and engaged with it, as Participant 9 noted during a free composition exercise: " I felt as if we are intermingling – the paper and I"; or they might have experienced a disconnection from with the task, as did Participant 12 (quoted above). As the interaction between a participant and drawing became more intense and or more constrained, the duality of self and world was continually being overcome, then re-experienced again.

The state of not-thinking

Not-thinking could be described as a somewhat diffuse state of mind. Participants seemed to

consider thinking a hindrance to the ease of their creative process, and that not-thinking was more conducive engaging inwardly with the movement, which in turn was experienced as enjoyable. They sometimes described not-thinking as feeling, feeling into, experiencing, even flowing, but again, the term 'not-thinking' was not used. Rather, it was only when participants became consciously aware of their thought process, that the flow of the process was interrupted. For example:

> "Less flow more in my head as I thought about where to put the next line" (ID 15)
>
> "After taking time to stop and think the line found a way to flow on" (ID 7)
>
> "Thoughts about how to go about it, thought about it too much instead of just doing it" (ID 12)
>
> "Taking a line and repeating it for me requires too much thinking" (ID 14)
>
> "… when I stop and think about making a line relate to the one before …" (ID 14)

Participants found the flow of the process was temporarily halted when stopping to think. Thinking was experienced here as being specifically located in the head, checking the process but did not necessarily constrain immediate re-engagement. This suggests that they experienced the state of not-thinking or suspended thinking as being more wholly in their *being*. This contributed to their sense of ease and enjoyment because their self was more fully engaged with the process and not 'withdrawn' into their head.

In this context, however, thinking was identified by participants as logical thinking or problem-solving, cognitive activities, which they apparently regard as not being conducive to creativity. As discussed in Chapter Two: Literature Review, logical or analytical thinking is regarded as a different mode of thinking from creative or intuitive thinking in many philosophical approaches, and this was reflected in the implicit understandings of many participants when they used the term 'thinking'. Some of the drawing tasks required a higher level of concentration, with more focused attention: participants have possibly labeled this more conscious attentiveness as a thinking that is in polarity with the diffuse mental state that accompanied feeling or experiencing. Participant 10 actually pointed to this conceptual difference, with this rather cryptic field note:

> "Could be endless - different ways – options - until infinite less tiny space other way losing the lines – intellectual, creative" (ID 10)

Later in his interview he clarified this comment:

> "It's a bit the two extremes I was talking about. One aspect the intellectual 'what am I achieving' and one aspect creative, free 'anything is possible'" (ID 10)

He had separated the analytical from the creative thought process, but then went on to say that they could exist together: "They exist, but I am aware of a space in between. And that's actually what I think is interesting" (ID 10, during his interview).

In her interview, Participant 1 was able to describe, not conceptualise, this difference, when she explained: "Trying to make lines [is] not [about] what I [am] thinking". She clarified this: "[I mean] that's a different line [rather than] I'm thinking differently". The experience of not-thinking was not that thinking was suspended, but it was embodied in the drawing of the line. The drawing of the line did not follow cognition, but was cognition, just experienced in a different way.

Summary of the Quality of Enjoyment

Enjoyment appeared to be strongly associated with ease of process and of pleasure, especially embodied pleasure, within the movements of drawing, as an embodiment of the process. But it was also linked to inner expansion and freedom, to feeling freer, but within boundaries, which reflects the nature of creativity itself – as something new or different, but not so new or different that contexts or patterns were lost.

Enjoyment is a positive quality. From its characterisation here, it suggests that enjoyment enabled the creative process to unfold without undue constraint. However, all participants documented experiences of challenge, difficulty, frustration or confusion at times, yet those experiences did not necessarily diminish or undermine the underlying sense of having participated in an experience that gave them pleasure or satisfaction on some level. It was evident, though, that enjoyment was strongly aligned with experiencing a deeper engagement with the process, of bringing self and world closer.

The Quality of Tension

As described in Part Two: The Structure of the Experience, all participants found themselves shifting frequently between their own intentions and those that came to meet them from the context (researcher–led drawing workshop) and from the process of itself (interaction with the drawing). They listened to the guidelines and they made their own decisions about how to

proceed, on how to interpret these guidelines, but they also frequently found themselves being led by the drawing itself, which resulted in a kind of tension as to who to 'listen to'. Here, 'tension' does not necessarily imply the presence of strain. Rather, it implies a dance between self and world, where two unlike entities meet in a continuously shifting *intentionality*, of which the participants were more or less conscious throughout the interaction.

But this tension was nevertheless evident. It could be seen particularly in the structure of the field notes: here, one saw the participants constantly fluctuating between activity and receptivity, experiencing and reflecting. It is as though there was a continually shifting of intention, between doing and not-doing, intention to do and feeling impelled to do – or not do. Sometimes this took place at such a fine level, like a subtle oscillation, that it took several readings to detect this tension, such as when one participant noted: "I can't not want to develop the line – I wish only to develop the line" (ID 2). It was not explicit, because participants did not necessarily feel anxious about this tension – they may have felt quite comfortable and at ease with the task – and because they were immersed in the process. Often, they were not even particularly conscious of the presence of tension, but sometimes it appeared to them as a moment of heightened consciousness of the process itself, and of the role they were playing in this process. Sometimes they experienced tension in their bodies, perhaps in the awareness of their breathing; sometimes as a recognition that something was being demanded of them or that they were being challenged on some level.

Participants themselves occasionally use the term 'tension'; they also sometimes described feeling confused or unsure about what they were doing. Tension was present but unstated when they questioned how to proceed; when they described a challenging moment; when they found the unfolding of the process was even slightly disturbed; or when they found their inner sense of ease was diminished. Participants experienced tension as a quality of their creative process as well as a structural element. This quality of tension can be characterised as a feeling of uncertainty, a state of not-knowing and a sense of friction.

A feeling of uncertainty

Participants experienced uncertainty before the workshops and at times during the process. It accompanied feeling nervous, unsure, excited, anxious, expectant, and open, and, as already stated, it was inherent in the discursive nature of the field notes. However, this feeling of being frequently on unfamiliar ground did not appear to impinge on participants' overall enjoyment of the workshops. There was hesitancy, but also openness to doing something new

or unexpected. The actual terms 'uncertainty' or 'uncertain' were infrequently used: it was more an underlying quality of the experience, a felt state. Conversely, feeling certain was also not expressed: no one stated they felt certain of what to do next or expressed complete confidence in what they were doing. (In this context, it would be strange, in the Phase One workshops anyway, since each exercise was deliberately made unfamiliar, as stated in Chapter Four: Procedure). Uncertainty, or suspension of certainty, allows a degree of openness, and this was essentially a precondition for participating in the workshop. In the follow-up Phase Two workshops, there was more of a sense of sureness about the process, due to greater familiarity with the tasks. Again, the term 'certain' or 'sure' did not appear; they only appeared as a subtext during the interviews.

A state of not-knowing

Almost indistinguishable from this feeling of uncertainty is not-knowing: " I don't know what I'm doing" or "I wonder if this is right." Participants felt unsure or puzzled or confused and even looked blank at times as to how to proceed with a drawing, which suggests that not-knowing was experienced more consciously and immediately, rather than as a felt, indeterminate presence in their *being*. Unlike uncertainty, not-knowing was experienced more on a cognitive level. It was often a brief experience of the immediate present, one that came and went when the participants questioned the direction the process was taking, or they decided to accept what the drawing was telling them to do. Not-knowing, like uncertainty, did not necessarily prevent participants from taking intentional action, but it may have opened the door to finding new ways to express themselves, if they could sustain the not-knowing and let the drawing process to lead them. Not-knowing was then associated with not-thinking.

A sense of friction

Underlying tension was also more consciously experienced when it appeared as a sense of friction – the friction of two forces rubbing against each other, rather than of conflict or discord. It may have been experienced when using unfamiliar materials; or when caught between the desire for a pleasing result and trying a new approach with unknown consequences; or when a participant was trying to balance light and shadow in her drawing; or when more concentration was required. Even the act of rubbing charcoal or pencil against paper produced an experience of friction, as two unlike objects pressed against each other. This may have been experienced as "just external feeling" (ID 12), but it may also have been an inner experience, one that brought a sense of challenge or unease, as Participant 14 discovered, after adding too much black charcoal. This third characterisation of tension was

an experience of bringing two different forces into play with each other and experiencing their differences, while trying to bring them together.

Occasionally the friction became so minimal that participants felt carried along, sometimes by what they called the flow of the process and sometimes purely by the mechanisms of the physical task, by a rhythm that became repetitive and mechanistic, and where they experienced their self as being barely engaged in the task. Participants described feeling almost hypnotised, or unaware, or not present in the process: "just copying, felt like respite – not input from me," said Participant 15. Friction became minimal when the movement became embodied or when a movement became mechanical. In both cases, the conscious self as director of the process was subsumed.

At times the sense of friction was heightened, and more apparent, when a tension arose between making it happen and letting it happen. For example: "(Sometimes) I felt I was trying to make something on the page rather than the something on the page coming out of an experience" (ID 13). This meeting of differences was experienced more directly between self and the world. Some participants experienced this type of friction when caught between what they wanted to do, habitually did, and what the drawing was 'telling' them to do. They became aware of their own desires or intentions rubbing against those of the unfolding process, and they experienced this as a push/pull in two directions, even as a conflict of will: "I feel tensions between wanting to represent it accurately [and wanting] to making it my own" stated Participant 9.

But this friction sometimes led to seeing that creativity may be something other than self-expression: "How much is me? From me? How much is something else?" pondered Participant 10, pausing to reflect upon what was happening in his drawing. For another participant, this momentary awareness opened a door to a new understanding of what was at stake if she let go of her image of herself: "Ooh! Possibility enters to 'let go' of the Artist (capital A). And just be free. Yeah, that's a task" (ID 6). Both participants had such moments of suspended activity, where they sensed they had the choice to follow their own way or allow something else to guide their process.

Uncertainty, not-knowing and friction are in themselves neither positive nor negative states during a creative process. They could open the door to possibility or they could become a constraint on the creative process. The next section describes considers these two potential effects of tension.

Tension as an Enabler of the Creative Process

At times, participants became aware they were not fully in control of the process. Tension was then experienced as a kind of watchful consciousness, a heightened awareness of what was happening and what could potentially happen. Sometimes this was challenging, even confronting, but sometimes it became an enabler of new things arising.

As previously noted, the sense of friction between what participants intended to do and what was actually happening could be a catalyst for something different or unfamiliar to emerge. Participants described experiencing moments of awareness that this was happening and was seemingly beyond their control:

> "The exercise has a life of its own" (ID 10)
>
> "What is it? What wants to be drawn? Am I up for it? " (ID 6)
>
> "It tells you where to go and I just followed it" (ID 12)
>
> "Despite my actions something else is in play beyond my control" (ID 3)

In each case, the participant relinquished full control over the process, loosening their own intentions as they became aware that the process was 'telling' them to do. Participant 13 noted that trying to follow her own intentions could be a hindrance to such an experience, as she wrote at the end of the workshop: "[Sometimes] I felt I was trying to make something on the page rather than the something on the page coming out of an experience" (ID 13). In his interview, Participant 10 put it another way:

> "[There is] tension between one aspect "what am I achieving" and one aspect creative, free "anything is possible" (ID 10)

Just as Participant 6 saw the potential of letting go of her image of herself as an artist, Participants 3 and 10 became aware of the sense of friction that could arise between a person's intentions or desires, of expressing the needs of the self, and the awareness that there was a freedom beyond these self-willed needs that could lead to a more creative path beyond self-expression.

Tension as a Constraint on the Creative Process

If the tension became too great, or a way forward did not immediately present itself, participants began to experience tension more consciously. Tension was then experienced as a

restraint or hindrance upon the fluent progression through a task. When characterising the nature of the constraint, participants were more specific than when describing the somewhat nebulous feelings of uncertainty or not-knowing that had accompanied them until this time. They now described feeling bored, frustrated, stuck, out of their comfort zone, not liking [it], not feeling right, of feeling pressure or just plain resistance to what was happening. Sometimes the term 'anxiety' was used, but more frequently descriptions were in bodily terms: as a tighter chest or as being too much in their head, instead of feeling the movement in their body. They then began to think about what they were doing, and the unfolding process would falter or stop.

These constraints may be described as indistinct feelings but more usually they were specific sensations in their *being*. These can be grouped as follows: a feeling of anxiety, a sense of unease, becoming self-conscious.

A feeling of anxiety

Uncertainty or not-knowing that is influenced by imagining what is to come or what might come can turn to anxiety. "Am I finishing too early? [Am I] not getting the exercise? When is it finished?" asked Participant 20. The openness that characterised the uncertainty they brought to the workshop disappeared, replaced by a formless apprehension, as they considered the possible risks and dangers ahead. The flow of the process then became constrained in its freedom to explore and play. Sometimes, in the face of anxiety, participants reverted to 'safe', familiar responses, repeating forms or gestures they had already created; and at other times, anxiety expressed itself as a loss of ease in the way a person was moving with the forms and gestures of the drawing. This apprehension was then experienced as spatial and embodied, as unease.

A sense of unease

Here, ease literally disappears from the body and affects the sense of wellbeing. This is embodied tension, where a person's sense of ease in their *being* is disturbed or challenged by what they are encountering. Participants became caught up in the body's sensations and felt less 'at one' the drawing process, often describing the sensation as being more "in the head" (ID 15). This unease brought greater awareness to the quality of their tension at specific moments and was usually described with spatial qualities: feeling out of their comfort zone, or out of their depth; experiencing a sensation of constriction or pressure and a loss of connection to the movement that united them with the drawing. Consequently, they lost the enjoyment and flow of the process, which constrained their ability to continue with the task.

"The shading exercise … was creating resistance within me. I couldn't picture the outcome. Didn't have direction," wrote Participant 18 (about a task in Phase Two).

Becoming self-conscious

When participants felt their own creative ability and skills were being challenged, there was an increase in the tension between what they felt they could do and what was being asked of them by the process. There was heightened sense of self, of self-consciousness, as their focus of attention turned to themselves. This self-consciousness could turn to self-judgment: "At one stage I felt quite overwhelmed by judgment of myself and lack of artistic ability that I couldn't go on," said Participant 15. Memories of past disappointments with their creative attempts surfaced; they withdrew from deep interaction with the drawing and began to judge the work on its appearance, perhaps in relation to own idea of aesthetics or satisfaction; perhaps in relation to what they saw others creating. They moved from the present into the past; they could become anxious about the future, about what they might be asked to perform next.

When participants found their own conceptions of art and creativity being challenged, the push-and-pull interaction between themselves and the drawing process could turn to a conflict of will, producing discontent and resistance. They became frustrated, irritated or simply unhappy with how things were proceeding. Some continued to dutifully follow the instructions, but only to the letter, so to speak, withdrawing their inner engagement from the process. "Mostly just external feeling" was how Participant 12 described this experience. Participant 15 said it "felt like a respite" from the pressure of meeting new challenges. Or participants turned to producing something that soothed and supported their sense of self, something familiar and satisfying to their image of creativity and art: "drawing to a pleasing place" (ID 1), instead of facing the risk of producing something unpleasing to their eye. Participant 6 reflected on this at the end of the workshop:

> "I did not like nor enjoy the sensations of having to undertake a task, a creative task, in a short period of time. To complete a creative task I like to be able to go through the full process, until it feels like I am finished, not to be "artistic" but to see a task through to a satisfactory point" (ID 6)

This participant felt challenged by the perceived time constraints, but rather than regarding this as an inability on her part to adapt, her final field note was framed as statement of resistance to a process she saw as superimposed by someone else, one which somewhat hindered her self-expression. She was one of three participants who regard themselves as

creative and artistic (from the Background Notes questionnaire), and, apparently, had already developed a personal approach to how she liked to work creatively. However, no one else commented about time constraints in this manner.

The uncertainties that participants accepted at the start of the workshops began to take on greater significance when they did not like what was happening, or when it did not feel right. They found themselves thinking more about themselves and their feelings about what they were producing, rather than being engaged in the unfolding process. They pulled back into themselves and began to dwell on their own perceived inadequacies, or of the drawing, the process or the researcher, rather than remaining open to what was coming to meet them. Sometimes they wondered whether they could meet future challenges; sometimes memories of past experiences came up and coloured the present. They became critical or self-conscious. When feelings of resistance to what was happening arose, there was a desire to draw back and reaffirm their own way of doing things, of asserting themselves over the process; or they withdrew from its unfolding. They may even have stopped altogether, not just paused, thus breaking their connection to the drawing and to their engagement with the experience.

As forms of constraints, anxiety, unease and self-consciousness are not necessarily discrete from each other, more than one may be present simultaneously, or they may merge into each other. It is a question of how they are experienced: anxiety has a formlessness about it, unease is experienced in the body, and self-consciousness is a challenge to their sense of *being*. All three forms of constraint could turn a person away from their engagement with the creative process, and withdraw, to an extent, from the world into their self. Anxiety and unease may or may not constrain a creative process; but the constraint of self-consciousness, even if not as directly troubling to a person as anxiety or unease, can affect their capacity for being open to new experiences, because it turns the focus from openness to what is happening onto what they would rather have happen, as has happened in the familiar past.

Summary of the Quality of Tension

All participants consciously documented tension, in some form, more than once during the workshop, but it can seen as continually present in the subtext of their field notes, as an underlying current that structured the experience, and also as a quality of the experience, one that is finely tuned to the creative process. As Participant 6 noted:

> "There is a balancing act between looseness and form, between open and closed, there is attention required, but too much 'tension' makes the progression harder" (ID 6)

The Quality of Inner Difference

There were elements of the creative experience that lay outside of such familiar and everyday feeling and sensations as enjoyment or tension, even if they were experienced in a less than familiar context. These elements were like moments of *transcendence* from the ordinary everyday and are unique to that moment and to that person; they usually did not recur in the same form during the workshop. They might be transformative, yet only briefly so; they had an ephemeral quality that was sufficiently concrete at the time to be captured succinctly in words, often using imaginative pictures. These occurrences had a quality that can be described as engendering 'inner difference'.

This inner difference experience was a shift in awareness that both punctuated and coloured the creative experience. It appeared spontaneously out of the process, from being deeply absorbed in the activity, but not with any intention from the participant. Inner difference experiences fall into two categories: the imaginative or metaphoric, and the transformative.

The imaginative picture

These pictures appear as nature metaphors: a person suddenly sees something recognisable in their drawing:

> "I could see creatures and faces beginning to emerge" (ID 13)
>
> "Suddenly saw piercing 'eyes' in the motif" (ID 7)
>
> "I see a megalactic cloud" (ID 14)
>
> "… beautiful, look's like the universe" (ID 8)
>
> "Stars colliding … Water forming … Deep dark depths of beneath" (ID 6)
>
> "Having that wonderful moment when I see nature in the simple following of allowing the line to develop. Tides on the beach. Shells – sand – movement, rocks, trees" (ID 2)

These imaginations gave meaning to a drawing's non-pictorial appearance, to its gestures, which otherwise could look quite abstract; they helped a person ground their inner experience in the known and familiar, without diminishing the uniqueness of its appearing. At such moments, some participants commented that they would like to have followed these imaginations, and turned the drawing into a picture.

Transformative moments

By contrast, transformative moments were felt, rather than perceived, as a change in a participant's sense of *being*:

> "Vast, expanding, motionless, frozen in time" (ID 19, in Phase Two)
>
> "Lightness of being" (ID 5)
>
> "Felt like a stream that I made visible" (ID 12)
>
> "I felt I was in the eye of the storm, then flowing out, softening" (ID 15)
>
> "I felt the flow of the patterns within my being" (ID 17)
>
> "Felt I was in the flow of the process" (ID 13)

'Flow' is a term that sometimes appears in the Phase One field notes (it also appears in the interviews). It was used to describe feeling ease and fluidity in the movement of the drawing process, but also at one with the movement, as part of it. Flow was accompanied by a more diffuse mental state, more peripheral than focal. But regardless of whether the term 'flow' or 'lightness' or 'expansion' was used, this transformative element deepened the participants' connectedness with the process. For some, this transformative element lifted them into another place and time:

> "Connecting with another realm" (ID 10)
>
> "I felt like I was working in another space. The mind wasn't judging, but rather wondering" (ID 14)

These participants found themselves in a place or space that was different from their everyday familiar state; in a space where new experiences could happen. Yet as Participant 14 then noted, "I found there was a point where I couldn't hold the creating space any longer and so decided just to stop" (ID 14). The experience was vivid, but she did not know how to sustain it, so withdrew altogether from the process. She did not know how she entered this "creating space" but was aware of leaving it. At times, a participant could sense when he was on the brink of a transitory moments beyond what he intended to do, such as when the sense of friction produced an awareness that something else was trying to come into being. Participant 3 had this experience when he found that despite his control, something else was in play in the process of drawing. As noted in the previous section, the sense of friction between self and world could lead to an openness to what was emerging.

As noted when describing the essential elements of the structure of the creative experience (Part Two: The Structure of the Experience), such shifts in awareness fluctuated, especially during the Phase One workshops. (Since there were comparatively few field notes from Phase Two, it is not possible to know if the transformative elements were similar, or even if they appeared).

Summary of the Quality of Inner Difference

These transitory moments of picture and transformation during the participants' creative experience added meaning and value to it, especially if there was a sense of inner difference in how a person experienced her self. These moments coloured and enhanced the overall experience of the workshops, including a participant's conception of what creativity 'feels' like. They may have fulfilled a person's desire to be more creative, or fed it more. They are possibly those experiences that met a participant's own idea of what being 'creative' should look or feel like.

This third quality of the texture (enjoyment and tension being the other two) revealed its presence in transient moments in the *upstream* experience as shifts in the state of *being*. However, its true nature could only be more fully understood by the researcher from the *downstream* material of the interviews, as participants struggled to give more than vague terms and gestures to experiences they had during the workshops. As stated in the previous chapter, what was initially seen as a weakness in the interview process or the research design, was later understood in one of those rare moments of revelatory seeing as an essential aspect of the phenomenon of creativity. The *downstream*, recollected material is now discussed in full.

The Downstream Recollection

During the interviews, 10 participants looked back to their *upstream* experience. As discussed in Chapter Four: Analysis, the Interview Texts were not analysed line by line, but read and pondered in their wholeness (particularly since much of those interviews were hermeneutic in nature, and were used for verifying purposes). Nevertheless, direct quotes have been used to evidence the *downstream themes* elicited from the Interview Texts, the videos of the interviews, the Debriefing Notes, the very small number of post-workshop field notes, and the Phase 2 post-workshop discussions.

The lived experience

Four *themes* were revealed from this material: two 'lived experience' *themes* and two *lifeworld themes*.

Theme One: The Afterimage of Enjoyment

When first asked what they could recall about the overall experience of the workshops, all interviewees responded with some version of "I enjoyed it". Similarly, when asked for comments on the workshops in the Debriefing questionnaire, most participants stated that they enjoyed it.

The wholeness of the experience can be seen in the afterimage of the experience, which is the first thing that comes to participants, post-workshop, when asked to recall and relive it. This afterimage is like vivid impression they are left with, a kind of sense of the whole experience. But it can only appear once they have left the workshops, once the whole experience is over. This sense of a whole does not appear in the group discussions because they took place immediately after the Phase Two workshops; there, the participants talked about the parts of the experience, specific exercises they grappled with, and specific thoughts they had during the process. At this point, the participants were still fresh to the creative experience; part of their *being* was still engaged in it (one person said she felt she was still 'spiraling' inwardly). The afterimage effect requires a break from the experience in order to form an impression; there has to be closure, but this may be sensed just afterwards or even a few weeks later during the interviews as a first response to the researcher's request: "Tell me about the drawing workshops."

This afterimage has the *theme* of enjoyment. But unlike the moments of that characterised the experience of enjoyment during the process, this afterimage does not have parts; it does not manifest in different ways. Participants did not describe different qualities of enjoyment; it is simply a whole impression they were left with. It was only later, further into the interview process, when participants were reliving the experience by viewing their drawings and field notes again, that this *theme* is reiterated with qualifiers (*italicised*):

> "… felt *exhilarated at successful drawing*" and "*tired afterwards*" (ID 19, Debriefing Notes)

> "*Very* enjoyable and challenging" (ID 11, Debriefing Notes)

"I felt *enlivened* by this workshop" (ID 2, Debriefing Notes)

"I arrived home *feeling much lighter and happier within my self*" (ID 14, Debriefing Notes)

"*I remember* really enjoying it" (ID 13, Interview, and says this several times)

"Final exercise – felt enjoyable, *energized*" (ID 20, Interview)

"Enjoyed it … I definitely *felt different* afterwards" (ID 3, Interview)

"Satisfied … (feeling tired) but *a good tiredness*" (ID 9, interview).

"Felt really good *to be a part of it*" (ID 2, Interview)

"I enjoyed it … I feel overall there was a *good flow* in myself with the experience" (ID 18, Interview)

'Exhilarated', 'enlivened', 'energised', 'lighter', 'in flow' and 'tired': from these qualifying statements, we can see that the enjoyment afterimage is experienced as a feeling of difference in one's *being*. It has embodied qualities that at times transcend the bodily experience, that point to changes in the way the self experiences its *being* after it has been immersed in a creative experience. Participants 1 and 14 also state that what they enjoyed about the whole experience was being "really engaged", "just being in it" and "at one" with it. For Participant 18, it was about feeling a flow in her self.

As noted in the *upstream* experiences of embodiment, experiencing a bodily connection to the drawing is part of the enjoyment in creative drawing. However, the afterimage of enjoyment is not bound directly to the kind of movements generated by drawing. In recollection, these feelings of difference are not body-bound sensations but felt as something more intangible.

There were also frequent recollections of feeling creative, challenged, frustrated, resistant, and self-critical; but these did not as much impact as the experience of enjoyment and of some form of inner change. These other recollections had to be drawn out of the participants during the hermeneutic considerations of the parts (individual exercises), they did not arise spontaneously from their *being* or as their primary recollection in the way enjoyment (and inner change) did.

For several participants, first feeling challenged or frustrated, then being able to move through that feeling, seemed to enhance the sense of satisfaction. One participant felt exhilarated at a

particularly satisfactory outcome (ID 17); another felt pride and accomplishment as well as her "good tiredness" (ID 9), and a third stated "the more I do these things, tis good for me as a person" (ID 2).

Summary of the Afterimage of Enjoyment

The data reveals that a core element of the *downstream* experience is the afterimage of enjoyment, an enjoyment of a sort that goes beyond simply liking an activity, and one that has qualities somewhat different to the *upstream* experience of enjoyment. The *upstream* experience was strongly associated with a sense of ease, of exploratory fun and embodiment with the process. *Downstream*, enjoyment is linked with changes in the ways participants experienced themselves, however briefly. *Upstream*, embodiment and a sense of satisfied enjoyment are essential to the creative experience, in its experiencing; *downstream*, enjoyment is characterised by feelings of a difference in one's *being* after a creative process, by a sense of having been changed by it.

Theme Two: The Inarticulation of the experience

For the participants, enjoyment was in some form an unequivocal constituent of the creative experience. But the researcher became aware, during the interviews and when watching the videos of the interviews, of another *theme* that was being disclosed, not by what the participants said, but how they said it; and by what they could not say.

During the hermeneutic stage of the interviews, the participants revisited their drawings and field notes. As they viewed each exercise and its accompanying notes, they tried to both relive the drawing experience and to make sense of the notes that accompanied it. What was notable about this process is the difficulty participants had, not so much with recalling details of the creative experience, which was only weeks before, but with finding the words to describe the experience, as they relived it with the aid the visual reminders.

Most participants could remember each of their drawings when shown them but could not always make sense of the accompanying field notes. Some could not relive the experience: they recognised their work, but could not reach back *upstream* to the experiencing of it. "I really can't even remember that exercise," said Participant 13, several times. Yet Participant 13 also wrote at the time: "I felt I was part of the drawings. They were an expression of me," and later: "I was the drawing" (ID 13). She produced many vivid field notes, evocative of her

experiences at the time (see Appendix C: Examples of Participant Texts, Phase One, Text 13), yet later could not recognise many of her own drawings.

Other participants could relive the process when viewing their drawings, but had great difficulty describing with words how they went about that process. Even rereading their field notes could not help them find the words. Yet none of these participants had any difficulty recalling the details of where they sat, the feelings of anticipation and uncertainty they had as they looked at the blank paper and unused materials in front of them, and how they felt overall about the workshops. Such recollections did not elude them; only the substance of the experience in its details and specificity proved difficult to express verbally.

What these participants did produce was mainly half-spoken and broken sentences, punctuated by inarticulate sounds and silences. These spaces were often accompanied by hand gestures; Participant 10 was so gestural that rather than gestures accompanying his words, the words appeared to be there to support his gestures.

Here are two typical examples[17], in their raw form (from the interviews), of this inability to concretely articulate the experience:

> "It's interesting because I feel like there is a different thinking here. And … It wasn't there so I had to work for it. So when I'm working for it, I'm thinking, 'Okay so how am I going to do this?' and I, and its too, um… I find this overwhelming because when I want to … do the next one, as a, ..a.., as different, but in a small increment … it, … a … infinite possibilities … like 'How close am I getting? Am I going to look at closeness? And am I going to look at the shape this way?'" (ID 18)

> "And then that [gestures] especially here, I had this kind of cross. It's almost calling for, to build on that. Or … hmm … Lines meeting other lines … yeah 'sense of art', [gesture] you almost tame it, you have this swoooooshhh [gestures] and if you make it curved then you can actually relate to [gestures]" (ID 10)

These almost incomprehensible descriptions are evocative of a potent experience that the participants could not quite find the words to describe. The videos show that both participants put great effort into their attempts - they are not otherwise inarticulate people. Participant 18 was trying to describe her thought process while creating; Participant 10 was living (or reliving) his actual process. One participant was more observational of her process,

[17] See Appendix C: Example of Interview Text, ID 18, interview excerpt, uncleaned and cleaned

and cognisant of a different way of thinking at work in the exercise; the other was simply reliving it. Yet with both, there was this sense of groping back towards an experience, as it had been experienced two months beforehand, without being able to take hold of it again, without being able to verbalise in concrete terms that make rational sense, to describe just what the experience was. They had a sense of what they did, maybe even how they achieved it; they were just not sure how to name or describe it.

Summary of The Inarticulation of the experience

Participants were not describing what they drew, but how they went about it, or the way they experienced it. They could sense it, feel it and understand it on some level, but they could not bring it back in any definable form, other than to perhaps say, "Wow, that lives in me!" (ID 13). Or as Participant 3 said (when looking back at the interplay of light and dark in his charcoal exercise), "[I] can't really describe [the experience] but I could really sense that difference" (ID 3). Yet in its experiencing, as documented in their field notes, participants usually had little difficulty finding words to express what they sensed, felt or thought, even if it was only expressed in the intensity of its expression. This suggests that there is something about the creative experience that is both ephemeral and diffuse. It suggests a nature that can not be quite grasped at, except in the immediacy of its appearing.

Themes from the *lifeworld*

The *lifeworld themes* are those deeply embedded perceptions and understandings that participants hold about their self and their creativity that they brought to the workshops. These underlying *themes* shaped the participants' drawing experience and how they viewed that experience, afterwards. Two *lifeworld themes* elicited from the Interview Texts and reflected in the findings of the questionnaires: aspiration and self-judgement.

In the questionnaires that bookended the drawing workshops, it was evident that participants came to the workshops with differing perceptions of their own creative abilities. Yet within these differences, it was noticeable that all carried an inner longing or desire to understand and develop this ability through the workshop process. In this way, individual differences point to a *lifeworld* theme of aspiration to be more creative, to extend one's potentiality in this area.

Theme Three: Aspiration

In the questionnaires, most participants expressed a need to feel and be more creative. From the interviews and group discussion, it became apparent that this desire for creativity had to do with longing or aspiration towards self-actualization, often through creating beauty or art. "I long to be an artist" said Participant 1; "I love beauty, art … why can't I do that?" exclaimed Participants 14 and 19. This desire to create artistic objects is seen as fulfillment of self-expression. For other participants, simply feeling creative at times during the workshops was sufficient to make them feel satisfied by what they achieved in them: "I felt creative doing this [exercise]" or "I created that!" [upon seeing again one of their drawings]; these comments characterise 'feeling creative' without being able to define what that feeling is, without touching on its essential nature. Not everyone left the workshops feeling fulfilled in their aspirations, even temporarily, but all found the engagement satisfying in some deeper level of their *being*.

Theme Four: Self-judgement

This aspiration and longing to be more creative brings with it a self-judgement of perceived shortcomings, of being as not as creative as a person believes she could be. Self-judgement invariably arose when a participant felt some form of constraint during the unfolding of their creative process. Participants 14 and 18 noticed that when they felt resistance or discomfort with the process, this made them relive past 'stuff' and it brought up old patterns where they felt unfree; whereas a flowing process was described as a "building into the future" (ID 18). Participant 2 would be absorbed, even having fun, and then experience a sudden moment of self-doubt when glancing at another's work. Self-judgement goes beyond feelings of constraint, such as uncertainty or confusion, which would usually pass. Rather, it is about self-doubt, a questioning of your belief that you are essentially a creative *being*, even if this has not yet been concretely realised. If creativity is important to how you live your life, as many affirmed in the pre-workshop questionnaire, then self-doubt asks questions about how you are living that life. Participants in the group discussions were quite cognisant of this dilemma; they thought the answer lay in silencing the inner critic by immersing themselves in the moment.

Summary of the *lifeworld themes*

The *lifeworld themes* create a context and backdrop for participants' workshop experiences. A longing to be creative opens a person to new experiences, to the world, whereas self-judgment

based on past experiences draws a person back into herself. Again, we see here the tension between self and world but also the fundamental and existential tension in the way the self engages with the world.

This chapter now takes a break from describing the findings phenomenologically, to considering them through a different lens. Here follows a short discussion about the structure and texture of the experience, as seen through the lens of a cognitive, problem-centred approach.

A Problem-Centred Approach to Analysis

The aim of phenomenological research is to explicate a phenomenon as a whole, to disclose essential, even universal, invariants of this phenomenon. It does not study the individual experience, but how a particular phenomenon manifests and appears in the unfolding experience of the individual. It does not point to what one individual's experience is, but rather to how it is possible for anyone to experience the world - that is, what is intersubjectively accessible (Gallagher & Zahavi 2012). Nevertheless, ideographic differences in the experiencing of the phenomenon are the starting point of an *explication*, and, as previously stated, can reveal the multiplicity of ways that an invariant may manifest.

Cognitive models of creative thinking, specifically *problem-finding* and *problem-solving* approaches, were considered in some depth in Chapter Two: Problem-Centred Approaches. To demonstrate the difference between a phenomenological approach to analysis and a cognitive one, a brief analysis of ideographic differences between participants is presented from a problem-centred perspective, as much as could be ascertained from experiential evidence. This section highlights the difficulty of using a theoretical construct, drawn from a cognitive model, to interpret experiential material; how a theoretical framework is also more 'distanced' from an approach that is focused on the 'things in their appearing'. (Note that even the style of language used by the researcher is different from the earlier sections.)

Characteristics of problem-centred approaches

The characteristics described in Chapter Two: Problem-Centred Approaches were used to inform this analysis. Even so, the researcher was sometimes required to extrapolate these characteristics from the content of 'what' was said, and 'how' it was said, rather than observing them directly in the Participant Texts.

In the internal, shifting dialogue observed in the participant texts, elements of *problem solving* (questioning the steps), *problem finding* (observing and describing), reflecting (usually sentences with verbs) and conceptualising (abstracting from the experience), as well as passing fragments of thoughts (single, seemingly unconnected words) were observed. As stated in earlier in this chapter, in The Structure of the Experience, the mobility of shifting intentions was notable.

A *problem-solving* approach may be evident in field notes that reflect and question both the researcher's directions to the participants and what was appearing in their drawing. Participants using such an approach tried to follow the instructions as closely as possible, puzzling their way through them. At times they noted they would have liked stronger direction; they required more information. They also noted constraints more frequently than other participants and their feelings of uncertainty were in the foreground much of the time. They seemed less inclined to follow the 'prompts' from the process and were either more self conscious (ID 5 and ID 11) or more result-oriented (ID 1, ID 9 and ID 16). Some, such as Participant 11, first tried to think their way through each exercise using a rational process, trying to find "a solution of sorts," and "building on past experience" (ID 11). Using existing knowledge, rather than working directly with unfolding the process, is typical of a *problem-solving* approach. Later, however, Participant 11 noted: "felt into the gesture" (ID 11), demonstrating a shift to a more embodied response to each exercise. Other participants noted how their thinking was getting in the way of being able to immerse themselves into the process and feel 'flow' (see The Quality of Tension, The State of Not-thinking for examples of this awareness).

By contrast, participants who were more open, exploratory and focused on the process rather themselves or the result (ID 3, ID 6, ID 8, ID 10 and ID 13), could be said to demonstrate a *problem-finding* approach. They were less concerned with questioning the directions or judging themselves, more observant of the process influencing them (not the reverse), and more open to living with uncertainty. As stated in the previous chapter, Part One: The Procedure, About the Choice of Drawing Exercises, most of the exercises were devised with a problem-finding approach in mind, since experiential drawing is, by its nature, focused on the process rather than the solution. Whether these participants are natural *problem finders*, or whether they simply responded more openly to the research design, cannot b ascertained here.

However, it is difficult to categorise all participants using either of these approaches. Many participants demonstrated characteristics from both approaches during different sets of exercises. Participant 9 consciously experienced the tension between both approaches. At times, both Participants 1 and 9 were very conscious of being asked to perform in unaccustomed ways, hence their concern for the end-result. They had already established their own ways of responding to creative activities and were more concerned with fulfilling these, but could not otherwise be described as problem solvers, based on the evidence of the field notes. Other characteristics also play into this analysis. For example, two participants were very self-consciously aware of themselves and their own limitations and had, at times, a heightened by awareness of other participants. Despite this, they still experienced moments of enjoyment and flow, though on some level their self-consciousness remained throughout. It may be that, rather than being problem solvers, they were never felt really at home with the process. Two other participants were almost the opposite, seeming to note observations like scientists, disconnected from the fact that it was their hand that was creating the lines and forms. But the other 16 participants fell between these two extremes, sometimes demonstrating a mix of them. This is not altogether surprising, since the different sets of exercises demanded different approaches.

Some participants were very busy mentally (ID 2, ID 10, ID 13, ID 14 and 18); they had a great deal to say, either about themselves or the process, frequently questioning, with many 'I'-centred statements, suggesting both *problem solving* and a high level of engagement. However, all of these participants were also very process-oriented, never referring to the end results but vividly describing imaginative and transformative experiences. These characteristics are associated more with *problem finding*. Moreover, neither approach can adequately account for less rational or less conscious processes, such as the 'I found myself' experience described earlier, in The Parts of the Experience: The Focus of Attention.

It seems evident from this brief analysis that considering the participants' experience in terms of *problem finding* and *problem solving* ignores the complexity of their experiences.

Part Three: The Core Findings

Part Three brings *upstream* and *downstream* experiences together, to disclose the core findings: the *essences* of the phenomenon of creativity. The first section presents a summary portrayal of the structure and texture of the creative experience, as experienced in this study,

before synthesising them to create a *description*. The second section responds to the two phenomenological research questions.

Descriptions of the *Essences* of Creativity

The essential elements of the whole experience were described in Part Two. A further stage of *dwelling* on these elements revealed the *essences* of the phenomenon, and in doing so, the individuals' experiences were subsumed.

The structure of the creative experience

The creative experience was found to have a dialectic, recursive, non-linear structure, reflecting a fluctuating interaction between self and world. The self seeks to engage the world in order to shape it according to the self's own intentions but finds that in order to bring something into *being*, it must give something of itself over to the world. There is a continual shifting between awareness of oneself, and awareness of oneself engaging with the world. At times, this leads to a feeling of fusion with the world, of becoming the process; at other times, of retreating back into oneself, to pause, question or reflect. This interaction is impelled by an underlying tension that slackens and intensifies, according to how the self responds to the unfolding process, and is influenced by the longings, aspirations and perceptions the self brings from its *lifeworld* of creative experiences.

The self experiences various levels of awareness in this interaction: focal and peripheral awareness; heightened and lowered awareness; awareness of one's own intentions; and awareness of things happening beyond their own volition (non-intentional). Again, these are not so much dual states or polarities but continuums of awareness that are fluctuating, mobile and transitory.

The texture of the creative experience

The creative experience was characterised by tension, by enjoyment and by moments of inner difference. But how these qualities were experienced in recollection was slightly different to how they were experienced *in situ*.

Tension was primarily a quality of the *upstream* experience, manifesting itself in several different ways. Sometimes, participants experienced it as enabling the creative process, even leading to new experiences that, afterwards, brought insight into the nature of the creative process. But tension was also experienced, at times, as constraining or even undermining the

creative process. But afterwards, tension was primarily recalled as having felt challenged. *Tension*, therefore, is an *essence* of creativity.

Enjoyment, by contrast, was only associated with enabling the experience, yet its appearance was not necessarily constrained by tension. It played a role in bringing participants into a deeper engagement with the process, but whether it facilitated this deeper engagement or arose out of it, is difficult to ascertain. It appeared during the unfolding process, but was consciously recognised in reflection. Like tension, enjoyment took many appearances, but, again, it was recalled somewhat differently *downstream* of the experience, as to how it was described in its experiencing. *Upstream*, it was strongly associated with the sensation of embodiment; whereas *downstream*, it left an afterimage that participants called 'enjoyment' but was more nuanced in nature than simply pleasure. It had qualities of a deep satisfaction of what was achieved, as well as with what was experienced. Most importantly, participants felt changed by the experience, even transformed at times, if only briefly. There was a sense of having transcended their known, familiar self and found some aspect of their *being* revealed, beyond this everyday self. Together with the sense of having found and met the challenges of the experience, participants were left with what can only be described as a sense of *fulfilled well being*: participants found the experience fulfilling on some level and were left feeling well in their *being*. What lies 'inside-under' the term 'enjoyment' is *fulfilled wellbeing*.

Inner difference was experienced as a transition in how a participant perceived or experienced the creative process, but one that was accompanied with some change, a feeling of difference that transcended their everyday, familiar way of *being*. This difference went beyond such experiences as liking, uncertainty or even embodiment. Such moments of inner difference were only documented during the *upstream* experience – they could not be recaptured with words. In fact, this was true of much of the substance of the participants' creative experience: the more a person immersed herself in the process, the harder it was to later recall the experience in its vivid concreteness and substance. Participants could only grope back towards the experience, with gestures and incomplete sentences. It seems that, having experienced a *transcendence* of their everyday self, participants did not then have everyday words to recall this experience. So what lies 'inside-under' the experience of inner difference is *transcendence*. This quality of *transcendence*, in whatever form, was found to be another *essence* of the creative experience, one which gave meaning and value beyond having had an enjoyable experience in the workshops, or simply producing pleasing or satisfactory drawings; it could lead the seeing and experiencing new possibilities in how to become more creative.

When the essential elements of the *upstream* and *downstream* experiences are considered together, as a whole, it is possible to consider the 'inside-under' of the experience, to see the *essences* of the phenomenon, those parts without which the phenomenon would not be what it is. In this study, *tension, fulfilled wellbeing* and *transcendence* have been identified as *essences* of creativity. *Tension* facilitates the process; *fulfilled wellbeing* both supports and arises out of the process; but it is *transcendence* that lifts the experience beyond the familiar sense of self and opens to door to new ways of seeing or experiencing. All three *essences* are interwoven with each other: they are not stages on a linear progression.

A synthesis of the experience

When the structural form, *essences* and *themes* of the creative experience are synthesised together, the experience of creativity could be described as thus:

> Creativity emerges with a sense of space opening up; a living into the present yet a moving towards a different place, a place where a person can feel part of what is unfolding without feeling entirely at home with it. The emergence of creativity is exemplified by the statements 'I found myself', 'I found I had created something beyond my own volition' and 'I found myself in a creating space without knowing how I got there'; where afterwards, in recollection, a person can say about such an experience, 'Wow, that lives in me!'
>
> Creativity is experienced as bringing a familiar, everyday self to a half-familiar world, participating in it, listening to it, then returning, somewhat changed, to the everyday world. It is a state of push-pull held in fine balance, which can slip into an intense but temporary change from the everyday, familiar self into a world of possibility and suspended certainty of outcomes. It is temporary, because a person's sense of personal self, central to their existence, keeps reasserting itself upon this state of change, consciously or subconsciously, in the form of personal feelings, thoughts and sensations that intrude on the flow of creative unfolding. There is a constant reappearance of a self with its own past and future, with its own longings and aspirations for beauty, fulfillment or self-expression, that is, to be oneself more fully. Yet, there may also a recognition that these things are found, not in being oneself, but by taking hold of the material of the world and becoming immersed in shaping it. Creativity is a state of becoming, not a *being*. Creativity has been found to be

something that takes on a life of its own, if one can allow oneself to be a partner in this unfolding life, rather than attempting to be master and director of it.

A creative experience leaves behind a sense of fulfillment and wellbeing, of having achieved something intrinsically uplifting and satisfying, without being able to put a finger on just what the something was. It is a transitory experience, but one that is sufficiently potent that it diminishes any sense of frustration and self-doubt felt on the way.

The Findings in Summary

This chapter opened with asking the two experiential research questions: What is/was the experience of being creative, in its experiencing/as it was experienced? and, How does creativity emerge? These questions are now addressed.

The creative experience, in its experiencing

Tension and fulfilled wellbeing are interwoven qualities that characterise the experiencing of creativity, both as the creative process unfolds and after it has unfolded. Although fulfilled wellbeing arises as a result of the experience, it nevertheless is not only a product of it but also a quality, since the experience is non-linear. Both tension and fulfilled wellbeing can exist simultaneously, but at different levels. If the tension becomes too strong, fulfilled wellbeing may temporarily disappear; yet nevertheless appear as an afterimage of the whole experience. Throughout the experience, there may be moments of *transcendence*, where a person experiences some sort of change in their being. Such moments have a role in bringing about those transitions in the creative process that particularly characterise it as being creative.

The creative experience, as it was experienced

There is something inexpressible or ungraspable about describing creative experiences in recollection. Yet, placing *transcendence* unequivocally in the time-stream of the creative process is even more difficult than placing *tension* or *fulfilled wellbeing;* it suggests that creativity has a somewhat ungraspable nature that can only be captured fleetingly in its appearing. The emergence of a creative moment, the experience of finding oneself in a space where new things are arising, where a participant finds herself having an experience of creativity that is wholly new to her, or at least unique to that moment, can be described, at best, as a moment in which *intentionality* and knowing are suspended, leaving a person in a

state of potentiality. This state, which may lead to moments of *transcendence*, belongs more closely than *tension* and *fulfilled wellbeing* to what Merleau-Ponty (2002) calls "the spontaneous surge of the lifeworld" (cited in van Manen 2014, p. 220) that exists pre-reflectively, before knowing, and therefore before conceptualisation through the articulated word. 'I found myself' exemplifies this experience, where a person finds herself participating in something beyond her conscious control and intention during the process of the creative experience. Yet because of this *un-intentionality*, it appears more nebulous to recall as a lived experience. It is something that must be caught in the act.

How creativity emerges

Transcendence plays a role in the emergence of creativity. If a person can relinquish full control of the process and remain open to what is unfolding, moments of inner change can be a catalyst for it to emerge. This allows a creating space to appear, where new things can emerge, out of the process itself. Without this creating space appearing, creativity can be described as production, but not creation in its originative sense.

This chapter presented the many different ways each *essence* or *theme* of the phenomenon of creativity was experienced in a concrete way. It also disclosed how creativity could appear. In doing so, it described the 'multiplicity in the unity'; the many different ways people can experience a creative process, rather than providing a summary of the experiences that were common to most participants when engaged in this activity. The next chapter will reconsider these findings in the context of the research questions, reframed in terms of cognitive processing.

Chapter Six: The Discussion

> There is a balancing act between looseness and form, between open and closed, there is attention required, but too much "tension" makes the progression harder.
>
> (Participant 6, 2013, Phase One Workshop)

Overview of the Chapter

In the previous chapter, the research findings were presented as a collection of descriptions of creativity and the creative experience. They described what emerged from the research data, from a phenomenological perspective, in light of the core purpose of the study: to explore how creativity is/was experienced and how creativity emerges. Through a process of gradual disclosure, the phenomenological process of uncovering the 'truth' about a phenomenon, the structure, *essences* and *themes* of the phenomenon of creativity were revealed.

Now, these findings are reconsidered in relation to key issues in creativity research, as identified in Chapter Two: Literature Review. After responding to the original research questions, the discussion then appraises the position of cognitive theories of creativity, in light of the experiential findings of this study, particularly the limitations of problem-centred approaches to creative ideation. Two notable issues arising from this study are then presented, before concluding the chapter with an appraisal of the strengths and weakness of this study from methodological and design perspectives.

The chapter is structured according to the focus of the research, broadens to encompass the wider issues and implications. Each part contains a range of discussions concerning different theories and issues highlighted in Chapter Two, followed by a brief summary. There are five parts to the chapter:

Part One: Re-addressing the research questions. The roles of flow and resistance in the creative process are considered in light of the phenomenological findings described in the previous chapter.

Part Two: Extending current creativity research. The propositions and theories of Schwenk, Dewey and Csikszentmihalyi are revisited; research on creativity as a problem, creativity as a state of awareness and the characterization of creativity are extended.

Part Three: Issues specific to this study: a discussion concerning self-expression and habit in creativity; methodological developments in phenomenological methods.

Part Four: Limitations of this Study: the overall approach, methodology and research design reconsidered in light of the study's outcomes.

Part Five: Conclusion of Chapter and Study: a summary of the findings, reconsidered in light of the study's purpose and questions, followed by a consideration of broader concerns about research approaches to investigating creativity.

Part One: Re-Addressing the Research Questions

Reframing the Research Questions

This study investigated creativity as both an experience and a process. The phenomenological analysis explored creativity as an experience in its wholeness, by asking: What is the experience of creativity? and How does it emerge? But the Schwenk (1996) metaphor for thinking that launched this study describes a process specifically oriented to the qualitative dynamics of movement in this process. This metaphor was used as a vehicle for engagement with the topic, by deconstructing it into four questions concerning the roles and relationship of flow and resistance in the production and generation of creativity. These questions asked:

1. What roles do flow and resistance play in the creative process?
2. How can we differentiate these roles more precisely?
3. What is the relationship between flow and interruption of flow?
4. Does their relationship play a part in the generation of new ideas?

These questions also reflect a core issue identified by the researcher in the existing literature, that of the seeming disparities between characterisations of the creative process. This process has been described as a dynamic, fluid, flowing movement, an enjoyable (Csikszentmihalyi 1996), even joyful (Nelson 2011) spontaneous experience. Yet other characterisations suggest it is a process of constant change, subject to intrinsic resistances, discontinuity or external constraints, an uncertain, unpredictable experience requiring some form of hindrance (Bardsley, Dutton & Krausz 2009; Stravinsky n.d., in Harnad 2006) in order to be open to potentialities and generate new ideas. Current research asserts the presence of these qualities – this is part of the paradox of the phenomenon - but does not clarify their relationship. Since Schwenk's metaphor suggests a relationship, this study has sought to understand this relationship through exploring his metaphor, and since his metaphor is based on an experiential study of natural water properties, an experiential methodology was chosen for this purpose.

However, since phenomenology aims to study the phenomenon as a whole, the fieldwork was launched from a reframing of these research questions about the cognitive process into open-ended, experiential terms. So, the questions on the roles of flow and resistance were reframed as 'What is/was the experience of the process?' and the question on creativity's generation was reframed as 'How does creativity emerge?' in order to use phenomenological methods to investigate creativity. Having produced phenomenological findings, these findings are now reconsidered in terms of the original questions concerning creativity during the cognitive process. From asking how the process of creativity could be experienced, the focus turns again to particular parts of the process, the seemingly disparate forces of flow and resistance.

Addressing Each Research Question

The *essences* of creativity, *tension, fulfilled wellbeing* and *transcendence*, and how they informed the structure the creative experience, are now considered in light of the research questions.

Q.1: What roles do flow and resistance play in the creative process?

> There is a balancing act between looseness and form, between open and closed, there is attention required, but too much "tension" makes the progression harder.
>
> (Participant 6)

Flow and Wellbeing

In this study, 'flow' describes the activity of fluidly moving with some ease through the creative process, where thinking is experienced as diffuse and does not constrain this ease. When participants use the term 'flow', it signifies they are becoming more deeply engaged in the process as they begin to feel in harmony with it. As the experience becomes more embodied, they may become so immersed in the process they feel at one with the drawing, Dewey's (1980), "complete interpenetration of self and the world of objects and events" (p. 19) may take place. This leads to feeling *fulfilled wellbeing*, similar to what Nelson (2011) calls "a sense of completion … felt on a physical level" (p. 300).

Although this study draws the terms 'flow' and 'resistance' from Schwenk's (1996) metaphor, not from Csikszentmihalyi's *flow* theory (1996), it is impossible not to see parallels between Csikszentmihalyi's *flow* and the experiences of this study's participants. Like Schwenk, Csikszentmihalyi draws on the stream analogy, but Schwenk's 'flow' describes the flowing movement of the cognitive process in experiential terms whereas Csikszentmihalyi uses 'flow' to describe a state of altered awareness that engenders enjoyment. Schwenk describes a thinking process that is intrinsically creative in nature and the Csikszentmihalyi describes the sense of 'oneness' with the process that can appear when intensely absorbed in a creative activity. The findings of this study concur in general with both these conceptualisations: the flowing movement of the creative process was found to engender an enjoyable, immersive experience, not unlike the one Csikszentmihalyi (1996) describes. However, though flow may lead to immersive states, enjoyment (or what this study calls *fulfilled wellbeing*) is not necessarily synonymous with *flow*, since *fulfilled wellbeing* was also experienced in this study from non-immersive experiences. Likewise, *flow* theory's immersive experience is characterised by highly focused concentration, whereas in this study, the mental state during immersive flow has a more diffuse quality, similar to Gelernter's (1994) low focus or affect thinking or Claxton's (2006) "soft creativity"' (p. 353).

Both the Schwenk (1996) and the Csikszentmihalyi (1996) conceptions of flow are described as unified and differentiated, with an underlying dynamic driving it. In Schwenk's flow (based on natural water flow), this dynamic creates a meander form in the flow; in *flow* theory, this dynamic is the focused, mental energy that powers the immersive oneness state. In this study, the underlying dynamic of flow is characterised as *tension*.

Resistance and *Tension*

Resistance and *tension* were found to have a more complex relationship than flow and

wellbeing. *Tension* is not an outcome of resistance but a resisting force within the current of flow. When *tension* slackens, a person might still feel in the flow of the process, relaxed and receptive, but they may also 'fall asleep' in a process, carried only by the mechanism of the movement while the diffuse mind slackens and wanders. Participants in this research documented such experiences, if they did not remain fully present in the process. If *tension* is too strong, flow is hindered by heightened self-consciousness and what Nakamura and Csikszentmihalyi (2014) refer to as the 'me' in us dominates the interaction between person and world (or object, to use the more concrete term). Then, a person pays more attention to her own thoughts and feelings than the process. In both situations, there can be no interpenetration of self and object, as the self must remain self-awareness and present in immersive states such as flow (Nakamura & Csikszentmihalyi 2014), even if the mental state is experienced as diffuse, as was the case in this study.

However, when *tension* is held in balance, there is a note of open but watchful awareness by the self upon the interaction between self and object. It is the resisting *tension* in water flow that creates the meander form, so tension in flow shapes the human energy in the ebb and flow of experience. This is sustained when a person is fully present in the constant fluctuation between activity and receptivity, between the intentions of the self and the intentions of the object, as described in the Chapter Five. The presence of this alternating fluctuation between self and object, activity and receptivity, has been observed as present in other phenomenological studies on creativity (Nelson 2011). Maintaining this balance is seen as central to sustaining the trademark "paradoxical attitudes" (p. 300) characteristic of the creative process. Whether between the demands for self-expression and the demands of the object (Doyle 1976, in Nelson 2011); or between immersive states and self-reflective states (Reinders 1992, in Nelson 2011); or between the conscious and unconscious processes (Giorgi 1984, in Nelson 2011), these experiences of alternating fluctuations confirm the essentially dialectical nature of the creative process.

Tension sustains this balancing act between the person's intentions and what comes to meet them from the process, as it unfolds. It prevents awareness from becoming too diffuse and inattentive, keeping the door open to what could potentially happen, keeping the self engaged in the process, not focused on itself. In this sense, tension is a resisting force: it not only drives the stream of thought but resists the familiarity of falling back onto habitual ways of thinking and being. This reflects Schwenk's (1996) implication that the vitality engendered by the

interplay of flow and resistance is as essential for thinking creatively as it is for "creative continuity" (p. 15) in water flow.

The experience of *tension* as a "balancing act between looseness and form, between open and closed" (Participant 6) concurs with the role Schwenk (1996) gives to resistance forces as being central the creative ideation. His premise is that shallow thinking results from a lack of resistance, of insufficient looseness and form, "dissolve and bind" (p. 97); but fixed thinking, where fluent progression is harder, arises from insufficient vitality in flow. So less resistance produces a less focused, more diffuse state of mind that cannot stay with one thought, which suggests more resistance, produces deeper thinking from a more focused attention. This would concur with Stravinsky's belief that "you cannot create against a yielding medium" (n.d., cited in Harnad 2006), but is at odds with theorists who suggest creativity arises from a diffuse, not focused, state of mind (Gelernter 1994; Claxton 2006). However, diffuse states are more closely associated with the sudden insights, intuitions and other such subconscious forms of processing that may emerge from of an incubation stage of creative activity (Wallas 1926, in Funke 2009; Richards 2011; Runco 2014), as opposed to the kind of ideation Schwenk (1996) proposes, where thought 'forms' gradually emerge from a recursive interweaving of flow and resistance forces. This kind of thinking pertains more to the productive thinking found in *problem solving* (Harnad 2006), where an idea is continually revisited, ever deepening in the process, rather than the sudden emergence of an original insight. Nevertheless, Schwenk's implicit notion is that deep thinking is creative thinking, a proposal with which Levy (2007b) would agree.

The distinction between productive creativity and generative creativity requires more attention when considering where creativity comes from; but it could be posited that it comes from more than one place and one type of processing. It is evident, though, that the roles of flow and resistance are not independent, but intertwined. There is interplay between the two forces within the creative process that shapes the stream of thought. This interplay is experienced as a dialectic interaction between self and object, but this dialectic operates on many different levels simultaneously, as described in Chapter Five: The Structure of The Experience. This suggests creativity, as an experience, will always appear paradoxical and, therefore, irreducible (Abel 2009; Rothenberg & Hausman 1976).

Q.2. How can we differentiate these roles of flow and resistance more precisely?

> Openness, uncertainty, anxiety, seems easy, striving, [an] idea struck, sense of freedom, felt good, was hard, desire to let it flow, [it] took discipline, things emerged, delight, easier, it feels good.
>
> (Participant 3)

This field note quote from Participant 3 is an example of the fluctuating, dialectic nature of a creative process, as described in the Chapter Five. Though this reduced structure presents only the bare bones of the process, we can get a sense of the interweaving of process and experience through its structure. *Fulfilled wellbeing, transcendence* and *tension* were found to be interwoven qualities of the creative experience, just as flow and resistance have been described as interwoven forces in the process. Flow and resistance as interrelated but contrasting forces can be grasped more comprehensively, by observing how this process was subjectively experienced in this study, by seeing the multiplicity of ways *fulfilled wellbeing, transcendence* and *tension* may be experienced within a process of flow and resistance.

For example, *fulfilled wellbeing* was found to have qualities of inner ease, satisfaction, sympathetic pleasure, embodiment and not-thinking. Ease of flow leads to a level of absorption in the process that participants found satisfying, keeping them sympathetically engaged and present in the process. Remaining present and sympathetically engaged in the process allows for the experiences of embodiment to appear, such as feeling freer, open, and spontaneous, feelings corroborated by artists interviewed in Doyle's (1976, in Nelson 2011) phenomenological study of creativity. In embodying the forms and gestures of the drawing, the drawing changes a person inwardly as he feels he becomes the drawing, transcending his familiar sense of self. Becoming the drawing generates a sense of "being wholly united with his environment" (Dewey, 1980, p. 18), leading to sudden insights and a feeling of "heightened vitality" (p.19). A "fully alive" (p. 18) experience overcomes past and future anxieties, allowing for openness for new things to emerge, leaving him with *fulfilled wellbeing*. In this study, such experiences pertain to self-transformation, which Krausz (2009) suggests from his own creative experiences can change and broaden the ways a person sees the world, the quality of his capacity to experience, which, in turn, enriches his creative productivity. There is an

interweaving of process with experience, presenting a richer, more complex understanding of creativity than a process-only conception of creativity can provide.

Likewise, *tension* was experienced as an intrinsic, underlying resisting force *within* the flow of the creative process. This *tension* was found to have qualities of uncertainty, not-knowing and friction. When held in balance, uncertainty and not-knowing sustain openness to the unfolding process, which concurs, in the main, with the role both Anderson (2006) and Zajonc (2006) ascribe to these states, of being a potential catalyst for creativity to appear (as discussed in Chapter Two: Literature Review, About the Term 'Uncertainty'). If the *tension* is strong, wellbeing may disappear temporarily but does not necessarily interrupt flow. If it is too strong, uncertainty may become anxiety, which draws a person's attention away from the immediacy of the present into the future, as she tries to anticipate what shape the future will take (Trigg 2017). Then memories of past experiences with creativity surface and constrain her freedom to be open to new ways of thinking and doing. The past colours and constrains her presence in the process. If the *tension* is not enough of a constraint, the ease of process may lead to less engagement, wandering thoughts or boredom. Nakamura and Csikszentmihalyi (2014) state that lack of challenge can undermine the immersive *flow* experience, but challenge is only one of the tensions that enable or constrain creativity. *Tension* characterises how challenge may be experienced, in its experiencing, just as *fulfilled wellbeing* is a more complex and nuanced characterisation of enjoyment, one more pertinent than the indeterminacy of 'enjoyment'. A careful, more differentiated characterisation of the essential qualities that colour and define creativity has been one of the aims of this study.

There is a correspondence between the process and the subjective experience of the process. They have an integrated yet differentiated relationship. Yet it is also clear that differentiating the roles of flow and resistance by understanding how they may be experienced, not only confirms the complexity of the creative process, a quality frequently ascribed to it *(*Funke 2009; Meusburger 2009; Runco 2014) but reflects the deeply complex nature of the human being (Runco 2014).

Tension, transcendence and *fulfilled wellbeing* are qualities of the texture of the creative experience, whereas flow and resistance are qualities of the structure of the process. Just as *tension, transcendence* and *fulfilled wellbeing* characterise how creativity is experienced, the interplay of flow and resistance shapes how it unfolds. To more deeply understand how this interplay shapes and structures the creative process, the next question examines what happens when flow is interrupted.

Q.3. What is the relationship between flow and interruption of flow?

> [Sometimes] I felt I was trying to make something on the page rather than the something on the page coming out of an experience.
>
> (Participant 13)

When participants were in flow, they were carried by the structure of the process, but this structure and the direction the process took changed in response to different constraints. Participants were not fully in control of the process. If they allowed the process to guide them, allowing "something on the page [to come] out of an experience" (Participant 13), they found themselves, without conscious intention, in unfamiliar territory. If they tried to "make something" (Participant 13) on the page using past experience, then their sense of flow dissipated. Becoming more self-conscious, more 'me'-centred by asserting control could dissipate, or even interrupt, flow. This sense of having periods with little control over the creative process has been noted in other phenomenological accounts of creativity (Nelson 2011), that a work creates itself. In these studies, such periods are considered central to the creative experience. However, the studies also observe that these periods came and went "in waves" (Nelson 2011, p. 299), as the self intermittently reasserted its own intentions.

In between such periods, when the self drew back from the interaction, there were moments of pause, of suspension of activity, when participants could take time, even if only momentarily, to observe and reflect. Connection was not necessarily lost but temporarily suspended. In such moments, a person might become aware that the process was asking a question of her. In their experiential accounts of a creative process, both Reinders (1992, in Nelson 2011) and Krausz (2009) assert critical appraisal is necessary during creativity. Indeed, Krausz (2009) considers that immersive, non-dualistic states, such as Csikszentmihalyi's *flow,* actually "inhibit" (p. 197) the creative process, "for the ability of emergent properties of a work to affect their creator depends upon a duality between creator and work" (p. 196). However, Conrad (1990, in Nelson 2011) believes that conscious, mental processes such as critical reflection interfere with the "intuitive grasping" (Nelson 2011, p. 301) of a creative work. Krausz (2009), however, does not deny immersive oneness experiences have a role in the creative process, but argues that such experiences do not directly generate creativity. Central to his argument is the role of the self: during critical appraisal, the self is in control, whereas during oneness states, the self relinquishes control to the interaction in order to be guided by it.

This study found there was a subtle and fluctuating line between dualistic and oneness states, because the interaction was experienced on different levels of awareness, as described in the Chapter Five, Part Two: The Structure of the Experience. In the experiencing of this process, such distinctions in awareness as Krausz (2009) and Conrad (1990) assert were not clearly observed in the participant accounts. This may be a question of methods: the participants were documenting their experience as they went; whereas it is not known whether Krausz and Conrad, though drawing on personal experience, base their assertions on in-the-moment, *upstream* accounts or from accumulated *downstream* recollections. Phenomenologist Giorgi (1984) declared, "conscious and unconscious processes intertwine constantly" (p. 26, in Nelson 2011, p. 301) during the creative process, a stance supported by the findings of this study.

The structure of 'an experience'

The participants' experience of their creative experience reflects, in its subtle alternation, something of Dewey's (1980) description of "an experience":

> Because of continuous merging, there are no holes, mechanical junctions, and dead centers when we have *an* experience. There are pauses, places of rest, but they punctuate and define the quality of movement. They sum up what has been under gone and prevent its dissipation and idle evaporation (p. 36).

The fluctuating nature of the interaction between each person and their drawing, each self and object, is not a swinging pendulum between two static, contained entities but a dynamic, continuous movement of "interchange and blending" (Dewey 1980, p. 37). Flow is not interrupted every time it meets some constraint, nor is the interaction between Self and object: this is too linear and simple a description of an experience. Linearity cannot encompass the "continuous merging" (p. 36) that characterises the immersive quality of an intense experience because the interpenetration of self and object for the participants is itself inchoate in nature. Immersion into the experience, interpenetration of self and object denotes a fluid merge that a person qualitatively slips in and out of, a merging and emerging, as typified by the statement "… connecting with another realm" (Participant 10), where a person finds himself entering, or having entered, into somewhere other than where he was before. As Nelson's (2011) overview of several phenomenological studies confirms, a person does not enter this space intentionally. It happens when they loosen control: the 'interchange and blending' takes them there. There is no gap in this experience where the self is not present at all. Rather, there is a shifting between centration and "decentration of one's subjectivity" (Ó Cluanain 1987, cited in Nelson 2011, p. 300), a dissolving of the unity between self and identity.

Dewey (1980,) states that interruptions to the unfolding of an experience are experienced as temporary resting places, where the momentum that has gone before, is gathered then released back into the unfolding, changing and shaping it. A similar unpredictable discontinuity that can change and disrupt the flow of thinking has been noted as a core characteristic of creative thinking (Abel 2009; Rothenberg & Hausman 1976): unpredictable, because of its organic nature; discontinuous, because of the 'places of rest'. Like Schwenk's water flow, there is a dynamic of "ebb and flow, systole and diastole" (Dewey 1980, p. 16), which both Schwenk (1996) and Dewey (1980) consider central to all dynamic interactions. In this study, the *tension* experienced by participants was the dynamic current that carried this ebb and flow, punctuated by "pulses of doing and being withhold from doing" (Dewey 1980, p. 16). In these pulses of doing and withholding from doing, participants experienced the flow of process as fluctuating in intensity and quality, as evidenced by the continually shifting structure, as described in Chapter Five. The findings of this study bring experiential evidence to support Dewey's (1980) assertions.

In this study, these pauses or places or rest that punctuate the ebb and flow of the process were experienced as moments for reflection or observation, and also as spaces for new things to potentially arise. The next question considers these spaces in the context of the generation of new ideas.

Q.4. Does the relationship between them play a part in the generation of new ideas?

> … in the process things emerged unconsciously on the page; despite my action, something else was in play beyond my control …
>
> (Participant 3)

Experiences such as Participant 3 describes, where creativity is experienced as creating itself despite a person's intentions, is a central theme in phenomenological research on creativity, both in this study and in past studies (Nelson 2011), but it is not entirely clear from the findings of this study as to whether the interplay of flow with resistance *directly* leads to such experiences. Schwenk (1996) states that this interaction leads to the creation of ideas, but his metaphor does not illustrate how this comes about, other than to say that dwelling on content accounts for new creation. Inherent in his metaphor is recursive dwelling, the continual ebb and flow of a dynamic movement. Repeatedly revisiting and re-dwelling on content can

engender deep thinking, which, as Levy (2007b) suggests, is a form of creative thinking, but unless the dwelling drops into unconscious processing, it is a form of conscious cognition that has more in common with Schön's reflection-in-action (1987) or *problem solving,* than Conrad's (in Nelson 2011) intuitive grasping or the transcendent 'I found myself' experience that requires conscious control to be loosened.

The process of flow and resistance may not directly generate the type of creativity that emerges unconsciously on the page; it may have more in common with the ability to "revise and redirect routine paths in new ways" (Gaut n.d., cited in Jenkins 2010, p. 186). This is productive creativity**,** in the sense of producing concrete results of significance, rather than being generative of new ideas. However, the experience of this process may lead to *transcendent* experiences, which in turn may be a catalyst for creativity to emerge. This is the substance of Krausz' (2009) argument: that the transformative nature of experiences that transcend everyday consciousness can enhance creativity indirectly, but they are not part of the production of creativity in themselves.

The findings of this study challenge that assertion. *Transcendence* was found to have a transformative effect on the *being* of the participants, sometimes engendering creativity. But *transcendence* was itself identified as being creative in nature, because *transcendence* experiences are unique to each situation and person. They do not recur in the identical manner or form again during a creative process. Further, *transcendence* experiences brought meaning and value to participants overall experience. This brings to mind the accepted definition of a creative product as newness, originality and value (Gaut 2010) that was introduced in Chapter Two. *Transcendence* is a product of the creative process and, as such, has a creative effect upon the process because the person and process are in dialectical union. Again, it is a question of one's definition of creativity, and whether an experience can be called a product; when participants had such experiences, during this dialectical union, they transcended their everyday, taken-for-grantedness world and entered another space, albeit often quite briefly, where new possibilities presented themselves. It was here, in this space, that creativity was experienced as appearing, as something that took on a "life of its own" (Nelson 2011, p. 299). This space between person and process, self and object, in the process of flow and resistance, is the space where creativity emerges.

Participants in this study described two such catalysts for this unfamiliar space appearing: one arises from holding the friction between unlike entities; the other emerges out of an embedded or immersive state. In the first, there was some conscious awareness of this

moment; in the second, it beyond their conscious control. *Transcendence* could change a participant's perception of what was unfolding in the process or change the way she experienced her inner being. It is difficult to differentiate the process from the experience here, since both could be described as states of awareness that are interwoven and inform each other. Maybe these two states reference the disparity between Krausz's (2009) understanding of how creativity emerges and Conrad's (1990, in Nelson 2011) experience. Perhaps the first belongs more to conscious process and the second to lived experience; or the first pertains to thinking creatively and the second to experiencing creativity. In an embodied conception of thinking, there is little difference, since embodiment dispenses with the need to distinguish conscious from unconscious processing. This topic will be elaborated upon in the section The Experience of Not-Thinking, in the second part of this chapter.

The space between

> It's a bit the two extremes I was talking about. One aspect … 'what am I achieving' and one aspect … 'anything is possible'. They exist, but I am aware of a space in between.
>
> (Participant 10)

In past research, the "potentiality space of creativity" (Abel 2009, p. 63) has been identified, in different forms, as the open space, the chaotic space or the emergent space. Both Abel (2009) and Zajonc (2013) propose that creativity requires an empty, but receptive, space where cognitive processing is suspended, where the indeterminacy of a creative experience can open up a potential space for creativity. Simone Weil (2002, cited in Zajonc 2013 associated the "grace" (p. 86) that enters into empty spaces with original insights or moments of creativity, but a void must already be there to receive them. Carter (2004) merges the concept of void with *chaos*, because *chaos* is an opening in time and space, a place where new things can arise. Runco (2014) suggests there may be a chaos dynamic at work in our sub-consciousness that is not necessarily disorderly. When Dewey (1980) states an experience has "ebb and flow, systole and diastole" (p. 16), this is a process of "ordered change" (p. 16) that emerges from the destabilisation that arises between the ebb and the flow. So, a "potentiality space" (Abel 2009, p. 63) can arise out of the interaction between two opposing forces.

Zajonc (2009) would concur with this, proposing the destabilised nature of this space can break "tyranny of logical thinking" (p. 64), leading to cognitive flexibility and a kind of open, experiential thinking. This ability to move between contradictions and polarities without feeling the need to resolve them by removing the contradiction is well documented (Zajonc

2009, 2013), going back to medieval philosopher Nicholas of Cusa's 'Coincidence of Opposites'. But Zajonc proposes that holding the friction of contradictions helps consciously overcome habitual, taken-for-granted ways of thinking, so as to find adaptive processing strategies to face the unexpected. In this study, participants described experiencing a sense of friction when two unlike forces or objects met. Sometimes, this acted as a constraint upon their openness to the process but there was also a conscious awareness of possibilities beyond the desire for self-expression, as Participant 6 noted: "What is it? What wants to be drawn? Am I up for it?"

Although they felt confusion sometimes, none of the participants in this study documented sensations of inner chaos or destabilisation, though the examples of reduced structure (as presented in Chapter Five: The Structure of The Experience) indicate a disrupted continuity of experience that hints at inner destabilisation. Perhaps it occurred, as Runco (2014) suggests, at a subconscious level.

The emergent space

> I found I was working in another space. The mind wasn't judging, but rather wondering.
>
> (Participant 14)

The emergent space was not experienced as a space, as much as place a person might enter without conscious awareness of entering it. One emerges into it unknowingly, even though the self is aware of being there. This is the 'I found myself' experience, described in The Findings chapter as being central to creativity appearing. "I found I had created something" noted Participant 15, beyond her own volition. Yet because of this un-*intentionality*, it was more nebulous to recall as a lived experience. In transcending the everyday *taken-for-granted* relationship to self, there is a loosening or diffusion of conscious intention, but this moment appears to be mainly shrouded from the conscious mind. The phenomenological researchers in Nelson's (2011) review assert the creative process requires a forgetting of self (Doyle 1976, in Nelson 2011); of not being in control, with immersive states, where there is a not uncommon dissolution of boundaries between self and object.

This experience of "things emerged unconsciously … beyond my control" (Participant 3) is similarly corroborated in Nelson's (2011) review, with such experiences accompanied by a gradual dissolution of boundaries between self and object. However, there is no accord as to whether creativity emerges out of oneness states or whether it requires a dualist awareness, despite there being general agreement that the creative process is a dialectic in nature. Again,

this lack of accord may be due to differing conceptions of what makes a process creative, a noted weakness in creativity research in general (Funke et al. 2009); or it may concern a lack of distinction between describing the process of creative thinking and the experience of creativity. The findings of this study suggest they merge into each other – participants experienced flow and they experienced resistance - yet the discrepancies in the way this process was experienced, or rather the multiplicity of ways it could be experienced, indicate they should not be confused. Failure to discriminate undermines systematic enquiry into creativity as a phenomenon.

The findings of this study support Krausz' (2009) assertion that the creative experience is a fluctuating, dialectic interaction of immersive and dualistic states, but question his assertion that transformative, transcendent states such as *flow* impede creative productivity. Although Krausz himself states that his non-dualistic experiences were transformative and influenced his creative works, his conception of creativity includes a critical, observant phase he considers necessary for creative production. Transformation, he says, is a by-product of creativity and not creative in itself. However, the experiences of participants in this study suggest otherwise: transformative experiences are creative in themselves, and creativity may appear from more than one type of experience. There is sufficient congruity between the findings of this study and those described in phenomenological studies in Nelson's (2011) review to validate these experiences as authentic.

Transcendence and *Personal* Creativity

It was found, in this study, that immersion into the process could lead to *transcendence*, which was a creative experience in itself, and could lead to new ways of creative activity. *Personal* creativity, the field of this study, concerns creativity in an individual's original construction of meaning - the potential for creative outcomes, though not necessarily the realization of such outcomes (Runco 2011). If *transcendent* experiences met a participant's own idea of what 'being creative' looked or felt like, and opened new possibilities to seeing and experiencing, then surely that is sufficient for claiming that creativity emerged into this space.

It is possible, that a pause for reflective response is sufficient for bringing about a change of direction or intention in the structure of a creative unfolding. However, it is also possible, that the heightened awareness brought about by sustained *tension*, when a person can act directly out of the moment, may be equally responsible for her finding adaptive processing strategies to face the unexpected. Withdrawing briefly to reflect engenders a different relationship between self and object, to one of the self being fully present in the moment. Here, there is a

brief suspension of interaction, not a withdrawal. That the recursive interaction of flow and resistance generates some form of creativity, out of the process, seems evident. Perhaps it is not possible, however, to pin down the exact nature of this dialectical interaction when speaking of creativity as a phenomenon, since creativity is, as both Abel (2009) and May (1975) assert, a continual process of coming into being. Abel (2009) suggests creativity has no beginning or end: as an experience, this may be true, but, as a process extracted from the experience, the findings of this study suggest that a person needs to enter into this dialectical interaction when she first approaches the object.

The Research Questions in Summary

> The realm of potentiality is more extensive than the realm of logical possibilities.
>
> (Abel 2009, p. 62)

In this study, flow and resistance were found to have a fluctuating, interdependent and dialectic interplay, both as a process and as an experience. Flow and resistance act together to form a unified, yet differentiated process, out of which creativity is generated and produced. This finding has some resonance with those of other experiential studies into creativity, which see creativity as a dialectical process. It also concurs, in the main, with Schwenk's (1996) metaphor for thinking creatively. However, there are differences in the details concerning how creativity is generated and, indeed, what makes an experience creative. In this study, three kinds of creativity that arise from the interweaving of process and experience were identified – the first pertaining more to productive creativity, the other others to generative creativity:

1. The creative ideation that arises out the continual and recursive interplay between the forces of flow and resistance, the type of creativity inherent in deep thinking.
2. The potentiality space that arises out of the breaks and discontinuities in the process, an opening that allows for original insights and moments of intuition appear
3. The emergent space, where creativity emerges by relinquishing control of the process.

It may be that deep thinking is a conscious process, emergent creativity is revealed out of the intentions of the object, and original insights arise from an interweaving of the conscious and subconscious processes. In practice, as they are experienced, there is less distinction and more ambiguity, a continuous merging, such as is quintessential to the Dewey understanding of the experience. These tentative suggestions will be further explored in Part Two: Extending

Current Creativity Research, in relation to, and as extensions of, the propositions of Schwenk (1996), Dewey (1980), Krausz (2009) and Csikszentmihalyi (1996).

From this study it is evident that when investigating the experience of the phenomenon, it is difficult to find certainty and logical understanding of the process of creativity. Modelling, or even delineating, a process based on experience is fraught with difficulty, because of the multiplicity of ways the process may be experienced. There are also fine nuances that cannot be formalised or pinned down, since they are contextual. However, one of the aims of this study was to make creativity intelligible, rather than explicable; to suggest an alternative to the reductive approach, one that could encompass the somewhat ungraspable nature of the phenomenon. Distinguishing process from experience for the purposes of research, like differentiating how the essential elements of creativity are characterised, seems mandatory in the pursuit of systematic research. Yet, in terms of creativity as a phenomenon, they are but parts that merge into the wholeness of the phenomenon. What one gets is an indeterminate picture of the parts, full of uncertainties and ambiguity, yet the whole picture presents an integrated yet differentiated relationship, which is the defining characteristic of a complex phenomenon (Nakamura & Csikszentmihalyi 2014). The question is whether a complex phenomenon requires the clarity of process that a cognitive theory seeks to bring, or whether an experiential approach that generates fruitful data, will make the phenomenon more intelligible. The findings of this study, considered in the context of its participant experience as well as past research, suggest we cannot discard cognitive approaches when trying to understand creativity, but such approaches are limited in representing the realm of potentiality in the creative process. How creativity is experienced also plays a role in understanding creativity. A possible relationship between the two approaches will be explored further in the next part of this chapter.

Part Two: Extending Current Creativity Research

Part Two returns to the propositions of key theorists introduced in Chapter Two: Literature Review, concerning creativity as an experience, as cognitive processing and as a state of awareness. The discussion reconsiders their work, in light of the findings of this study. The characterisation of creativity is also reappraised.

Experiential Approaches to Creativity

Schwenk's imaginative metaphor for thinking contains three key motifs that were used to identify gaps or issues in the creativity domain and structure the research design: the limitations of cognitive theories; the value of experiential approaches to address the limitations; and the limitations of modelling an unpredictable and irreducible phenomenon. These issues are now reconsidered in light of the study's findings.

Schwenk's contribution to creativity research

Figure 6.1: Meander and vortices in water flow

Schwenk (1996) describes thinking as an organic movement analogous with water flow (see Figure 6.1), a dynamic, continually recursive, multi-stranded interplay of two opposing forces, with the qualities of flow and of resistance. This view has been evidenced in this study, yet there is a question as to whether this process generates new ideas or only deepens existing ones. If the emergence of creativity is a coming into being process (Abel 2009; May 1975), then Schwenk is suggesting that dwelling repeatedly on a thought can lead to a new idea. As previously stated, his metaphor does not encompass how this "creation of form in thought" (p. 96) occurs. Schwenk derived this metaphor from his phenomenological study of water dynamics, not on the human experience of thinking itself. Although flow and resistance give an apt description of the cognitive process, the human experience of the process where new ideas arise appears more complex and subtle than his analogy can encompass. However, a closer examination of his water studies reveals the basis for his assertion. Firstly, he describes

water as a creative substance, and so by analogy active thinking is also inherently creative. This references the holistic theories of cognition where ideally, thinking is one intrinsically unified, active process (Bortoft 1996) that assumes creativity is inherent (Abel 2009), somewhat akin to Maslow's (1968, in Runco 2014) concept of the fully realised, creative human being. But Schwenk's (1996) description of the vortices that arise in water flow from the interplay of flow and resistance might provide an answer to how a thought 'form' appears: a hollow space arise out of the undulating recursive movement and a separate space "with a life of its own" (p. 41) is created, within the flowing movement. Just as water flow creates spaces for the potential of creativity, so the dynamics of repeated cognitive dwelling generates the kind of spaces Carter (2004) and Abel (2009) suggest as potentiality spaces for creativity. Perhaps it is the destabilised nature of this space, as Zajonc (2009) proposes, that opens the way for new insights. However, creativity emerges from this process and whatever happens in between the ebb and flow is as a result of opposing forces. Schwenk's metaphor appears to assume this knowledge.

With closer study of Schwenk's scientific work, the metaphor could be 'fleshed out', so to speak, but it is beyond the scope of this study to do more than speculate about the precise process by which creativity emerges out of flow and resistance. However, this study points to the increasing importance of interdisciplinary research for understanding complex phenomena such as creativity (Runco 2017). Moreover, Schwenk's imaginative, creative approach to understand water phenomena produced a metaphor for thinking that has value for understanding the creative process. This is not to suggest the metaphor itself should be used as a model of creative process, so much as to point to the value of seeing cognition as a dynamic force rather than a linear progression and to recognise its generative, coming-into-being nature as well as its productive side. For this reason, his work and its significance for creativity research goes beyond the metaphor.

Modelling the creative process

There is the question as to whether a metaphor rather than a model may be a more flexible paradigm for the thinking process. In Chapter Two, Models and Images, Schwenk's (1996) metaphor was suggested as a 'shape' of the movement of thinking, exemplifying a dynamic conception of thinking. Schwenk's metaphor describes a cognitive, not experiential, process of thinking, but it broadens thinking into a more encompassing image of cognition, one that can encompass the dualist distinctions described in Chapter Two: Cognition and Creativity, overcoming the divide between rational and creative thinking. Instead of analytical and

creative thinking being separate types of thinking, Schwenk takes the Goethean view (Bortoft 1996) of multiplicity in unity: thinking is a unified but comprehensive, complex weaving in a constant state of movement, a process that incorporates flow, meander, resistance, activity, reflectivity, pause and emergence. One has to imagine that these changes and fluctuations are happening on a subtle, or even microscopic level. There is a difference between viewing the river from afar and observing it up close. From afar, it appears a sweeping, flowing unified movement, without much obvious differentiation. But up close, one sees the details as tiny events within the unified movement - the meanders, the little eddies and whirlpools, the seemingly still surfaces – revealing an interplay of many different streams, all with their own impetus, yet still interwoven into the unity of one river. If thinking is conceptualised as an organic movement, rather than as a formalised progression of steps (somewhat in the manner that Dewey (1980) uses the analogy of the live animal to describe the qualities of a fully lived experience), then the static nature of modelling can be addressed. Schwenk's conception of thinking, though based on processes in nature, still has more real-world robustness in regards to cognitive processing than mental models, such as problem solving (Gelernter 1994), which limit creativity to what arises from certainty and conscious processing. Models that aim to give a feeling of certainty through rational processing, are based on what has been done, not what has not yet been done: they cannot account for the "realm of potentiality" that is "more extensive than the realm of logical possibilities" (Abel 2009, p. 62). The dynamic nature of Schwenk's conception of thinking allows for cognition to be a coming-into-being process, always open-ended, always open to potential.

If Schwenk's metaphor is seen as a picture image or a shape of the cognitive process, one with an open framework that allows for discontinuity and spontaneity (Abel 2009; Meusburger 2009) as well as fluidity, then it reflects the conceptualisation of creativity as an emergent process (Abel 2009; May 1975), as well as a productive one. It also encompasses the conscious and unconscious processes that the dualistic stance on thinking separates. Gelernter (1994) suggests the picture image appears in the lower-focus states where *felt* thinking and the more subconscious processes are active, where emergent creativity arises. An image of thinking, such as Schwenk proposes, that is not bound by stages or steps, that accommodates the indeterminate and unpredictable, and that incorporates the conscious and unconscious processing, can capture the rich complexity of creativity. It can provide an imaginative vehicle for creatively engaging with the subject. However, it is complex and unsuitable for the purposes of meeting the practical needs of creative communities since it cannot be directly applied. Nor can it address the specificity required to understand the many different contexts

of creative practice. It is a way of thinking, not of doing. It promotes creativity in cognition, not only creative products.

Perhaps rather than searching for multifaceted models that can encompass all aspects and levels of creativity, interdisciplinary approaches that bring together Art and Science, such as this study, could be more fruitful. Or, phenomenological descriptions could be used in conjunction with *process* theories, such as the Stage models or *problem solving*, to bring the lived experience to the reductive tendencies of cognitive theories and address the criticism that metaphoric and experiential approaches are too speculative (Kozbelt, Beghetto & Runco 2010) or subjective (Jarvie 2009; Sternberg & Lubart 1999).

Cognitive theory revisited

As Merleau-Ponty (2002, p. xviii) says: The world is not what I think, but what I live through. The dialectic nature of the creative process as described in experiential research is, therefore, something of a challenge to cognitive process theories such as the stage theories. Their abstract linearity and proscribed steps, even when a recursive stage is added (Runco 2014), still cannot adequately embrace the merging that arises out of the interactive complexity of the person-object interaction. Moreover, the *incubation* stage of the Stage Theory models where unconscious processing takes place has not been sufficiently investigated, other than to regard it as an inactive gap (Abel 2009; Kozbelt 2011) in the conscious process where insights and intuitions mysteriously emerge. As the findings of this study show, experiential research can provide insights into the nature of this gap, even if it cannot evidence concrete, verifiable mechanisms for the unconscious processing.

Likewise, *process* theories such as *problem solving* that conceptualise creativity as having a gap to be bridged or problem to be solved simplify the complexity and ambiguity of creativity. As the findings of this study reveal, a gap may be experienced as a potential opening for new insights to arise, a momentary pause for reflection or a deeper dwelling that leads to developing a new idea. But more importantly, such breaks in the flow have the capacity to change the structure of the process, not only adapting it but also disrupting it and the habitual patterns of processing that people easily fall into in their everyday, taken-for-granted relationship to the world. Formalised models, even if not linear, cannot encompass the disruptive, fluctuating and unpredictable tendency of the creative experience. As Holdrege and Talbott (2010) state, “The world breaks every fixed template into which we try to pour it” (p. 165).

Conceptualising creativity as having a problem space in a creative process, whether as a gap or a barrier, has a number of issues. Firstly, the concept of 'problem' suggests a need for certainty and resolution, which limits the emergent nature of the phenomenon. It does not even allow for creativity to be phenomenal but keeps it in the realm of familiar, everyday information processing. This leads to the second issue: 'problem' references a conscious awareness of something obstructed or constrained, where the self directs the process of resolving the problem. 'Problem' also implies there is a obstacle to be reduced, a blip in the flow of creative processing rather than an integral, often underlying, resisting force that is essential for creativity to appear. Again, framing *problem solving* and, to a lesser degree, *problem finding* in terms of situation, goal and obstacle is too abstracted from the lived experience; neither *problem solving* nor *problem finding* addresses unconscious processing or the dynamic, continually recursive nature of the lived interaction. Nor can they encompass conscious but transcendent immersive states such as *flow*.

Having said this, there is some correlation between the more exploratory *problem finding*, which is not goal-oriented and where the 'problem' is intrinsically felt rather than explicitly known (Runco 2014), with the dialogic interaction experienced by participants in this study. However, the dialogic structure of the participant responses rarely showed any explicitly logical progression, most field notes being fragmentary in structure. There was one exception to this: the responses to Set Four (see Chapter Four: About the Choice of Drawing Exercises) often revealed a higher level of cognitive engagement, with less affect and more logical thought progression, though thinking was usually considered a constraint, unless it was the not-thinking form of cognition described in Chapter Five. Nevertheless, participants commented on needing to think more in this task, so these field notes sometimes had a more puzzling-through-a-problem quality, more in common with Schön's (1983) *thinking-in-action* than the typical fragmented and multi-faceted levels of awareness captured by field notes from other sets. However, the Set Four exercises, based on the water meander form, were designed with *problem finding* in mind and the responses often reflected this.

What *problem finding* cannot account for is the relinquishing of 'me' being the controller or director of the process, which has been found as essential to creative activity in this study and other phenomenological studies. Although the structure of *problem finding* is unclear (Dudek & Cote 1994, in Kozbelt, Beghetto & Runco 2010) and it may incorporate sudden insights or *felt* thinking, it is still a cognitive model, and cognitive models are self directed in that they only model the conscious, rational processes where the self can remain the director of the

interaction between person and object. Runco (2017) has challenged this conscious, rational control, stating affect and metacognition are also involved in *problem finding*. However, like information processing models in general, *problem finding* still relies on existing knowledge and experience to interpret what is coming to meet a person from the process. In light of this, there is a question as to whether *problem solving* and *problem finding* can be considered creative processes at all, since they do not address the relinquishing of control by the person at any time during the process.

Conceptualizing creativity as problem-centred or as incomplete information sets the agenda for how we respond to it. Gaps and constraints are seen as difficulties, whereas generative creativity characterises these spaces as emergent. When we conceptualise out of a problem space, the self first defines the issue, then finds a way to adapt or innovate it. But in creativity, the self is diffused into the emergent space and allows something transformative to take place. The 'something' that emerges is different to 'something' that overcomes, bridges or solves. This researcher suggests 'emergent space' is a more descriptive term than 'problem space' for creativity, since it recognises the *transcendent* quality of the creative process.

During this study, the researcher became increasingly aware of the distinction between process and experience of the process. It became evident that *problem-solving* and *-finding* approaches, in fact many cognitive process theories, are concerned with the structure of the process and how it unfolds, than its qualities. This is what Schwenk's conception of thinking has to offer, with his experiential analogy of thinking as flow and resistance: he assigns qualities to cognitive processing. These qualities describe the texture of 'what' is experienced during the creative process, whereas cognitive models are concerned its structure and do not encompass qualities. For this reason, research that brings lived experience to cognitive processing models is critical, if the phenomenon is not to be reduced to a one-dimensional experience. A phenomenological approach (a descriptive one, anyway) can elicit both the structure and qualities that characterise the experience, which cognitive models such as the Stage Theory and problem-centred approaches cannot, because phenomenology seeks to uncover the whole through the parts, whereas cognitive models are primarily focused on one part, the process.

Creativity as a state of awareness

Considering the popularity of Csikszentmihalyi's (1996) *flow* theory, it is perhaps surprising that there has not been more research on altered states of consciousness during the creative

process. There is research on intuition, but more as a *felt* sense (Claxton 2006) than a state of consciousness. Yet it is evident, from the phenomenological studies on this subject, that changes in consciousness during the person-object interaction, particularly in awareness and focus, play an essential role in the creative process. The locus of the self is central to these shifts. Remaining fully present, yet relinquishing control in order to let the process guide, is a recurring keynote in both this study and past research (Nelson 2011, Robinson 2009). These two aspects of altered awareness - the self relinquishing complete control and yet the self remaining fully present - are now reconsidered in light of this study.

Ineffability and inarticulateness

In this study, being able to live into the creative experience was central to the sense of *fulfilled wellbeing* people felt both during and after the experience. Sometimes this led to embodied experiences and then to *transcendent* experiences that were felt intangibly in their whole *being*. 'Living into the experience' describes moving into state of awareness of one's being but with something of a diffuse quality, diffuse in the sense of awareness of where the self is located. When 'living into the experience' led a participant to being able to say, "I am the drawing" (Participant 13), the self had achieved complete interpenetration between self and object (Dewey 1980). Robinson (2009), in her phenomenological study of the effect of the creative process on awareness, suggests that this diffusion of self-consciousness, of 'me,' into a state of fusion with the object, is a necessary step for afterwards feeling more fully alive (Dewey 1980), for experiencing *fulfilled wellbeing* when the self reintegrates itself. Robinson (2009) proposal that the person functions in this paradoxical state of diffusion and integration throughout the creative process is a finding this study supports.

Yet, participants in this study later struggled to describe these experiences with words. Words disclose the experience, so if they cannot find the words, it points to the nature of the phenomenon, not the lack of skill in the participants. As Participant 3 said during his interview: "[I] can't really describe [the experience] but I could really sense that difference". The experience was not lost to him, just not graspable. Perhaps this is the result of the diffusion or decentration (Ó Cluanain 1987, in Nelson 2011) of the self during the process. What is evident from the findings is that, as Abel (2009) states, creativity is a phenomenon of emergence; one never really becomes a thing that can be clearly identified. It is an ineffable experience. As a result of immersive and *transcendent* experiences, participants had fleeting glimpses of new and meaningful ways of perceiving or transient sensations of changes in their inner being that brought transformation to themselves and their creative process. These

glimpses and transformations were only briefly sustained, though without temporal boundaries, but could not be retained with conscious clarity, due to this diffusion of self.

This ineffability and subsequent inability to then articulate a *transcendent* experience is a hallmark of any experience of fusion of self and world (Ludwig 1966). In their phenomenological account of the experience of music, Vadén and Tovinen (2014) argue that meaning will, in any case, always be in flux and therefore ineffable during what they call the asubjective experience of being 'in-between' (p. 209) self and object. Merleau-Ponty (2002) states that the problem with human language is that is "stabilizes" (p. 452) the meaning of words into fixed forms that rely on past uses, relying on past frames of reference, which suggests that language cannot represent something that is coming into *being*. There will always be the difficulty, say van Manen (2006), of articulating such precognitive engagements with the world, of bringing "into presence" (p. 718), that which existed before words, and that which is lost by bringing it to words (van Manen 2002). This, then, is another paradox: that by putting words to the experience may bring insight, it also brings illusion. Here is Merleau-Ponty's wild *Being* (Trigg 2012), the primal lived experience that has yet to become an object and be named. For in naming it, the thing in its primal state disappears (Trigg 2012; van Manen 2002).

Nevertheless, in this study, many participants were able to put words to their experiences, as evidenced by *upstream* field notes that are evocative of their embodied and *transcendent* experiences. In light of the past evidence cited here that refutes this ability, it may be that these participants were either not fully immersed into their experiences and therefore their self was still in control; or that the field notes were made just after such experiences, and were therefore already *downstream* of it. As previously stated, the interaction between self and object is a merging and emerging experience that cannot be delineated. Either way, some valuable insights into the nature of their immersive experiences were garnered during this study as a result of attempting to catch their experiences, as they were experienced. Yet, as van Manen (2014) says, it is a fundamental impossibility to capture the lived experience, in its experiencing. One can only grope back *upstream* towards it. This is the paradox of the phenomenological approach.

Not-thinking and the role of cognition during creativity

> I felt like I was working in another space. The mind wasn't judging, but rather wondering. There were no thoughts …
>
> (Participant 14)

Another aspect to the ineffability of the *transcendent* experience is the nature of cognition during this experience. Cognitive theories of creative process are based on the idea that there must be some basis for creativity activity in cognition, and that creative people have particular way of thinking and processing when they create. However, *embodied mind* theories of cognition see cognition and action as indivisible from the world in which they perform (Rose 2006). On Tam (2008), in his phenomenological study of aesthetic experiences of art, suggests the inarticulateness of his research interviewees was due to the embodiment of their experience, in the sense that the body, during immersive experiences, becomes the perceiving device, and therefore knowledge, the basis of verbal language, becomes tacit.

In this study, not-thinking was also closely associated with embodiment experiences, whereas thinking, rational thinking in particular, was experienced as a constraint upon immersive experiences, forcing a person to be more 'in the head', more focused and more in control. Not-thinking, typified by a more peripheral or diffuse state of mind suggestive of Gelernter's (1994) medium or low focus was experienced as more conducive to living into the experience. But not-thinking was still accompanied by a conscious but defocused attention that enabled a person to stay present in the process without maintaining complete control over it. Richards (2011) suggests such diffuse mental states are more receptive, which would account for the relinquishing of control in order to be open to guidance from the process. And not-thinking was quite strongly associated with not-knowing in this study, where previous knowledge to think one's way through the process was suspended. However, the experience of not-thinking is not suspended thinking, but embodied thinking: experienced in the process of making of the object, not in the head, similar to Carter's (2004) *material thinking*. Rational cognitive processing is suspended, but the mind is still consciously engaged, receptive and aware, so it cannot be called unconscious processing. Nardone's (1996, in Nelson 2011) phenomenological research into music analysis affirms this experience of an embodied, non-rational intelligence guiding a creative process, suggesting this form of cognition is not limited to the *visual thinking* technique (Arnheim 1970, Rose 2006) used during the fieldwork in this study.

In this non-rational cognition, where there are no thoughts but rather a defocused attentiveness, the words that belong to rational thought processes cannot exist. As Merleau-Ponty (2002) says, "The world is not what I think, but what I live through" (p. xviii). Conscious, rational thinking separates the self from the world, drawing back to observe, reflect and judge; conscious non-rational thinking, where the interaction with the object guides, allows the self to remain attentive and receptive, yet immersed in the creative process. As previously noted, the self as director is central to cognitive models such as *problem solving*, whereas in emergent creativity, there is evidence that the self sublimates itself to the process, allowing 'me' to disperse into the object, to be decentred. Perhaps cognitive theories of creativity need, as Seamon (2015) suggests, to move away from a cognitive-centred self towards an epistemological understanding of embodied cognition in order to understand the lived experience of thinking during the creative process.

Csikszentmihalyi's *flow* revisited

Csikszentmihalyi (2015) considers his *flow* theory to be central to the creative process, a claim which other experiential studies in creativity dispute on several levels. Krausz (2009) argues that such transformative, oneness states inhibit productivity rather than foster it, since transformation is a by-product of creativity, and not creative in itself. Further, he says, the creative process has both dualist and oneness experiences of the self-object relationship. Richards (2011) does not dispute *flow's* creative efficacy but suggests that it is only one kind of oneness state that may be experienced during creativity, and may only pertain to the productive, "seeing through" (p. 472) stage of a creative process, once a goal is in sight. Then, there is the question of the intense, highly focused nature of *flow*, as opposed to the diffuse or low focus mental states associated with emergent creativity by other researchers (Claxton 2006; Gelernter 1996). Although Krausz' argument has already been addressed, it is worth revisiting Csikszentmihalyi's *flow* research in order to reexamine this established theory in light of the findings of this and other phenomenological studies.

The embodied and immersive flow-like state experienced by participants in this study was similar to, but not identical with, Csikszentmihalyi's *flow*[18] (1996), where their actions and awareness were merged; where critical judgment was suspended and their reflective self-consciousness of 'me' faded; where they experienced autotelic feelings of living into the task without considering its goal; and where there were aftereffects of fulfilled wellbeing and heightened vitality comparable with *flow's* noted deep enjoyment. However, for the participants in this study, such experiences did not last long. They moved in and out of this immersed state, rather than remaining in one zone of constant, deeply focused awareness. Their experience was dialogic and fluctuating; like Krausz (2009), they had both reflective and immersive experiences. Moreover, their mental state was not the high, "one-pointed" (Richards 2011, p. 472) focus characteristic of *flow*, but a diffuse one with less control. However, the principal difference between

Csikszentmihalyi's oneness characterisation and that of other experiential accounts, is not level or type of focus, but the sense of control. In *flow* theory, there is a highly focused sense of control, whereas in this study, as in the phenomenological research of Robinson (2009), Reinders (1992, in Nelson 2011) and Conrad (1990, in Nelson, 2011), there was a sense of relinquishing control in order that creativity could emerge.

The research design of this study may be in part accountable for the disparities. Participants moved through different types of drawing experiences within two hours, in contrast to *flow* respondents spending hours immersed in their activity (Csikszentmihalyi 1996), but even throughout one task (and no task was longer than thirty minutes), participants experienced continual fluctuations in awareness. Nakamura & Csikszentmihalyi (2014) present *flow* as a state that 'seamlessly unfolds from moment to moment' (p. 90), without varying degrees or levels of engagement and focus, and without the momentary pauses or breaks the participant field notes documented. Participants in this study sometimes experienced *flow*-like states within the flow of their process, as did respondents in the studies Nelson (2011) reviewed, but the experience was one of merging and re-emerging, as Dewey (1980) indicates, not of continual immersion. However, recent studies have shown that in work-related contexts, *flow*

[18] *Flow:* an intrinsically rewarding embodied experience (Biasutti 2011), a non-dualistic "oneness" state (Krausz 2009) of intense, focused concentration; action and awareness become one; characterised be a distorted sense of time, a sense of control, a loss of reflective self-consciousness; mental energy; and deep enjoyment (Nakamura & Csikszentmihalyi 2014). There is a balance of perceived challenge and existing skills and clear immediate goals and feedback about progress (Csikszentmihalyi 1996).

also presents continuous fluctuations and abrupt changes across time (Ceja & Navarro 2009, 2012).

Unlike *flow* research respondents, this study was focused on *personal* creativity, not professional or *big-C* creativity (Csikszentmihalyi 1996). Participants in this study were not professionals in their field, which may account for shorter immersive periods, but the key difference in the conditions under which this study took place and that of most *flow* studies, is that, in this study, participants did not have a developed, existing internal model or strategy from which to work, one that drew on past experience and knowledge. Their experiences had none of the familiarity of the known score or routine that can be creatively adapted or interpreted and consequently, did not have the clear goals and immediate feedback that attenuate uncertainty. In this study, the level of unfamiliarity was intentional; the ongoing tensions of responding to the unfamiliarity of the context and the open-endedness of the process was an intrinsic part of the research design, since one aim of this study was to investigate emergent creativity. *Flow* respondents were invariably professionals in their fields, even if not in creative professions, and their level of familiarity with the structures of their creative process, and its enablers and constraints, would be high, allowing them to sustain high levels of concentration. For this reason, they were less likely to experience the more receptive mental state or loosening of control established as pivotal to emergent creativity. Further, in *flow* states, a person is carried by his intention to engage deeply with the world, but does not loosen control of this intention, according to Nakamura and Csikszentmihalyi (2014), even though this intention is not pre-existing, but responding to the moment.

If a person is engaged in familiar and habitual practices during a creative endeavour, the potential for the indeterminacy, uncertainty and unpredictability experiences characteristic of emergent creativity is greatly reduced. Even the ability to "revise and redirect routine paths in new ways" (Gaut n.d., cited in Jenkins 2010, p. 186) decreases. As Richards (2011) suggests, *flow* as an experience central to creativity probably pertains to the production of creative products or outcomes, when a person can operate at "full capacity" (Nakamura & Csikszentmihalyi 2014, p. 90), rather than the coming-into-being experience of generative creativity. The *flow* model does not allow for the emergent space where creativity can create itself by relinquishing control of the process, such as participants in this study experienced; or for the potentiality space that arises out of the breaks and discontinuities in the process when a person is in a more diffuse state of mind (Gelernter 1996; Richards 2011); or for an *incubation* stage away

from the process, where unconscious processing takes place, such as Wallas suggested (1926, in Funke 2009).

Nakamura and Csikszentmihalyi (2014) consider *flow's* major contribution to the quality of life consists in "endowing momentary experience with value" (p. 102). As in this study, *flow*-type experiences bring meaning and value to creative experiences, he states, and therefore have a motivating effect. *Flow* is a particular type of *transcendence* that has more to do with fulfillment of self through "being in the zone" (Ceja & Navarro 2009, p. 1103) experiences, than with entering into new and unchartered waters. And *flow* experiences do not occur during states of receptivity or suspended knowing, but at times when one is intensely engaged in a motivating activity, intently focused, challenged, yet always in control.

In general, the flow experiences of participants in this study and *flow* theory have similar qualities, but they are characterised somewhat differently, no doubt due to the context and the type of research participants. However, that in itself points to the need for the fine distinctions of contextualisation. Although Csikszentmihalyi (2014) terms his research 'phenomenological,' Nelson (2011) places his method amongst more general qualitative approaches to creativity. His conceptualization of *flow* is just that: a conceptualization of his findings rather than a description that highlights the different ways *flow* may be experienced. This may be in part due to his methods of interview and self-administered questionnaire (1996, 2014). The fine details of his respondents' *flow* experiences may have been subsumed to the effects of recollection and habitual practice. Or they may simply have been lost to theorising. So his characterisation of *flow* as seamlessly unfolding and highly focused control may be a limitation of his methods. Or it may be, as Richards (2011) suggests, that *flow* is only one of the altered states of awareness that can manifest during the creative experience. The findings of this study support the latter reason.

Characterising Creativity Revisited

One of the issues highlighted in the Literature Review was the need for a more nuanced and careful characterisation of the term 'creative'. From the etymological discussion of terms associated with creativity, it was found that creativity has two historical meanings that have implications for how the term is used and conceptualised in modern research. This finding in turn differentiates 'creative' from 'innovative', terms often used interchangeably in research. Further, it appears that the seemingly conflicting characterisations of the creative process played into this disparity in meanings. Past research suggests loose use of terminology in the

study of creativity only adds to the existing ambiguity and complexity around the phenomenon (Hodgkinson et al. 2009; Rothenberg & Hausman 1976), which has a knockdown effect from the theory through to findings, skewing the whole process. Sometimes this results from using one term to describe different experiences, or of theorising the creative process, without considering its lived experience, but the weakness could also lie in the epistemological foundations of the research. These issues concerning characterisation are now revisited in light of the phenomenological findings.

The nuanced definition

Runco (2017) has noted that definitions of creativity have been evolving for more than a hundred years. Rather than being a weakness, he sees this as a sign of health in a field that is itself evolving, moving into new domains and interdisciplinary contexts. Definitions need to be responsive to such changes and so a universal definition may be limiting. This researcher proposes that it is not an evolving definition per se that is required but the recognition that creativity has essential qualities, regardless of domain, and these qualities take on different characterisations in different domains and contexts. In this study, it was found that the multiplicity of qualities used to describe the creative process led to a working characterization for both creative process and creative emergence. For this reason, the first step to designing research should be to interrogate the definition chosen, rather using than a taken-for-granted, unexamined definition, to see if it can be operationalised effectively during the research. For example, in this study, the definition used to assess creative products, that of newness, originality, and value (Gaut 2010) proved fruitful for understanding why transcendent experiences, as outcomes of the process, were creative in themselves; but the term 'unique' was more valid than 'original' in this context, and 'value' was found to have nuanced connotations pertaining to self-actualisation. By contrast, the conception of creativity as a coming-into-being phenomenon (Abel 2009; May 1975) was valid for understanding the experiential aspects of the process and also congruent with the studies' chosen methodology, bringing a synthesis to the research design and authenticity to the findings. Such a flexible, discriminating approach helps make creativity intelligible (Rothenberg & Hausman 1976), even though it does not reduce the added complexity of such a process.

Similarly, a non-specific term such as 'enjoyment' has quite varying meanings, according to context, whether it is used with reference to eating a meal or creating a painting. It is considered a core characteristic of Csikszentmihalyi's (1996) *flow* theory, yet the undifferentiated use of the term does not sufficiently convey the sense of vitality, satisfaction,

even ecstasy (Biasutti 2011) *flow* can engender; nor differentiate it from the enjoyable experiences that arise from other immersive experiences. If such essential meanings remain undisclosed, the term loses value as a descriptor of an experience. It is one of the strengths of the phenomenological approach that it specifically seeks to elicit such hidden meanings and challenges the unexamined use of generic terms such as 'enjoyment'. This in turn enables a deeper, more refined understanding of the phenomenon of creativity.

Generative and productive creativity

The etymological analysis of the term 'creative' has produced two historical distinct meanings to the term. One pertains to its originative nature and references its generative, potentiality qualities; the other, to its productive, fruitful nature, in the sense of producing concrete results of value and meaning. This distinction proved useful for navigating through this study; as a way of categorising different theories and approaches to creative process, a distinction few researchers, other than Richards (2011), appear to make. The disparity between characterisations of the creative process as a dynamic, focused activity (Meusburger 2009, Csikszentmihalyi 2014), as opposed to being a slower, more receptive and uncertain state (Claxton 2006; Gelernter 1994; Zajonc 2006) were tentatively suggested, by the researcher, after the etymological analysis, as referencing the difference between productive and generative creativity respectively. Careful analysis of the structure of the creative experience, as experienced in this study, confirmed this position. It was found there are different phases within the creative process that shape its structure. At times, there is a deep and recursive thinking activity, carried by the flow of the process, that is productive in nature; but there are also breaks and changes, where immersive and transcendent states conducive to the emergence of new things appear. Further, productive creativity is a process more directed towards the production of outcomes, whereas generative locates the experience firmly in the process, and yet also in its beginnings, where the more uncertain, receptive and discontinuous elements are active. Experientially, the two types of creativity merge: they are not sequential, as the terms generative and productive imply, but recursive, even circular. Yet the value of making such a distinction was noted when differentiating Csikszentmihalyi's *flow* from other transcendent and immersive states (see this chapter, Csikszentmihalyi's *Flow* Revisited). The sequential, linear Stage models or problem-expression approaches do not encompass such refined distinctions, even though it has been suggested that immersive states may occur in the Wallas' incubation stage (Richards 2011). Clarifying the distinction between 'generative' and 'productive' not only facilitated the research outcomes of this study, but also elucidated some

of the contradictions of characterisation noted in the Literature Review: Creativity's Characterization.

The conceptualisation of uncertainty

The term 'uncertainty' is frequently included as a characteristic of the creative process. However, creativity literature does not always clearly characterise what is meant by this term. It may refer to the presence of doubt (Anderson 2006) or an awareness of missing information or knowledge without knowing what is absent (Anderson 2006, 2008, 2010); but it may also pertain to a receptive openness (Zajonc 2006). However, even these differentiations are not sufficient, since uncertainty may also connote ambiguity (Rothenberg & Hausman 1976; Meusberger 2009), indeterminacy (Abel 2009) or simply indistinctness (Hodgkinson et al. 2009), as opposed to a specific lack of knowledge.

Whether uncertainty is an *felt* state or a cognitive one, or even if the two can be distinguished, may be determined by where it is experienced in terms of awareness: as focal or peripheral to the consciousness; as felt in the body or experienced in the head. In this research, uncertainty and not-knowing were both identified as forms of the tension that accompanies an open-ended process of discovery and creation, throughout the process to a greater or lesser degree. Uncertainty was characterised as an underlying and diffuse, felt sense, whereas not-knowing was experienced more focally and consciously at certain times in relation to a cognitive issue. Yet not-knowing was also found in this research to be associated with the embodied state of not-thinking, where cognition was experienced in the process, not in the person. Experientially, the felt state merges with the mental state to be almost indistinguishable, even if qualified by other terms such as 'ambiguity'. However, it is important to distinguish them in research, because individuals respond to their presence in different ways and forms during the creative experience. For example, uncertainty and fear of uncertainty are not the same thing. Uncertainty may be a neutral state, but Davis (2011) suggests it is the fear of uncertainty that is the hindrance to creativity, not uncertainty itself.

Uncertainty and not-knowing have been used in earlier research almost interchangeably, yet there may be epistemological differences underlying their usage here. To unpack this conundrum in light of existing theory requires a closer look at two philosophical approaches to the notion of 'uncertainty': Dewey's Pragmatism and Merleau-Ponty's Phenomenology. Dewey's (1929) understanding of the term 'uncertainty' is that of unsureness or lack of certainty, in the context of his quest for certainty, and takes place in our everyday, familiar

experience of the world, whether in creative pursuits, research or any form of information-seeking. But if 'uncertainty' is a state of openness, experienced when hovering on the edge of a new experience, then consider it through the lens of Merleau-Ponty, the "philosopher of ambiguity" (van Manen 2014, p 130). Here, uncertainty is a state of not-knowing, and concerns the ineffable nature of pre-cognitive, pre-word experience, before reflection has ever occurred (Merleau-Ponty 2002). It is most difficult to articulate precognitive engagements with the world, because the "interior experience [is] ineffable" (Merleau-Ponty 1968, p. 252). This form of not-knowing is not unlike the Carter's understanding of chaos as an opening in time and space (2004), where there is no information processing. It has, perhaps, the quality of Dewey's (1980) breaks that punctuate and define the movement of experiencing. Anderson's (2010) conception of uncertainty concerns cognitive processing; Zajonc (2006) and Abel (2009) are speaking of the space that can emerge when cognitive processing is suspended, where a new experience may manifest. The first occurs during the production of creativity, but the second pertains more to the origins of new ideas. Uncertainty and not-knowing, then, are states that can occur during both productive creativity and generative creativity, but also reference the difference between cognitive and experiential approaches to creativity.

The findings of this study do not refute the conceptions of either Anderson (2006, 2008, 2010) or Zajonc (2006) concerning uncertainty and not-knowing, but do distinguish them with more nuanced understandings as to how these states are experienced and conceptualised. This study also confirms that, in some form, they are essential to the overall dynamic of structure of the creative process, not just sometime attributes. However, the researcher proposes 'suspended certainty' and 'suspended knowing' as more apt conceptualisations of the open unknowingness that ideally accompanies the search for knowledge and understanding.

Conditions for creativity

Some characteristics of creativity are also conditions for its emergence, confirming that static models and definitions cannot encompass the lived experience of creativity, since the experience is always characterised by a state of emergence. Suspended certainty and suspended knowing have been distinguished from each other as characteristics, but are also preconditions for openness (Gelernter 1994; Meusburger 2009) and receptivity (Zajonc 2013). Openness as a condition for creativity to emerge and be sustained have been established by past research (Gelernter 1994; Meusburger 2009) but, in this study, openness was found to be a characteristic of the *lifeworld* of the participants, linked with aspirations and longings to be more creative. To sustain openness, participants needed to suspend their own intentions and

aspirations, in order to remain open. So, openness is both a condition and a quality with its own contextual, nuanced characterisation. In this study, the participants' underlying motivation more attending the workshop was coloured by these longings or a volition for creativity, which then engendered the openness. In past research on *big-C* creativity, motivation is frequently driven by longing as well as extrinsic recognition and reward. In this study, motivation was expressed as a longing to be more creative, to fulfill one's potentiality through self-expression. This understanding of motivation is indicative of *personal* or *little-c* creativity (Runco 2011).

In past research, creativity has been described as requiring special conditions of time and space, especially for creative ideation (Levy 2007b; Zajonc 2006). The findings of this study did not foreground the importance of time since imposed time constraints were part of the research design. The question of space, or place, is more disputed. Creativity literature gives special prominence to place, both in the Four P's theory (Chapter Two: Creativity Theories) and in Systems theories (Csikszentmihalyi 2015) but has less to say about space. Solitude as external space has been regarded historically as conditional for lonely geniuses (Becker 2011), but space as an internal state, as was experienced in this study as conditional to some level of *transcendence*, has not appeared in past research as a factor. This may be an area for future research.

The issue of place is made more complex by the ontological foundations of a study's research design. Dualist approaches see place as separate from person and process, but embodiment theories consider them indivisible, to a greater or lesser extent (see Chapter Two: The phenomenon in embodiment and representation). The findings of this study have little to add to the debate.

Part Three: Issues Specific to this Study

Part Three discusses two issues concerning creative thinking arising from this study that have not been addressed in past research and the implications of using an upstream/downstream approach to phenomenological research methods. It then re-evaluates the effectiveness of phenomenology as this study's chosen methodology.

The Problem of Self-expression and Habitual Practices

> The creative process … It is an expression of self and it cannot take place without forgetting the self.
>
> (Doyle 1978, p. 123, cited in Nelson 2011, p.300)

Self-expression is considered so synonymous with creativity that it is rare to find creativity research that questions their connection. It has been a taken-for-granted assumption that the creative arises out of the being of the self, as a form of self-expression, and that self-expression is a form of creativity. Yet, the findings of this study suggest self-expression may, indeed, act as a constraint upon a creative process. Once again, it is the role of the self during the creative experience that provides a clue to understanding this proposition.

The standard definition of self-expression is "the expression of one's feelings, thoughts, or ideas, esp. in writing, art, music, or dance" (OED 2000). This suggests we put our inner world out into the world; or rather, we manifest our being, as shaped by accumulated experiences, through a specific medium. Self-expression is like a way of describing ourselves. However, as Doyle (1978, cited Nelson 2011) implies in the quotation above, describing one's own being in this way does not necessarily lead automatically to creativity, since creativity requires the self to subsume itself to the demands of the process. As has been discussed in Part Two, Not-Thinking and the Role of Cognition During Creativity, 'me' needs to be subsumed into the process, and control given over to the process, in order that creativity can 'create itself'. Further, describing one's own being through self-expression, is not necessarily a creative act, since creativity concerns bringing something new or original, meaningful or valuable, into being. Although a creative work may be these things to us personally, if the process by which the work was produced has become habitualised through repetition of practice, then, by definition, it is no longer creative. Creativity that becomes habitual becomes a routinised practice, and the potential for the new and original, for change and transformation, is thereby reduced. 'Me-centred' creative expression and habitual self-expression as constraints on creativity are two issues identified in this study that have not been given particular attention by past research. These issues have implications for problem-centred approaches to cognition, as well as creative thinking.

Self-expression vs. self-actualisation

The motivation to express oneself, or to understand one's self, can become confused with the motivation to be creative. If creative freedom is understood as doing it 'my way', a person may become unreceptive to what comes to meet her from a creative process when it conflicts with this 'my way'. Such a stance inhibits a person from having an 'I found myself' experience of emergent creativity and can block openness to new possibilities. In this study, the participants who prioritised self-expression over exploring unfamiliar ways of expressing did so because they felt their concept or practice of creativity was being challenged or constrained. As Participant 9 noted: "Having to tune in as well as create add[s] pressure to make it more than just [about] myself." She experienced her need to make it about herself, to express her 'self', as being in conflict with letting the process guide her.

Thrash and collaborators (2010, in Conti & Amabile 2011) note that some form of transcendence is essential for creative inspiration to arise, but it "enters awareness without the individual's control" (Conti & Amabile 2011, p.151), a proposition this study supports. Relinquishing control and the 'decentration' of the self are central to the phenomenological understanding of the creative experience. Creativity can only take on 'a life of its own' when the self relinquishes conscious control. Transcendent experiences, as Krausz (2009) observes, can enrich creative productivity, but require the self to be subsumed to the process. The desire for self-expression may be the motivation to be creative, but it is not the same process. Further, self-expression may be discerned in a creative process, even in its outcome, but it cannot direct that process. Likewise, to transcend oneself and fulfill one's potential are not the same thing.

The desire to explore and develop one's potentials beyond the limits of habit and norm, what Maslow (1968, in Runco 2011) calls self-actualisation, has long been linked to creativity. Self-actualisation plays an important role in motivating a person to want to engage in creative activity (Conti & Amabile 2011); the desire for growth and change requires the self to remain open and exploratory during the process. Self-actualisation leads one to focus on the object, not on oneself (Runco 2014), so has more in common with creative process than self-expression. Even so, it is more a cognitive 'style', states Richards (2011) than a specific type of process. Further, growth through self-actualisation may be realised through achieving aesthetically pleasing results, through solving a problem or through achieving some sort of higher level of understanding of one's self (Conti & Amabile 2011; Richards 2011), without requiring creativity to achieve this. Self-actualisation is closely tied with creativity in the

humanist sense of the term (Richards 2011; Runco 2014), without being synonymous with it. In this study, many participants were initially motivated by the desire for self-actualisation, but some found personal aspirations for aesthetic outcomes or the need for self-expression hindered such growth.

Habitual self-expression

Ooh! Possibility enters to "let go" of the Artist (capital A). And just be free. Yeah, that's a task.

(Participant 6)

Creative ideation requires mental *re*-modeling, or even transformation, of habitual cognitive patterns. This is the foundation of Schwenk's metaphor of thinking: that the continual friction in cognitive processing between the flowing forces and the resisting forces brings about change and new paths or directions in thinking. That learned and habitual practices can therefore be blocks to creativity has been established by past research (Davis 2011), but to date, such practices have not been associated with self-expression.

Any practice that becomes habituated cannot be creative, by the very definition of what defines a process as creative: never falls back on habitual, routinised practices. This is where self-expression is vulnerable, because self-expression can easily become a person's standard way of responding, when embarking on creative activity. In self-expression, *transcendence* is not possible if the self wants to remain in control as the director of the process, since *transcendence* requires the self to loosen control in order to move out of its everyday self and transcend itself.

In this study, it was discovered that *tension* is required during a creative process for the possibility of emergent and potentiality spaces to rise to conscious awareness. By suspending certainty and sustaining that *tension*, new things can emerge; but this requires the suspension of familiar, everyday, routinised practices. However, when pressed by unfamiliar, external constraints, such as the demands of the drawing or personal practices, then habitual ways of responding were sometimes given preference over unknown ways, even though learning new ways was the reason participants came to the workshops. However, this form of *tension* was experienced only in those participants who regarded themselves as already quite creative or artistic. Their conception of their self as a creative being had already been formed to some extent, and this proved a hindrance to relinquishing control of the creative process. They

experienced this *tension* as a kind of friction, even a conflict of will, between what they liked to do (and were used to doing) and what the process was directing them to do. Although not professional artists, they had developed habitual responses to creative activities out of regularly practicing self-expression. Participant 6 (see quote above) recognised this limitation, when she realised that holding onto a certain, accustomed self-image of herself as an artist, was a restraint upon her freedom during the creative process. Creative professionals can suffer a similar pressure when pressed to regulate and routinise their creative process in response to societal demands (Gaut 2009).

Habit that becomes routinised can become embodied. Letting go of a habitualised pattern of movement was an ongoing challenge for almost all participants, not only the self-professed creative ones. It was particularly evident in Phase Two of the fieldwork, with any exercise that had rhythmical and repeating forms. Once a person had found a rhythm, there was a desire to stay with this repetitive movement. Once it became embodied, it was difficult to change or disrupt the rhythm. Once a pattern of response was established, it was easier and more enjoyable to simply be carried by the flow, rather than continually change and create new paths. Sometimes, the flow of embodied movement led to losing one's self-awareness, as Participant 10 noted during one such experience: "Have to be more present, more creative." Although control is relinquished here to the rhythmical process, the self is not subsumed, so much as falls asleep. This is a notable tendency in any performance art form that has a set sequence or pattern; the challenge of creating it anew each time it is performed, since all creative practices are in danger of becoming habitual after a while (Meusburger 2009). The problem of embodied habit extends to creative thinking, undermining cognitive flexibility and openness to new experience. Seamon (2015) notes that familiar, everyday practices are habitually pre-reflexive, done without much thought. However, if thinking patterns become habitual, then the possibility of creative ideation is compromised. Levy (2007b) indicates that Vannevar Bush, the inventor who envisioned the World Wide Web, foresaw the separation of habitual, everyday thinking from deep, creative thought as inevitable with the advent of a more technology-driven society, but predicted that computers would take over the routine tasks, freeing us up to devote more time to creative thinking. Levy (2007b) is concerned that this has not eventuated. Instead, he says, there is less time for creative thinking, at the expense of routinised cognition.

Self-expression may become habitual in process because staying watchfully alert and open to potentiality or change requires one to 'tune in', as Participant 9 noted. Any practice that

becomes a norm is always in danger of becoming habitual and a block to creativity at any level of development. Even popular tactics for overcoming blocks suggested by creativity experts Runco (2014) and Csikszentmihalyi (1996) might become habitual, if practised continually, without watchful alertness. What is required, then, is a different way of thinking at the inception state as a work or activity comes into being; one that does not simply follow one's own mental models or familiar, comfortable ways of being. For ongoing change in our ways of processing information, deep, recursive thinking, such as Schwenk (1996) describes, is required. Such change may be brought about by deep thinking, but the generation of new ideas requires still something more; it requires *transcendence*. It has already been established, both in this study and past experiential studies (Krausz 2009), that transcendent experiences can engender deeper transformations, as can the practice of sustaining contradictions (Rothenberg 2011; Zajonc 2009), in order to disrupt habitual ways of seeing and experiencing. Again, this is the generative or emergent thinking that goes *upstream* (Bortoft 1996) to the source of creative ideation, and towards developing the potential for creativity as a coming-into-being experience, rather than a view of creativity as something one has already developed, and therefore does not require ongoing transformation.

To conclude, the constraining nature of habitual thinking and habitual doing upon creativity has been long recognised, but the potential constraint of self-expression on *transcendence*, and therefore on emergent creativity, requires more investigation. To more fully understand the implications of this for creativity, more investigation into the role of the self during creative process is required.

Habitual self-expression and cognitive approaches to creative ideation

In terms of problem-centred approaches to creative processing, self-expression may be considered a form of *problem finding*, of 'wandering without goal', using only one's volition and aspirations as guide. *Problem finding*, however, also has the potential to become habitual if particular aspirations such as the desire for aesthetically pleasing outcomes always guide the process. If such preferences become a person's *modus operandi* to creative work, then *problem finding* can lose the not-knowing and openness that characterise it, whether it is in artistic work or in the deep thinking of productive ideation. As well as becoming routinised, working towards certain, known goals, such as aiming for pleasing results or recognisable outcomes that reflect and affirm one's self image, can affect the quality of ideation, leading to a facile creativity or, as Schwenk (1996) suggests, shallow thinking.

Likewise, *problem-solving* approaches that draw on existing frameworks can become routinised if the 'problem' is not sufficient a constraint upon the routinising. As this study and past research (Schwenk 1996; Stravinsky, in Harnad 2006) has found, creative ideation always requires some appreciable form of constraint against which to press. For sufficient constraint to be generated, *problem solving* needs an open, complex, even paradoxical problem (Dorst 2011) to generate sufficient tension for real innovation to take place. However, the problem/constraint itself needs to be approached with the openness that is generated by suspending certainty. Otherwise, the openness to seeing things with 'new eyes' will be subsumed into the certainty of working with a successful, but now familiar, procedure. When *problem solving* becomes procedural knowledge, then the creative potential will surely be lost.

There is a further issue: although there is the consistency and comfort of known strategies, the routinising of thought processes means new ideas have no space to emerge, which undermines the potentially innovative nature of *problem solving*. Koestler (1964, in Meusburger 2009) indicated this issue over half a century ago when he noted that *associative* thinking is structured by set routines and rational thinking, routines that easily become habitual. Dervin's (1992) gap-bridging *sense-making* suffers from a similar problem, though it incorporates elements of both *problem finding* and *problem solving;* it is *problem finding* in that its gap is defined by an individual's subjective experience; and *problem solving* in that it uses a routinising approach to attempt to resolve the gap. It addresses a type of uncertainty that can be resolved using past knowledge to bridge the gap, but this only one part of the picture; although new ideas can arise in this bridging, it uses existing information to find and formulate these ideas. This is the basic problem of models: they easily become formalised procedures, reinforcing habitual patterns of thinking and responding. The models used in, and generated by, cognitive approaches reinforce routinising, which has implications for whether truly creative ideas can be generated with such methods. As Schwenk (1996) implies, fixed ideas arise from routinised practices, where there is insufficient dynamic tension in the flow of thought. Fixed ideas generate fixed habits, and vice versa; this is the problem that formalised modelling reinforces.

Methodological Issues

Methodological innovation

Despite its vaunted flexibility (Finlay 2009; Vagle 2014; van Manen 2006), phenomenology as a practice has the limitation that it is primarily directed towards revealing the unnoticed and

unconscious aspects of the everyday, taken-for-granted experience (van Manen 2014), and not towards a phenomenon that is generally experienced outside the everyday lifeworld. Since phenomenology is a study of beginnings (Seamon 1998), and this research has concerned itself in part with creative emergence, the researcher considered it the most suitable methodology to meet the demands of the multifaceted research questions, even though Merleau-Ponty, the guiding philosopher of this research, did not provide an analytical procedure to reflect his philosophy. However, the research process required continual adaption and reinvention to meet the needs of the data, and the resulting approach was therefore something of a bricolage, such as artist-researchers often choose, but was undertaken in the name of being creative, being true to the phenomenon and being responsive to the context. Perhaps the most obvious critique from purists might be that the methodology in this research is not truly phenomenological because it launched its investigation from an existing proposition, (albeit a metaphor based on a phenomenological study), and has sought to reframe and interpret its descriptive findings with reference to cognitive theories and etymological analysis. Above all, it mixes descriptive and interpretive analytical approaches, with some insights drawn from Goethean phenomenology, an approach that has little in common with the methods and purposes of classic phenomenology of human experience. The researcher admits the resulting outcome is idiosyncratic and crosses boundaries, but the need to be creative in conceptualization and innovative in method had higher priority than purity of approach, not for the sake of being creative but in order to meet the "things in their appearing" (Finlay 2009, p. 9). If the resulting artifact presents complex, even conflicting, interpretations at times, it reflects the nature of creativity and the human experience of it. Therefore, the artifact is true to the phenomenon.

Upstream and *downstream* methods

The use of field notes as the primary method for collecting experiential material from the participants was one of the innovations of the research design (the tailor-made fieldwork drawing exercises being the other), and the one with the greatest impact on the outcome of the research. It is not the use of field notes that is unusual, but that the participants, not the researcher, took them. Further, the purpose of this was to capture the appearance of creativity in the act of appearing. To use field notes in this way was not only on account of the researcher's own use of the method when creating an artwork, but its justification was inspired by Goethean phenomenologist Bortoft's (1996) statement that, to disclose an experience, one must not start *downstream* of it, but go back *upstream*, back into the

experiencing of the experience. For this reason, the field note method has been described as *upstream* (see Chapter Three: Argument for the Approach Revisited, for the philosophical foundations of this approach). The pictorial imagery of *upstream* and *downstream,* of a stream, was also in harmony with the motif of thinking as water flow.

Phenomenologists may dispute this *upstream* method is possible because note taking would disengage the note taker from being fully present in the experience, making the notes reflective in nature. To overcome this disengagement, experiential drawing, as a form of *visual thinking,* was used in conjunction with note taking, with participants encouraged to take notes as they drew. Combining note taking with visual thinking, a direct expression of cognition (Arnheim 1970), sought to overcome any divide between drawing and writing. As a result, many field notes (especially later in the workshops) were written on the drawings themselves, even incorporated into them (see Appendix C: Field Note Examples). When the participants were drawing and note-taking, they were not onlookers observing the participation, but participating in the observation. The notes became part of the drawing experience, part of the unfolding creative experience. The present tense used in many of the field notes and their placement on the drawings are evidence of this. They were not separate from the experience and therefore do not compromise the experience.

This strategy proved fruitful. It could be argued that, even if the field notes were only reflective, they were nevertheless closer to grasping back, *upstream,* towards the primal experience, in its experiencing, than they were in the subsequent interviews. The notes captured something of the quiver of the original experience/ing that the interviews, being further *downstream* of the experience, could not. The findings in Chapter Five document the striking differences between the *upstream* observations and the *downstream* attempts to recall and relive the experience. For example, the *upstream* experience of *tension* was captured by vivid and concrete descriptions of passing feelings, sensations, observations and insights demonstrating the multiplicity of ways *tension* could be experienced, and how it affected the flow of the process, whereas *downstream*, *tension* was only remembered as a general sense of challenge at times. (Likewise, in Csikszentmihalyi's *flow*, challenge was recalled as a characteristic of *flow*, without hinting at how challenge might be experience.) The quality of a continual, underlying sense of friction, generated by suspended certainty as to how the process would unfold, was quite lost to the participants in the *downstream* recollections. Even attempts to recall and relive the process proved almost beyond most of the interviewees, as evidenced by the *theme* of inarticulation, because the ephemeral nature of the immersive

creative experience barely left an afterimage. Without the field notes, it is unlikely this essential constituent of the creative process would have been revealed as central to the phenomenon. Without the interviews to provide a comparison, the impact of the distinction between the *upstream* and *downstream* methods would not have been so evident. This points to the difference between capturing a direct trace of an ephemeral experience and capturing only an afterimage of the experience.

Schutz (1973) states "only experiences which can be recollected beyond their actuality and which can be questioned about their constitution are, therefore, subjectively meaningful" (p. 201, cited in Van Manen 2014, p. 147). But a person calling on many experiences of a phenomenon is constructing meaning from something that has been processed and possibly routinised. Describing will be shaped by certain habits of framing and communicating experiences. This is what this research deliberately sought to avoid: practised descriptions informed by routinised conceptions of creativity. Relying on her experience as a professional creative, the researcher knew that such descriptions can easily become 'storified' (an idea that is explored below). Further, this study sought in part to study emergent experiences of *personal* creativity, not the productive creativity of practised creatives. Although it is the mark of a skilled phenomenologist to get 'inside-under' processed experiences, this researcher had different intentions and chose an approach to data collection that seemed best suited to meet the demands of the her objectives. The usual focus of phenomenological study is the day-to-day natural attitude (Vagle 2014), but creativity is a phenomenon that, for most, belongs to the special, unusual or even original moments of human life. It cannot be described as a familiar lived experience, since familiarity suggests recurring forms, and its ineffable nature defies recollection beyond its actuality. For this reason, the familiar interview method was considered less suitable than field notes for such a non-familiar experience. In any case, the researcher proposes that a field note from observation is a different kind of trace of experience from what a memory, however rich, can provide.

Storifying **the experience**

> To live a story and to tell a story are two different experiences.
>
> (Saevi, 2013, p. 6)

In an interview, there is little to observe of a phenomenon in question, because it is a recollection of an experience, not the experience itself. It may be processed by time, values

and habitual ways of thinking and acting into a composite memory. The researcher observed, in this study, that interviewees displayed a tendency to frame their experiences of creativity as stories about themselves. For example, Participant 1 said frequently: "I am the sort of person who acts in this way." But the experiential life, as we experience it, it does not flow or unfold like a story, but as this dynamic, continuous movement of "interchange and blending" (Dewey 1980, p. 37). The structure and texture of a story about an experience will be different from that of the original experience because the intellectual mind can only recall what is actually finished (Bortoft 2012); it cannot bring back into being the dynamic, coming-into-being nature of the experience, in its experiencing. As Merleau-Ponty (2002) said, "To perceive is not to remember," (p. 26). It is a question, then, as to whether descriptions of experiences elicited from interviews are actually relived or are they remembered in details that themselves are subject to being generalised, as the varying details of the experience of 'tension' was remembered only as 'challenge'? Further, in the process of making meaning from the experiences, have they become stories about the person? Although such stories will obviously have value for explorations into the lifeworld of a creative person, can they recapture something of the original quiver of an ineffable, creative experience?

When attempting to recollect what one has lived through, there is always the processing that has taken place, the 'storyifying' of the experience: the "telling or writing a lived experience is to recall the lived in the shape of a memory," (Saevi 2013, p.6). The afterimage effect (described in Chapter Five: The Experience, As It Was Recollected) was such a shape: a shape of a memory of an experience that had lost its vivid concreteness through time. The momentary freshness of the experience may be compromised by re-interpretations of the original response. This is an ontological argument and one that points back to the difference between an immediate experiencing of an experience and the recollected experience. Merleau-Ponty (1964) states "reflection on the meaning or the essence of what we live through is neutral to the distinction between internal and external experience," (p. 65), which suggests meaning is only disclosed once the experience has been expressed. In his last work, Merleau-Ponty began calling the pre-reflected experience a brute or 'wild' being that can never be fully articulated, can never be fully expressed, yet must always be the aim of the phenomenologist, to reach back towards this wild being. This suggests a much more radical response than the strict and scientific transcendental approach of the descriptive phenomenologists, and far from the everyday familiar *lifeworlds* of the interpretive phenomenologists. It suggests something right on the edge of what can be humanly expressed, of grasping towards a part of us that is

"ontologically prior to the personal self" (Trigg 2012, p. 145). This is the ineffable experience that the *upstream* field note method sought to capture.

Re-evaluating phenomenology

In Chapter Three: Methodology, phenomenology was evaluated in terms of its key strengths and weaknesses as a qualitative approach to research. This section revisits that discussion.

Phenomenology describes the subjective experience. Inherent in such an approach is whether it can meet the usual requirements for qualitative research: trustworthiness, authenticity, rigour and credibility. Phenomenology is concerned with possible human experiences; therefore, trustiness lies in the honest and comprehensive disclosure of experience and a sense of fidelity to the research process and its participants. The use of both field notes that directly captured the voices of the participants and interviews that verified their experiences confirms the trustworthiness of the research. Even though the experiential material lacked somewhat in lived-throughness, there was vivid and concrete material documented in the participant field notes, sufficient to communicate a sense of *being-there* (Finlay 2014). Likewise, the video recordings that captured what participants were unable to verbally communicate proved a highly fruitful source for disclosing creativity's ineffable nature. The use of direct participant quotes throughout the findings and subsequent discussion, in order to stay close to the experience, as it was experienced, support the authenticity of the findings, as does the correlation of the findings with those of past phenomenological research on this topic.

Part Four: Limitations of the Study

This section reflects upon the limitations of this study: its overall approach, choice of methodology and the research design.

Overall approach

One of the primary aims of this study was to be creative in approach, in response to key criticisms about creativity research to date. It has used creative methods and research design and can claim an unusual if not unique approach, but its complex ambitions have led to ambiguous, complex findings and a dense narrative. This is not unexpected, since artistic practices, such as *visual thinking*, are inherently more ambiguous, nonlinear and unpredictable (Rothenberg & Hausman 1976). However, the findings have significance, not only for creativity research, but also for phenomenological research. One concern was

researcher bias; a researcher with professional expertise in the field can unintentionally skew the research with their own unconsciousness assumptions. Various strategies were adopted to address this. That the researcher was surprised by one key finding - that self-expression is potentially inhibiting to creativity – which challenged her own assumptions of creativity, is evidence of the success of these strategies.

The Methodology

Playing into the complexity is the use of phenomenology to direct the research process. The phenomenological approach, by nature of seeking to reveal the whole picture and not isolated aspects, generates multilayered outcomes that bring their own intricacies to the research design. Negotiating the philosophical differences between the different schools of thought is confusing and time consuming to the novice phenomenologist, especially since there is little consensus on the practicalities of implementing the differences, beyond stating there are the four elements to the process: reduction, immersion, explication and description. As noted in Chapter Four: Explication, the initial attempt to follow a standard path of clearly distinguishing descriptive and interpretive methods of analysis was abandoned in order to meets the needs of the experiential material, as it became clear that they could not be treated as entirely distinct sets of data. This researcher was aided in negotiating the resulting ambiguity by using two quite different data collection methods, which allowed for comparison. This brought some clarity to the analysis, and a verifiable element to both methods, by having participants review their own documentations. However, maintaining coherency and consistency throughout the analysis and description of findings was made difficult by the ambivalence of the terminology. For example, the term 'consciousness' is impossible to define, so its use is always subject to personal interpretation on the part of both researcher and reader. The researcher chose to sidestep this murky issue by using the term 'awareness' instead, which has a narrower definition. Nevertheless, since phenomenological idiom is metaphysical and ambiguous, presenting phenomenological findings in the context of cognitive theory and Information Studies was almost a translation task. A balance of both worlds was attempted, which itself was a challenge to clarity of expression.

The fieldwork design

In retrospect, the fieldwork was ambitious, designed to capture creativity in its complexity in order to meet the intentions of the study. The choice of two principal data collection methods - field notes and interviews - proved complex to analyse and resulted in a time-consuming

dilemma concerning the presentation of the findings. The original intention to treat the five different sets of drawing exercises separately (since each of the five sets had a different character and purpose) had to be discarded: in the process of the analysis, it became clear that this intention was beyond the scope of this study, and would, in any case, have required more detailed responses from the participants or longer workshops, in order to generate sufficient material. However, it provided thought for further investigation, especially for developing *visual thinking* techniques to foster creative thinking. The drawing exercises were therefore treated as one whole experience, rather than as five distinct experiences. It could be argued that this was, in fact, a more naturalistic approach, one that reflects real-world experience, because any creative experience will usually have a number of varying elements. For example, when painting a picture, an artist will invariably use different colours and work on different parts of the canvas during one painting session.

Longer workshop sessions may have elicited different results, allowing for deeper engagement, and time to produce richer, more lived-through experiences; or for participants to become more relaxed and less self-conscious. However, it should be noted that the follow-up Phase Two workshops produced fewer field notes and far fewer 'original' or unexpected outcomes. Some participants recorded almost no notes in this phase, as they "felt more at home" (Participant 3) this time round. Consequently, there may have been more *flow*-like experiences during Phase Two, but the familiarity of the repeated experience was already establishing accustomed ways of responding. This may, possibly, have provided for more insights into the experience of productive creativity, to contrast with the more emergent experiences of Phase One.

A shorter time gap between the Phase Two workshops and the Phase Three interviews may

Finally, this study acknowledges the strengths and limitations of the researcher's impact upon the study's outcomes. The researcher hopes, by documenting her rigorous process in exploring a very complex subject with transparency and scholarly depth, she has maintained fidelity to the phenomenon in question.

Part Five: Summary of the Chapter and Research

The aim of this chapter was to address the research questions and interrogate key creativity research issues, as identified in past studies, in light of the experiential findings of this study. These key issues include the limitations of cognitive theories and models of creative process,

particularly *problem solving* and *problem finding*; the lack of research on creativity as a state of consciousness; and the inconsistencies in creativity's characterisation. In conclusion, the findings support but do not wholly affirm any of the experiential approaches to creative cognition reviewed in Chapter Two, since none can encompass the complexity of thinking creatively. The researcher suggests phenomenological research can complement other methodologies and promotes interdisciplinary research, especially if methods and frameworks used in other fields are applied phenomenologically. A multi-dimensional approach, such as the one used in this study to investigate both the process and the experience of creativity, may be well suited to exploring unusual and complex phenomenon that fall outside of the everyday, taken-for-granted world. Such approaches can provide both a subjective and objective perspective, combining real-world authenticity with rigour and credibility. Further, this process of sustaining opposing perspectives and the tension it generates, may produce the kind of cognitive flexibility required for creative and innovative research. However, there are broader concerns to address, in terms of how research itself is conducted. These concerns were flagged in Chapter One: The Introduction and have run like a thread throughout the study and this thesis.

Creativity research has been dogged by what Dewey (1929) called the quest for certainty, despite creativity being noted as paradoxical, unpredictable, indeterminate and ambiguous, all qualities that suggest there is little certain about its nature other than it is uncertain. In all research there is a desire to replace speculation and hypothesis with knowledge and, if not truth, then clarity concerning the subject of the investigation. Research into creativity has been no different in this desire for knowledge and clarity, so that we can declare we have solved its riddle.

While such approaches have guided and shaped past investigations into the creative process, this study has questioned whether modelling the process is the best approach to understanding how creativity unfolds. Modelling tends to distance the researcher from the human experience that is increasingly recognised as vital for understanding creativity. Modelling requires conceptualisation, and in conceptualising creativity, the researcher steps back from the phenomenon to find a theory or model that has general, if not universal, application. In doing so, modelling removes the multiplicity of subtle ways that express the individual's response to the phenomenon. Further, in this search for certainty and knowledge, modelling ignores the many qualities that identify its essential nature.

Experiential approaches are concerned with the qualities of the phenomenon, but qualities do not have the "sharp-edged, yes-or-no, unambiguous character" (Holdrege & Talbott 2010, p. 176) of reason, and reason is intrinsic to overcoming ambiguity and ascertaining truth. However, phenomenology offers another way of approaching truth in research, since it does not aim for certainty and resolution of the whole, but for revealing truth through careful description of the parts that itself will reveal the whole. Truth in phenomenology lies not in certainty and fixed meanings, but in disclosure. Disclosure is an open-ended form of truth because there is never a clear and finished answer, thus leaving it open to evolving. It is a truth placed firmly in the uncertain world of experience, not one that is unaffected by the world.

Chapter Seven: The Conclusion

> Is it always an advantage to replace an indistinct picture by a sharp one? Isn't the indistinct one often exactly what we need?
>
> (Wittgenstein, cited in Blair 2006, p.113)

Creativity is a complex phenomenon that can reveal itself in a multiplicity of often-contradictory ways, yet in this complexity there are essential aspects to its nature. Firstly, the process of creative thinking and experience of creativity reflect each other; yet operate on different levels and need to be considered both separately and in conjunction with each other. And experience cannot be reduced to a theory or model. Secondly, creativity has both productive and generative characters. The productive concerns the process by which creativity unfolds and manifests; the generative pertains to its source, to its coming-into-being nature. And like process and experience, the generative and productive qualities are interwoven. When a phenomenon is as complex and irreducible as this, rather than trying to present it in terms of formalised model or bounded theory, its nature may be better expressed by an "indistinct picture" ((Wittgenstein, cited in Blair 2006, p.113) that can encompass these emergent and often contradictory qualities. An indistinct picture, such as an experiential approach to research can provide, has the potentiality and openness that allows for a deeper and more effective engagement with the phenomenon.

Research Purpose and Aims Revisited

The purpose of this study has been to develop an understanding of the complex nature of creativity by describing how its process can be experienced. The study aimed to elucidate, if possible, the irreducible paradox of creativity of being both "determined and undetermined" (Rothenberg & Hausman 1976, p.26), by investigating this tension in light of past research concerning the nature of the creative process. To do this, it explored the particular process of flow and resistance in the general context of the lived experience of creativity, using an imaginative metaphor for thinking to guide and structure the investigation. A central concern was to be creative in approach, not just to be creative per se, but to generate the rich and

authentic data required to promote greater understanding of creativity's enigmatic nature. The study focused on cognition during creativity, and its scope was the personal creativity of individuals who wanted to explore their own potentiality through creative expression.

The resulting outcomes offer insights into both creativity and phenomenology, but they are not straightforward. There are a number of competing ideas, due to the aims and methods of the research. Phenomenological research, although fruitful, generates complexity; this is its richness. In addition, the study sought to address the key issues identified in past research (see Chapter Two: Issues and Future Directions) through its creative design, adding to the complexity. These issues are woven through the fabric of the research artifact but central to this discussion is that creativity's complex, contradictory nature cannot be "unpacked in any precise way" (Jarvie 2009, p. 55). For this reason, the study sought to explore creativity in its parts, by placing the flow and resistance interaction within the context of the whole experience of creativity.

The research provides outcomes that concern depth of existing knowledge as much as new knowledge:

- It elucidates existing knowledge of the creativity phenomenon, by shedding light on the irreducible paradox of creativity.
- It deepens existing knowledge by providing more nuanced understandings of creativity's process, characterisation and the keywords attributed to it.
- It broadens our understanding of creativity as a state of awareness.
- It offers an alternative to problem-centred cognitive approaches.
- It provides an innovation of phenomenological methods in distinguishing *upstream* methods from *downstream* methods.

The study also raises two new issues:

- It questions the fruitfulness, even relevance, of formalised, sequential models that reinforce the very habits that compromise creativity's generative nature.
- It questions the taken-for-granted role of self-expression in creativity, in light of the findings concerning creativity as a state of awareness.

This study did not seek to resolve the key issues, so much as to put a magnifying glass to them, using phenomenological techniques to elicit detailed, concrete descriptions of the

creative process, as it was experienced. This in turn provided such details that are discarded when modelling the creative process. Consequently, the study questions a number of assumptions about creativity in general but does not seek to offer explanations. Rather, in questioning the assumptions, it both deepens our engagement with the issues and provides new avenues for further research. Questioning assumptions is foundational not only to phenomenology but to any field of study that seeks to evolve and meet the demands of changing times. This move has been advocated by past and recent creativity researchers as essential in a field with a breadth of theories and models that require more real-world robustness (Carter 2004; Kozbelt 2011; Runco 2017).

In the spirit of creative thinking, this study suggests ways to innovate existing approaches to research on creativity, as well as present previously undisclosed aspects of its essential nature. Moreover, the findings have implications that extend beyond the areas of creativity research and phenomenological methods into any field of human behaviour dominated by cognitive theories and models, for example, Information Studies. These outcomes are now elaborated, in light of this study's contribution to existing research and significance for further research.

Contribution to Existing Knowledge

A major contribution of this study is that it deepens existing knowledge of creativity. An overarching concern of earlier creativity researchers has been the breadth of competing theories that seek explanations but instead generate more paradox and indeterminacy. However, it is this desire for encompassing theories and straightforward models that sees creativity's unpredictable and ineffable nature as a problem to be resolved. In response to this concern, this research has attempted to make this nature more intelligible, by finding more nuanced understandings of its complexity. Identifying that creativity has a generative nature interwoven with its productive one is not a major breakthrough for creativity research, since it was implicated in past research, but this recognition set the scene for identifying that cognitive theories are oriented to the "search through a problem space" (Gaut 2010, p. 1042). By contrast, experiential approaches, such as the one taken in this study, understand this space as emergent, as being a space where new ideas are generated. This study contributes new knowledge by suggesting the problem space be replaced with the emergent space. Further, conceptualising creativity as problem-centred sets the agenda for how we respond to it in research and inhibits the "realm of potentiality" (Abel 2009, p. 62) out of which new knowledge can arise.

This study also yielded new and fruitful understandings of existing propositions and theories by using a creative approach to examine some of their assumptions. It has been previously proposed that creativity research should itself be creative in design and implementation in order to generate richer data that elaborates our understanding (Rothenberg & Hausman 1976). Richer data can also constrain existing theories (Kozbelt 2011). This study demonstrates how its creative design resulted in both extending existing research and finding new ways to investigate it. Firstly, unpacking Schwenk's (1996) metaphor provided the structure and content of the research design. In light of this, Schwenk's metaphor for thinking creatively is proposed as an example of how a flexible and imaginative framework can be fruitful for finding new ways to shed light on creativity's paradoxical nature. It also provides an interdisciplinary melding of ideas, showing how it can be both generative and productive to look beyond a single domain for inspiration and insights to inform a research approach and open up new avenues for investigation. Secondly, using the creative tool of visual thinking indirectly generated vivid, concrete experiential descriptions from the research participants, leading to more nuanced understandings of the essential characterizations of creativity such as uncertainty, as well as insight to experiential approaches such as Csikszentmihalyi's (1996) popular *flow* theory. These contributions to creativity research also embody real-world robustness, since they were generated in situ, during a creative process.

Another contribution of this study to creativity research is the recognition that the process of creativity and the experience of creativity are interwoven, although for research purposes, they need to be distinguished, in order that the structure of the process and the qualities of the experience can be considered in their parts. Again, this is the magnifying glass approach to investigation that sees the importance of deepening existing knowledge as much as generating new theories. Further, exploring the lived experience of creativity in light of the proposals of Schwenk (1996) and Dewey (1980) concerning the nature of cognition and of experience, helped unpack the paradox issue by revealing that the experience of creativity is essentially one of a continual interplay of contrasting forces and experiences. In doing so, this study places value on the contradictory nature of creativity as being a pathway for further exploration of the ungraspable and nonverbal aspects of creativity's emergent nature. This study has proposed that using both experiential and cognitive frameworks can provide the multifaceted and interdisciplinary understandings of creativity, which Runco (2017) suggests will increasingly be part of the future of creativity research.

Implications Arising from this Study

The potentiality space and the emergent space have been intimated in the past (Abel 2009; Zajonc 2006), but this study provides experiential evidence for these propositions and provides insights into how they arise and what conditions are essential to their emergence. This study proposes there are possibly three aspects to the creative process: the deep, recursive thinking of Schwenk's dynamic thinking; the potentiality space of intuition and insight; and the emergent space where transformation of Self can take place. Exploring creativity as a state of awareness, particularly the locus of the self, has, by nature of the methodology, had significant impact on this study. The giving over of control of the creative process to the process itself has been noted in past phenomenological studies (Nelson 2011; Robinson 2009), but the implications of this for cognitive theories has not been given sufficient attention, particularly in regard to the immersive and transcendent experiences that typify generative creativity. *Flow* theory has firmly established the importance of non-dualistic, immersive experiences for the creative process, but this study suggests there is more than one type of such experience, beyond *flow*. This idea has implications for the origin of intuitions and insights during creativity.

As this study has found, the experience of not-thinking during creativity has significance for the notion that creative thinking occurs at an unconscious level. Cognition still remains consciously engaged during not-thinking, but it is defocused and receptive, even if not consciously in control. Exploring awareness during the creative process provides certain insights that process theories and models cannot encompass because they can only model conscious, rational processes. That the phenomenon cannot be fully grasped due to its ineffable, emergent quality is an area that requires less theorising and more experiential exploration beyond simply categorising such experiences as an *incubation* period, as does Wallas' Stage Theory (Runco 2014). Phenomenological research can reveal something of this ungraspable quality, as this study demonstrates, even if it cannot model or even clarify it. A deeper understanding of consciousness and the role of the self in the creative process are required from creativity researchers in order to understand cognition beyond dualist conceptions of thinking.

Self-expression has been considered one of the givens of creativity, but this study questions whether it can be considered more than only a launching pad for creativity, unless *transcendent* experiences themselves continually transform the self. Further, it identifies that self-expression can actually be a constraint upon genuine creativity, since it is essentially 'self-

centred', undermining the decentrated nature of emergent and transformative experiences. This decentrated self, where the unity of self and identity dissolves into the creative process, is foregrounded in this study as significant for the transformative experiences that hallmark generative creativity. If a creative process is always self-directed and self-conscious, prioritising 'me' over the medium, it does not allow for the medium to take on a life of its own and generate new ideas and outcomes. This also has implications for the fruitfulness of problem finding as a creativity theory, because problem finding is essentially a form of self-expression, directed by one's own volition, and if one's own volition always guides the process, the process is in danger of becoming habitualised. This then undermines self-expression's potential for emergent creativity.

Further, habitual processing also has implications for problem solving, because p*roblem-solving* approaches often use existing mental models (Runco 2014). Some of the limits of mental modelling were identified in Chapter Two: Literature Review, but the role of habitualised practices that sustain mental modelling has not been previously highlighted. Creative ideation requires continual mental *re*-modelling, but a habitualisation of practice can lead to the cognitive process becoming routinised, and any process or practice that is routinised cannot, by definition, lead to new ideas. Further, this study indicates that everyday ways of thinking do not engender creative ideation, and problem solving is an everyday approach to meeting challenge, since it does not allow for not-thinking. This has implications for the place of mental models in cognitive processing in general. Further, the implication of habit in cognitive processing means that new knowledge is then always processed in the old ways, limiting its ability to lead to change.

In this study, another outcome of approaching creativity as a state of awareness was the development a method that could capture unfamiliar and emergent experiences of creativity. This resulted in the separation of *upstream* and *downstream* methods for collecting experiential material. This distinction between an *upstream* and *downstream* understanding of experience is an innovation of the application of phenomenology, one that challenges an established norm of phenomenological practice in the Human Sciences. The recollected experience is usually central to this methodology (in the Human Sciences, anyway), but since emergence was a specific focus of this study, participant field notes were considered the closest means of capturing something of the quiver of the *upstream* experience, before it became lived memory. This has significance for phenomenologists who want to study unusual, unique or transformative experiences, especially those where the sense of self is diffused into

the process. This study suggests the recollective and routinising nature of memory may not be suitable for the investigation of such phenomena. The use of this *upstream/downstream* approach may have implications for the scope of phenomenological study beyond disciplinary and philosophical traditions, since it draws on insights garnered from the Goethean phenomenological approach to nature and, as previously stated, indicates the value of interdisciplinary approaches to studying the experience of creativity. This unorthodox application of Bortoft's (1996) distinction of appearing and appearance, experience and experiencing, was a direct response to the demands of the phenomenon being studied. The outcome was an innovation of the existing method for data collection of field notes, used in design and the creative arts that also incorporated the *visual thinking* technique into the method. As such, it challenges taken-for-granted assumptions about how to capture the ephemeral quality of experiencing.

This reworking of an established research method is just one aspect of this study's methodological creativity, itself a contribution to phenomenology in the tradition of creating a path, not following one (Heidegger 1988). Firstly, in order to implement Merleau-Ponty's style of thinking, it drew on descriptive, existential and Goethean philosophy to create the research design and facilitate the analysis, using the different traditions for different parts of the research. Of particular importance was drawing on Bortoft's (2012) framing of experience in terms of *upstream* and *downstream;* this became the lens through which the data collection and analysis were conducted. Secondly, two techniques drawn from fields outside of Social Sciences were employed to facilitate the phenomenological attitude that is core to phenomenology as a practice: the *beholding* technique, inspired by Goethean approach to observation, and adapted as a structured method of close observation for this study; and Zajonc's (2009) *cognitive breathing* technique, drawn from contemplative practices, which facilitates attentiveness. Both techniques are forms of attentiveness that overcome our natural desire to immediately cognitise and order our experiences. Although these two contemplative practices played only a minor role in the overall research process, they helped this researcher develop the requisite phenomenological attitude. As such, they are examples of the interdisciplinary and intradisciplinary approach taken throughout this study, again demonstrating the value of creativity researchers thinking creatively about how to design research that investigates complex, ambiguous phenomena.

Research Impact

For creativity researchers, the importance of interrogating the definition of creativity that guides and structures their investigations cannot be underestimated, since this impacts on the internal integrity and authenticity of the work. It is not so much a case for using an established definition, as understanding the nuanced characterisations of that definition in the context of the focus or scope of the research. For example, 'creative' can reference both productive and generative meanings, so the term is informed by the two different meanings. In this study, the first characterisation pertains to its flowing, resisting, multilayered process, the second to its coming-into-being nature. Likewise, 'creative' and 'innovative' are frequently used interchangeably, without much consideration to their finer meanings. An etymological examination of the difference between 'creative' and 'innovative' reveals that 'creative' has connotations of emergence from an unknown sources, whereas 'innovative' pertains to adaption of the existing. Further, 'innovative' is primarily a problem-solving quality, and *problem solving* is a conscious, rational certainty-oriented process, not an emergent, situated one. The epistemological foundations of the definition and its qualities have also been important for the cohesive integrity of this research overall, as the unpacking of the term 'uncertainty' demonstrates. Cognitive approaches to creativity, and to information processing in general, use 'uncertain' to mean lack of certainty or lack of information, whereas an experiential approach may find the term 'suspended certainty' a closer characterisation of the open-ended, receptive state required for emergent creativity. Runco (2017) suggests that, as the field of creativity is evolving, so must definitions of creativity also evolve. This researcher suggests that, in turn, research methodologies and methods should evolve in response to thoughtful consideration of an investigation's working definition. This study has tried to embody this perspective.

For Information Studies, understanding the inhibiting effect of habitual thought processes on creative ideation has consequence for the field's reliance on problem-centred cognitive models. Mental modelling in information processing is primarily certainty-driven: it uses existing knowledge to solve problems, and therefore is an adaptive process, not a generative one. Uncertainty, for example, is conceptualised in this field as incomplete information, not a space of suspended knowing where new ideas can emerge. Further, although the habitualisation of thought is useful in *problem solving*, where drawing on procedural knowledge provides a consistent method for closing the gap between what is known and what is unknown, Seamon (2015) notes that familiar, everyday practices are habitually pre-reflexive,

and so conscious cognition may not even be present. Therefore, the routinising of such methods may promote unconscious and repetitive processing patterns that undermine the flexibility even adaptive thinking. It may be that Information Studies, in fact, has not actually distinguished that innovation concerns adaption of existing ideas, whereas creativity pertains to the generation of new ones, and therefore has fallen into a similar trap as creativity researchers who use standard definitions, without considering their implications for the foundations of their research design. When creativity is conceptualised as a problem space, identifying the problem and finding a way to overcome or adapt it, becomes the goal. Such an approach is centred not only on achieving complete information or knowledge, but is centred on the conscious self as resolver. In creativity that is conceptualised as emergent, where the self is subsumed into the process, the information that emerges is different from information that bridges or resolves.

For creativity practitioners and educators, this study indicates that developing thinking that is creative is essential for establishing a creative practice that always embodies the essence of creativity as a coming-into-being phenomenon. Drawing on the findings, a number of avenues suggest themselves. Open receptivity, of course, is necessary, but to develop this requires a person to suspend certainty and knowing concerning the outcome. Rather than relying on ingrained mental models or stage processes that have been externally imposed or that have arisen from habitual self-expression practices, sustaining contradictions, such as Zajonc's (2009) suggests, was found valuable by some participants for having new insights. His exercise helped them to consciously overcome habitual ways of seeing the world. This technique also promotes cognitive flexibility and may engender the type of potentiality spaces or transformative experiences that Krausz (2009) and participants in this study found changed or enhanced the quality of their perceptions and experience. Learning to see the world as strange is a starting point for creative professionals and phenomenologists alike.

Likewise, finding ways to change ingrained practices may only require the recognition that self-expression is not always a creative pathway; this in itself can provide a shift in thought patterns. Relinquishing control to the process, and above all, the need for the individual to impose her conscious intentions upon the process, has been documented as essential for emergent creativity, both in this study and past investigations (Nelson 2011). Going beyond what one likes to do and wants to produce, is in itself a starting point for developing mobile, fluid thinking.

Future Directions for Research

Phenomenological research is, by nature, always unfinished, and so provides immediate pathways for further investigation. The role of self-expression and its potentially habitual nature is one immediate area that demands more investigation, because it has significance for mental modelling and information processing during creativity. The potential constraint of self-expression, and the inhibiting role of the self upon the generation of new ideas and perceptions, both have implications for the personal and everyday development of creativity, as well as for cognitive theory.

Another useful inquiry would be to analyse in more detail each individual task in the five sets of exercises used in the fieldwork in order to discover which of them might be suitable as tools that foster creativity. In this study, the five sets of exercises were treated as one experience. Analysing them as individual experiences may lead to further insights regarding the effectiveness of each type of exercise for fostering creative thinking. Some initial indications are already in place: the drawing exercises that generated the most participant insights or transformative experiences were imaginatively based on the meander form in water, developed from Schwenk's (1996) descriptions and images. This exercise elicited the greatest number of field notes of any set of tasks and was described by participants as using not-thinking and sometimes being paradoxical to work with. However, more experiential evidence is required to ascertain the suitability of this type of exercise for the purposes of professional and educational practice.

Likewise, the experiential distinction between *upstream* and *downstream* needs more consideration. The practical application of the concept, deriving as it does from a phenomenological approach to nature, could be fruitful for qualitative research in the arts and social sciences in general. Noted creativity researcher Amabile (2017) has recently observed that research in this field needs to focus more on the multiplicity of ways creativity is experienced, in situ, in order to understand its complexity and development in everyday life. Phenomenology is ideally positioned to meet such needs. This study has already taken steps in this direction with its focus on personal *creativity* in people who place value on becoming more creative in their daily lives. The further development of methods that distinguish the *upstream* 'as it happens' from *downstream* recollective approaches, such as the post-event interview, is a step in this direction.

Final Word

Research in the field of creativity is becoming increasingly technologically-centred (Runco 2017), but the realm of human experience must accompany such developments, if the lived process of creativity is not to be lost to the formalised and routinised modelling that undermines the emergent potentiality of unfolding creativity. Aiming for models reduces the lived process to an abstraction and allows no place for this unfolding quality. To this end, there may be value in conceptualising cognition, as does Schwenk (1996), as dynamic force rather than a linear progression, so that its coming-into-being nature can be recognised and investigated as being equally generative and productive. Then thinking can be understood as holistically and intrinsically creative, and does not need to be analytically split into different modes having separate, delineated parts. Likewise, there is value in recognising creativity's contradictory qualities as intrinsic to its nature, as fruitful to understanding and as reflective of the complexity of human nature. Rather than trying to resolve such contradictions, research into creativity needs to remain true to the phenomenon; if the phenomenon is paradoxical, it is because people are paradoxical. We must transcend the need for simplification and explanation, and look more to lived meanings and experiential understandings of creativity. Rothenberg and Hausman (1976) have called creativity a human capacity, "but it seems to transcend human capacities" (p.3). For such transcendence to take place, we must suspend knowing and certainty as goals, so that we can remain receptive to new things arising, beyond our own volition, out of the world of experience.

List of Appendices

Appendix A: Workshop Handouts

UNIVERSITY OF TECHNOLOGY SYDNEY

Information sheet for workshop participants

Exploring flow and resistance in our thinking, as we create

UTS HREC REF NO. 2013000357

Research Title. Problematizing creativity: exploring the tension between flow and resistance in the process of creative thinking (Phase One)

WHO IS DOING THE RESEARCH?

My name is Fiona Campbell and I am a PhD student at UTS.
My joint supervisors are Dr Theresa Anderson and Dr Hilary Yerbury

WHAT IS THIS RESEARCH ABOUT?

This research is about finding out how people who have little or no professional training as visual artists experience the creativity, in the act of creating, using semi-guided drawing exercises. It aims to find out about how we experience being *in the flow* while we create, but also how we experience hindrances to that *flow*: such as blocks, gaps in knowledge, limitations, skill constraints, uncertainty, and vagueness about how to proceed; and how we might describe such states. The research is particularly interested in the tensions between *flow* and *resisting* states, about that moment when we switch from one to the other.

The research uses freehand experiential drawing to explore and give shape to these experiences. No previous drawing skills are required, only an interest in creativity and self-discovery.

IF I SAY YES, WHAT WILL IT INVOLVE?

You are invited to take part in a two hour drawing workshop, in which you will be asked to carry out a variety of drawing tasks, ranging from very simple to more complex; and to describe, as you draw, how you experience the process of carrying out the creative process. You can write notes on the drawings, on the notepad or you can also have short conversations with me, as you draw.

I would like to observe you generally as you draw, but also take part by acting as a facilitator, such as a teacher would when giving an art class, beyond simply giving you instructions. So you can ask questions as you would in a normal workshop, or quietly share your experiences with me during the course of the workshop. I may also demonstrate some tasks.

Since the purpose of the workshop is to record and observe how each individual works through this process, I aim to maintain a quiet but not silent atmosphere during the workshop. You can get up and stretch, get a drink, or just sit and relax in this time, but I do request that you do not engage in extended conversation with other participants or unduly disturb their concentration.

Mobile phones must be switched off til the workshop concludes.

The workshop will be documented by audiotaping and transcribed by me. I will be keeping your work but if you would like to keep it after the workshop, I will take photos or photocopies of it. This data will be stored securely for a period of five years.

The workshop will also be videoed, but the video will focus on me, not you. This data will not be transcribed, and will be destroyed after two years.

I may contact you later by email to ask you if you would like to take part in a short follow-up interview about your experiences. I may also ask if you would like to attend a second drawing workshop, at a later date. If you do not wish to be contacted in future, I will not do so.

ARE THERE ANY RISKS/INCONVENIENCE?

There are very few if any risks because the research has been carefully designed. It is possible that you may feel self-conscious about sharing your experiences, but any information identifying you will be removed from the drawings and field notes I collect from you.

You may also feel a little inadequate about your drawing ability, but you are not being evaluated in any way. Rather, I am interested to hear about how you experience the process of creativity. I value your personal responses and your interest in this type of self-discovery activity.

If you are a potential student of mine at Sydney Rudolf Steiner College, you may also wonder if I might be influenced by your work or experiences here, in future courses. However, I will not teaching creative arts practice in the future in any assessable course that the college or community runs.

To compensate for your time and commitment given and any travel costs, I would like to offer you a free ½ hour art class directly after the workshop.

WHY HAVE I BEEN ASKED?

You have shown interest in creativity, in self-development and new ways of seeing the world by enrolling in this workshop, in response to the ad I posted.

DO I HAVE TO SAY YES?

You don't have to say yes.

WHAT WILL HAPPEN IF I SAY NO?

Nothing. I will thank you for your time so far and won't contact you about this research again.

IF I SAY YES, CAN I CHANGE MY MIND LATER?

You can change your mind at any time and you don't have to say why. I will thank you for your time so far and won't contact you about this research again.

WHAT IF I HAVE CONCERNS OR A COMPLAINT?

If you have concerns about the research that you think I can help you with, please feel free to stay behind the after the workshop ends for a short debrief. Alternatively, you can contact me at Fiona.C.Campbell@student.uts.edu.au or contact one of my supervisors Hilary.Yerbury@uts.edu.au or Theresa.Anderson@uts.edu.au. If you would like to talk to someone who is not connected with the research, you may contact the Research Ethics Officer on 02 9514 9772, and quote this number: UTS HREC REF NO. 2013000357

Thank you for your time and interest. If you wish to take part, please sign the attached consent form. This information sheet is for you to keep.

UNIVERSITY OF TECHNOLOGY SYDNEY

Consent Form for Participant Community 1

Exploring flow and resistance in our thinking, as we create

I _____ *(participant's name)* **agree to participate in the research project** *Problematizing creativity: exploring the tension between flow and resistance in the process of creative thinking (Phase One), UTS HREC REF NO. 2013000357* **being conducted by Fiona Campbell, FASS PhD candidate, University of Technology (UTS), Sydney, PO Box 123 Broadway NSW 2007, email: Fiona.C.Campbell@student.uts.edu.au) for her doctoral degree.**

I understand that the purpose of this study is to explore how people experience flow and resistance to flow while engaged in creative activities. It is also being used to develop drawing as an everyday tool for understanding how these experiences.

I understand that my participation in this research will involve a two hour experiential workshop in freehand drawing during which I will be asked to carry out a series of drawing exercises and make short notes, as I go, about how I experience the process. I understand that my drawings and notes will be documented, collected and used as data for the research, as will any individual conversations about the drawing process that I have with Fiona. I understand that the workshop may be videoed but that it will not video me specifically; and that I can leave at any time during the workshop. I understand that all data collected in the workshop will be stored anonymously and securely for five years.

I am aware that I can contact Fiona Campbell or her supervisors Dr. Theresa Anderson and Dr. Hilary Yerbury if I have any concerns about the research. I also understand that I am free to withdraw my participation from this research project at any time I wish, without consequences, and without giving a reason. I understand that my responses in this workshop will not influence my participation in any future courses that I may enroll in, where Fiona Campbell is the teacher, as she will not be teaching visual arts in any assessable course in the future, in this community or at this environs. However, I am also aware that Fiona Campbell will offer a one-off, free ½ art class directly after the workshop, as recompense for my time, commitment and travel costs, should I wish to attend.

I agree that Fiona Campbell has answered all my questions fully and clearly.

I agree that the research data gathered from this project may be published in a form that does not identify me in any way.

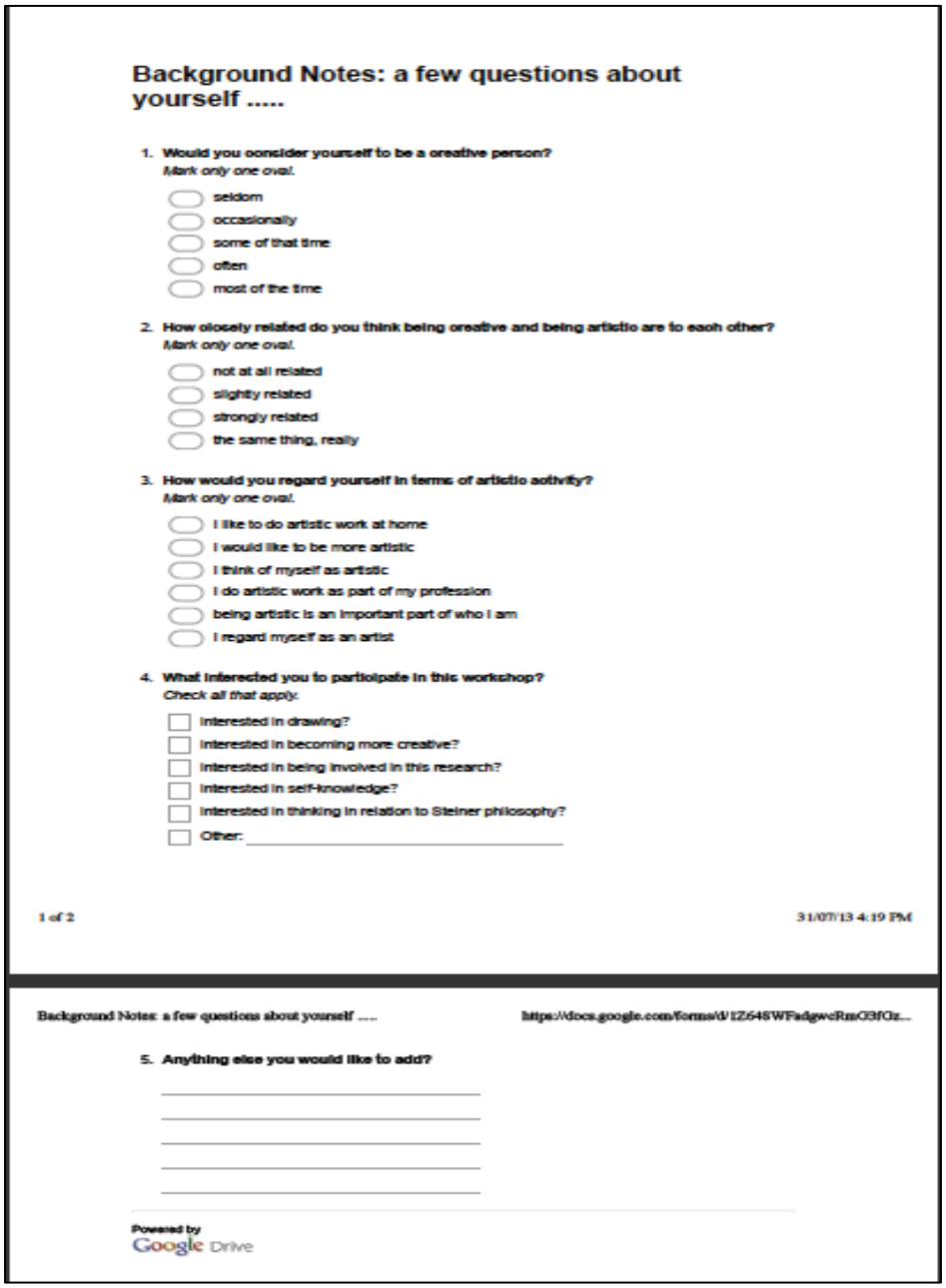
_____ ____/____/____
Signature (participant)

_____ ____/____/____
Signature (researcher or delegate)

NOTE: This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: +61 2 9514 9772 Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Background Notes

Pre-Workshop Questionnaire



Background Notes: a few questions about yourself .....

1. Would you consider yourself to be a creative person?
Mark only one oval.
- seldom
- occasionally
- some of that time
- often
- most of the time

2. How closely related do you think being creative and being artistic are to each other?
Mark only one oval.
- not at all related
- slightly related
- strongly related
- the same thing, really

3. How would you regard yourself in terms of artistic activity?
Mark only one oval.
- I like to do artistic work at home
- I would like to be more artistic
- I think of myself as artistic
- I do artistic work as part of my profession
- being artistic is an important part of who I am
- I regard myself as an artist

4. What interested you to participate in this workshop?
Check all that apply.
- [ ] interested in drawing?
- [ ] interested in becoming more creative?
- [ ] interested in being involved in this research?
- [ ] interested in self-knowledge?
- [ ] interested in thinking in relation to Steiner philosophy?
- [ ] Other: _____

1 of 2 31/07/13 4:19 PM

Background Notes: a few questions about yourself .... https://docs.google.com/forms/d/1Z648WFadgwcRmGBfGz...

5. Anything else you would like to add?

_____
_____
_____
_____
_____

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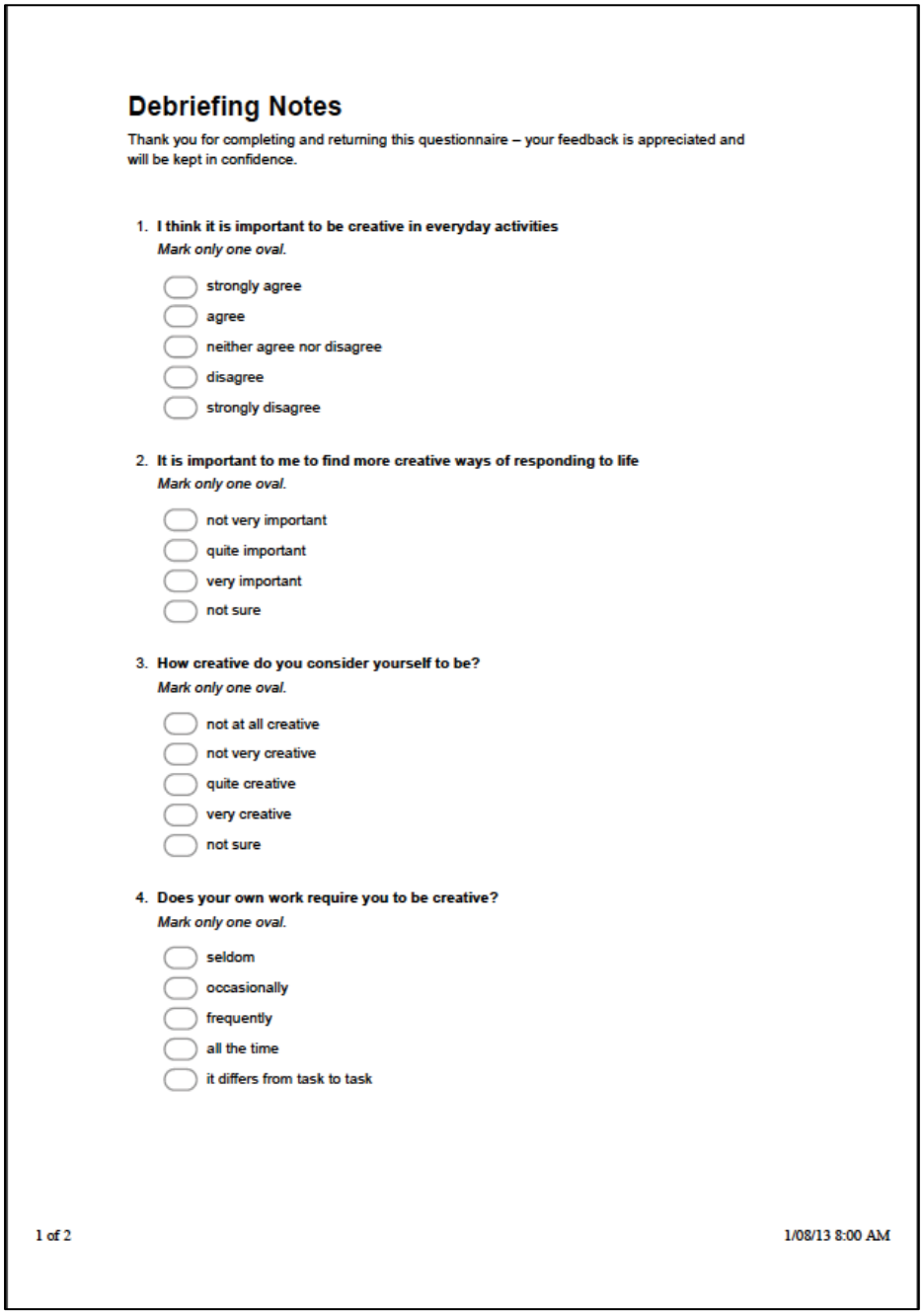
Debriefing Notes

Post-Workshop Questionnaire



Debriefing Notes

Thank you for completing and returning this questionnaire – your feedback is appreciated and will be kept in confidence.

1. **I think it is important to be creative in everyday activities**
   Mark only one oval.
   - ◯ strongly agree
   - ◯ agree
   - ◯ neither agree nor disagree
   - ◯ disagree
   - ◯ strongly disagree

2. **It is important to me to find more creative ways of responding to life**
   Mark only one oval.
   - ◯ not very important
   - ◯ quite important
   - ◯ very important
   - ◯ not sure

3. **How creative do you consider yourself to be?**
   Mark only one oval.
   - ◯ not at all creative
   - ◯ not very creative
   - ◯ quite creative
   - ◯ very creative
   - ◯ not sure

4. **Does your own work require you to be creative?**
   Mark only one oval.
   - ◯ seldom
   - ◯ occasionally
   - ◯ frequently
   - ◯ all the time
   - ◯ it differs from task to task

1 of 2 1/08/13 8:00 AM

5. **Have you ever done any drawing work before?**
   Check all that apply.

   - [ ] yes, I often doodle while listening on the phone, etc
   - [ ] I have done some drawing in a Steiner course
   - [ ] I have attended community life drawing classes
   - [ ] I did some drawing at school
   - [ ] I have never done any drawing before
   - [ ] Other: _____

6. **Would you be interested in participating in the next phase of this research project in the next 6 weeks?**
   Mark only one oval.

   - ◯ yes
   - ◯ no
   - ◯ Other: _____

7. **11. Any comments about this workshop you would like to make?**
   Your feedback would be appreciated

_____

_____

_____

_____

_____

Appendix B: Researcher Tools for Implementing Fieldwork

Workshop Guide: Drawing Instructions & Procedure used during workshops

Emergent and Participatory: The fieldwork has an experiential art workshop format that unfolds partially in response to participant responses and progress, as a result of researcher observation and/or participant questions. Drawing workshops can generate rich, low-tech, visible data so are effective tools for capturing experiences of the unskilled, *provided* the practical tasks are allowed to unfold in a free, organic process. Although I have considerable experience in facilitating such workshops, it is difficult to fix the order of the tasks and the manner in which the instructions are delivered in advance. Therefore, this is a rough guide only.

It requires an emergent approach during the workshop. Participant response may demand more detailed instructions, demonstrations, repeats or rephrasing of instructions, a change of pace or breaks in the proceedings for writing, drinks etc. Evaluating this process requires careful attention on the part of the researcher while still facilitating the workshop, in keeping with an emergent approach. For this reason I intend to video myself in action, not the participants. They will be in the background.

At all times, a relaxed yet engaged atmosphere is desirable while maintaining a focused, semi-structured approach that nevertheless is guided by the individual progress of each participant. The exercises themselves are initially not difficult. As the drawing exercises progress the level of difficulty may increase, but participants will always be the ones to choose how they interpret and execute the tasks. In this way they act as co-designers, since I will be continuously observing group and individual dynamics, and adjusting the drawing tasks in response.

Documents for Workshop
For participants

- Consent form
- Information sheet
- Background Notes (survey)
- Debriefing Notes
- 7xPrint of Flow
- 7xprints of metamorphic line

Pre-Workshop Procedure

- Lay out papers, pencils, sharpeners, cloths, booklets, and 3 forms.
- Setup and Check video and audio at intervals
- Change video batteries after 1 hour TIMER Have batteries ready
- Find and Place 3 observational objects on table
- Write field note questions examples on the whiteboard.

Instructions Guidelines

Stage 1: Introduction to workshop (15 minutes)

a) Participants read and fill in Information sheet, Consent Form and Background Notes
b) Participants will be Welcomed & Informed: give welcome, allow participants time to read
c) **Introduce the workshop and research**:

- My aim is to collect descriptions of lived-through moments, captured like “snapshots” of the process, of how your experience a creative process as it happens, not afterwards, when you’ve thought about. Captured in visual and verbal form, as field notes, as written descriptions just after the drawing task, as verbal conversation with me during the tasks.
- tasks will build from simple and structured to more unstructured and multifaceted, working as your own pace.
- knowledge gets in the way of experience without bias, assumptions and preconceptions
- I need your feedback: you, the participants, act as co-designers
- focused on your individual experience, as it is lived
- awareness guidelines
- Not art therapy: not interpreting your drawings or behaviour or inner state, only getting access to your experiences. There are no “mistakes”, correct/incorrect, good/bad – product is not important when all participant responses, verbal or drawn, to the process are relevant and valid.
- Short debrief session: any questions, anonymous comments on the post-its, or write down concerns for later
- Optional art class can be continuation of drawings, personal feedback, technical advice.

- Reassure them of my respect for their privacy, time and commitment, anonymity on the data collected and that they are free to withdraw at any time without giving reasons.

d) **Participants will be requested to record their experiences** in relation to the drawing tasks, as they go, in the form of short notes beside the drawings themselves or after the exercise in a small booklet. This request is also included in the Information Sheet.
e) **It will be explained** that the notes can just be phrases, keywords or full sentences but that they should simply describe their experiences, not try to explain or validate them.
f) **They will be given prompts** at certain points to remind them to write or share, Suggested guidelines/questions19 could include:
   g) Can you describe your process as you go? (Avoid causal explanations, generalizations, or abstract interpretations)
   h) Can you describe your experience from the inside, as it were-almost like a state of mind: the feelings, the mood, the emotions, etc.
   i) Can you describe what happens when you get to get into a rhythm?
   j) *What happens when you to change direction?*
   k) *What happens when you use the charcoal on its side?*

l) They will be provided with some questions to guide them in this process. These could be put on the whiteboard
m) They will asked to label each sheet with their first name and number each exercise, and asked to write it on each sheet they use.
n) They will be informed that the audio and video recording will only take place during Stage 2 and that the video camera is located as to film the general context and the researcher in action, rather than the participants.
o) Go through the 3 documents and ask for questions
p) Go through the tools and extra supplies
q) Turn on audio- and video-recorders

Workshop Begins 12.30pm to 2.10pm

Stage 2: Exercises (80 minutes)

1. Warm-up: participants are then guided through simple drawing tasks to familiarize them with the tools. This is to relax, stimulate engagement and adjust to the tools and space.

2. Main tasks: participants will be asked to perform 4 sets of drawing tasks, each involving basic tasks such as drawing a straight line repetitively then changing direction, changing dynamic or speed. The tasks will gradually increase in complexity and open to individual interpretation. Simple compositions will be constructed in this way, sometimes repeated but with small changes.

3. A 15-minute space will be given for participants to finish off, ask questions or write notes.

Stage 2: Sample Drawing Instructions
We are going to start with a few warm-up exercises to get you familiar with using the pencils and charcoal. Before you start, make sure you have put your first name on the top LH corner and number it. I recommend you fix your paper to the table with the blu tack provided, so that the paper doesn't slip around while you work. It's best to hold the pencil towards the end, not near the point as you doing when writing, in order to free up your arm. Hold it loosely, it doesn't matter if you use the side of the pencil as well as the point, in fact, you might like to experiment with the pencil in this way."

C. Stage 3: Wrap-up (20 minutes)
We're going to finish up shortly. You can use this time to add more notes about your experiences, finish off drawings and spray them with fixative if you would like to take them with you. Please make sure you have placed the identifying mark on each of your sheets of paper - I gave you this at the start of the workshop – but not your name.

I am turning off the recording devices now, and start taking photos of your work, so could you please place them on the table by the window. Thank you. If you have any further questions, please feel free to ask. If you have time, you can stay on for a chat, give me some feedback about the workshop; or you might like to stay on for a short art lesson, Starting in about 10 minutes. If so, please don't use any of the drawing sheets you've already worked on. I will give you different paper and tools. Thank you for your work today and your time. If you have any questions in the future or would like info about a follow-up workshop, please email me or one of my supervisors. You can find their names on the Information Sheet.

Stage 3: Wrap-up (10 minutes)
Post-workshop

- Key operational tasks: after workshop exercise are finished, allow 5 minutes wrap-up, labeling with names
- Give Debriefing Notes Handout
- Offer Art workshop, optional

19 Questions 1 and 2 sourced from van Manen at http://www.phenomenologyonline.com/

Example Drawing Instructions, Phase One

We are going to start with a few warm-up exercises to get you familiar with using the pencils and charcoal.

Before you start, make sure you have put your first name on the top LH corner and number it. I recommend you fix your paper to the table with the blu tack provided, so that the paper doesn't slip around while you work.

Its best to hold the pencil towards the end, not near the point as you doing when writing, in order to free up your arm. Hold it loosely, it doesn't matter if you use the side of the pencil as well as the point, in fact, you might like to experiment with the pencil in this way."

Set One: Warm-up exercises *(10 minutes)*

1. *I'd like you to practice drawing straight lines. First draw a line along side the edges of the paper, like a margin: first a vertical line followed by a horizontal ones, then another vertical. Draw slowly but firmly, in control but no stiff.*

2. *Now try the same task again, but this time, imagine that the black trace which becomes visible on the paper represents only a small visible section of a very long invisible line that extends into infinity at both ends of your paper. You start with your pencil out beyond the paper, then slowly pick up the line and bring it down on to the page, slowly, lightly but keeping the momentum, the let it sweep off the bottom of the page, away into infinity. Try this a few times to get the feel of it. You might ask yourself at this point – what was the difference between the first way of drawing and the second way? How did it feel? How might you describe this?*

Set Two *(10 minutes)*

Exercise One: Free Play with the Line (10 minutes)

1. *I'm going to take you through an activity walk with the line, what the artist Paul Klee called "taking a line for a walk". I will give you different moods and I'd like you to get the line to follow them. Just do it freely, without thinking about it, just what comes to you first. Remember, just to play with the line, not worry about whether it's good, right, wrong etc. there is no wrong or right way of doing it. Would you like me to demonstrate first, what I mean?*
2. *Let's start with a your line just going for a stroll along the road (30 seconds), now it begins to trot (30 seconds), now skip along (30 seconds), walk sideways, now roll yourself into a ball, now slowly slowly unwind, now dance (30 seconds), and now come to a sudden stop. (Pause). Start running, go left, go right, go left, go left. Stop. Hop in a circle. Then go for a bit of a meander. It lies down, has a rest, a bit of a think, not sure what to d o next…. have a doze. Now it jumps up and decides its time to go to work: what clothes will he put on?*
3. *Now we are going to do something similar, but with Moods. You might like to try the charcoal for this exercise.*

   So, using your pencil or charcoal,

   - *What might a tense line look like?*
   - *A happy line?*
   - *An angry line?*
   - *A vague line? A line that's not quite sure what to do next …*
   - *A festive line?*
   - *Truthful line?*
   - *An hysterical line?*
   - *A thinking line? Thinking really hard …..*
   - *A thinking-in-a-knot sort of a line.*
   - *Now, try to untie that knot – what would that look like?*

Set Five: Observational drawing (30 minutes)

(Places a branch from a small bush, quite twiggy, but only a few leaves, on a table in front of the participants)

- *Try drawing this branch in a few quick stokes, just to capture its gesture. Don't try to copy it exactly.*
- *Try it again, but this time, focus a little more on the detail.*
- *Draw the gesture again, but then add some leaves and a few of those notches. Again, don't worry about accuracy just the general sweep of line.*
- *Now try it with the charcoal. You might like to use the thick side of the charcoal to get a bit of surface shading into your drawing.*

Summary of Drawing Exercises, Phases One and Two

Table B.1: Phase One Drawing Exercises Summary

Preliminary Exercise: to gaze at the blank paper in front of them;
Instructions: to observe and note down any feelings or thoughts about it.
Purpose: This exercise was designed to capture the pre-drawing experience and encourage receptivity.

Set One: a series of exercises exploring the qualities and dynamics of drawing a line: straight, curved, vertical, horizontal, slow, fast, light and heavy. i
I**nstructions**: to explore different ways of drawing a line before creating a free composition based on their experiences.
Purpose: a warm-up task, to familiarize people with the tools and materials, adjust to the workshop environment and become accustomed to making field notes about their experiences.

Set Two: two exercises exploring the life of the line.
Instructions: to take a dot for a walk that embodied different activities or moods, in response to the researcher's suggestions e.g. "take your dot for a stroll, now skip, now lie down for a rest" or" draw a happy line, now a sad one, a truthful line, an uncertain one".
Purpose: to imbue the participants with a sense of exploratory play and enjoyment; to increase attentiveness and self-awareness, by embodying the line (or anthropomorphizing it, as one participants later noted).

Note: this set was the only fully guided task: participants drew directly in response to the researcher's suggestions, as she spoke.

Set Three: one, progressive exercise exploring surface qualities of charcoal.
Instructions: to rub charcoal sticks onto paper to create large flat surfaces, and then spread with the fingers; to fill the page with soft mist or fog like forms, changing in intensity and shape as they moved the charcoal around the paper, first building up the darkness then dissolving it outwards again.
Purpose: to keep the picture changing.

Note: this exercise simulates the natural, always shifting fog, mist of clouds. It is based on an exercise suggested by Theodor Schwenk (1996, p.96) for bringing mobility to the thought process.

Set Four: a series of exercises based the meander form found in nature. The basic form was demonstrated on the blackboard first, then participants used the underlying principle of this form to draw successive lines
Instructions: to draw a line, then draw successive single lines based on, but not identical to, the previous line; to create a compositions of these lines, filling the page.
Purpose: to experience differencing i.e. to make different; to break the tendency to become habitual and mechanistic when drawing lines repeatedly and rhythmically.

Note: the exercise was developed from Schwenk's descriptions and images (1996) of how the ebb and flow of the tides shapes patterns in the sand (such patterns can also be seen in a human fingerprint). This set of exercises demanded a more cognitive approach than the previous sets of exercises, which engendered more affect experiences. This set had something of a *problem-finding* and -*solving* quality.

Set Five: five observational drawing exercises, using different observational techniques
I**nstructions**: to cope; to drawing from memory; to observe, then draw from memory; to observe, then freely render the image from imagination three different objects: a branch, an object of their choice in the room and a photograph of water meander.
Purpose: to see "with new eyes"; to experience different ways of seeing and drawing from life.

Note: the last two approaches used ***beholding***, the observation technique described in **Chapter Four: The role of attentiveness.** This set was the only representational drawing task.

Table B.2: Phase Two Drawing Exercises Summary

Preliminary Exercise: to gaze at the blank paper in front of them;
Instructions: to observe and note down any feelings or thoughts about it.
Purpose: This exercise was designed to capture the pre-drawing experience and encourage receptivity.

Set One: a progression of exercises drawing forms from nature and geometry, becoming increasingly complex:
Instructions: to draw, repeatedly, lemniscate, double lemniscate, inverted lemniscate, spiral, spiral vortex forms; to draw rhythmically but not mechanistically, exploring the dynamics of each form.
Purpose: a warm-up task, to engender a calm, centre contemplative mood.

Notes: participants were given examples of these forms on paper beforehand and used the ***beholding*** technique to engage with the forms.

Set Two: two exercises based on the lemniscate form of the previous set, but drawn as a continuous, linear progression.
Instructions: draw each repetition of the form identical to the previous; then draw each repetition in a different size, shape, etc.
Purpose: to experience *differencing*

Set Three: an exercise based the meander form, similar to Set Four in Phase One, using the same principle.
Instructions: to use the meander principle to create compositions of related but different lines, starting anywhere on the page and completely fill it.
Purpose: to experiences *differencing* but in free composition.

Set Four: an exercise using the meander principle again, but with each line expanding into a surface that dissipated and faded away.
Instructions: to explore the tonal dynamics of light and darkness and the compositional possibilities of filling the paper with surfaces that expand out of lines.
Purpose: combines the principle of *differencing* with the surface technique of Phase One, Set Four.

Note: uncompressed charcoal was the medium, since it is easy to blend with the fingers

Set Five: an observation exercise using ***beholding***, of the underlying dynamics and gestures of water flow, as the basis of creating a free interpretation of the image
Instructions: to create a freely expressive, imaginative picture of water flow, using own choice of technique and material.
Purpose: to experience how to draw imaginatively, basing the composition on an existing image; to combine the skills and techniques acquired over two workshops.

Note: a Schwenk photograph of water meander was used for the observation

Summary of Interview Process, Phase Three

Table B.3: Phase Three Interview Process

1. **Becoming** attentive: a brief attentiveness exercise, either a breathing exercise or familiar drawing task, to empty the mind, to silence mind-chatter; to prepare for recollection.

2. **Remembering** the whole experience: participants were asked about their general experience of the workshops, what "after-image" they were left with.

3. **Recalling** the process: participants were asked to put themselves back into the space for the 1st workshop, and describe what the room looked like, where they were seated, how they felt, how they remember the workshop unfolding, what exercises they did etc. to help re-immerse themselves more concretely in their workshop experiences.

4. **Reliving** the drawings: participants were shown their drawings.20 With or without prompting, they described how they experienced specific drawings.

5. **Reliving** the field notes: participants were shown selected field notes they had made. With or without prompting, they reflected on what they had written.

6. **Recalling** the whole experience after refreshment: reiterating step 2, participants were asked whether any new recollection of the general experience had arisen during the previous steps that they would like to share.

7. **Questioning**: participants had the opportunity to ask the researcher any questions they had about the process, their artwork or the research in general. This completion stage acted as both a debriefing and an opportunity to focus on themselves with a *natural attitude*, i.e. without the constraint of being asked to describe only.

Summary of Data Collection Methods.

Table B.4: Summary of Data Sources, Instruments and Purpose

Data sources	**Data collection instruments**	**Purpose**	**Connection to the research questions and design**
2xQuestionnaires	Pre-workshop Background Notes; post-workshop Debrief Notes	To collect information about each participant's conception of and relationship to creativity, pre- and post-workshop.	To provide some insight into the conceptions of creativity participants brought to the workshops.
2x Semi-guided art workshops comprising of 5 sets of different experiential drawing exercises	20 sets of freehand experiential drawings. Tools: paper, pencils, charcoal	To elicit responses in the form of field notes from participants; a visual thinking for embodying cognitive processes.	To embody elements of the research questions by simulating the mental processes of different qualities of movement associated with creative thinking: flow, resistance, interruption, direction change, dynamic change, choice, pause, ambiguity, forming and dissolving.
	2xAudio-recording	To document researcher and/or participant dialogue	To provide a possible secondary source of data in the form of spoken words; supplementary to the field notes
	2xVideo- recording	To document visual elements of the workshops, including the non-spoken word, gestures and body physiognomy	To provide visual backup for the audio-recordings of the workshop.
Field notes	20xBooklets 20 sets of drawings	To capture participant responses to their experiences as they emerged during the workshops; To provide the substance of the participants' upstream experience	To address the questions: "what is the experience of being creative, in its experiencing?" and "how does it emerge?"
Group discussions	2xAudio-recording	A participant request, for feedback concerning their self-development	To meet the needs of the participants
Semi-structured Interviews	10 interview transcripts 10 video recordings	To collect participant responses to their experiences during the workshops; provided the substance of the participants' *downstream* experience.	To address the question: what is the experience of being creative, as it was experienced?
Researcher reflections	Reflective journal	To inform the design of Phases Two and Three.	To provide verification of participant responses during the analysis.

Appendix C: Examples of Fieldwork Data

Participant Experiential Drawing Examples

Four experiential drawings from Phases One & Two

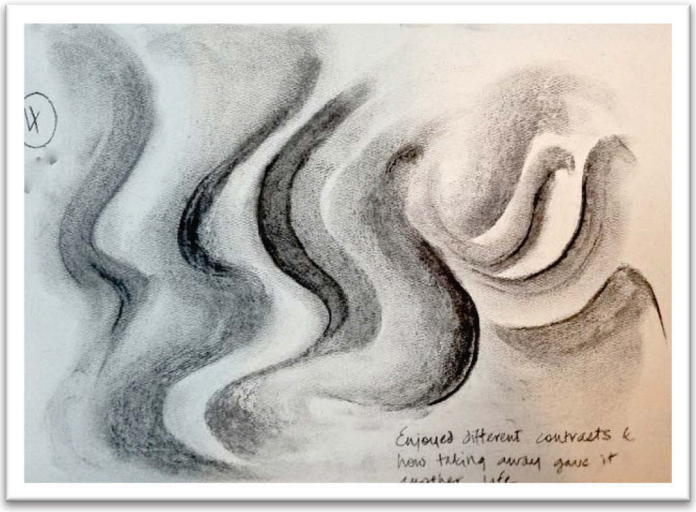


Figure C.1: Set 4. Ex. 4 Meander forms, free play

Figure C.2: Set 1 Line dynamics, free play

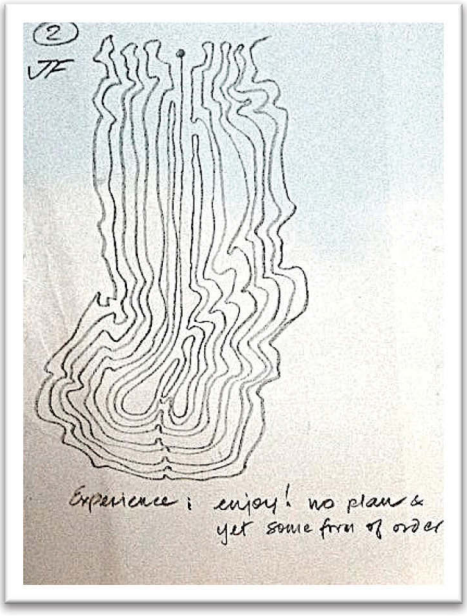


Figure C.3: Set 4, Ex. 2 Meander forms

Figure C.4: Set 3. Ex. 1 Surface drawing with charcoal

Participant Field Note Examples

Two field note examples from Phases One & Two

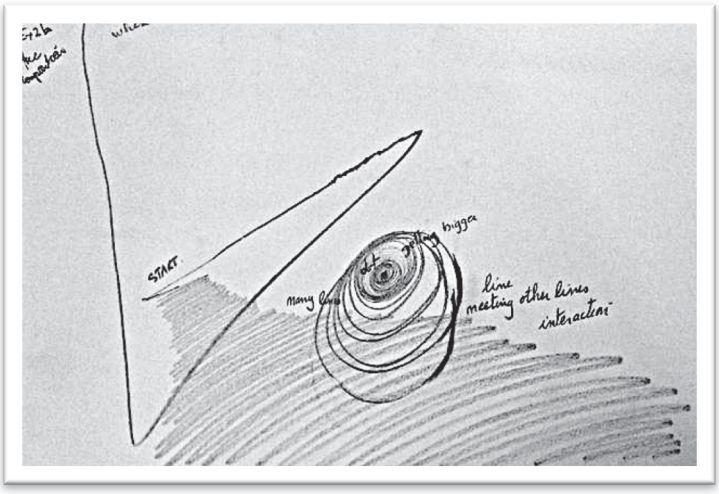


Figure C.5: Field note of Set 2, Life of the line exercise

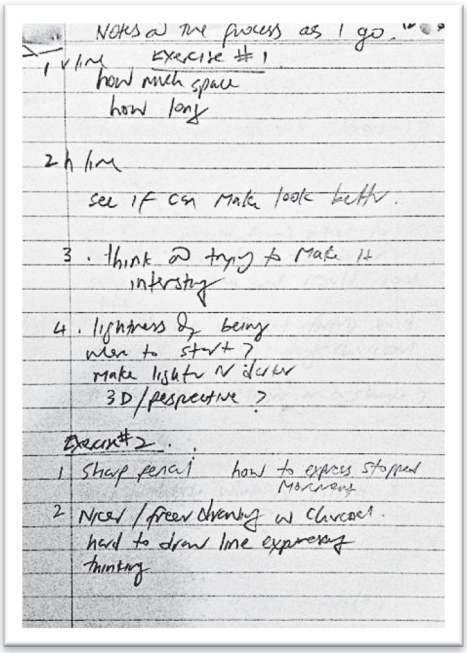


Figure C.6: Field note from Set 1, Warm up exercise

Example of Task Text, by Exercise

Field notes from Set Three, Charcoal Surface Exercises, responses from 16 participants

Set Three: Surface Work Instructions

1. Create a surface with charcoal and fingers
2. Gradually intensify towards the centre, building inwards with your fingers to move the charcoal
3. Dissolve outwards, using fingers to move the charcoal and take it away
4. Build it up again for more depth
5. Repeat a few times

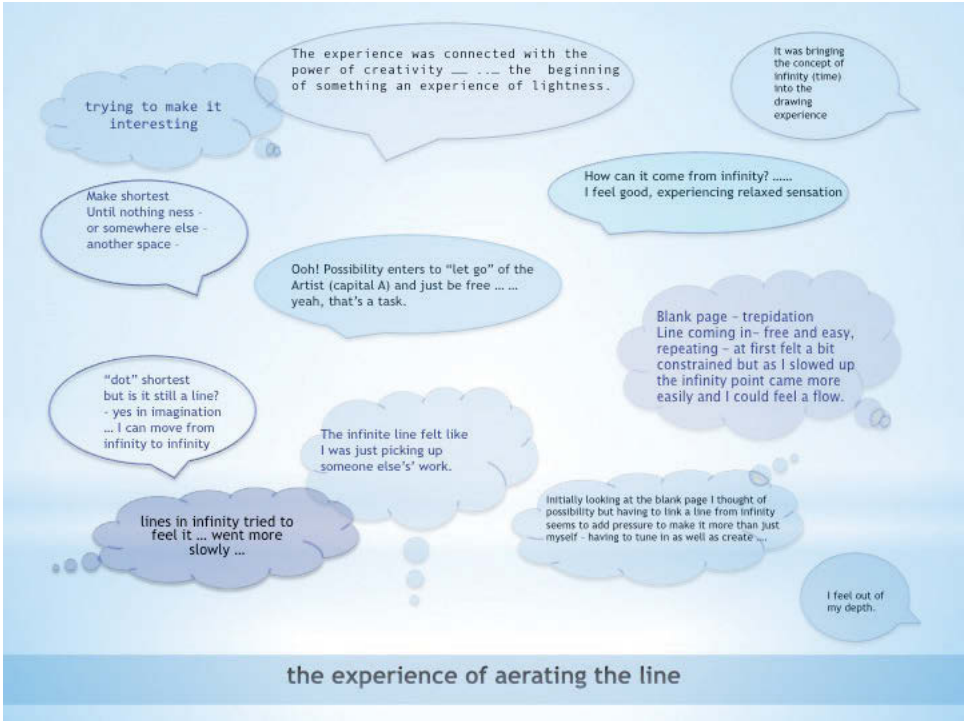
Composite of responses

Charcoal surface easier to add then take away … hard to make anything of it …tried both hands to remove charcoal … upward gestures … not very happy with result …need lots more time to bring it into a happy result

1. Was hesitant using fingers to move around the charcoal … once in a rhythm I started to really enjoy it.
2. Filling the page with charcoal and building layers …in the process things emerged unconsciously on the page despite my actions something else was in play beyond my control. There was a delight in seeing the texture develop.
3. Charcoal on the pastel paper … rubbing back and dispersing the black … first time for me to "play" with the charcoal … It's okay to make a mess! Then go on …
4. At first hesitant at what to expect, how thick the layer … … What will the end result look like … … Nice to use different forms with fingers when spreading charcoal … … Try for consistent layer or a shape?
5. There was a tender little moment when I decided to use the fingers on both hands to build up and take away, that moment had me enter the creative process on a deeper level.
6. Building up … intense feelings focused … Breaking down, soothing, getting rid of calmness … fog
7. Everything that I create is so easy to destroy … to erase and start again with more fun … I like it the flow of the materials … my hand is soft, easy to create and destroy … relaxing
8. Taking the charcoal away allowed a balance between the two and a never ending task to bring light into dark and dark into light…the rhythm of moving in a circular motion, sound of the charcoal becomes quite hypnotic
9. Hard to keep progressing evenly … … Bringing light out of darkness – a pleasant process … … Image taking life – depth – interaction movement
10. Pushing charcoal uphill … no discernable pattern … … Appearance and disappearance … need to have something to show for all that work …commenting (?) shade feel more real
11. Adding the charcoal was an experience of ease, formless, shapeless dark substance, easy to move and change. Taking away didn't feel right and I had an inner resistance to it.
12. I started with a triangular shape and didn't want to lose it. Now I am and that is OK. … Not sure where to put the charcoal and notice I'm leaving fingerprints in the cloud and surrounds ... Will push on. Can't see me filling the page – unless I branch out in a new direction. … … Got rather lost and very unsure in latter part of this exercise. Would have enjoyed staying with it longer to see where it wanted to me to take it.
13. I am not enjoying charcoal … uncomfortable working with the darkness .. prefer to see the darkness disperse to the lightness … interesting to use different fingers and then the whole hand. … move over the page much more quickly. I see a megalactic cloud. … a darker area … that was not something I want to do … I felt like I had made a planet within the universe …taking substance away was not easy ... I wanted the white area to be smaller than my finger could create
14. Started with back and forward action but as I got into the flow I just let myself get carried in circular movements – travelling in and out with form and flow. I've never used charcoal before so I enjoyed just taking it around in circles getting lost in the movement with no attachment to outcome. Sometimes I felt I was in the eye of the storm, then flowing out, softening. … … … Taking the charcoal away – another new experience, created a little anxiety – not the look I wanted but building up and taking away created another flow that was enjoyable and I felt freed to know it could change and grow.
15. Enjoyed different contrasts … how taking away gave it another life

Example of Task Text, as Cartoon

Field notes from one exercise in Set One, after imaginative variation applied, creating a cartoon to create an impression of the lived experience, in its experiencing during one drawing exercise.



Examples of Participant Texts

Field notes from 5 participants, after imaginative variation applied, creating poem-like structures to represent the lived experience of each participant during one whole creative experience, during one workshop. Original field notes slightly cleaned and reformatted as narrative poems.

Participant Text ID 8, Phase One, Workshop 1

Lines are not straight

Easier to do because wasn't coming towards body.

How can it come from infinity?

I feel good,

experiencing relaxed sensation.

Happy and problematic are easy but thinking?

Is not easy.

I like the material

I feel a bit confused

Flowing is fun

Repeating exactly what I did seems difficult to me

concentration,

I can not reach perfection.

Everything that I create is so easy to destroy,

to erase and start again with more fun

I like it the flow of the materials,

my hand is soft,

easy to create and destroy,

relaxing.

Lines related to each other

I like 6B pencil,

is soft,

I feel a bit confused,

lines are all different,

First I try to copy it,

it took long time,

I got a picture and try to imitate

my hand does not what I want,

but is good anyway

Remember the leaves and try to draw it is challenging,

fells like I got the pictures,,

but if I try to draw it is so different

I forgot some details,

I need concentration.

It's beautiful,

its' similar to the exercises that we did

Lines and lines with patterns,

look's like the universe

Drawing the picture feel so good,

patterns figures flow,

spirals, lines curves movement,

everything single line is different

but they look similar.

Participant Text ID 5, Workshop 1, Phase 1

How much space

How long

See if can make look better.

Think of trying to make it interesting

Lightness of being

When to start

Make lighter or darker

3D perspective

Sharp pencil

How to express stopped movement

Nicer/freer drawing w charcoal

Hard to draw line expressing thinking

Chinese whispers

Repetition – hard, boring

At first hesitant at what to expect, how thick the layer

What will the end result look like?

Nice to use different forms with fingers when spreading charcoal

Try for consistent layer or a shape?

How to decide what is missing?

-logic or creative?

How to make image accurate, likeness

Trouble remembering what object was (since for ex. 1 spent all energy trying to copy and draw and not trying to remember the object being drawn.

Hard to image object in brain so that can tap into it for a recall – no photographic memory ability! (includes pencil drawing of object in notes).

Mysterious – what is it?

Swirly, dynamic

Way too hard to copy out of comfort zone!

Panic when cannot get my drawing to look like image – frustration!

Participant Text ID 3, Workshop 1, Phase 1

An openness to experience but a certain uncertainty – blank, anxiety

Drawing straight lines and horizontal lines

At first seems easy

Striving to be straight then when the page was full of lines the idea struck to fill in certain gaps with may lines and perhaps create something of a pattern.

There was a sense of freedom as we progressed

Emotional lines – feels good expressing the different state of mind – exploring how these feelings could be expressed

It was hard to maintain a regular pattern with repetition when the desire was to let it flow into new patterns and developing rhythms. It took discipline to repeat the forms

Filling the page with charcoal and building layers – in the process things emerge unconsciously on the page

Despite my actions something else is in play beyond my control.

There was a delight in seeing the texture develop.

Drawing the branches then drawing the leaves.

In some ways it was easier to draw when the object was not there because the flow of movement could determine what was on the page rather than trying to follow the exact form.

The intense swirls seem to open up and disintegrate into the surrounding environment.

The flowing movement of the developing vortexes becomes a rhythmic movement.

It feels good to be part of the flow but it is very complex and difficult to reproduce the movements for each vortex.

Participant Text ID 2, Workshop 1, Phase 2

No white or blank paper – didn't want to mark it
Restriction towards ruining something.
I notice how restricted I feel
but I do feel that much of it is due to outside influences.

When I did breath, I started to make a more natural lemniscate.
Much easier with pencil and the breathing.

I found it REALLY difficult doing the kosmein lemniscate
easy doing the metamorphic lemniscate
I wanted to do many more
I found it really difficult not to cover the page with it.

Move in space.

I could grasp it as a whole piece.

I was nervous to allow it because the act of doing is very different to the thought.
The first go both times was lopsided, however I very quickly brought balance to it.
I didn't feel to do more than two.
The line and relationship.
She said I've made myself a hard task.
And that is totally ME.
I do it with most things.

I can't not want to develop the line – I wish only to develop the line

The line – fading out – like building up the earth and letting it settle or sink.
Surfaces – feeling with flat of fingers
(would help thinking people get in touch with their feelings
just as feeling people can get into thinking
by triggering their thinking with the tips of their fingers.)

I started to copy the picture and was hardly aware of it.
I felt insufficient as I tried.
As I stopped looking at the original
got into the experience
it all changed I became less conscious of an outcome,
judging my abilities,

it became an experience and a freedom to explore

in thought and feeling rather than cognitising, controlling, judging.

I can now see the correlation to how I go about my own life. If I see what and where I'm meant to be heading to, I balk, but if it's a concept with no specific outcome, I'm free to explore the event, the opportunity.

Participant Text ID 13, Workshop One, Phase One (excerpt only)

I already feel a bit nervous

Wondered what Lisa, beside me would make of my efforts.

I.e. feeling self-conscious

nervous

Begins in nervousness that arises from her self consciousness

Interesting

Felt I was being creative

Excited

A bit mystified/curious

Puzzled

Enthusiastic

Amused

Delighted

Not sure if I'm asked to draw a straight line

Now find I was – so I got it wrong as I draw curved and wavy lines.

Feel like I'm in an exam

Too rushed.

Not enough time to reflect

Hey! I created something. Thought I had "stuffed up 1B

by doing curvy lines

yet could see how I could combine crossing curves with mainly straight lines.

I'm excited.

I think it looks great.

Fun.

Not sure how to interpret some of the actions e.g 'truthful"

Interesting

Looking at it afterwards I wanted to now work on it and see what else I might create.

Wondered if I was "doing it right"?

Knowing there is no right or wrong.

Noticed I immediately formed something to do with nature.

Loved it!.

Steps.

decided which way round to have the paper

began at the top and world down

on the way I paused to see if any points or angles lined up.

Being a design – they didn't.

realized some angles were wrong

length of lines like-wise.

Made adjustments

started to relax and sketch in lines rather than draw them.

Now need to add the shading.

Compared with previous drawing – equally difficult.

Neither as satisfying as free form drawing with lines and shapes relating to each other.

Didn't enjoy the charcoal drawing

– couldn't really get into it.

it didn't speak to me.

I felt I was part of the drawings in 3 - or some of them.

They were an expression of me.

Earlier exercises – I was the drawing

Later ones I felt I was trying to make something on the page

rather than the something on the page coming out of an experience

Example of Interview

Excerpt of Participant ID 18, two excerpts, uncleaned transcription and cleaned Interview

Uncleaned transcript with researcher annotations

Participant: And then I did ..remember, there was a su-, there was a point where I felt ….resistance and I felt ..discomfort, and I felt there was a shift in how I, um, where I was, just my state of mind, ah …where was that? [pondering/recalling]……. hmm. [silence]…….. Oh yeah… the metamorphic stuff. Its an, it's an ….issue I am aware of … that, that I …[speaking slows down] don't ..quite ..have ..the ..experience internally of this progression ..of ..steps to go from the beginning to an end and showing all that^ [voice rises] like, um. …Usually, I, yeah, ah, there's a lot of things ..I'll get to the outcome but I don't know how I've gotten there, I just know I need to get there so that process is really, kind of "I don't get it"^, and I, a, a, ..I remember I had a ..problem in the workshop I had with you earlier in the year. I didn't, yeah, I just didn't, yeah I ah …[speaks quickly] but then when I was doing the ah, wat- the final form^, which is what we did in the workshop, I found that much easier [speaks normally] and then I was quite ah ….pleased with ..w-what …resulted, ..and it came from more of a flow than, …yes it was um, yeah, that was interesting, …..there was much more of a letting go there, and kind of like a um, …….yeah, it made it easier ….....cos I think there was more going on with that drawing [^voice rises], d'you know^? So it made it easier for me to have other bits, help, yeah, just feel like there was this ….automatic kind of just, feel of where, kind of like this rough idea of where, what, the movement,^ whereas with the individual morphing of just one kind of straight line and then that just felt much more broken a, and yeah, like ..each ..stroke ..was separate and I didn't, couldn't ..quite ..get the fit^.

Researcher: Okay, you say *(looking at participant's field notes)* " I did find it irritating to be patient to find the change so progressively, that's so irritating"

Participant: yep … [speaking quickly] you can see here, I just gave up. Like, I'm like, it's just, pff, whatever. There was no, d'you know? whatever, I was just kind of, and I rush it …. It's just, when I don't get it, I'll just pfft! rush through it. It's um, just this, sort of … yeah, giving up …… but I think, yeah, [slows down to normal] I'd need more time to decide to work with it^... But in this .. situation .. I didn't feel I had tht though, so it was a quick decision, just to go…kind of, [speaks quickly] rush it off.

[Whole description in rushes and bursts & lots of hand gestures, like a mental groping after the experience]

Cleaned Interview Text

She did remember there was a point where she felt resistance and she felt discomfort, and she felt there was a shift in where she was in her state of mind. That was the metamorphic (drawing exercise). It's an issue she is aware of that, that she doesn't quite have the experience internally of this progression of steps to go from the beginning to an end and showing all that. Usually, she'll get to the outcome but doesn't know how she's gotten there. She just knows she needs to get there so that process is really, kind of "I don't get it". She remembers she had a problem (like this) in the workshop she did with (the researcher) earlier in the year. She just didn't (get it) but then when she was doing the final form, which is what they had done (back) in that workshop, she found that much easier and then she was quite pleased with what resulted and it came from more of a flow than (the first exercise) It was interesting, (she thought) that there was much more of a letting go there, it made it easier cos she thinks there was more going on with that drawing (maybe)? So it made it easier for her to have other bits, to help, just feel like there was this automatic kind of feel of where, kind of like this rough idea of what the movement (was); whereas with the individual morphing of just one kind of straight line and then that just felt much more broken and like each stroke was separate and she couldn't quite get the fit.

Appendix D: Glossary of Specialised Terms

A list of terms used throughout this thesis with specialised, contextual meanings. Most of the terms appear in *italics* in the dissertation. Definitions sourced from the thesis or OED.

Beholding	A form of observation beyond ordinary observation to a perceptual encounter with the essence of a phenomenon; receptive contemplation.
Being	Existence; pertaining to the essence of a thing or person; In existential phenomenology refers to existence in the world.
Continental Philosophy	In the context of thinking, sees ideation as a productive act; as opposed to the school of Anglo-American Analytic Philosophy which regards the mind as a static screen upon which thoughts appear. Includes German Idealism, Kantianism, Romanticism, Phenomenology and Existentialism.
Creativity	Considered a phenomenon in this study, as an emerging and unfolding experience; a 'coming into being' process, where new things arise that have originality, meaning or value for the individual.
Create	To bring into being, into existence; to produce or do something imaginative or inventive. (OED 2000).
Chaos	A formless void believed to have existed before the creation of the universe (OED 2000),
Description	A phenomenological term; describes what appears in an experience; the disclosure of the original experience of the world by describing the structure of an experience or its hidden meanings, depending on the school of phenomenology; Also a form of phenomenological writing that stays as close as possible to the original experience without interpreting it.
Descriptive	A school or stream of phenomenology concerned with describing the structure of an experience, rather than interpreting its meaning. *Transcendental* phenomenology is *descriptive* phenomenology.
Downstream	A term used by *Goethean* phenomenologist Henri Bortoft to describe the difference between an experience *downstream* of its event; a reflected, experienced state, as opposed to the immediacy of the *upstream* experience, in its experiencing.
Embodiment	Sometimes called embodied cognition, where cognition is not separate from bodily experience; Challenges theories such as cognitivism and Cartesian dualism.
Essence	The essential quality of a thing, without which that thing would not be what it is; can refer to the essential structure or the essential meaning on an experience, depending on the school of phenomenology in question.
***Existential* phenomenology**	A school of phenomenology concerned with the existential world as live and experienced; Associated with Heidegger, Sartre and Merleau-Ponty

Explication	The third step in a phenomenological analysis; the disclosure of the essential elements or essences of a phenomenon.
Experience	In this study, a type of heightened experience, outside of everyday taken-for-granted experiencing; a direct experience where a person becomes fully engaged in the experience; where any duality between a person and her activity disappears during the experience.
Everyday **creativity**	An approach to creativity where everyday activities can be performed in novel and meaningful ways; more a cognitive 'style' rather than a theory of creativity
Flow	*Flow* theory is a model for optimal experience developed by Mihaly Csikszentmihalyi. Though not a creativity theory, it has become almost synonymous with creativity.
Goethean **phenomenology**	A Natural Science-oriented form of phenomenology, based on an epistemological understanding of the phenomenon,
Innovate	To make anew by altering or changing something already existing.
immersion	Second step in a phenomenological analysis; to become completely 'at home' with the data.
Intentionality	A phenomenological term used primarily in *descriptive phenomenology*, the way a phenomenon appears or shows itself, not to be confused with its non-phenomenological meaning of 'purpose'.
interpretive **phenomenology**	A school or stream of phenomenology that interprets human experience, as opposed to only describing it; *hermeneutic* phenomenology is a narrower form of interpretive that focus entirely on the textural element.
Intuiting	A phenomenological term; looks beneath the appearance to the essential structure or meaning of the phenomenon of the *essences*, but also requires immersion into the phenomenon.
Lifeworld	A phenomenological term: the world of everyday experience, where we have a unquestioning approach to life. *Lifeworld* experiences are typically tacit and taken-for-granted.
Personal **creativity**	A theory of creativity where creativity concerns an individual's original construction of meaning, not society's judgement of it; the potential for creativity is the focus, not necessarily realization of creative outcomes.
Phenomenological ***attitude***	The open but attentive approach required by phenomenologists that breaks the everyday, taken-for-granted acceptance of the phenomenon.
Problem finding	A cognitive process theory closely associated with creativity theories; focuses on the source of the creative process, not the solution to a problem.
Problem solving	A cognitive process theory very closely associated with creativity theories; focuses on closing the gap between what is known and what is unknown; a solution-oriented approach.
Process	One facet of a creativity theory called the Four (or 6) Ps of Creativity, an alternative framework for categorising creativity theories, based on where creativity resides. The other facets may include *product, personality, place, persuasion* or *potential.*
Reduction	The first step in a phenomenological analysis; to re-achieve or restore direct contact with the world as we experience it.
	A reaction against reductionism by phenomenology.
Reductionism	Reducing uncertainty and complexity; explaining a complex phenomenon in

	terms of relatively simple or basic concepts.
Reflection	In phenomenology, a form of extrospection rather than introspection; a turning of the self towards the world, where things reflect back their own meaning back to us
Themes	A phenomenological term; the different ways essential or invariant meanings of a phenomenon are clustered
***Transcendental* phenomenology**	Particularly identified with the work of Husserl and Giorgi, where phenomenology is treated as a rigorous science. More broadly known as *descriptive* phenomenology
Upstream	A term used by *Goethean* phenomenologist Henri Bortoft to describe the activity of going back *upstream* to the source of experience; to the experiencing of the experience, as it happens.
Visual thinking	Thinking through visual processing where perception and thinking are not separate activities; thought in visible action; in drawing, where drawing is a direct expression of the thinking process, not a representation or reflection of it.

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