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A phenomenological and thematic interpretation of the experience of creativity

2008

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A thesis submitted to Auckland University of Technology in partial fulfilment of the requirements for the degree of Master of Health Science

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Acknowledgements

I give my sincere thanks to Rosemary Godbold, Mark Jackson, Hasmeeta Shukla, David Seedhouse, Kitt Foreman, Verna Harford, Beryl Daniels, Max Garmonsway and Neil, Jesse and Lee Bellingham for their invaluable guidance, practical assistance, encouragement and patience.

Abstract

Creativity is a nebulous concept, lacking both clear articulations and common understandings of meaning. Due to a lack of clear alternatives the concept of creativity is increasingly becoming infused with economically driven vocabulary, associations, interests and ideologies. There is an immediate need to provide alternatives to the 'creative economy' view of creativity, because of its insidious effect on educational institutions and practices and because it promotes a generally impoverished view of the meaning of creativity and of human potential.

Reductionist thought; the tendency to understand concepts as separate and distinct from one another prevents us from easily conceptualising an experience such as creativity which involves the simultaneous experience of seemingly paradoxical elements such as individuality and unity, intellect and intuition and freedom and discipline. Democracy is a metaphor which can help to articulate and understand the paradoxical experience of creativity. Democracy stands for the potential to make meaning from the integrated exploration of individuality and of unity, which I argue is a fundamental dynamic of the creative experience. I further suggest that the essence of the creative experience is a democratic attunement to existence, in which subject and object, self and environment, intellect and intuition and freedom and discipline are experienced as in a democratic relationship with one another. This way of understanding creativity provides an alternative to the creative economy view. It implies some significant changes to traditional educational emphases, including a movement away from primarily individualistically oriented curricula and toward curricula and educational values which situate the individual within an integrated eco-system.

Introduction

This thesis contains a description of a personal phenomenology of creativity and a cross-disciplinary thematic analysis and phenomenological interpretation of literature on creativity. Its purpose is to provide an interpretation in answer to the questions: What are the essential features of the experience of creativity? How can we understand creativity better through close examination of these features? It examines a phenomenological description of my own experience of creativity in daily and ordinary situations and compares this with an analysis of two texts on creativity from the perspective of the 'creative genius'. The project aims to explore what if any common elements underlie all of these experiences of creativity at an essential level. It shows that both the genius and the ordinary person's experience can be interpreted as emerging from the same essential features or fundamental aspects of experience. The features identified as constant in the fundamental experience of creativity are the simultaneous drive for individuality and for unity, the simultaneous need for freedom and for discipline and the simultaneous experience of the use of intellect and of intuition. In sum the essential features equate to the experience of human existence; of being human both in and of the world.

This project also determines that a new way of conceptualising creativity is required in order to comprehend the nature of these essential features. We are accustomed to thinking of the concepts: individuality and unity, freedom and discipline, intellect and intuition, as polar opposites; as separate, incompatible and mutually exclusive. However, this interpretation sets forward the idea that these concepts are not incompatible. Instead, it argues that understanding of their compatibility is significant to advancing new interpretations of creativity, what it means to us and how it works for us.

Understanding the compatibility of opposites is difficult. Rothenberg (1979) explains that although we use the term 'opposite' to apply to concrete

phenomena, as a concept it is purely abstract. Unlike symmetry and sameness which derive through perceptive information, nothing in nature is opposite, unless we define it as such. In discussing how we grow used to making such abstract distinctions, Dewey (1916) says: 'This distinction is so natural and so important for certain purposes, that we are only too apt to regard it as a separation in existence and not as a distinction in thought' (p. 378). In other words, our tendency to confuse distinctions in thought with distinctions in existence and experience is a handicap to our understanding existence and experience. In 1965, Kincaid identified this 'dualistic' or antithetical thinking as a primary source of misinterpretation and confusion in the literature on creativity.

This discussion suggests the notion of democracy is a useful metaphor for understanding the essential features of creativity. The way we conceptualise a concept in metaphor has implications for the way we experience the concept (Lakoff & Johnson, 1980). Democracy is a concept which can help us to arrive at a new way of interpreting creativity. A central problem in understanding the essential features of creativity is the discontinuity in thinking which arises when we conceive of individuality and unity, freedom and discipline and intellect and intuition as three sets of antithetical concepts. Conceiving of creativity as an experience democratic in nature brings our thoughts about creativity closer to our direct and fundamental experience of it. Democracy illustrates that these drives and resources may at times compete, but can also be united in an integrated and inseparable approach. Democracy is about the sharing and use of power and resources and is about action toward the interests of both the individual and the unified society. It is about simultaneously being an individual in the world, being with others in the world, and existing as an integral part of the world. Democracy is about the latent potential in the relationship between the part and the whole and about the ideal of the optimal relationship between these. In this thesis I interpret these characteristics of democracy as essential characteristics of creativity also. I identify creativity as a democratic attunement to existence; an attunement to the energy which connects all and to the potential held within this connection.

Rationale for the study

The first reason for this study is that from an academic standpoint, there is a lack of common understandings of creativity. This leads to nebulousness in the concept and problematic ideologies concerning creativity in both academic and popular understanding. In the academic world, there is a bewildering array of questions, angles and arguments to the study of creativity. This is unsurprising; a brief description of the general evolution of the concept gives some indication of its breadth. It has an ancient past rooted in divine creators and mythic moments of divine inspiration; a more recent past associated with the arts and artists, and a current incarnation in a range of 'applications' such as advertising and public relations, business studies and education (Pope, 2005). Questions commonly asked about creativity indicate its roots and continuing complexity. For example, should we think of 'creation' as involving a trait, a state, a finished product, or a network of relationships and processes (Harnard, n.d; Rhodes, 1961)? What are its processes (Doyle, 1998; Kestenbaum, 1985; Lubart & Getz, 1997; Stoetz, 1995)? Can it be taught (McWilliam, n.d.; Thomas, 2007)? Should it be linked with spirituality or personal fulfilment (Thayer, 1995)? Is it the same as 'innovation' (Amabile, 1996)? What kind of philosophical lens is required for its analysis (Jacobs, 1990)? What is its relationship to aesthetics (Dudek, 1999; Zuo, 1998)? What kinds of conditions are required for its occurrence (Dewey, A., Steinberg, & Coulson, 1998)? How can cross cultural understandings of creativity be developed (Miller, D., 1989; Niu, 2006; Rao, 2005)?

These questions reflect just a fraction of the range of books and perspectives on this topic. They demonstrate the complexity of the task of making sense of creativity in a way which might be both useful and meaningful to a range of people. Many texts acknowledge that creativity is almost universally recognised as a desirable attribute or process, and yet there seems to be no clear idea what this means. For example, Wehner, Csikszentmihalyi and Magyari-Beck (cited in Sternberg, 2003) examined 1000 doctoral dissertations on creativity. They found a 'parochial isolation' of the various studies and disciplines. Different fields tended to use different terms for what appeared to be the same phenomena (for

example, innovation and creativity) and to focus on different aspects, (for example, organisational and individual) like the blind men touching and attempting to describe the elephant. The outcome of these kinds of studies is that those who do not subscribe to the specific discipline offering the study are left feeling dissatisfied. Sternberg and Lubart (1999) note that this diversity of approach and understanding typifies creativity research.

This diversity reflects the nature of the concept of creativity. Creativity is a concept describing an idea of significant and complex meaning to humans, in a similar way as other concepts such as justice, and spirituality attempt to describe complex and significant ideas. Concepts can be broadly explained but are difficult if not impossible to define. They are products of the mind and culture and represent whole systems of thought and feeling (Seedhouse, 2001). Concepts result from interplay between personal experience, feeling and culturally held knowledge, and because of this, concepts not only differ between individuals, but also evolve. Creativity as a concept has over time developed a range of different forms of individual and cultural usage (Pope, 2005). At this point in time it arguably manifests a wider spectrum of meaning than many other concepts. For example, lay and academic views of creativity can sit anywhere on a spectrum between essentially spiritual and essentially non-spiritual, cognitive and non-cognitive, spontaneous and non-spontaneous. In terms of products, creativity is commonly agreed to be applicable in a wide variety of settings, including the art, science, technology, design, education and business worlds, but appears to have an immense variety of manifestations within these settings; tangible and intangible, aesthetic and unaesthetic, functional and non-functional, personal and public, to name a few.

Reading widely on creativity affords many new angles and insights and plenty to divert and fascinate. But the quantity and enormous diversity of literature also gives the sensation of a lack of a meaningful and comprehendible grasp on the subject. There is no coherent sense of a field of study of creativity as a whole; no common terminology, no agreement on process, significance, or appropriate methods for exploration. In this context creativity appears to be entirely subjective. Attempts at a comprehensive exploration are then viewed as

marginalised or insular and without relevance to other occasions, settings or disciplines. Cross-disciplinary understandings become extremely difficult to achieve.

The second reason for this study concerns the need to examine popular notions of creativity and their accompanying ideologies. Just on its way out of fashion but leaving a residual effect is the notion that creativity was the realm of the genius or Einstein-like character. The 'genius' approach to the creative subject is derived from the fields of aesthetics, philosophy and art; especially through the work of Kant and Nietzsche (Thomas, 2007). This definition implied a qualitative distinction between the mental operations and achievements of geniuses and those of the ordinary person, the former involving perhaps a magic ingredient one either possessed or did not possess. This made creativity seem irrelevant or largely unattainable to most of the populace (Pope, 2005) and resulted in a general lack of attention to its development.

In the current age the dominant view of the value of creativity is shaped by the notion of the 'creative economy', first espoused by Howkins (2001). This notion has emerged from claims that the Industrial Economy is giving way to a new form of economy based on the growing power and value of idea: The creative economy. The creative economy defines creativity as a human economic resource (Peters, 2007) and people as human or social capital (Fitzsimons, 2007). Florida's (2007) work *The Flight of the Creative Class* is an example of the creative economy view. The popular success of this book demonstrates that it has gained ground in society as truthful or timely. For Florida the coming era is the 'creative age', because 'the key factor propelling us forward will be the rise of creativity as the prime mover of our economy' (p. 26). His view of creativity is undefined, but he uses such things as patent applications and the growth of 'creative industries' such as film-making as a measure of the creativity of a country.

Another example of a popular author endorsing the creative economy view is Pink (2005). His book *A Whole New Mind* is ostensibly about the evolution of our psychology and mental processes. Its central idea is that we are now moving

out of the Information Age, in which logical, linear, computer-like qualities were developed and revered. This age has been dominated by a form of thinking and an approach to life that is reductive and analytical. Those who were successful in it were manipulators of information and users of knowledge and specialised expertise. Now, instead we have before us the Conceptual Age. In this age, the new social conditions we must adapt to are defined by Pink (2005) as follows: Firstly, we live in a society of abundance, in which we do not need to struggle to get the daily requirements for living, and in which aesthetics are becoming more and more important to give products a competitive edge, and to give consumers a sense of meaning and of transcendence of the mundane. This implies creativity in the service of consumerism. Second, most 'knowledge worker' type jobs are now outsourced to parts of Asia where well educated people are a cheaper source of labour than those in the West. This means that well educated Westerners must gain a competitive edge by being good at other things such as forging relationships and tackling novel challenges. Thirdly, in a similar way as outsourcing, the automation of machines is giving us further competition for jobs. These imply creativity in the service of competition for employment. The creative economy view implies that the essential features underlying creativity are individualism, competition, materialism and consumerism.

In this society, the mere manipulation of information is no longer so important. This economy and society will be built on inventive, empathic, big-picture capabilities. Those who will be successful in the new society are those who can detect patterns and opportunities, create artistic beauty and satisfying narrative, combine seemingly unrelated ideas into something new, empathise and understand subtleties of human interaction, and extend their ideas of purpose and meaning.

There is nothing wrong with Florida and Pinks' arguments in themselves. They demonstrate a valid perspective: changing social conditions do require different kinds of thinking for the success of individuals and economies. The problem is that these ideas require a higher level of critical attention than they are receiving, and that there are no counter arguments or alternative reasons for creativity discussed in the public sphere.

The assumptions of the creative economy place highly restrictive limitations on the spheres in which creativity is supposed to function and on what activities and products are likely to be considered 'new and valuable'. Florida (2007) defines a concept he calls 'creative capital'. This is 'the intrinsically human ability to create new ideas, new technologies, new business models, new cultural forms, and whole new industries' (Florida, 2007, p. 32). The purpose of creative capital is for an economy to grow and prosper. Through a number of avenues including the work of Florida and Pink, the notion of creative capital has become pervasive in society; the economy and creativity become firmly linked and their relationship goes largely unquestioned. But, as Fitzsimons (2007) argues, as human characteristics become increasingly construed as forms of capital, we are framed within an instrumental view of human life. We become commodities for the purpose of exchange in the marketplace. Those in the fields of technology, industry and business are supported in their creativity. Other forms of creativity with no obvious value in the economy are dismissed. The meaning of creativity becomes synonymous with its instrumental, economic value. Creativity's intrinsic and fundamental significance to human existence and potential is overlooked.

The 'creative economy' perspective is clearly limited, but it is pervasive and there is little debate about it. Its rhetoric is present in OECD literature and in the New Zealand Tertiary Education Strategy (Fitzsimons, 2007). This reveals 'government's determination to equip the country with skills needed to drive economic transformation', promoting 'a better bridge between the world of learning and the world of work'. Economic transformation as a central reason for education has been strongly emphasised in New Zealand government for over a decade (Fitzsimons, 2007). As Fitzsimons points out, a view of education and creativity in education as instrumental for work purposes means that teachers and policy makers are not encouraging people to reflect on the meaning and purpose in their lives. Haynes (2007) argues that when creativity is emphasised in education in order to encourage economic competitiveness, it comes shaped by an ideology of conservatism and control. Creativity is reduced to a trained brain process about problem solving, in response to a social change. There is often no individual choice, autonomy or artistry involved. In this education system there

is unquestioning emphasis on diligence, employment opportunities and individual and global competition, while personal meaning, enjoyment and discovery are neglected.

The implications of this creative economy view of creativity could be and probably are the subject of an entire thesis on their own. The implications of relevance here are that this view is a largely uncritiqued, limited and value-laden conceptualisation of creativity, its means, methods and goals. It results in a restrictive education system and more broadly, an impoverished understanding of human potential.

To address the problems of conceptual vagueness and hijack by an economic world-view, we need a higher level of explicit discussion and clarification of the underlying philosophies and assumptions of creativity. An economic model is fine so long as it is recognised as such, its underpinning philosophy is made clear, and alternative understandings of equal clarity are available. Because personal and cultural meaning and experience are the basis for our decisions about appropriate methods, processes and goals (Seedhouse, 2002), alternative interpretations of the meaning and experience of creativity are an important resource for wider discussion about its significance. This study presents one alternative interpretation.

In Chapter One I explain the design of this study and outline the aims of the project. I then explain the epistemological underpinnings of the project and discuss interpretive phenomenology as the theoretical and methodological approach, guiding the methods I have chosen: phenomenological and thematic analysis. Chapter One also explains the rationale for the selection of the key texts I have used in the thematic analysis.

Chapter Two contains the literature review. This divides previous work of relevance to understanding the essential nature of creativity into five categories and identifies how far each category brings us toward a better understanding of this.

Chapter Three is my personal phenomenological analysis. This explains my own experience of creativity as I immediately experience it. I give an analysis of two specific examples of my ordinary and everyday experience of creativity and isolate the fundamental and essential elements which these examples have in common.

In Chapter Four I provide the findings of my phenomenologically guided thematic analysis of two key texts about creativity. These texts discuss perspectives of creative geniuses. I interpret the essential and fundamental aspects of the 'genius' experience of creativity and compare these with the essential features emerging from my analysis of my own ordinary creative experience. Chapter Four is divided into three sections, reflecting my interpretation of the essential features of creativity.

In Chapter Five I introduce the idea that the experience of creativity can be described as a democratic attunement to existence. I explore what this means from a range of angles, and bring in literature from a range of sources which shed light on the essential features of creativity I identify and on why and how these can be viewed as democratic.

Chapter One: The design of the study

Aims

The general goal of the study is to develop an interpretation of the essential experience of creativity. Its contributing aims are:

1. To compare my own experience of ordinary creativity in daily life with experiences of creative genius described in literature
2. To interpret the essential features of creativity
3. To provide an interpretation of the nature of the experience of creativity as a whole

Epistemological approach

This research is developed from the epistemology of constructionism. Constructionism is the view that knowledge and reality are dependent upon human interaction with and in the world, and that knowledge and reality are thus developed and transmitted within an essentially social context (Crotty, 1998). This research assumes that the meaning and experience of creativity are developed and reside in both the mind and the culture, rather than in the form of an absolute reality. Multiple interpretations of the essential nature of creativity are valid.

Theoretical perspective and methodology

The theoretical perspective underlying the research methodology is interpretive. Interpretivism takes the constructivist assumption that knowledge is dependent upon human interaction in the world and aims to interpret and understand this

knowledge rather than to describe or explain it. It claims neither complete objectivity nor complete subjectivity, assuming that knowledge and experience are always constructed by an interaction between the two; by humans experiencing the world (Crotty, 1998). This research sets forth an interpretation of the essence of creativity which is constructed out of an engagement by me as the researcher, with my own experience in the world; with literature; with culture; and specifically with my experience of creativity. The interpretive approach assumes that individual experiences of creativity differ, but that there are also aspects of the experience which are shared, through culture. Thus my interpretation aims for both personal and social validity.

Within the interpretive approach, this research chooses phenomenological aims for exploring the subject and data. Phenomenology suggests that we can receive new opportunities for understanding meaning if we lay aside as best we can the dominant views of phenomena and return to our immediate experience of them (Crotty, 1998). Merleau-Ponty (1945) described phenomenology as a form of descriptive psychology which was a return to the 'things themselves'; that is, a return to our immediate and fundamental experience of things which precedes our constructed knowledge of them.

The idea of immediate and fundamental experience is backgrounded by the notion of intentionality. Intentionality is the idea that all consciousness is consciousness of something and that consciousness can not be separated from its objects. Because we perpetually direct our consciousness toward the world and objects in the world, we do not have knowledge of consciousness without objects. And because our knowledge of objects is entirely mediated by our consciousness, we do not have knowledge of objects without consciousness; we can not know what objects are like when separated from our consciousness.

Merleau-Ponty (1945) uses the example of sensory perceptions to illustrate intentionality. Sensations are typically considered to be perceived in the body, and in this sense are considered both a physiological and immediate experience, preceding our thoughts or responses to the sensation. Merleau-Ponty proposes that this is an inaccurate interpretation, that in fact the physiological event can

not be distinguished from the psychological event as the two overlap. The physiological event can not be the more elementary of the two because as we sense, the sensation is already invested with meaning. For example, our visual perception of the colour red is never a mere sensory registering of 'redness', it is always accompanied at the same time by an immediate and automatic distinguishing of properties, such as its similarity to or difference from other colours or other reds. This is in fact what allows us to 'see red' and to differentiate a range of different reds from other colours. Processes which give meaning such as categorising things into 'similar' and 'different' kinds supposedly belong to the mental realm and are supposed separate from the physical sensation. And yet our perception without these processes would not in fact distinguish anything. Furthermore, on close examination we find that our perception of colour is conditional on and formed with reference to its context. This is how we can distinguish that red is red, even when it looks dramatically different when seen in different lights (Kelly, 2007). Sensations and perceptions are inherently prejudiced by what we think and know both about perception and about the world, and can not be examined separately from these. Because of this, and because we always experience the world through our perception of it, there can be no complete objectivity in understanding.

In phenomenology, therefore, to 'understand' is to take in the total intention including both consciousness of the object and the object itself and to gain an appreciation of the unique existence expressed in the relationship of both. Phenomenology does not aim to discover and make explicit a pre-existing reality because it does not view the world in these wholly objective terms. Rather, it brings the truth into being (Merleau-Ponty, 1945). Through a heightened awareness of the interaction between our consciousness and the world and a reflective expression of this interaction, phenomenology helps us to establish truths. In this context, legitimate knowledge involves a deep and reflective understanding of our real and fundamental experience of consciousness and its objects.

The phenomenologically-based aim of this research is the attempt to construct a view of the essential and direct experience of creativity. That is, a view of what

the experience of creativity consists of before we begin to think about it. It examines what exists in creativity before we start to associate it with other thoughts, emotions, techniques, skills, products or advantages. This is what is meant by the term ‘essence’: the fundamental experience itself. The research seeks the objects of experience which underlie the descriptions in the texts and my own experience in as fundamental a sense as it can grasp.

The phenomenological stance this research takes is that of Merleau-Ponty (1945), that one can not put oneself in the place of another, and explain their meaning and experience. Instead, each of us must explore our own experience, because it is only from our own experience that we can take the step back to ‘the things in themselves’. The research process therefore aims firstly at an analysis of my own direct experience of creativity and secondly at a subjective interpretation of what two texts on creativity suggest about the fundamental experience of creativity.

The primary method: Phenomenological analysis of experience

In Merleau-Ponty's (1945) phenomenological terms, the method of phenomenology is not an act of introspection or intuition. This creates something subjective, which can only be accessible to one person. His method, simply put, is to thematise the features of immediate experience. This is not an intuitive, irrational process, but an intentional analysis of our perception. However, as he acknowledges, ‘nothing is more difficult than to know precisely what we see’ (Merleau-Ponty, 1945, p. 67). My interpretation of Merleau-Ponty’s process is this: In order to study experience we can simplify analytically what actually had been given phenomenally in experience. In other words, we can analyse the form of the experience. This involves examining experience, for example by producing variations of an experience in the imagination, and then fastening upon the invariable element in the variations. This examination of experience

should involve breaking with our familiarity of it, in order to see this reduction. Merleau-Ponty stated that thorough reflection is reflection which is aware of itself. Phenomenology is a method developed to be as inclusive as possible of the observation and experience of all kinds of phenomena. This includes reflection; one must reflect on their reflection in order to understand how the situation is part of the reflection's formation. This is a complicated way of saying that the process involves both personal reflection and explicit acknowledgement of worldly influences on this reflection, as the two are inseparable. We must take the perceptual context into account in order to completely describe experience.

Part of this project involved a phenomenological analysis of my own direct experience of creativity. This was based on the method Heidegger used in his phenomenology of boredom (Heidegger, 1995), and involved examining actual experiences of doing something creative and feeling creative. These experiences were described as they unfolded and were analysed for their fundamental and constant features.

The secondary method: Thematic textual analysis guided by phenomenology

Phenomenological understandings also guided the part of this project which involved a methodical analysis of two key texts about creativity. This study seeks to explore the meanings in these texts on the experience of creativity. Like my own experience of creativity, the texts were analysed in order to discover an interpretation of the underlying form of creativity; of what seems to exist at an essential, fundamental level, underlying the experiences described in the texts.

It is more complex to interpret my experience of whole works of literature phenomenologically than it is to interpret a discrete experience. For this reason, in this section which uses literature as primary data source, I employed an analytical method. Thematic analysis is used as a method for the exploration and

organisation of themes from literature. Braun & Clarke (2006) have described a rigorous and explicit method for thematic analysis which has advantages over other qualitative methods.

Thematic analysis is a method for identifying, analysing and reporting themes or patterns of data. It minimally organises and describes data sets in rich detail, and may go further than this and be used to interpret aspects of the research topic (Braun & Clarke, 2006). A key advantage of thematic analysis is flexibility. Thematic analysis provides a rigourous and explicit method combined with freedom from elaborate constraints of process, focus and subject matter. Flexibility of process and focus is important to the research design of this project because the aims of the research (to explore meaning) and the units of data analysis in this section (philosophical and theoretical works of literature) are broad, rich in detail and exploratory. A guiding approach is required but the path taken through the material is a personal one. Freedom to divert, revisit, and determine and adapt focus are important in any process to explore personal meaning.

In addition, as this is a phenomenological project it requires creative and interpretive rather than prescriptive methods. Thematic analysis allows for intuition, creativity and openness to be a part of the research process. Braun and Clarke's (2006) version of thematic analysis determines a sequence of phases designed to facilitate the identification, exploration, organisation and description of themes, but assumes the active role of the researcher in determining many elements of the research process. They implicitly acknowledge the interpretive approach; themes, they state, do not emerge from data, as if residing there waiting to be found. Themes come from the researcher's attempts to find associations and meanings within the data, and if they reside anywhere it is in the mind of the researcher.

In the spirit of interpretivism and phenomenology, the thematic analysis acknowledges the validity of multiple perspectives and seeks understanding by examining and interpreting different perspectives of the experience of creativity. I have therefore approached the thematic analysis interpretively rather than

critically. I identify the epistemological perspective and major assumptions of each text, but do not aim to deconstruct and critique these. Rather, I accept each text as a valid report of experience, examine what is reported in detail and interpret a view of what is common and essential between them.

Selection of texts for analysis and interpretation

The purpose of the thematic analysis section of the project is to provide a vehicle to consider different experiences of creativity, and to explore themes and their underlying features. The available literature on creativity is vast while the manageability and time constraints of this project demand that only a small selection of texts can be examined meaningfully.

With this in mind, I have drawn specifically on two works of literature on creativity; Hirsch's (2002) *The Demon and the Angel*, and Miller's (2000) *Insights of Genius*. These key texts were selected from out of a broader literature review, explained in Chapter Two. They were chosen for the following reasons:

Firstly the texts are comparable in that they are detailed and lengthy discussions of a range of experiences of creativity. They both present a (different) central argument about the processes, general meaning and individual experience of creativity. They do not over-stress or focus on discrete factors involved in creativity, such as the significance of environment or personality. They attempt a broad discussion from which can be drawn wide ranging experiental information.

Secondly, they both present a discussion of creativity primarily based on the notion of the creative person as a genius. Neither text states that creativity is singly the realm of the genius, but both restrict themselves to arguments and examples from persons who have reached significant heights of achievement and fame for their creative activities. This is a common approach in creativity research and often contains the implicit idea that 'real' creativity is something experienced only by a few select individuals. I was interested in the potential for

insights awarded through the contrast of the genius perspective with the ordinary experience. I wanted to explore what, if any evidence there is that the creative experience of the genius differs at a fundamental level to the creative experience of the ordinary person.

Thirdly, while they are similar in the above ways, the texts can be viewed as demonstrating very different perspectives. They are about creativity within different disciplines and are founded in different epistemologies and thus contrast at a number of levels. Hirsch's work is about the creativity of artists: writers, painters, poets and dancers. He can be interpreted as presenting a primarily post-structural viewpoint. A post-structural perspective holds that the construction of knowledge is culturally conditioned and subject to multiple interpretations and biases. It therefore accepts and uses multiple interpretations of reality, suggestion, emotion and ambiguity in the creation of knowledge (Crotty, 1998). Hirsch's work demonstrates this post-structural approach. He presents a range of facets of creativity and only loosely attempts to connect them. He emphasises the emotional experience of creativity as the significant window to knowledge about it. He also emphasises various manifestations of ambiguity in the creative experience; ambiguity of emotions, of inspirational sources, and of interpretations of the experience itself. In Hirsch's central thesis that our personal emotional struggles with angels and demons are the source of creativity, his work also contains echoes of an earlier time, before the rise of rationality. In the Middle Ages the cultural focus was on supernatural and religious symbols, myths and inner experience. In this time angels and devils were as real as, if not more real, than people (Blair, 1991).

On the other hand, Miller's work is primarily about creativity in physics, and is based in scientific realism. Scientific realism proposes that there is a real and objective world and that knowledge of this world is in general terms gained through common sense and logic and our powers of observation; that is, through the methods of science. Understandings in physics from a scientific realist perspective therefore, are precise, objective, reliable, valid and tested understandings of the physical world involving certain established methods and formulas (Stanford University, 2002). Miller's emphasis is on the mental

processes of highly creative physicists and he describes these with logical, rational and structured arguments. Loosely described, the comparison of these texts affords the opportunity to compare an objectivist with a subjectivist interpretation and to discover what if any fundamental features or essential elements might be common to both.

Chapter Two: The Literature Review

Theoretical representations of creativity are extremely diverse (Thomas, 2007). The purpose of this review is to indicate the range of literature which has assisted in bringing us toward an understanding of the essence or fundamental nature of creativity. It aims to identify a range of approaches to understanding creativity, some key perspectives articulated within each approach, and the strengths and limitations of these perspectives in terms of their suitability as aids to establishing a sense of the essential nature of creativity.

I have not included literature which does not centralise the human experience of creativity. That is, the literature I focus on addresses the how, why and what of creativity in the mind, emotions and spirit of humans. I have excluded literature which does not address human experience. For example I have not included literature which defines creativity and its products, or which theorises about explanations of creativity which do not relate to human experience, such as discussions linking Chaos theory to creative processes (for example, Richards, 2001), Simonton's (1999) theory linking Darwinian evolution to creative processes and Greene's (2001) model synthesising 42 other models of creativity. I have also separated out the literature which does not contribute to an understanding of the essence of experience; that is, literature which acknowledges a focus of associated but not fundamental relevance to the creative experience. Examples of this are studies which focus on the practical methods or strategies of creativity, or the influence of personality characteristics or environmental conditions. This means I have not attempted to cover the body of literature which is largely pragmatic and concerned with specific strategies for practicing or developing creativity, such as the work on creative techniques of De Bono (1970; 1992), Prince (1972) and Osborn (1993) and on creative technologies (for example, that of Shavinina & Ponomarev, 2003). These works are not concerned with understanding creativity by interpreting its nature and what it means to us.

With the field of literature I have left, I have categorised approaches into four major types and have covered some of the most prominent literature in each category. The four major categories are: Psychodynamic/humanist approaches, which emphasise the introspective experience and a subjective interaction between conscious and unconscious thought in creativity; Cognitive approaches, which assume a large degree of objectivity in the study of creativity, including emphasis on conscious, observable and measurable cognitive processes; Confluence or systems approaches, which emphasise cognitive processes in conjunction with social influences; and Teleological approaches, which view creativity as a significant functional aspect of a purposeful and connected universal system. The two key texts which I use in the thematic analysis section of this study can be loosely aligned with two of these approaches. Hirsch's text *The Demon and the Angel* (2002) most strongly resembles the psychodynamic approach, while Miller's *Insights of Genius* (2000) is generally compatible with the cognitive approach.

I have also determined a fifth category which I call Dialectical studies. This group contains studies of lesser prominence than those in the other major categories, but which are of particular relevance to this project. These studies are of diverse methodological approach, but with a similar aim. They aim to explain or describe the dialectical tensions involved in the creative process. These are relevant because this study also finds that there is an apparent tension between separate drives and processes in the creative experience. A major purpose of the discussion section in this study is to seek a new way to understand the experience of this tension.

Of each of these five approaches, I ask the questions: How far does this approach bring us toward an understanding of the essential nature; the underlying form and structure of creativity? What does it say about it?

Psychodynamic/humanist approaches

The psychodynamic approach is the first major twentieth-century theoretical approach to the study of creativity. Psychodynamic psychology is concerned with creating models of individual's inner worlds and with facilitating behaviour change through the release or catharsis of unconscious conflicts (Gross, 2001). It has neo-romantic origins, from which it takes its notion of the self as the centre of meaning and truth. This approach says that creativity arises from the tension between conscious reality and unconscious drives (Pope, 2005). Psychodynamic approaches to creativity generally involve detailed discussion and theory about its inner psychological desires and impulses. They regard creativity as a meaningful human activity or process fulfilling a significant social role (Esquivel, 2003).

The psychodynamic view fully explores the territory that many of the other approaches will not go near; the unconscious mind. It holds that some of our mental processes occur in the realms of the mind which we can not easily observe, measure, test and manipulate, and in so doing, attempts to explore fundamental and spiritual aspects of creativity which purely conscious cognitive approaches can not access. Notable authors who have utilised this approach include Freud (1964), Jung (2001) and Kubie (1958).

Freud first positioned unconscious conflict as central to creativity (Esquivel, 2003). He emphasised the important point that creative actions are not always the result of deliberate intentions; that much of what occurs during this process remains hidden both from the creator himself, and from society. He proposed that people produce creative work as a way to express their unconscious wishes in a publicly acceptable fashion (Freud, 1964). Jung criticised this as overly reductive and based on an assumption that repressed material must be negative, and the stuff of neuroses (Chodorow, 1997). In spite of Jung's criticism, Freud's lead has given psychodynamic approaches a fundamental concept. The polarised dynamic between repression and expression is a central tenet of most psychodynamic understanding of creativity (Pope, 2005).

Jung's psychotherapeutic method was based on an idea of transitioning between a broader range of dynamic oppositions within the psyche. In this method, the unconscious is allowed to come up, and play, expression and the imagination are used to come to terms with it (Chodorow, 1997). He saw his method for coming to terms with the contents of the psyche as a model for the creative process and a central aspect of human existence. Jung's link between creativity and what it is to be human is a perspective of an essential nature. Following Jung, creativity is essentially and fundamentally linked to human existence.

Jung also gave a socially significant interpretation of the deeper significance of creativity. Jung believed that the unconscious does not serve a merely individual function. He proposed that one is not in complete control of his psyche and its products; that there is a collective unconsciousness existing within and yet external to the individual psyche which influences and is a source of thought and imagery (Jung, 2001). For Jung, art was not an individually oriented exercise, its purpose is to 'educate the spirit of the age, conjuring up the forms in which the age is most lacking', and the purpose of the artist is to 'discover what it is that would meet the unconscious needs of the age' (cited in Pope, 2005, p. 74). This is achieved via attending to the collective unconscious, manifesting as archaic symbols received through the unconscious. Jung's idea that creativity has a collective as well as an individual significance is another perspective on its deeper essential nature.

Kubie (1958) attempted to define some distinct states of consciousness involved in creativity. He emphasised the pre-conscious, which falls between conscious reality and the unconscious, and suggested this as the true source of creativity because here thoughts are loose and vague, but interpretable. The pre-conscious is a sort of middle ground where some of the conditions of both the conscious and the unconscious exist. Kubie also defined a two stage process of creativity, involving primary and secondary ideation processes. The primary processes include unstructured, illogical, subjective thoughts. The material generated in this phase is then worked on with secondary processes; reality-based, controlled and evaluative actions. In his work, Kubie has articulated useful vocabulary and ways of conceiving of the micro-processes involved, and has built on Jung's work to

offer a way of understanding how the conscious and unconscious may be united or utilised together; a key issue for many interested in the psychodynamic approach.

The psychodynamic tradition partly underlies the humanist approach, which has also made a contribution to understanding creativity. Humanism emphasises holism rather than reductionism as an approach to knowledge and thus contributes to the idea of the individual as the focus of study, rather than abstract components of behaviour (Overby, 1997). It attempts to integrate the physiological and psychodynamic motivations of the person (Gross, 2001), and combines these in a modernist approach, affirming the power of humans to shape and improve themselves and their environment. It assumes that people help to determine their own behaviour and are not slaves to biology, the environment or the past. Humanism also emphasises the principles of intuition as a source of knowledge (Overby, 1997), autonomy, democracy, self-determination and personal and social change through self and collective awareness. Humanist theorists such as Maslow and Rogers did not fully articulate perspectives on the essence of creativity, but they contributed to the notion that our ability to self-actualise is dependent upon aesthetic appreciation and transformative processes (Gross, 2001). Thus, our sense of self is deeply linked to creativity.

The psychodynamic and the humanist approaches have much to contribute to this study. These primarily underlie Hirsch's text *The Demon and the Angel* (2002), which is a key text in the thematic analysis section of this study. This text contains frequent references to conscious and unconscious matter and process and to self-actualising motivations. The psychodynamic and humanist approaches offer substantial theory explaining views of creative processes which do attempt to grapple with aspects of humanity and existence which are arguably essential – fundamental to our experience. These include the notions of self actualisation, expression of conflicting psychological thoughts and feelings and individuation and collective connection as dual aspects of human existence.

The limitation of these approaches in terms of their interpretation of the essential nature of creativity is their restriction of the focus of knowledge to the individual

psyche. In spite of the fact that Jung indicates the significance of creativity in the collective unconscious and in the world the psychodynamic approach still tends to pose the individual psyche as the central avenue to knowledge. It positions the conscious and unconscious processes as central, and views all else in terms of their relationship to these. Jung identifies the dynamic between the conscious and unconscious in essential terms, as the structure underlying human endeavour and creativity (Jung, 2001). This is an important dynamic, and likely to be relevant to examinations of the essential and fundamental, but is not a complete interpretation of creativity. The centralisation of conscious and unconsciousness does not accommodate the phenomenological assumption that these are inseparable from the external world. Merleau-Ponty (1945) argues that a full expression of experience can not come from within an approach which tends towards the introspective. This results in completely individualised and therefore subjective interpretations. The psychodynamic approach implies that creativity is primarily relevant to the individual mental realm without relevance to the external world. The humanist approach also positions the individual as the central aspect of significance and source of understanding and views creativity and self-actualisation as individualistic endeavours.

Cognitive approaches

While cognitive psychology is a diverse discipline and its boundaries are difficult to define, it can be said that it generally seeks to understand the mechanisms by which people learn (Lycan, 1999) and functions based on the positivist assumptions that brain and mind functions can be objectively observed, measured and analysed (Gross, 2001). The cognitive perspective of creativity stems broadly from a philosophical position that all aspects of reality can be reduced to matter: psychology can be reduced to biology, biology to chemistry and chemistry to physics. In this view, creativity must be decided upon as a mechanistic process determined by biological or chemical reactions, or else it must be viewed as a purely imaginary construct, in the sense that it is not in fact really ‘real’.

As cognitive processes cannot be observed in the brain in the same way as the functions of the other organs in the body, cognitive psychologists have been limited to making analogies to describe the functions of the mind; for example, the brain as a computer, (Gross, 2001), and to making descriptions of behaviour based on this analogy; for example, reception, processing and output of information (Lycan, 1999). Cognitive processes thought to relate to creativity include the acquisition of knowledge, identifying relations and patterns and flexible responses adapted to the situation (Sternberg & Lubart, 1999). Creative process theories are informed to a significant extent by cognitive psychology (Thomas, 2007). This field tends to neglect or downplay the significance of the unconscious. In fact there is a tendency among some authors (for example Plsek, 1996) to view the consideration of the unconscious or subconscious as old fashioned and out of date, while cognitive models which imply purposeful generation of ideas are viewed as 'modern'. Cognitive psychology has established itself as the currently dominant paradigm for understanding creativity and is especially pervasive in discussions of creativity in education (for example, De Bono, 1970; Jackson, N, 2003; Jackson, N & Sinclair, 2005; Torrance, 1976; Treffinger, 2004). Key streams from cognitive psychology for understanding creativity are the psychometric approach and the stage-based approach.

Psychometrics is the branch of cognitive psychology which attempts to objectively observe, measure and analyse mental functions. Psychometrics is a part of the movement in cognitive psychology begun in the 1950's to gain legitimacy as a scientific discipline. Psychometric approaches to creativity are typified by Guilford (1950; 1958) and Torrance (1976; 1995).

Guilford (1950; 1958) was the founder of the psychometric movement. Guilford's influence accelerated the 'modern' view of creativity: That it is needed to meet the challenge of accelerating social and technological change. The key areas of this change are in scientific and technical advance and economic, political and military competition. Guilford's (1958) work in the field led him to the suggestion that divergent thinking; the ability to view a problem from many perspectives and to generate multiple answers to it, is the essence of creativity. His belief that creativity is a measurable function led him to focus on

the development of methods of measurement. Guilford also popularised the problem-solving definition of creativity in his equation: creativity = problem solving + evaluative ability.

After Guilford, Torrance (1976; 1995) followed as the next major proponent of the psychometric approach. Torrance developed the now dominant instruments for measuring creative thinking. These were based on divergent thinking tasks because these lend themselves to measurement. Torrance Tests of Creative thinking can be scored for fluency (number), flexibility (different categories), originality (statistical rarity) and elaboration (level of detail) in the responses. Torrance also made explicit a number of cognitive skills associated with creativity. He contended that creativity is the process of:

> becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficulty; searching for solutions, making guesses, or formulating hypotheses about the deficiencies; testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results. (1976, p. 217)

With this explanation, he further broadened and articulated understandings of the conscious mechanistic processes of creativity.

Stage-based approaches are those which attempt to analyse creativity in terms of discrete and sequential steps. They typically emphasise conscious cognitive functions, but may include unconscious ones as well. Wallas's model (1945) was the first and most influential in this category. Wallas's theory was based on introspective evidence; the accounts of people who had observed and considered their own creative process, such as the mathematician Poincare. Wallas (1945, p. 40) analysed these accounts as follows:

> ….if we take a single achievement of thought – the making of a new generalisation or invention, or the poetic expression of a new idea – and

ask how it was brought about. We can then roughly dissect out a continuous process, with a beginning and a middle and an end of its own.

The result is Wallas's four stage theory of the 'art of thought' (Wallas, 1945).

- Stage one is preparation, during which the problem is investigated in all directions. This is a conscious production of dialogue of alternate suggestion and criticism, trial and error.
- Stage two is incubation, in which the idea is laid aside for some time, allowing the unconscious mind to work on it freely.
- Stage three is illumination, in which the 'happy idea' appears.
- Stage four is verification; here the validity of the idea is tested, and the idea itself is reduced to its exact form, using conscious processes similar to those of the first stage.

Wallas's theory to some degree unites psychodynamic notions with cognitive psychology, using vocabulary from both and tying both forms of process together. He has provided a model which many after him have found a simple, comprehensive and useful tool (Lubart, 2001), applicable in education, business and other realms. Others have used this as a basis for their own variations. For example, Amabile (1990) has proposed a four stage model, based on Wallas's:

a. Problem or task identification
b. Preparation (gathering relevant information and resources)
c. Response generation (seeking and producing potential responses)
d. Response validation and communication (testing the possible responses against criteria)

While Amabile acknowledges the occurrence of incubation, she does not specify any unconscious phases in her essential steps. Like Guilford (1950) and Torrance (1995), Amabile also conceptualises creativity as problem solving.

A further variation on Wallas's model is Finke, Ward and Smith's Geneplore model (1992). This has two phases: The Generative phase, where an individual constructs mental representations, and the Exploratory phase, where those

structures are used to come up with creative ideas. Cognitive processes that may enter into either of these phases include: retrieval, association, synthesis, transformation, analogical transfer and categorical reduction. This model has the comparative advantage that it implies a somewhat looser structure than other stage-based models and perhaps therefore lends itself to more flexibility of use.

The cognitive approach has done much to promote discussion and interest in developing creativity, and has helped to expand and articulate a vocabulary for cognitive skills and mechanisms associated with creativity. This has partially paved the way to further work on understanding the essential nature of creativity, rather than offering views directly relating to this. Torrance (1995), Guilford (1958), Wallas (1945), Amabile (1990), Finke, Ward and Smith's (1992) work in observing and describing the mental actions taken by those involved in creative activity gives us a set of phenomena about which we can speculate. The phenomena they identify are a layer of knowledge in which we can dig for connections and implications about deeper meaning. For example, Miller's (2000) text, used in the thematic analysis section of this project draws on cognitive psychology. He uses examples of instances of incubation and illumination (Wallas, 1945) from scientific geniuses, to theorise about the central importance of visualisation in creativity.

The need for reductionism and mechanistic process has led cognitive psychologists to imply that creativity is intentional, conscious and limited to thought of certain styles. All of these assumptions are debateable. Creativity is reduced to the logical, calculated and deliberate and its intuitive, unconscious, aesthetic or artistic sides are largely unexamined. The framing of creativity as problem solving, a notion which is pervasive today, also implies logic, calculation and deliberation. Merleau-Ponty (1945) is opposed to problematising the world and experience in this fashion. He asserts that the world and reason are not problematical; there is no unknown quantity to be determined by a process of logic and deduction. Understanding is gained by re-learning to look at the world; an entirely different approach to problematising it. Merleau-Ponty believed his approach could access understanding that problem solving could not because problem solving fails to position the consciousness as part of knowledge of the

object. Problem solving places problems as external to the subject. Creativity experienced as problem solving suggests that problems are objective; they pre-exist and are not constructed. This disqualifies a range of acts which might otherwise be thought important in a creative process, including problem posing and exploration without any deliberate aim.

Cognitive approaches to creativity are further limited by their foundations in realism. Realism starts with an objective idea of the world and then tries to understand the mental realm in terms of this. When realism is applied to the mental realm, as when it attempts to discuss creativity, it must conceive of mental laws on the same general lines as the physical laws which are more easily observed. That is, it only has the limited descriptive powers of a mechanistic view. This is illustrated in both psychometric and Stage-based approaches. These conceive of creativity as sets of discrete steps, often sequential and linear in nature, supposedly describing mental acts. This is an attempt to analyse and reduce creativity to its invariable elements, but is faulty as it assumes that there is an objective creative process, independent of consciousness. Its separation from consciousness means it cannot describe experience.

In support of the proposition that mechanistic approaches are inadequate, there is evidence indicating that a sequential process of discrete steps is not especially characteristic of creativity (Lubart, 2001). There are also viewpoints which suggest that sequential and linear thinking is in many ways antithetical to creativity because creativity is fundamentally about perceiving wholes and connections which depends upon more loose, ambiguous, integrated or synthesising approaches (Arnheim, 1970; Shlain, 1998). In spite of these contrary perspectives, the result of the apparent usability of the Stage-based approach is that there is a strong school of thought that more reduction and analysis must lead to better understanding of creativity, as illustrated by Lubart: ‘Theories of creativity need to specify in much greater detail how the subprocesses can be sequenced to yield creative productions. This issue should be central to any model of creativity’ (Lubart, 2001, p. 305).

The cognitive perspective denies the complexity of life and existence, and of creativity as an integral aspect of life. Mechanistic models ignore the subjective component of the world and only make sense in terms of observable external endeavour (Goswami, 1999). They ignore the fact that creativity might occur using common processes, but both the experience and the results can still be utterly surprising and unpredictable (Schuldberg, 1999). They indicate that creativity is fundamentally a mode of thought, instrumental in other aims, but of no deeper significance. What divergent thinking is instrumental for is implicit in the assumption partly initiated by Guilford and dominant today, that the important problems are competitive, commercial and technical in nature. As Pope (2005) notes, this assumes the need for adapting to the environment, rather than adaptation of or with the environment. That is, it does not question our role in maintaining the continued supremacy of competition and commercial and technical interests and sees the role of creativity to respond to, not to transform these. The cognitive concept of creativity has been easily accommodated by the creative economy ideology, as it functions within the same instrumental paradigm.

Confluence or systems approaches

According to Sternberg (2003), since the mid-eighties there has been increased interest in cross-disciplinary understandings of creativity due to the recognition that disciplinary understandings had been to that point extremely fragmented, involving different sets of concepts, vocabulary and theoretical foundations. Systems or Confluence approaches are one result of this attention. Systems approaches are described by Rathunde (1999) as those which view creativity as a process shaped by multiple forces, which ‘reorient the study of creativity by placing the person within a sociocultural context, rather than isolating him or her from it’ (p. 605). Confluence means ‘to flow together’ and Confluence models of creativity are said to be those which state that multiple components must converge for creativity to occur (Sternberg, Kaufman, & Pretz, 2002). Thus, Confluence and Systems approaches tend to be an intersection of understandings

from cognitive psychology with social psychology. Confluence approaches tend to attempt to catalogue the mental skills required for creativity and qualify these with the social conditions acting on the individual, thus acknowledging a mediating power relationship on the success or creative output of the individual. For this reason, some theorists such as Gruber (1988), maintain that case studies are the most appropriate method for understanding creativity via the systems approach. Prominent amongst confluence theorists are Sternberg and Lubart (Sternberg, 2003; Sternberg & Lubart, 1999; Sternberg & O'Hara, 1999) and Csikszentmihalyi (1988; 2001).

Sternberg and Lubart initially proposed a confluence theory they named the Investment Theory of creativity (Sternberg & Lubart, 1995). Investment Theory says that creative people are those who are willing to buy low and sell high in the realm of ideas. Buying low means pursuing ideas that are unknown or out of favour but have growth potential. Selling high means convincing others of the worth of these ideas, and thereby increasing the perceived value of the investment; and then moving on to the next unpopular idea. According to this theory, creativity requires confluence of six distinct but interrelated resources: intellectual abilities, knowledge (enough to know where the field is), styles of thinking (for example, legislative style: a preference for thinking in novel ways of one's own choosing; global as well as local styles, discerning the big-picture from details), personality (for example, self-efficacy, willingness to overcome obstacles, sensible risk taking, tolerance of ambiguity, willingness to stand against conventions), motivation (for example, intrinsic or task-focused) and environment (for example, level of support and reward). Three intellectual abilities are especially important in confluence: a. the synthetic ability to see problems in a new way and to escape the bounds of conventional thinking; b. the analytic ability to recognise which of one's ideas are worth pursuing and which are not; and c. the practical-contextual ability to know how to persuade others of the value of one's ideas (Sternberg & Lubart, 1999).

Sternberg also believes that 'Creativity, according to the investment theory, is in large part a decision' (Sternberg, 2003, p. 110). By this he means that there are people who have creative intelligence but are unable to use it effectively because

they have various blocks in deciding to use it. The levels of these six types of resources in the individual are important, but the decision to use a resource is a more important source of individual differences in creativity (Sternberg, 2003). One must decide to generate new ideas, analyse the ideas and sell them to others. One must decide to use the intelligence, knowledge, thinking styles, personality strengths, motivations, and environmental challenges he has positively. 'One must decide to use one's past knowledge but also decide not to let the knowledge become a hindrance' (Sternberg, 2003, p. 108). 'How can one encourage people to decide for creativity? According to the view of creativity as a decision, fomenting creativity is largely a matter of fomenting a certain attitude toward problem solving and even toward life' (Sternberg, 2003, p. 143).

Csikszentmihalyi highlights the systemic interaction of individual, domain and field (1988) and conceptualises creativity as 'flow' between elements in a system (1990). His main conclusion is that a dialectic among talented individuals, domains of expertise, and fields charged with judging the quality of creations is the dynamic which characterises all creative activity. Csikszentmihalyi is thus one of the most prominent theorists to strongly emphasise the significance of the community rather than the individual in fostering creativity. Gardner (1993) approached the study of creativity using Csikszentmihalyi's model and through case studies of seven creative and famous individuals, Gardner attempted a search for patterns to illuminate the 'nature of the Creative Enterprise' and 'principles that govern creative human activity' (p. 7). The dynamic between the three dimensions identified by Csikszentmihalyi often contains various tensions, which provided they are not overwhelming, are conducive to creativity. This Gardner calls 'fruitful asynchronicity'.

In general terms the strength of confluence models of creativity is that they acknowledge the complexity of the subject matter and emphasise cross disciplinary perspectives. Both Sternberg (2003) and Csikszentmihalyi's (1988) models acknowledge the importance of context to the individual and the manifestation of his creativity, an adaptation and improvement on the purely cognitive psychological approach, which historically tended toward the examination of the individual in isolation from his environment.

Sternberg and Lubart's confluence model offers little contribution to a deeper understanding of the meaning and experience of creativity. Sternberg has attempted to identify that decision making is central and irreducible to creativity. He states that 'Motivation is not something inherent in a person. One *decides* to be motivated by one thing or another' (Sternberg, 2003, p. 108). How this is so is not explained convincingly.

It could be further argued that Sternberg and Lubart's (1995) model is a summary of collections of research brought together in a list with minimal synthesis or identification of relationships and dynamics. Their model of creativity is complicated and inelegant and might be a list of desirable attributes for accomplishing anything at all. While some priorities are indicated, it does not suggest enough in the way of what is significant. The result is generally unwieldy and lacking in purpose.

Furthermore, on close examination these prominent confluence theories are not so multidisciplinary in their content. Sternberg and Lubart's confluence theory (1999) is discernibly founded in cognitive psychology, and is generally a synthesis of personality trait research with cognitive learning research. Cognitive psychology, as has previously been suggested, has taken an objectivist view of psychology, neglecting the role of consciousness on perception and of the unconscious processes and emphasising supposedly empirically testable components.

This disciplinary focus would not be so problematic, were it not for the fact that Sternberg has a tendency to assume an authoritative position and not to recognise the limits of his own approach. In spite of the fact that all its contributors are behavioural scientists, the introduction and back cover blurb of his compilation, the *Handbook of Creativity* (1999) identify that its goal is 'to provide the most comprehensive, definitive, and authoritative single-volume review available in the field of creativity'. Sternberg does not appear to see the single discipline foundations of the book as a potential impediment to providing a comprehensive, definitive and authoritative review of creativity. This lack of cross-fertilisation is the more strange as it indicates that Sternberg does not follow his own teachings;

according to him creativity supposedly involves new cross-disciplinary links (2003). That Sternberg has established a position as a leader and expert in the field of creativity research generally is an indication that the dominance of the cognitive approach in creativity research is largely unchallenged.

Its roots in cognitive psychology mean confluence approaches suffer from the same objectivist, mechanistic limitations as previously described. Sternberg's writing (Sternberg, 2003; Sternberg & Lubart, 1999) also demonstrates the same rhetoric of the instrumental and creative economy view of the significance of creativity as is clear in cognitive approaches. He believes in the importance of creativity at the individual level for problem solving, the societal level for scientific findings and new movements in art and social programmes, and the economic level for new products, and new jobs. Rather than describing the importance of creativity to question and make meaning from existence, at all levels the purpose of creativity is instrumental; people must adapt existing resources to changing task demands and to remain competitive.

Teleological and evolutionary approaches

The teleological perspective views nature as holding inherent design and purpose. It holds that there is a 'grand narrative'; a cause and reason for all natural phenomena in the universal system. Teleological approaches to creativity are those which assume that creative behaviour is explained by viewing the creative individual as a purposeful part of an interconnected system (Lycan, 1999). This places creative processes within a broad and deep hierarchical system and views them as a part of a pattern of phenomena occurring universally.

Key theorists of the teleological view include Koestler (1976) and Bohm (1996a). Both of these authors provide extensive perspectives on the universal processes and significance of creativity. In brief, Koestler through his analysis of art, humour and science, formulated views on processes common to all and introduced the concept of bisociation to explain the underlying action.

Bisociation is the combination of two different frames of reference which have not been combined before, and the result of this is creativity. He further posed that all entities have the dual characteristics of the tendency to protect and assert the self and the individuality, and the tendency to contribute to the systemic whole, and that it is through the interaction of these tendencies that creative adaptation occurs.

Bohm developed a detailed view of creativity throughout his career as a physicist, culminating in his view of creativity as dialogue (1996a; 1996b). The basis of this is the understanding that the universe is not fixed and is in constant transition, indicating that our notions of process and knowledge should be just as fluid. We should interact with the world and with each other with an attitude of dialogue, of listening and observing the flow of conversations, ideas, and the environment. In this state we rid ourselves of preconceived ideas and free ourselves to notice new concepts in the form of new patterns and relationships. This is essentially what creativity is, to Bohm.

Of the two, perhaps Bohm (1996a; 1996b) goes further toward posing a comprehensive view of the meaning of the essential nature of creativity. His notion of dialogue manages to capture both process and deeper significance. It identifies an attitude and orientation to the world and explains how this can be both functionally advantageous and a perspective on the meaning of existence, echoing the concept of non-dualism in eastern philosophies as well as notions of ecological reciprocity and evolution. These ideas are present in Koestler's (1976) work too, but his theorising tends toward the description of phenomena, albeit on deep levels. His notion of the implications and significance of his theory; of the actual meaning of creativity, what we should understand about its purpose, is less fully articulated than Bohm's. For example, his equation of creativity with bisociation is more process oriented and less indicative of an underlying philosophy than is Bohm's idea of dialogue.

Both Koestler (1976) and Bohm (1996a) contribute substantially to an exercise in understanding the essential experience of creativity. They articulate what observably occurs, the reasons for this occurring and on the deeper meaning of

this for humans and the universe. They both indicate that our social and evolutionary advance is dependent upon our creativity, where this is conceived as our ability to understand the nature and restricting tendencies of our own minds, to utilise the potential of our own minds, to conceive of ourselves within a wider universal system, and to understand the tensions between our individual identities and ourselves in the collective system.

Dialectical studies

The studies in this group stem in one way or another from the philosophical study of dialectical process. Dialectical studies involve the study of conflict or synthesis of opposing views or concepts and often address ideas such as contradiction, paradox, complementarity, ambiguity, polarization and reciprocity. Dialectical thinking is often described as proceeding by a means of steps: an assertion of a thesis; followed by the statement and discussion of an antithesis, the contrary or opposite point of view or denial of the thesis; followed by the synthesis, the combination of partial truths of the thesis and antithesis into a higher level of truths. The idea of a dialectical process has been advanced in western philosophy by Hegel and Fichte, among others (Walls, 1979). It is said that the dialectical process sets out a means to understand the advancement of thought of all kinds. Dialectics has been a highly influential field of study in discussions about creativity.

Prominent in the background of studies examining the relationship between creativity and dialectics or opposites are the philosopher Nietzsche (2000/1872; 2005/1887) and the psycho-dynamic theorist Jung (Chodorow, 1997). Nietzsche's notion of the conflicting tendencies in man; the Apollonian and the Dionysian; discipline and freedom (Nietzsche, 2000/1872) is central to his understanding of existence and creativity and has formed the basis of much ongoing discussion and theorising. As discussed previously, Jung was prominent in conceiving of human psychic structure in general as composed of opposites

and that much of our motivation and behaviour results from attempts to reconcile these opposites (Chodorow, 1997).

A diverse range of further studies have explored dialectical processes whereby apparent opposites are synthesised, and their relationship to creativity in humans (Yan & Arlin, 1999). Dialectic studies relevant to creative experience include Fergus-Jean's (2002), who explored her own artistic experience phenomenologically and interpreted tensions between the rational and the mythopoetic, the real and the unreal and fact and fiction. She concluded that embracing intuition and ambiguity lead to a creative experience in the world. Perry (1996) studied creative writers and found that central to their process was a balance of opposites she termed willing/not willing, thinking/not thinking, and audience awareness/ unawareness. Reinders (1991) found a similar phenomenon in the attitude of artists; he identified a dynamic balance of purposive playfulness, circumscribed indeterminacy and distant-engagement. Stoetz (1995) examined children's creative processes, and determined four 'dialectical movements' which were central: process-product, person-society, inspiration-expression, one modeality-another modeality. Ayman-Nolley (1999) proposed a dialectic approach to understanding creativity based on Piaget's mechanisms of assimilation and accommodation in cognitive development.

An interesting subset of dialectical studies in creativity examined the relevance of gender. MacKinnon (1978) found that highly creative people were more successful in reconciling the opposites of their natures – masculinity-femininity, independence-dependence, conformity-nonconformity. Following the same line of thought about gender, Kriegel (1996) and Valente (1980) both independently proposed that people who were androgynous would tend to show more creative thinking; androgyny bringing together opposite elements of masculine and feminine. Valente's study confirmed this correlation, while Kriegel found it in androgynous women but not men.

Further dialectical studies relate to the products of creativity, rather than the human creative experience. For example, Sundararajan (2004) discussed Chinese poetry and aesthetics and identified that these contain a high degree of

dialectical principles. Rao (2005) examined Indian myths for their illumination of the creative process and found a dialectical description of the interplay between ego and creativity in the myths of Arjuna and Muchukunda.

Others have examined the more general subject of conflict in creativity. As mentioned previously, Gardner, (1993) performed several case study analyses and concluded that an intermediate amount of asynchrony or tension between the individual, the judges in their field and the discipline in which they work, is fruitful for creativity. Sheldon's (1995) study found that the ability to tolerate conflict is a core characteristic of creativity.

Kincaid (1965) recognised these tensions as characteristic of creativity, but saw them also as an obstacle to the comprehension of creativity. His central thesis was that dualistic thinking; our tendency to conceptualise ideas as separate and thus often opposed, leads to confusion about creativity in general. He argues for a unified view of creativity: "One of the first steps toward seeing creativity as an 'all-embracing' or unified process may be to ascertain how the various factors of creativity interact, overlap, and as Dewey states, 'keep the balance of a multitude of diverse actions, so that each borrows and gives significance to every other' (Kincaid, 1965, p. 10). Dewey's philosophy discussed thought, art, education and aesthetics and identified tensional dialectics manifest in all of these processes (Dewey, J., 1934). As the quote above indicates, his work touched on the notion that balance or tolerance of tension is somehow central to a deeper understanding of creativity.

Other studies have provided valuable insights into the significance of this balance or tolerance. However, there are two central limitations of these studies. In common with the majority of the literature as a whole, the first limitation is their tendency to view the creative experience as a primarily internal and individual one, not taking into account the reality that every aspect of existence is shared and that we can not separate our individual consciousness from its external objects. Rosica (1982) for example, examined conscious and unconscious processes in creativity and advocates a synthesis of the two positions, revealing commonalities and dissolving differences. His focus is

limited to conscious/unconscious processes and therefore cannot provide a conceptualisation of the whole of the creative experience. Rothenberg (1979) claims that his concept 'Janusian thinking' encapsulates this balance and conceptualises creativity as a whole. Janusian thinking means holding two or more opposing thoughts simultaneously and without conflict. Rothenberg denies that this process is dialectic or even a synthesis, as no attempt at reconciliation of the thoughts is made. His concept is a useful description but like Rosica's analysis, is limited to the thought processes of the individual.

The second general limitation of dialectical studies in creativity is their failure to provide a new and comprehensive way of conceptualising creativity which encapsulates the paradoxes they identify. McAra-McWilliam (2007) discussed the Keatsian concept of Negative Capability; when man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason. She argues for the need to develop an understanding of the significance of this balance point. Rea (1983) attempts a metaphoric theory of creative change. He states that creative change is the paradoxical tension of opposing perspectives of Holism and reductionism, in search of a metaphoric resolution. This sounds promising, except that like McAra-McWilliam, Rea's purpose is to identify this need, rather than to fulfil it.

Literature review summary

None of the four major approaches appear to have thus far offered an adequate way to describe the meaning and experience of creativity. The psychodynamic approach attempts to get through to the deep level of experience as human meaning, but is a perspective contained within the experience of the individual. It suggests that the creative experience occurs entirely within the psyche of the individual and has little to say about the significance of the rest of the world. Yet this does not reflect the reality of the human condition; of the way we exist, or of the inextricable relationship between our consciousness and the external world, and thus does not fully describe experience.

The cognitive approach does not aim to describe deep experience. It cannot, as it denies that truth can be found in experience. In cognitive psychology, the observable aspects of experience are treated as discrete phenomena which provide the data for theorising about, but not as the source of understanding itself. This process is thought to transform subjective experience into objective knowledge. The unobservable and felt aspects of experience are not considered. In this way, the cognitive approach can not explain the essential meaning of whole experience; it can only describe patterns of different phenomena.

While its intention is to draw together disciplinary understandings of creativity and thus provide a more comprehensive picture, the confluence approach is largely descriptive, like its forerunner the cognitive approach. It can provide useful itineraries of process and characteristics but does not succeed in aiding our sense of comprehension of creativity as a whole. Its scope and complexity distract from efforts to discover what the experience of creativity is like and what it means.

The teleological approach is useful to the aims of this study in so far as it offers meta-narratives about the experience of creativity; ways of understanding it which fit a broader pattern in the universe. What are required are studies which focus at the experiential end of the scale and examine the depth and detail of the human experience. These are needed in order to understand the fit of the grand meta-narrative with the direct human experience of creativity.

Dialectical studies have as a group, laid important foundations for this project. They have identified that creativity appears to involve a large number of apparently contradictory or paradoxical experiences, and many suggest that this is a defining characteristic of creativity. Paradox means: against the common understanding. It seems logical that our trouble in comprehending creativity stems in part from the fact that when creativity is examined it presents us with notions which are against our common way of understanding about concepts, such as the simultaneous experience of opposite attitudes and processes. It then follows that in order to develop a more sound comprehension of creativity, we require a new way of understanding, which fits, and is not against, the ideas

which present when creativity is examined. This group of studies has provided some important insights into what this new way of understanding might entail, but so far has not provided a comprehensive account of the meaning of these paradoxical experiences which could then lead to a new conceptualisation of creativity.

This chapter has provided an overview of the background of literature for this study. In Chapter Three I begin the generation of my own interpretation of the experience of creativity, with an analysis of my own experience.

Chapter Three: A phenomenology of the daily and ordinary experience of creativity

> The entire property of a concept consists of nothing more than what has been begged and borrowed from perceptual knowledge, which is the true and inexhaustible source of all insight…philosophy can not be spun out of mere abstract concepts but has to be founded on observation and experience, inner and outer. (Schopenhauer, 1970, p. 81)

The phenomenological method: Based on Heidegger's phenomenology of boredom

For Heidegger (1995), phenomenology was a method with which to grasp knowledge of being. Heidegger was primarily concerned with the meaning of being and existence and his term *Dasein* (being-there) means existence with particular reference to our own being in a place and time. To be human is to be embedded and immersed in a physical, tangible, day-to-day world. Our own experience of being is thus inextricably bound up with our experience of place and time – our embeddedness in the world.

Heidegger (1995) followed a particular phenomenological method which endeavoured to approach experience of being directly; to bring into awareness the experience inclusive of the influences of place and time, but also to preserve its immediacy prior to any application of theory or idea. He described his method as phenomenological reduction; the directing of oneself toward an entity in such a way that its being is brought out. He used this method to describe the essence of the experience of boredom. Heidegger asked: How does boredom unfold as boredom? What is it like for us to be bored?

His examination revealed three different forms of boredom, the experience of which becomes progressively more profound and intense. These forms are being bored by, being bored with and profound boredom. He ascertained two structural aspects of boredom common to all of the three forms. These structural aspects are being held in limbo and being left empty. His method was to describe the experience of boredom as it occurs and then to identify more precisely what is felt and occurs in the experience. This is illustrated in the following passage:

> We straightaway take 'boring' as meaning wearisome, tedious, which is not to say indifferent. For if something is wearisome and tedious, then this entails that it has not left us completely indifferent, but on the contrary: we are present while reading, given over to it, but not taken by it. Wearisome means: it does not rivet us; we are given over to it, yet not taken by it, but merely held in limbo by it. Tedious means: it does not engross us, we are left empty…That which bores, which is boring, is *that which holds us in limbo and yet leaves us empty*. (Heidegger, 1995, pp. 86, 87)

A phenomenology of creativity

Some initial reflections on experience

My phenomenological examination of creativity is based on Heidegger's method. In the following pages I attempt to describe my experiences of creativity straightaway as it unfolds. I then take two examples in order to deepen my interpretation of the experience and its structural moments, and reflect on these in order to observe and include the influences on my experience in my analysis.

According to Heidegger (1995), in order to allow experience to resonate, we need to shake off our usual tendencies of habit in relation to it. In this case, for example, on the conscious realisation that I am being creative I need to shake off my judgements about my creative experience. I need to free myself from the

distractions of wondering about the value of my efforts, my process and my aims.

Instead I want to focus on the experience itself. To take a series of mundane examples; in writing an essay or cooking an unusual and tasty meal I am experiencing creativity. In watching a film which makes me think, or using a well designed can-opener, I am also experiencing recognition of creativity. The common factors in these experiences are newness and originality, coupled with a spark of interest and excitement within me. I might say that I take creativity straightaway as being the experience of something new which ignites a spark of interest or excitement in me.

But newness and the spark of interest do not adequately explain the essential features of creativity because they do not say anything about the meaning of the experience, for me. When I say something is new and original what I mean is that the something embodies new kinds of connections or combinations between already existing things or ideas. A new combination of ingredients or a new connection between a character and a setting in a film are examples. Newness means: it presents itself to me in a new way; it sheds new light on something or provides me with a qualitatively different experience because of a new form of connection-making.

The spark of interest or excitement I feel about creativity occurs because I am taken with the experience as meaningful and in some way important. I find meaning in things when they speak to me personally and assist me to work out the world. For example, I sense a spark of interest when a scene in a film provides me a new frame for viewing relationships which I can personally connect with. I appreciate the design of an object if I have personal experience which allows me to see its superiority of function and form. Through this personally meaningful connection I get a sense of something important; I glimpse potential. As I use the can-opener, watch the film or write the essay I am experiencing something of what it is like to bring into the world a useful and pleasing possibility which did not exist before.

That which I call creative is that which shows me a glimpse of previously unknown possibilities and potential for personal meaning. This glimpse helps me to understand something about existence in and connection to the rest of the world.

Here I have an initial part of my structure of the experience of creativity. As Heidegger did with boredom, next I will use a more detailed example to try to deepen my interpretation of the experience of creativity. Phenomenology is a method for understanding designed to be as inclusive as possible of all kinds of experienced phenomena; physical, social, mental and emotional (Priddy, 1999). During my process of analysis I described as much and as many of these phenomena as I could. What I present in the following passages is a refined interpretation of the direct physical, social, mental and emotional experience, inclusive of my reflections on the values, views and previous experiences influencing my direct experience itself and the meaning I attribute to it. These factors have conditioned the experience itself (Priddy, 1999) and are inextricable from the perceived phenomena.

Two specific experiences of creativity

In this first example, I have chosen a specific act, an actual instance of 'doing something creative'. The example is grading and giving feedback on a student's essay. This is a comparatively ordinary and mundane example, chosen to show that the fundamental features of creativity can be seen in ordinary aspects of work and existence. I am providing a grade and feedback to a student and am trying to be consistent with reference to other feedback and grades I have given, to be useful to the student and to get the job done as efficiently as I can. However this is none the less an example of my being creative, as the act of reading and commenting on essays involves the same experience of glimpsed potential and of understanding something further about existence and relationships.

I am marking and giving feedback on an essay, in my bedroom in my home. I begin and make comments in the margins and marks on the text as they occur to me. I look back at the name on the cover sheet and a picture of this person arrives in my mind. I read on. I am gathering an initial impression of whether the student has understood the task and of how well they have begun. I stumble with and re-read sentences. I write more notes in the margin, underline words and sentences, and draw arrows to other words and sentences. There are some grammatical and structural problems in the essay, and there are other places where paragraphs and ideas are well formed. There are ideas taken from literature which are poorly developed and lack an appropriate link to the purpose of the essay. There are some other ideas which are original, interesting and well explained which form images in my mind and spark interest and empathy in me. I am taken by a particular idea in the essay. I stop to consider this; it expands and wanders in my imagination and I let this happen for a time before I stop and formulate a response to write to the student. I pause because I am distracted by something which has occurred to me that I need to do later. I realise that I am distracted and read on. I read through to the end. I flick back through the pages and look at the decisions the student has made or not made about ideas and use of literature and form. I get a general feeling for how the student has approached the task, for how confused, or succinct, or interested they are, for how much they have used other's ideas and for how much they have developed themselves. I compare my general feelings with the criteria written on the cover sheet. I fill in the grade boxes on the cover sheet. I look back at the essay to check whether my grades seem appropriate, but am quick as I am conscious of time. I think about this particular student and I consider how I can communicate the overall strengths and weaknesses of the writing to her. This consideration feels part mental and part physical; that is, I am not just thinking, I am also feeling how I should write to her. I write an overall comment to her in the space at the bottom of the cover sheet. I try to choose language which will draw her attention and emphasise my thoughts.

As in the series of previous examples, in this experience I am largely making and observing connections. I am interacting with a piece of writing and with a student and I am observing how the student has interacted with their writing and their ideas and the task. These connections are between ideas, emotions, people and objects in the world. All of the connections embody the same desire to put things together in context and empathy, to form, understand and extend relationships.

By focussing on the meaning of these particular connections I can gain further insight into the essential features already identified of seeing new connections and glimpsing previously unknown potential for personal meaning. My sense is that in my interaction with the student I am seeking to develop our connection. My reflection tells me that the aim of the comments is partly to assist her to build confidence; to feel that she is on the right track and to feel her own capacity to put to use the advice I give her. I know or sense that if the student is minimally connected to me and if I do not develop our connection; if I present myself as empty of human personality or empathy, she will not really hear my advice. I need to develop a connection to her if I am to assist her confidence and capability, so I picture her as I write and I write as if we were having a conversation. I am in effect saying to the student: You might trust me because I have some understanding of you and your feelings. This is because we are similar, I am a thinking, feeling person, like you. I recognise a range of influences which result in this way of interacting with the student. A primary one is a perspective that students are people first and students second. Another is that I have children of my own and am also a student myself, and thus I have recent reminders of the power of teachers to encourage, or alternatively to crush spirit and enjoyment in learning.

On the other hand I am also saying things which express my difference. I am commenting on her work, which is an assertion of my personality, and is often also an expression of a different view of meaning to that which the student has expressed. If I am 'with' the student in everything she writes our connection will not prompt her to keep pushing toward further glimpses of the unknown. When I come across a particular idea that I find either irritating or compelling, I feel a more particular need to express my individuality by noting my comment. In my

comments I am trying to be both with the student and separate from her; to show both unity and individuality in relation to her.

Unity and individuality are also demonstrated by the student and it is important that I indicate acknowledgement of both to her. She wants to know that she has on the whole conformed to the requirements of the assignment task and with my expectations as a teacher. I comment on her demonstration of the skills she has been asked to show and on the literature she has selected to assist her to present a unified argument. She has also shown individuality in her particular choices of literature, ideas and examples, in the meaning she has created for herself in her essay. Acknowledgement of her individuality helps to develop our connection; I try to express that her individuality, her discovery of meaning is noticed and valued and I hope she is encouraged to continue to develop these. Reflection tells me that this aspect of my experience is a significant part of my view of teaching and learning. I myself value the creation of personal meaning in teaching and in learning and I am compelled to try to engender this enthusiasm in others. I naturally tend to take up opportunities to stress to students that their individual approach to assessment tasks is welcome and desirable.

The dynamic is two-way. I also gain glimpses for myself of previously unknown potential through my student's individuality. When I am attentive even ideas which initially jar sometimes reveal perspectives I had not considered. Other aspects of the writing reveal to me things I had not realised about the way I have been teaching or have set up the essay task. I could say that:

The experience of creativity; glimpsing unknown potential to understand something about existence in and relationship with the rest of the world, happens through the simultaneous exploration of individuality and the discovery of unity.

There are other important aspects of what I am doing when I am writing comments. I am trying to show her the 'rules of the game' more clearly. I am attempting to encourage her to make the essay her own by using it as a process to find out what she thinks. In these aims, what I am essentially doing is conveying the encouragement to develop both discipline and freedom at the same time, in

her writing. The aim is for the student to exercise the freedom to glimpse and chase possibilities, and to use discipline to work with them until their potential becomes at least partly realised in her essay. I value quite highly the power of writing as a tool to explore freedom of ideas and experiences and to order them comprehensively. This manifests in my direct experience, for example, I indicate to my student that structure is a tool to lend discipline and to assist her to dig deeper, to illuminate the glimpse, to explain what she means and in so doing to discover what she means. I could say that:

The experience of creativity; glimpsing unknown potential to understand something about existence in and relationship with the rest of the world, happens through a simultaneous bid for freedom and an application of discipline.

I can further explore the structural moments of making new connections and glimpsing previously unknown possibilities and potential through a re-examination of how I do things in my description of marking. How do I decide which words to use when writing comments to the student? What are the tools at my disposal for translating my mental and emotional response to the writing in terms the student can understand and accept? As I comment on the student's work I am influenced by my own degree of focus, by time-pressure, and by my prejudices about the student, the degree of effort they have made, what they have produced, their personality and confidence. In determining both what I communicate and how I communicate it I use intellect and intuition in combination. I try both intellectually and intuitively, to determine the aspects of most significance to the student, and choose language that will tell her that I am with her, that will be meaningful to her, that will connect her further to her writing. To do this I have the resources: the concrete piece of writing in front of me, the image of the student in my head as I imagine a conversation between us, and another intuitive sensation, which as I have said, is physical. When considered, this physical feeling seems to originate from both the mind and the centre of the body at once and feels like an expansion or a reaching toward something. I meld these resources into what I think and feel that the student should know about their essay.

If I do this well and if the student can understand me I can also through my comments encourage the student to use this same combination of intellect and intuition in their writing; to use writing skills and conscious techniques and also to develop more of an instinctive sense of what are fruitful ideas to explore. I could say that:

The experience of creativity; glimpsing unknown potential to understand something about existence in and relationship with the rest of the world, happens through a combined use of intellect and intuition.

In the following example I describe a similarly ordinary, but less specific event. This is a description of feeling restless and going for a walk.

> I am at home, in the evening after a day's work. I have a number of things I need to do about the house and with my family. I have to do these things most days, but just now I feel a restlessness and dissatisfaction with this routine and other familiar things. I am tired, but rather than wanting rest, I feel a desire for respite from familiarity, an inkling that it would be nice to have new feeling for something; a lively conversation, a bit of a change. I feel closed in and shut off and this is a bodily sensation. I walk to the sea and although this is also familiar I can watch and breathe it in and feel somewhat satisfied. It is like a small expansion, a broadening of my intake of sensation.

This description is reminiscent of Heidegger's (1995) description of boredom in that it might be interpreted as explaining boredom or restlessness rather than a creative feeling. I think that it is likely that all three experiences stem from a similar fundamental aspect of existence. They seem to me to be reactions to the human experiences of feeling disassociated from newness, opportunity and broader connection to the world. They are the experience of the desire to chase up some as yet undefined possibilities. But creativity is the most significant and apt concept in this example as it is the heart of the reason for restlessness and boredom and also indicates an energetic and purposeful response to these. This example describes a desire to become active in the world and to break the

suspension, lethargy or passivity of restlessness and boredom. It does not describe a desire to act for its own sake and as a distraction from boredom, but a desire to act for a particular kind of purpose: to become more opened to sensation and more connected to things and people in the world. Instead of 'doing something creative' this form is 'feeling creative'.

My experience of feeling creative and going for a walk is firstly in part an escape from individuality, towards unity. I have a desire to lose the self in the whole; to lose my closed in and personal, trivial concerns in a bigger meaning and a broader connection to the world. This is why watching and breathing in the ocean are satisfying; they take me out of myself and bring me to the world. Paradoxically, the experience is at the same time an escape from unity towards individuality in that I try to shake off the sense of completeness and unity, sameness and routine and look for a breath of something new; for an individual experience. Secondly, this shaking off of routine is also a desire for freedom asserting itself; a desire to choose and follow my own course of action. But here I must also assert discipline because discipline drives action. In order to gain a small sense of freedom I need to make the effort to walk, even though I am tired. And thirdly, intellect and intuition are essentially involved because they combine to create consciousness in me of a small vaguely defined potential on this particular day and to formulate a way to move towards it.

In phenomenological self-reflection it is important to acknowledge the assumptions which shape experience (Priddy, 1999). In both of my key examples, the central assumption I make is that 'creativity' is an entity which exists, which can be legitimately and meaningfully distinguished from other kinds of experiences. It is this belief in creativity as a distinct entity which has in a sense allowed my actual experience of it; it is much easier to experience something which is believed in. In my interpretation; the meaning I draw from my experience, I also make the assumption that experience, in general terms, is characterised and made meaningful by connections between people, things and environments rather than characterised primarily as an individual matter. This assumption about the nature of human experience is contestable; it is my aim to

explore this further and to see whether it remains meaningful throughout this project.

Rather than a scenario in which I am involved in an activity which sparks an urge to develop some unknown potential, the last scenario, of going out for a walk is one in which the spark comes from within myself, apropos of nothing specific in my everyday life. Because of this it seems a more profound experience; if it can spring up without external prompt, the feeling of creativity is something which resides within me. This kind of creativity is a feeling that I can never fully satisfy by creative acts. It tells me something important and fundamental about myself. The restlessness I feel comes from the fact that the meaning and potential I seek are internally present but never fully realisable. As Heidegger (1995) says, '*Dasein* (being) stands before possibilities it does not foresee. It is subject to a change it does not know' (p. 19). Everything we know, we know in a unique way which hovers between certainty and uncertainty. The impossibility of complete certainty is therefore fundamental to being.

It is therefore fundamental to my experience of being; to my being itself, that I can only ever go as far as to glimpse and pursue meaning and potential. To give a concrete example; in writing this thesis I am bringing into being and making more real glimpses of my fundamental existence; ideas and feelings which reside within me and are central and significant in my life. But the experience of making whole and complete meaning from these feelings and ideas is not fully realisable. This is both dissatisfying and satisfying. The elusiveness of complete meaning means the sense of striving towards something is always present, but this sense of mystery is also what maintains the appeal of the experience. Uncertainty is the truth of existence, and so to explore meaning, but ultimately experience uncertainty is to feel as though I experience something approximating truth. In my existence, the potential to experience simultaneous unity, individuality, freedom, discipline, intellect and intuition is glimpsed but never properly attainable, and this is the reason for both the frustration and the pleasure of existence.

Profound creativity then is about finding that existence means creativity. I argue that the glimpse of the elusive potential we see when we experience profound creativity lies in our seeing the offer of possibility in everything, in existence. My phenomenology of the ordinary and everyday experience of creativity has led me to the point at which I find creativity as the experience of being human. I experience being human as centrally about being in the world and about awakening consciousness of and action toward the potential this situation affords.

Heidegger (1995) seems to say that the notion of existential identity and that of the world are completely wedded. Heidegger's Being-in should not be thought of in terms of Being-present-at-hand of a physical entity, as water exists 'in' a glass. 'Being-in' is an existential expression to describe our fundamental manner of existence as essentially worldly. I acknowledge this meaning of Being, but also want to acknowledge and explore our disconnection from this fundamental truth. Existence is being in and with the world, and yet we mostly understand existence from the perspective of being ourselves and regarding the world of things as external to ourselves. This is Being in the world without the comprehension that being in must include being with. Schopenhauer said:

> We complain of the darkness in which we live out our lives: we do not understand the nature of existence in general; we especially do not know the relation of our own self to the rest of existence. (Schopenhauer, 1970, p. 25)

This indicates to me that we sense our lack of knowledge of the other perspective; understanding of being with the world; the relation of our self to the rest of existence. I suggest that the glimpse of potential we sense and seek in the creative experience lies largely in our recognition of this lack and our striving to meld our individual experience with this other, larger and different-yet-same perspective. Profound creativity is existential, like Heidegger's Being-in the world; it involves a fundamental mode of existence inclusive of our immersion in the world. In this study I also wish to explore the more concrete and corporeal levels on which creativity operates. On both metaphysical and physical levels,

creativity brings the connection between the self and all of existence into relief, and awakens us to connections in the experience of existence.

In this chapter I have produced an initial and personal perspective of the essential elements in the experience of creativity. In Chapter Four I turn my attention to the two key texts of the study, and use a thematic analysis process to interpret the essential elements of the experience of creative geniuses.

Chapter Four: The thematic analysis

The purpose of this thematic analysis is to interpret the features of the essential experience of creativity, from the perspectives of creative geniuses. The phenomenological perspective says that examination of direct experience is a path to knowledge (Merleau-Ponty, 1945). My analysis views the texts as existing in a dialogue with each other and with myself, and I aim to experience and interpret this dialogue. I do this with an attitude of tolerance; I want to listen to the dialogue, rather than to critique each perspective.

What this means is that this chapter does not bring to bear the ideas of other authors, nor does it examine the original sources of literature the two primary texts have utilised. It means that I identify the major epistemological approach of each text, in order to provide their context and general relationship to the broader field of literature, but that aside from identifying some key points of discussion which are central to this project, I largely do not attempt to deconstruct or critique the assumptions within the texts or relevant epistemologies. In this analysis I accept the texts as valid descriptions of the creative experience and I bring to bear on these my own interpretation of what they say about the fundamental features of the creative experience. I have left aside the inclusion of other literature to the Literature Review in Chapter Two and to the Discussion in Chapter Five.

The epistemologies of the key texts:

The Demon and the Angel

The Demon and the Angel (Hirsch, 2002) is a book about the source of artistic inspiration. Its author, Edward Hirsch, aims to explain his central theory; that artistic inspiration is achieved through struggles with personal angels and

demons. He develops his story of demons and angels using a range of perspectives from writers of prose and poetry, painters and musicians.

The epistemological foundation of Hirsch's text is constructionism; the view that knowledge is dependent upon human interaction with and in the world, and that multiple interpretations of knowledge are valid. Within the constructionist view of knowledge, he develops a post-structuralist perspective of art and creativity. In this view there is not absolute truth about the meaning and nature of art and creativity. The meaning, purpose and significance of creativity and art are personally and culturally determined, are ambiguous and do not have a timeless and inherent structure (Crotty, 1998).

Hirsch's book also contains postmodern elements in that it has a stance and structure which could in some respects be described as anti-rational. The book concerns itself with ambiguous and playful ideas and utilises a fragmentary structure. His approach is impressionistic; it does not attempt a stable and structured conception of creativity but creates a series of colourful, dramatic and loosely sequenced impressions around his themes. He draws some conclusions but does not attempt to tie up all the loose ends. Many threads of idea are brought to the reader's attention, without comment on their relative significance. The text could be described as 'decentring' its subject, and dispersing its key ideas through various thematic and narrative threads; characteristics of postmodernism (Crotty, 1998).

However, I suggest that Hirsch's text is situated within the post-structural rather than postmodern paradigm. It is postmodern in style rather than in content. While it legitimises multiple and ambiguous interpretations of its subject and employs a chaotic structure it does not make any case that the reality of creativity is unpresentable or unexplainable, and does not claim that there is no meta-narrative that can bring things together for us. Hirsch's meta-narrative is one familiar in psychodynamic discussions; the notion that the creative process is dependent upon engagement of the individual with his or her own angels and demons.

Insights of Genius

The subtitle to *Insights of Genius* (Miller, A., 2000) is '*Imagery and Creativity in Science and Art*'. Arthur Miller's central proposition is that advances in civilisation arise essentially from the personal urge experienced by individuals to search for visual representations of our universe. While the majority of his book is about creativity in science, in the final chapter he introduces the idea of artistic creativity, integrates this with scientific endeavour and ties both to the central point.

Miller's text is objectivist in its epistemology. His theory stems from a world view that meaningful reality does exist apart from our consciousness and interpretation of it, and truth can potentially be arrived at with accuracy and certainty (Crotty, 1998). His theoretical perspective is scientific realism. Thus science is the enterprise of determining knowledge of the world in an objective sense, through the development of scientific theory which in general moves ever closer to the truth as science progresses through time (Stanford University, 2002). Miller is a post-positivist. He not only acknowledges that the positivist framework in which scientific theory is supposed to be built around observable phenomena is inadequate to describe the reality of scientific practice; he constructs his theory of scientific creativity around this acknowledgement of inadequacy. He recognizes that scientists do actively construct knowledge rather than passively describing the laws of nature they observe. His theory is developed around what it takes to creatively construct knowledge. His theory is that direct perceptual experience; that which we receive through the senses, is the source of less sophisticated scientific understandings, while increasingly more sophisticated scientific understanding must be developed through the creative use of mental images. While the successful result of these images is often theory about phenomena which are not directly observable, either with the human senses or with current instrumentation, it is nevertheless approximately real. That is, the resulting successful theories represent an approximately accurate, objective reality.

Thus, two key assumptions are integral to Miller's text. The first is that an objective distinction can be made between verbal and visual forms of thought. The second is that direct experience can not give us knowledge of the same degree of sophistication as is available from visual thought. These assumptions stem in part from Miller's philosophical background in scientific realism and can both be challenged. While the main purpose of this textual analysis is to describe the experience of creativity as related in the texts rather than to critique the author's viewpoints, I do suggest a challenge to these central views of Miller's later in this analysis. The basis of my critique is that from the standpoint of phenomenology this construction of creativity makes an artificial distinction between forms of thought and knowledge.

In comparison with Hirsch's text which demonstrates a loosely structured, emotive and artistic approach to explaining ideas, *Insights of Genius* demonstrates a more objectivist method. This book adheres to a more logical and focussed structure; Miller leads the reader through themes which explore aspects of his thesis, sequenced more or less chronologically through history. He periodically summarises his progress towards his central idea. He generally restricts himself to discussing the intellectual processes of creative individuals and their resulting theories and avoids discussion of emotional processes or other aspects not of direct relevance to his central thesis idea.

In terms of this analysis, the contrast between the style and content of the texts is both challenging and rewarding. As noted previously, this study is in part a comparison of the perspective of the creative experience with the creative experience of the ordinary person. Together the texts could be described as providing mirror images of the genius perspective, in their subject matter. Creativity is made visible in these mirror images in ways which enable us to see some of their essential character, as perceived by observers from two different personal and disciplinary perspectives. The two texts have the same fundamental subject matter (creative processes and experience) and underlying approach (theorising from accounts of subjective experience). But reflecting the differences in epistemology and discipline, they are different in source data (artist's experiences in Hirsch's case; and primarily scientist's in Miller's),

conceptualisation of the creative process (combat with angels and demons in Hirsch's case; and a search for visual representations of our universe in Miller's) and in the manifest method and stylistic approach used to perform the examination ('a tribute with wings' [xv] in Hirsch's case; and a 'foundational analysis that gives new awareness into the philosophical underpinnings' of science [xv] in Miller's).

Phases in the thematic analysis of literature

The thematic analysis process consisted of six phases. Phases one to five were based on Braun and Clarke's (2006) method for thematic analysis. Phase six was added as a further means to develop a central argument and to provide a transition between the thematic analysis and the discussion in this study.

Phase One: Familiarisation with the ideas in the texts

This was an inductive process, involving immersion in the literature to the extent that I was familiar with the central arguments, and the depth and breadth of the content of the key texts. It meant reading and re-reading actively, searching for patterns and semantic and latent meanings. Semantic themes are those identified at the explicit and surface level. Latent themes are those underlying assumptions, conceptualisations and ideologies which are implicit, but identifiable. This research is concerned with both kinds of themes as both semantic and latent ideas contribute to my own interpretation of important themes on the experience of creativity.

Phase Two: Identification of features of the texts

This phase involved the generation of initial codes from the texts. Codes identify a semantic or latent feature that is of interest to the researcher. For example, discussions about experiencing the limits of logic in creativity were coded as a semantic feature of both texts, while non-conformity as an aspect of some creative experiences was coded as a latent feature in both.

Phase Three: Searching for themes

This phase re-focused the analysis at the broader level of themes, rather than codes or features. It involved sorting the coded data into potential themes about creative experience. Themes were generated through a comparison of a range of experiences described in the texts, and a reduction of these down to an interpretation of the invariable elements of these experiences. Experiential themes were organised into a provisional structure.

Phase Four: Reviewing themes and relationships

This phase involved refinement of themes. Themes which lacked convincing support were discarded and other themes were merged. The clarity of distinction between themes was re-assessed. Finding distinction between themes was an especially difficult aspect of the method. The experiential themes overlapped substantially, as facets of experience are difficult to separate and in this case were found to reflect each other closely. Themes were delineated but there is much about each theme which is common to the others.

Once an adequate thematic map had been refined, I considered the validity of each theme in relation to the data set of literature as a whole. This involved re-reading the literature to ascertain how well the themes seemed to fit and

identifying additional data which had been missed in previous stages. As Braun and Clarke (2006) suggest, the aim for the end of this stage was to have a workable outline of the themes, how they fit together, and the overall story they tell about the experience of creativity.

Phase Five: Defining and describing essential features

This phase involved more rigourously determining at an essential level what it is about the data that each theme captures and clarifying the essence of each theme. This is where the written notes on themes began to undergo transformation and the written up account of the essential features of creativity began to take shape. Following Braun and Clarke (2006), I achieved this by going back to the collated data extracts, refining their organisation and interpreting and describing a coherent story or view of what they meant. This description involved a detailed break-down of each theme into its invariable elements. The structure of the discussion to be developed in the next phase was identified, through paying attention to the relationships and nuances of the essential features.

Phase Six: Developing the whole and producing the central shape and argument

This phase comprised of identifying and articulating a line of argument and converting the description of the essential features of creativity into a written analysis. Extracts from the texts were selected as support and illustration for the themes. The argument and write up in this section draws only from the key texts and from my own analysis and interpretation.

A general introduction to Hirsch's view of the creative experience

Hirsch's view is that artistic inspiration happens via a personal struggle to make meaning from life, death and all the events in between which are beyond our control. To Hirsch this meaning creation is a highly personal, subjective, isolated, anxiety-ridden, conflicted, and combative experience; a psychodynamic and existential struggle. More specifically, the central theme of the *Demon and the Angel* is that artistic creativity comes through the creation of meaning via crises manifesting as combat with demons and angels. Demons and angels are the parts of ourselves which call us to look deeper into the darkness of existence and higher into the realm transcending earthly existence. Demons and angels represent extremes: the highs and lows of experience and aspiration in the natural and supernatural worlds. Creative acts are a highly risky business due to the mysterious and paradoxical nature of demons and angels; they reside in the unknown and may lead to meaning and insight or death and madness because they are the part of us which is capable of both. Thus, art and creativity are a manifestation of our desire to reach and understand our demons and angels, and to achieve some form of transformation in the process. In Hirsch's terms, 'Art is born from struggle and touches an anonymous centre. Art is inexplicable and has a dream-power that radiates from the night mind. It unleashes something ancient, dark, and mysterious into the world. It conducts a fresh light' (p. xi).

The ambiguous nature of the demon or duende (sometimes known as the daimon) - external representations of the artistic mind - is one of the subthemes of Hirsch's book. According to Hirsch the word duende stems from the Spanish: duen de casa, lord of the house'. It has various meanings. In one sense it is used to indicate an imp, poltergeist or trickster who stirs up trouble. It is also applied to mysterious, gifted people, especially flamenco singers. The singer who has duende is driven and possessed with an indefinable life force. Thirdly, it is described as a deep trance-like emotion. In Hirsch's words: 'It is both a

troublesome spirit and a passionate visitation. It seems to suggest both contact with the depths and access to our higher selves' (p. 10).

A general introduction to Miller's view of the creative experience

Miller begins *Insights of Genius* with a quote from the abstract artist, Mondrian:

> For there are 'made' laws, 'discovered' laws, but also laws – a truth for all time. These are more or less hidden in the reality which surrounds us and do not change. Not only science but art also, shows us that reality, at first incomprehensible, gradually reveals itself, by the mutual relations that are inherent in all things. (Cited in Miller, A., 2000, p. vii)

The quote sets up a number of Miller's themes. Firstly; he views the creative process as driven by the human desire to reveal universal laws of nature and matter and relationships between things and ideas. Secondly, that we can progress further and further towards the 'truth' of these laws by more creative and more abstract thought. And thirdly, that we need and desire to represent and understand these laws in a visual form, in order to make sense of them.

The focal point of the book is imagery. Miller believes in the essential role of visual imagery in human thought in general, and by extension, in how that plays an essential role in creative thought when developed with greater sophistication. He links the use of mental imagery to intuitive processes; that imagery can occur in the mind prior to words and the application of reason. Because of this, Miller believes that imagery is a freer, more intuitive and spontaneous mental tool.

Miller's view is that mental imagery based on phenomena which are observable in the natural world is only useful for creative thought to a certain degree. He believes that there is a point at which visually perceived phenomena cease to

provide enough insight into the truth of things, and then abstracted visual imagery is necessary. This is because there are laws of the universe which we cannot observe, and cannot imagine when using only observable phenomena as the blocks of imagination.

Hirsch and Miller's basic common ground: Creativity is to make meaning from existence

Hirsch and Miller have a central idea in common. This is the view that the creative process is fundamentally a metamorphosis of thought and/or feeling brought about through a search for meaning. In this aspect they demonstrate agreement with my own phenomenology of creativity. They describe a deep transformation with the potential to bring forth something fundamentally different to what has existed before. Miller discusses deep creativity in the context of more and more highly developed abstractions of thought achieved through imaginative imagery and not based on observable phenomena, as these severely limit the potential of the imagination. Hirsch identifies a dramatic and powerful emotional conflict at the heart of creativity, an existential experience which brings one to the brink of despair or transcendence. Through this experience and the new knowledge and feeling this brings, new meaning is created.

Both authors believe in the power and creative potential of the individual's inner psychology as the key driver of this process. Hirsch thinks that the essence of the process to achieve this meaning is to do with conflict with the dark and frightening aspects of existence and personality, while Miller's view is that the essence is developing forms of imagery to visually represent the world. Do these views describe wholly different interpretations of experience, or is there a deeper level at which they can be interpreted coherently as the same experience? This analysis will explore this question. It is organised under headings which indicate

the essential features of the direct experience of creativity as drawn from both texts and interpreted by myself.

The essential features are as follows:

1. The dynamic between the exploration of individuality and the discovery of unity in the creative experience
2. The dynamic between intellect and intuition in the creative experience
3. The dynamic between the bid for freedom and the application of discipline in the creative experience.

Theme One: The dynamic between the exploration of individuality and the discovery of unity in the creative experience

The first and major theme which became apparent in the thematic analysis was that of a dynamic occurring between individuality and unity in experiences of creativity. It is recurrent and significant in both *The Demon and the Angel* and *Insights of Genius*. Both the exploration of individuality and the discovery of unity surfaced discretely as codes early in the analysis process, and became fused as mutually dependent in my interpretation as I recognised this relationship and progressed from codes to themes. As this theme became highly prominent I interpreted it as one of the three central essential features of the experience of creativity.

The dynamic between developing individuality and seeking unity was also apparent in my personal phenomenological analysis. This theme is about relationships and connections between unique entities, specifically: relationships between the self and others; the connection between ourselves and our environments; and the web of connections between all things.

In *The Demon and the Angel* the relationship between individuality and unity is strongly apparent in Hirsch's main metaphors of demons and angels in creativity. A significant attraction of exploring the demon and the angel through art is their spiritual or transcendent nature. They represent what to Hirsch is beyond the human and the earthly; unity, purity and immortality. According to him, our desire to wrestle with demons and angels is due to our need to transcend the anxiety of mortal existence. Writers, painters and dancers demonstrate a conflicted relationship between their limited individual, specific and isolated human existence and the eternal, pure and unified experience which they desire and can achieve through demons and angels and their art. Relationships between individuality and unity are also present outside of those sections in which Hirsch discusses demons and angels, as will be explained.

In *Insights of Genius* the experience of exploring the relationship between individuality and unity is also strongly represented, but here it reflects the scientific approach and interests. Miller's approach to the concept of 'individual' generally rests on scientist's accounts of their observations and 'thought experiments' about individual natural phenomena, such as the behaviour of matter, rather than on individual human experience, as in art. Individual observations and visualisations of phenomena are highly significant in the central aim of science: to unify phenomena and discover universal laws. Reality is thus shown through the discovery of unity. This relationship is as important to Miller as it is to Hirsch, as it is evident in his opening quote from Mondrian:

> For there are "made" laws, "discovered" laws, but also laws - a truth for all time. These are more or less hidden in the reality which surrounds us and do not change. Not only science but art also, shows us that reality, at first incomprehensible, gradually reveals itself, by the mutual relations that are inherent in things. (Cited in Miller, A., 2000, pp. vii, 379)

Conflict between individuality and unity in the creative experience

Conflict and disequilibrium play an important role in creativity according to both texts. In my own phenomenological analysis, the potential for conflict is evident. My student is likely to feel conflicted when my own comments are in disagreement with her views. I am likely to feel conflict if my student has undertaken the essay task in a way I had not anticipated. Both these conflicts are opportunities for creativity if the confrontation is faced and examined for its glimpse of potential to create new meaning. This is similar to many of the experiences of conflict in creativity described in the key texts.

Hirsch's dynamic between individuality and unity is characterised by crisis, tension and struggle. The crisis of the self is required before new relationships can be formed. Creativity is a human struggle; the struggle with the self, with one's own demons and in an alien and hostile environment. This tension is essentially about intense emotional experience. Duende (or the demon) is repeatedly depicted by Hirsch as this struggle with the self. Duende is the cry of the solitary and the bereft, the experience of which are traumatic and contrary to our natural human need for belonging. Duende in creativity is exemplified by works which bring the 'dark night of the soul' into being. Emily Bronte's *Wuthering Heights* and Miles Davis's *Kind of Blue* are examples given. An element of the struggle with the self is the struggle for inner strength and meaning when the external world seems senseless, powerful, harsh and unforgiving. 'The crisis generates from the self – the individual at the mercy of his own psychic traumas and wounds – but often that crisis….is generated by a personal impotence in the face of overwhelming external circumstances and forces' (Hirsch, 2002, p. 215). Jackson Pollock's art during his period of greatest depression is given as one example of creativity experienced through great crisis. According to Hirsch, Pollock confronted personal darkness in his black paintings, which enabled self-encounter and discovery. O'Connor affirms that the paintings represent 'the dark night, the undersea journey, the working through of depression. It is the facing down of the dark presences in the psyche,

separating oneself from them, and re-uniting oneself in a more positive relationship to oneself and others' (cited in Hirsch, 2002, p. 177).

Conflict with the self is dangerous. The demon and the angel take us into the unknown where we are not altogether in control of what occurs and where we are likely to find dramatic and profound things, but they may be things we wish we had not found:

> Both the duende and the angel take us to the far limits of the human self. That is why it is such a dangerous joy when the duende is released into a work of art, a made thing, which it animates with its breath, a dark fire. It is equally dangerous when the angel wrestles the work of art in the darkness, when it illuminates it with a fiery touch, a darkly luminous blessing. (Hirsch, 2002, p. 230)

If we wish to face the demon and the angel, we must be prepared to feel acutely what it is to be human. This has the potential for both heightened and profound experience and for enormously burdensome despair.

Not only conflict but combat characterise the process. Hirsch quotes Baudelaire's *Parisian Scenes* from *Les Fleurs du Mal* in literal support of his idea that combat with the demon within the self is the essence of creativity:

> Late in this cruel season when the sun
> scourges alike the city and the fields, parching the stubble and sinking into slums
> where shuttered hovels hide vile appetites
> I venture out alone to drill myself
> in what must seem an eerie fencing-match,
> duelling in dark corners for a rhyme
> and stumbling over words like cobblestones
> here now and then realities collide
> with lines I dreamed of writing long ago.
> (Cited in Hirsch, 2002, pp. 53, 54)

The notion of combat is developed by Hirsch as one of the essential characteristics of man. The artistic struggle is not merely anxiety-ridden, it is violent, and its purpose is to conquer. The method by which we grasp reality is through a series of oppositions. We differentiate between *this* and *that*, all things are categorised, including our inner and outer worlds. For this reason we set up oppositions and create circumstances of combat: with the self, with others, with the external world. The artistic quest is a spiritual ambition in that it reflects a search for ultimate truths. We believe that through struggle with these opposites we can release a truth buried within the self, to find a greater unity. For Hirsch, spiritual truths are revealed by force.

At least two kinds of modern crisis are identified in *The Demon and the Angel* as part of our modern experience of creativity. One is that we have increasing degrees of complexity in our environment and in the relationship between individuals and their society. Because our demons are the aspects of ourselves and our environment that we struggle with we can expect more and more demons to plague us in the modern society. We have an increasing tendency to question all of the central aspects of our existence including our identity, spirituality, relationships, politics and religion. These are the key structures we use to make sense of ourselves. We are increasingly testing their boundaries, and creating new demons in the process.

Hirsch believes that another crisis of today is the absence of spiritual connection. In the absence of religion, many of us must cast about to find other things that give us solace. Barthelm, in his comic story *On Angels* describes our situation. In the story, the death of God has left the Angels in a strange position. The angels are suddenly stricken by doubt, consumed by anxiety. They are unaccustomed to considering the most basic question about themselves: 'What are angels?' Barthelm believes that in writing about angels we have always been at least in part, writing about ourselves. 'I saw a famous angel on television; his garments glistened as if with light. He talked about the situation of angels now. Angels, he said, are like men in some ways' (cited p. 156). The existential crisis of the angels leaves them searching for a new principle. Angels like us are bereft of

their identity and sense of meaning, left with vague and unspecified spiritual aspirations.

Hirsch believes that these modern crises are opportunities for new forms of creative energy. We are encountering a raft of forms of self questioning, including examinations of religion, patriotism and democracy. The modern role of demons and angels is now to represent these conflicts. According to Hirsch angels and demons are valuable in this capacity as they are fundamentals of the human imagination. The transcendental impulse is constant within us. We need our imaginary beings to help us understand that aspiration is still worthwhile in modern contexts and to make the leap towards it with imagination.

Hirsch suggests that demons and angels need protecting. He quotes Borges who poetically illustrates their vulnerability and our precarious connection with them:

> I always imagine them at nightfall, in the dusk of a slum or a vacant lot, in that long, quiet moment when things are gradually left alone, with their backs to the sunset, and when colours are like memories or premonitions of other colours. We must not be too prodigal with our angels; they are the last divinities we harbour, and they might fly away. (Cited in Hirsch, 2002, p. 156)

We might take from this that we should not overuse angels and demons or degrade their use in ways beneath their calling, lest their power deserts us. Rothko assesses how we have begun to degrade our demons by excessive use:

> Without monsters and gods, art cannot enact our drama: art's most profound moments express this frustration. When they were abandoned as untenable superstitions, art sank into melancholy. It became fond of the dark, and enveloped its objects in the nostalgic intimations of a half-lit world. (Cited in Hirsch, 2002, p. 169)

The excessive use of the darker side of humanity in art and entertainment makes it mundane.

One way suggested by Rothko to negotiate the modern darkness and to create meaning from it is to minimalise. He describes an approach which understates rather than overstates, and which captures a sense of spirituality through desolate stillness. He feels that the best way in which art can demonstrate the human condition is to depict the human figure captured in a moment of solitary immobility. In terms of my personal experience of creativity in marking essays, I sometimes enhance the creative experience if I also take a minimalist approach. Sometimes my view of the potential in the work needs to be articulated sparingly and without clutter. The conflict for students is often related to the overwhelming mass of information they are told they must absorb and for some, a single clear message is more valuable than a lot of feedback. The communication of a minimalist message which captures a feeling I have for the work can be more satisfying for me too, as it provides a graspable sense of distillation of my own engagement with the work; of the meaning I have made from my connection with the work.

While Hirsch's conflict in creativity is about personal and social crisis, Miller's conflict tends to be intellectual. Unsurprisingly, Miller's text does not heavily emphasise the emotional or spiritual experiences of scientific theorists. Their internal drives and struggles are much less obvious to the public than those of artists, whose essential work is to convey emotional experience. The kind of conflict emphasised by Miller in *Insights of Genius* is that experienced by scientists when their theories are not aesthetic; when the answers of science feel inadequate for their questions; when they have the sense the wrong questions are being asked; when they feel that the world and our ideas about it do not make sense together. He believes that true mathematicians and scientists are fundamentally driven by the desire to resolve these intellectual conflicts, and by the need to create visual representations which make meaning from the world.

These intellectual conflicts produce a sense of disequilibrium and the desire to make meaning in order to glimpse a realm of higher truths and experience. According to Miller, Einstein's thought experiments revealed asymmetries in natural laws which he found 'unbearable' (p. 318) and this sense of disequilibrium drove him to explore them further. Einstein also used his sense of

disequilibrium to intuit when scientific questions or problems were inadequately conceptualised. One of Einstein's creative strengths was this ability to re-define questions.

The experience of creativity then involves experiencing conflict to focus and magnify the dark aspects of the human self, or to courageously confront and examine rather than avoid that which either does or does not feel true. Through the confrontation of demons or asymmetries new potential for creating meaning can be glimpsed and developed. This can be assisted by techniques such as minimalism, distillation and re-definition.

Connection of individuality and unity through the affirmation of life

Conflict can be used to examine and connect the individual with the universal, but so too can a positive affirmation of life characterised less by conflict than by attention, beauty and wonder. Hirsch's philosophy is to live in and experience the world wholly including attention to its darker side. In *The Demon and the Angel*, Ralph Ellison suggests that what gives the flamenco and the blues their emotional power 'is the note of unillusioned affirmation of humanity which (they) embod(y)' (cited in Hirsch, 2002, p. 198). It is this unillusioned affirmation which Hirsch also suggests repeatedly in the form of the acute observation and recording of the details of existence in prose and poetry. Many writers quoted by Hirsch seem to ask readers to pay close attention to the world around them, perhaps especially to its mundane aspects, and to see beauty in the sharp realisation of these. For example, through the poetry he wrote in America, Hirsch believed Lorca asked his listeners to wake up and observe the wreckage of society, to be alert to a kind of disembodied unhappiness in the world.

> Look at the concrete shapes in search of their void.
> Lost dogs and half-eaten apples.
> Look at this sad fossil world, with its anxiety and anguish,

> A world that can't find the rhythm of its very first sob.
> (Cited in Hirsch, 2002, p. 227)

We should observe acutely the details of human-made rubble and anguish because this awakens us to both beauty and pain. This observation should extend to both the external world as well as to ourselves. In this vein, Hirsch cites Baudelaire, whose poem *At One O'clock in the Morning* describes revulsion for daily urban life, and with his own complicity in it.

> Discontented with everyone and discontented with myself, I would gladly redeem myself and elate myself a little in the silence and solitude of night. Souls of those I have loved, souls of those I have sung, strengthen me, support me, rid me of lies and the corrupting vapours of the world: and you, O Lord God, grant me the grace to produce a few good verses, which I shall prove to myself that I am not the lowest of men, that I am not inferior to those whom I despise. (Cited in Hirsch, 2002, pp. 39,40)

With this full attention to the horrible yet real detail of existence, Hirsch believes, comes a sense of the 'struggle of loving intelligence with the incomprehensible mystery that surrounds it' (p. 29).

Hirsch also quotes Ashbery, whose writing describes presentness in the world and a will to record the acutely observed experience with a sense of wonder, rather than revulsion.

From John Ashbery's *Self Portrait in a Convex Mirror* (cited p. 158):

> Today has that special, lapidary
> Todayness that the sunlight reproduces
> Faithfully in casting twig-shadows on blithe
> Sidewalks. No previous day would have been like this.
> I used to think that they were all alike,
> That the present always looked the same to everybody
> But this confusion drains away as one

Is always cresting into one's present

The attitude embodied in the affirmation of life seems to be ambiguous in that it is at once positive regard and emotional detachment or disinterest. Hirsch cites Hazlitt, on Shakespeare's disinterest. Shakespeare was according to Hazlitt 'the least of an egotist that it was possible to be', 'nothing in himself' but embodied 'all that others were, or that they could become' and 'had only to think of anything in order to become that thing' (cited in Hirsch, 2002, p 107). Hirsch believes that such acute intuitive knowledge and eye for detail can only be obtained by an observer who is emotionally detached; who is separate from himself in order to embody his subject.

The disinterested state is one of open, heightened receptivity coupled with a lack of aim. According to Hirsch, Keats was especially interested in the idea of disinterestedness, of Shakespeare's selflessness and ability to shape-shift. Keats believed that this state of being embodied the poetical character itself. The essence of poetry has no character, being everything and nothing at once. Hirsch states that Keats eagerly sought this state in the 'ardent listlessness' (p. 108) of the creative trance. This meant combining a heightened receptivity to the diversity and peculiarity of the world with an openness of aim; a lack of a particular object of interest.

For some this state of detachment somehow also embodies compassion and empathy. For example, Hirsch cites Rilke's autobiographical novel '*The Notebooks of Malte Laurids Brigge*'. The Notebooks are: 'a hymn to the inner self one deepens in silence, to the suffering of others incorporated into the body' (p. 40). This seems to denote a compassionate, shared, empathic experience which is yet detached and silent. Hirsch seems to see in Rilke a desire to draw close the experience of others and to find unity or connection in absorbing this and melding it with one's own experience.

Miller shares a similar concept to Hirsch's affirmation of life. This affirmation is an appreciation of the aesthetics of the phenomena of the physical world and their universal laws. Miller describes the range of viewpoints on what is meant

by 'aesthetic'. He avoids a definition himself but cites examples of aesthetic experience including visual harmony achieved through elegant proportion and relationship. According to Miller, in science the search for new aesthetics has the highest importance. He names a range of physicists and their specific discoveries which were centrally informed by aesthetics, for example those of Heisenberg, Feynman, Einstein and Schrödinger. Theories and mathematical structures were identified by these physicists as exciting due to their elegance of pattern and symmetry. Often disagreements about theories arose because of disagreements about aesthetics, for example where visual harmony was at odds with continuity of a traditional theory.

Like Hirsch's affirmation of life through experience and observation, Miller's scientific aesthetics are also heightened by flaws rather than perfection. He describes the way in which beauty is intriguing in that it often relies on the asymmetrical. A work of perfect symmetry and with no imbalance or human imperfection is majestic, and yet is also cold, pristine and lacking in feeling. Miller quotes Morrison, physicist and science writer:

> A soap bubble is beautiful. (A perfect sphere) has a kind of simplicity, a coldness, which bars it from the category of great beauty. In fact, the very reflections and colour changes which make it something other than a perfect sphere enhance its beauty. (Cited in Miller, A., 2000, p. 386)

Miller sees appreciation of aesthetics, symmetries and asymmetries as important guides to understanding an original and deep unity in the universe. The fundamental mystery of our universe is the nature of the original unity before the Big Bang, and the nature of the fractures resulting from the Big Bang:

> Today elementary particle physicists and cosmologists assume that our physical world is actually one of broken symmetries. Minute fractions of a second after the Big Bang some 10 to 15 billion years ago, there was only one force in an instant of purest symmetry, an instant of oneness. A slight imbalance or asymmetry between matter and antimatter began it all. ....Among the deepest problems in modern physics is how this

> symmetry was broken and how to work backwards to that one force: the quest for the Holy Grail of physics, the grand unified theory possessing pristine but profound symmetries. (Miller, A., 2000, p. 386)

The power of these symmetries and asymmetries is that they reveal to us new connections and patterns. I identified in my personal phenomenology that what I initially perceive as flaws in student's writing and asymmetries with my own ideas, can sometimes reveal to me a new connection, context or train of thought. Miller indicates the view that creative advances in ideas stem from making new kinds of connections, especially those which relate previously unconnected fields.

An example of connections from separate domains is Miller's speculation that Bohr's conception of the complementarity principle - which explains to some degree how light or other atomic entities can have attributes of both waves and particles at once - was influenced by Cubist art. A Cubist painting represents a scene as if the observer were moving around an object to seize it from several angles or appearances. Cubists achieved this through the 'interpenetration' of forms and space, to free the artist and observer from a single perspective and to allow multiple viewpoints:

> In 1927 Bohr offered a motif for the world of the atom with striking parallels to the motif of multiple perspectives: According to complementarity, the atomic entity has two sides - wave and particle. Depending on how we look at it, that is, what experimental arrangement is used, that is what it is. (Miller, A., 2000, p. 396)

So, both Hirsch and Miller believe that the creative experience involves attentively observing beauty in its imperfect natural state. This experience is a search for profound unity via new patterns and connections made between laws, disciplines, ideas, people, or environments. These experiences are part of our human struggle to make meaning from our existence.

Connection of individuality and unity through abstracted thought

Although he believes in the creative power of attention to the beauty and flaws of the universe, Miller's belief is that this is best achieved abstractly and intellectually; in the mind, rather than through direct sensory observation. He believes that the notion of discovery through observation is a limited understanding of our creative potential. Observation of individual phenomena has limited potential for creative thought because information received through the senses is limited by our powers of perception and is potentially inaccurate. Our existing knowledge and cognitive structures, and the limits of our vision itself temper the way we see phenomena.

Miller thus acknowledges the constructionist view that our consciousness is inseparable from our perception but nevertheless demonstrates objective beliefs about the nature of reality. He believes in an objective reality; a pre-existing deep structure in the universe. For deep understanding of this reality we need means other than our own sensory perception and experience of the world around us. He believes that we must use forms of conception which occur solely in the mind, such as abstraction, intuition, aesthetics and imagery to manipulate and creatively organise our understanding and thus come closer to knowing the actual reality of the world.

For example, for conceptualising reality, Miller distinguishes between everyday imagery and creative imagery through the term 'visualizability' as distinguished from 'visualization'. Visualizability is the 'common sense' approach to using imagery in thought, in which we use mental pictures based on our daily experience of observable phenomena. Einstein's 'thought experiment' involving a person falling from the roof of a house and dropping a stone at the same time, and which led to his formulation of special relativity theory, is one example of 'visualizability' in science. On the other hand, visualisation is the abstract approach to imagery, in which we do not rely heavily on our daily experience to guide the mental pictures we create because the information we receive through

the visual sense is limited and possibly inaccurate. The structure of Miller's argument seems contradictory. If we cannot rely on our perception to tell us about reality as it is influenced by other factors, perception is therefore constructed. However, Miller still draws a distinction between 'mental' images: those which are creatively constructed in the mind; and 'real' images; those which we see in our daily life.

Miller believes that it was the ability of scientists in the early and middle 1900's to use visualisation; imagery based in the imagination rather than in the physical world, which allowed for the advances in thought which have led to the principles of quantum physics. Heisenberg's uncertainty principle is an example of abstracted imagery. The uncertainty principle was formed through the discovery that it is impossible to determine both the speed and the position of a particle at any one point in time. Miller suggests that this theory could not have been formed through thinking based purely on phenomena observable in the world around us. That the speed and position of particles can never be determined at once defies our common understandings of the fixedness of objects. Conception of this relies on visualisations not based on the permanent and fixed world, but of a less fixed and more abstract nature.

Miller suggests the use of multiple perspectives, and metaphors or ideas from completely different disciplines to abstractly re-conceive reality. One such example is Bohr's complementarity principle, which involves the visualisation of sub-atomic matter as both particles and waves, simultaneously. Physics experiments have shown that matter appears to take the form of either a wave or a particle, depending on the conditions of the experiment or the observer, and yet common sense tells us that matter cannot have both the properties of waves and particles at the same time. In Miller's view, in order for Bohr to conceive this, he needed to alter his imagery from what common sense told him about the behaviour and characteristics of matter, to an abstracted view in which multiple perspectives were held at once, and in which matter could hold two seemingly opposed characteristics at once. In this way he could conceive of an entity which demonstrates either characteristic depending on the perspective from which it was observed.

Miller suggests mathematics as another way to penetrate to meaning beyond what the eye can see. The scientist uses mathematics to penetrate into a more intrinsic aesthetic or pattern, one beyond appearances in the atomic and subatomic realms. This structure may have no direct visual representation because mathematics can describe attributes that do not correlate to anything we have ever visualised or even imagined, for example, simultaneous wave and particle existence.

Connection of individuality and unity through the experience of ambiguity

As well as conflict and the affirmation of life, a third element emphasised in both texts is connections which can be made when ambiguity of thought and feeling is tolerated and encouraged. It is significant that Hirsch's central metaphors of the demon, or duende, and the angel are highly ambiguous in themselves. To Hirsch, demons are not purely malignant beings, and angels do not merely represent the pure and the good. The angel and the demon are sometimes interdependent opposites, dependent upon each other to be meaningful, like good and evil. At other times each embodies simultaneous opposites; despair and inspiration, earth and heaven together at once, like Lucifer the fallen angel. They are unpredictable.

The ambiguity of the demon and the angel stems from their intermediary nature. Hirsch states that the Greek term 'daimon' means divine power, fate, and god, but at the same time, the daimon is an earth dweller, like man, involved in the struggle to seek a place beyond its mortal limits. The daimon therefore belongs neither here nor there, is homeless. The daimon is the intermediary figure or messenger through which movement is possible between the human and the transcendent.

The angel is also a messenger between human and transcendent worlds. Hirsch identifies a range of religious sources for this idea. In the Hebrew Bible angels

are both messengers and active agents in running the two worlds; their job is to overthrow the forces of evil and to establish the eternal kingdom of God. The Hebrew word *ma'lak* and the Greek word *angelos* literally mean 'messenger'. Jung described angels as representing God's thoughts. Again, they are our means of communication from a transcendent realm.

Angels are also the aspect of ourselves through which we can see the spiritual realm. Thus, the angel could be viewed as a conduit for creativity because she connects and moves between the human and the spiritual realm, or because she helps us to see the spiritual in ourselves, sparking glimpses of new and creative ideas and ways of being.

However, as the angel's role is paradoxical it also conveys tension: Rilke's poems described the implications of crossing over to the other side and becoming as inhuman as divinity. 'It is impossible to see the Angel without dying of him' (cited in Hirsch, 2002, p. 137). 'Rilke's angel represents a transcendence that can scarcely be endured by mortal beings. We cannot dwell with divinity, he suggests, but can rise up or turn inward to meet it' (Hirsch, 2002, p. 139). This again echoes Hirsch's insistence that the creative path is dogged with conflict and danger.

Paul Klee's angels are the physical embodiments of intermediaries and also convey the tragedy of humanity. They are hybrid figures, shown still undergoing the transformation from human to angelic form, exploring the subject of where humanity ends and transcendence begins. They are partially transcendent but still held back by earthly connections and aspire to, rather than ascend from the heavens. The tragic dimension to Klee's hybrids is that they depict a clumsy body holding back an airy spirit. Klee puts it this way: 'Man's ability to measure the spiritual, earthbound, and cosmic, set against his physical helplessness…is his fundamental tragedy' (cited in Hirsch, 2002, p. 143).

Hirsch does not explain the significance of these hybrids or give any analysis to the deeper meaning of any of his ambiguities. But the ambiguity of angels and the demon/angel paradox in general suggest that to Hirsch, the experience of

creativity involves emotions and thoughts held in an intermediary state in which anything is possible and nothing is definite or finalised. Hirsch's placing of the demon/angel metaphor as central seems to give special significance to the ambiguous nature of creativity. Hirsch quotes Emerson: 'Everything teaches transition, transference, metamorphosis: therein is human power' (cited p. 158). By this Hirsch seems to imply that separately the demon or the angel are a medium for creativity, but to understand the demon/angel together is to gain a closer grasp of their essence. When we see the inherently transitory nature of things our minds and emotions are not fixed, they are flexible and free to develop and create.

Miller's comments on ambiguity and transition states in the creative process are illuminating from a different perspective. His central thesis; that creative imagery; thought processes in pictures, is essential for creative thought, rests on the characteristics of imagery which allow for ambiguity. Miller felt that in thinking, images come before words, and creative thinking must be essentially non-verbal, because it is images around us and in our minds which cause us to wonder about things. Miller believes that imagery in thinking provides a freedom and flexibility which verbal language does not afford. Thinking in images more readily allows for juxtaposition of ideas, for more fluid melding, reshaping and re-organising. Images can and often do represent more than one thing and one emotion at once. Essentially, images are ambiguous rather than fixed, and allow for more 'free play of concepts' (Miller, A., 2000, p. 372).

Summary of Theme One: My interpretation of the dynamic between individuality and unity in the experience of creativity

Miller and Hirsch are in agreement that a key motivation for creativity and a central aspect of the creative experience is the desire to discover unity and to find meaningful relationships between individual aspects of life and universal truths. This experience is often characterised by conflict and stress, as we require

pushing into uncomfortable and disorientating experiences before we will fight our way out and in the process create something new.

The affirmation of existence is another way to see connections, characterised less by conflict than by detachment and wonder. This is apparent in the idea that much of the content of literature is acutely observed detail of human existence, ranging from the mundane and the trivial, to the decaying and the deathly. Affirmation of life can also be experienced through scientific aesthetic sensibilities, observing symmetries and asymmetries in ideas, theories and nature. Through these affirmations of existence we can see the world, ourselves and others with close magnification, and can gain a fresh perspective.

I suggest that the repeated identification of experiences of unity, connections and relationships in the two texts in general terms points to the importance of consciousness that creativity is not at a fundamental level experienced in isolation within the self. Instead creativity is experienced as exploration of the self and uniqueness simultaneously with exploration of connection with others and the external environment. The implication of this observation is that commonly held conceptualisations of creativity which emphasise the individual experience are inadequate. I argue that conceptualisations should reflect this simultaneity as this is a fundamental characteristic of the experience of creativity.

That the experience of creativity involves ambiguity is stated in both texts. Miller appreciates the ambiguity of images in thought and Hirsch suggests that angels and demons represent the ambiguous nature of man which moves constantly between despair and inspiration and body and spirit. Hirsch seems to imply that this transitional status provides us with both the desire and the ability to experience creativity. I interpret the central significance of ambiguity in creativity to be associated with the essential dynamic between individuality and unity. The simultaneous experience of being an individual and seeing individuality in the world with being an integral part of the world and seeing unity necessitates a tolerance of ambiguity; a lack of definite boundaries and flexibility of experience, perspective and feeling.

The difference between the views of Hirsch and Miller might be described as perception versus conception. Hirsch appears to believe that the creative experience focuses on the senses and emotions. Miller believes in the power of the mind as the path to a more sophisticated creative experience. The distinction between Miller and Hirsch's view of the significance of observation as a source of creativity could be taken as the result of the fact that the artist tends to work more generally in the concrete domain using concrete materials to make concrete objects. The creative scientist works in the largely theoretical or abstract domain, and thus has tended to develop more sophisticated abstract tools.

However, I argue that Miller's distinction between abstracted (mental) images and those we 'see' in the physical world around us is a false distinction and that all images are constructions of reality involving an interaction between consciousness and its objects. From this perspective, both perception and mental abstraction involve the same potential limitations. Both are limited by our level of understanding of the relationship between consciousness and the external world. Observation is limited by the belief that it perceives objective reality and by the subsequent inability to reflect on and adjust consciousness and thus see alternative realities. Abstraction is limited by the belief that direct experience is an inferior path to knowledge and by the subsequent disconnection from direct experience and thus from an important means for understanding felt and experienced human meaning.

However, I also argue that as humans, we rely on habits of distinction and separation of concepts. These serve a function for us; we create distinctions in order to gain a sense of comprehension. In this case, rather than suggesting that the creative experience means removing the distinctions between mental and sense images, perhaps it is better to say that it involves allowing their co-existence. Here the question is not, as Miller implies, how we can keep the imagination pure and protected from reality, but how we give each room to meet and exist together. We have examples from Hirsch of individuals who describe their experience in terms of the sense image operating to stir an idea that lies buried in the subconscious, or to spark the creative imagination. This process can occur in reverse also; the imagination or the subconscious at times arriving at its

own images which are then nourished and developed by analogies from the real world. These are examples of use of the distinction between abstract and sense images which also allows their combination.

A more refined distinction to make might be between images which are constructed complacently, out of force of habit and social reinforcement and without reflection, and those which are creatively and reflectively conceived. Phenomenology suggests that knowledge and images primarily constructed through direct and sensory experience can be reflected upon equally as thoroughly as those which are primarily constructed in the intellect. I suggest that a flexible, reflective and adaptive approach to understanding reality is a significant aspect of the creative experience. This implies that the phenomenological understanding of the dynamic interaction between consciousness and its objects also underpins the creative experience.

Theme Two: The dynamic between intellect and intuition in the creative experience

The second major theme is the relationship between creative experiences which are conscious and logical and those which are less than fully conscious, involving dreams, imagery, emotions, hunches, physical experience and sensation. I categorise this as the relationship between intellect and intuition. Again, this theme initially emerged from the two texts as separate codes: the use of different kinds of intellect; and the use of different kinds of intuition. However, as the analysis continued I began to interpret their deeper meaning as dependent upon their connection and relationship. Intellect and intuition, and their combination, are descriptions of the faculties, tools or resources involved in the creative experience. In my phenomenological analysis of reading a student's essay this dynamic is experienced as I explore processes with which to determine and carry out my course of action. I use part logic and part feeling; conscious knowledge of the essay task and my student and an intuitive sense gained from

previous interactions with her and with her current writing, to decide how to respond to her work.

Hirsch identifies this theme himself in his Preface, as the relationship between ‘reason and unreason, between rational and irrational elements in works of art (p. xiv). Miller’s text revolves entirely around the use of imagery in creative thought. Imagery in thinking is largely guided by intuition according to Miller and thus the combined use of the intellect and intuition is a clear underpinning premise of Miller’s book. Neither of the authors gives explicit definitions of terms such as conscious, unconscious, rational, irrational, intellect or logic. Hirsch and Miller’s understandings of intuition are discernibly different and reflect their general approach to creativity. Hirsch’s intuition has few words to directly explain it, but involves a large degree of guidance from the emotions and through following experience itself. He indicates the bodily sensation of creativity in the same way as I have in my personal phenomenology, in an example about Jackson Pollock who ‘was seeking a more visceral and spontaneous contact with his own work, to participate in it physically,…..almost to inhabit it’ (Hirsch, 2002, p. 173). Hirsch also states that intuition is generally ill-defined and that this holds us back from its proper use. Because we have convinced ourselves that intuition is mysterious and irrational, we have left it alone. If we would address this neglect we would have a deeper experience of creativity. He states: ‘We need a fresh vocabulary, a fuller and more enhanced notion of the artistic trance state in which one also actively thinks’ (p. 101).

Miller’s intuition is less following the full and felt experience, than the sudden appearance in the mind of guidance, which is then worked with intellectually. He defines intuition as: ‘the scientist's feel for the correct way to bridge the gap between the exact statements of a scientific theory and inexact data’ (p. 375). Miller indicates that the ‘scientist’s feel’ is guided in a major sense by aesthetic sensibilities; ideas of beauty illuminated through pattern and form. The following discussion explores the experience of intellect and intuition as described by the two authors and interprets a dynamic between these as an essential feature of the creative experience.

Both authors suggest that the role that the intellect; our faculties of systematic reasoning and logic, plays in the creative process is to provide structure, power and protection for creative ideas. Both authors describe creativity as hard mental work involving structured and systematic thinking and application of intellectual techniques. Miller's abstracted imagery is a highly intellectual process, largely distanced from emotion and practical experience. In *The Demon and the Angel* Hirsch identifies that the poet Lorca insisted that strict controlled self-awareness was as essential in his creative technique as divine inspiration. In the text, Lorca describes the way in which intellect provides a foundation for poetry, lending it qualities of clarity and purification and helping to identify relationships between things which have not previously been suspected. Lorca also indicates his experience that the intellect gives poetry a form and a structure which lends a sense of authority and coherence. 'The poet uses it to construct a tower against the natural elements and against mystery. The poet is unassailable; he orders and is heeded' (cited in Hirsch, 2002, p. 52). Language, reason and the intellect are the poet's elements of construction. They give the poet a sense of power and protection.

However, neither Hirsch nor Miller believes that logic and the intellect alone will bring us to true inspiration. Lorca noted this too; in his view logic can do many useful things, but it falls within our human and precise view of reality, controlled by reason, and cannot escape from it. Logic is order and limits and therefore it cannot lead us to touch the darker forces of nature, glimpse the most inspiring heights, or experience the realm of the unknown. Miller gives examples of scientists who experienced creative ideas with no conscious forethought and rational reasoning including Archimedes (stepping into his bathtub), Poincare (stepping up into his coach), Charles Darwin (reading Malthus), and Einstein. In Hirsch's text, Lorca implied that to forget the limitation of the intellect is problematic, or possibly dangerous. 'Too much intelligence can limit too much' and 'elevates the poet to a sharp-edged throne where he forgets that ants could eat him or that a great arsenic lobster could fall on his head' (cited p. 211). The 'sharp-edged throne' where the poet might forget the possibility of arsenic lobsters falling demonstrates that with sophisticated use of the intellect can come

an arrogance which prevents from seeing its limits and from seeing the power of more unexpected thought forms.

Reason and intellect then, are not enough to obtain escape from boundaries and attainment of higher truth which we search for in art and science. The experience of intuition in creativity brings flexibility, ambiguity and escape from the domination of the intellect and of pre-determined structures in creative ideas. Poincare wrote: 'Logic…. remains barren unless fertilized by intuition' (cited in Miller, p. 351). Hirsch and Miller mention several different kinds of experiences which are characterised by use of intuition and which help provide escape from the limits of the intellect.

The use of imagery and metaphor are an experience recurrently described by both authors as involving intuitive elements. As in art, for Miller metaphors have an essential role in science because they provide a means for seeking new and more truthful descriptions of the world about us. Scientific theories are metaphors themselves, reducing aspects of the world to aesthetic descriptions. A scientific model in the form of a metaphor, gives the simplicity of the model with the added value of a comparison with something we are already familiar with. The role of metaphors is to relate thoughts. For example, Planck expressed his law for cavity radiation with a metaphor linking the electrons lining the walls of the radiation cavity with the behaviour of charged particles on springs. The comparison subject; 'charged particles on springs' with its known mechanical and electromagnetic properties, allowed Planck to explore less well known properties of cavity radiation and thus find a closer approximation of the 'truth' of this scientific phenomenon.

For Hirsch, the power of metaphor in literature is also to produce new ways of seeing and understanding, complete with emotional impact. Despite not following the laws of logic, good metaphors carry an innate sense of truth. Lorca's poems 'followed a strange inner logic of emotion and of poetic architecture'. This architecture was acknowledged by Lorca who named it '*Hecho poetico*; the poetic fact' (cited in Hirsch, 2002, p. 5). The poetic fact existed in Lorca's poems in fast successions of metaphors requiring a

‘sympathetic attentiveness’ or an open receptiveness and acceptance of ambiguity to follow.

Miller’s tendency is to conceptualise highly creative use of intuition as significantly crafted by and even dominated by the logical intellect. This is apparent in a number of descriptions of conscious manipulation of intuition. He quotes Heisenberg’s description of his intentional play with visual images:

> What frequently happens in physics is that, from seeing some part of the experimental situation, you get a feeling of how the general experimental situation is. That is, you get some kind of picture. .....Then what frequently happens is that the mathematical formulation of the 'picture' or the formulation of the 'picture' in words, turns out to be rather wrong. Still the experimental guesses are rather right, that is, the actual 'picture' which you had in your mind was much better than the rationalization which you tried to put down in the publication. That is of course, a quite normal situation, because the rationalization, as everyone knows, is always a later stage and not the first stage. So first one has an impression of how things are connected, and from this impression you may guess, and you have a good chance to guess the correct things. But then you say 'Well why do you guess this and not that? Then you try to give rationalizations, to use words and say, 'Well, because I described such and such'. The picture changes over and over again and it’s so nice to see how such pictures change (Cited in Miller, A., 2000, p. 320).

The phrase ‘you get some kind of picture’ followed by ‘Then you try to give some rationalisations’ and ‘the picture changes over and over’ indicate first an intuitive experience followed by logical and conscious manipulation of images.

The fusion of the intellect with intuition involves disorientation and uncertainty

The implication from Hirsch is that over-reliance on the intellect and reasoning is not conducive to creative experiences. To be creative we need ways to free ourselves from the dominance of these processes and to experience the combined use of intellect and intuition. One method for experiencing this is to throw ideas or assumptions into chaos, and then to search for a new way to make sense of them. This process is apparent in both of the key texts. When thrown into chaos, the intuition is required for a creative resolution, because the mind has no preconceived knowledge structure to deal with the scenario, so must explore other avenues of thought. Once the intuition has gained a foothold on an idea, the structure of the intellect is then required, in order to develop a re-construction of a new way of understanding. Metaphor creation provides an example of this. Metaphors juxtapose previously unrelated ideas or images. The lack of pre-conceived intellectual logic in their connection means the intellect and intuition must work together to create meaning; the intuition beginning with a hunch or an emotion and exploring this, and the intellect assisting to give it shape it until it takes a form which is coherent in the mind.

Miller explains the process in scientific terms:

> How can new concepts emerge from ones already set into the brain? In other words, how can a system produce results that go far beyond the statements included in it? This is the problem of creativity….. Data are incorporated into an already existing body of knowledge, which can be disequilibriated....the lower level theory, is thrown into confusion, or becomes disequilibriated, because of the assimilation of new information. Through reasoning involving metaphors (the theory) adjusts or accommodates itself to these new data, and a new and hopefully higher level of knowledge emerges to provide a better understanding of the data in question. (p. 228)

In both of the primary texts, there is evidence that some people experience disorientation deliberately. For example, Hirsch discusses a deliberate disorganisation of logic or of the senses, quoting Rimbaud: 'The Poet makes himself a seer by a long, gigantic and rational derangement of all the senses' (cited p. 101). The implication of this is that the experience can involve an aggressive disorganisation of the senses; a degree of purposeful control of intuition. Rimbaud's picturesque description: 'Imagine a man implanting and cultivating warts on his face' (cited in Hirsch, 2002, p. 101) captures this idea.

Miller indicates a similar deliberate disorientation in the creation of metaphors. He suggests that the creative power of metaphor is dependent upon tension. When we create metaphors we connect images. The dissimilarity between them is referred to as tension. The greater the tension in the metaphor, the greater is its creative potential because the sense of disorder conveyed through dissimilarity requires us to work harder to create a sense of meaning.

I indicated a similar kind of experience of creative tension in my phenomenological analysis. Contrasting ideas dissimilar to my own sometimes makes visible a tension between ideas in the classroom or the society which I had not been fully conscious of and which I can then respond to.

Other than metaphor, Hirsch and Miller indicate a range of further techniques of the intellect used to give shape and form to disorienting ideas. For example, rhyme provides a piece of writing with a sound form which is predictable and thus may feel reliable or satisfying. Hirsch cites Byron, on using rhyme as a means to marginally avert poetry from disorder. Poetry is 'the lava of the imagination whose eruption prevents an earthquake – they say poets never or rarely go mad…but are generally so near it – that I cannot help thinking rhyme is so far useful in anticipating and preventing the disorder' (cited pp. 218, 219).

Other techniques providing form include rhythm, juxtaposition and patterns of imagery. These will be discussed further in the following section, Theme Three: The dynamic between freedom and discipline in the creative experience.

The fusion of the intellect with intuition involves acceptance of ambiguity

Both Hirsch and Miller have identified the potentially fruitful aspect in creating chaos and tension. I have also discussed imagery and metaphor as methods by which this tension is explored and developed into something creative. More generally, ambiguity emerges as a central characteristic of tolerating disorientation and creating new meaning using both the intellect and intuition.

As noted, both authors suggest that metaphor is both a means to create disorder and to combine the intellect and the intuition in order to emerge from disorder and chaos. Hirsch notes that Crane attempted to pin down the processes of metaphor in his essay *General aims and theories of finding a logic of metaphor* (cited p. 6). Crane describes some of the processes behind metaphor: associational meanings rather than ordinary logic, unusual words combined in unexpected and musical ways, and through implicit emotional dynamics of sudden conjunctions.

When examined, all of these techniques rely on a form of organisation other than the pre-determined categories of language. They rely instead on organisation through the intuition, emotions, sound, images or reversal of logic. They require a tolerance for ambiguity of process, because when intellectual logic is absent, ideas lose their precision and definiteness, but can gain subtlety and a layering of meaning. For example, Hirsch quotes from Sylvia Plath's poem '*Ariel'* in which the narrator rides a horse uncontrollably through darkness and seems to leave behind her physical body. It finishes:

> And I
> Am the arrow,
>
> The dew that flies
> Suicidal, at one with the drive
> Into the red

Eye, the cauldron of morning
(Cited in Hirsch, 2002, p. 98)

The arrow, the dew and the morning are ambiguous entities, their symbolism and action are open, but evocative. The narrator as the arrow might be controlling with unfailing precision her drive toward its target, the red eye. Or the arrow may have given itself up to a force beyond itself, which insists upon this drive. Somehow the lines imply both occurring at once, and the action is transformed into something more layered and more significant than either. The poem contains the dialectic characteristic of Plath, between the struggle to contain and consciously control experience and the desire to liberate it through the imagination.

Plath's dialectic between liberation and control is central to understanding the state of tolerance for ambiguity required to make the emergence from chaos fruitful. Keats' 'Negative Capability', mentioned in *The Demon and the Angel* is also a description of this state. Negative Capability is the state '.. when man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason' (cited in Hirsch, 2002, p. 107). Negative Capability lends the idea of tolerance of ambiguity a rather peaceful and balanced air and suggests that this state of being involves a happy lack of striving for meaning and a readiness to accept what the experience reveals. There is control in this state, but it is the controlled letting go of the intellect.

Ambiguity of process is evident in Miller's advocacy for the use of imagery, as already discussed. It is also evident in other experiences recorded by Miller. In science aesthetics often inform our ideas by assisting in the selection of material with which to theorise. Aesthetics are ambiguous; they have no firm and logical rules. To Poincare 'invention is selection' (cited in Miller, A., 2000, p. 354), meaning inventing is the art of choosing which elements to combine. He held that the rules that guide choices are extremely subtle and delicate, and it is practically impossible to state them in precise language. They must be felt rather

than formulated. The most useful combinations are the most beautiful, and these are recognised as such by all mathematicians, without laws to guide them.

Fusion of the intellect with intuition and acceptance of ambiguity can be assisted by the use of different states of consciousness

Escape from the structured intellect seems to be experienced more easily in other than fully conscious states; states of mental activity of which we are less aware. Miller cites Mandler, a leading researcher in memory and general problems of consciousness, who has collected evidence of problem solutions appearing suddenly after a period of incubation, a phenomenon he calls 'mind popping' (cited p. 334). While consciousness plays the important role in our daily lives of restricting the bounds of our actions, in certain loosened states of consciousness we can activate thoughts without boundary. Mandler's studies imply that ideas can be processed in parallel in the subconscious and find their way into conscious thought. An innovative idea thus emerges suddenly, not through an observable sequenced process.

There appear to be a number of different sub-conscious states, through which intuitive ideas can emerge. Miller quotes Goethe, indicating latent sources of creativity in the sleep state: 'What man does not know/Or has not thought of/Wanders in the night/Through the labyrinth of the mind' (cited p. 356). Hirsch uses Poe, describing his experience of intuition arising unbidden from the edge of sleep:

> There is a class of fancies, of exquisite delicacy, which are not thoughts, and to which, as yet, I have found it absolutely impossible to adapt language. I use the word "fancies' at random, and merely because I must use some word; but the idea commonly attached to the term is not even remotely applicable to the shadows of shadows in question. They seem to me rather psychal than intellectual. They arise in the soul, (alas, how

> rarely!) only at its epochs of most intense tranquillity,….and at those mere points of time where the confines of the waking world blend with those of the world of dreams. I am aware of these "fancies" only when I am upon the very brink of sleep, with the consciousness that I am so. (Cited in Hirsch, 2002, p. 86)

To me Poe's description of 'psychal rather than intellectual' fancies evokes what I attempted to describe in my own phenomenological analysis as the aspect of the experience which feels like a reaching toward something, which was neither physical nor mental, but somehow both and more. Miller identifies that one experience of utilising the subconscious is to allow the intuition to work with no predetermined path and/or set goal. He asserts that the mathematician Poincare achieved some major discoveries in geometry in this fashion, experiencing illumination by connecting unrelated disciplines after subconscious thought with no predetermined path. Poincare's process echoes Keats' Negative Capability, cited in Hirsch. Allowing the subconscious to work intuitively with no set goal sounds effectively similar to a state of being with no 'irritable striving after fact and reason' (Hirsch, 2002, p. 107).

The creative experience sometimes involves the conscious awareness and control of these different states of consciousness. According to Hirsch, Poe suggested that he was learning to manipulate and utilise his dream-like state, by preventing it from lapsing into sleep, startling it into wakefulness and transferring it to memory, placing the shadow of thought into active consciousness. From there he wrote it into firmer existence, using language to develop and evoke it. Thus it seems, for some the creative experience involves developing conscious awareness of intuitive states, together with some means to shift the contents of new thoughts from the fringe of consciousness to full consciousness.

Hirsch identifies the Spanish Sufi master, Ibn 'Arabi (1165 -1240) as experiencing a high degree of awareness and control of the subconscious. Ibn 'Arabi wrote in his *Interpreter of Desires*: 'A person, must control his thoughts in a dream' (cited in Hirsch, 2002, p. 105). The source of Ibn 'Arabi's inspiration is said to have been 'reverie in which the consciousness was still active' (Hirsch,

2002, p. 105). The Sufis call this ‘Active Imagination’. This gives access to the world that exists between the sensory and intelligible worlds.

Utilising the subconscious intuitive state also involves the experience of encountering things we do not like. Hirsch views the use of the intuition as risky because the nature of the subconscious is potentially disturbing. In *Angels and Demons,* Milosz explains his experience: ‘In the very essence of poetry there is something indecent….a thing is brought forth which we didn’t know we had in us’ (cited in Hirsch, 2002, p. 73). When we use intuition, we relinquish some control, and enter unknown territory. The aim is to court the unexpected. This means we may meet our demons; the aspects of ourselves which we wish we had not met.

Another example of conscious guidance of the subconscious is the disciplined improvisation of the Miles Davis album *Kind of Blue.* Davis consciously guided his musicians toward a certain haunting tone, while also pushing them into individual spontaneity. Davis states that he did not write out the music for *Kind of Blue*, but brought in ‘sketches’ (cited in Hirsch, 2002, p. 205) indicating roughly what his musicians should play. Evans compared the creation of *Kind of Blue* to a Japanese Zen method of painting:

> There is a Japanese visual art in which the artist is forced to be spontaneous. He must paint on a thin stretched parchment with a special brush and black water paint in such a way that an unnatural or interrupted stroke will destroy the line or break through the parchment. Erasures or changes are impossible. These artists must practice a particular discipline, that of allowing the idea to express itself in communication with their hands in such a direct way that deliberation cannot interfere. The resulting pictures lack the complex composition and textures of ordinary painting, but it is said that those who see will find something captured that escapes explanation. This conviction that direct deed is the most meaningful reflection, I believe, has prompted the evolution of the extremely severe and unique disciplines of the jazz or improvising musician. (Cited in Hirsch, 2002, p. 206)

Davis's method seems to have been a highly sensitive balance between the moment to moment spontaneous and unpredictable input of his own and his band's sensibilities, guided by an instinctive knowledge of what he wanted to create.

According to Hirsch, ambiguity is moving and transitional rather than a static balance of entities. Hirsch identifies the poet Emerson as one who emphasised the element of transition in the creative experience: 'The experience of poetic creativeness…is not found in staying at home, nor yet in travelling, but in transitions from one to the other, which must therefore be adroitly managed to present as much transitional surface as possible..' (cited p. 171).

Creativity is neither staying at home, nor travelling, but something in between which captures the qualities of both but is flexible and moves between them. Rather than the establishment of a relatively static position, a kind of fine middle line, transition implies a more dynamic process where creativity occurs by the movement or conversation between elements, without becoming fixed or dominated by one or the other.

Summary of Theme Two: My interpretation of the dynamic between intellect and intuition

Both Hirsch and Miller describe the combined and simultaneous use of intellect and intuition as an essential part of the creative experience.

The intellectual faculties of logic and reason lend the creative experience a structure and process with which to create strength, power and protection. The conscious intellect gives us the ability to persist with a problem, to apply different methods to it, and to craft, shape, contain, develop, clarify and embellish the ideas over time. The application of logic also helps provide us with a language and process with which to communicate our understandings of the world. However, over-reliance on the intellect is a problem characteristic of

humans in the current age and inhibits the creative experience. To free ourselves from the dominance of the intellect we sometimes need to take deliberate action, for example by seeking a state of chaos; the disturbance of logic is often required in art and science to reach beyond what is already known and to create something with new feeling and new knowledge.

Intuition lends the creative experience flexibility of thought, loosening of the boundaries of understanding, the involvement of the senses and emotions, and playfulness. A requirement of freeing ourselves from the dominance of the intellect is the ability to accept ambiguity. Both Hirsch and Miller suggest that the creative power of metaphors lies in their ambiguity and that through these we can discover new aesthetics and new truths.

The two authors tend to emphasise different experiences of the simultaneous use of intellect and intuition. Hirsch's controlled intuition appears to allow more scope to the intuitive element and to involve more ambiguity and flexibility to transitions occurring between intellect and intuition. Hirsch's intuition incorporates the power of the senses with the power of the mind. His discussion of Negative Capability implies that it is the ambiguous experience itself which is significant. The experience of just being, with no pre-determined goal is given free reign in the creative experience. His range of individuals suggesting control of intuition allow the embellishment of ideas through different states of sub-consciousness, rather than the fully conscious state, which tends to work logically and within pre-determined paths. Miller tends toward an emphasis on an intellectual process following the intuitive generation of ambiguous ideas and images. He emphasises techniques for forming thought, actively discovering aesthetics, for crafting and developing intuitive ideas and images. He overtly dismisses the senses as an inferior source of intuition. In this he seems to suffer from the arrogance of the elevation of the intellect, described by Lorca in Hirsch's text. In spite of acknowledging the importance of intuition and ambiguity, his process involves more active, deliberate and conscious manipulation than Hirsch's.

I interpret the dynamic between intellect and intuition in creativity as transitional and ambiguous. The implication from both authors, but particularly from Hirsch, is that in the creative experience these qualities are not just used in conjunction, but that they are inseparable. Creativity involves an ambiguous use of these faculties and a process which is transitionally thoughtful, physical, experiential, conscious, subconscious, methodical and spontaneous. Constant transition between the faculties associated with the intellect and those associated with intuition means they are experienced not as separate but as melded. Where the intellect and intuition operate inseparably the direct and essential experience of creativity is not excessively dominated by either one or the other. There is the potential in the creative experience for all faculties of thought and experience to hold power and for power to be transitionally shared through these faculties. Examples from Hirsch and Miller suggest that when these resources are used in ambiguous and flexible transition, when their boundaries are blurred, they contribute more than the sum of their individual contributions; that deeper creative experiences are a result. This parallels my own finding that when communicating with students about their writing, I experience a more satisfying connection if I give scope to thought, method, intuition, imagery and feeling collectively.

Theme Three: The dynamic between freedom and discipline in the creative experience

The final major dynamic running through Hirsch and Miller's views of the experience of creativity is the relationship between freedom and discipline. In the same way that the individual and the universal, and the intellect and the intuition have a complementary relationship in creativity, freedom and discipline are also interpreted as dynamically related to each other.

Early in the analysis I did not draw a distinction between this dynamic and the second; the intellect/intuition dynamic. They emerged together and have much in

common: freedom and intuition are both open, spontaneous and unrestricted. Discipline and intellect are both contained and methodical. However, as the analysis progressed I found that it was meaningful to me to draw a distinction between them, as it seemed that while closely related, there were important differences. I have interpreted intellect and intuition as descriptions of the faculties, tools or resources involved in the creative experience. Freedom and discipline seem to me to stem from a deeper level, underlying our human resources or faculties. Freedom and discipline are twin aspects of the deep fundamental experience of existence and motivation toward creativity.

In Hirsch's text creativity involves freedom; and freedom means passion. Passion is a crucial element in Hirsch's duende; it is the unrestrained freedom of emotion and experience. For example, he identifies a power unleashed when wild abandonment emerges as a product or complement to the fear of death. Many of Hirsch's authors and artists desire and seek this freedom from emotional restriction. Lorca for example sought intensity of feeling above all else. Duende in Lorca's poems has a fiery element of raging unfulfilled passion. He describes his creative experience as a state of fever from which he experiences the intense joy of creation. Hirsch describes blues musicians such as Robert Johnson, Miles Davis, and Billie Holiday singing *Strange Fruit*, and Flamenco singer Pavon as needing to free themselves of their skill and security in order to tap the deep passion with which to create and perform with duende.

Miller suggests that the bid for freedom is strong but somewhat disguised in scientists who unlike artists are emotionally constrained in their public writing. But he cites Poincare who indicates the importance of the freedom to pursue meaning in life when our lives are often dominated by the pursuit of what is useful:

> The scientist does not study nature because it is useful; he studies it because he delights in it, and he delights in it because it is beautiful….If nature were not beautiful, it would not be worth knowing, and if nature were not worth knowing, life would not be worth living. (Cited in Miller, A., 2000, p. 355)

Miller also describes creativity as highly disciplined. He describes the significance of the ability to persist in the face of failure and to sustain motivation through discouraging times. For example, Einstein failed to obtain a Ph.D. and was denied letters of reference from his undergraduate school before his ideas began to gain acceptance. Miller's implication is that Einstein was not motivated by external reward but by an internal discipline geared toward understanding, theorising and creating meaning; a kind of inner faith in his own process.

I am conscious of the idea of persistence in the face of failure and the need for inner faith and discipline in my own phenomenological analysis. As I give feedback on essays I am aware of the central conflict student's face between conforming and succeeding in the university system and developing faith in their own inner direction and drives for learning. In part, my creativity in this scenario centres on developing ways to keep them moving along both the path to success and their own path of learning, when these are often difficult to reconcile. This involves encouraging students to always assume responsibility for discovering their own personal aspect of interest within any task or assignment and to hold on to what they know interests them even when they have not succeeded with it in the university system.

For Hirsch, creativity is the freedom of passion melded with a disciplined spiritual force. According to Hirsch inspiration means inbreathing, indwelling, or inhalation, and has roots in 'enthusiasm' derived from the Greek word enthousiaszein 'to be inspired by god' (p. 58). From these roots, he suggests, creativity is connected to enthusiasm, passion and spiritual alertness. This spiritual alertness is consciously disciplined in Hirsch's mind. For example, Hirsch describes Lorca as motivated by a search for passion controlled: 'Wild horses, flexible reins' (cited p. 49). Lorca's was an 'ardent struggle, endless vigil' (p. 50). In the same vein, Jackson Pollock's creative process is described by Hirsch as 'both feverish and Zenlike' (p. 173). These descriptions indicate the form of motivation underlying the combination of the faculties of intellect and intuition discussed earlier. These faculties are driven by both liberating freedom

and need for order. Intellect and intuition are the tools of the creative experience. Freedom and discipline are the significance of these tools; their meaning for us.

The significance of the desire for freedom and the need for discipline

The experience of creativity involves the human desire to push the boundaries of existence, to venture into chaos and to explore the unknown. But when we experience the strangeness of uncertainty we then need to understand and to create sense of it. Creating sense is essential to our operation in life; we do it in order to feel confidence and autonomy in the world.

Sylvia Plath described this desire for liberation existing alongside the desire to order and understand experience. Hirsch quotes Plath: 'I believe that one should be able to control and manipulate experiences, even the most terrifying, like madness, being tortured….and one should be able to manipulate these experiences with an informed and intelligent mind' (cited p. 98). Lorca also had a simultaneous longing for both form and the formlessness of the unknown. The unknown, which we perceive as chaos, reminds us of the possibilities and potential of ourselves and the world, of all that we do not yet know, that is yet to be explored and discovered. Order helps us to wield and to believe in our own power to understand things and to achieve goals.

The glimpse of chaos and the unknown is recognisable from my personal phenomenological analysis of creativity. I identified the previously unseen glimpse of possibility and potential as an essential part of the creative experience. In marking essays I sometimes come across a fully realised idea, which I recognise as the result of the student taking a risk and setting off away from the beaten track to pursue an interest or flash of insight. I more frequently experience this as an elusive and partially formed phenomenon. This experience feels like a flash of insight in the writing which has not been pursued and might flicker and die if not nurtured. Encouraging the student to view their learning as

meaningful, as a free but highly disciplined exploration into their own potential is part of my own creative experience in my work.

Patterns of imagery and rhyme were described in Theme Two as techniques for providing form to chaotic work. Hirsch's description of how rhythm is used in Flamenco gives a perspective of the deeper significance of rhythm, not just as an ordering technique but as a means to liberate passion or meaning. Flamenco is abandoned physical expression brought together with an emotionless stamping beat; formless passion meets passionless form. According to Hirsch, form; rhythm, is more the liberating rather than the constraining agent. Rhythm here is more than a technique to contain and order our thoughts and feelings about the dance. It is the form by which the dance is experienced, without which we have no means to access the passion of the dance. To Hirsch this represents the nature of existence; we constantly lend form to the world. The real substance of the world itself is formless. Our application of form is the only means we have to liberate or confront it, to make it real to us.

The same implication is present in Hirsch's discussion of Hect's *The Hard Hours*. Form and order are used to convey and liberate the creative experience, more than they constrain it. *The Hard Hours* is a barbaric tale told with steady, even neutrality, juxtaposing frightening themes with logical treatment. The following is an excerpt:

> We move now to outside a German wood.
> Three men are there commanded to dig a hole
> In which the two Jews are ordered to lie down
> And be buried alive by the third, who is a Pole.
> (Cited pp. 215, 216)

The Hard Hours provides us with the means to fend off and control what is unthinkable and terrifying, and thus enables us to come near enough to examine it. The form provides the means for freeing the idea. We are not liberated by our freedom; freedom is incomprehensible to us. We are liberated instead by our means to understand, by being taken to the unknown and being made able to see,

touch and feel it. The form and tone given to *The Hard Hours* allow us the liberation of the power to experience without being overwhelmed. Without the imposition of order, we experience an 'excess of being' (Hirsch, 2002, p. 51), a formlessness over which we hold no power.

Hirsch suggests that a deeper experience of creativity involves the creation of new forms of order. Here the motivation to experience disciplined freedom reaches new heights. Hirsch describes Lorca's longing for a 'technique to go beyond technique, that rupture(s) the geometry of their own imposed forms' (p. 53). The idea of new forms of order is also evident in Miller's examples of new understandings in quantum physics and his idea of abstracted visualisation. Abstract visualisations can provide new forms of order because they can probe beyond our sense perceptions, and can find and examine ideas not shaped by the form and order familiar to us. He acknowledges the artificial or flexible nature of established order in science: 'The element of completeness, which restores continuity and symmetry, is (the) realisation that any differences between (observed order) reside only in the choice of viewpoint' (p. 318). Socially or scientifically established order is not necessarily an accurate reflection of the real order. We can discover new forms of order by exploring the connections between apparently different perspectives.

Miller's scientific perspective on the significance of the bid for freedom and need for discipline underlying creative experience is that chaos and the discovery of new order are inherent characteristics of the organisation of our universe. According to Miller, this is summed up in complexity theory:

> Complexity theory supports the view of scientific progress we see emerging from the history of scientific thought: somehow, complex systems far from equilibrium achieve self-organization. ….The key issue is inherent in the word somehow, which is shorthand for the dynamics driving systems to equilibrium. (p. 444)

This belief of Miller's suggests that complexity theory indicates that the dynamic between freedom and discipline in our human creative experience are a naturally

occurring pattern involving a continuous movement from disorganisation to organisation, and thus creating continuously higher and higher levels of organisation.

Summary of Theme Three: The dynamic between freedom and discipline in the creative experience

The freedom/discipline relationship is linked closely to the second set of essential features; the intellect/intuition dynamic. They mirror similar qualities. Freedom and intuition are both open, spontaneous and unrestricted. Discipline and intellect are both contained and methodical. I interpret intellect and intuition as descriptions of the faculties, tools or resources involved in the creative experience, while freedom and discipline underlie these faculties, as aspects of the deep, fundamental motivation toward creativity.

Freedom and discipline are also an echo of the first dynamic: that between individuality and unity. Freedom is linked to the desire to experience what it is to be an individual and a human and to explore the unknown potential of existence with unrestrained intensity. Freedom is also about the emotional or spiritual release described in Theme One as the experience of unity and transcendence achieved through creativity. Discipline; the drive for order, can also be viewed as the drive to discover universal laws, described in the first theme.

The freedom/discipline dynamic seems therefore to transition between the first and second dynamics. It manifests another dimension of one and an underlying significance of the other.

The key authors write about freedom in different ways. Hirsch's view can be interpreted as emphasising the desire for freedom both to feel and to express passion, as important to artists. Meanwhile, Miller largely avoids discussion of passion and the emotions in his scientists. Rather than the freedom to test the limits of human experience, Miller believes in the significance of the freedom to

test the limits of human knowledge and understanding, for the scientist. This is a source of creative energy.

The authors are in explicit agreement that creative freedom is freedom harnessed by discipline. Vigilance, form and structure are necessary to keep the artist from the brink of madness, and to liberate the aesthetic and joyful experience of ideas. The urge to experience the freedom of chaos is assisted rather than countered by the imposition of order and discipline. Discipline allows the development of faith in the self which is needed to persist in life's endeavours. Through order and discipline we can make chaos real and comprehensible enough to examine. Discipline liberates the creative experience through the provision of a comprehensive form.

The highest forms of creative experience, according to both authors, are those in which new order is found. These experiences allow enough freedom to break down old perspectives, to examine the chaos and uncertainty that is left and experience its meaninglessness and incomprehensibility, and to have the faith and discipline to glimpse, build and create a new perspective, organisation or aesthetic.

Conclusion to the thematic analysis

In this chapter I have proposed that the essential features of the experience of creativity emerging from this thematic analysis are the same as the essential features I interpreted through my personal phenomenological analysis: A dynamic between the exploration of individuality and the discovery of unity; between the use of the intellect and the use of intuition; and between the bid for freedom and the desire for discipline. The emphasis which has emerged is that it seems important not to focus on the separate components of these essential features but on their relationship with one another. The meaning I interpret about the experience of creativity is that it is essentially to do with the dynamic between these seemingly polarised human tendencies; with the energy generated

by our reconciliation and melding of these, and with an ability to allow them equal participation, power and weight.

In the next chapter, I explore the nature of this dynamic further, and offer an analogy to assist in understanding it better; the analogy of creativity as a democratic energy.

Chapter Five: Discussion. Creativity is essentially a democratic experience

> We complain of the darkness in which we live out our lives: we do not understand the nature of existence in general; we especially do not know the relation of our own self to the rest of existence. (Schopenhauer, 1970, p. 25)

I use Schopenhauer's words again here, as they encapsulate a central theme of this research. The previous chapters have discussed the idea that a significant part of human life and experience is to wonder and make meaning about the nature of our own existence, and the nature of our connection to the rest of existence. I argue that this wonder, and the steps taken to pursue it and engage with it, are essentially what creativity is. So far, the thematic analysis of literature and my own phenomenological analysis indicate three central dynamics which make up the essential experience of creativity. These are the connection between the meaning and potential of our individuality with the meaning and potential of our unity; the connection between the use and development of the intellect with the use and development of the intuition; and the connection between the bid for enhanced freedom with the drive for a greater sense of discipline, order and coherence. I propose that the essential experience of creativity always consists of these same dynamics, regardless of whether creativity is subjectively experienced as fairly mundane and ordinary or is experienced by the genius-type, as highly transformative and socially significant.

This next discussion argues that these essential dynamics of the creative experience can be understood better if creativity is viewed as energy rather than as something more fixed and observable. It argues that creative energy can be described as a democratic attunement to the world and existence. Attunement to Heidegger (1995), is feeling. Attunements cannot be straightforwardly ascertained in a universally valid way, as ascertainment means in effect to

destroy; the bringing into consciousness changes the feeling indelibly. Instead attunements are to be awakened but left as they are; let be. In effect attunements are a fundamental manner and fundamental way of being. 'Attunement belongs to the being of man' (Heidegger, 1995, p. 63).

Attunements then are not side effects resulting from our experiences, but are something which in advance determines our experience:

> It seems as though an attunement is in each case already there, so to speak, like an atmosphere in which we first immerse ourselves in each case and which then attunes us through and through. It does not merely seem so, it is so…..(to reveal attunement) is a matter of *seeing* and *saying* what is happening here. (Heidegger, 1995, p. 67)

In this chapter I first explain why creativity can be appropriately viewed as an energy and why this energy can be described as 'democratic attunement'; a feeling for or orientation to the world and a mode of existence in which the normal boundaries between subject and object; self and world are blurred and in which a sense of receptiveness, empathy and dialogue both within the self and with the outer world, are central. I then extend the metaphor of democracy in a number of ways in order to discover its further potential as a concept to describe and understand creativity. With this research I have merely approached the connection between creativity and democracy, and here I use some prominent, but general texts on democracy to assist me in testing the metaphor in a range of ways. A fuller discussion of creativity as a democratic attunement to existence, which is unfortunately outside of the scope of this project, would involve the use of democratic theory more closely aligned and more profoundly dealing with a phenomenological approach. That is, a fuller discussion would make use of literature which explores notions of democracy, community and social conflict as human experiences and as modes of being and existence. The works of Nancy (1991) and Laclau and Mouffe (2001) are potential examples of such literature.

A view of creativity as a form of energy

In this explanation of creativity as a form of energy I make three main points: Firstly, that a paradigm shift is required to understand creativity better; secondly, that understanding creativity as energy is a concept more creative in itself than other concepts of creativity; and thirdly that creativity conceived of as energy is a significant alternative to other concepts as it situates creativity both within and outside of, the individual.

My first point relates to the need for a paradigm shift. The scientific paradigm is effectively the major current paradigm of acquiring knowledge about reality and existence. The scientific paradigm rests on empiricism; observable and measurable fact. The Dalai Lama (2005) comments that because of this emphasis on observation and measurement this paradigm tends to overlook the distinction between that which is 'not found' and that which is 'found not to exist', deducing that that which is not observable and not measurable (not found) is not real (found not to exist). This is true even of mathematical reasoning, which allows a great deal of abstraction, and might be considered outside of the restrictions of the observable. However, like science, mathematics is limited to the domain of the objective. It lends itself to particular quantifiable, empirical and repeatable methods of inquiry.

Clearly this paradigm does not exhaust all aspects of reality, in particular the nature of human existence, experience, emotions and values. Not observing a thing is not the same as proving its non-existence. I propose that it is the tendency not to distinguish between what is 'not found' and what is 'found not to exist' which requires a paradigm shift if creativity is to be understood more fully. To understand creativity more fully requires not only the realisation that the observable aspects of a thing (for example the behaviours, techniques and products of creativity) are not its total reality or its total meaning, but also the realisation that the unobservable aspects are worthy of investigation and are essential and integral to understanding. This paradigm shift needs to include a move from the idea that anything not affirmed by science is false or insignificant,

toward the idea that there are things which cannot be affirmed by science which are highly significant and substantially real.

This shift is required because in the case of creativity it is the aspects which cannot be observed which are the most meaningful, significant and fascinating; the invisible dynamics. Energy is what exists between the visible, observable structures of creativity. Both science and myth tell us that energy is worth investigating because it holds insights into another order of existence beyond that which we can immediately perceive (Blair, 1991). Like concrete objects in our everyday experience, the poles in the dynamics of the creative experience are the parts we can initially perceive. Intellect and intuition, for example, are our describable, observable components of creativity. We can notice and name them. But I am arguing that the important aspect of the experience of creativity is the dialectical relationship between these observable parts; the dynamic which moves between them, or the energy which is generated by their relationship.

Understanding creativity as energy actually assists us in thinking more creatively. This is because it involves ceasing to think of creativity as an objective thing with certain and intrinsic qualities and beginning to experience and think of it with the qualities of energy; as flexible and connecting. In Buddhism there is a principle which states that it is our belief in intrinsic existence which sustains self-perpetuating dysfunction in our engagement with the world. By attributing aspects of existence with intrinsic properties we react to these with attachment or aversion, or other forms of habituated response (The Dalai Lama, 2005). From this springs the worldview that the world is inherently divided and disconnected and that each of these divisions is essentially independent and self-existent. In contrast, the Sanskrit term *Advaita* meaning 'not two', promotes the concept and worldview that the underlying order of existence involves no division; that the essence of existence is constant, unified and unchanging. This signifies that our ordinary perception of reality is in fact the perception of transient forms rather than essence or reality in terms of what is true and unchanging.

Contributing to the production of perceived reality and transient form is consciousness. Consciousness can change, and therefore perceived reality can change. This is why I state that a paradigm shift; a shift in consciousness is required. A shift toward a different understanding of creativity creates a change in creativity itself, in terms of our actual and real experience of it. For example, mechanistic or economic concepts of creativity are useful to an extent, but are transient forms of creativity which we have created, and have significant limitations. Seen this way, the task of understanding creativity becomes the task of coming up with other transient forms with which to embody our consciousness of creativity; those which are fuller, and more flexible and creative in themselves.

This leads me to my second point: that because consciousness creates the form, the concept we choose to understand creativity by in a sense both embodies and awakens the actual experience. Taking for granted a common consensus that creativity involves ambiguity and flexibility of thought and seeing new connections, a concept of creativity should embody these. A mechanistic concept does not embody these qualities; it is dependent upon intrinsic qualities in cause and effect relationships, an ultimately closed system. A mechanistic concept is therefore not creative in itself. An economic concept may embody ambiguity, flexibility and connection making, but again operates within a closed system with pre-determined objectives, and is therefore creative in itself only within these highly prescribed boundaries. My interpretation that creativity involves pursuing the manifestation of the latent potential held within the relationships in existence is not embodied in these ways of understanding creativity. I argue that creativity as an energy is a concept of creativity which is creative in itself, embodying the generally agreed upon qualities of ambiguity, flexibility and connections between things. I argue further that the concept of energy accommodates for transience of form and interconnectedness of existence, notions which are also creative in themselves as they propose the reverse of restrictive notions such as intrinsic qualities of being, and division. The extension of this argument which I cover in this chapter, is that a more refined concept of creativity is the idea of a particular kind of energy; creativity as a democratic attunement to existence.

My third point here is that understanding creativity as energy situates it both within and outside of the individual at once. The Dalai Lama (2005) suggests that unlike the study of material objects in space, the study of consciousness has two components. One is what happens to the physical brain and the behaviour of the individual (that which brain science and cognitive behavioural psychology are equipped to explore). The other is the subjective experience of the cognitive, emotional and psychological states themselves. I suggest that the study of creativity (and perhaps of consciousness also) involves both of these components, but also a third. The physical brain and behaviour and the subjective experience relating to creativity cover the elements of objective and subjective individualised experience. The third component also integral to creativity is the component which is not individualised; not experienced as situated within the individual person. If creativity is experienced as a loosening of boundaries; especially those between subject and object, individuality and unity and self and other, as I have interpreted it, it can not be adequately explained or investigated by approaches which situate its occurrence within the individual, as this perpetuation of focus on the self, the subject, misses the point. What I argue is that the experience of creativity can be viewed as something other than an individualised experience. It can be viewed as a reciprocal democratic experience, in that it is personal yet shared. It is the experience of lessening the differentiation between within and without, which necessarily involves the intrusion of or dialogue with the external, and cannot be entirely situated in the individual. Therefore a third component of investigation representing the energy between subjective and objective, self and other is needed.

However, because we do not have means to investigate energy or anything else, apart from as an object of our own consciousness and can not remove ourselves from the investigation, we must examine our own subjective and personal experience, or a range of objective, measured and generalised experiences of energy. That is; we can not know about creative energy independently from ourselves and therefore the way to investigate it is to make it the focus of our objective and subjective examinations. The Dalai Lama's study of consciousness involves objective brain and behaviour and subjective cognition, emotions and psychology. My notion of the study of creativity is that in order to shift it from a

centralisation upon the self it must also involve the objective and subjective investigation of the energy, relationships and dynamics with the external world occurring as we, the subject, experience creativity. Creative study should emphasise energy and relationship, not just the self. In light of the notion that divisions in existence are false and encourage us to fixed and habituated responses, the study of creative energy; accommodating qualities of interconnectedness and transience of form, is a potentially more expansive approach than the study of creative individual experience.

In this discussion I will outline the way in which the idea of democratic attunement can illustrate both the creative experience as an experience of certain kinds of energy and dynamic, and what the nature of this energy is. We are not as confident with our understanding of dynamics or energies as we are with the visible and the solid. We do not feel the same sense of grasp and knowledge of energy. Analogies to enhance our grasp are therefore important. Democracy is useful as an analogy because firstly, while also an abstract notion, it can be described in firmer terms than creativity. The objectives and connotations of democracy are more widely shared and specifically articulated than are those of creativity, as I will explain in this chapter. I will also explain how democracy is an apt analogy for creativity, embodying a number of the same essential characteristics, including a flexibility and open-endedness of process and outcome. Both creativity and democracy can be interpreted as essentially about co-existence in the world. I argue that existence as we generally conceptualise it is characterised by two features; being in the world as individuals and being of the world in inseparable connection to it. As Heidegger (1995) says, the reality is that that these two features are inseparable. A concept of creativity then should awaken us to bringing these features together. This chapter will demonstrate how the metaphor of democracy can do this and outline how both democracy and creativity stand for the notion of simultaneous individuality and integration in existence; of freedom within an organising but adaptive system. Importantly, both democracy and creativity also have the same strong relationship to incremental advancements toward the hidden potential of humanity.

Characteristics of democracy relevant to creativity

Before I explain how democracy works as an analogy for creative energy, I need to outline a specific view of democratic characteristics. The notion of democracy is currently being globally re-examined and re-defined due to a range of forms of political crisis and to views that its evolution is significant to our continued collective existence. Theorists of democracy of relevance here include Dewey (1916; 1939), Habermas (cited in Finlayson, 2005; Goode, 2005) and more recently, Monbiot (2003), Gutman and Thompson (2004) and Dryzek (2007).

Dewey (1939) articulated a view of democracy which identified its social and individual functions as central to existence and the betterment of man. Habermas (cited in Finlayson, 2005) saw his concept of the public sphere; a space where subjects participate as equals in rational discussion in pursuit of the common good, as the ideal of democratic politics. He regarded the collective judgement of the people as the fundamental source of legitimacy. Openness, inclusiveness, equality and freedom characterised the ideals of the public sphere, and are also characteristics relevant to this study on creativity. Later, Habermas criticised the consolidation of what he called a 'scientistic' model of politics; which operated in terms of relationships between 'experts', political leaders and citizens (cited in Goode, 2005).

Other characteristics of democracy relevant to this study stem from the deliberative democracy movement and its conceptualisation of how democracy should function. The deliberative democracy movement has grown out of a response to the 'scientistic', expert led model of politics among other things. Gutman and Thompson (2004) explain deliberative democracy as the theory and political process whereby decision-making is carried out by citizens rather than leaders. Its moral basis is that citizens should not be treated as the passive subjects of legislation, but as active and autonomous agents who take part in the governance of their own society. The process is therefore founded on equality and lack of hierarchy. The deliberation necessary to reach these decisions takes the form of public discourse or discussion rather than private reflection. The

process is dynamic and assumes an ongoing process of dialogue in which previous decisions can be critiqued and reviewed. Thus, deliberative democracy seeks transformation of views, not just the registering of views, through a process for reflecting on and refining opinions. According to Gutman and Thompson (2004) the primary criterion of the process is inclusiveness. A further characteristic is reciprocity; the premise that citizens owe one another justifications for the mutually binding laws which they create.

Dryzek (2007) prefers the term discursive democracy as this more specifically implies a necessarily social and inter-subjective process involving communication. Discursive democracy also implies a process less overly rational, more unruly and potentially contentious than deliberation, which includes argument, humour, emotion and storytelling. Dryzek challenges the stream of deliberative democracy which has developed an easy relationship with liberal and constitutional norms and thinking. He believes the term discourse in a Habermasian sense emphasises freedom in the ability to raise and challenge arguments, and thus to challenge systemic norms. In addition to participation, inclusiveness and equality, aspects of deliberative democracy which I make use of in this chapter in my analogy for creativity are pooled resources, open-ended outcome, dynamism, interaction, dialogue, tolerance of diversity, reflection, transformation, reciprocity, conflict, challenge, human emotion, and freedom within an organising system.

I also make explicit the underlying values in my view of democracy; that a system for organising human life should facilitate sympathy and concern for the experience of others as well as an adaptive spiral of growth and development of potential and the manifestation of potential. My view of democracy, like Dryzek's (2007), is a departure from Habermas (cited in Finlayson, 2005) and Gutman and Thompson (2004) in that it does not emphasise rational, logical discussion. The analogy of creativity as a democratic energy illustrates that in democratic creativity, logic and the intellect are resources equal among others, to be valued but not at the expense of the inclusion and participation of other creative resources such as intuition and emotion. Similarly, neither individuality or unity, freedom or discipline are dominant. The essence of the creative

experience is that all components of motivation, thought and experience hold power and that power is transitionally shared through these faculties. When these components are experienced in ambiguous and flexible transition, when their boundaries are deliberately blurred, the experience amounts to more than the sum of the parts.

Creativity and democracy embody the same fundamental idea of the realisation of potential

A fundamental link between creativity and democracy can be made by comparing Dewey's (1939) notion of democracy with Nietzsche's (2005/1887) notion of creativity. These ideas share a common idea of purpose: to reveal and to manifest human potential. Nietzsche's idea of the 'self-overcoming individual' illustrates his conviction that existence is about its full experience and about taking hold of the power to create and shape one's own potential. The self-overcoming individual is one who recognises that the only meaning of any value to be drawn from life is the meaning that is purposefully and personally created and that the task of life is not to discover one's nature, but to create it and live one's own unique creation.

Dewey's view that democracy is central to existence and the development of the potential in man and society is illustrated here:

> The political and governmental phase of democracy is a means, the best means so far found, for realising that ends lie in the wide domain of human relationships and the development of human personality. It is… a way of life, social and individual. The keynote of democracy as a way of life may be expressed…as the necessity for the participation of every mature human being in formation of the values that regulate the living of men together: which is necessary from the standpoint of both the general

> social welfare and the full development of human beings as individuals. (Dewey, J., 1939, p. 400)

Democracy is for Dewey more than a political system; it is a way of living. He emphasises human personality, relationships and participation in the shaping of the values of our shared existence as key aspects of this way of life. Hirsch and Miller both identify the opening of consciousness to relationships and implicitly suggest the blurring of boundaries between self and other, as important in creativity. However, neither of them really articulates the same degree of emphasis on shared existence in their philosophies of creativity, as Dewey does with his philosophy of democracy. I suggest that this lack of acknowledgement of the fact of our co-existence is the central oversight of most ways of understanding creativity. Most authors, including Hirsch and Miller have undervalued the significance of a number of markers indicating the central importance of shared and democratic existence in creativity.

In creativity and in democracy, the relationship of the self with the world affords greater potential than the pursuit of individuality

An important point which the democratic analogy brings to light is that the notion that creativity is experienced through the pursuit of autonomy, individuality and freedom of personal expression is misguided. Traditionally autonomy has been conceived of in terms of individualism, independency, self-sufficiency and entrepreneurship and as opposed to community (Bleazby, 2006). Thus creativity as a quest for autonomy is conceived as opposed to the constraints of the community and social responsibility (McLaren, 1999). However, creativity as a democratic attunement to the world illustrates a new way of viewing creative potential; that potential is greater when the individual and their community are conceived of as in a dynamic relationship.

The relationship between autonomous creative individuals and their society is commonly confused. Nietzsche himself is ambiguous about the significance of the relationship of the self with the world. At times his philosophy seems to be inclusive and embracing of the individual/universal relationship, as in his concept of life affirmation (Reginster, 2006). However, in the concept of *Entstehung;* the emergence of adaptation and changing function that occurs through history, the relationship between individuals and their universe appears to be characterised as centrally oppositional rather than unified. *Entstehung* occurs due to a struggle with the naturally excessive and unpredictable forces of the universe (Irwin, 2001). And common interpretations of Nietzsche's Will to Power (2000/1872), cast the will, energy and goals of the individual as the primary concern of existence while external entities tend to be cast as the source of oppression. For example, Nietzsche states that to draw meaning from life that is personally created, the individual must struggle with and overcome both internal and external repressive forces using the Will to Power (Nietzsche, 2000/1872). Smeyers (2001), interpreting Nietzsche describes that: 'A human being is an individual, whose essence is uniqueness and singularity. The human being has to overcome all that represses her nature and denies her freedom, including external authorities' (p. 3).

Smeyers (2001) interpretation implies the traditional view that the nature of freedom (and the source of potential) is expression of individuality. Smeyers interprets Nietzsche as conceptualising humankind as ordinarily in a state of repression by his community and external forces. These smother the uniqueness of the individual, who should fight to clear himself of their influence to allow space for the freedom of expression of individuality; to create their own existence. This common interpretation of the nature and reason for freedom is problematic. Most people can probably identify that lifting the pursuit of individuality among the highest of aims is flawed on many levels. Yet this persists as a definition of freedom, because we have little understanding of how else to conceive of it.

An alternative way of understanding individuality is provided by Schopenhauer, who frames it as just one perspective of our existence. He indicates a dual view which is fuller and more suggestive of our actual experience of life:

> One can thus regard every human being from two opposed viewpoints. From one he is the fleeting individual, burdened with error and sorrow and with a beginning and an end in time; from the other he is the indestructible primal being which is objectified in everything that exists. (Schopenhauer, 1970, p. 47)

When we regard our existence from the two viewpoints, Schopenhauer implies, we have a fuller understanding of the reality of our situation. I argue that this fuller understanding affords greater opportunities for creativity than exploring individuality alone does. Creativity conceived as freedom to express uniqueness and singularity is creativity in a single cause: for the advancement of the self in the world. To believe that this is the ultimate freedom does not make logical sense. This is to limit possibilities and miss creative potential, through blindness to a closer approximation of the reality of our situation; the existence of a flipside to existence.

I argue that like democracy, creativity relies upon the central connection of the self with the world. The analogy of creativity as a democratic attitude or approach to existence offers a description of the energy between individual and unified experience and illustrates how this energy affords greater creative possibilities. Democratic systems rest on the understanding that we are connected to others. Both Dewey (1939) and Dryzek's (2007) versions of democracy indicate it as a socially oriented process. It is socially-oriented in part because in the long-term, the development of greater freedom and potential in individuality depends upon establishing collective responsibility in the form of connections, support systems and cross-fertilisation of resources and ideas. The direct and actual experience of creativity tells us the same thing; the fullest glimpse of potential comes from the comprehension of the special nature of one thing combined with comprehension of the meaning of its connections, support and cross-fertilisation in the universe.

The dynamic between self and world enhances creative potential through the ability to experience detachment

One of the reasons for greater potential in experiencing creativity as a connective experience is that this affords a loosening of the ego; the kind of emotional detachment which frees and opens the thoughts. This is explained by Koestler's (1976; 1979) theory of the dual aspects of existence: Self-Assertiveness and Self-Transcendence. Self-Assertiveness is the drive to act in accordance with one's own unique individual interests, to express individuality and to survive and flourish. Self-Assertiveness is thus also behind our ego, which gives us the drive to develop the discipline to persist until we find order, to master the skills and techniques we need, and to use our intellect to apply these. The importance of perseverance and a high level of discipline in creative experiences are also echoed in both Hirsch and Miller's texts. Koestler explains that Self-Assertiveness provides drive but is also limiting, because it tends towards self-protection and the development of fixed, ego-driven habits.

All organisms also have a tendency to Self-Transcendence. This is the drive for unification with others and with something higher than ourselves; a drive to commune with the infinite and the universal. Self-Transcendence is also evidenced by Miller in his examples of experiencing a desire for truth, aesthetics, beauty and wonder and by Hirsch in his examples of communing with angels. Self-Transcendence brings us to seek belonging and to contribute to whole, larger systems. Because the Self-Transcendent tendency is without ego, I suggest that it is also that which allows us the detached or disinterested state, identified by Hirsch as experienced by Shakespeare and Keats. Detachment is like a distancing from the individualised self toward a universal self; a loosening of the ego and of self-protection and fixed habits. Self-Transcendence and detachment are therefore important in order to be open to more and new forms of potential which can only be seen once the habits of the mind and ego are loosened. An excess of Self-Assertiveness means a dominance of the pursuit of individuality, fixed and self-protective habits. A balance of Self-Assertiveness with Self-

Transcendence provides drive and yet also the ability to shift perspectives away from a focus on the self, to be more detached and thus flexible and reflective.

The dynamic between self and world enhances creative potential through the opportunity to understand and drive towards new forms of integration and harmony

As well as the ability for creative detachment, Koestler explains other aspects of the greater potential afforded by the dynamic between Self-Assertiveness (individuality) and Self-Transcendence (unity). In general terms these benefits are underpinned by the view that creativity is finding order and harmony out of chaos. Self-Assertiveness provides a drive for development through competition and ego which will take the entity some way forward as an individual, but alone it will ultimately undermine its own progress, because of a lack of integration with the whole. Bohm (1996a) also has an argument for the negative relationship of excessive Self-Assertiveness to human creativity. According to Bohm a creative state of mind is one in which petty objectives such as security, furthering of personal ambition and glorification of the individual are put aside. These motivations may offer the occasional flash of insight, but are not compatible with the harmony, beauty and totality characteristic of real creation. As well as the tendency to hold the mind a prisoner of old familiar structures and habits of the ego, individualised objectives also mean individuals act in an independently determined order, lacking substantial reference to the whole. The result is what Bohm terms a ‘general mess’; an inharmonious, incongruous and conflicted result.

So Self-Assertiveness – individuality, alone does not produce strong creativity. However, neither does pure Self-Transcendence – integrated unity. The excessively Self-Transcending state tends towards tranquillity and quiescence with the whole. In its pure state Self-Transcendence means de-personalisation, self-sacrifice in the interest of the whole; a herd mentality. In their pure form both states are static; together, they are creative.

When Self-Assertiveness (individuality) and Self-Transcendence (unity) are in a democratic, power sharing relationship, they avoid the extremes of both and the dynamic manifests in 'flexible strategies, original adaptations and creative syntheses which originate higher, more complex and more integrated forms of thought and behaviour' (Koestler, 1979, pp. 59-60). This is because integration of individual entities for a common purpose provides the connections and cross-fertilisation required for the development of the common entity, without excessive inhibition by individual agendas.

The analogy of democracy explains this relationship more concretely

I argue that the analogy of democracy explains this phenomenon in more concrete terms. In the analogy of democracy the relationship between self and world is moved from the abstract realms of the search for truth and meaning in existence, to the concrete realm of society. The abstract desire to explore identity and develop personal potential is rendered more concrete in the democratic powers and processes we use to develop personal and political autonomy: ambition, drive, communication, decision-making and action. The abstract desire to transcend and to commune with something higher than ourselves is rendered more concrete in the democratic notion of contribution to and interaction in our society and participation in its adaptation and evolution. The potential held in the abstract dynamic between individuality and unity is rendered more concrete in the analogy of a democracy which illustrates the potential in the integration of individuals with their society.

For example, we can see the ultimately anti-creative effects of excessive individuality in the political example of anarchism. Anarchism can be described as the political equivalent of excessive Self-Assertiveness as it is characterised by individuals acting upon individual objectives in an independently determined order and lacking substantial reference to the whole. It results in conflict and violence. In modern times it has not resulted in the establishment of a satisfactory

new form of social organisation (Monbiot, 2003), in which opportunities for developing potential are maximised: just as excessive individualism does not result in creativity in which opportunities for developing potential are maximised. Because of its more visible nature and our cultural conditioning it is easier for us to see why anarchism lacks creative potential, than it is to see why the radical pursuit of autonomy lacks creative potential.

I further suggest a broader interpretation of the latent potential in the relationship of self with world, and of individuality with unity. These mirror the idea of the relation between the known and the unknown. The metaphor of democracy presents creativity as the extension of understanding from self to other; to the world. Our ordinary perspective is that of being in the world; being the self and viewing the world as consisting of objects external to the self. The glimpse of a shift in perspective we experience in creativity is the difficult shift from being in the world, to being of the world. If creativity is an exploration of connections and perspective shifts between the self and the rest of the world, it can be described as an exploration to come to grips with what is other than the perceived self, or with what could be other; with 'otherness'. Explorations of 'otherness'; of what is outside the known self, are explorations of the unknown. The democratic relationship between being in and being of the world therefore illustrates more concretely the relationship between the known and the unknown; between what is thought to exist and what could exist.

As I described in the phenomenological analysis of my own experience, creativity is about developing consciousness of and action toward the potential afforded by being human, in and of the world. I argued that the glimpse of the elusive potential we see when we experience profound creativity, lies in our seeing the offer of possibility in everything, in existence. This is the potential of something that is other than the self; other than what is known, or what was thought to be in existence. The analogy of creativity as a democratic kind of energy can describe this because it suggests an energy which facilitates shifts in perspective. Creativity involves continuous shifts in perspective; from the point of view of the self, to the point of view of others; from the point of view of what

is, to the point of view of what could be; from the point of view of the subjective, to the point of view of the subjective and objective in dynamic relationship.

All of the fundamental dynamics of creativity operate democratically

> The foundation of democracy is faith in the capacities of human nature; faith in human intelligence and in the power of pooled and cooperative experience. It is not belief that these things are complete but that if given a show they will grow and be able to generate progressively the knowledge and wisdom needed to guide collective action. (Dewey, J., 1939, p. 402)

Dewey's words point to the power of pooled and cooperative experience; that is, the potential within the connection of the self with the world, as has just been discussed. Pooled and cooperative experience also describes the other dynamics in the experience of creativity; the combination of intellect and intuition, freedom and discipline. I argue that a democratic attunement to existence means experiencing the essential features, resources, capacities and drives of creativity, as in a democratic relationship. The essential features may be conceptualised discretely, yet in practice meld inseparably. As in democracy, in creativity pooled experience facilitates reflection and transformation.

Creativity is a democratic experience because it is fundamentally the experience of discovering potential in the relationship of the self with the world. It involves a democratic attunement or receptivity to other relationships; to that between consciousness and its objects; between individual and unified phenomenon; between intellect and intuition, and between freedom and discipline. To be democratically attuned to these affords greater creative potential because their potential lies in their co-existence as separate yet integrated entities.

The democratic dynamic in the paired features intellect and intuition, and freedom and discipline is implied in Hirsch and Miller's discussions. These demonstrate the way in which reason, intellect and clarity on the one hand and intuition and emotion on the other are ultimately limiting when either is excessively dominant. Their democratic and interdependent nature is illustrated further in Nietzsche's work. Nietzsche (2000/1872) describes the tendencies of the Apollonian and the Dionysian, which characterise the internal conflicting drives of man. The Apollonian tendency stands for the connection between our human intellect and the discipline with which we use it. Apollo is a god of restraint, of freedom from the wilder emotions, of philosophical calm (Marshall, 2001), measure and harmony (Kaufman, 2000). The Apollonian tendency in man signifies clarity, self-control, formed boundaries, individuality, celebration of appearance and/or illusion, flawless technique and idealised perfection.

The Apollonian is essential to us because through it we retain sanity and security in the harsh reality of life. It represents an artificial certainty; our belief in our own ability to comprehend and categorise the world as it really is, and to live in it with controlled order and clarity (Marshall, 2001). The Apollonian tendency underlies the importance to us of our intellect which desires clarity and precision and aspires to perfection. This is an important protection for us. The intellect allows us the illusion that we are in control of our destiny, that we know things and their meaning. Without it life is incomprehensible and we can not function.

The Dionysian impulse, by contrast, represents intoxication, celebration of nature, instinct, intuition, individuality dissolved and hence destroyed, dissolution of all boundaries and excess (Nietzsche, 2000/1872). Rather than the detached, rational representation of the Apollonian, the Dionysian impulse involves a frenzied participation in life itself. The Dionysian tendency thus stands for intuition and freedom and also indicates the frightening side of these qualities. It is depicted as the knowledge that our sense of order is false, and:

> the terrible awe that seizes us when man is suddenly bereft of reason to account for some phenomenon… the blissful awe that arises at the inability, if not the collapse, of reason…it is a sense of frenzy or ecstasy

> or rapture in which one realizes that reality is a unity, a one, and not composed of individual objects individuated in space and time. (Marshall, 2001, p. 113)

The Dionysian is thus the glimpse of the unknown and of the potential therein, without the means to create meaning and knowledge of it. Nietzsche (2006) uses the metaphor of a tightrope walker for one who challenges order and courts the Dionysian. Marshall (2001) states that the metaphor of man, rope and abyss make clear the importance of living a life of challenge and danger. The self-overcoming man is contrasted with the Apollonian man, tied down by a lack of desire, seeking security, comfort and happiness. The self-overcoming (creative) man must take risks and expose himself to danger, and in the end sacrifices himself to his created existence, as the tightrope walker does when he falls.

I argue that the tightrope walker signifies more than the importance of challenge and danger in life. He represents the simultaneous experience of the Apollonian and the Dionysian; of the extremes of freedom and discipline and intellect and intuition. This is a man who uses a level of skill which has taken much practice, devotion to perfection and discipline to develop. He uses high levels of intellect gained from practice and the intuitive use of his body in order to walk the rope. But while highly disciplined he is also a figure willing to court danger and is free enough to take the ultimate of risks. He is a master of balance; of the tightrope and of the fundamental experiences of existence. Nietzsche's metaphor of the tightrope walker is a metaphor for the simultaneous expression of two modes of existence; freedom and discipline and intellect and intuition, which we are accustomed to thinking are opposite extremes and therefore separate. The tightrope walker is a metaphor for the democratic experience of the essential and fundamental features of creativity.

Creativity, like democracy, is promoted by conflict

Conflict has been posed as central to creativity by several of the authors prominently utilised in this study, including Hirsch (2002), Nietzsche (2000/1872) and Bohm (1996a). In democratic systems and in the creative experience, conflict occurs because of our conceptualisation that people, processes and concepts are separate and opposed. Rothenberg (1979) defines oppositional forces as resistant or radically different as well as reciprocal within the same category. For example short and tall are opposing principles – they are radically different dimensions within the category of height. Thus, it can be argued that individuality and unity are radically different concepts within the category of social or environmental connection; intellect and intuition are radically different within the category of mental faculties; and freedom and discipline are radically different within the category of autonomy or choice.

As I have noted in the introduction, Rothenberg explains that although we use the term 'opposite' to apply to concrete phenomena, it is actually a purely abstract concept. Nothing in nature is opposite, unless we define it as such. Opposition is relative, and depends on establishing a reference point, and relating other points to it. A standard English dictionary definition also says opposition means resistance, being hostile or in conflict or disagreement, of a contrary kind, or as different as possible from (*The Oxford Paperback Dictionary*, 1994). Opposition then is an abstract concept of entities highly distinct and radically different from each other, yet falling within the same category, which are not sympathetic but are hostile, resistant and in conflict with each other. It is because we define qualities as polar opposites that we experience them as conflicted. This occurs in both democracy and creativity.

Conflict in democratic societies arises because people define themselves as individuals, and different, separate and often opposed to the rest of the world. Democracy deliberately provides opportunities for conflict between opposites and individuals (Monbiot, 2003). As Dryzek (2007) says, argument, contention and emotion are important human aspects of democratic deliberation. Democracy

permits the expression of disapproval and conflict and the overthrow of governments and policies without bloodshed. Conflict in the creative experience also arises because we define ourselves as individuals, and we struggle to connect and find our place in the world. Hirsch's whole philosophy of creativity rests on this idea. His angels and demons and the notion of duende represent our struggle and pain as individuals, with ourselves and with the world. As in democracy, in the creative experience, we also experience conflict through our perception that the aspects of our experience are different from and opposed to, each other. Our experience of Apollonian and Dionysian tendencies; the desire for chaos and the need for order; conscious and unconscious thought; destruction and reconstruction; freedom and discipline; individuality and unity; intellect and intuition; passion and detachment; Self-Assertiveness and Self-Transcendence; symmetry and asymmetry; depression and aspiration; tragedy and comedy; the mundane and the beautiful, are perceived as separate, distinct qualities. The conflict of these opposed experiences produces competition in which one extreme or the other emerges as dominant, and suffering as we experience lack of balance and disequilibrium.

Creativity is facilitated by conflict in the same way that democracy is. Firstly, while conflict emphasises a separation, paradoxically, the suffering it produces holds the potential to do the reverse. The experience of suffering can loosen the distinction between the individual and the universal experience. Schopenhauer (1970) regarded suffering the calamities, torments and miseries of life as entirely in order because these assist us in an essential outlook on life:

> From this point of view one might indeed consider that the appropriate form of address between man and man ought to be, not monsieur, sir, but fellow suffer, compagnon de miseres. However strange this may sound, it corresponds with the nature of the case, makes us see other men in a true light and reminds us of what are most necessary of all things: tolerance, forbearance and charity, which each of us needs and which each of us therefore owes. (p. 15)

Suffering is significant in that it provides an opportunity to find reason for and evidence of our humanity, brotherhood and need for each other. The notion of Bildung; the self development of the human spirit and human race, Hammershoj (2006) contributes another way of understanding why disturbance is necessary in the act of seeing the relationship between the self and others. Bildung is brought about in part by a formation of the personality through a transcendence of the self into the social. The abandonment of the self allows the experience of an alien world greater than our own. This provides a disturbing shake up to our perception and the potential for new understanding. Suffering and disturbance facilitate new and sympathetic perception.

In society personal suffering also holds the potential for sympathy; insight into what the experience of others might feel like. As Dryzek (2007) notes, storytelling and emotion are important aspects of democratic deliberation; we can not achieve sympathy through rational arguments. Suffering can tell us what it is like to be in need and help to keep us humble, to remind us that we can not control life and do not know the future. The notion that if we create a society which looks after everyone we safeguard ourselves becomes clearer. Working to relieve the suffering of others means working for ourselves as well.

Saito (1996) provides yet another context for understanding the relationship between sympathy and creativity in his discussion of Dewey's notion of intelligent sympathy in the development of the ethical self. He notes that sympathy as a quality of human relationships is a feature not much discussed and that Deweyan scholars usually highlight social intelligence and communication as the main features of Dewey's idea of democracy. He argues that a deeper examination of the nature of human relationships is required for a better understanding of democracy. I agree, and argue that a more explicit acknowledgement of the meaning of relationships in both democracy and creativity would incorporate more than skills and intelligence for relationships; it would incorporate sympathy, as a quality of feeling associated with relationships. Saito argues that sympathy is an ethical dimension of the imagination, as it is that imaginative aspect which connects us with people. In the context of education intelligent sympathy connects the teacher's self to the student's self and 'serves

as an eye to reach the other's existence' (p. 5). An awareness of the suffering of ourselves and others in a democracy is similar to the same awareness in creative experiences; this can deepen the experience of seeing the individual and the universal experience as reciprocal.

My connection with my student as I write comments on her essay is connected with a sense of suffering. It stems in part from my own experience of how hard it can be to be set a task and to have to summon and invest emotional and mental commitment to it and to have faith that this is a valuable use of energy. This memory facilitates empathy with the student and connection to the universal importance of maintaining faith that effort is worthwhile even when it comes at a cost. As Nietzsche (cited in Reginster, 2006) says, suffering offers us the important and liberating knowledge that we do not and can not understand the world. The reason to observe and treasure suffering and the flawed aspects of life is that they save us from arrogance and give us the crucial reminder of our own humanity.

Both Hirsch and Miller also noted this. Attention to the flaws in existence awakens us to both beauty and pain, gives us a sense of the incomprehension and mystery of life and can reveal new relationships to us which we would not otherwise have noticed. Nietzsche's notion of life affirmation (*Amor fati*) (Nietzsche, 2000/1888) captures the idea that suffering connects us, and that attention to the real; that is the tragic and flawed experience of life, affords opportunities for new creativity. Through this real attention we see and appreciate things we would not see otherwise. Smeyers (2001) explains:

> Tragedy is for Nietzsche a way to overthrow nihilism by the discovery of the special value of what is near to us, the value of what seemed to be unimportant. The things around us are wonderful because they are fragile. One can love them, they can become precious and things we care for, because they are not immune from the uncertainties of life. Realising this, the little things of life can achieve a new significance for us, which may lead furthermore to a better attunement to the world. (p. 97)

In addition to a better attunement to the world, *Amor fati* can be described in terms of a democratic attitude to our own power in existence. Because of our need to categorise things based on their similarities to and differences from already established categories we tend to ignore or overlook what is individual and actual in the situation at hand. The kind of freedom we can gain from affirmation of life is freedom from the deception that we can know and understand the world. It is freedom from the tendency to dismiss incongruences and phenomena which do not fit our mental patterns. We are then open to possibilities and our attitude is a spirit of inquiry. This is freedom from being wholly driven by the ego; by the need to always put the self first and to control existence. Attention to conflict, suffering and the flaws of existence give us an essential humility and bring us closer to the truth that we have a place in but are not masters of the universe.

As well as a means to see connection and focus attention, in the creative experience, as in democracy, conflict is a spur to action and persistence. When we suffer or are discomforted by conflict, our mental and emotional experience is extended in order to discover ways to remove ourselves from discomfort or suffering. Miller also notes this; in science tension between elements such as theory and imagery results in unaesthetic experiences which are important because it is these that make us work harder to create meaning. As Nietzsche, Hirsch and Miller all indicate, a radical transformation of thought becomes a necessity after removing the old forms of order.

Conflict creates a range of ways to arrive at creative transformations of thought. A democratic political system is constructed around opposing principles. The theory of democracy holds that this is a good system not just because the holders of different views and principles are given a voice but because their very construction as opposed is good for society. For example, opposing parties will challenge each other to 'keep each other honest', or in other words, their challenges to each other will ensure that no one side be allowed to deviate too far from what is widely perceived as an accurate portrayal of truth, good values and reality. The theory is that their construction as opposites can also help refine and

incrementally move ‘truths’. Opposing sides will come up with better adapted and more refined scenarios for the running of a society.

The same democratic process of understanding by opposition is observable in creative thought. Holton describes a similar phenomenon as central to the progress of science:

> Not far below the surface, there have coexisted in science, in almost every period since Thales and Pythagoras, sets of two or more antithetical systems or attitudes, for example, one reductionist and the other holistic, or one mechanistic and the other vitalistic, or one positivist and the other teleological. …Science has always been propelled and buffeted by such contrary or antithetical forces. Like vessels with draughts deep enough to catch more than merely the surface current, scientists of genius are those who are doomed, or privileged to experience these deeper currents in their complexity. It is precisely their special sensitivity to contraries that has made it possible for them to do so, and it is an inner necessity that has made them demand nothing less from themselves. (Cited in Rothenberg, 1979, p. 240)

Holton gives scientific examples of these sets of antithetical systems: matter and energy, space and time, the gravitational and the electromagnetic field. The exploration of these opposites has resulted in enhanced understanding of the distinctions between entities, the clarification and adaptation of our ideas of how things are different and how they are the same. As our concepts of opposites become more sophisticated these developments in our conceptual understanding lead to better formulation of opposites; those which more and more adequately characterize the materials and understandings required in the particular context (Rothenberg, 1979). Conflict is thus a useful force for creating new knowledge and its potential is open-ended and eternally recurrent. It is this open-endedness; this eternally dialectical process of testing oppositional truths against each other in order to move truth forward incrementally, which makes conflict a central process in both democracy and creativity.

The experience of more highly adaptive democracy and creativity through conflict rests on the ability to break habits

Conflict is useful to us in creative thought, in the same way as it is useful in democracy. However, a moment's reflection tells us that conflict in the mind, emotions or society does not always seem productive and can sometimes result in deterioration and marginalisation from relationships and hardened attitudes, thoughts and feelings. An example of transformation through conflict in democratic societies is observable as societies cope with increasing migration and the mingling of cultures. Democracy provides us with the theoretical expectation that people are to be treated with equity. With increasing migration, notions of which cultures and people are like ours and which are different to ours become more and more conflicted. We can either decide to further entrench our prejudices or to creatively transform them. There is the potential for a finer appreciation of the uniqueness of other people, but also to see how differences between cultures are sometimes artificial, exaggerated and misunderstood. We can begin to refine our concepts of other cultures and in so doing, gain a better understanding of ourselves.

This example illustrates that the incremental forward movement of truth is central and significant to the capacity of conflict to produce creativity. Creativity is truth and meaning progressing incrementally in spirals rather than circulating. Circulatory opposition means our prejudices are entrenched and we repeat the same conflicted experiences over and over. In Hirsch's text, Jackson Pollock's black paintings appear to demonstrate this same movement of truth through opposition and conflict. According to Hirsch these were confrontations with darkness. They had the effect for Pollock not of maintaining the power of his depression, but of bringing his confrontations into the light in order to enable a separation of him from them, to examine them, and to re-unite himself or re-form a new truth of himself.

Democracy thus highlights the potential strength and richness in diverse perspectives which challenge each other. Schopenhauer (1970) discusses the importance of the continual advance of knowledge through the lifespan, in 'which our point of view is to a certain extent being continually altered (and), whereby things reveal to us sides we did not yet know' (p. 88). Creativity is a democratic experience because it progresses through advances in understanding by the revelation of sides we do not yet know. In creativity and democracy crisis is generated by separation and distinction of entities. Creative potential is held in attention to the nuances of the relationship and crisis, through which the possibilities for a new and advanced form of unification can be seen.

It is useful to be conscious that humans are limited in their ability to use the creative potential in conflict. To some degree this can be attributed to our tendency to fixed and reductive modes of thought. Reductionism is the tendency to reduce things to distinct elements, to break apart and analyse things separately, rather than to understand them as wholes (Shlain, 1998). Conflict and opposition are strengths which afford creative opportunities, but because of our tendency to allow reductionism to rule our thought processes, they are difficult for us to wield creatively.

Once we have begun by characterising entities as opposite and distinct, we tend to continue to do so, and find it difficult to adapt and transform our thought processes. For example, for many of us it is habitual to think of freedom and discipline as opposed to and different from one another. Because they are conceived of as so differently experienced, our notion of their combined operation tends toward the idea that one or the other must be compromised or sacrificed. The notion of their enhanced function by integration does not come so easily. Bohm's (1996a) view is that creativity in thought is at least partly dependent upon our becoming conscious of our fixed and habitual patterns of thought. These are 'mechanical reactions' which cause us to 'go to sleep' (p. 30); to put our thinking on automatic pilot, which is a passive, not an active state. Reductionism and verbal categorisation are two of these mechanical thought patterns and are deeply embedded in the way we think. The act of perceiving of individuality and unity, intellect and intuition, and freedom and discipline as

opposite entities is a construction of thought which potentially facilitates challenge to our ideas, but without a high level of consciousness of this function it becomes reinforcement of our fixed and established thought patterns. Reductionism is a difficult form of thinking to escape from because we are attracted by its precision and offer of certainty.

In both creativity and democracy there must develop a level of consciousness of thought patterns if creative use is to be made of conflict. Of democracy, Dryzek (2007) states that 'the only condition for authentic deliberation is the requirement that communication induce reflection upon preferences in a non-coercive fashion' (p. 1). In democracy interaction and reflection help us to learn to change judgments and preferences. A society which is unconscious of its patterns of history is likely to perpetuate fixed prejudices and values and to repeat the same mistakes. Social progress is very often instigated through force, but also requires times of reflection and analysis. Consistent, eternal and inevitable conflict is exhausting. Many might consider that it is a mark and an aspiration of a democratic society to understand the patterns of the past, to attempt to develop ways to reduce conflict and to find new methods for social evolution.

Thus, the main problem in the conception of conflict as central to creativity is that it is an incomplete idea. An emphasis on conflict; as in Hirsch, who repetitively discusses combat with demons; suggests that all change must be brought about through a fight, and minimises the role of change through reflection. And yet many instances of where reflection was used to break habits are discernable in Hirsch's text; Pollock's black paintings being one of these. Both Hirsch and Miller's texts also carry the suggestion that an important function of the intuition and of different states of consciousness is their reflective potential. There are many examples of new forms of thought and experience appearing from the edge of sleep, from reverie and from the sub-conscious. The intellect seems to need to be subverted sometimes, for habit breaking reflection to occur.

I suggest that the role of conflict in a democratic society illustrates that in the experience of creativity conflict is fruitful but should not be viewed as its most

central and significant aspect. The experience of creativity is not centrally about combat with our angels and demons, and about dwelling in our own personal chaos and the dark sides of our nature. Both the notion of personal chaos and constant political revolution indicate the overruling of the sense of unity by the ego-driven desire for individualistic passion and power. As in a democracy, in the experience of creativity, conflict should be cast not as the primary means to an end, but as means to interact and bring perspectives to light, resulting in the opportunity for enhanced consciousness of our mechanical reactions and our fixed and habitual patterns of thought.

Creativity, like an effective democratic system, is neither characterised by the experience of eternal conflict, nor the experience of a search for balance. According to Irwin, for Nietzsche the notion that existence involves a search for equilibrium is mistaken. Balance and equilibrium are artificial notions:

> Equilibrium is a conservative assumption that the norm has some basis in a universal "truth" rather than being an incidental (if at the time, important) contingency. Aristotle's discourse of a "balance" to moral traits reinforces the normative dynamics of morals, limiting excess and corresponding disorder. (Irwin, 2001, p. 48)

In Nietzsche's philosophy norms hold no weight, and the notion of a constant return to equilibrium implies a static quality to nature which is at odds with his principles. Creativity is, like democracy, not centrally about conflict or balance, but is the experience of the incremental building up of meaning based on the enhanced consciousness of the limits of fixed habits of thought and action.

Creativity, like democracy, can be promoted by tolerance and attention without conflict

While conflict has been described by Hirsch as centrally characterising the creative process, others including McAra McWilliam (2007) and Bohm (1996a; 1996b), have described creative states in non-conflicted terms indicating tranquillity, detachment and tolerance. Examples from both Hirsch (2002) and Miller's (2000) work also indicate that conflict does not always characterise the creative experience. Hirsch discusses Keats's Negative Capability and Poe's description of a creative state of mind on the edge of sleep while Miller describes 'mind-popping' and the importance of allowing the mind to wander with no set goal. All of these examples indicate flexibility, a suspension of effort toward any goal and an absence of resistance and conflict. Much of Hirsch and Miller's work also indicates the key role of ambiguous thought and experience in creativity. Ambiguous thought is characterised by tolerance of indefinite boundaries and vague categorisation and is highly flexible rather than fixed, definite and oppositional.

In democracy, tolerance can be practically demonstrated in the crucial processes of listening and dialogue. Bohm (1996b) believes that his concept of dialogue is a potentially transformative social enterprise. In his dialogical process, people are brought together to participate in an interaction for which there is no particular aim aside from a spirit of genuine interaction itself. The lack of aim is significant; the purpose is not to achieve consensus, to hold debate or to make decisions. It is to give people the opportunity to speak and to listen to each other and to train them to observe the flow of meaning in the interaction.

The same processes of listening and dialogue are part of creative experience. Hirsch indicates an experience of casting off of knowledge and 'listening' to the outer environment or the inner intuition; seeing these with fresh eyes to allow a creative perspective to emerge. From a creative point of view, he suggests, the subject-object relationship is not static or one-way, but a transferable relationship or dialogue. Miller seems to agree to the extent that the listening relationship

occurs between the intuition and the self, but does not value the creative exchange between the self and the environment as highly. The general experience involves a weakening of the boundaries and barriers between that which we perceive as ourselves and that which we perceive as not ourselves. Buchen (1974) says that the traditional analytical process is unilateral, one directional. In this process the subject comprehends the object: the tree. But creativity is mutual and two-directional. The object; tree, communicates its own meaning in its own language. This dialogue is dependent upon us, the subject, loosening our hold on the categorisations we have of the object and on the roles of ourselves and the object in the act of perception. In a dialogue, in order to really listen or to see we must be prepared to hear and view new and different perspectives and to take both active and receptive roles. Khattar (2001) has also explored ways of understanding this phenomenon. He suggests that the reason for our difficulty in developing a more participatory mode of being in which subject and object are less well delineated, is our perception of reality through a habituated need for certainty and stability and a fragmentary sense of order. In this way we are alienated from our surroundings. Like Bohm, he suggests it is possible to dissolve this fragmented perception through attentive perception, listening and dialogue in the present which facilitates recognition of the participatory nature of how one thinks, feels and acts.

In summary, Bohm's dialogue (1996b) is not the presentation and analysis of two or more perspectives, it is following the stream of meaning flowing through words; it is suspension of your own opinions and looking at all opinions. In dialogue difference of opinion is paradoxical rather than problematic. That is, while a problem requires active solving, a paradox cannot be solved, and requires a different approach. A paradox requires sustained attention to the paradox itself; the diversity of views, the interaction. Creativity research reports on a number of similar notions to the dialogic experience of sustained attention to diversity and following streams of meaning. For example, Hausman (1976) discusses paying attention to the 'fine shades' of an aesthetic object. The fine shades are the areas in which novelty often occurs. The fine shades are the subtleties, the aspects which may not appear prominently at first. In addition, in business there is a phenomenon known as 'valuing the periphery' (Epstein, 2007). This indicates

that those individuals who are at the fringes of the organisation and are less noticed often have the freedom to explore new possibilities. The creative experiences of allowing the fine shades to come forward and be seen and heard, and valuing the less-noticed fringes of a business organisation, image or idea, are democratic in nature. They involve allowing and observing the participation of all streams of meaning, feeling and experience, regardless of status and listening and suspending the urge to evaluate.

Creativity, like democracy, embodies the idea of ambiguity

Ambiguity is central to Hirsch's creative philosophy. Angels and demons are interdependent, embodying similar ambiguous qualities but dependent upon each other for their full meaning. They are also intermediary figures; they represent both man and spirit or God and are the means of communication between the two. In this capacity their purpose is to help us to see the transitory nature of all things. Ambiguity is also apparent in Miller's emphasis of imagery in creativity (2000), Keats's Negative Capability (Hirsch, 2002; McAra-McWilliam, 2007), Bohm's dialogue (1996b) and Rothenberg's Janusian thinking (1979). Janusian thinking is the capacity to conceive and utilize two or more opposite or contradictory ideas, concepts, or images simultaneously and without attempt at reconciliation. These concepts all involve observation of all ideas, including those which appear ambiguous, incongruent, contradictory, or are otherwise uncomfortable. They thus demonstrate the democratic principles of full participation and inclusion.

Dryzek (2007) states that deliberative democracy should be pluralistic in embracing communication across difference without erasing difference. I argue that in a democratic society, tolerance of ambiguity, participation and inclusion are significant for creative as well as egalitarian reasons. Diversity is a core aspect of a society and this diversity creates uncertainty. To a certain extent trends become apparent through observing history, but specific future events are difficult to predict because of the complex diversity of variables in the make up

of human society. Uncertainty is further aggravated in our ecosystem because of the competitive, creative, adaptive and progressive nature of humans. Therefore the goals of a democratic society can not be fully articulated and defined; this would fix them when they need to be flexible and adaptive.

Diversity and uncertainty can therefore enhance creativity in society because potential remains ambiguous and undefined. Ambiguity is an essential component of creative experience; it is the characteristic which 'affirms the presence of spontaneity and freedom in the world' (Rothenberg & Hausman, 1976, p. 26). Saul (2001) quotes Estonian poet Jaan Kaplinski: 'Truth is that which breathes, and allows others to breath' (p. 17). Both democracy and creativity allow their participants to breathe; to create truth which is shared and yet adaptive not definite, which is spontaneous and allows for individual meaning. Heidegger's (1995) notion of attunement indicates the same high degree of significance of ambiguity, and this is why I use this term in my central argument: that creativity can be viewed as a democratic attunement to existence. For Heidegger, attunements are a fundamental and pre-existing way of being and are to be awakened, but let be. Attunements are therefore to be brought into consciousness but left undefined; left in a state of Negative Capability; a state of uncertainty, without reaching after fact and reason (McAra-McWilliam, 2007); a state which breathes, and allows others to breathe. Creativity is an attitude and orientation to being which is awakened to connections in existence and yet lets them alone; which observes and listens to and holds dialogue with existence and yet considers it indefinable and unknowable.

In both creativity and democracy, the experience of ambiguity also implies something about the value of the experience itself, over the outcome. The achievement of goals, reconciliations and syntheses are not the fundamental purpose of a democracy. The fundamental purpose is to allow citizens and the society to live well (Dewey, J., 1939). To incessantly strive for goals and syntheses is to become distracted by defined ends, from the experience of ambiguous living. In the creative experience, to pursue syntheses, goals and products is to become distracted by definite processes and outcomes and to miss the ambiguous experience of creativity and existence itself.

The notion that creativity is a democratic experience offers an alternative to the ideology of the 'creative economy'

This project began by discussing creativity in the current socio-political context and by demonstrating that creativity is now most prominently discussed in terms of the 'creative economy'. It is useful to unpack the background and influence of this context a little, in order to understand better the implications of the creative economy.

The current context has significant origins in the age of Enlightenment, in which a rationalist focus on determining the nature of an objective reality established itself as the path to knowledge. Horkheimer and Adorno's (2001) analysis of the Enlightenment is that it was governed by the assumption that humans are the sovereigns of the world, who shape it through their activity. In addition the Enlightenment era was characterised by the establishment of instrumental rationality; a form of reasoning to determine the best means toward specific ends, as the dominant form of knowledge. The process of enlightenment was seen as the means of man's liberation, whereby reason would lead him to freedom from the constraints of nature and superstition. But Adorno and Horkheimer felt that enlightenment, while necessary, is also impossible. It is impossible because rationality itself is the root of our problem. Power and knowledge arrive together, and our excess of power through rationality is the reason for our destruction.

Now, the modern world is shaped by an excess of rationality, which generates a culture in which we are led to ask questions of practicality and instrumentality, rather than questions of meaning and experience. Technology, industry and capitalism are the extension and application of this mindset, are useful for meeting practical and instrumental ends and are therefore positioned as good in themselves. Their power is cumulative (Horkheimer & Adorno, 2001). The accumulation of power in technology, industry and capitalism has resulted in corporate and financial globalisation (Monbiot, 2003). Technology and profit are now not means, but are the largely unquestioned ends to be pursued by society as

they are the ordering principles of the society itself. This is an age of technocracy and neo-liberalism.

The creative economy is an ideology stemming from neo-liberalism and technocracy. It assumes economic growth, consumerism and competition as modes of being and thus creativity is advancement in the service of these. The main contention of the creative economy view as espoused in documents such as The Creative Age, Knowledge and Skills for the New Economy (Seltzer & Bentley, n.d) is that radical changes must be made to the education system in order to realise the creative potential of all citizens and to boost competitiveness in the knowledge economy. Creativity is defined as 'the application of knowledge and skills in new ways to achieve a valued goal' (p. viii), in line with standard definitions popularised by Sternberg and Lubart (1999) and other holders of instrumental philosophies.

The creative economy therefore frames questions about creativity in terms of practical and instrumental logic and capital. For example: How can creativity be analysed in terms of its mechanical processes? How can increases in wealth be generated? How can new markets be formed? How can competitive advancements be made?

There are a range of consequences of this framing. A first consequence is an individual and societal lack of sense of meaningful aspiration. The creative economy leaves us like Barthelm's angels after the death of God (Hirsch, 2002). We are given pre-determined goals of individual and competitive success, but are bereft of a sense of meaning, connection and spiritual aspiration. I do not suggest that we should all have spiritual aspirations, or attempt to define what this means, but suggest that we do have a natural desire to understand relevance. In the postmodern age we are not given grand narratives to understand relevance and meaning but are given relevance in the form of practical application and economic usefulness. This is largely unsatisfactory as we perceive that it tells of just a small aspect of existence and stifles questions which might extend the horizons of meaning and relevance. Because we are not given meaningful relevance in the postmodern society, it becomes more, rather than less important

for individuals to be able to find their bearings and relate in a personal manner to knowledge: we must create our own relevance (Hammershoj, 2006). The creative economy does not facilitate questions such as: Why be creative? What does it mean to be creative? What does it feel like? What are the heights and depths of its potential? We have a human need to ask these questions. Thus we need an idea of creativity which challenges the creative economy and facilitates these questions.

A second consequence of the economic and instrumental framing of creativity is that its goals are determined by outer world success and materialism. The practical and instrumental parameters of the creative economy mean creativity is defined as such when it is successful in the outer world; the world of technology, material and economic progress, achievement and growth. As Pope (2005) identifies, creativity in this context is not consistently valued in society. It is valued in times of growth and success but in times of recession, industry and government switch to old style managerialism in which efficiency, stream-lining and downsizing take precedence over risk taking, innovation and new thinking. Further to this inconsistency, the effect on individuals of materially driven creativity is demonstrably negative. This has been linked to diminished well-being, psychopathology and lessening concern for the welfare of others (Kashadan & Breen, cited in Bryant, 2007).

A third consequence of economic and instrumental framing of creativity is that the power of creativity to bring about systemic change is significantly inhibited. Creativity in this context is largely unreflective and uncritical. The argument runs: creativity is for achieving goals and generating success and wealth. This system does not stand up well to critique or reflection, which would expose its roots as materialistic, undemocratic and of dubious benefit to humankind and the earth. Its promoters choose not to examine or expose this situation. This is therefore not a system which encourages its own improvement. It is a system which tells others how to live; it cannot challenge its own principles or itself as a system (Monbiot, 2003); it cannot create new order. The value of creativity is conditional upon its operation within the established neo-liberal system.

There are further repercussions of this unreflective model of creativity, for individuals. The creative economy ideology promotes the striving of individuals for success, but does not allow individuals to promote changes to the underlying system which would create more equal conditions for success, or new kinds of success (Monbiot, 2003; Pope, 2005). This results in the disempowerment of citizens, who are psychologically hyped to view themselves as marketable commodities, masters of their own success, but whose measures of success and capacity to achieve it are to a significant extent already determined for them, by the existing marketplace. For individuals, creative potential is fixed. Because creativity is viewed with economically driven and systemically inflexible borders it forgets both the inner world and its relation to existence. It does not ask the questions: What reasons are there for creativity, outside of economic and material success? What does my creativity tell me about myself, others, or the universe?

Further consequences of the creative economy ideology are effected upon the relationship between individuals and their community. In the creative economy human creativity is the ultimate economic resource (Florida, 2007) and entrepreneurship is the ideal mode of being for individuals in this context, bringing together human creativity and economic interests. The entrepreneur is someone motivated by the 'dream and the will to found a private kingdom'; 'the will to conquer: the impulse to fight, to prove oneself superior to others' (Schumpeter, cited in Besley & Peters, 2007, p. 4). Besley and Peters (2007) argue that an emphasis on entrepreneurship in education has brought in the idea that the individual is responsible to insure himself against risk by perceiving himself as a citizen-consumer and investing in himself at critical points in the life cycle. Teachers and educational policy makers contribute to this idea through an emphasis on personal diligence and employment opportunities (Fitzsimons, 2007). As Brockling (2006) notes, this emphasis is unceasing. Entrepreneurial action demands persistent innovation, as everybody not only has to be creative, but more creative than others. In this context, creative individuals are entrepreneurs, who see themselves primarily as lone individuals whose task is self-promotion, set persistently against and in competition with society and whose sense of responsibility extends to taking care of their own interests.

In the creative economy individuals are human capital and communities are social capital. Fitzsimons (2007) argues that social life has traditionally provided a sense of collegiality, shared interest and purpose that preserve us through the challenges of our working lives and thus facilitate a sense of affiliation and nurturing for each other. However as all spheres of activity become instrumental of capital, even the social world becomes commodified and ready for exchange. In New Zealand, this is evidenced in the privatisation, corporatisation and commercialisation of education in general, the emulation of private sector management styles and globalisation of education as tradable services (Peters, 2007) and in the encouragement of the business community to become involved in the development of tertiary education policy and city council strategy (Fitzsimons, 2007). The creative economy ideology justifies the extension of the sphere of influence of corporate interests into community life and education.

There are other educational implications of the creative economy view. The creative economy positions education as central to its aims, as education institutions are the primary centres for the transmission and development of new ideas (Besley & Peters, 2007). In the absence of alternative ideas or any ethical discussion of what are its valued goals, creativity in education is now significantly driven by creative economy views. Backgrounded by Enlightenment thinking about the primacy of rationality and instrumentalism, creativity in education is often conceptualised and promoted as consisting of replicable and mechanistic 'creative' strategies. Again, creativity in the form of philosophical and systemic challenges to pedagogy are less in evidence.

Educational institutions contain a range of other conditions not conducive to creativity. For example, normal features of educational systems include the inability to tolerate ambiguity, fear of making mistakes and limited space for experimentation. Significant contributors to these conditions are the practices of auditing and standardisation now common in education. The consequences of this problem are significant in education. They result in an emphasis on performance goals, rather than learning goals. Performance goals are about winning positive judgements of your competence. Learning goals are about the

desire to acquire new skills, master new tasks or understand new things (Dweck, cited in McWilliam, n.d.). In valuing standardised outcomes over the development of strategies for new learning, this educational model does not view learning in any other terms but performance. This is disempowering for students, who are not encouraged to think for themselves, act upon their own judgement or from their own sense of authenticity and integrity (Haynes, 2007). As McWilliam (n.d.) notes, lack of creative space is not just the result of bureaucracy and ideology; there is a complexity to working at the margin of certainty and uncertainty and achieving a balance between too much compliance and too much chaos, which most educational organisations do not understand. However, I suggest that educational institutions are the most appropriate place to make efforts toward developing this understanding; it is their responsibility to facilitate independent thinking and social evolution.

To sum up, the creative economy view of creativity stifles both social and individual potential. It is uncritical, unreflective, disempowering and facilitates more selfish individualism than social connection. It perpetuates a social order in which economic power is beyond the reach of democratic influence. In order to challenge the creative economy view, we need modern and viable alternative ideas of creativity. I argue that the analogy of creativity as a democratic attunement to existence offers a comprehensive alternative to the creative economy view. Creativity as a democratic experience does accommodate and encourage critical, reflective questions; it establishes a reflexive, questioning orientation to established traditions, and therefore holds potential for systemic change. Creativity viewed as a democratic experience suggests a meaning and purpose of creativity which is yet undefined and ambiguous. This is creativity with the open-ended purpose of integrated personal and collective realisation and development of potential. It values appreciation of life and the capacity to create meaning in existence as aspects of life which are to be nurtured. Creativity as a democratic experience implies value in the experience of creativity in existence itself rather than value in instrumental commercial and competitive ends.

In education, there is the potential to explore creativity as a democratic attunement to existence for new ways to understand creativity and learning and

to enhance individual's sense of meaning and connection in existence. There already exist a number of pedagogical approaches which might complement this concept of creativity. These are approaches which emphasise a more experiential and error welcoming educational environment, students as producers of knowledge and meaning rather than recipients, the assembling and then disassembling of knowledge and products, play and social learning (McWilliam, n.d.). I also suggest that educational approaches based on democratic creativity should involve developing connection and sympathy with others and environments; developing authentic meaning and interest in students; a capacity for self-assessment and reflection through both individual and social means; flexible and dynamic goals; tolerance and encouragement of both ambiguity and of conflict; and a stance of questioning assumptions and the nature of reality. For example, the democratic and experiential educational approach of Dewey (1916; 1939), and the Transformative Learning theory of Mezirow (1991; 2000) are relevant pedagogies.

Furthermore, the phenomenological approach and thematic analysis of texts in this study point to the significance of a notion of presentness; of attention to experience as both conscious and sensory; both in mind and in body, in creative experience. I suggest that this is one of the more radical challenges to our present education system, which, beyond primary school or arts education, largely neglects the exploration of the full range of sensory experience as means for understanding. This study highlights the importance of sensory experience as means to fuller exploration of knowledge. The ability to reflect on the way in which knowledge and perception are derived from a complex relationship between consciousness and its objects, also involves awareness of the roles of touch, hearing, sight and smell in the generation of knowledge. This inevitably poses a challenge to the notion that the intellect, logic and rationality are the more legitimate and superior academic capacities. This study has argued that faculties of creativity do not operate solely in the mind, but also in the body. Intuitive reflection for example can be and is derived viscerally and through the senses.

The analogy of democracy is significant in that it offers alternative significance to individual and social roles in creativity. In the creative economy the significance of both the individual and the society is their value as capital. In a democratic notion of creativity these roles are not economically based. A democratic attunement to existence facilitated through education would involve a notion of individuals as mutually dependent upon each other for their own growth and autonomy. A notion of autonomy put forward by Dewey (cited in Bleazby, 2006) fits this approach. Rather than autonomy perceived as individualism, independency and self-sufficiency, here autonomy is perceived as the capacity for self assessment and action guided by reflection achieved through the social means provided in a pluralistic and inquiring community.

We are accustomed to understanding the importance of more socially-oriented educational curricula in ethical terms; for example we believe that we should train young people to care for others and to treat them with respect because this is morally good; it promotes the right values and creates citizens of the sort we think we should all be. Here I suggest that more democratically oriented curricula are important not for moral reasons, but because they can promote a truer and fuller picture of the conditions of existence and thus heighten creative potential. Creativity taught as a democratic attunement to existence demonstrates that individualism, technology, science, logic and capitalism are vital and useful, but are in the end merely a certain set of manifestations of human capacity. Creativity understood as democratic attunement to existence is a reminder of a different set of priorities; the fuller development and manifestation of the potential in existence. Technology, science and logic serve the interests of human and world potential, rather than the other way around.

I acknowledge the difficulty of making these shifts in education, but, as I have indicated in the introduction to this project, I consider a proportion of the difficulty to be due to the fact that educators lack confidence in their own sense of the meaning of creativity. Therefore an essential first step is to debate, discuss and clarify this through articulating possibilities of meaning such as this one. A more specific obstacle is that models such as this one, which promote the importance of reflection, curiosity and openness of process and outcome demand

a great deal of educationalists (Nickerson, cited in Bryant, 2007). Not least amongst their anxieties may be the idea that this form of education promotes non-conformity. However, as Bryant suggests, non-conformity is justified in that it signifies an important form of creative consciousness; that culture has been crafted and is changeable.

Finally, this suggestion for an educational model which facilitates a democratic attunement to existence poses a significant challenge to certain other institutional norms. For example, learning and assessment outcomes in the form of demonstrated knowledge and skills are now fairly ubiquitous. They reinforce an institutional worldview in education that it is acceptable to state, agree upon and work toward a small range of pre-determined outcomes for learning, creativity and potential. Promotion of the imagination and curiosity, individually or democratically decided meaning for learning, are not high priorities. The shift in philosophy required from learning or performance outcomes as aims, to transformation as the aim, is a significant one. It is dependent upon shifts of power as well as ideology. Teachers and institutions cannot dictate what learning should occur or what meaning to ascribe to it when the aim is the manifestation of as yet unknown potential, and flexible, reflexive and democratically decided meaning.

Conclusion

This thesis arose from my own desire to understand creativity better from both a personal and a professional perspective, as a teacher. It has also stemmed from my sense that the general direction in which rhetoric about creativity is moving is somehow misguided and that this misdirection is deeply significant. Creativity is not the realm of the genius, nor is it an economic commodity, and to view it in such terms is to lose an important part of our humanity. Creative experiences cannot be separated from our existence and are therefore within everyone's realm. The appreciation of creative experience is fundamentally connected to our appreciation of life in general and to persistently frame it in economic terms is to severely limit our perception of our human existence and potential.

This thesis has aimed to show that we have inadequate and misleading conceptualisations of creativity. I have argued that analysis of the actual experience of creativity is an appropriate way to understand it better because it is our theory and fixed thoughts about creativity which are the central obstacles to our understanding of it. An examination of experience directly as it unfolds is a way of evading the habits of thought. I have used examinations of my own experience and of experiences described in literature as a means to interpret what creativity means at an essential and fundamental level.

Like Nietzsche, I interpret the experience of creativity as essentially consisting of the manifestation of potential held in human existence. However, perhaps unlike Nietzsche, I interpret the fullest potential in existence as that available through the experience of existing as an individual in the world while simultaneously existing as an integral part of the world.

I have further interpreted the essential experience of creativity; the pursuit of potential held in existence, as involving the experience of three key dynamics: a relationship between individuality and unity, between freedom and discipline,

and between intellect and intuition. These dynamics can be interpreted as fundamental and essential regardless of whether the creative experience is that of the genius and is highly original and socially significant, or that of the ordinary person and is comparatively mundane.

Another important aspect of this interpretation is that the creative experience is paradoxical. The dynamics named above are each the simultaneous experience of elements which we perceive as polar opposites and distinct from one another. Part of our difficulty in understanding creativity is our human tendency to understand concepts as separate and distinct. This limits our ability to conceptualise paradoxical experiences such as creativity.

Finally I have aimed to show how democracy is a metaphor which can help us understand the paradoxical experience of creativity. Firstly this is because unlike most other conceptualisations of creativity, this metaphor illustrates that creativity is fundamentally about making meaning from co-existence. Democracy stands for the manifestation of potential held in the experience of simultaneous individuality and integration in existence, which is the essence of creativity. I argue that contrary to our common belief, the pursuit of freedom and individuality are not the conditions for deep experiences of creativity. Greater creative potential is held within the simultaneous and integrated experience of both individuality and unity.

Secondly, the metaphor of democracy assists us to focus attention on the nature of the dynamic relationship between the polar elements in the experience, rather than focussing our attention on the poles themselves. Creativity is neither an individual nor a social experience; an intellectual or an intuitive experience; an experience of neither freedom nor discipline. It is an experience of the dynamic which exists between all of these; a dynamic which can be described as democratic attunement. Democratic attunement is being awake to connections, energies and dynamics, while yet allowing these to remain uncertain and undefined. The dynamic is democratic in that it indicates that the essential elements in creativity all hold power and are utilised in conjunction. Democracy demonstrates that when one ideology gains power over others, this is a

malfunction rather than mastery. Excess of intellect, individuality or freedom come at the sacrifice of other resources and drives and are not the highest achievements in our potential.

Metaphors can highlight qualities and summarise bundles of properties (Katz, Cacciari, Gibbs, & Turner, 1998). Democracy carries with it a set of additional relevant connotations including conflict, opposition, integration, balance, tolerance, listening, attention, equity, diversity and self-expression. It also suggests imbalance; collapse; hijack or stagnation when it all goes wrong. As others have indicated, conflict is part of the creative experience; confrontation and disturbance allow examination, redefinition and new forms of thought and experience. Deeper creativity relies upon reflection on old conflicts and habits in order to generate a spiral of incremental growth, rather than a circular return to the same oppositions. The analogy of democracy assists to demonstrate that creative experiences are deepened when we reflect, listen and blur the habituated boundaries between ourselves and the external world, in order to position ourselves differently and to see new perspectives.

A limitation of the notion of democracy as a metaphor for creativity is that it does not illustrate emotional quality well. It may not for many of us hold the right quality of excitement, joy or deep significance for an analogy of creativity. However it does convey aspiration towards an ideal. In the real world, we find it as difficult to manifest the ideal aspirations of democracy as we do the ideal aspirations of our creative drive. As is suggested in my own phenomenological analysis, profound creativity can not be satisfied by action, as it is the eternally present sense that the fullest potential of existence is glimpsed but not attainable.

Use of this research for others

Because this study offers a philosophy which spans different paradigms and disciplines, it is useful in the development of understandings of creativity in a

range of fields, for example, social science, psychology, education, arts, science, or business. I suggest that this study is particularly relevant to the field of education because it is there that new concepts of creativity are primarily required. Educational institutions are both the promoters and the challengers of ideology. I have argued that the dominant ideology of the creative economy has a negative impact on our concept of creativity and on educational practice in general. Alternative concepts of creativity need to be articulated and debated in educational institutions and literature in order to stimulate a deeper level of consideration of the values and implications on educational practices of our understandings of creativity. In this study I offer an articulation of the values with which I associate creativity, a structure for understanding its essential features, a discussion of its fundamental meaning and significance and an analogy encapsulating all of these.

Key findings, implications and further research

The central aspect of this thesis which I would have liked to have had time and opportunity to develop in more depth is the democratic analogy. I have brought this project as far as to indicate a number of aspects of alignment between democracy and my notion of creativity, through the use of some prominent, but rather general academic texts on democracy. Thus, the end point is essentially that I have made a connection between the two concepts, and have tested this connection in a range of ways. However, much is left unexplored. I believe the idea of creativity as a democratic attunement to existence would benefit from a deeper and more phenomenologically grounded analysis. That is, further research using democratic theory more aligned with the phenomenological approach is required. For example, Jean Luc Nancy's (1991), ideas on our longing for an original (but mythical) community in which being-together is the mode of existence, may be a fruitful beginning as he deals more profoundly with our ideals of political organisation and their effects on our being. Laclau and Mouffe's (2001) re-examination of socialism and the emergence of new forms of social struggle may also be enlightening, for its deeper analysis of the notion of

social conflict and its implications for creativity. Through a more phenomenologically based analysis of creativity as a democratic attunement to existence, developments to the democratic analogy might be advanced, and challenges may be articulated.

Aside from the connection between creativity and democracy, a further finding of this study is that it is possible to interpret the creative experience in a meaningful form which unites subjective and objective approaches. A central obstacle in creativity research has been its separate development within diverse disciplinary approaches, resulting in incompatible vocabulary, methods of exploration and conceptualisations. For example, the surface dichotomy of objective and subjective views of creativity is that one presents a measurable, cognitive and mechanistic perspective, while the other is a highly personalised, emotional view. I have argued that neither is adequate to discover a description of the meaning of creativity, as neither indicates the complexity of life, experience and existence, of which creativity is an essential part.

An example of the limited way in which the objective perspective conceptualises creativity which is described in this study is the flawed belief that sensory experience is a lesser path to understanding. Miller (2000) insists that creative abstract thought and imagery are fundamentally different to and more highly sophisticated than creativity through images perceived by the senses. Miller's implication is that sensory and emotional experiences in general are lesser paths to understanding than are abstracted, intellectual manipulations, which are situated in the mental realm and can be described mechanistically. I have argued that Miller's is a false distinction; that all images are constructed through an interaction between consciousness and its objects, and are therefore neither situated in the mind, body, emotions or environment, but in all. Miller's distinction is in fact an obstacle to creativity as over-emphasis on the intellect denies a fuller and democratic experience of the co-existence of a range of ways of understanding, and can result in entrenched intellectual habits.

I suggest that the phenomenological approach I have taken allows a means to overcome the obstacle of diversity of approaches lacking common ground, and to

understand why views such as Miller's are limiting to our understanding of creativity. Phenomenology is the study of experience where experience is understood as an interaction between consciousness and its objects. As such it offers a means to unify the subjective and personal with the supposedly objective and measurable. I have used phenomenology as a method to take into account all of these as factors of experience which are inseparable from one another and thus I have developed this study to examine experience from a breadth of perspectives inclusively and simultaneously. This phenomenological and thematic analysis of texts has drawn together two of the most prominent paradigms of relevance to creativity; objective science and humanistic, subjective art.

Through this phenomenological method I have argued that with regard to creativity, a more enlightening distinction than that between sense and abstract images is a distinction between passively received, habituated and fixed images and knowledge and adaptive and reflectively developed images and new insights. Phenomenology indicates that sensory experience and intellectual thought are inextricably connected. If so, we have the potential to reflect upon and adapt not only new mental abstractions, but also new sensory and emotional experiences; new views of reality, to literally see and feel things differently. This potential to reflect and adapt in all aspects of existence is creativity.

With relevance to this finding and its implications, further research is required to explore other interpretations of the subjective/objective experience, and other ways of uniting diverse approaches to creativity. More phenomenological studies would be useful in this respect.

A second key finding of the study is that the significance of co-existence as essential to the experience of creativity has been largely overlooked or misunderstood. Authors such as Sternberg (2003) and Csikszentmihhalyi (1988) have indicated that social experiences are important in creativity as they stimulate reflection on the self and a drive for originality and success. However, Sternberg (2003) and Csikszentmihhalyi's (1988) approach is cognitive and mechanistic. It therefore merely labels community and social influence as a factor in a chain reaction. It does not describe experience or make meaning from

experience. I suggest that the social aspect of creativity is significant for more than just the stimulation of more reflective and adaptive thought.

This study indicates that the essential creative experience is about deriving meaning from co-existence. Heidegger's Dasein (1995) is being which is inclusive of and inextricably bound to our being in a place and time in the world; a view of the meaning and knowledge of existence as always situated and embedded. This implies the fluidity of subject and object characteristic of phenomenology. But I have argued that while superficially we are aware that our being is inextricable with being in and with the world, we need reminding that this is also the nature of the reality of existence on deep and fundamental levels. This is because we tend to view ourselves as the subject of our lives and the rest of the world as objects external to ourselves, rather than an integral part of our being. Most models of creativity for example, reflect this tendency by situating creativity as primarily occurring within the mind and emotions of the individual. Democracy is a good metaphor to connect us to the reality of being, as it reminds us that the essential reality of our situation is that individuality and unity are inextricable. Our individual characters are derived in large measures from our community, and the reverse is also true; communities are made of and characterised by the natures of their individual members. To use this analogy is to see individuality in creativity phenomenologically; to perceive that the range of phenomena which make up existence includes community, society and relationships, and to see that individuality is merely one interpretation of a mode of existence, rather than the objective reality of existence. To use the analogy of democracy for creativity in this way is to record and integrate a broader range of the perspectives, angles or interpretations available to us, and to therefore gain a more phenomenologically based and fuller understanding of existence, and of creativity.

A central implication of this finding is that a philosophical shift is required, especially in education, to understand the experience of creativity. Our current educational model emphasises individualism. I argue that this emphasis is fundamentally anti-creative and restrictive of potential. An interpretation of creativity as a democratic attunement to existence; as essentially about

awakening to involvement of the self with others and the world demands a shift in perspective from education for individual success to education for integrated development by discovering new potential through relationships. Creativity is movement towards an understanding of other, or of what could be other; the pursuit of a glimpse of something other than the self; other than what existence was thought to be. This involves a shift in perspective from our ordinary way of viewing the world; from being ourselves in it, surrounded by objects. The shift required is to being of the world; to see and experience the otherness of being not ourselves but part of the world; the otherness of being the object as well as the subject. Creativity can not be 'taught' but could be facilitated in education if our education models encouraged some radical shifts in perspective. The facilitation of a democratic attunement to existence would require for example, an approach which emphasises our position as entities within an ecological system, which draws our attention to connections, relationships and interdependence. Similarly, it would require models and conditions which encourage us to pay attention to, listen and empathise with others and our surroundings, and to feel and experience interactions with the environment, rather than just think about them, in order to develop broader creative resources, to blur the boundaries between subject and object and to facilitate shifts in perspective. These models and conditions are not suggested here as moral imperatives, but as educational pathways toward greater potential.

Our current educational system also emphasises performance and assessment outcomes in the form of demonstrated knowledge and skills and these increasingly set the boundaries for learning. This is because the purpose of education is ultimately conceptualised as economic and employment related, and thus instrumental, mechanistic and determinable, rather than learning and creativity related and thus significant in itself, for the development of indeterminable personal and social meaning and potential. The ubiquitous influence of performance outcomes has a subtle yet profound effect, reinforcing an institutional worldview in education that it is acceptable to state, agree upon and work toward a small range of pre-determined outcomes for learning, creativity and potential. The result is institutionalised consensus about the aims and meaning of learning. This leaves little room for promotion of the imagination

and curiosity, for individually or democratically decided meaning for learning, or for open-ended, incremental and expansive learning. The shift in philosophy required here is from performance outcomes as aims, to transformation as the aim. This shift from pre-determined outcome to open-ended outcome is dependent upon shifts of power; teachers and institutions cannot dictate what learning should occur or what meaning to ascribe to it when the aim is the manifestation of as yet unknown potential, and flexible, reflexive and democratically decided meaning.

Based on this finding and its implications, there is a need for further research into existing and new educational pedagogies and models which might be vehicles for the expression of the philosophy of creativity articulated here. Mezirow's (1991; 2000) Transformative Learning theory and Dewey's (1916; 1939) notions of experiential and democratic education are a good beginning.

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