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Image-Making, Creative Minds and Symbolic Consciousness:

In Search of a Methodology of Interconnectedness

A thesis

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ABSTRACT

It is apparent that in recent decades there has been, in the Western World at least, a major escalation in general engagement with 'the arts' and personal arts practice, with a corresponding growth occurring in arts and creativity related education. This has happened within a global context of significant and escalating rates of social, political, technological and environment change. In t urn this has fuelled debate about the role the arts and art education might play in an increasingly dynamic world. The dissertation identifies a number of gaps and weaknesses in current thinking about the relationship between art, education and change which can be addressed by adopting a 'system' perspective on cognitive development and changing consciousness. This project was a case study involving students at a School of Art and Creativity called The Learning Connexion, with the study having both descriptive and instrumental objectives (Stake 2000). The descriptive level aimed to achieve an in-depth 'holistic' picture of the personal and organisational factors influencing or reflected in student image-making. The instrumental aim was to analyse and interpret these findings from a 'systems' perspective that recognises that brain, culture and 'mind' essentially form interdependent elements that create the languages, 'or currencies' of human consciousness. This project also proceeded on the premise that the 'arts' generally, and image-making of students at The Learning Connexion specifically, offered a window into aspects of this. The systems approach was used in two ways, firstly to analyse some of the descriptive findings, and secondly as a framework for looking at the relationship between ritual and the earliest human image-making during the Upper Palaeolithic. Parallels and connecting themes were then explored between the pre-historic and The Learning Connexion setting. The findings indicate that engaging with a period of image-making can often be linked with a major period of reorientation or reframing in a person's life, coupled with a particular desire to develop artistic skills and a sense of personal creativity. Those who engaged the longest with the school's very open and unstructured programme, tended to be females in mid to later stages of life, often with significant prior qualifications and non-arts career experience. Moreover, when these people's images were combined with interview statements a 'narrative' was revealed of an intense exploration by the students about their own lives and events affecting these. The data also indicated that a period of image-making resulted in general improvement in people's sense of personal well-being. When the well-being finding was considered from the systems perspective, it was theorised to involve an interweaving of three sets of factors: people generally developed and strengthened an 'artistic' identity through a unique image-making 'style' with this assumed to reflect a person's unique neurological make-up; the organisational environment provided important signals that what people did through their image-making was safe

and appropriate; and thirdly, through the action of image-making people appropriated the most salient features of their own life story and recoded this into a new and unique visual 'currency of thought'. When student work was also analysed in terms of connecting themes with Upper Palaeolithic image-making, common elements of shamanic transformational ritual and shamanic healing were identifiable in both contexts. The dissertation concludes with discussion of implications for further research, arts practice, mature age transformational education, and ways the systems approach used may be extended. Moreover the multiple perspectives used pointed to common 'systemic' elements underlying: 'shamanic healing', improved 'well-being through image-making', and pre-historic image-making and ritual playing some central role in the very emergence and ongoing reshaping of human symbolic consciousness. It is therefore felt the premise underlying the project that 'the arts' can offer viable research windows into how aspects of human cognition and consciousness change, was justified. With these views in mind the idea of 'the art student as researcher' and 'the art school as a research organisation' explicitly contributing to such inquiry is put forward, and seen as consistent with a general academic trend towards trans-disciplinary research fields. Such a move also requires the fashioning of 'methodologies of interconnectedness' which enable 'art' and 'science' to be able to be linked as forms of inquiry into areas of common interest, and it is hoped this project will contribute to this.

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PROLOGUE

The incubation period for this project extends back twenty and more years and draws on this writer's experience as an arts organiser, musician, music tutor, writer, and actor. It also builds on undergraduate and post-graduate qualifications in Educational Psychology (BA. Hon. 1977, M.Ed. 1999). Important background experiences included three years as manager of a 'community arts farm' in Canberra in the late 1980s, followed by work as a Project Officer and festival organiser for the Nimbin Arts Council, in an 'alterative' community in Northern NSW. This in turn led to several years as a music tutor and then member of the senior management team at the Northern Rivers Conservatorium, a regional music centre which also developed accredited vocational programmes in music, dance and drama during this time. The M.Ed. was also undertaken during this same period, with the research component focusing on learning styles and knowledge transmission issues within a festival organising committee for two arts festivals held in Nimbin in 1996, and 1997 (Cotton 1999).

Towards the end of the 1990s there was a period of work as a consultant with local councils and their communities in Northern NSW, assisting them to develop cultural policies and implementation strategies. While that work was primarily orientated to multi-cultural issues faced by local government councils, it also involved some consideration of needs and demands for local arts facilities, programmes and support services.

As a result of these experiences a conviction formed that there was something of a 'youth arts movement' emerging in the Western world, whereby young people in increasing numbers were exploring and creating new pathways into adulthood for themselves via engagement with art. Based on the Nimbin and Canberra experiences in particular, it appeared that 'the arts' were offering a viable alternative to the traditional pathway into adulthood and paid employment, which for youth was 'drying up' generally but also 'out of reach' for many young people from 'alternative' rural communities. The activities being engaged in by youth often in their very early teens, included

music, dance, theatre, puppet making, circus style acts, as well as a strong involvement with the visual arts. Many engaged with multiple art forms and there was a strong emphasis on public performance and exhibitions.

This idea of there being a youth arts movement was re-evaluated as a result of undertaking a research project (Cotton 2003) with The Learning Connexion (TLC), a privately owned art school in Wellington that offered an Accredited Diploma course in Art and Creativity. That project sought to illuminate the experiences and backgrounds of a sample of students, with a view to helping the organisation develop a degree course from its diploma programme. That project revealed that many of those engaging with the school were mature aged people, often with significant prior qualifications, who associated a major period of personal reorientation or reframing with their engagement with the school. It was an interest in finding out more about mature aged 'novice' art students that led to the doctoral project being undertaken.

By the conclusion of this first project with TLC it seemed clear that engagement with 'art' within the multitude of local communities and projects that this writer had had direct experience with was growing Moreover feedback from others suggested that this was certainly not limited to Australia and New Zealand but was really a Western, if not a global phenomenon. These perspectives also connected with a much earlier undergraduate engagement with art history, and it occurred that historical time reflects a broadening, if not a shift in focus within art from 'the collective' to 'the individual'. This process appears to have gained momentum since the Renaissance (Gombrich 1999, 1989) with a seemingly massive escalation in engagement with art for individual and collective purposes occurring in the last few decades. Indeed, Shiner (2003) indicates that the term 'fine art' as used today is an eighteenth century 'western invention' which tends to dominate conceptions and discussion of 'art' from all times. What has also accompanied the shift in the role and definition of art, and which is reflected in this writers direct experience, has been a corresponding expansion in arts related education as well.

What was being sensed here then in very broad terms was as follows: engagement with the arts generally has been escalating; arts learning via formal and informal education has been expanding; people of all ages appear to be using art to negotiate periods of change and transition in their lives; with educational systems themselves emergent changing phenomena; with all these changes occurring within a broader environment marked by significant and escalating rates of technological, social, political and environmental change. That is, 'change' itself can be seen as a most salient feature. The result was interest in exploring how such dimensions of change may interrelate, accompanied by a growing conviction that looking further at what was happening for individual 'image-makers' (the preferred term in this work) within The Learning Connexion setting might provide a window into some of these relationships.

This emerging focus on 'art' as a window into 'multi-level change' raised all sorts of questions, not the least being what is meant by the term change? If this was indeed to be a focus of further work, then there was a need to distinguish what was important and accessible within the vast fabric of changes identifiable through time which could on one hand, provide a common ground between the individual and the collective, and on the other hand embrace a focus on image-making. Moreover, by expressing this interest in terms of change processes occurring between individuals and societies, the prospect of becoming bogged down in traditional psychology-sociology 'antinomy' issues loomed (Cole & Wertsch 1996).

In all, it was felt that a novel approach was needed to take my own thinking about how art, education and change interconnect into fresher territory that might come to grips with the multitude of forces assumed to be at play. The first step was to move away from thinking about an individual-society relationship per se and start from a premise (prompted in part by Vygotskian socio-cultural theory) that fundamental interdependencies must exist between brain, culture and mind, and, that a 'systems' or 'interconnectionist' orientation might be applied to how knowledge and meaning are created, represented and communicated. It was felt that within such an approach a

focus on image-making could potentially offer a window into aspects of this at particular stages in the human journey.

The next step was to adopt as broad a perspective on change and human transformation as possible and exploring how brain and culture interweave from evolutionary, linguistic, anthropological and archeologically perspectives was a logical step. It enabled the window through image-making to reach not only back to, but through the earliest known 'art' in the Upper Palaeolithic to a much deeper ritual past. Adopting this orientation also brought concepts of consciousness, identity and symbolism as a core set of related elements to the fore. It also generated a broad thematic question which sits under this project as a whole, this being: are 'we' becoming our own 'artists' as an adaptive response to changes pressures. Such a question also implicitly reaches out to the premise that, in terms of consciousness at least, 'we' are still a 'work in progress'.

These perspectives also brought the image in Figure 1.1 below to my attention. The print was done in the 1960's by the late Papua New Guinea Highland artist Michael Kauage, and it sums up many of the themes I began to see, not only in the earliest human image-making, but also in the image-making of some students at TLC. The image speaks of transformational ritual, the altering of states of consciousness, the symbolisation of 'power', and the appropriation of 'the known' in ways which enables (in this image) a rather 'frail person' to be transformed into a powerful 'presence'. These are major themes which are explored in much more depth throughout this work.

Developing the project in this direction offered a way forward which promised, for this writer at least, fresh territory but at the same time it posed a dilemma. A brain-culture 'systems' orientation with an eye to our evolutionary past and the origins of image-making essentially opened up a 'new front' in addition to the interest in the personal and vocational outcomes for mature age image-makers at TLC. In order for such a project to achieve a satisfactory conclusion these two 'fronts' had

to strongly interconnect at some stage. It is fair to add here that at times this was by no means certain, and for a period there were two distinct projects with different agendas heading off in apparently different directions. On one hand data gathering was underway at The Learning Connexion through surveys, interviews and participant observation, and this came to be referred to as 'The Inner Frame'. At the same time within an 'Outer Frame' a process was underway of exploring and building theory from perspectives which grappled with diverse and often competing ideas about the human evolutionary journey, the origins of art, language and the nature of human consciousness.

In many ways it has been the juggling and reframing of the range of interests indicated above, and how they need to interrelate in focused and productive ways, where much of the effort behind the writing of this dissertation in its latter stages has been applied. In the end a core focus on The Learning Connexion re-emerged but with this clearly able to be linked to the broader interests in multi-level change influencing human symbolic consciousness, *and* how art might provides a viable research window into this. This broadness is reflected in the dissertation title - *Image-making, Creative Minds and Symbolic Consciousness: In Search of a Methodology of Interconnectedness*. The title essentially outlines a trans-disciplinary 'field of inquiry' that this writer senses is emerging. The aim of this project is therefore to contribute not only insight into aspects of how art, education and social change interweave in the contemporary world, but also to a broader change in how science is viewed in relation to art - and therefore how educational practice relates to these domains as well. In sum, the hope is that this project can contribute to the emergence of a more generally held view of art and science, not as mutually exclusive human endeavours, but as complimentary and at times interweaving forms of inquiry.

Figure 1.1 Barraset Man by Michael Kauage



CHAPTER ONE

INTRODUCTION

This introductory chapter provides in broad strokes a road map for the project as a whole. In the first section a brief overview of the history of Western education is given which leads up to more recent changes. The main theme explored here is that education, until very recently, has primarily been concerned with preparation of selected individuals for participation in a largely predictable world. More recent changes have shifted the emphasis to preparation for, and participation in, a world which is seen and experienced by many as changing and increasingly unpredictable. That discussion identifies in general terms the context within which The Learning Connexion has emerged and operates.

The second section explores various philosophical perspectives on art education and its relationship to individual development and social change. Discussion includes consideration of policy statements and associated documents relating to arts education in the New Zealand setting. This section then identifies a number of 'gaps' in existing thinking about art, education and change which the project seeks to address. Section three presents the explicit research questions which structure the dissertation as a whole, with a brief overview given of how subsequent chapters relate to these questions.

1.1 EDUCATION FOR PREDICTABLE AND UNPREDICTABLE WORLDS

In a little over a century and a half, organised education has emerged as the single most commonly organised activity on the planet, with in excess of 25% of all humanity now involved with this in some way (OECD 2004). There is also now growing awareness that individual learning and participation in education will continue to increase as it becomes something people do throughout their lives (NZ Ministry of Education 2007). Indeed work and learning may well be on a trajectory

whereby sharp distinctions between these may, for many, become increasingly irrelevant. Before looking further at education in the contemporary setting and how the themes of art, education and change interconnect, a very brief overview of Western Education helps identify some major themes which are important to this work as a whole.

1.1.1 A Brief History of Western Education

If we trace Western educational thought and practice from the Greeks to the present, what stands out is the fundamental role education plays in preparing selected people for participation in particular societies and the world view of those societies. That is, education has been, directly or indirectly, largely an instrument of the state, or the empire, or the church, or all three at once. It has, historically, not been concerned with the acquisition of 'facts' so much as the acquisition of knowledge structures and 'currencies' which deal with 'facts' in particular ways. It might therefore be said that education plays a critical role in how the 'meta-languages' of any period are conserved and passed on to following generations, but that educational processes and institutions have not necessarily been the direct source of such meta-languages.

Education as an organised activity was in existence in Greece in the 7th Century BC, with the evidence for this being, perhaps ironically, not of schools directly but of school regulations (Boyd 1965, Meyer 1966). The existence of earlier writing and mathematical systems from Egypt, Babylon, Sumer and China clearly points to organised education well before the Greeks but little is known of the details. The legacy of Greece in Western educational philosophy and practice is manifold and beyond discussion here, but it was the rise of the Macedonian Empire in the 4th century BC that resulted in the 'hellinisation' of the ancient world by dispersing Greek educational thought and practice which in turn provided a model for the Romanization of the world.

As the Roman Empire declined and shifted to the East to become Byzantium, Christianity emerged as the unifying force through the Middle Ages of a fragmented Europe. Organised education became

the province, and an essential part of the power of Western Christianity. Church education was no longer a preparation for citizenship in any identifiable national state or empire, but a facet of monastic life. These austere environments, removed from day to day life, enabled learning by the faithful in the service of the faith. From these foundations an increasingly powerful and educated church emerged, which by the height of its power in medieval Europe provided, through a network of cathedral schools, for its internal needs as well as the need for educated officials in the courts of Europe. In these educational traditions, the search for new knowledge was barely present, as all knowledge was judged against the core assumptions and beliefs, the meta-language, on which the church itself was founded.

In terms of the science and mathematics of antiquity it was the Eastern 'world' which conserved these. They made their way into the West through various pathways to eventually provide a decisive counter to the deeply spiritual orientation of the medieval mind. The medieval universities, which began to emerge in the twelfth and thirteenth centuries, were off-shoots of the cathedral schools, which were the source of Latin, the common language for the learned across Europe. By the late fourteenth century 'a renaissance' in thinking became possible enabling an independent literate class to reach back to the lives and thoughts of antiquity and to use this as inspiration for a different future. From Boyd (1965):

> The essential fact of the situation was not the 're-birth' of ancient modes of thought and practice, but a determined revolt against the cramping narrowness of medievalism and a vague but none the less insistent demand for a larger and fuller individual life …
>
> In the middle ages men had found themselves as citizens of towns: now they began to discover that a wider citizenship might mean an enlargement and not a diminution of personality. Intimately connected with the growth of national feeling was the emergence of true literature in the languages hitherto regarded as vulgar and incapable of literary use. Even before the revival of learning had come to its height, Dante, Petrarch and Boccaccio in Italy, Chaucer and Wycliffe in England, had shown the immense possibilities of the vernacular tongues. In physical science, again, there was active research for the first time in many centuries, beginning with Roger Bacon and culminating in the epoch-making work of Copernicus (Boyd 1965:159-162).

The flourishing of the arts and humanities was largely contained in Northern Italy until the 17th century, when new humanitarian and egalitarian philosophies were expressed through various European progressive and revolutionary movements. Less obvious to begin with but ultimately more impacting was the European scientific revolution. Central to this science was an 'inductive' approach to inquiry, which could use, in a new way, the highly abstracted symbols and mathematical systems which had had their origins in the ancient world. When these, in conjunction with the use of the abacus, replaced the cumbersome and essentially 'iconic' and 'indexical' (see Chapter 2.2) Roman numerical system, it gave emerging communities of people inquiring into the nature of the physical world the foundations for today's scientific meta-languages. These not only enabled more practical and precise observation and measurement, but the results of empirical work could also be reduced to abstractly represented elements and principles expressed in the form of symbols.

The unfolding of 'modern' science and the 'age of enlightenment' also needs to be seen in the context of a Western world still largely dominated by the now divided Christian Church (Protestant vs. Catholic), neither parts of which welcomed free inquiry into the nature of the world. It clashed with the meta-languages of the church, not the least because the new science was being founded on quite a different approach to knowledge than the science of antiquity, which was largely philosophical and 'deductive'. Deductive reasoning applies assumptions about the nature of the world and the cosmos to the observable, and thus leaves plenty of room for a preconceived universe and roles for 'the Gods'. Inductive science works from a foundation of observation and measurement which can be used to question the known and infer new universal principles.

These developments in science also occurred largely in spite of available educational opportunities. Nevertheless throughout the 17th and 18th Centuries, all manner of educational institutions existed in Europe, but any sort of education for 'the common' people was still unheard of except in Scotland and Germany. Even there, what people did receive was often under poor conditions and usually finished at ten or eleven years old. Yet it was through the 18th century that at a philosophical level

many of the themes which have been at the centre of educational debate ever since were articulated. This is the time of Locke (1632-1704) Voltaire (1694-1778) Rousseau (1712-1778) Kant (1724-1804) Pestalozzi (1746-1827) La Chalotais (1701-1785) Condillac (1715-1780) and Helvetius (1715-1771) to name a few.

Within emerging progressive and revolutionary meta-languages, the idea took root that some form of education for all was not just desirable, but necessary to achieve and maintain the more equitable and humane society that many felt must come to replace what existed at that time. However, the question of what sort of education is required for citizenship in a freer society is far from an easy one to realise when the actual society which one might be prepared for did not actually exist. Education was also seen by some as the means by which the true nature and potential of each individual might be realised, but a similar dilemma existed here as well - this being that given that 'some sort of state' must exist, what sort of education is needed that protects and promotes the individual's nature, while at the same time meets the needs of society? Questions were also emerging about the role perception, experience and activity might play in human nature and educational practice.

The philosophical build-up seeking change through these centuries saw concrete expression in the French Revolution, but the early idealistic promise of this revolutionary movement giving rise to a freer more humane European society was not to be materialised at that time.

> First came anarchy within and wars without: then Napoleon and a military despotism which threatened to overrun the whole of Europe. In the course of the struggle that ensued, the forces of reaction everywhere gathered strength, and when peace returned, the old institutions, though somewhat weakened, were for the most part restored (Boyd 1965:331).

Nevertheless the impact on educational practice was significant. In the centuries before the French revolution, education had been much the same all over Europe, the difference between one nation and another being largely a matter of backwardness and forwardness. During the first half of the 19th

century each nation followed its own line of thought and action in virtual independence of its neighbours. Germany, for example, spurred on by defeats at the hands of Napoleon, was far more radical and advanced in comparison with England. Isolated from war-ravaged Europe, England was enjoying significant economic prosperity, which was being generated by an industrial workforce that, at the margins, was living in increasingly obvious squalor and misery. Educational measures for these new poor evolved, slowly, beginning in 1802, but it took until 1870 before all English children were brought into a national system of education (Wolf 2001).

The 19th century thus saw a general broadening of educational opportunities within European and colonial systems, driven primarily by economic and political factors, but with significant humanitarian and 'progressive' influences playing their part as well, with the nature vs. nurture debate dominating philosophical perspectives through this time and well into the 20th century. The importance of Darwinian evolutionary theory contributing foundations for later constructionist developmental theory is also noted by Boyd (1965).

Moreover, while Darwin looked at the evolution of the species, Marx, Engels and others looked at how society itself may evolve, with these approaches providing the framework for the revolutionary, social and educational ideologies of the socialist world. In other words, flowing into and through the 19th century were multiple and escalating change forces, new 'meta languages' influencing how and what people thought about. These were unfolding in a world which not only required new skills but also increased mobility in those skills and by the end of the 19th century broadly based universal compulsory education at the primary level was the 'Western' norm (Wolf 2001).

These same forces, accentuated by two world wars, escalating ideological tensions at a global level, and a dawning space race, saw Post-Second World War reforms which provided the basic shape of education in the West for the middle to late part of the twentieth century. The general pattern established was that most people completed schooling to the middle secondary years, a

minority of brighter or more privileged students went on to upper levels and even fewer moved on to university level.

1.1.2. Meta Languages and Consciousness Thresholds

Before looking at more recent changes to Western Education, some important threads from the above discussion need to be teased out. In the brief outline provided, the emphasis has been on seeing education in relation to changing world views, what was referred to in the beginning as meta-languages, sets of core assumptions upon which prevailing power structures were based and which used education as a transmission device for these. The second point to make is that changes in meta-languages can be regarded as new thresholds in consciousness, changing what lies within reach of consciousness. Thirdly, the change processes effecting meta-languages are not simple lineal and accumulative processes. The 'forces' which have underpinned major changes in world views have not just emerged through time, but have moved East to West and West to East much like currents of water, and of course, these have always been distributed across some (usually the elite) and not others. The 'hellinisation' of the Western world in antiquity, the Christianisation of Europe after the decline of Rome, the Italian Renaissance, the Protestant Reformation, the Age of Enlightenment all represent major changes in world views and the crossing of thresholds to an increased reach in what consciousness could embrace and work with. One significant threshold was the crossing of the Western mind into the use of the abstracted symbols from antiquity, which reflects a flow of ideas and symbolic forms relating to science and mathematics from West to East and back again over many centuries. The emergence of written vernacular languages also gave access to new ways of constructing and preserving national histories and identities, and the progressive and revolutionary movements brought into broader consciousness ideas of democracy, freedom, liberty as causes worthy to fight and die for. As indicated earlier by Shiner (2003) in the prologue, the concept of 'art' itself crossed some threshold into a new consciousness during the 18th century and has been regarded in a different way ever since.

Education itself as we know it today as a mass system which reaches to most if not all, is itself founded on meta-languages which relate to nationhood, industry, economics, and progressive and humanist ideals, which simply were not in general currency a mere two hundred years ago. The main thrust here then, is that organised education, while it has a far deeper past than the last two hundred years, at any particular place and phase in time has primarily functioned to replicate in the next generation the current world view of the state, the church, the empire, and, more recently individual nations. That is, the educational process from a Western historical perspective rarely, in practice, has been an 'anticipatory force'. If this analysis is generally correct, t he question then arises, what happens when the 'rate of change' affecting changes in meta-levels of consciousness, and the technologies, skills and work force needs underlying these, outstrips the capacity for education to deliver?

1.1.3 Recent Changes in Education

In the last thirty odd years, economic, social and technological forces at a global level have, once again, radically reshaped education, tertiary education in particular. More pointedly, it has been the 'rate of change', especially in areas of information technology, which have outstripped the capacity for education, as it was two to three decades ago, to keep pace in delivering the skills required throughout the economies of the developed and developing world. The need arose for 'just in time skills' within what has become known as 'the information or knowledge economy' and the general Western strategy was to make education itself responsive to 'market forces'. Opening up the vocational education sector so private (and community) enterprise could compete for students and funding was one way additional capacity and innovation and rapid response to skills needs could be achieved.

This has only been one of many significant changes. One can point to the concept of education being 'a public good' being replaced by education as a private benefit to be purchased by the

recipient. Education is now an international commodity traded on a global market where institutions compete globally for students, teachers and funding, with the private sector throughout the planet playing a major role in vocational and specialist professional training. At a governmental level system steerage has moved from direct organisational influence to the use of funding policies to align provision and outcomes with perceived economic and social priorities (Wolf 2001). Science, technology and communication orientated programmes have expanded while traditional humanity programmes have declined. Post-graduate, part-time, distance and on-line learning are major areas of new growth, with transition from secondary school to tertiary sector continuing to increase. Participation in the tertiary sector by more mature people is escalating, and, as already indicated, interest and engagement with arts and creativity-related education has seen sustained growth over the last few decades. Part of the meta-language which now permeates education, especially at the tertiary level, embraces the view that individual 'creativity' is an important means of individual and collective competitive advantage and adaptability in the market place (Cropley 2002, Eisner 2002).

1.1.4 The Learning Connexion (TLC) in Context

The school emerged in the early 1990's and reflects many of the points listed above. It is part of the private sector, it relates to a broader growth in engagement with the arts, and its areas of marked growth in enrolments in the last few years reflect the general pattern of a preference for part-time and distance and online learning. The theme of adult re-engagement with education is strongly present, and the organisation clearly identifies itself as relating to the enhancement of creativity, with the engagement with learning in the visual arts seen as contributing to abilities to pursue new and effective pathways through life and work (Milne 2008). On the other hand the school appears quite distinctive in other ways, such as in its age and gender participation profile as well as its organisational structure, processes and philosophy. The findings chapter reveals it attracts, initially, people of all ages and backgrounds, though it also appears to be particularly attractive to longer term engagement by people in mid to later life, people who often have

significant professional qualifications and backgrounds. Much more detailed discussion of The Learning Connexion occurs in later chapters.

1.2. PHILOSOPHICAL PERSECTIVES ON ART AND EDUCATION

In this section various perspectives on art and education are explored, primarily from the perspective of how they engage the issue of individual development and social change. The purpose is twofold - firstly it helps identify where The Learning Connexion sits with contemporary philosophies and approaches to arts education. Secondly, it identifies a number of gaps or weakness in current thinking about art, education and change that this project seeks to address.

1.2.1 Global and Historical Perspectives

It is possible to distinguish a number of 'global and historical perspectives' which have had a significant effect on arts education, arts theory and curriculum development (Min. Ed. 1999). These can be grouped into a number of major categories: Progressivism; Modernism; Discipline-based Arts Education; Post Modernism; and Arts and Cognition, and a brief review of these follows.

Looking back to the 'progressivism' of 18th and 19th century educational and social philosophies, one can see some of the foundations for 'education through art'. From Schiller (1759-1805) there is the notion of education needing to centrally involve a concern for 'aesthetics' (in his conception an appreciation of beauty contained within various traditions of 'fine arts' which looked back to the ideas of Plato) with aesthetics the pathway to the development of people capable of creating and sustaining a society based on freedom, democracy and reason (Smith 2004). Also from Rousseau there is the theme of 'non-interventionist self expression' through which a 'natural goodness' could be fostered outside the corrupting influences of the existing order. From such philosophical foundations ideas were developed during the 19th and first half of the 20th century, of 'children's art' (Wilson 2004) and 'child development in art' (Kindler 2004).

With 'Modernism' the emphasis in art education shifted from an assumption that a potential for 'natural goodness' could unfold through free expression, to arguing that there was, with appropriate pedagogies, the potential to promote a relationship between positive individual and social development through consideration of the originality and other qualities of the 'art work' itself. The principle reason for experiencing and examining art was to reveal and appreciate its underlying design, composition and expressive qualities. Modernist ideals have influenced and shaped much of art practice and theory during the 20th century (Min. Ed. 1999:2), with diverse theorists emphasising a concern for the individual, the nature of social responsibility, and 'the fundamentals of an agreed universal truth'. The world view here is thus firmly embedded within the enlightenment project and the achieving, through art experience, 'reason, rationality and individual freedom' (Giroux 1988).

Dewey (1859-1952) and Read (1893-1968) in particular are cited in this context. Dewey (1934) believed that art should be experienced through educational contexts for its potential to transform and reconstruct experience. Dewey favoured a very broad concept of 'art' that looked to find 'the aesthetic' in everyday experience and life and through this the ability to judge the quality and appropriateness of everyday aspects of life. Smith (2004:166) suggests that Dewey developed a 'Darwinian biosocial conception of human development' where development (i.e. new mental or cognitive capacity of some kind) occurs through the interaction between an organism and its environment. Engagement with art in this view was a necessary part of the shaping of human biology in the direction of a potentially different and better world view, one that could counter the effects of the dislocating social change that Dewey himself had experienced.

With Read we see not only reflections of Schiller's ideas, but also the social thought of Marx and the psychological theories of Freud and Jung (Thistlewood 1984, in Smith 2004). Read was therefore 'sensitised' to a 'dehumanisation of society' and an associated decline in the quality and quantity of humanly crafted objects. From the fields of psychoanalysis Read drew on notions of the subconscious mind, with these reflecting Freud's orientation towards the subconscious being

essentially sensual and sexual in nature. Moreover, Read believed that 'dipping into the subconscious', especially into 'its potent image-making powers' opened up 'paths to greater self realisation' (Smith 2004:165).

Eisner has continued to build on the ideas of Dewey, as well as drawing on the multiple intelligence theories of Gardner (1983). The concept of literacies in the arts is often associated with Eisner (1998:52) who defines it as ' a way of conveying meaning through, and recovering meaning from, the form of representation in which it appears'. Art offers unique forms for experiencing the world and impact on how we think, what we think about and modes of communication through which we 're-present our thinking' (Hong 2003:139). In Giroux's view (1992) 'literacy' involves the progressive development of our abilities to both interpret and convey meaning through multiple sign and symbol systems which include kinaesthetic, visual and aural modes of communication.

The key to developing knowledge within educational settings in Eisner's view (which he defined broadly to include the family) is to create a varied and stimulating environment in which people become 'immersed' (Harris 2003). Eisner's view are also far from art education being any sort of free engagement with free expression, and like Dewey he looks for arts educational experiences to be systematically structured. In this way Eisner aligns with and was directly influential in aspects of what is generally termed Disciplined Based Art Education (DBAE).

DBAE has tended to dominate art teaching practices (beyond the earliest years) since the 1970's. Jerome Bruner is also seen as a major influence on DBAE through his emphasis on studying 'the structure of the field rather than just facts about it' (Dobbs 2004:703). DBAE embraces the idea that the benefits of art education for individuals and society (and therefore the rationale for social investment in it) lay in 'a more holistic, comprehensive and multi-faceted strategy' which integrated teaching practice which was directed at art making, art history, art criticism, and art aesthetics. It was thus a more structured approach to education about the arts and through the arts, to enable

students to develop increasingly sophisticated aesthetic abilities to produce, describe, interpret and analyse art works, and through this achieve a broader understanding of their society, history and the cultural diversity which was embedded within this. DBAE art education was therefore a further challenge to the creativity/self expression paradigm, by even more firmly putting the 'art work' (especially work by established artists) rather than the student at the centre of the educational experience - self-discovery is further displaced with 'the acquisition of competence in art as a field of study and engagement' (Dobbs 2004:706).

Post-Modernism represents a more recent shift in emphasis towards questioning the social contexts and processes through which meaning is created and expressed. While in many ways difficult to define and accompanied by contradictory definitions (Giroux 1988) post-modernism provides an emphasis on 'plurality', 'the necessity for crossing boundaries', and 'the mixing of genres'. This change is driven in Lyotard's (1979) view by technology and changing conditions of knowledge, and from Jameson (1984), it is founded on a new 'cultural logic'. That is, knowledge and the processes of knowledge construction are no longer able to be contained and controlled (disciplined) within the paradigm of the enlightenment project with its well defined pathways and steps to gaining and extending certain types of knowledge. The postmodern 'condition' then exists not so much in a shared sense of what it is but in a shared sense of what it is not, and that some sort of threshold has been crossed and the 'rules of the game' are not just rewritten, but are to be rewritten, again, and again. As Hinkson (1991) suggests, we are now in an 'age of discontinuity' reflected in changes within education itself which, not only seek to embrace 'the creative individual' but also established the conditions which enabled The Learning Connexion and its approach to the creative self to emerge. Educational experience relating to the arts from the post-modernist perspective is to be valued for how it reveals and challenges the social contexts which shape people's experience of reality. 'Art' in this view can therefore also be approached from the

viewpoint that it involves literacies which are 'texts' (Giroux 1992) to be interrogated about the social context in which people find themselves (Grierson & Mansfield 2003).

Looking back at these philosophical perspectives from the point of view of how they connect the individual with social change, each has quite a different emphasis. With progressivism we have the idea that more just, equitable and freer social arrangements will be created in the future by people whose natural abilities and presumed 'goodness' are fostered in an environment which itself allows and values highly 'free expression'. Free expression and democratic ideals are seen as interwoven. Modernism on the other hand emphasises the process of becoming 'human' through structured rational based learning and participation in culture (Bauman 1992), with art education part of the mechanism which enables humans to change their natures in ways which reaches towards a potential to rationally understand and reveal the 'real world', with teaching by those 'in the know' an essential part of the process. DBAE therefore essentially takes the modernist view and attempts to create a more structured pedagogical framework and instructional process.

Post-Modernism on the other hand aligns more easily with constructivist and interpretive approaches to 'what is real' and recognises that, phenomenologically at least, multiple realities must exist because there are multiple ways 'reality' can be experienced and materialised. Such pluralistic views also tend to promote and value 'individual agency and creativity' while also challenging the legitimacy of established institutions and power structures. Institutionalised education historically, as pointed out above, has largely functioned as an instrument of the dominant power structure, and in its more recent mass form remains essentially 'a modernist project'. On the other hand contemporary 'art' embraces many activities that tend to align, indeed feed into, essentially Post-Modern ways of looking at the world. Such an interpretation therefore also poses a challenge for the very idea of 'art education' as being something that modernist institutions can meaningfully deliver as part of the preparation for life in a Post-Modern world.

While this project does connect to these broader philosophical debates as outlined above, it builds towards this connection from a foundation of particular ideas about 'art' and its relationship to cognition, cognitive development and consciousness. In terms of the more established positions here, two general orientations can be identified which mark out major areas of ongoing debate relating to arts education policy and research. Firstly, there are ideas that engagement with art can have beneficial effects on other forms of cognition, for example, engagement with dance may be beneficial for spatial ability, or engagement with music beneficial for mathematical ability. The second general approach is that engagement with art can lead to, as advocated above by Eisner (1998) unique forms of cognition – literacies or 'art thinking'.

Hetland & Winner (2004) looked at the evidence for cognitive transfer from arts education to non-arts outcomes, such as: music to mathematics; dance to spatial intelligence. They suggest the results in many areas provide little or only equivocal support for claims of cognitive transference. At the same time, they also suggest that methodologies for such research are themselves in need of improvement to address such questions more effectively. Eisner (2002:219) also suggests that the issue of researching 'transfer' is problematic (though not impossible) but at this stage also suggests there is little evidence to support such claims. The issue of cognitive transfer is taken up again in later chapters where it is related more directly to some of the findings in The Learning Connexion context.

A third position on art and cognition is identified in this work, this being that cognition can be approached from a systems perspective which moves away from an immediate emphasis on individual development, to distributed effects impacting through time on cognition and therefore on the meta-languages or 'currencies' of consciousness. For example the following quote, while directed at individual development, could also be read as a description applicable to the emergence of higher levels of human consciousness:

> In developing sensory perceptions of the world, children respond to gesture and movements before they react to spoken word. They understand and explore sound before they learn to speak, they draw pictures before they form letters. They dance and act out stories before they learn to read. Gestures, movement, sound and pictures are codes or symbols which allow people to formulate and store ideas, observations and understandings about the self and the world. The arts are therefore cognitive enterprises (Min. Ed. 1999:4).

This view of 'art' as intrinsically linked to 'thinking' via systems of symbols is further emphasised by Parsons in the same paper:

> Symbol systems identify forms of thinking … the use of symbol systems to create meanings establishes sets of rules which are mostly intuitive and natural, but also partly conventional. 'Artistic thinking' is the perception of the terms of the symbol systems, creating significance and following the appropriate rules; and aesthetic thinking is the perception of that significance in the arrangement of those terms (Parsons 1988:108; in Ministry of Education 1999).

Where this view is considered to fall short is its emphasis on symbolic systems being primarily a construction of individual 'minds'. The position pursued in this work is that 'the arts' do indeed have the capacity to shape cognition in new directions but this idea can be applied, and may indeed be better applied, within a broader systemic view which recognises culture itself as a cognitive dimension and force which influences consciousness with our species more generally.

This cognitive perspective also reaches out to another field of inquiry which might be loosely defined as 'art and the brain'. This explores connections between art and neurological processes relating to perception, emotion, association, attention and memory. Kindler (2004) for example, points to Miller & Tippet (1996) who identified the right frontal lobe as the area particularly involved in visual problem solving, and Elliot (1986) who demonstrated integration and synchronisation of functions of the right and left hemispheres relate to creative visual 'thinking'. Also Zeki (1999:12) developed a visual brain theory which stipulates that 'vision is an active process through which the brain constructs knowledge of the visual world'. It does this by discarding some sources of information and selecting others, and comparing the selected information to its stored record. Only

then does the brain generate the visual image. As will be seen, in later chapters, this is a viewpoint which connects strongly processes of abstraction and symbol creation.

Ramachandran et al (1999) also looked at neurological processes, in particular processes reflected in people with well defined neurological syndromes, such as Blind Sight and Capgras syndrome, and how these illuminate emotional and perceptual influences on consciousness. While these perspectives appear not to have yet become strongly linked with art educational philosophies and practices, they promise to become increasingly significant in the future, and the strengthening of the links here can be considered one of the general aims of this project.

1.2.2 Arts in the New Zealand Curriculum

Helping to round out the discussion is a brief look at the Ministry of Education 2000 Art in the New Zealand policy framework. What appears to stand out about this document is that while much of the thinking from the educational and arts communities that went into developing it reflects a post-modern orientation, the framework itself appears to still be anchored within a modernist meta-language. The overall emphasis is on the arts being related but separate 'disciplines' with little mention of a world that is itself undergoing discontinuous change through new knowledge systems driven by new technologies and other change forces. Art education is still, it appears, primarily orientated around promoting a sense of place, history and issues of cultural identity, rather having any central importance in the critique of that world or the educational preparation for participation in an unpredictable world. Taking a broad perspective on the likely results in practice of 'the official philosophy' many writers express the opinion that it is just as likely to be used as a mechanism which tries to maintain social equilibrium in the face of change. Grierson (2003) comments:

> I have suggested that in the construction of the new Arts Curriculum, the concept of difference has been brought under control through linguistic devices which name the boundaries of thought and practice. Difference has been disciplined by the consensual preference for unity through which the group might progress in some sort of pragmatic and harmonised efficiency. The question must be

> asked – is this ethical in practice? It would seem that what is lacking ... is a critical attitude towards assumed and undeclared positions. Practices aimed at normalising, neutralising and a-politicising difference would appear to be effete, yet such practices are priorities in the interests of order, unity, accountability and efficiency. If arts are potential sites for imaginative and deconstructive practices, then their milieu is not one of a Kantian return to universality that situates the prioritisation of Eurocentric norms and values. Arts potential for transformative practice lies in the opening of pedagogical encounters to the traces of indeterminacy, surprise and risk (Grierson 2003:114).

What is strongly emphasised in the 2000 policy framework is the literacies perspective (Hong 2003:139) with the overarching emphasis of each art discipline involving unique 'ways of knowing'. Here is a rather tame statement about literacies drawn from the document:

> Literacies in the arts involve the ability to communicate and interpret meaning in the arts disciplines. We develop literacies in dance, drama, music and the visual arts as we acquire skills, knowledge attitudes, and use their particular visual, auditory and kinaesthetic signs and symbols to convey and receive meaning (Min. Ed 2000:10).

By comparison Hinkson (1991) in the background paper (Min. Ed. 1999) has a much more powerful thrust:

> If the social space of modernity, under the influence of the social groupings called forth by writing, especially that transformation of writing within modernity called the printed word, is displaced by a social space constituted by the information and image revolution, it is clear enough that one must expect a major transformation within education (Hinkson 1991:27, in Min. Ed. 1999:9).

One of the things which distinguishes the post-modern from the modernist world, and which is reflected in the quote above, is the unfolding of a major 'shift to the visual' (McAuley 2004) in how we create and share information. It might therefore be said that we are now crossing a major threshold in how brain, visual culture and minds interconnect. For example, contemporary IT and communication technologies rely on visual fields of information in addition to, or in the absence of, the linearity of speech and writing. The quote by Hinkson (ibid.) above also touches upon what might be called 'the creativity educational dilemma' and the challenge faced by orthodox institutions in

promoting unorthodox, risk-taking, ambiguous and thus potentially novelty producing behaviours and attitudes (Cotton 2003, Cropley 2002).

The views of Hinkson (ibid.) and Grierson (ibid.) seeing art as a 'transformational space' is another theme pursued in later chapters, where the transformational dimension can be seen to function at multiple levels - the individual, organisation, society and ultimately consciousness itself. This set of ideas: 'a shift to the visual'; 'the creativity dilemma'; and image-making as involving the creation of 'powerful transformational spaces', along with further discussion of art, education and cognitive development, are important themes explored through the project and which are returned to in the final chapter.

What also stands out in relation to the Arts in the New Zealand Curriculum and much of the thinking which lay behind it, is that it is primarily conceived in terms of its applications within a learning process which starts within the school system then reaches out in its upper levels to the tertiary sector and to processes associated with people entering adult society. As already pointed out in the prologue, this study involves a particular interest in mature ages novice artists, people in their forties, fifties and older, who are choosing to engaged with a period of image-making. These are therefore not people entering the workforce, but often coming from the workplace to engage with image-making during a major period of reframing or reorientation in their lives. This perspective then raises questions of the relevance of a curriculum framework that is primarily conceived as part of the preparation for participation in society by younger people, when, increasingly engagement with art involves people in mid to later life. What also stands out is an assumption of gender neutrality, which is also an aspect this project brings under question. These themes are also an important focus in the final chapters.

1.2.3 Project Aims: Identifying the Gaps

The material presented above touches upon a number of gaps or weaknesses in how the issues of

how art, education and change are approached. From the discussion on art and cognition it is possible to see two major perspectives which currently form a major focus of discussion. These can be summed up as the 'instrumental' and 'literacies' perspectives. The instrumental position sees arts education giving rise to improvements to a range of recognised cognitive abilities, including creative skills and attitudes, which support involvement in society and employment generally. The literacies perspective on the other hand emphasises not only the 'arts' but each art form as a separate discipline which embrace unique knowledge systems - a view which Bracey (2004:184-6) claims is often assumed, especially in the current curriculum, but not founded on any sort of agreed epistemology of the arts. The 'gap' in this regard is that something of a resolution between these two positions may be on offer when deeper time perspectives on image-making are used that work from a systems orientation. In this view image-making can be seen to involve processes which gave rise to cognising minds that were able to create and function within what is termed in this work as 'the symbolic domain' (See Knight 1999).

The second gap is related and arises from the question - can we adequately understand the relationship between art, education and change in the contemporary setting without, at least in part, standing outside art and education itself? If finding new vantage points outside historical and contemporary art and educational debates is an important way to move the debate forward, the question arises of where do 'we' stand in order to find those vantage points? This issue is approached in this work from the position that the very first human image-making can be interpreted as reflecting the crossing of a major threshold in the nature of human thought, where the relationship between brain, culture and mind was fundamentally changed. Expressed this way, perhaps something of a parallel is on offer with the post-modern idea that a threshold has been (or is being) crossed where 'the rules' for creating knowledge and experiencing reality are changed. More generally, it is suggested that when an interconnectionist standpoint is applied on the origins

and possible consequence of image-making in the European Upper Palaeolithic, new perspectives emerge for looking at the relationships between art, education and change today.

The third 'gap' is more pragmatic and stems from recognising that current thinking and policy relating to arts education is largely orientated around the developmental period from early childhood to emerging adulthood. Yet it is appears that engagement with the arts generally is escalating, and in some educational settings, it may be people of older ages who are engaging with this in ways that can be regarded as 'developmental'.

As stated here, the three gaps identified above establish a fairly broad agenda, but which is delimited by seeing the project as 'a case study' (discussed in Chapter Four) which has both descriptive and instrumental dimensions. The descriptive dimension aims to illuminate the experiences, processes and influences occurring in the image-making of mature aged novice student image-makers in The Learning Connexion setting and to understand this within the contemporary spectrum of arts educational provision and philosophy. The instrumental dimension seeks to build and extend theory relating to human symbolic consciousness *and*, how aspects of 'art' may provide a research window into this. That is, while the core of the project has a focus on The Learning Connexion setting, the theoretical perspectives underlying the other two 'gaps' are also used to interpret the findings from The Learning Connexion and to further reflect on these theoretical perspectives as well. It also follows from this discussion that 'the audiences' for this work are likely to be found spread across multiple disciples, with this itself reflecting a trend towards what Sullivan (2004) refers to as a post-disciplinary paradigm. The next section presents the three research questions which provide the structure for the dissertation as a whole.

1.3 THE RESEARCH QUESTIONS

1.3.1 What personal and organisational influences can be associated with or seen to be reflected in, the images created by art students at The Learning Connexion?

1.3.2 How might the Findings from The Learning Connexion be interpreted by theory that brain, culture and mind function systemically to continually reshape human symbolic consciousness?

1.3.3 What light on the Findings from The Learning Connexion can be drawn from an examination of the first known human fixed image-making?

1.3.4 Dissertation Overview

The dissertation addresses these questions through the following six chapters. Chapter two is a review of literature that relates to the theme that brain, culture and mind can be approached as interdependent phenomena. Chapter three looks specifically at the origins and possible developmental consequences of Upper Palaeolithic image-making. Chapter four looks at the methodological issues and perspectives which frame the project. In this the project is identified as 'a qualitative case study' involving descriptive and instrumental dimensions. Discussion also details the research methods used and how the ethical issues which arose during the project were addressed. Chapter five is concerned with describing and discussing the findings from the data gathered at The Learning Connexion. Chapter six then analyses and interprets these findings with regard to various perspectives and themes drawn from the earlier chapters, with discussion returning to the three research questions and an overview of the most salient findings in relation to these. The final seventh chapter looks at implications for arts educational practice, policy and discourse development, further related research, and system theory development. The dissertation draws towards a close with discussion of arts-based inquiry which includes consideration of the second part of the dissertation's title – Towards a Methodology of Interconnectedness.

CHAPTER TWO

BRAIN, CULTURE, MIND

The main theme running through this chapter is that 'consciousness', and in particular what some call symbolic, extended, or higher consciousness (see Donald 2001, Domasio 2000, Edelman 1994) is based on a particular type of integration, or a binding, of neurological processes and cultural material and processes. This chapter is therefore based on the premise that an adequate understanding of the nature of human consciousness and how it changes, requires that we see brain and culture as essentially 'two sides of the same coin' (Malafouris 2004). Discussion relating to this occurs in three major sections. In the first the focus is on 'levels of consciousness' and central to that is Deacon's (1997) distinction between iconic, indexical and symbolic inference, with symbolic inference based on 'artificial' signals which are derived from culture. The next section considers various aspects of the brain itself which appear to provide the foundations for this symbolising relationship between brain and culture to emerge. The third section looks more deeply at the possible role encephalisation (enlargement of the brain) and early hominid ritualised behaviour may have played in moving evolutionary processes in the direction of 'the symbolic domain'. That section also explores cognitive approaches to 'culture' and 'mind' which provide an important link into Chapter Three and consideration of Upper Palaeolithic image-making.

2.1 LEVELS OF CONSCIOUSNESS

Consciousness has emerged as something of a common focal area for people working in various and often disparate fields, and this reflects the fact that consciousness involves levels of complexity that lie out of reach of any one approach (Domasio 2000:82). Nevertheless, many neuroscientists regard themselves as 'monists' (e.g. Ramachandran 2004) and allocate all the mechanisms relating to consciousness to aspects of individual brain functioning, even if these are not really understood

yet. Here Dennett (2005) outlines part of the philosophical challenge of moving in the monist direction:

> All the work done by the imagined homunculus in the Cartesian theatre must be distributed among various agencies in the brain, none of which is conscious. Whenever that step is taken, however, the subject vanishes, replaced by mindless pieces of machinery unconsciously executing their tasks. Can this be the right direction for a theory of consciousness to take? Here opinion is strikingly divided. On the one hand, there are those that join me in recognizing that if you leave the subject in your theory, you have not yet begun! A good theory of consciousness should make a conscious mind look like an abandoned factory, full of humming machinery and nobody home to supervise it, or enjoy it, or witness it (Dennett 2005:69).

Part of the problem here is that attempts to explain what consciousness is in terms of any particular neural mechanisms has not yet met with any real success (See Koch & Crick in Koch 1998 and Greenfield 2000). Moreover, while it cannot be argued that a functional brain is not necessary for consciousness to occur, looking just to the brain to explain major changes in human cognition *through time* is insufficient. What offers one way forward is to make distinctions between consciousness per se and symbolic or higher-level forms of consciousness. Domasio (2000) heads in this direction and makes a distinction between core and extended consciousness. Likewise, Edelman (1994) distinguishes between primary and higher order consciousness. In this work the emphasis is on symbolic consciousness but this term can be seen as similar to these other concepts. Helping to lay the foundation for further discussion of these approaches is Deacon's (1997) distinction between Iconic, Indexical and Symbolic inference.

2.1.1 Iconic, Indexical and Symbolic Inference

> … icons and indices are not mere perception and learning, they refer to the inferential or predictive powers that are implied in these neural processes. Representational relationships are not just these mechanisms, but a feature of their potential relationship to past, future, distant or imaginary things…That facet or stage of my interpretative recognition process that is the same for the sketch as the face it portrays is what makes it an icon, looking at one is like looking at the other in some respects … iconic relationships are the most basic by which things can be re-presented, it is the base on which all other forms of representation are built upon.

> Physical contiguity (nearness or connectedness) or just predictable occurrence are the basis for interpreting one thing as an index for another, but as with the case for icons, these physical characteristics are not the cause of the indexical relationship. What makes one an index of another is the interpretive response whereby one seems to 'point to' the other …
>
> The common sense idea is that a symbolic association is formed when we learn to pair a sound or typed string with something else in the world. But in the terms we have been developing, this is what we mean by an indexical association. …the shift from associative predictions to symbolic predictions is initially a change in mnemonic strategy, a recoding. It is a way of offloading redundant details from working memory, by recognizing a higher-order regularity in the mess of associations, a trick that can accomplish the same task without having to hold all the details in mind. Unfortunately, nature seldom offers such neat logical systems that can help organize our associations. There are not many chances to use such strategies, so there is not much selection for this sort of process. We are forced to create artificial systems that have the appropriate properties. The crucial point is that when a systematic set of tokens becomes available, it allows a shift in mnemonic strategy that results in a radical transformation in the mode of representation. What one knows in one way gets recoded in another way. It gets re-represented. You might say we know them from the bottom up indexically, and from the top down symbolically … Because this recoding is based on higher-order relationships, not the individual details, it often vastly simplifies the mnemonic problem and vastly augments the representational possibilities (Deacon 1997:73-89).

In this view the ability of communities of brains to function 'symbolically' is possible because there are sets of symbolic signals or clues which really only exist outside the brain, as culture (or in it depending on your point of view) that enable the brain to processes information in novel and non-evolved ways, that is, to create new and increasingly transparent forms of cognition.

2.1.2 Symbolic Consciousness, Identity and the Binding Problem

The idea of consciousness having different levels mentioned just above can now be explored further. From Edelman (1994):

> Primary consciousness is a state of being aware of things in the world – of having mental images in the present. But it is not accompanied by any sense of a person with a past and a future … primary consciousness is a kind of 'remembered present … it lacks an explicit notion or a concept of a personal self, and it does not afford the ability to model the past or the future as part of a correlated scene … This does not mean that an animal with primary consciousness cannot have long term memory and

> act on it, obviously it can, but it cannot, in general be aware of that plan, or have an extended future for itself based on that memory. Creatures with primary consciousness, while possessing mental images, have no capacity to view those images from the vantage point of a socially constructed self… Higher-order consciousness involves the recognition by a thinking subject of his or her own acts and affections … [it] involves the ability to construct a socially based self-hood, to model the world in terms of the past and the future, and to be directly aware. Without a symbolic memory, these abilities cannot develop … long term storage of symbolic relations, acquired through interactions with other individuals from the same species, is critical to self-concept (Edelman 1994:112-32 in Lewis-Williams 2002:188).

From Domasio (2000:196) there are similar views on what he calls core consciousness, to Edelman's primary consciousness. The major difference is at the higher level where, instead of the socially constructed self, he uses the term 'the autobiographical self' and places the majority of the emphasis for this on an evolving capacity for 'autobiographical memory':

> The autobiographical self hinges on the constant reactivation and display of selected sets of autobiographical memories. In core consciousness the, the sense of self arises in subtle, fleeting feeling of knowing, constructed anew in each pulse. Instead, in extended consciousness, the sense of self arises in the consistent, reiterated display of some of our own personal memories, the *objects of our personal past,* those that can easily substantiate our identity, moment by moment, and our personhood (Domasio 2000:196).

In terms of the shift from one level to another, it is most unlikely that there was a single threshold, and a gradual build up to a series of major thresholds in consciousness change seems more plausible. The central issue to focus on here is, what role might 'culture' and 'identity' have played in the extension from lower to higher order forms of consciousness, given that the above models of consciousness change are heading in the right direction?

Domasio appears to be orientated around evolution gradually providing individuals with a brain with the memory and reasoning capacity that enabled construction of symbolic cultures and identity. Edelman, in addition to memory evolution, appears to recognise the need for symbolic systems and structured communities to be in place before socially constructed identities can be experienced. From Deacon (above) there is the view that symbolic inference is made possible by

artificial 'clues' created by communities of minds. A chicken and egg situation thus arises - if some sort of symbolic environment is needed in order to experience symbolic identities, and symbolic identities are in some way related and perhaps essential for extended or higher level consciousness to occur, how could such symbolically structured environments come into being in the first place?

The ideas of Domasio, Edelman and Deacon are of course not the last about different levels of awareness and consciousness. For example, Donald (2001:260) sees the evolution from primate to human mind interwoven with culture and occurring through four major stages which describe both cognitive and social/cultural systems: Episodic, Mimetic, Mythic, and Theoretic, with the movement between stages driven by three levels of expanding conscious capacity. Donald is also very aware of the chicken and egg conundrum:

> Which came first in human emergence, symbolic skill or culture itself? Obviously many of our symbolic skills are due to enculturation. The most indisputable examples of this are the skill sets associated with literacy and mathematics. Given the recency of their invention, they cannot be vested in evolved modules. There has been no time for such evolution. Unthinkable as it may seem, this allows us to entertain a radical possibility: If the exquisitely intricate networks of the literacy brain have to be acquired in culture, why not language itself … We cannot dismiss the possibility that language itself, especially in some of its most esoteric semantic and grammatical features, might be just another product of culture, driven by our expanded level-3 conscious capacities (Donald 2001:204).

This discussion also relates to the binding problem of consciousness (Domasio 2000, Donald 2001, Ramachandran 2004). The binding problem relates to the idea that, consciousness, at least in part, occurs through some (as yet unknown) mechanisms that enable the incredibly complex neural processes underlying perception, association, attention, emotion and action, to be drawn together into a unified experience of existence in the present along with events affecting that existence. One way to think about the emergence of higher levels of consciousness is in terms of a new type or element in the binding process, a structure which integrates the neurological processes involved at a new level of cognitive capacity. That structure can be theorised as either, particular to the brain

itself, or particular to culture itself (thus the chicken and egg problem) or intrinsically embedded in an evolving and increasingly dynamic brain-culture relationship. The 'interconnectionist' orientation is towards brain and culture being in a dynamic relationship, and the conceptual candidate to focus on in this relationship (given the perspectives of Edelman, Domasio, Deacon and Donald above), to support new levels of consciousness, is that of 'identity'. That is, does symbolic identity, or the socially constructed self, provide a core 'construction' that enables the capacity for symbolic cognition and language more generally? (See Domasio 2000:223 for an extended discussion). These themes of identity, language, the symbolic domain, and new levels of consciousness are all taken up again below. In the next section, the focus shifts to the brain itself and to aspects of this which appear to provide not just the foundation for culture, but also for culture itself to be seen as an evolutionary force.

2.2. BRAIN AND CULTURE –TWO SIDES OF THE SAME COIN

When reduced down to its core function, a brain is 'simply' an incredibly complex sensory-motor system which seeks perceptual information from the environment and then organises further activity in response to that information. Between sensory input and motor output the brain engages evolved or acquired responses. All this happens so seamlessly and automatically that it is appropriate to conclude that sensory-motor functions and any related brain systems which are engaged must be highly integrated, but 'how this integration is performed by a nervous system is currently poorly understood' (Avis & Booth 2003:1016,in Arbib 2003). It is not the intention here to go into brain anatomy or neurological theory in any depth. Rather various aspects of brain theory and functioning are considered with the emphasis on how these appear to enable 'culture' with culture itself then seen as a necessary additional dimension which has enabled the human mind to cross over a threshold into symbolic consciousness.

2.2.1 Neural Plasticity and the Primacy of Action

> A brain is made of a network of cells called neurons … input into the network of neurons is provided by receptors which continually monitor changes in the external and internal environment. Cells called motor neurons, governed by the activity of the neural network, control the movement of muscles and the secretion of glands. In between, an intricate network of neurons … (hundreds of millions in the human brain) continually combines the signals from the receptors with signals encoding past experience, to barrage the motor neurons with signals that will yield adaptive interactions with the environment … The brain provides far more than a simple stimulus-response chain from receptors to effectors (though there are such reflex paths). Rather the vast network of neurons is interconnected in loops and tangled skeins so that signals entering the network from receptors interact there with billions of signals already traversing the system, not only to yield the signals which control the effectors, but also to modify the very properties of the network itself, so that future behaviour will reflect prior experience (Arbib 2003:3).

The basic unit of the brain is therefore the neuron, and while there is no such thing as a 'typical neuron', (Arbib 2003) it is possible to summarise the properties of many of these. In brief, information in the form of electrical impulses flows into the cell body (soma) via dendrites, of which there can be many thousands per neuron. Information flows out of the cell body via the axon, which may branch off in many pathways which in turn can also branch and so on (axonal arborisation). Axonal branches end in nerve terminals or boutons, which 'impinge' on other neurons chemically via synaptic responses involving neural transmitters. Dopamine, serotonin, and noradrenalin are examples of neural transmitters. The synaptic response (the release of these neurotransmitters) occurs when the signal reaching the bouton is strong enough to trigger it, which in turn may trigger, or correspond with, the firing in the cell it is connected to. The synapse therefore is the basic interconnecting element within networks of neurons.

Various approaches to memory and learning focus on 'plasticity' at the neuron level. Hebb (1949, in Arbib 2003:50) for example proposed a theory of learning based on the length of the synaptic response increasing when 'pre-synaptic and post-synaptic elements are coactive'. A sense of what is meant by coactive is captured here by Reyna (2002):

> Electro-chemical energy moves along wiring organised in feedforward, feedback, parallel, lateral, convergent, divergent and hierarchical manners … regions of neurons which connect in feedforward/feedback fashion are said to exhibit 'feedback' loops (Reyna 2002:51).

Mesulam (2002:320) also suggests that 'the enormous physical complexity of individual neurons compels us to consider other types of plasticity.' He suggests there is growing evidence that dendrites change in some way, with this involved in the 'optimisation of sensory information'. In general there appears to be agreement that there is a fundamental capacity to modify brain functions through either strengthening or weakening connections between neurons.

It also appears that neurons are initially unspecialized so the question arises of how defined neural circuits emerge through ontogenesis when the information available to guide this in the beginning is rather vague. Deacon (1997) suggests that brain cells have an inbuilt 'drive for connectivity' which gives rise to over-production in axonal branches. Thus there is a 'competition for connection between neurons' during ontogenesis, but slight 'biases' exist in these processes which results in 'selective elimination' of under-utilised axonal branches. This generally results in a standard sort of brain architecture:

> Biases influencing axonal selection can arise from both functional and quantitative factors. The central rule underlying this selection process is believed to be the degree of temporal correlation of firing patterns of input axons and output neurons. A neuron generally receives hundreds of thousands of inputs from other neurons. No one of these inputs is sufficient to cause the receiving neuron to initiate an output signal, only the near synchronous firing of many inputs will succeed in activating the recipient to fire … axons which regularly release their neurotransmitters in synchrony with the firing of the recipient cell (which indicates synchrony with a large fraction of the other input axons) will tend to have their links to that cell strengthened. Those that tend to fire out of synchrony will, conversely tend to lose support, and eventually may be eliminated (Deacon 1997:202).

Wexler (2005) also makes the point that neural growth is dependent on adequate sensory stimulation. When sensory input falls below certain thresholds, neural connections can break down quite quickly, and there appears to be an inbuilt orientation in brains to promote action and exploratory behaviours which generate sensory input. Where this view has greater salience is in the

next chapter and discussion of how the brain generates 'entoptic visions' (Lewis-Williams 2002) in altered states of consciousness.

2.2.2 The Visual Brain and 'Fuzzy Logic'

It is from the connections between neurons that the brain builds its neural networks which give rise to specific (modular) as well as general perceptual, motor and cognitive functions that in turn need to be integrated into unified awareness, meaning construction and appropriate action. Humans have evolved as essentially visual creatures and sight usually dominates day to day sensory-motor behaviours for most people (Bloom 2000, Napier & Napier 1985). This is of course relative, and is not meant to imply that the 'other senses' don't provide essential supporting clues to understanding what we see, including what we see and understand in a symbolic world. Nevertheless, Zeki (1999) also affirms that a primary function of the brain is 'to obtain knowledge of the world' and in humans vision is the most efficient way of doing this:

> It takes but a moment's thought to realise that obtaining that knowledge is no easy matter. The brain is only interested in obtaining knowledge about those permanent, essential or characteristic properties of objects and surfaces that allow it to categorise them. But the information reaching the brain from these surfaces and objects is in continual flux … the brain must discount much of the information reaching it, selecting only what is necessary in order to obtain knowledge about the visual world, and compare its selected information with its stored record of all that it has seen (Zeki (1999:78).

Vision therefore also provides something of a model for consciousness more generally, in particular the binding problem, in that visual awareness is 'constructed' slightly after the event (Frith 2007) through the integration of a multitude of parallel and serial processes.

Also helping to look at aspects of the visual brain is the field identified earlier as 'Art and the Brain'. Ramachandran and Hirstein (1999:18) for example contend that why art 'works' as a visually aesthetic experience may be able to be explained with reference to evolved responses to types and patterns of visual stimulus which relate to some core biological survival functions. They explore these in relation to what they term 'the eight laws of artistic experience' (see the Journal of

Consciousness Studies 1999, Vol.6 for a full discussion). 'Peak shift' for example is a known principle in animal discrimination learning, where responses to a stimulus become stronger when a key aspect of the stimulus, such as its shape and or colour, is accentuated in some way. For example, a learned response to a rectangle by a rat becomes even stronger when that shape is made longer and thinner. In another experiment a simulated bird beak was used to generate the automatic responses a chick has to sight of its mother's beak (pecking at it). That response was heightened when a highly abstracted beak in the form of a stick with red dots on it was used. What Ramachandran and Hirstein suggest is that we may be able to extrapolate such ideas to human brains and art:

> How does this principle – the peak shift effect – relate to human pattern recognition and aesthetic preference? Consider the way in which a skilled cartoonist produces a caricature of a famous face, say Nixon's. What he does (unconsciously) is to take the average of all faces, subtract the average from Nixon's face (to get the difference between Nixon's face and all others) and then amplifies the differences to produce a caricature. The final result is of course a drawing that is even more Nixon-like than the original (Ramachandran & Hirstein 1999:18).

Zeki (1999) extends these views and considers the visual brain as involving processes which search for constancies which provide adaptive knowledge of the world – a point made above. He goes on to suggest that this idea is applicable 'with equal vigour' to the function of art:

> … both the brain and one of its products, art, have the task of, in the words of artists themselves, depicting objects as they really are. And both face the problem of how to distil from the ever changing information in the visual world, only that which is important in order to represent the permanent, essential characteristics of objects. … I shall therefore define the function of art as being a search for constancies, which is also one of the most fundamental functions of the brain. The function of art is therefore an extension of the function of the brain – the seeking of knowledge in an ever-changing world (Zeki 1999:80).

If we take Zeki's idea that what 'artists' do is an extension of the visual brain, and place this more firmly within a symbolic cultural context, we see that aspects of these biological processes appear to have been reproduced in analogous forms within culture itself. The 'fashion industry' is a ready example - this essentially produces things which capture attention and shape behaviour in many

different contexts. Think of marriage, swimming, the army, school, work, dating, and it is clear that the clothing in these contexts provides symbolic clues that are far outside any immediate physiological purpose, but which provide precise indicators for engaging particular actions, emotions and memories in different social contexts. These cultural clues when all said and done are not about surviving in a physical environment, but very much about 'surviving' within our symbolically constituted cultural environments. The 'artist' in this context may of course be many different people who contribute to the complex patterns of activity which constitute such domains (See Mansell 2005 for images and discussion of fashion and symbolism).

If this is so, what is it about how the brain processes information that would enable such 'exaptations' (Gould 1991) of the brains automatic programmes or 'intuitive ways of knowing' so they come to underlie particular patterns of behaviour within particular cultures? At the very least, the 'science of art' perspective reminds us that perception in the biological world occurs in environments that are highly dynamic, often requiring rapid automated behavioural responses to ambiguous environmental inputs. The term *fuzzy logic* is therefore suggested as an appropriate descriptor here (see also Kasabov 2003 for a similar conception) because the perceptual-motor brain does not operate in a world of hard-edged perceptual categorizations. These are 'constructed' in the later stages of the binding processing within the visual system from various 'clues' (colour combinations, shapes, movements, contrasts, sounds, smells, sensation, tastes etc) rather than the neurological processing of all potential signals in the field of vision. It therefore seems reasonable to suggest that it is this 'fuzziness' of representational processes at the earliest stages of the neurological binding process that creates at least one opportunity for attentional, emotional and associational manipulation of our neurology through external influences.

2.2.3 Mirror Neurons

With talk of 'rituals' and 'fashion industries' and 'mother chick' responses above we are clearly

dealing with sensory-motor functions and the construction of representational 'realities' that are not only in individual brains but which are essentially constructed through interactions which are distributed across communities of brains. So the question arises: what might it be about the human brain that would enable it to latch on to some form of conspecific recognition and communication in the first place? Why should particular gestures, postures, vocalisations, and colour patterns come to have parity between members of the same species? The element which is the focus here is 'the mirror system'. It is suggested that something like this is necessary to provide a foundation for the emergence of some basic forms of communication, social structure and coordinated behaviour between members of the same species.

Corballis (2006:3) is particularly interested in the mirror neuron system because of its connections to gestural theories of language origin. It was first distinguished in monkeys by Rizzolatti et al (2006) who observed that when monkeys made grasping movements with the hand or mouth, neurons fired in the F5 area of the central premotor cortex. He also observed that a subset of those cells, now called mirror neurons, also fired when these animals observed another making the same movements. For these responses to occur in the monkey a target of some sort (grasping or eating food) needs to be present. Corballis comments:

> This direct mapping of perceived action onto the production of action seems to provide a platform for the evolution of language (e.g. Arbib, 2005) and to support, albeit indirectly, the motor theory of speech perception. Furthermore, the area of the human brain that corresponds most closely to area F5 in the monkey includes Broca's area, which is one of the main cortical areas underlying the production of speech. This suggests that speech may have arisen from cortical structures that initially had to do with manual action rather than vocalisation (Rizzolatti & Arbib 1998). It has also become apparent that mirror neurons are part of a more general 'mirror system' that involves other areas of the brain as well (Corballis 2006:3).

Research suggesting there is a human mirror system has come through a variety approaches (Arbib 2003). One key difference in humans is that the presence of a target is not required, though it is stronger when one is present, but more generally it appears to be 'tuned' to actions which have a

reference to people. While Arbib and Corballis have a primary interest in language origins, it is possible that the mirror system could have played some role in the emergence of ritual in the deep past, and then also later in the transference of meanings from ritual to images.

2.2.4 Neurological Syndromes and Emotional Cognition

Neurological syndromes also offer important vantage points as these can involve unusual and sometimes very bizarre patterns of cognition and behaviour which relate to either specific areas of brain damage or to abnormal patterns of brain development. One reason why these are of interest is because they appear to illuminate the modular nature of some brain functions, where damage (lesions) results in modifications to specific functions rather than to an overall diminution of mental capacity. For example damage to Broca's areas affects speech production while damage to Wernicke's area affects speech comprehension.

Of particular interest are syndromes such as Capgras (denying visual recognition of known people) and Blind-sight (able to locate objects in space without visual consciousness). These indicate that humans have very powerful sensory processes which work sub-consciously which enable the brain to be aware not simply of the nature of the physical properties but salient emotional and contextual aspects of the immediate environment as well. Carrying forward this ability to sub-consciously read the emotional salience of socially constructed environments (e.g. 'the group' 'the tribe', 'the family' 'the club') is surely a necessary foundation for symbolic culture. This strong emphasis on the emotional dimensions being the primary foundation for understanding aspects of culture is reflected in Turner (2000). His position provides another vantage point on the idea that language and its origins (see next chapter) can be approached in a more holistic way, with a stronger emphasis on the cultural harnessing of evolved emotional foundations:

> It may be that there is something like a language facility for emotions that is hardwired in the brain. Selection may have produced neurological templates that generate and organise emotional production in diverse contexts. To some extent, the modes of expressing emotions are culture-specific … but the facility

> to employ emotional grammars to construct emotional sequences of gestures is, I suspect, more universal. We might even see primary emotions and certain first and second order elaborations as the hard-wired equivalents of phonemes in language, and as is the case when phonemes are selected to produce morphemes and eventually, syntax, these hard wired emotions are strung together to produce configurations of emotional responses in situations … I would speculate, then, that there are universal, pan-human structures in the brain that give humans emotional abilities analogous to those for language. In fact, if the hypothesis that the first languages were emotional is plausible, then we could conclude that the generative rules of spoken language evolved from those for emotional languages (Turner 2000:124).

Adopting a 'material engagement theory viewpoint on this (See DeMarris, Gosden and Renfrew, 2004 below) the nature of some human material creations – artefacts - seems to capture elements of an emotional 'grammar' - whereby, for example, 'bold work' is created from people feeling bold, and 'fragile work' from people feeling fragile. At the 'feeling' level then, it can be theorised that a transformation (a recoding in Deacon's terms) of unconscious primary emotional 'templates' (or intelligences to reflect Gardner's 1983, 1993 approach) occurs through the actions of 'making things' which create 'a feeling currency'. This particular perspective is used in chapter six in the analysis of one research participant's work from The Learning Connexion.

2.2.5 Attention, Emotion, Association, and Memory

In terms of identifying 'the interface' between brain and culture, it is possible to conclude from discussions above, that this is based on the brains attentional, emotional, associative systems working in concert. The concept of memory and how it differs from association is also important to this view. Referring back to Edelman's (1994) quote above on the socially constructed self, the concept of memory used in this work reflects his views to a degree, with memory considered to be a special feature of higher conscious, which enables 'the self' (which may be a collective self) to be placed within a narrative which reaches beyond the present into the intangible domains of past and future. The individual brain can access voluntarily or be 'visited by' such memory, but 'the language currency' used is essential drawn from culture. The term association on the other hand refers to sub-cortical (Turner 2000) neural linking of events, the actual linking of neurons in the brain. Association

as part of the brains 'pattern generation' abilities ((Anderson 2003, Cohen & Boothe 2003) can be regarded as basic properties of individual human, primate and mammalian brains.

It is also theorised that the ability to direct attention and have ones attention directed is fundmental to concepts of core or primary conscious (Domasio 2000). While these are part of the essential neurological foundations for human memory - attention, association (pattern generation) and emotion play a more fundamental role in individual brains making sense of their immediate environment and informing appropriate but largely automatic survival responses. Association can therefore be regarded as part of the 'bottom up' processes stemming from the sensory-motor system in an individual, while memory can be regarded as a feature of culture involving 'top down' processes for organising and recoding certain types of associations.

This interface concept has relevance below and in the next chapter, where it is argued that ritual was recoded into fixed images at the start of the Upper Palaeolithic. It is suggested that this threshold, once crossed, enabled the attentional, associative and emotional systems of individual brains to be progressively manipulated and harnessed in radically new ways.

2.2.6 Lateralization of Brain Function, Language and Human Creativity

Popular ideas about the right hemisphere being 'the artistic brain' are common along with the view that 'art' is something different and independent from what is conventionally regarded as language. These views can be challenged on a number of grounds, and from a language perspective Deacon (1997) points out:

> The right hemisphere is not the non-language hemisphere. It is critically involved in language processing at many levels during both development and maturity. Perhaps most importantly it is critical for the large scale, semantic processing of language, not word meaning so much as the larger symbolic constructions that words and sentences contribute to: complex ideas, descriptions, narratives and arguments. …The best evidence for this right hemisphere language involvement comes from analysis of how right hemisphere damage affects abilities such as language and joke comprehension … The same neural systems that subserve sentence length analysis would also probably be critical for maintaining long-term mnemonic

> continuity of symbolic information. These simultaneous demands would thus likely conflict or interfere with one another and so limit the efficiency of both procedures. But because right and left brain structures are paired, it is possible to keep them from interfering … by compartmentalizing them to opposite hemispheres (Deacon 1997:312).

This right brain damage which effects comprehension of jokes and narratives is worth elaborating on. People who have suffered extensive damage to their right hemispheres are generally still able to speak well, without any unusual increase in grammatical errors or mistakes in choice of words. What they sometimes have is difficulty following and interpreting a short story, as they seem to fail to grasp the meaning of the narrative as a whole. They may also fail to distinguish anomalous elements when these are incorporated in such stories, though they tend to have no problem recounting details. In other words their difficulties are contextual, in that they fail to attend to all the clues which contribute to comprehensive understanding (Deacon ibid.)

The right hemisphere can therefore be seen to involve many 'language-related functions' such as the representation of spatial relationships, prosody (the rhythms of pitch), large time domains, and inter-sentential meaning, and pattern recognition generally (Turner 2000). The left hemisphere on the other hand involves intra-sentential meaning, speed optimisation, syntax, and visual details. If we think about fixed image-making in terms of the neural processes needed for their creation as well as the social functions images may perform, they are produced in ways which appear analogous to spoken and written language. Images involve sequential motor actions as they are produced by one thing occurring after another. Image-making is 'speech like' in that it is 'generative' with an infinite possibility of images that can be produced. They can also be 'recursive' in that ideas expressed as images can be embedded within other ideas expressed as images. Moreover, images are made sense of by an understanding of not just the specific spatial and contextual clues contained within them, but also through an understanding of the physical settings and social context in which they occur. In other words it makes as little sense to think of image-making as involving distinctively right hemispheric processes as it is to think of language as belonging to the left hemisphere.

More generally then, there appears to be considerable potential for further higher order functional 'plasticity' to occur when *well developed brains* are prepared for challenges within novel circumstances. In terms of the interest here in the interrelationships between brain, culture, and the creation of new forms of consciousness, lateralisation may be essential for this by providing isolatable neural networks within different hemispheres which can be harnessed to support human creativity. While 'language' is often argued as the most important creative development which has the potential to harness and reshape brain functions (Deacon 1997, Donald 2001) activities which are usually categorised as 'art' have the same capacity - but rather than seeing 'language' in one dimension and 'art' in another, the lateralisation perspective suggests that a reconceptualisation of 'what language is' may be more appropriate.

2.2.6 Joint Attention and Communicative Competence

Another area of research which connects quite strongly here is the development of 'Joint Attention' in infants. According to Carpenter, Nagell and Tomasello (1999) 'joint attention' emerges around nine months after birth and involves children achieving an ability to sense others as 'intentional agents' and to sense and communicate intentions. This can be described more generally as achieving 'communicative competence'. The ability of neonates to actively reproduce facial and manual gestures is present from birth (Meltzoff & Moore 1997). While this further points to a mirror system at work, interactive behaviours whereby children themselves direct the attention of adults to something of common interest does not occur until the later part of the first year. In the view of Carpenter et al (ibid.) it is the capacity for joint attention that provides the foundation for speech to be in place by around the age of two:

> Non-linguistically based episodes of joint engagement may play an important, perhaps even a necessary role in children's early language development, but they are obviously not the whole story. Children must also experience the actual linguistic symbols that they are to learn (Carpenter et al 1998:28-9).

Communicative competence is played out through the mimetic components of gesture, pointing, gaze following and vocalisations, and may not itself be dependent on a speech environment, but development of speech itself is obviously another matter. The key idea to draw out here is that the capacity for communicative competence must have pre-existed speech in evolutionary time, just as it does in ontogenetic time. Therefore, in both contexts, communicative competence could give rise to an ability to participate in other forms of communication if these had greater salience than speech for some reason and this is an important line explored further below.

2.3 EVOLUTIONARY AND HISTORICAL PERSPECTIVES ON BRAIN AND CULTURE

The previous section has presented a variety of perspectives on the brain which suggest that it evolved in ways that would 'naturally' reach out to a cultural dimension when conditions suited this. Before summarising these perspectives the discussion turns more firmly to evolutionary perspectives which underlie the human brains reach towards culture.

2.3.1 The Frontal Cortex – Bottom Up Meets Top Down

The most recent evolutionary changes to brain anatomy are in the frontal lobes (Holloway 1997). There appears to be a consensus that the development of these areas are linked with increasing voluntary control over one's own behaviour and emotions, and an associated ability to understand and communicate intentions to conspecifics (Deacon 1997, Donald 2001). The prefrontal cortex itself is isolated from direct sensory receptors but has extensive connections with areas which are further up the processing 'hierarchy'. Deacon again:

> The prefrontal cortex helps us inhibit the tendency to act on simple correlative stimulus relationships and guides our sampling of alternative higher order sequential or hierarchic associations … Prefrontal computations out compete other cognitive computations and tend to dominate learning in us as in no other species … The way the parietal cortex handles tactile and movement information, the way the auditory cortex handles sound information, the way the visual cortex handles visual information, are all now much more constrained by prefrontal activity than in other species (Deacon 1997:265).

The slow incremental emergence of voluntary control of action and imitative learning and intentional communication enable co-evolutionary scenarios between evolving brain and emergent culture to be constructed (Donald 2001). The conservation of tool making strategies provides indications that early non-symbolic material culture existed back as far as Homo Habilis (handy man) some 2.6 million years ago (Corballis 1999:49). From this point on, culture, very slowly at first as indicated by the conservation of tool making techniques over very long periods, became an evolutionary force itself. The eventual result was the emergence of something more than a clever ape and the ideas put forward by Geertz some three decades ago resonate:

> Rather than culture acting only to supplement, develop and extend organically based capacities logically and genetically prior to it, it would seem to be ingredient to those capacities themselves. A cultureless human would probably turn out to be not an intrinsically talented though unfulfilled ape, but a wholly mindless and consequently unworkable monstrosity (Geertz 1973:68).

and here from Donald (2001):

> There are several good reasons for developing a culture first approach to language evolution. First it allows us to remain consistent with what we know about the evolving hominid brain. Second it provides both continuity and a radically new evolutionary factor, enculturation, that might account for the shifts in human cognition (Donald 2001:278).

2.3.2 Encephalisation

In all probability the biological and cultural 'forces' at work, pushing and pulling the brain towards a capacity to function within symbolically structured environments (the symbolic domain) were multiple and extensive. One line of thought on these matters reasons that the evolution of a larger brain (encephalisation) would itself have created adaptive pressure requiring 'a cultural level' response, and an introduction to this material here is helpful to later discussion. As encephalisation took the brain towards the size of Homo Sapiens, most significantly between 1.8 and .5 million years ago (Holloway 1997:96), selection pressure for birth at an earlier stage of maturation would have mounted, so the (eventually larger) brain could pass through the birth canal. (A number of other physiological changes must have co-evolved with this as well.) A lengthening developmental period

would have also created correspondingly longer patterns of child rearing, and this may have increased female vulnerability to the male primate tendency towards 'individualism' (Whiten and Byrne 1988, Turner 2000:12) and abandonment of non-receptive females after a relatively short period (Trivers 1972).

At the same time the increased voluntarily control of ones own actions, and the capacity to use such actions to gain attention and communicate intentions with others, sets the stage for a radical new social strategy which could address 'the encephalisation problem'. This strategy might be called the emergence of 'ritual cognition' as a means to manipulate biological 'clues' relating to menstruation and fertility. This is known variously as the 'sham menstruation' hypothesis (Power 1999) or 'the sex strike theory' (Knight 1999, Meyer 2005) and can be envisaged as a way coalitions of females could generate male 'effort' to provision groups as a whole, and thus reduce the survival pressure on infants, mothers and other non-fertile females.

> The sham menstruation strategy involves deceptive signals in that some females who are not imminently fertile pretend to be. Unlike primate tactical deception, which is always individualistic and egocentric (Whiten and Byrne 1988) the deception in this case is socio-centric, being maintained by a collective. As such it represents a vital step towards sustaining an imaginary construct and sharing that construct with others – that is, establishing symbolism (Power 1999:100).

In short then, it can be envisaged that some mimetic 'currencies of thought' in the form of gestures, vocalisations and postures became distributed across groups (Donald 2001), which were directly related to biological cycles and imperatives. These 'cultural' responses by groups were 'triggered' when the appropriate biological clues were present, in this case menstrual bleeding and perhaps associated also with moon cycles and tidal patterns (Meyer 2005). Such 'currencies' would be cyclically reified and reinforced through some 'crazy behaviour' which proved to be adaptive.

2.3.3 Ritual Manipulation of Attention, Emotion, and Association.

Ritual appears to work by heightening people's sensitivities and *intensifying* the effects of

biological and environmental signals (a peak shift in effect) so that associations and behaviours are shaped in relation to cultural imperatives (i.e. survival of 'the group' as an entity) and not *immediate* biological imperatives relating to individuals. The emergence of collective ritualised behaviour *must* therefore have involved the crossing of a threshold into new types of awareness, the beginnings of a higher order group consciousness involving group identity. Such proto-forms of 'higher consciousness' would essentially be based on 'attention' being captured and directed 'emotionally' through the 'look' and 'feel' of ones own and others bodies, gestures and facial expressions (Frith 2007, Donald 2001, Greenfield 2000, Turner 2000). While such a scenario is still a long way from contemporary symbolically constituted culture and consciousness, a dynamic brain-culture-mind system can now be envisaged as emerging (based on 'currencies' or 'literacies' it might be suggested) which were adaptive allowing the encephalisation evolutionary threshold problem to be solved. Moreover, because of its direct influence on mate selection and off-spring survival, this would in 'Baldwinian' fashion (Donald 2001:210) gather pace in the direction of the adaptive value of the symbolic domain. That is, early ritualistic 'culture' would have, through mate selection resulted in evolutionary effects, thus culture itself can be seen as an adaptive force.

2.3.4 Creole Languages and Cultural Fluidity

The Creole perspective is perhaps more historical than evolutionary, but it appears to offer insight into some higher level consciousness building processes which may have occurred through, if not evolutionary time, pre-historic time leading up to and through the Upper Palaeolithic. Deacon (1997) comments:

> … during recorded history, a number of populations have also evolved new languages directly from pidgins, which differ from either 'parent' language. Such 'creole' languages appear to originate quite rapidly – within as little as one or two generations – especially when populations find themselves transported and isolated in new contexts …What is even more remarkable … is that the syntactic structures of different creole languages often appear to be more similar to one another than to the languages which spawned them … Bickerton interprets such similarities as evidence for an innate

> grammatical template reasserting itself in each case. But I think there is an alternative suggested by the co-evolutionary approach which parallels Bickerton's … creolisation occurs when children are exposed to pidgins as their first and only language, and so reflects the ways that these young minds reinterpret a partial symbolic system *as though it were complete.* In this regard I follow Bickerton in suggesting that the similarities between creoles reflects how children spontaneously fill in what is missing and recategorise what is given (Deacon 1997:139).

The creole perspective is an intriguing one to incorporate and is used with other perspectives in the next chapter to look at image-making, in particular at the processes of abstraction associated with 'sign and symbol' development during the Upper Palaeolithic. The message from creolisation is that when available sets of cultural clues are right, the developing brain itself 'fills in some dots' and automatically fashions new forms of conscious capacity. Could something like this then have happened in our pre-historic past which drew the human mind, generally, across a threshold into new ways of creating and sharing meaning? That is the basic theme explored in the next chapter, but for the moment an overview of the material presented in this chapter is required which leads into further discussion of the concepts of 'culture' and 'mind'.

2.3.5 Overview

So far, the emphasis in this chapter has been towards consciousness and the brain itself. In the first section above the idea was presented that in addition to lower, primary or core consciousness, the human species has developed what is variously called: extended, higher, or symbolic consciousness. That discussion also indicated that it may be the symbolic or socially constructed self that supports the ability to function in a symbolically structured world. In Deacon's view, such symbolic abilities are based on artificial systems that are external to the brain, but which are able to be used to reorganise and recode the evolved iconic and indexical systems for inferring meaning. This view reveals a chicken and egg dilemma: if we are dependent on artificial systems to 'think' symbolically, and symbolic culture is the source of such systems, how did such culture come into being in the first place? Domasio (2000) puts the emphasis on an evolved capacity for memory and

the evolution of language. While the human capacity for memory is generally seen as a necessary element for culture, others place greater emphasis on culture itself being ingredient in the emergence of novel 'currencies of thought', including the emergence of linguistic cognition.

In the second section above the focus was on aspects of the brain which could provide the foundation for culture. In that discussion, it was noted that neural plasticity and a bias towards action to stimulate neural connectivity are basic properties of the human brain. It was also suggested that, as a visually dominant species, we have evolved 'fuzzy logic' processing systems which enable ambiguous environmental signals to form the basis of constructing meaning and informing action, and this provides at least one area where culture could manipulate neurology. The evolution of hemisphere lateralisation with discrete neural networks also may have provided a critical foundation for the development of novel, non-evolved ways of processing information. Moreover, a very basic foundation for culture exists through the linking of sensory-motor functions via a mirror neuron system, which ensures that the attention of some conspecifics will automatically be drawn to the actions of others.

A high level of integration between attentional, emotional and association systems in the brain seems likely, with these working in concert to provide the interface between brain and culture. The major theme explored in this regard, is that aspects of brain functioning emerge in analogous forms and processes 'as culture' which then provides 'top down' structures and processes to be used by 'communities of minds' to manipulate brain development and functioning, with this enabling novel currencies of thought to be built from an evolved platform of communicative competence.

The third section indicated that 'the power' of groups to function 'culturally' gained momentum as evolution of the frontal lobes gave increased capacity for voluntarily action and an ability to understand and communicate emotional states and intentions (see also Theory of Mind, Donald 2001). Brain enlargement (encephalisation) may have also brought about adaptive pressures for

'cultural solutions' in the form of ritualised behaviours which promoted group solidarity and the creation of 'in-group' and 'out-group' boundaries (proto clan structures in effect) as a way to override primate patterns of cognition.

Ritual cognition would have involved collective emotional manipulation of biological and environmental signals (i.e. menstrual bleeding, moon cycles) giving rise to 'peak shift effects' which reinforced participation, acceptance and/or belief in 'counter realities'. The mate selection mechanisms that resulted would also have had evolutionary effects which further shaped human cognition in the direction of increased social interdependence and cooperation (Key & Aiello 1999) and the emergence of explicit collective symbolic identities (See Miller 1999 for discussion of sexual selection theory). The section then took a brief look at the emergence of creole languages from pidgins, with this indicating that the developing brain can automatically create new 'currencies of thought' when attention is drawn during ontogenesis to salient sets of clues (See Hurford 1999:189 for discussion of creolisation).

2.3.6 Culture and Mind

Given the perspectives presented above, what then is 'culture' and where does 'the mind' fit into the picture? The following not only helps to round out this chapter but also provides perspectives which underlie discussion in the next chapter. The 'culture concept' has in recent decades seen major shifts in meaning and emphasis which mirror the 'cognitive-constructivist-interpretive' paradigms that underlie more recent approaches to social science. Pearson (2002) comments here on traditional and more recent approaches to culture:

> Processualists [see Binford 1968] viewed culture as a system of socially transmitted patterns of behaviour that related human communities to their ecological settings; culture change was primarily a process of adaptation to their ecological settings. From this perspective, technology subsistence, and all the various aspects of social organisation that can be directly tied to production are the more important cultural elements for analysis … The corollary of this …is that such cultural concepts as

> ritual, ideology, beliefs and symbolism are thought to be epiphenomenal – derivative or secondary in nature – and therefore analytically irrelevant (Whitley 1998c:3 in Pearson 2002:23).

Cognitive archaeologists on the other hand focus on culture as shared systems of symbols, values, meanings and beliefs (Whitely ibid.), which should be viewed as 'cognitive objects' that are actively created, used and changed by individuals as they live out their lives. Pearson (ibid:27) goes on to suggest that this approach also sees the material remains of prehistoric action as 'the evidence' which can be interrogated in terms of the cognitive systems which gave rise to their creation. Given that prehistoric peoples images, and their 'rock art' in particular, still exist and often remain in situ, these can be regarded as a direct source of evidence for these lines of inquiry.

Material engagement theory has also emerged as part of the cognitive revolution in archaeology, and is perhaps more forceful in thinking beyond an emphasis on 'individual cognition' to approaches that see cognition as: distributed beyond the individual; mediated and socially embedded; situated in action; embodied; enacted as a living system; or extended beyond the skin (DeMarris 2004:57). The following also helps clarify such approaches, which seek to 'rethink materiality' (From DeMarris, Gosden and Renfrew Eds. 2004):

> Material engagement theory is concerned with the relationships between humans and the material world and focuses on the use and status of material objects … which are employed to mediate in the interactions between human individuals and their environment. Its purpose is to facilitate the analysis and understanding of culture change … It has been formulated partly as a response to what has been termed the 'sapient paradox': the puzzle posed by the considerable duration of time between the widespread emergence and dispersal of our own species, and the burst of innovation in the field of material culture widely seen in the early Holocene, with the emergence of sedentary life, food production and an accelerated rate of change. To attribute a decisive causative role in these things to fully developed language skills and fully human self consciousness along with humankind's innate capacities for the use of symbols is hardly persuasive, if the effects of these new causes were not to be perceived for some 30,000 years (Renfrew 1996: In Renfrew 2004:23).

As will also be seen in the next chapter, cognitive archaeology draws increasingly on recent developments in neuroscience (Pearson 2002:39) and the work of Lewis-Williams (2002) relating to

entoptic visions produced in altered states of consciousness is of particular importance in relating the emergence of image-making with a changing brain-culture dynamic. The term culture as used in this work therefore generally aligns with this cognitive orientation, and as reflected in statements in some earlier sections above, considers culture to be aspects of brain functioning that have been transformed, recoded, (downloaded) and made ingredient in the material world itself through human action. The concept of 'mind' in this view can thus move beyond Descartes dualisms of a world of nature that is material while the human mind and spirit is immaterial - to a concept of 'mind as a bridge', anchored in neurological processes at one end, and in the material world and the actions relating to these at the other end. Moreover, both dimensions interconnect in processes of making meaning and informing action, because they intrinsically function in worlds shared with others. The view of 'mind' put forward here also underpins the phrase 'currencies of thought' which has already be used above and occurs again in following chapters. It reaches back to the discussion on consciousness and has been coined by this writer in response to a perspective put forward by Dennett (1991). He makes the point that consciousness does not really exist per say and that we are only conscious of 'particular things' in 'particular ways'. The term 'currencies of thought' then encapsulate the idea that what might be called 'the coinages' of the conscious mind (such as money systems themselves) are changed in ways which reflect how the brain culture relationship is played out through evolutionary, historical and ontogenetic time.

2.4 CONCLUSION

The purpose of this chapter has been twofold. It provides a framework of ideas which are drawn upon to address research question 2 , this being: *How might the findings from the research in The Learning Connexion context, be interpreted by theory that brain, culture and mind function systemically to continually reshape human symbolic consciousness?* The specific perspectives carried forward from this chapter and used in that analysis are discussed in the methodology chapter itself.

The second purpose has been to create a set of ideas which provide a lens for looking at the origins and consequences of image-making, and that is the focus in the next chapter.

CHAPTER THREE

THE RITUAL ORIGINS AND DEVELOPMENTAL CONSEQUENCES OF UPPER PALAEOLITHIC FIXED IMAGE-MAKING

As indicated in Chapter One it is felt that there are gaps in contemporary thinking about art and education today which a focus on the earliest human image-making from a systems perspective may help address. In this chapter the image-making of the Upper Palaeolithic is discussed with the aim of illuminating: firstly, that its emergence represented the crossing of a major threshold in terms of how brains and culture interact; secondly, that this then had accumulating developmental consequences which created the cognitive and cultural foundations for new levels of language and social complexity to emerge after this period; and thirdly, the images from this period, reflecting the cognitive view of culture presented at the end of the last chapter, are a primary source of evidence to explore these positions. The chapter also identifies specific themes and perspectives within this more general discussion that are carried forward into an analysis of the image-making of the students at The Learning Connexion. These form focal areas addressing research question 3: *What light on the findings from The Learning Connexion can be drawn from an examination of the first known human fixed image-making?*

Numerous Figures and Tables are provided to support the discussion and these are all contained in Appendix 1. The rest of the chapter is divided into three main sections. The following looks at the evidence for symbolic culture prior to the Upper Palaeolithic itself. The general conclusion here is that a proto-symbolic culture may have generally existed with ritual 'traditions' the main means of structuring community existence. Section Two looks at the recoding of ritual into images and discussion identifies elements in selected images which probably had their origin in ritual or were the product of ritual events. Section Three is more speculative and looks at the possibility that

image-making and the social dynamics interwoven with it generated increased complexity and social differentiation and the adaptive need for a new level of consciousness. It is suggested that, through a creolisation effect (see Chapter 2.4.4) more modern-like syntactical speech may have emerged more towards the end of the period and not prior to it as assumed by many writers. Section Four provides a general summary and conclusion and presents the main ideas to be carried forward into the analysis and interpretations given in chapter six.

3.1. SYMBOLIC CULTURE BEFORE THE UPPER PALAEOLITHIC

The application of genetic methods to re-examine the human fossil record has pushed the estimate for the emergence of our own species back to a common ancestral group in Africa around 195,000 years ago (McBrearty & Brooks 2000). It was the descendants of these people that dispersed out of Africa into the Middle East, Asia and Europe between 100,000 and 50,000 years ago and it is now assumed that these people had the same potential to develop symbolising minds and cultures as people today (Lewis-Williams 2002). Evidence for the emergence of 'fixed images' in the form of cave paintings, relief carvings and sculptured figurines occur from about 35,000 years ago (Lewis Williams ibid., Conkey 1997). Thus there is a temporal gap of up to 160,000 years between 'modern' physiology and evidence of consistent patterns of recognisably 'symbolic' behaviour. This gap raises questions about the nature of human cognition and community life that are being explored by different disciplines as a way to think about aspects of human life today.

The Upper Palaeolithic is generally considered to be between 35,000 and 10,000 years ago and leading into this is a 10,000 year known as 'The Transition' (Lewis-Williams 2002). The Transition was the time when Homo Sapiens Sapiens moved into Eurasia from Africa via the Middle East. At the beginning of the Upper Palaeolithic proper, there were at least three branches to the hominid family still in existence: Homo Floresiensis; Homo Sapiens Sapiens; and Homo Neanderthalensis. Neanderthals may have come under competitive pressure in the European setting by incoming

Homo Sapiens and were extinct by about 27,000 years ago (Lewis-Williams 2002). Homo Floresiensis appear to have dwindled until they vanished in Indonesia about 12,000 years ago (Mithen 2005, Wong 2006). So by the end of the Upper Palaeolithic Homo Sapiens were the only humans left and had managed to find their way into most corners of the world.

The Upper Palaeolithic also encompasses the last great ice age which peaked (the glacial maximum) about 18,000 years ago, with global warming steadily occurring from then on, giving rise to conditions to support farming from about 5,000 years ago (Mithen 2003). Therefore, in terms of climatic conditions alone, the Upper Palaeolithic could not have offered an easy life, and ideas of image-making emerging primarily as an individual leisure activity undertaken for its own sake are now generally discounted. Many images were made 'in deep, dark and dangerous places' (Lewis Williams 2002), and this alone indicates that it was associated with deeply held 'beliefs'. The evidence in general suggests that image-making was a widespread and regularly occurring activity that therefore played some important community functions for the groups that were spread throughout the region.

Prior to the Upper Palaeolithic there is no evidence of representational images anywhere in the world, but by 20,000 years ago there is evidence that representational images were being produced in some form wherever mankind found itself (Bahn & Vertut 1988). While this suggests that an overly strong focus on the European setting may be misleading, the evidence from here is more numerous, it is dated earlier than elsewhere with this pointing to something very different beginning to occur in people's minds and in the brain-culture relationship for the people in this area.

It is beyond the scope of this work to discuss in any detail the nature and full extent of European Upper Palaeolithic images, rather the emphasis is on how ritual and image-making interconnect. Helping to set the scene for that discussion is Conkey (1997):

> One is faced with a multiplicity of possible accounts for different selected sets of imagery, such as for the plaquettes or female statuettes, or for all of 'cave art'. For example, it is now argued that some animals and especially signs on cave walls may have been the work of shamans or those who have been in a trance (Lewis-Williams and Dowson 1988); much cave art may be part of the dramatic context for initiation ceremonies (Pfeiffer 1982); some of the engraved geometrics on bone/antler … may be pre-alphabetic graphic designs (Challot 1980) and to some most of the images are semiotic, meaning bearing imagery (Leroi-Gourhan 1965, 1982, Sauvet 1988) whereas to others (for example Halverson 1987) 'art for arts sake is still a viable account! I myself have suggested that some of the engraved bone and antler and other portable 'art' may be part of the material culture in contexts of social gatherings and the concomitant rearrangements of interpersonal relationships (Conkey 1985) and … as discussed above, have suggested that [the] 'art' may be part of the dealing with and the marking of socio-spatial arrangements. Delporte (1986) argues that the imagery … must be about cosmologies and conceptual systems that could broadly be considered 'religious' whereas (Gilman 1983) suggest that the appearance of art and the abundant material culture were part of the processes embedded in social-relations of production, specifically in the inter-group alliances that led to what he calls the cultural revolution of the Upper Palaeolithic (Conkey 1997:307).

There is nothing particularly exclusive about many of these perspectives and it is reasonable to presume that 'the meanings' of the images for those alive during these times may well have related to such perspectives. The intention here is not to review this material in great detail, nor to revisit the fascinating history of research and thinking into Upper Palaeolithic art (see Conkey 1997, Locke & Peters 1997, Lewis-Williams 2002, Mithens). The focus is on exploring the relationship between ritual and image-making during the Upper Palaeolithic itself, but also the idea that ritual played a central role in the origins of fixed image making in the first place. In order to pursue this line of thinking it is necessary to look to the temporal gap between the emergence of our species and image-making for evidence for symbolically mediated existence, and to consider the role 'language' may have played in the emergence of image-making.

3.1.1 Early Signs of Symbolism

There are only a handful of sites in Africa contributing to the archaeological record for the period between 200,000 and 50,000 years ago. The debates about the existence of symbolising minds

centre on evidence of burials; red ochre deposits; innovation in tool making; modification of dwelling sites; the intentional inscribing of objects; the use of beads and adornments; the use of objects for exchange; and the making of representational images (McBrearty & Brooks 2000, Wong 2006).

Looking within the African setting, there is evidence of stone hearths found in the Mumbwa cave in Zambia which date to around 100,000 years ago. Bone harpoons dating around 90,000 years have been found in the Congo, but then nothing similar is found until about 30,000 years ago. Discovery of distinctively new styles of bone artefacts dating between 72,000 and 80,000 years ago were made at the mouth of the Klasies River (South Africa), and then these also disappear from the record for another 20,000 odd years.

Mithen (2005:251) considers that two small incised slabs of 'shale-like ochre' from the Blombos cave in South Africa dating around 77,000 years ago are 'the earliest unequivocal symbols we have from the archaeological record, not only in Africa but in the whole world' These pieces are just a few centimetres long and marked with similar cross-hatched 'designs' and sufficiently ordered to rule out markings by chance. Some shell shaped beads have also been found within the same cave and are dated to the same period. The finding of seashells well away from their probable source and which are dated back to 140,000 years ago may also indicate 'trade goods' (Lewis-Williams 2002:98).

In terms of the earliest fixed representational images of recognisable animals and 'magical figures' within the African record, these are found in Namibia in a cave known as Apollo 11, and date to no older than 28,000 years ago (Mithen 1999, Wong 2006). They are therefore contemporary with image-making in the Eurasian setting and this suggests a common level of consciousness between such makers.

The strongest evidence indicating early use of material with symbolic force comes from quantities of collected red ochre found at multiple sites in Africa which date from at least 125,000 years ago.

Lewis-Williams (2002:98) in fact suggests (drawing on Howell 1999) there are 'pigment processing grind stones' which date to 250,000 years ago. Watts (1999:121) suggests that archaeologists tend to interpret ochre use in relation to body paint, though some put forward possible utilitarian explanations in association with hide preservation (cf. Mithen 1999). Watts (ibid:137) argues that such ideas are not supported directly by empirical evidence and that Khosian menarcheal rituals provide 'the most useful source of ethnographic information about the role of red pigments in the middle stone age':

> The expectation of the sham menstruation/sex strike theory hypothesis is that while social contexts, meanings and behaviours should undergo historical change, the identification of ritual potency with periodic blood flow should remain unchanging (Knight 1991, 1997; Knight et al. 1995; Power and Watts 1997). This implies that a focus on perceptual qualities such as redness and brilliance, used in giving performative force to constructs of ritual power, should also resist historical change. The selective criteria evident in the MSA ochre record are consistent only with the use of red pigments in visual signalling (Watts 1999:137).

This quote from Watts helps illuminate that there was, probably, a direct evolutionary connection between Middle Stone Age rituals, and the 'encephalisation problem' introduced in chapter two, and further discussion of this is taken up again below. In brief then, while the archaeological record in support of symbolising minds and symbolically structured culture between 200,000 and 35,000 years ago is very thin and interpretations debatable, the African evidence strongly suggests that ritual traditions were well established at least as long ago as 125,000 years with pigment grinding stones, and deposits of ochre as (probably) 'blood substitutes' pointing to this being far earlier than this. Given the apparent ubiquity of ritual, it is reasonable to assume these 'traditions' would have been carried out of Africa as Homo Sapiens migrated north and made their way into Europe between 45,000 and 35,000 years ago.

One question that then arises from this interpretation is, if this early or proto-symbolic capacity existed, why did the 'flowering' of this capacity for symbolic thought not occur until the Upper Palaeolithic and most strongly and earliest in the European area and not in Africa itself? The

'thinness' of the evidence itself can be interpreted in a variety of ways. It is possible that major new finds await but at this stage it seems reasonable to suggest that symbolic culture itself was not sufficiently established, occurring only in pockets. Perhaps there was simply a lack of people numbers and adaptive need to drive the creation and elaboration of material culture that occurred later. Whatever the actual reasons, and it is probable that these are multiple, this scenario points to *the lack of a* symbolic culture-brain relationship as one factor for the limited and sporadic evidence of symbolic behaviour in Africa, and not a lack of neurological potential (See Chase 1999:34 for discussion of symbolic reference and how it is needs to be distinguished from symbolic culture).

As introduced in chapter two, ideas about ritual cognition and the evolution of culture involve creating and sustaining 'counter realities' as ways to achieve social solutions to certain adaptive problems. The example given earlier was based on the encephalisation problem and the need to achieve reliable provisioning of groups as a whole. As indicated above by Watts, the use of red ochre is seen by many as a blood substitute (Knight 1999, Meyer 2006, Watts 1999). Red itself seems to be a colour that brains naturally respond strongly to - *it draws attention*, and is the first colour that the developing brain distinguishes (Ramachandran 1999, Zeki 1999). Here is a wonderful description put forward by Humphreys (1976) from an essay entitled: The Colour Currency of Nature:

> Red toadstools, red ladybirds, red poppies, are dangerous to eat, but red tomatoes, red strawberries, red apples are good. The open mouth of an aggressive monkey is threatening, but the red bottom of a sexually receptive female is appealing. The flushed cheeks of a man or woman may indicate anger, but may equally indicate pleasure. Thus the colour red, of itself, can do no more than alert the viewer, preparing him to receive a potentially important message; the content of the message can be interpreted only when the context of the redness is defined (Humphreys 1976, in Mithen 2005:252).

This also reflects the 'fuzzy logic' scenario put forward in the last chapter (2.3.2) where the use of colours, red in particular, can be intensified to create a peak shift affect. Moreover, because the purpose of such transformational rituals was to override evolved or intuitive primate 'ways of

knowing', these could not be any sort of 'soft' option but something that needed the felt presence of 'power' (Pearson 2002:70), something that 'redness' may naturally enhance. Ritual also needs to occur as regularly as the environmental and biological clues occur, and in as perceptually invariable form as possible. Thus, if ritual had emerged as a fundamental strategy for restructuring primate social organisation away from male dominance towards a female tendency towards coalition and cooperation (Key & Aiello 1999) then the materials needed for such process, i.e. blood substitutes, are likely to have been highly prized and sort after (cf. Meyer 2006, for a review of cross-cultural use of blood and the colour red).

3.1.2 The Language Question

Considering the nature of 'language' in the gap between the emergence of Homo Sapiens and the earliest image-making is an important perspective, as numerous ideas about the nature of language in this period are put forward. Donald (1999, 2001) for example proposes that as far back as Homo Habilis 2.5 million years ago, our hominid ancestors had a form of emotional culture which he termed mimesis, based on imitation, mime, posture, gesture, and vocalisation. In Donald's account mimesis was a reflection of the enlarging pre-frontal cortex and the emergence of an 'executive suite' of cognitive abilities, which gave early hominids a greater voluntary control over emotional expression, and a capacity to mentally rehearse and plan movements and gestures. There appears to be acceptance that something like mimesis was a necessary foundation for the evolution of human culture and language, though there is less agreement about the concept of an 'executive brain' itself (cf. Bickerton 1995, Corballis 2006, Noble and Davidson 1996).

Mithen (2005:257) argues that Homo Ergaster had a holistic vocal language in addition to mimesis, that used song-like qualities of the voice, and this was transmitted down through the Neanderthals until their extinction around 27,000 years ago (Lewis-Williams 2002). Corballis (2006) and Hewes (1997) suggests the possibility of some form of gestural language being in existence with Homo

Erectus from about 1.5 million years ago, with this only shifting to a fully vocal form following genetic changes that correspond with the emergence of our own species (see Corballis 2006:4 for discussion of the FOXP2 gene and its relation to language).

Wray (2002) considers that language at the time our species emerged was 'holistic' and conveyed 'messages' but was not segmented into elements which could be easily combined in novel ways. Bickerton (1995) on the other hand believes there was probably proto speech, words with individual meanings (meat, hunt, fire) but no syntactical system to combine these into anything like the modern fluid form.

The idea of modern language being a late comer is also advocated by Humphrey's (1999) who, drawing on information on artistic savants (Selfe 1977) suggests that Upper Palaeolithic 'art' was an indicator that modern speech was possibly still absent even at this relatively late stage. Quite a different view is held by Bickerton (1995), Mithen (1996, 1999, 2005), and Tattersall (2006,1999), who are representative of the position that language itself was the means by which the human mind achieved, in the view of Mithen, 'cognitive fluidity' and the ability to combine evolved domain specific intelligences. He argues it was the neurological combination of formally isolated modular intelligences, through an evolved language component of the social intelligence domain that created the brain's capacity for the complex forms of thought characterised by art, religion and science.

The position adopted by this writer, is that the direct communicative elements of language during the temporal gap, be these spoken and/or gestural, were probably largely social (see Dunbar 1998 for the 'gossip' theory of language origins) utilitarian, iconic and indexical but not really symbolic. In terms of consciousness, it is also felt that this was probably still largely emotional in character and locked into what Edelman (1994, Chapter Two) referred to as 'the remembered present'. Whatever the actualities, given the presence of 'modern cognitive potential' it can be assumed that the 'currencies of thought' at that time involved communication of complex information and emotions

about biologically, environmentally and socially clued contexts and events – but to suggest that syntactical speech itself was present around 200,000 years ago begs the questions: what did people have to say that they were not already able to effectively communicate about to each other by other means anyway? Moreover, if they did have it, why did they not make far greater creative use of it over the next 160,000 years? One of the core ideas pursued here is that, in order for symbolic syntactically structured speech to emerge and come to be used generally, symbolised material culture needed to be in place first. It is material culture (thus the images as a central feature of such culture) which could have provide the tangible 'scaffold' to direct attentional, emotional and associative processes towards the use of 'collectively held fictions'. Symbolic speech is after all itself constituted by such 'fictions'. An important connecting idea here is that shared meanings eventually expressed through words must necessarily pre-exist words themselves in some sense. Thus again, symbolic culture as a fabric of interlocking system of symbols needs to be in place in order for this to be recoded into speech. Such a scenario also raises some interesting questions about the nature of 'the first word' and Knight contributes this:

> … the first word in human language betokened not a physical thing, but a morally authoritative intangible … It invoked the most general of all pretend-play representations, at the apex of the ritually constructed taxonomy. If the earliest language users had been religious in the contemporary sense, that ultimate reality would have been 'god' (Knight 1999:245).

Ritual then brings the symbolic domain, if not actually into existence, certainly within close reach, with that threshold finally being crossed when ritual was recoded into fixed images.

3.2. FIXED IMAGE-MAKING AS RECODED RITUAL

3.2.1 The Eland Bull Dance and the Hohlenstien Stadle Therianthrope

A number of perspectives are adopted in this section which also provide ways of looking aspects of the image-making by the research participants at The Learning Connexion, and helping to illustrate the connection between ritual and image-making are Figures 3.1 and 3.2 in Appendix 1. The Eland

Bull Dance in Figure 3.1 needs to be read *not as* a collection of fixed images but as a glimpse into a living theatre of costumes, postures, gestures, noise and charged emotional tensions and drives. The ritual that this relates to may have a lineage for the San people of South Africa that reaches back to the Upper Palaeolithic (Lewis-Williams 2002:172). Knight (1999) also recognises a deep ritual past in the figure.

> A reality defying representation is now being staged in direct pursuit of a fitness-enhancing kin-coalitionary strategy of exploiting the provisioning energies of out-group males. Attempts by such males to fight over, harass or privatise an imminently fertile female are resisted. A young woman's first menstruation now triggers a performance – a public display of her fertility, marriageability and equally her current inviolability and inseparability from her kin group. Protecting her may mean forming around her a solid wall of resistance. Signalling 'no' to out group males involves staging a kind of 'theatre of the absurd' – females posturing as male, humans pretending to be animals. The outcome is a simple form of 'initiation ritual' triggered by the onset of menstrual bleeding, involving coercive monopoly control over the menstruant, constructing blood (real or surrogate) as the ultimate taboo-signal, generating a communal domain of 'counter-reality' – and ensuring that the central reality defying representation is well respected and defended. Members of the in-group embrace the paradoxical totemic representation as an expression of their own group identity and inviolability (Knight 1999:242-3).

The second Figure 3.2 is known as the Hohlenstein-Stadle Therianthrope, from Württemberg, Germany. It is dated around 33,000 years ago and therefore is one of the earliest known representational works. It stands just over 28 cm high and is regarded by Lewis-Williams (2002:202) to be part human and part-lioness. This indicates that from the beginning of human image-making there is unambiguous material evidence of symbolic reference. If this figure is compared with the ritual ideas embedded within the Eland Bull dance image, it becomes possible to see similar mental operations at work in both. The claim is *not* that there is any actual connection in meanings between the two figures - and of course the Eland Bull Dance is itself hypothesized to reflect a type of ritual that *may* have predated the fixing of images. Accepting that such question marks must exist, both reflect processes of ritual reification that through the merging of human and animal forms, makes materially present a configuration of symbolic meanings that (probably) relate to a particular people's sources of power and identity.

So the basic hypothesis here is that the mental operations of creating counter-realities via ritual has been transformed to a new fixed form. The theme of appropriating 'power' and fashioning this in ways that gives 'power' to humans for some individual or collective purpose is present in both and suggest the creators of Figures 3.I and 3.2 were in shaman like roles, who separated themselves from others, and 'journeyed' to another tier of 'their cosmos' and encountered the very source of their people's ultimate power. In support of this Lewis-Williams writes:

> The Upper Palaeolithic subterranean passages and chambers were therefore places that afforded close contact with, even penetration of, a spiritual, nether tier of the cosmos. The images were not so much taken under ground as pictures of the world above lodged in people's memories – and placed there. The hallucinatory, or sprit world together with its painted and engraved imagery, was … invested with materiality and precisely situated cosmologically; it was not something that merely existed in peoples thoughts and minds. The spiritual nether world *was there,* tangible and material – and some people could empirically verify it by entering the caves and seeing for themselves the 'fixed' visions of the spirit-animals that empowered the shamans of the community (Lewis-Williams 2002:210).

3.2.2 Shamanic Power

The concept of power requires further comment. Pearson (2002:70) makes the point that 'power' is the most import precept in most small scale social systems, or what he refers to as 'groups that need to deal directly with the natural world':

> Power most often originates in a void where two potent entities, usually male and female, come together in some cataclysmic event that produces a dynamic creative force. In some cases, power and creators appear simultaneously in the cosmos – without explanation –and a creative force then proceeds to form or alter the world … The final result is a hierarchically structured social universe, a cosmological model where the nature of power is defined and rules governing the interaction with power are established (Bean 1975:26) … In this cosmos, power is omnipresent, It is the principle causative agent for all phenomena through out the universe. Power is sentient, possesses will, and potentially exists in all things … The special role of the shaman is interaction with the sources of power. Their goal is to preserve the cosmic equilibrium by acquiring and applying knowledge and power (Pearson 2002:70-1).

There are a number of points to be highlighted here. The building of inferences about 'power' reflects Deacon's iconic, indexical and symbolic schema. Animal images (using ethnographical perspectives) are often associated with 'power' and 'identity' and the making and using of these needs to be the provence of those who have the knowledge to access and use such power. Images of 'something known' is the basic link here, enabling inference about 'power' to build from the iconic level (this looks like something known, an animal, *but it is also not an animal*). In other words it is also indicating something else, something 'unknowable' other than emotionally through the mediations of the shaman, these being essential in drawing attention to the clues which enable one level of inference to build to an indexical that in turn can be pointed towards belief and use of explicit 'fictions' in the currencies people use to share meaning. The basic argument here is that when such 'clues' are materialised, consciousness can move to a new level - crossing a threshold which may well have generated a sense of the world being 'suddenly created'. For if a new threshold in consciousness was crossed and pre-existing meanings and emotional experiences were then recoded into a new 'currency', then there may have been an experience of *a cataclysmic creation*, but, one that happened in the way the human mind bridged between brain and culture.

The comment by Pearson (ibid.) that the creation of a people's cosmology appears in the void between male and female, further points to the crossing into the symbolic domain being a result of biological and cultural tensions between males and females with this probably being the fundamental driving force for culture in the first place. Another related point is that for abstract power to exist, a certain level of social diversity and hierarchy may also need to exist. Access to and the welding of power requires social groups to be structured in ways that such arrangements are protected and perpetuated. In all then, the presence of Figure 3.2 points to the existence of communities where ritual was central, shamanic roles key, image-making probably the province of such roles, with competing forces and tensions between males and females possibly underlying the realities of day to day existence. It was the mediating of these tensions through a fabric of clues

which enabled 'the symbolic domain' to be further adaptive, providing a unifying 'power' which could reach out and hold people within a commonly experienced identity, and in doing so created the cultural foundation for a radically different sort of mind.

In a sense then the journey from primate mind to human higher level consciousness can be viewed as a journey of appropriating and symbolising power - of turning actual threat into something collectivised, implied and abstract. When, as a result of this evolutionary direction, humans began to ritually make fixed images the possibilities for creating new experiences of power and for exercising that power by some on behalf and over others, would have jumped exponentially, and taken the human mind along with it.

3.2.3 Caves, Altered States of Consciousness and Entopic Visions

Lewis-Williams (2002) emphasises image-making emerging through the 'fixing of visions' produced in altered states of consciousness. Additional to the archaeological evidence from Europe and Africa, Lewis-Williams draws support from the consciousness altering practices of recent and present day hunter-gather societies (Lewis-Williams 1997) as well as material from neuroscience on entoptic phenomena (see Bressloff et al 2000, Knoll et al 1963, Leakey 1994, Siegel 1977). Entoptic phenomena relates to the way the brain itself generates mental imagery and other modes of sensory experience in the absence of external stimulus, or as a result of a lack of oxygen - such as in some near death experiences (Winkleman 2000). Lewis-William's (2002) argues that experiences in cave environments would have promoted altered states, with shamanistic rituals within these environments used to access hallucinogenic and entoptic visions. In this hypothesis, entoptic vision explains the presence of particular types of marking (cross hatchings, geometric shapes, dotted and jagged lines to mention a few) which are found not infrequently to be superimposed over and around some images of animals in Upper Palaeolithic caves (Table 3.1 Appendix 1). Given that these visions were associated with the gaining of access to certain levels of a peoples cosmos, in Lewis-

William's view people would have no choice but to interpret these experiences as being connected to a cosmological realm. These then would form part of the shamanic world of 'clues' and 'proof' that certain people had direct access to a source of power.

3.2.4 Gesture and Sacred Blood Transferred to Image

Mentioned earlier was the possibility that interpersonal communication by the Upper Palaeolithic may have still been largely gestural, or at least retained a significant gestural component - as indeed it does today (Corballis 2006). It might also be assumed that gestural mimicry of animals was an aspect of pre-Upper Palaeolithic rituals, given the wide spread use of animal images in historical and contemporary rituals. In this regard, when one visits the Pech Merle grotto in the Lot region in central France, prior to entering the cave system a short film is shown which graphically demonstrates that many images are composed by a few simple gestural strokes. This characterisation can also be applied to images created through the highlighting of natural rock features, which suggests that people may have 'searched' for 'spirit beings in animal form' through 'gestural feeling' of rocks in the flickering shadows of the caves while in altered states of consciousness.

Some Pech Merle images date back to about 28,000 years ago and have simplicity and perhaps randomness in their location which is noticeably different from some images from Lascaux - the Hall of the Bulls in particular, made some 11,000 years later. The Pech Merle images are part of the earlier Aurignacian traditions and possibly more deeply embedded in an earlier, less structured phase of transference from ritual to image. On the other hand, many of the images in Lascaux (early Magdalenian around 18,000 years ago) are 'powerful' representations in scale and execution and speak of far greater community effort in their creation. Lewis-Williams again:

> That the paintings in the Hall of the Bulls were carefully composed seems inescapable. But more can be said. The sheer size of the images suggests that they were communally made, people must have surely co-operated in the preparation of the paint, construction of the scaffolds, outlining of the huge images and

> then the application of the paint, even if one, or a few, highly skilled people directed the work (Lewis-Williams 2002 251).

The hypothesis for the prior existence of ritual to image-making is clearly reliant on the evidence of widespread ochre use and the assumption that it was used in ritual as body paint. This gives another strong potential connection between image and ritual, because it is but a short stretch of the imagination to see people eventually applying this 'paint' to other surfaces than themselves when attention was eventually drawn to those surfaces having some salience. Thus, such 'paint' when combined with gesture could then become another powerful and perhaps not uncommon means to 'reveal' what people were searching for. This may also help explain why 'ochre as paint' is itself seen in some societies as 'magical stuff' (Lewis-Williams 2002, Meyer 2006).

3.2.5 Accessing the Spirit World

The theme of 'searching and revealing' in ritualised altered states can also be applied to particular areas of some caves where there are many layers of apparently chaotic image-making over the top of one another. Examples can be found in caves such as Altamira, Chauvet, Les Trois Freres and Lascaux. Lewis-Williams (2002) believes that such areas were experienced as 'permeable membranes' which allowed access to a people's spirit world, with such 'places' reached in altered states of consciousness, a view also supported by Winkleman (2000) and Pearson (2002). At such places the image itself may have had little ongoing significance other than as a locator of 'a 'transformational space' or an entrance way to such a space.

3.2.6 Lunar Calendars and the Cyclical Regulation of Community Life

One last perspective is offered in this section, and this comes from possible evidence of early calendars. The particular focus here is the Abi Blanchard plaquette (Figure 3.3) which Marshack (1978: in Conkey 1997) identifies as a type of lunar calendar. Plaquettes are not uncommon within the Upper Palaeolithic period, with many revealing markings which suggest recording of events of

some sort (Conkey ibid.). The deliberate marking of items itself has a heritage which reaches back to at least 77,000 years ago in Africa with the inscribed ochre blocks from the Blombos Cave mentioned earlier. While the suggestion that the Abri Blanchard plaquette, dated around 30,000 years ago is some sort of lunar calendar, is not widely accepted as adequately demonstrated (Conkey ibid.) it fits with the idea of rituals being based on menstrual and lunar cycles. As pointed out by Power (1999) and (Knight 1999) female coalitions appear to not only synchronise menstrual cycles between members of a kin-group, these can also be synchronized with moon cycles. This connection between moon and menstruation is a point also made by Meyer (2006) from a cross-cultural perspective:

> Rural Germans called menstruation "the moon" and in the French country side it was *le moment de la Lune*. In the Torres Straits, the same work conveyed "menstrual blood" and "moon". Congolese people refer to menstruation as *ngond,* or the moon. Over and over in cosmologies, myths, art, literature, discourse and everyday language, people have associated the moon with menstruation. Darwin believed that the marine origins of all life accounted for this. Knight argued that this was more than coincidence of cycle length; woman's menstrual cycles evolved in tandem with the lunar cycles due to ancient section mechanisms involving exposure to light and the establishment of ovulatory synchrony (Meyers 2006:29).

The Meyer quote suggests that ritual traditions specifically relating to menstruation coupled with regulation of mating were carried into the Upper Palaeolithic. Evidence for this would lie in indications of ritual cycles which might connect hunting, the provision of meat to groups, and opportunities for mating and access to fertile females. The discovery of markings which appear to record phases of the moon, while not conclusive, points in this direction. If we also apply Deacon's ideas of iconic, and indexical reference here, the markings on the plaquette, which at least appear to mirror the shape of the moon in different phases, could be regarded as iconic (looks like) and indexical (pointing to particular cyclical events past, present, future) rather than the marks having transferable 'currency' in themselves – but at the same time important elements within a broader fabric of elaboration clues within 'the symbolic domain'.

The idea of lunar calendars being connected to menstruation related rituals also further supports the idea that community life centred on maintaining the interdependencies and balances between

access to opportunities for sex, co-ordination of hunting, and the provisioning of groups as a whole. This perspective also reconnects with the idea of Gourhan's (1968) that 'the art' of these times was indeed part of an overarching ritual structuring of human society and thought based on binary oppositions involving male and female, and life and death. In his own words:

> Palaeolithic people represented in the caves the two great categories of living creatures, the corresponding male and female symbols, and the symbols of death on which the hunters fed. In the central area of the cave, the system is expressed by groups of male symbols placed around the main female figures, whereas in the other parts of the sanctuary we find exclusive male representations, the compliments, it seems, to the under ground cavity itself (Leroi Gourhan 1968:170: In Lewis-Williams 2002:63).

Certainly the concept of an over arching dynamic between male and females has a strong resonance to it which aligns with much of what had been said about ritual so far, and as will be seen in later chapters, this theme along with a number of other ritual perspectives discussed above also connect with the image making of a number of The Learning Connexion research participants

3.3. THE DEVELOPMENTAL CONSEQUENCES OF IMAGE-MAKING

The following discussion looks at the possible consequences of image-making communities in terms of the development of more modern syntactical speech, *if* this was less advanced at the beginning of the Upper Palaeolithic than is generally thought. Many writers assume that by the Upper Palaeolithic speech would have occurred in something like its modern syntactically structured form. Mithen (1996, 2005) argues that language itself is what gave humans the 'cognitive fluidity' to combine 'evolved intelligences' into the novel forms of thought that underlie art, religion, and later, scientific thinking. This might be summed up as the 'language before art' position, with Mithen suggesting that modern language was a characteristic of Homo Sapiens before they dispersed out of Africa into Eurasia. As Mithen and others point out, language is found everywhere humankind is, with Africa the source of existing humans, and therefore the logic of a single origin of modern language traced back to a common ancestor in Africa is attractive. To contemplate the alternative,

one has to argue that modern language emerged spontaneously in discrete populations. As already pointed out, image-making is also found wherever humankind is around 20,000 years ago (Bahn & Vertut 1988) but it can also be argued that ritual traditions were probably ubiquitous as well.

Humphrey (1999) is representative of the 'art then language' position, and he draws on research relating to a young artistic savant called Nadia (Selfe 1977). He puts forward the proposition that Upper Palaeolithic 'art' was a particular manifestation of a pre-linguistic mind that was more easily able to connect and represent visual sensory information, and memories of this information, via the motor actions involved in image-making. It is this 'direct representation' of visual information through the actions of drawing that appears to be what artistic savants and other 'gifted' artists are able to do. Humphrey suggests that if modern symbolic language did exist during the Upper Palaeolithic it would have *inhibited* the ability of early 'artists' to make the types of images they did, by restricting this ability to directly 'map' visual phenomena into fixed images.

Mithen and Humphrey while they encompass a 'certain divide' are united in the assumption that 'art' is a *product* of how a certain type of individualised mind functions and not an essential aspect constituting mind and language itself. An alternative approach (reflecting material engagement theory introduced at the end of chapter two, as well as to a degree structuralist approaches) assumes that there must be multiple levels of interconnectedness between symbolised material and symbolising mind which enables 'changing consciousness' and 'changing culture' to be seen, as discussed earlier, as essentially different sides of the same coin. With these perspectives in hand Upper Palaeolithic images can be approached with three basic ideas in mind: that the making of images 'made a difference' to how brain and culture connected; these differences had accumulating developmental consequences through inter-generational time which flowed between individuals, their communities and the species more generally; and these processes will be reflected in the material evidence.

3.3.1 Animal Images and Intuitive Knowing

Animal forms dominate Upper Palaeolithic image-making (See Table 3.2 Appendix 1.) so why not plants, landscapes, or more human forms. Ethnographic studies also show that animal forms remain central to different people's identities, myths and rituals and Winkleman (2000) suggests that an examination of shamanic practices reveals underlying universal knowledge structures associated with these:

> The universality of basic experiences related to shamanism (e.g. soul flight) illustrates that these practices are not strictly cultural but are structured by the underlying psychobiological features. Universal shamanic practices must be understood in terms of similar adaptations to a common underlying psychobiology. Their biological basis makes them neurognostic structures, reflecting biological structures of knowing … Neurognostic structures are the inherent knowledge structures of the organism, predisposing the structure of experience and the cognized world … The concept of neurognosis is reflected in inborn modules for organising knowledge, which are used by several researchers to explain the evolution of the human mind in terms of specific specialized programs (Winkleman 2000).

Winkleman is referring at the end of the quote to ideas of 'the modularity of the mind' as put forward by Fodor (1983), the theory of multiple intelligences as put forward by Gardner (1983), and the concept of domain specific intelligences and cognitive fluidity by Mithen (1996, 1999, 2005). Here Mithen is discussing his concept of the mentality of the direct ancestors of Homo Sapiens as well as for Neanderthals:

> I argue there were three key intelligences: social intelligence for managing the complex social world in which hominids lived; natural history intelligence for understanding animals and plants, the weather and the seasons, and any other aspects of the natural world that were essential for a hunter gather lifestyle; and a technical intelligence which enables the complex manipulation of artefacts and especially the production of stone tools … The Homo Sapiens mind is based on multiple intelligences, but has one additional feature, cognitive fluidity. This term describes the capacity to integrate ways of thinking and stores of knowledge from separate intelligences so as to create types of thoughts that could never have existed within a domain-specific mind. For instance, a Neanderthal or pre-sapiens homo in Africa could not have taken their knowledge of a lion (from natural history intelligence) and combine it with knowledge about human minds (from social intelligence) and create the idea of a lion-like being that had human-type thoughts – a type of anthropomorphic thinking that is pervasive in all modern minds. Cognitive fluidity

> was a consequence of language: spoken and imaginary utterances acted as the conduits for ideas and information to flow from one separate intelligence to another (Mithens 2005:262).

Mithen's perspective has an enticing logic to it, which certainly offers a fertile ground for constructing apparently logical connections between evolved intelligences, in this case a 'natural history intelligence' and the expression of this in ritually performed and then fixed animals. It fits well with the idea of a ritual origin of image-making, as such representations 'can work' because it enables iconic and indexical associations to be experienced in relation to some sort of 'common knowledge' shared via a material reference. It marries also with Donald's (2001) concept of mimesis, where a repertoire of 'animal-like performances' can be envisaged as a form of 'mimetic currency'. Nevertheless, the idea of 'content rich' modular intelligences which are part of our mental heritage can be challenged. Such modules may be formed during ontogenesis from far more basic perceptual-motor elements and or 'developmental biases (Deacon 1997, Karmiloff and Karmiloff-Smith 2001) and an alternative to the Mithen's cognitive fluidity approach is discussed below.

3.3.2 Human Figures

If animal images dominate, what possible cognitive explanations can be put forward for the relatively rare images of humans during the Upper Palaeolithic? The statuette known as the Venus of Willendorf is presented as Figure 3.4 in Appendix 1. There are only about 60 clearly female figures which have been found throughout the European region, yet many appear to have a common 'style'. McDermott (1995) offers the following description:

> These mostly palm sized statuettes appear to depict nude obese woman with faceless and usually down turned heads, thin arms which commonly end or disappear under the breasts …an abnormally thin upper torso carrying voluminous and pendulous breasts, exaggeratedly large or elevated buttocks … … presumably pregnant or adipose abdomen with a large elliptical navel, and what often appear to be oddly bent, unnaturally short tapering legs which terminate in either a rounded point or disproportionately small feet. Although readily recognizable, these anatomical details do not add up to an accurate image of the human figure (McDermott 1995).

Their appearance signals a further significant change in mental processes occurring within the period itself. Prior to the Venus figures representations involving human elements only occur as therianthropic figures such as in Figure 3.2. It is therefore suggested that Figures 3.2 and 3.4 must reflect the emergence of a new type of shamanic consciousness and identity because this would have had to accompany the making and use of such works – these would simple not exist otherwise because they would have no meaning. Along something of a similar vein, McDermott (1995) offers an 'autogenesis hypothesis' for the Venus figures, which reflect an experience of self-imaging – that is, how women see their own bodies when looking down onto these.

> The realism of form and content seen in [the] images when properly viewed suggests a materialist hypothesis for why our species first began to make images of the human figure and what functions they originally served. As accurate representational images of the female figure at different stages of development, they stored and preserved information about biological processes unique to the lives of woman. No answer to the absence of male sculptures … could be more parsimonious than that woman first developed human image-making as accurate records of physical changes that they alone experienced and presumably controlled (McDermott 1995:).

The autogenesis theory is far from the only interpretation of the Venus figures. Gamble (1982) for example, proposes a socio-ecological framework, where the figures were possibly part of a process by which social groups established and communicated changes in regional alliances, a necessity perhaps brought about by the approach of the glacial maximum, 18,000 years ago. Such an interpretation does not exclude McDermott's, as something created in one context being used in another can apply here. Like much of Upper Palaeolithic art, more questions are often raised than answered by the female figures, but a few pertinent offerings seem possible. Figures 3.1 – 3.5 and Tables 3.1 - 3.3 in Appendix 1 all point to distinctions in ritual practices relating to men and women, once again pointing to the dynamics between males and females being a dominant force for fashioning materials with 'symbolic force' (Gamble 2004:85). Moreover, the fashioning processes were likely to have been different for men and for women, thus elaborating cultural diversity and tension mirrored and built on biological diversity and tension, so different sorts of changes in

'currencies' of self-consciousness between men and woman may have accompanied the making and use of different types of images. This view also seems applicable to the many 'signs and symbols' (Conkey 1997) that are found at this time.

3.3.3 Signs and Symbols

Table 3.3 in addition to Table 3.1 in Appendix 1 gives some sense of these. Leaving aside the actual meaning for those that made and used them what can be said is that they occur throughout the period, with common signs occurring across the European region, such as the vulva-like graphics which are presumed to be connected with female 'business' while others may relate to male 'business'.

An increase in the number and complexity of the signs also occurs from the early Magdalenian period with the possibility that from this time onwards, distinct regional 'styles' or 'dialects' were emerging (Conkey 1997). So perhaps regional 'currencies of thought' were emerging based in part, on increasingly abstract representations of more complete forms. The critical idea to emphasise here connects back to Zeki (1999) and the ability of the brain to create meaning and inform action based on the perception of selected biological and environmental clues. This ability now appears to have become transferred to abstracted 'signs' drawn from the cultural environment. The elaboration of signs then, coupled with the gender and shamanic perspectives discussed above, suggests that greater social (and therefore cognitive) diversity, complexity and hierarchy was emerging towards the end of the period.

3.3.4 The Emergence of Image Based 'Narrative'

As already noted above, there are a number of perspectives available on the question of why human-like forms are not only rare, but also generally portrayed as abstractions. The relevant perspective to offer at this point is from Humphrey (2002, 1999) and his suggestion that language was still in a pre-modern form:

> Everybody agrees that *some* kind of language for *some* purpose has likely been in existence among humans for most of their history since they parted from the apes. But Robin Dunbar for example, has argued that human languages evolved originally not as a general purpose communication system for talking about anything whatsoever, but rather a specific social tool for negotiating about – and helping maintain – interpersonal relationships. And Steven J. Mithen has taken up this idea and run with it, arguing that the 'linguistic module' of the brain was initially only available to the module of 'social' intelligence' and not modules of 'technical intelligence' or the natural history intelligence'. So to begin with, people would – and could – use language only as a medium for naming and talking about other people and their personal concerns, and not for anything else (Humphrey 2002:146).

Humphrey is therefore not arguing that Mithens is wrong so much as his timing for the merging of modular domains via language is too conservative. Humphrey continues:

> I too would have thought the idea that there could still have been some structural restraints on the scope of human language until just 20,000 years ago too fantastic to take seriously, were it not for one further observation which seems to provide unanticipated confirmation of it. This is the striking difference in the representation of humans as opposed to animals in cave art … if indeed it was the lack of … naming that permitted those artists to depict animals so naturalistically, then this naturalism ought *not* to extend to other human beings. In other words, representations of humans should either be missing altogether from the cave paintings, or if present should be much more stereotypical and modern … But behold, this is exactly what *is* the case. As a matter of fact there are no representations of humans at Chauvet. *[about 33,000 years ago]* And when they do occur in later paintings, as at Lascaux at 17,000 years ago, they are nothing other than crudely drawn iconic symbols (Humphrey 2002:148).

The image that Humphrey refers to is Figure 3.5, Appendix 1. While Lascaux has some 1,500 images, there is *only one* known image that can be regarded as human- like. It is found in an area difficult to access called 'The Shaft'. Given this and the nature of the image, a shamanistic interpretation seems the most plausible and Lewis Williams (2002) comments:

> What we have … is not a hunting disaster; far too many points count against so simple an interpretation. Rather we have transformation by death: the 'death' of a man paralleling the 'death' of the eviscerated bison. As both 'die' the man fuses with one of his spirit helpers, a bird. The close juxtaposition of the 'broken sign' and the similarity between the signs and the bird staff suggest that this sign was in some way associated with zoomorphic transformation and the bridging of the cosmological levels that becoming a shaman necessitated (Lewis-Williams 2002:265).

Therefore we have here a possible 'scene' composed of 'realistic' representations as well as abstractions. As Kliener et al (2001:10) comment: 'if the painter placed these figures beside each other to tell a story, then this is evidence for the creation of complex narrative compositions'. This may be so, but an alternative is also possible, whereby it is not complex narrative per se being created or invented, but that we have a glimpse of a pre-existing narrative once distributed across multiple forms, being (re)presented in a new way. That is, what is being expressed graphically is a recoding of a broader 'distributed narrative', reflecting speech-like combinatorial and generative abilities beginning to occur through the activities of images-makers. When looked at this way an alternative to Mithen's (2005) conception of cognitive fluidity indicated earlier also appears to be on offer.

3.3.5. Integrating Mind and Material – Cultural Fluidity

What the above discussion indicates is that through the Upper Palaeolithic there are indications of diversification of images and therefore also probably increasing complexity in social arrangements. This diversity and complexity in turn suggests that some radical meta-level development in speech and consciousness may have occurred within and perhaps more towards the end of this period. If we carry forward the idea that 'language' can be regarded as broader than the specific communicative elements used between individuals, but is also reified within a fabric of materialised clues as well, one can speculate that different aspects of such 'languages' are somewhat analogous to a collection of pidgin languages. If a creole analogy is then applied to this scenario, perhaps the conditions to promote the emergence of a new type of language and a corresponding new type of consciousness may have been present. For, if diversifying material culture itself is a 'top down' source driving increasing diversification in discrete knowledge-power structures - would there not be mounting 'adaptive' advantage for new overarching equilibrating structures to emerge through brain-culture interactions. In other words, just as it was suggested that adaptive pressure gave rise to a social-ritual solution to the biological challenges of encephalisation, perhaps a diversifying symbolic

domain through the Upper Palaeolithic created the adaptive pressure, and the opportunity for a new social-linguistic solution.

One can assume that any existing gestural, social or proto-language would be the obvious structure to be advanced to a new level by the addition of syntax. The syntactical elements themselves could be derived from more basic processing 'rules' relating to very basic perceptual motor coordination, and or, from the emotional grammar approach suggested by Turner (2000) in the last chapter. If there was any sort of evolved 'higher order' cognitive platform which might have provided the springboard for such a meta-language change once the symbolic domain was materially established, it possibly lies in the capacity for 'communicative competence' as discussed in 2.3.6. This is the ability to engage in joint attention and through this to understand and communicate emotional states and intentions, and emerges in the infant during the latter stages of the first year. While this is *now* a prerequisite for the acquisition of modern speech it presumably existed also in any pre-syntactical speech environment, and would have supported development of other forms of communication if these were the more salient.

3.4 CONCLUSION

This chapter, combined with the insights from Chapter Two has presented a case for seeing the origins of human image-making in a more recent 'cognitive' light. The discussion indicates that the emergence of Upper Palaeolithic image-making was not the result of the pre-existence of a modern language facility, but essentially the recoding of aspects of ritual. It seems likely that ritual 'traditions' reach far back into pre-human evolutionary stages, with ritual possibly providing the main structuring of social existence in the temporal gap between the appearance of our own species in Africa, and evidence of image-making some 160,000 years later. It is also argued that the fixing of images may have materialised 'the symbolic domain' in ways which led to greater social complexity with syntactical language development occurring through and perhaps more towards the end of the

period. In this conception, the 'step up' to symbolic syntactical speech was essentially an adaption to elaborating social and cognitive complexity within the symbolic domain and not the other way round.

These lines of argument couple with the systems view on changing consciousness enable 'pre-historic art' to be repositioned from being seen as an 'epiphenomenal' i.e. non-adaptive activity (Pinker 1997) to something involving processes central to how our species achieved the cognitive capacities and forms of consciousness it has today. Because the same cognitive foundations and potentials of that time can be presumed to still exist today, this repositioning also enables 'art' today to also be seen as working through both distributed and through-time processes which continue to reshape human consciousness. Aspects of this broader theoretical discussion are taken up again in the final chapter.

3.4.1 Analytical and Interpretive Themes and Perspectives

The other aim of this chapter has been to identify specific themes and perspectives within the discussion to carry forward into the analysis and interpretation of the data gathered through The Learning Connexion, and these are as follows:

- Ritual and Altered States of Consciousness
- Gesture
- Accessing other Realms
- Gender and Sexuality
- Abstraction
- Animal Images
- Style and Identity
- Image-Makers as Appropriators of Transformational Knowledge and Power

CHAPTER FOUR

METHODOLOGY

The New Oxford English Dictionary defines 'methodology' as 'a system of methods used in a particular area of study or activity'. In qualitative research there is also usually an expectation that the epistemological and ontological theories associated with the methods used, will also be made explicit (Schwandt 2000). The aim therefore in this chapter, in association with material already presented in earlier chapters, is to give the reader a clear understanding of - what, how, and why particular research methods were used, and how these relate to the researchers views on the nature of 'being' (ontology) and how this nature can come to be understood (epistemology).

4.1 THEORETICAL ORIENTATION

Consistent with the ideas discussed in chapters Two and Three - that we construct the human conscious and symbolising mind, and interpret the 'meaningfulness' of the world we experience, through epistemologies shaped through a systemic interaction between brain and culture, this project falls within a 'constructivist' orientation. As Schwandt (2000:118) points out 'constructivism, along with the related term 'interpretivism' are best seen as descriptors for 'a loosely coupled family of methodological and philosophical persuasions', which point to certain orientations of 'how to look' rather than being in themselves 'descriptions of what to see'. These emerged from philosophical perspectives which rejected the notion that the aims and methods of 'naturalistic science' could be applied to social science. There is a rejection of 'modernism' (Gergen 1991) and positivist orientations (Lincoln & Guba 1985) and the associated conviction that the facts of the world are essentially there for study and these exist independently from human observers. Schwandt continues:

Constructivists are deeply committed to the contrary view that what we can take to be objective knowledge and truth are created, not discovered by mind. They emphasis the pluralistic and plastic character of reality – pluralistic in the sense that reality is expressible in a variety of symbol and language systems; plastic in the sense that reality is stretched and shaped to fit purposeful acts of intentional human agents. They endorse the claim that – contrary to common-sense, there is no unique 'real world' that pre-exits and is independent of human mental activity and human symbolic language (Bruner, 1986:95). In place of a realist view of theories and knowledge, constructivists emphasis the instrumental and practical function of theory construction and knowing (Schwandt 2000:125).

The general orientation of the inquirer therefore lies in 'elucidating processes of meaning construction', and clarifying what and how meanings are embedded in, and able to be interpreted from, 'the language and action of social actors' (Schwandt ibid.). Such approaches also usually seek to examine processes occurring in 'real world' settings (Lincoln & Guba 1985) rather than within researcher constructed and manipulated contexts.

This study not only engages these core elements, that is; the elucidation of how meaning is constructed and interpreted through language and action in 'real world' settings, but seeks to extend aspects of this orientation in a number of ways. For example, it is argued in the previous chapter that what constitutes 'language' can be understood as being broader than the direct elements of communication occurring between people but this is also embedded in a fabric of clues in the 'materialised' world. In essence then, the actions of materialising images as well as the actual images created through these actions should be viewed as intrinsic aspects of 'language'. Image-making in this view can be seen as a 'central player' in epistemological processes which are intrinsically embedded in brain-culture interactions which, through time, create novel ways we, as a species, come to understand 'the world' and our relationship to it.

This systems orientation provides the overall framework for The Learning Connexion research with this reflected in the research questions as stated at the end of chapter one. That is, in addition to seeking to describe the image-making processes and experience for students in The Learning

Connexion setting, it was generally hypothesised that what would be seen to occur there would also reflect aspects of this general theoretical approach to the evolution of human symbolic consciousness, and, that the data could enable the theoretical dimension itself to be further developed. As also pointed out in the concluding section of the previous chapter, systemic processes can be seen as involving both 'through time' and 'distributed' dimensions with the origins of image-making during the Upper Palaeolithic and the possible developmental consequences flowing on from this providing a through time perspective. The research into The Learning Connexion on the other hand offers an opportunity to gain insight into some of the distributed processes.

4.1.1 Case Study Inquiry

Beyond a broad constructionist-interpretive orientation, the term 'qualitative case study' is used as the primary descriptor for this study as it offers a overarching framework which enables multiple perspectives and methods to be drawn together within a well defined situation.

4.1.2 Defining 'The Case'

As Stake (2000:435) also points out: 'perhaps a majority of researchers doing case-work call their studies by some other name.' In other words, it is not 'the label' which is of concern here, but the essential elements which indicate that a particular study might be called such, while another study might not. At its heart, case study work has a specificity and a 'boundedness':

> Custom has it that not everything is a case. A child may be a case. A doctor may be a case, but *his doctoring probably lacks* the specificity, the boundedness, to be called a case. An agency may be a case. But the reasons for child neglect or the policies for dealing with neglectful parents will seldom be considered a case (Stake 2000:436).

Merriam (1999) adds:

> I have concluded that the single most defining characteristic of case study research lies in delimiting the object of study, 'the case' (Merriam 1999:26)

In this instance, as made clear by the first research question 'the case' is 'the students' at The Learning Connexion. This is not to say that the organisation and specific aspects of it are not important to researching the case. As will be seen they clearly are, and indeed, the organisation creates the essential boundaries within which (potentially) a finite amount of data can be gathered, but the organisation itself is not the case. Another important aspect of case study work is the aims, and here again we see the interpretivist and constructionist theme, for as Merriam suggests, Case Study is used to achieve in-depth understanding of a situation and the meanings experienced in that situation for those involved. Moreover, the interest is often in process rather than outcomes, context rather than a specific variable, and in discovery and interpretation rather than confirmation. Therefore, it is important to see that this study is not directly concerned with evaluating The Learning Connexion teaching practices and philosophy as such, but with how organisational (and other factors) influence and are expressed through peoples image-making at the school.

Case study can be further defined by certain features, and in a qualitative context one can talk about particularistic, descriptive and heuristic orientations. Shaw (1978:2) talks in the context of particularistic studies being 'small scale, entrepreneurial endeavours', and Merriam (1999:29) of 'particular situations, events, programs or phenomena.' Descriptive to Merriam (Ibid.) implies 'thick description', a term taken from anthropology which seeks 'the complete, literal description' of something. Stake (2000:437) also points out that, case researchers seek what is both 'common and what is particular about the case', and the use of multiple data sources to achieve this end is common. Merriam (ibid.) suggests that description in case studies is generally qualitative, where prose and literary techniques are used to describe, elicit images, and analyse situations'. The term heuristic is also sometimes applied to studies that seek to illuminate the readers understanding of the phenomena under studying in ways that bring discovery of a new take on something that otherwise may be reasonably familiar, or where, previously unknown relationships and variables can be expected to emerge leading to rethinking of the phenomena understudy.

In this instance, the case study of the students at The Learning Connexion is more complex than 'a particular instance' and involves, firstly, an aim to describe different aspects of an ongoing situation in sufficient detail so the reader can develop a reasonably complete sense of the student experience and the processes underlying the making of their images. At the next level it is heuristic in that the case seeks to analyse the descriptive level in ways which illuminate the familiar (people studying art and making-images) through the lens provided by the second and third research questions and the literature and theoretical ideas behind these. Another way to look at the multiple level approach within case study work is provided by Stake (2000) who distinguishes between 'intrinsic' and 'instrumental' interests in cases.

> I call a study an intrinsic case study, if it is undertaken, because, first and last, the researcher wants better understanding of this particular case … The researcher at least temporarily subordinates other curiosities so the stories of those living the case 'will be teased out … I call it instrumental case study if a particular case is examined mainly to provide insight into an issue, or to redraw a generalisation. The case is of secondary interest, it plays a support role and facilitates our understanding of something else … Because the researcher has simultaneously several interests, particular and general, there is no line to distinguishing intrinsic case study from instrumental; rather, a zone of combined purpose separates them (Stake 2000:437).

This study embraces both intrinsic and instrumental components. The intrinsic aspect is captured by the idea of an 'Inner frame' which is particularly concerned with and focused on the student experience at The Learning Connexion, while the 'Outer Frame' is concerned with a broader interest in building theory about consciousness change and how this may be viewed through image-making. Merriam (1999) provides support for this theory building aspect of case study and describes Interpretive case studies being used to:

> Develop conceptual categories, or to illustrate, support or challenged theoretical assumptions held prior to the data gathering … A case study researcher gathers information about the problem … with the intent of analysing, interpreting, or theorising about the phenomena (Merriam 1999:38).

4.1.4 Description, Analysis and Interpretation

Description, analysis and interpretation are inherent to the completion of case study work and Wolcott (1994) provides a useful guide to distinguishing between these. Description refers to a presentation of a sufficient amount of data to give the reader an adequate and reliable 'picture' of 'the case' or particular aspects within this. Looking back to the discussion in Chapter Two, it could be said that the descriptive level reflects Deacon's (1997) 'iconic' level of inference, where the description acts as a window to what researcher actually sees or experiences. Where this is most obvious in this project is in the narrative aspect of the project (discussed below) where actual images and interview statements are presented as part of the descriptive and analytical discussions. The survey data gathered (discussed below) on the other hand is necessarily manipulated into tables and graphs, but the 'pictures' these give essentially summarise into an easily readable form some basic areas of information relating a description of 'the case', such as patterns of age, gender, and course level completed. Presenting the 'raw' data' in this regard within the descriptive, analytical and interpretive discussions is impractical.

It is with direct reference to what is described and how this relates to the research questions that the analysis occurs. In Wolcott's (ibid.) view analysis needs to reflect 'a tightness' between the descriptive level and the methods by which the research objective is achieved or the questions addressed. The interpretive process on the other hand is more open ended and looks to broader implications from the possibilities that the descriptions and analysis suggest. As Wolcott (1994) also points out, there are no hard and fast rules for how these three aspects are played out, and in some areas the difference is in emphasis rather in clear delineation. In terms of the three research questions, the descriptive level is mainly contained in Chapter Five which provides much (but not all) of the information for addressing the first question. The analysis in Chapter Six looks more towards addressing questions two and three. The interpretive aspect extends the discussion within Chapter Six but is also carried into the final Implications Chapter**.**

4.2 PROJECT METHODS AND STRATEGIES

This study uses a combination of surveys, interviews, narrative development, participant observation and 'self study'. Each method offers a different perspective at different levels with all contributing to the aim of achieving a 'holistic appreciation' of the case. What follows below is a brief outline of each method.

4.2.1 The Completing Student Surveys

These were used to map some general patterns of characteristics of students, as well as looking for some broad insight into how people interpreted their experience at The Learning Connexion in relation to a number of personal development perspectives. While the surveys involved quantitative elements and reduced data to tables and graphs, it is felt that they still fit within an overall qualitative orientation because in addition to gathering some 'factual data' (age, gender, educational qualifications, mode of study) the surveys had a major focus on gathering insight into how students themselves interpreted their experienced at the school. 352 surveys were filled in between 2004 and 2007 out of a possible total of around 1000. The survey form used is provided as Figure 4.1 in Appendix 2.

4.2.2 Graduate Follow-up Surveys

In mid 2004 a follow up survey was also developed which was mailed out in a block each year (2004-2007) to former students six to twelve months after they had left the school. This gathered information about people's activities since leaving such as their level of ongoing engagement with image-making and related learning. Also included was an enlarged battery of personal development questions along similar lines to the Completing Student survey. 145 responses from a total possible of about 1000 were received. The survey form used is provided as Figure 4.2 Appendix 2.

4.2.3 Research Group 'Narratives'

In-depth interviews were conducted with a small number of people which had a focus on people's images and how these 'told their story'. It was felt, following an earlier study (Cotton 2003) that this project should have a major focus on student's images. A pilot project tested an approach in 2004 with four initial participants chosen randomly from student lists of people in their second and third year. Recorded interviews were conducted over 1 to 2 hours which used photographic reproductions of people's art work to focus the interview. These were transcribed and relevant statements combined with relevant images used to build up a 'narrative'.

Following the pilot, the research group was expanded, by the same random process, but with younger aged female students excluded from this list (see the ethical issues discussion in relation to this). Those selected were approached and asked to participate with a number of people declining. It was felt that about ten people was the maximum the project could manage and once this number had been reached approaches to people ceased. The forms, information sheets and question guides relating to this process are included as Figure 4.3.1-5 in Appendix 2.

4.2.4 Outer Frame Analytical Tools

Some general comments about narrative inquiry are also useful here. Narrative inquiry refers to a variety of research designs in which 'stories are used to describe human action' (Polkinghorne 1995:5). The term is used in this work to refer to 'the stories' that were able to be constructed through the use of research participant images and their interview statements. Polkinghorne (ibid.) drawing on Bruner (1990) distinguishes between 'paradigmatic narrative inquiry' that gathers stories which are then used to produce 'taxonomies and categories out of the common elements found from the database of stories'. What he refers to as narrative-type inquiry on the other hand gathers events (such as individual images and interview statements) as its data and uses narrative analytic procedures to produce explanatory stories. The use of the term narrative in this work reflects some

elements of both orientations, but consistent with the case study approach, these have both descriptive and instrumental dimensions. At the descriptive level, people's images and interview statements are drawn together to construct ‘a story’ about each person or things they are interested in, and which can be regarded as being structured by ‘a plot’. Polkinghorne (1995:7) describes plot as a type of ‘conceptual scheme by which a contextual meaning of individual events can be displayed’. The contextual meaning of stories is ‘concerned with human attempts to progress to a solution, clarification, or the unravelling of an incomplete situation’ (Polkinghorne ibid.) So at this level the narrative aimed to tell ‘a story’ that enables some sense of the uniqueness of each participant being revealed through the body of their work and the purpose or nature of their personal journey occurring through their time with The Learning Connexion.

The paradigmatic emphasis comes in at the next level of analysis, where common themes from ‘the events’ which make up these stories, are explored in relation to research questions 1.3.2 (Brain, Culture Mind), and 1.3.3 (Upper Palaeolithic Image-Making). In terms of the specific themes and perspectives used to explore question 1.3.3, these are listed at the end of Chapter Three. A number of these themes also provide focal themes for the discussion in relation to research question 1.3.2. That discussion also has a general emphasis on ‘improved well-being’. As will be seen, the analysis of some survey data (the data itself is described in Chapter 5) indicates that increased ‘well-being’ can be associated with some people engaging with a period of image-making. It was then theorised that improved well-being reflects Brain, Culture, Mind, working in an integrated way by involving a combination of: neurological factors relating to a persons ‘unique artistic style’; environmental or cultural clues stemming from The Learning Connexion environment; and the image-making process itself which created in a visual form a unique narrative about their unique lives.

The analysis and interpretations in Chapter Six also look at ‘style’ as an emerging source of personal identity, along with consideration of images which may reflect altered states of consciousness. Evidence of possible synchronicities occurring between image-makers is another

perspective used, with this thought to be a possible indication that some level of mirror neuron functioning was occurring and being captured in the image-making process.

4.2.5 Self Study

The researcher periodically participated in the six month Foundation level of the course during the second half of 2004 as well as some stage one classes in 2005. Participation within the programme enabled the researcher invaluable first hand experience as 'an image-maker' with the researcher's own images contributing to the analysis discussion in Chapter Six.

4.2.6 Participant Observation

There was open access to many organisational processes - staff and tutor meetings, and fairly regular contact with the organisational principals. Participation observation within the organisation more generally enabled the researcher to gain considerable insight into the organisational philosophy and 'culture'. A research journal was kept during the research period which recorded insights and experiences from the self study and the participant observation sessions.

4.2.7 The Earlier Project (Cotton 2003)

This researcher was approached by the organisation in 2002 to explore possibilities for establishing a degree course based on their existing Diploma programme, and this project was related to that task. It aimed through in-depth interviews to gain insight into what sorts of people were being attracted to the school and what the experience was like for them as students. The research process involved one-off interviews from which fourteen case studies were developed. Interview statements were examined for the degree to which people connected with a 'creativity process' model which was developed from a review of creativity literature. Some of the findings from this are incorporated in the discussion in chapter five. It was as a result of this project that the substantive project was developed with an emphasis on using people's own-images as a focus of interviews. Further

discussion of some details relating to the data methods outline here are incorporated in the following section on Ethical Issues.

4.3 ETHICAL ISSUES

4.3.1 Accessing and Generating Data

Merriam (1999) makes the point that in qualitative studies ethical dilemmas are likely to emerge with regard to the collection of data, the analysis of data, and the dissemination of findings. Numerous ethical challenges were identified from these perspectives and this section deals with how these were addressed. In terms of collection of data, as Stake (1994) indicates, qualitative researchers are 'a guest in the private spaces in the world', and the researcher, in many instances needs explicit permission to pursue their interests. This need is especially clear in educational contexts where people have chosen a learning experience which did not include an initial choice to participate in or contribute to an external agent's research process. Participation in data collection by such people therefore needs to be invited, voluntary, and able to be withdrawn at any time, and supported with as much accurate information about the nature of the project as possible.

With regard to the surveys, these were developed and conducted in a spirit of collaboration between the researcher and the organisational principles. The survey programme evolved out of the researcher being asked to providing design advice for some existing survey approaches being implemented by the organisation itself. Given the need (indeed requirement) for the organisation to collect some data a collaborative process evolved whereby this researcher designed and managed the organisations survey programme on behalf of the organisation, on the understanding that the information would be shared. The principle of voluntary participation was maintained by the questions in the surveys being clearly indicated as voluntary, and, that the information gathered would only be used in ways whereby no specific individual could be identified. Contact details were also provided so survey respondents could raise any questions directly with the researcher, and each

year the survey results in table and graph form were made available through the organisations data base, and meetings were held to discuss the findings with interested people.

A far more intimate collaboration was necessary with the smaller group of research participants who were invited and agreed to participate in an in-depth process of discussing their images and the influences reflected in these. Prior to engaging with these students, Ethics Committee approval was sought and, after some modifications, granted for the types of questions that the researcher was likely to ask (see Figure 4.3.3 Appendix 2). It was also mentioned above that younger aged females were excluded from the lists from which the narrative group were selected. The reason for this was two fold. Firstly this researcher was aware that themes relating sexuality are often found in people's art work (one of the outcomes from the earlier study) and it was felt prudent to avoid getting into such discussions with younger females. Moreover, the primary interest was in work by more mature people and as the survey data reveals, it was older aged people who tended to participate in the later stages of the course.

4.3.2 Validity and Reliability

The terms validity and reliability are used here, but it is also recognised that such terms are felt by some (Gergen & Gergen 2000) to be inappropriate for qualitative research because of the essential contructivist and interpretative nature of such methodologies, which require 'a tolerance of ambiguity' and the championing of multiple perspectives (Stake 2000:443). Nevertheless they are used here, with validity in this context referring to the 'trustworthiness' or 'dependability' of the data gathered and reliability referring to the degree to which it relates to the purpose or aim of the particular inquiry being conducted.

The ethical challenges relating to qualitative analysis stem from the fact that the researcher is the primary instrument for data collection, and data is therefore filtered through his or her particular theoretical position and biases. Thus 'opportunities exist for excluding data contradictory to the

investigators views. It is felt that the challenges here were addressed by the use of multiple methods which enabled strong elements of triangulation. Triangulation according to Stake (2000:443) is a process of using multiple perceptions to clarify meaning, and verifying the repeatability of an observation or interpretation.

With regard to the surveys data was coded and processed using SPSS version 10 and initially produced as tables and graphs. Various checks such as the use of scatter grams were used to identify 'outliers' (possibly anomalous results) which may have been a result of data entry. On the assumption then that the data was coded, entered and processed accurately, the results are largely self-evident, and any reader of the descriptions based on the survey tables provided has access to the same information which informed these descriptions.

In terms of ethical issues relating to the analysis and interpretation of the data gathered with the smaller group of research participants, data was gathered in the form of photographic reproductions and combined with transcribed interview statements. The aim was to reveal 'a story' which captured some essential and accurate aspect of each person, the processes and influences in their work, and how things may have changed for them through the course of their involvement with the school. These 'narratives' were refined through subsequent interviews sessions with available participants. In other words, the constructed narrative was a product of the researcher working with research participants, and at the descriptive level the final overall 'narrative' could be verified by research participants themselves as accurate. In terms of the participant observation perspectives, the organisational characteristics described in chapter five were also largely grounded in the directly observable, but also triangulated by some interview and survey data, with these provided to the organisational principles in the form of draft chapters for feedback. At the descriptive level then, the ability to 'ethically' address the first research question was relatively straight forward and grounded in multiple data perspectives. In terms of the analysis and interpretation relating to the other two research questions this was in the context of theory building and in parts speculative, but still

grounded in perspectives directly drawn from the findings, and from the literature discussed in chapters one, two and three.

4.3.3 Dissemination

Dissemination of the findings also involved ethical concerns. The survey data also 'belonged' to the organisation and could be used by that organisation as it felt appropriate, with the researcher having little control over this. At the same time, much of that information would have been available to the organisation anyway, and the researcher's role here helped build the relationship necessary to gain entry to the research field. In terms of sharing the results with the small group of interview participants, the narrative approach outlined above ensured that the data felt to be important by the researcher about each participant was provided back to available participants through subsequent interviews. Moreover, explicit permission was sought from these people to include any images, interview statements and their proper names (or a suggested pseudonym). In terms of the thesis itself, near final drafts were sent to all available interview participants inviting their comment.

4.4 CONCLUSION

To conclude, a few comments are offered here in relation to the second part of the dissertation title *Towards a Methodology of Interconnectness.* As pointed out in this chapter multiple 'methods' are used and drawn together through the case study approach. The idea that this project can contribute to 'a methodology of interconnectedness' is a more substantial idea than just the combining of data collection methods, but seeks to indentify this project as part of a broader epistemological challenge. That challenge relates to what this writer sees as a 'post-modern' trend towards 'trans-disciplinary' if indeed not 'post-disciplinary' (Sullivan 2004) research paradigms. This concept is discussed further near the end of Chapter Seven where 'consciousness' is put forward as an example of a peak level interest that connects to a 'trans' or 'post' disciplinary research field, with 'arts based inquiry' having the potential to contribute important elements within this field. Building

towards that discussion, the next two chapters look at the research findings from the data gathered within The Learning Connexion setting, with Chapter Five offering a general descriptive approach, which is followed by more analytical and interpretive discussions in Chapter Six.

CHAPTER FIVE

FINDINGS

This Chapter is primarily concerned with the descriptive level of the findings from the multiple data sources indicated above, although towards the end the discussion reaches towards some of the analytical themes and perspectives which come into play in chapter six. In 5.1 the survey data is discussed with reference to numerous graphs and tables contained in Appendix 3. This is followed in Section 5.2 with consideration of the 'narrative' research group, and two example studies are provided to illustrate how people used their image-making at The Learning Connexion to deeply explore their own lives. Selected images and interview statements relating to these examples are contained within the body of the chapter. This section also includes the researchers 'self-study' component. Section 5.3 then focuses on observations of the organisation itself, with all these sections contributing to a final overview in Section 5.4. The aim of the chapter is to provide an overall picture of 'the case' this being the students, their patterns of engagement with the school, and organisational and personal factors which have influenced this and their image-making. In this way the chapter provides much of the material to address the first research question (1.3.1) though specific reflection on this and the other research questions is left until the end of the next chapter.

5.1 THE SURVEY FINDINGS

The Completing Student survey aimed to distinguish patterns associated with people's engagement with the school based on the variables of age; prior education; study mode; and gender. The next aim was to look for how such variables might be associated with other factors such as: level of course completed; length of time with the organisation; levels of course satisfaction; post-graduate intentions and actualities, and levels of responses to the sets of learning and personal development questions in the surveys.

5.1.1 Student Characteristics

Age emerged as a prominent variable, distributed fairly evenly from the late teens to retirement years, with annual samples showing little variability from this overall pattern (Graph 1). The overall average age was just over 40 but marked differences in age were noted when viewed from the perspectives of gender, study mode, course level completed and prior educational experience. Not only were males younger on average but they also showed a consistent level of participation around 15% (Graphs 2, 3). Females thus consistently made up the bulk of the student population surveyed in each of the four years.

Previous educational level was assessed on a three-point scale: low; medium; and high and was considered in relation to age, gender and study mode. The missing data was quite high in this area, but based on comments included in some surveys it was felt likely this was an indication of either low prior education, or high prior education where people thought that this question was not relevant. The average age from the missing data was close to the overall average ages for each gender. The prior education perspective also suggests that for both females and males, higher age is associated with higher levels of prior educational experience (Graph 4).

Very few people directly indicated low prior education (school certificate or lower) with the greatest concentration in the medium range (upper high school, trade, undergraduate studies), but there was also a significant number of people in the high category (Graph 5). The preferred study mode for females was clearly extra-mural part-time followed by full-time extra-mural and then full-time on-site. Males showed something of a preference for full-time and on-site study. Females studying on-site tended to do so full-time and were generally lower in age (Graphs 6 and 7).

5.1.2 Outcomes and Associated Characteristics

The focus here to begin with is on Course Level Completed and how the variables of Age, Gender, Study Mode and Prior Education relate to this. This is followed by consideration of the responses to

the learning and personal change sets of questions. The most obvious relationship identified is between Age and Course Levels Completed. Females going on to the stage three level of the course tended to be mature age females (Graph 8). Higher age tended to be associated with higher levels of prior education for both sexes (Graph 4) but there was also an indication that many in the higher category left the programme after the foundation level of the course, whereas people from medium educational backgrounds, males in particular, tended to go on to next level (Graph 9). It thus appears that the people most likely to leave at the lower course levels had higher prior educational experience and studied extramurally part-time (Graphs 9, 10, Table 1).

The Age and Study Mode data needs to be interpreted in light of the significant growth in extra-mural student numbers through the survey period. The data suggests an emerging pattern where increasingly mature age participants tended to be those who would go on to the stage three level of the programme (Graphs 11 and 12).

When responses to the learning outcome questions are considered, a fairly clear general pattern of higher average outcomes for people exiting at higher course levels was indicated, and the age factor is also highlighted here as well (Table 2). At the same time Table 2 also indicates a drop in average personal change outcomes at stage three. One possible explanation is that the stage three experience was quite different in character from the lower levels. Also people, predominantly females, were increasingly entering at this level without coming up through stage one and two, and this is indicated by the drop in the average time spent at the school by stage three participants (Table 2, Graph 13).

The Findings relating to the personal change questions are presented in Graphs 14-47, and these are based on data from both the Completing Student and Follow-Up surveys. Marked levels of positive change are indicated, and of particular note are the responses relating to: seeing oneself as an artist (Graph 15), feeling positive about oneself (Graph 17), confidence and regained confidence

(Graphs 22, 23, 30, 31), being more relaxed (Graph 28), becoming open to new ideas (Graph 23), learning to trust and act on ones intuition (Graph 26, 35), realised what I wanted to do next in life (Graph 28, 47); to mention a few.

Some lower levels of response to some questions may also be significant. For example the questions concerning the connection with the environment show a relatively low response rate (Graphs 21, 41). This outcome may not mean that people had a low sensitivity to the environment. On the contrary, people often commented in their surveys, to a pre-existing sensitivity to environmental issues. It is possible that for some people this was a contributing factor to the decision to engage with a period of creative activity and learning.

5.1.3 Other Outcomes

To complete this section the following are outlined briefly: Reasons for Leaving at a Particular Course Level, Overall Satisfaction with the Course; Future Intentions; and from the Follow-Up Survey, Most Important Outcomes. While a high percentage of people left after the foundation course, most people indicated that they left at the course level they originally intended and a significant percentage completed at a higher level (Table 3). These findings are also reflected in the overall satisfaction reported for people's involvement (Table 4). The Future Intentions by Course Level Completed suggests that those who leave earlier, tend to go on to further arts or non-arts study or to work as before, whereas those who go on to the upper levels were more likely to indicate an intention to work and earn as artists (Table 5, Graph 48). When Most Important Outcome from the Follow-up survey is considered (Table 7) it reflects the Graduate Intentions from the Completing Student Survey (Table 6) with a similar level of about 36% indicating they were setting themselves up as a working artist. Further discussion of the survey findings occurs in the summary section towards the end of the chapter. In the next section the focus is on the work with

the smaller group of research participants where two example 'narratives' are presented and discussed.

5.2 THE 'NARRATIVES'

Whereas the survey findings contributed primarily to a general view the intention with the narratives was to go more deeply into the image-making and learning experience over time for a small number of people. In most cases the image-making of the participants and the information volunteered through their interviews reflected a period of intense personal exploration over a number of years. Major themes within people's works and interview statements were identified as follows:

- Significant personal life events
- Events, places and images associated with partners and relationships
- Family of origin and own childhood
- Participants own children
- Representations of self
- Fascination with 'the body' and life drawings
- Accessing 'other realms' and dimensions
- Guiding spirits, friends.

Two case examples follow of women who were involved with the school over a number of years, with their narrative indicating a significant period of change.

5.2.1 Paula

Paula was born and grew up in Colombia, South America, with Spanish, Portuguese and some indigenous heritage. She was in her mid-fifties at the completion of her studies. Her academic and professional background in her early adult years was in international finance, and she had worked within a family import/export business. She had lived in various countries around the world at but considered Australia, where her grown-up children lived, to be her home, (cont. from page 102) though she maintained strong links with Colombia. She decided to come to NZ from Australia in her

early fifties as a result of a relationship and at a time when her children had become more independent. She used this time as an opportunity to pursue a long-term interest in being an artist, and following the ending of the relationship, she chose to stay in NZ and continue at the school. Examples of her appropriating her own life story within her work are numerous, and the initial focus here is on a series of works based on horse images. In each case the form of the horse has been taken from a pre-existing image and adapted by her for a new purpose, with the images crossing over a number of the major themes indicated above. The horse therefore appears to play an important structuring and linking role within her narrative. In *P2* the horse is divided into a front and rear section and forms part of a strongly erotic scene with a path leading up to a house. As the comments reveal, the work relates to the ending of a relationship. The second image *(P3)* portrays a 'wild free' horse on its own. The *P4* was produced after this and the accompanying comments suggest that a metaphor of 'getting back on the horse' is relevant here. *P4* is constructed from three pre-existing images - a recent photograph of herself while the horse is drawn from another photograph, and the background is based on a painting by another artist. The finished work reveals a smiling, confident looking Paula riding a magnificent white 'Spanish' horse which moves over a mystical silver-grey sea. It creates a powerful and positive image, and one that links to a number of the major themes in her life – personal relationships, family of origin, childhood memories, and an implication that she is herself dealing with a number of fears and 'getting back on the horse'. These and related works *(P5-12)* suggest strong processes of exploration, integration and development are occurring for her. All these paintings had been reworked by Paula through a series of earlier of versions, and this reworking was a major feature of her creative process. This points to an 'action' orientated process – the getting immersed into the 'making' and 'the remaking' to produce forms that become symbolic and held dense multi-layered meaning for her. (cont. page 112)

Paula 1



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P1 Paula with Camera	**P2 Two Horses**
I had plans, as soon as my son graduated from high school and moved out, I would dedicate my life to art … I have a terrible thing, a handicap [*laughter*] which is I can not paint unless I have a reference … I think eventually I have to break that … one day I will paint without a reference, who knows when it will be.	The house is sort of related to him …I found out he was having an affair …so it's like, that's her and that's me *Its like one horse cut in two?* Yeah! *[laughter]* *And this one is you?* Of course, I am the head! *[laughter].*
P3 Silver Horse	**P4 Paula on Horse**
Basically … when I start a thing, I don't have in my mind what I am going to paint … … I work from photographs … I never follow the colours, its always my own colours … when I look for what I am going to do, I have to be feeling it … they always relate to what I am going through in that moment … except at the beginning because I wanted … practice … techniques …	I used to ride a lot, into riding classes … but then I started feeling frightened of horses, so maybe that is why I painted myself on it, to see if my fright would go *So you got back on the horse! …This is what is fascinating … part of you is in so many different cultures … that's your Spanish culture?* Could be [*laughter*] not that I consider myself Spanish any more … my father was from Spanish heritage, my mother Portuguese, and I suppose there is a bit of Indian in there between so many years …

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P5 Suitcase On the Bed	**P6 Bronze Male**
… it's like you're coming or going, you just spend the night and your leaving … the folds …I like the feel of it, it has a mysterious feel … it is something that everybody has gone through, you have been in bed because of one thing or another [*laughter*] … you can see it in a lot of different ways depending on how you are … and for me I know why I did, how it is … there is a lot of white … very little colour in certain areas … its not abstract but its almost abstract … Yes, and I am thinking now of doing a series where the woman are behind the materials, so you only see bits of bodies …	I think I have gone back in a circle I started with the body and I went out of it …and now I'm going back to the body … I realise that is where I start and that is where I am going to finish … I like the human body, so basically that is my story
P7 Lovers	**P8 Lovers**
… happiness is towards yourself … for me, if I didn't paint … I don't know … probably the only thing that I could do that would keep me happy is yoga, but I could not be doing yoga for 12 hours [laughter] a day! … I think this is a holistic situation, … we experience life the same with our body as our mind or spirit, the whole thing together … when you do something like painting you use everything … your body, your physical, my hands, without my hands I couldn't paint … your mind because you have to learn to use your brush … I don't just relate it to art, to anything you do in life … I do know that when I am doing a painting and I put all of my inside, all of my body, all of my spirit and everything together it becomes a success	I can't paint anything I don't like the feel of … *Maybe that's what I'm after, trying to find out about that feeling* Probably that's one of the things that helps me to know myself more, like when you have things inside you and you don't take them out, they sort of get stuck in your system, so I think this is one of the ways of me taking everything that I have inside out, by painting the things that I feel.

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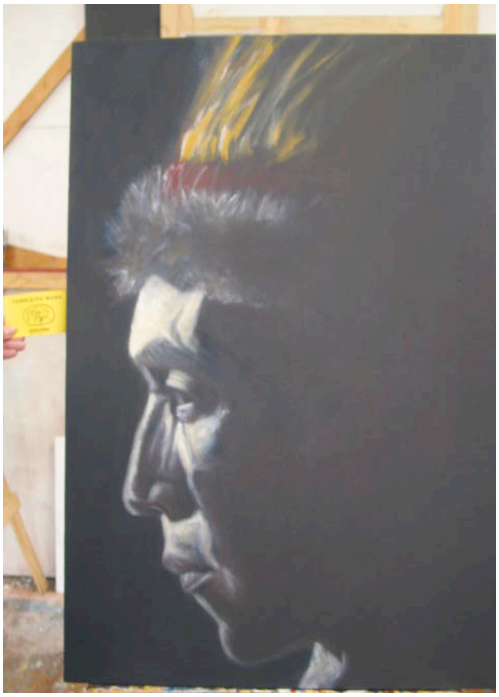
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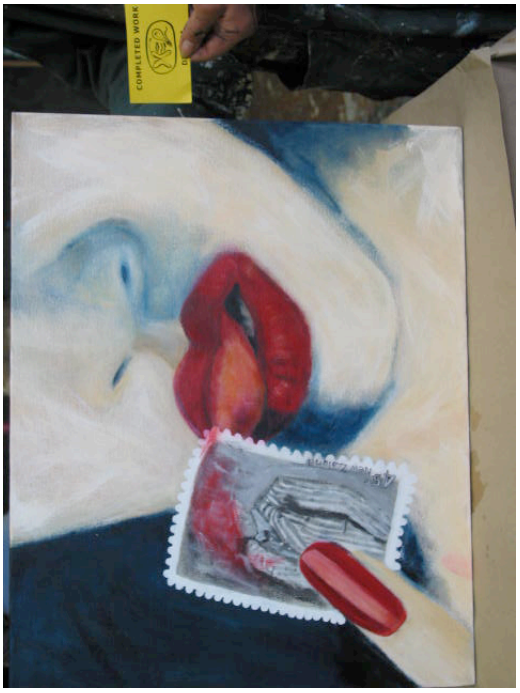


P9 Figure With Flower	**P10 Drying Hair**
I'm not interested in graduating …I'm interested in learning …I've actually been doing art for a long time … but now it is really serious [*laughter]* … I love painting with people around … it opens your horizons … even though you are painting your own thing, it just gives you a lot of … feedback … in both ways … when you are painting with a lot of people in the same room it is like an energy flowing all around … even if you are not talking, looking … it is energy going around the whole room	You know, when I am painting I never think of … in the beginning about it … I mean I see something that I like and I start painting without the thought of what it is … and I'm doing it and I start thinking about the feeling, without realizing …
P11 Indigenous Colours	**P12 Columbian Indian**
Just colours … yes *Colombian colours*? I think so … but … I'm painting a lot of blue, red and yellow, and that's the three colours from the flag of Colombia … but I don't like strong colour paintings … I like to look at things which are neutral, quiet … its like with music, I don't like very strong music	…one of the things [a tutor] was saying, was that the paintings I have done of Colombian things are the best … and I think it is because they are my roots. *So it's like a higher connection?* Yeah, exactly, a connection with the colours, the people, with the ideas. … not some much South American but its me, because what I was thinking is … the colours, the sort of person, it doesn't agree with me, it's the same with my painting … I like neutrality … so that's what I give to my painting …

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15



16



P13 The Vagina	**P14 Kissing The Stamp**
… an artist you are extremely alone … you're here, you have peers, tutors, and others … you really don't have … you sell or paint over them … I have a few of the old ones … but you don't see the full process … as a story … you don't see how you work … for your future work …	*What about this, talking about it, does it add anything to it.* I think it is really good, that is one of the things you don't do as an artist, you don't confront your self … this is good practice for the real thing, you don't say stupid things [*laughter*] you realise more why you're doing certain things … more conscious, realizing what you are doing …
P15 Dancers	**P16 Boat Scene**
This is from a photo by Davis Hamilton, but, I like Degas …Its gone *Why!* It gave me a lot of trouble … it was worked beyond … keeping, yeah …I liked it at the end, especially this area this corner here, and even thought of cutting it … but last term I didn't sell anything, so I was short of money so I thought I better use my canvasses of those I didn't want to hold onto *[laughter*] so its good bye … it's a pity.I have the same feeling he has towards nudes … I have done a lot of painting from his work … *This is reaching into the western tradition isn't it … Ballet is a western thing* Well I was a ballerina … it was one of my frustrations in life … I love ballet.	This was one of my last ones … It is related to going back to Australia … It's like, don't look back … just go ahead … now I'm going to work on my photos and divide the work into taking photos of the things I think I want to paint and then painting … so I am going to be a little bit of a photographer as well.

(Cont. from page 103). This 'reworking' process also helps explain why Paula's body of finished pieces was relatively small and it is perhaps better to regard each 'finished' painting as representing multiple works.

A particular interest developed relating to peoples styles. A sense of a person's 'artistic' or 'creative' style is not necessarily easy to pin down, but a general conclusion was reached that a personal style reflected some stable configuration of processes, structures and associations which were unique to each person. 'Style' embraces such things as (in a visual arts context at least) colour preferences and treatments, treatment of line and shading, perspectives adopted, scale of representation, size of work, media used, how such elements may be reflected throughout a body of work, and how variable and constant are such elements over time. It also embraces preferred types and sources of inspiration. For Paula, what stands out in addition to her subject matter is the consistent use of subdued pastel colours and a reliance on particular approaches to shading and light, and an orientation that generally preferred full-bodied and 'realistic' images rather than abstractions *(P5-12).* The comments which accompany these also indicate a strong connection between her preferred approach to colour in her art and something of her approach to life generally.

Nevertheless, there were some works which offered something of a contrast with this general style, these being *P13* (*The Vagina*) and *P14* (*Kissing the Stamp*). These used red and blue in a strong contrasting fashion and were related to an experimental process of explicitly representing aspects of sexuality. She was thus using visual shock to gain attention to her work and intuitively drew on certain colours and subjects to achieve this. Such explicit themes coupled with strong colour contrasts did not occur in her later work although sexuality is still clearly present, but the treatment appears more subdued, finished and controlled.

Do then, these fairly slight modifications in her general style, reflect some sort of underlying or associated change or resolution? Put another way do they reveal the plot! It is suggested that her

work reflects a growth in general confidence in her ability to represent what she wants through good painting technique, and this in turn is a reflection of a resolution of issues in relation to her own feelings about life, love and sex. This interpretation is consistent with the personal change findings from the surveys. Paula's approach to creating her paintings and sculptures was usually based on the use of pre-existing images, normally a photograph or a painting by someone else (e.g. *P15*) though as she approached the end of her time with TLC she had developed her own skills as a photographer and was intending to work more from her own images. Far from 'simply' copying though, this appropriation process gave her the means to 'explore' events, emotions and interest in her own life. In sum, one might suggest that Paula's images reflect a consistency in style, over which she gained greater conscious control, giving her a 'currency of thought' to use within her work. This in turn was mirrored in expressions of confidence in the direction her life was taking personally and as an artist. Towards the end of her involvement with the school she expressed the intention to return to Sydney, to be near her children, to open an art gallery and to continue her development as a professional artist. Something of all this is captured in *P16* of the swans and the couple in the boat and the comments which accompany this.

5.2.2 Rosemary

Rosemary was an incredibly prolific creator while at TLC, and used a wide range of media through which she explored events and issues which influenced her and her family, and only a very small sample of work is touched upon here. Formerly a primary school teacher and a farmer's wife, and a mother of three adult daughters, she began to pursue an interest in painting in her early fifties. She moved to Wellington to take up the programme following separation from her husband. There is a searching undercurrent in many of her works, a seeking of answers to questions and the resolution of issues with this also reflected in many interview statements. (Cont. page 127).

Rosemary 1



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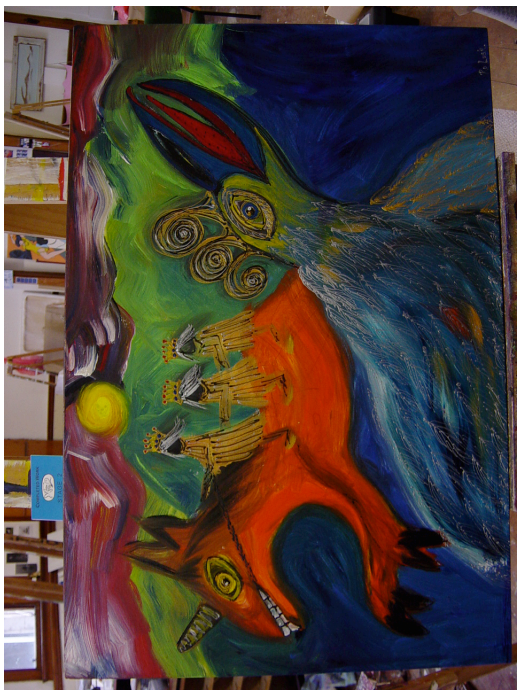


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R1 Rosemary in Sculpture Studio	**R2 Flying To TLC** … that's just me flying in the sky … yes I'm a bird escaping from the farm and coming down to TLC, and our eldest daughter loved it so I gave it to her … I have always loved seagulls.
R3 Bronze Seagull I don't know why but birds seem to relate to me, and I seem to relate to them, it's really weird, because any time I hear a seagull really screaming I think something terrible is going to happen and it always does …to me, and if I don't listen …but if I listen then it's like a warning … and I change my tack …	**R4 Seagull and Fish family**

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R5 Children on Unicorn, Rosemary as Seagull, all leaving family farm … it was a unicorn with my three kids on its back, and me as a bird in the other direction, and [Kakapuka?] mountain … in the background … so it was as though they were flying to safety in one direction and I was flying off in another direction, like down here to Wellington.	**R6 Earlier Picture of Family Farm** That's our farm, and that's the view from our, my kitchen window … and it's funny but just lately I feel that I just want to go home. But I know I can't. …and I don't want to really … but it was a beautiful view and I planted lots of trees and I had a native garden … but it was too big for me …
R7 Butterfly and Ball That one I did when I first came to TLC, and I'm the butterfly and I'm sucking the juices of TLC, getting the information … … inside the ball is my old life … I started with a moth, and it ended up a brightly coloured butterfly … and that's my old life, … that koru is [my husband] and me, and [a daughter] and her husband and [other daughters] are down below me … that was my original sort of … Iwi … and I think that was the farm and a rainbow …	**R8 Pill Painting** Dad used to get things from drug companies … and they were things like 'do you have a patent feeling outside themselves or something' … and that was a bit like me in the centre … you have a few really special friends, then you have people that are … giving you a hard time or something … *So right in the middle is you, surrounded by these green-goodies*! … and then there are these baddies … and then an ocean of … life … and this is the nice people and those that are ok and then the ones that can't stand you and you don't like them particularly, but then that's life … I just really liked sitting there fiddling with the lines … I just squeezed blobs out of the tubes …

9


Travel, Job, Family
Friends, New Life,
Positive Thinking, Spiritual Life,
Strength, Courage, Kindness, Love,
it behind you. Move on.
Stand up fo
your rights. Pray. Go by your
gut feeling. Treat yourself as
precious object. Take time to smel
the flowers. Learn & move on. Enjoy li
it's up to you to make yourself happy

10



11



12



R9 Writing Painting	**R10 Stone Carving of Maori Head**
What's your sense of what this stage of your life is all about, do you feel like you're out the other side of something or are you taking it all with you? I feel as though I am coming out the other side, and I don't want to take it all with me … [He] keeps telling me I need to go and see a councilor, I had to go and see one when I first left … and he said you don't want to regurgitate it all the time do you and I said no I wanted to move on … I think time is a great healer, and though it was an enormous shock you do have to go on …	
R11 Maori family	**R12 Maori Figures**
So you're almost using Maori as a metaphor for family? Yeah, I suppose I am … [he] had Maori blood in him and I asked his mother about it and she told me to mind my own business … but I wanted to know for my kid's sake.	I did those little Maori warriors because I saw a Maori warrior in a magazine on the plane … that sort of inspired me … … it was really fun when they were being fired just taking them out of the kiln, it was quite shocking really but it was quite fascinating, it was actually shocking seeing them … just burning, flaming, it was horrible.

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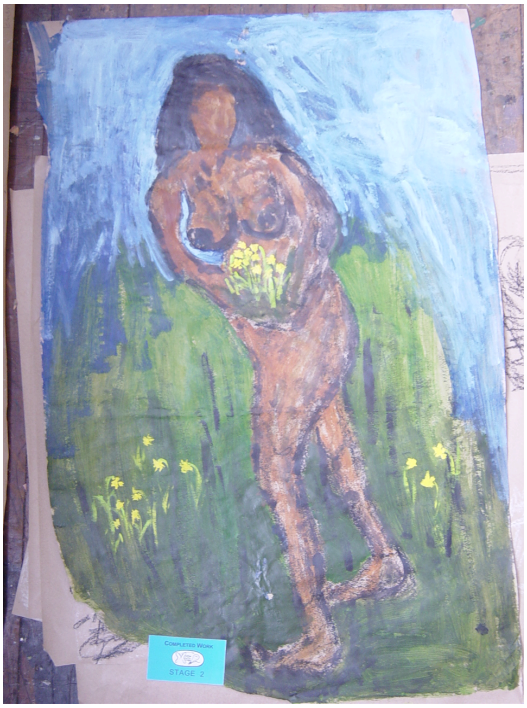
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R13 Face Without Mouth	**R14 The Family**
… because my husband said, I have to be careful what I write, and he wanted me to agree with everything he said … so I didn't have a voice … so I couldn't do the models mouth, so I decided to leave them out …	Basically we had a very happy married life, we have three beautiful daughters, their lovely girls, we're terribly lucky … *[is this your family?]* I don't know, I was just making little creatures and it just happened that way …It probably is … its like my Maori warriors, I just put 'family', I don't see why I shouldn't make Maori warriors, and I love Maori work, and … it's a bit like telling Van Gogh that he can't paint the Irises or the sunflowers because the paddock is owned by somebody … I feel it's that's a shame, and I found that with my Maori warriors I just put family, because that's what they were
R15 When Good Men Go Bad	**R16 Girl with Flowers**
… that's my husband [*laughter*] I just read a NEXT magazine … they had an article When Good men Go Bad, so I took those words, and I had my husband going to hell to start with [*laughter*] on a rocket …that actually looks like [*his*] chest … he's a really nice guy, good fun, good company, good sense of humour …	

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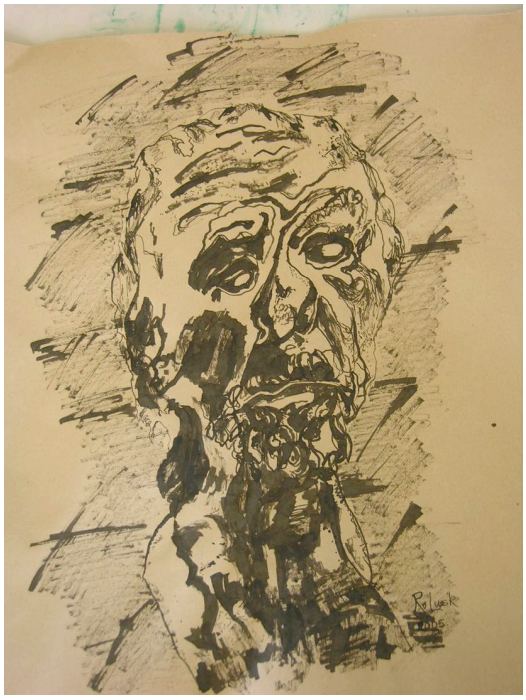
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R17 The Confession That's my ex sitting there confessing to me … That's his head, and that's his hair …that's the background, that was the colour of our walls … and he just said ' I'm not going to heaven, I'm never going to see my mother again, I'm not going to heaven, I'm going to hell' … I made a mistake on his thumb so I put a plaster around it … he usually had a plaster on a crack in his thumb because he is a farmer …	**R18 Face 1**
R19 Face 2	**R20 Face 3**

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24



R21 Life Figures	**R22 Life Figures**
How do you feel about where your art has developed? Oh I feel as though I'm just a beginner, scratching the surface **…** for when I was teaching … primary school kids, I just got to the stage where I was bored stiff, I didn't want to be there, I wanted to be doing the art that I was teaching them myself … and now I am … I feel totally happy and totally lucky that this place exists … because if it didn't I just don't know what I would have done …it's actually saved my life really	*Do you mean in a literal sense or just –* Oh in every way, in every way … *So, in terms of you and your thinking about yourself …* It's saved my sanity … we had to do a collage, and I found a cutting that said 'lose your fat not your sanity' … so I did a little painting of that … I like the support of the other woman, and the men, the students, they're really kind to each other, and it doesn't matter how old you are … or anything …
R23 Life Figures	**R24 Life Figures**
You have finished stage two at the end of the term … so what do you feel is next …You said you might go and do Foundation? We'll I enjoy doing the kindergarten stuff … because it's fun playing with paint-	*your not really ready to leave are you?* Not really … not particularly … But … I've got about 300 banana boxes to sort out in the front bedroom of my house … *This is stuff from the farm?* No it's 55 years of my life [*laughter]* … so I could take a term off and do that, but I don't really want to, as I enjoy it so much …

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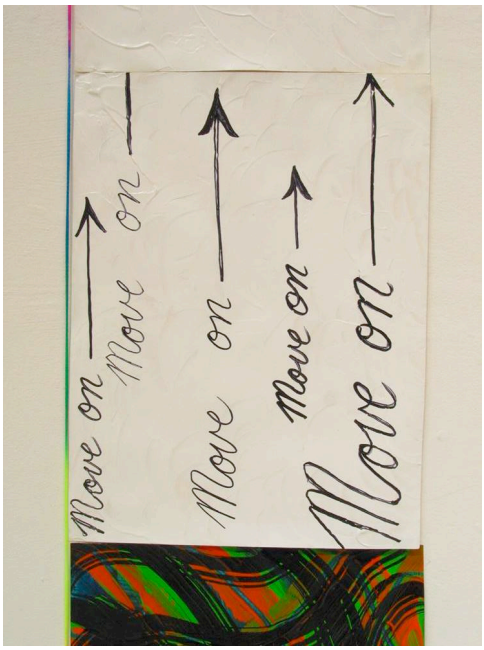
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Of particular interest process is the occurring use of a seagull figure. It made an early appearance in *R2* and many other times such as in *R3, R4* and *R5*. At times these images represent her while other times they are more of a guiding spirit. *R5* in particular draws together a number of themes - her children growing up, the home on the farm, leaving this and her husband. It is interesting to compare *R5*, with *R6* done earlier, which indicates a very peaceful representation of the family farm from a similar vantage point, done during the earlier period of image-making while still at home. The comments with *R8* reveal multiple themes and layers stemming from childhood memories of her father. The repetitive use of dots and the line markings gives the picture something of a mandela quality and one can image the making of it as a contemplative 'ritual-like' remembrance. There is also something 'ritual-like' in *R9*, which is constructed through repetitive writings. Indeed, within her works as a whole, quite a number of works contain repetitive patterning of one kind or another that may have helped produce a meditative, dreamy or 'play-like' state through the making.

The Maori figures in *R10-12* and associated comments reveal that her interest in things Maori relate to significant family issues and events. *R13* is also connected to this and is of a woman's head modelled in clay that Rosemary had difficulty with in terms of finishing the mouth. In the end she left it unfinished, seeing in it something of a metaphor for aspects of her married life. Of the various symbolic elements within her work, the seagull and other 'mythical' creatures appear to contribute significantly to a narrative structure within the body of her work, creating in individual works, like Paula, images with dense areas of meaning which link into multiple threads within her life.

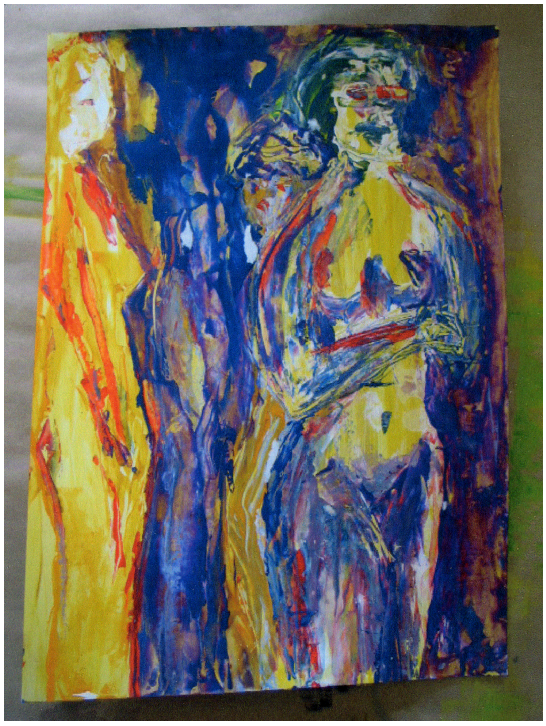
While Patricia explicitly used pre-existing images as the starting structure for her creative process, Rosemary's sources were at times less explicit, but definitely embedded within her own life events and relationships with husband and family. *R15-20* all focus on her husband and events relating to him.

A consistency in style is easily identifiable throughout her work, where an early 'naive' quality has been preserved, consolidated and able to be drawn on more consciously over time. Her life drawings in particular reflect this, but the wonderfully freestyle quirky nature of these drawings is recognisable throughout her work. The life drawings (*R21-24)* also reflect processes of abstraction and the reducing of line into condensed meaning. *R25* is near the end of stage two and reflects wonderful control of her style to capture a beach scene from her childhood.

5.2.3 Researcher Self Study

Selected images from other research participants narratives are used in the next chapter. What follows below is a consideration of some of this researchers own images made while participating in the Foundation and stage one level of the course. The relevant works are RSS *1-12* below and these and the discussion fall into three groups. *RSS 1-4* are a sample of images produced in the foundation class. *RSS 4-8* are samples of work produced at a weekly life drawing session, and *RSS 9-12* were part of a process whereby people in the life drawing group explored ideas for larger scale paintings based on their life drawings. While the foundation works and the life drawings were largely 'exercises' it is interesting how quickly personal narrative elements emerged. *RSS 3-4* connects to adult life in Australia where the writer lived for over twenty years, and had been in a long-term personal and professional relationship with another musician A return to New Zealand was associated with the ending of that relationship and in a sense the 'bridges had been burnt' and this is reflected somewhat in *RSS 4.* This image also expressed the fear and danger associated with the bush fires which occurred regularly in the region where the writer lived. So there is an intermingling of fears relating to the physical world and fears relating to the social world. *RSS 1-4* were also reminiscent of work from an earlier period of art making in high-school (some 35 odd years earlier) and the general 'style' from that time seems to have been carried forward.

RSS 1



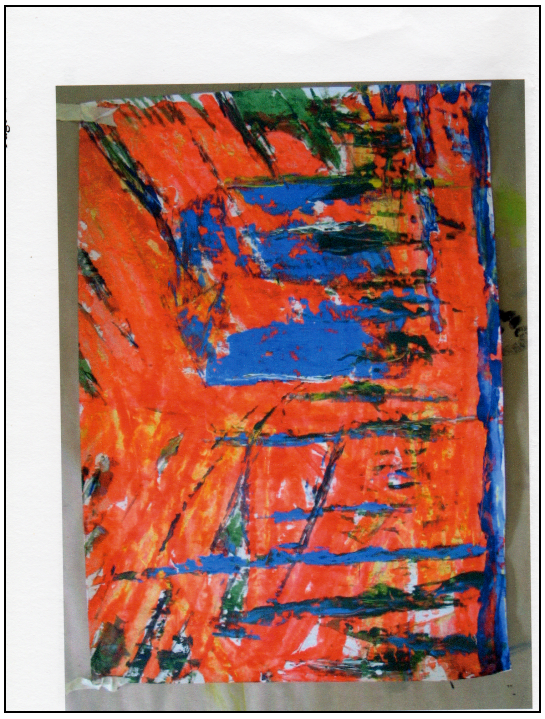
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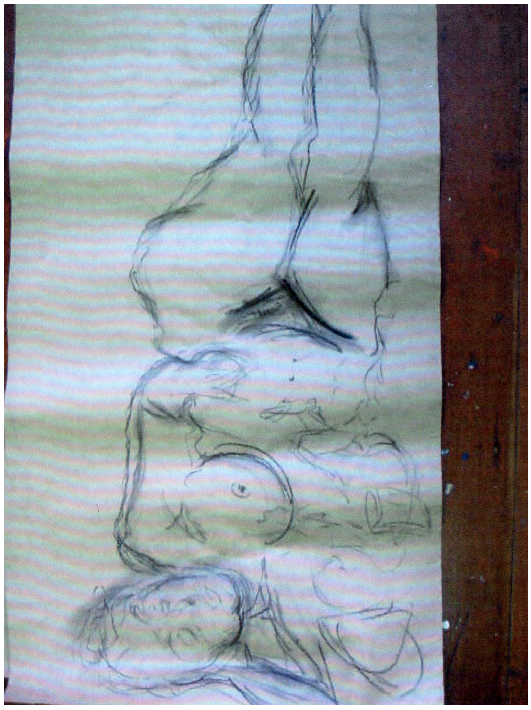
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4



5



6



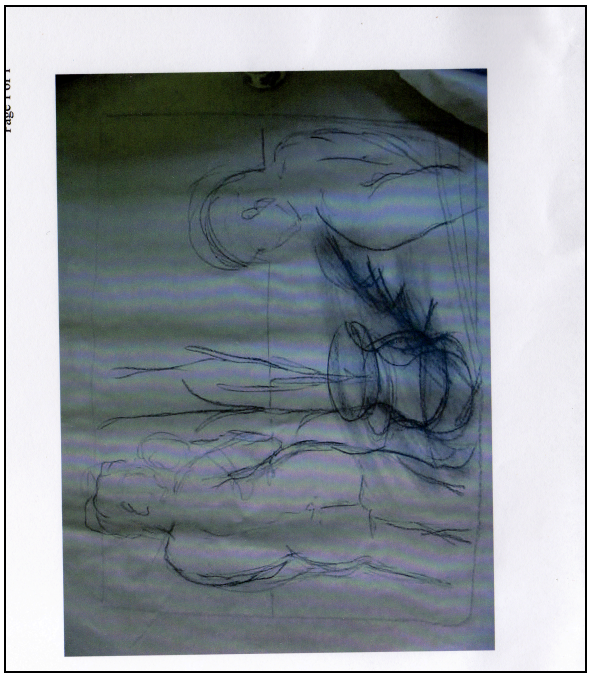
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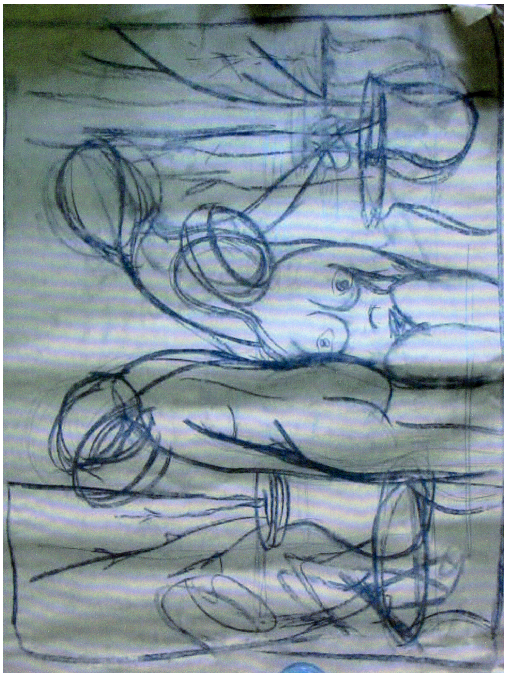
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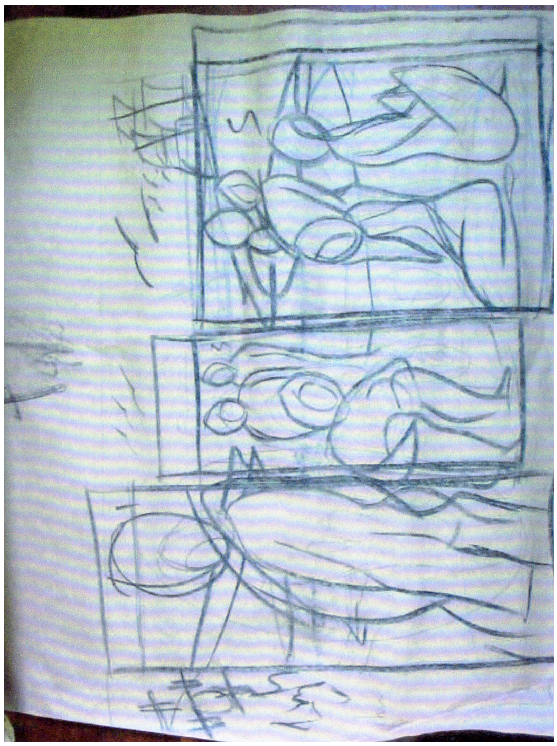
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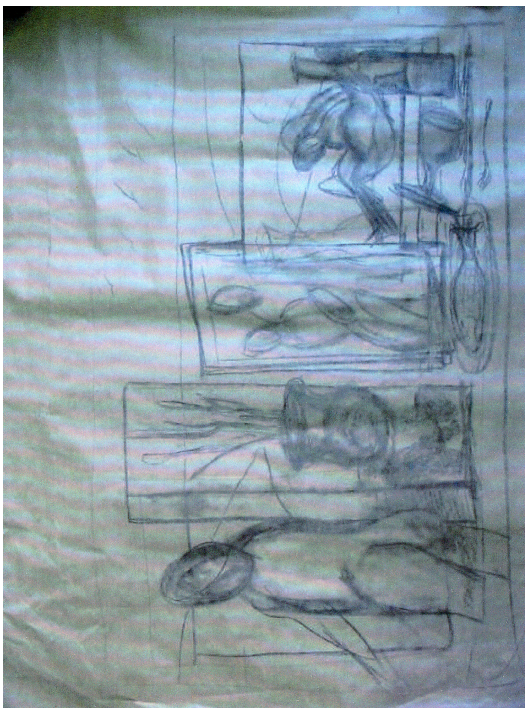
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11



12



. As *RSS 9-12* emerged it became obvious that these were exploring feelings relating to a series of miscarriages which had recently occurred for the writer's partner. In other words the pattern reflected in other participant's works, of processes of image-making giving rise to a narrative structure that was deeply embedded in their own life story, was being replicated here as well.

Another particularly important experience from the Foundation class involves the creation of vortex images. The following description is based on notes produced after one of the classes:

> *The group was asked to make non-representational marks on large flat pieces of paper with different items, such as pieces of carpet, pieces of wood, leaves, twigs, brushes and with fingers and hands. Different pieces of music were played as a source of inspiration for the nature of the markings and the choice of colours. At one stage some fairly peaceful music was played and the group was asked to make marks with fingers and hands. As I 'played' with the paint a sort of meditative dreamy state came over me, and the feeling within the room as a whole seem to change in some way. I heard comments from others to the effect that it felt like childhood experiences. I was not trying to make any sort of image and I was just enjoying the feel of the paint and paper, and the making of a huge spiral in the wet paint which merged the colours together into a murky gray colour. After this session I noticed that quite a few other people had ended up doing spirals as well, and others appeared to have just been enjoying 'the playing' with paint (PO notes 24th June 2005).*

Spiral and vortex images were noted in other participant's works in other settings, and as will be seen in chapter six these can be associated with transformation and journeying.

5.3 PARTICIPANT OBSERVATION

Complimenting the surveys, narratives, and self–study, participant observation was also an essential part of the research process, without which the interpretations touched upon above and elaborated on in the next chapter, would have been impossible.

5.3.1 Observations from the Earlier Study

One aim of the Preliminary Study was to gain insight into the experience of being a student at TLC

and to relate that experience to ideas about creativity and creativity enhancement. A 'creativity process' model based on a set of ideas about creativity was developed from a review of relevant literature. Fourteen people from the stage two course level (the upper level at that time) were chosen at random to be interviewed, five male, nine female. They were questioned through in-depth recorded interviews about their motivations for coming to TLC, their work patterns and their feelings about themselves as a result. Their interview transcripts were then analysed in terms of the degree to which they appear to connect with the creativity process model, with people rated as having, high, medium or low levels of connectivity.

All but one of those who indicated higher levels of creative processes, were between the ages of 39 and 51, 51 being the highest age of all the people interviewed. Moreover, all but one of these people had relatively high prior educational backgrounds. In other words, while quite different research strategies were used between the first study and the substantive project, both provided indications that those likely to do most well within an environment like The Learning Connexion were maturer people with significant prior educational experience. The findings also indicated that such people were likely to come *from* the workplace as part of a process of reorientation rather than being in a phase of trying to enter or re-enter the workforce.

Transcripts were also analysed in terms of people reporting aspects of the environment and experience which they felt were particularly important to their time there. The overall impression gained was that those who showed relatively higher levels of connectivity with the creative processes model also brought to the environment a strong combination of factors:

- well developed cognitive skills
- intrinsic motivation to develop art skills and new knowledge
- a strong element of personal change, growth or transition
- the ability to negotiate an idiosyncratic relationship with the organisation
- an ability to chart their own learning pathways within the opportunities provided by the institution.

At the same time, the preliminary study also revealed that most people regarded their experience with TLC positively (as reflected in the survey results) and some key elements relating to this were also identified:

- the potential for a high level of self-direction
- a wide choice of media and what one could choose to work with
- a feeling that TLC was a safe place to explore sensitive and emotional issues
- a sense of that TLC was 'different' from the mainstream
- that TLC was 'a community'
- that the TLC community was diverse
- the boundary between student and organisation was fuzzy
- that the 'rules' for what constituted 'art' and being an 'artist' were personal

Consideration of these findings led to the interpretation that what was happening for a lot of people in the TLC setting was 'an intertwining of two major themes – that of 'personal developmental' (the pushing forward of personal boundaries in some sense) and the theme of 'creative development' (acquiring skills and insights to express personal and other ideas effectively in visual media). It was also felt that how the environment was experienced was critical to this 'developmental-creative' dynamic occurring, with *the* most critical organisational contribution being a highly supportive 'culture' and the absence of any strongly prescribed programme of learning.

This was also consistent with the conclusion that what was most likely to determine the level of 'creativity' demonstrated during peoples time at TLC was the particular configuration of variables and characteristics people brought with them to the TLC environment, and the way the environment allowed these to be salient. The Preliminary Project therefore highlighted the need to look more closely at the organisation for clues to how that supportive 'culture' was created and sustained.

5.3.2 Organisational Observations

During the course of the substantive project a number of characteristics were identified which

potentially influenced how the learning environment was experienced by students. To begin with, people working within the organisation generally had high levels of autonomy within their designated task areas with the organisation functioning on a day to day basis on an assumption of trust. Many staff also personally contributed to the systems, approaches and strategies associated with their jobs. A noted feature was the high level of staff recruitment from TLC graduates, with this contributing to some staff feeling particularly positive and committed to the organisation. This may also have enabled in some organisational areas a high understanding of the student experience to shape organisational functions, and it also appears to have contributed to a sense of the school being 'a community'.

There were few if any discernable hierarchical layers other than a very clear, unambiguous distinction between the staff generally and the principal and owner of the organisation who held ultimate authority. There were therefore few 'career' pathways within the organisation, but people were encouraged to put forward proposals which could contribute to the organisation and their professional development in some way. During the course of the project it was noted that many staff successfully negotiated a redesign of their levels of involvement and their task areas. In addition, all staff members were able to enrol in the programme if they wished.

Some co-ordination roles were identifiable in some contexts and within some 'departmental' areas. During the course of the study more formal academic and management committees were formed, with open access to these in theory, with recorded meeting content available to all.

The scale of TLC was potentially an important factor as well. While there was significant growth in student numbers over the years (primarily extra-mural) and some change in staff levels, the scale enabled all staff to come to know each other at some level. The school had a regular development day each term, where all members were drawn together and encouraged to engage in discussions and activities relating to the organisation and its future.

The physical environment and the location of the school (primarily) in a former convent school, away from the main business district of Wellington, also contributed to the environment being experienced as different from the mainstream.

In other words, there seemed to be a core of organisational attributes which, not only distinguished TLC from 'mainstream' educational providers, but orientated the school towards a developmental-creative emphasis as much as any explicit pursuit of vocational objectives. From an organisational learning perspective, organisational development was orientated around creative experiential processes rather than an imposition of established ways, though bureaucratic requirements did appear to be impacting on this towards the end of the project.

5.3.3 The Learning Connexion Approach to Creativity

At the heart of TLC's philosophy are the concepts of 'Sustainable Creativity' and Creative transference and as used in the TLC context, are premised on the idea that 'creativity' developed in an arts setting can be transferred to other contexts (Milne 2008). What is meant or implied by the concept of sustainable creativity and the premise of creativity being transferable between domains is reflected in the following:

- TLC's goal is to establish, encourage and nurture sustainable creativity (TLC Mission statement 2008)
- The Learning Connexion is New Zealand's centre for sustainable creativity. TLC uses art as a context for discovering how creativity works and how to apply it (Preamble to TLC Charter 2008).
- We see that the processes of art are fundamental to all areas of creativity …We access 'pattern thinking' through all our senses … Creativity is driven by the development of patterns which run deeper than the short hand of words and numbers (Milne 2008).
- We offer a Diploma in Art and Creativity – a course which assists our students to make creativity a way of life. The goals of the Diploma are: To develop a thorough grounding in fine arts; To develop through art a thorough grasp of the principles of creativity; To achieve sustainable art/creativity (TLC Brochure for International Students, 2008).

Little more on these perspectives are added here as they are taken up again in more depth in the next chapter. In the final section the findings above are summarised and discussion heads towards some of the analytical perspectives which are the focus of the following chapter.

5.4 OVERVIEW

The Completing Student and Graduate Follow-up surveys suggest that people are attracted to TLC and a period of engagement with image-making for a range of reasons. For some, their needs and interest may well be met through a short term involvement at the Foundation level. For others, a mid-term engagement (by slightly younger people on average) appeared to be sufficient for them to feel that they could move on to other employment, study, or along an independent pathway as artists. Those *most* likely to indicate a continuing commitment to engaging with image-making are maturer age people. A steady increase in higher learning outcomes relating to some general arts industry measures and some personal change questions clearly occurs, and this is also associated with age, course level completed, prior educational experience and length of time spent at TLC. In terms of how the organisational environment was experienced by those who indicate higher outcomes, a number of key elements were identified:

- The potential for a high level of self-direction
- A feeling that TLC was a safe place to explore sensitive and emotive issues
- A sense of that TLC was 'different' from the mainstream
- That TLC was 'a community'
- The boundary between student and organisation was fuzzy
- Students could negotiate idiosyncratic arrangements with the organisation
- The rules for making 'art' were personal

Also identified were a number of organisational processes and factors which appeared to underlie the creation of such an environment:

- The organisation functioned with high levels of autonomy and trust
- People were not just doing a job, they were creating those jobs
- There was unambiguous ownership and ultimate authority.
- There was a marked absence of formal hierarchy.
- There was high level of staff recruitment from graduates of the school
- There was a general emphasis on personally directed professional development
- Staff could redesign of their levels of involvement and their task areas
- The scale of TLC was relatively small
- The physical environment was experienced as different from the mainstream.

When viewed together, these perspectives reflect a dynamic occurring between the nature of individuals, their perceived needs, their life experiences, and the nature of the organisational environment to which they have been attracted. In a sense the organisation appeared to act like a container, one might even say 'a cave' which promoted action related 'thinking' in certain directions - in this case it involved ideas about creativity, art and 'self as artist'. Put another way, it was felt that a combination of factors generated what could be termed 'a developmental-creative zone.' What this conception is alluding to is Vygotsky's concept of a Zone of Proximal Development (Sawyer et al 2002). The concept of a Zone of Proximal Development envisages that the capacities of individual learners are drawn, with the help of more mature and experienced others towards the 'in reach' capacities contained within a group. While this was conceived in a child development context a related zone concept may be applicable here. The 'zone' is essentially created through the interactions of individuals with a particular environment and is not something that can be supplied readymade. The primary role of the organisation then lies in managing the environmental conditions and signals which attract a critical mass of people, with the appropriate characteristics, to enter and participate in that environment. The findings above also generally support the idea that there is an ongoing expansion of engagement with art and image-making. TLC clearly attracts into its Foundation level people from all ages and from a broad range of backgrounds. There was also a significant growth in the numbers of people enrolling through the project period. While this add

support to the proposition that engagement with the arts continues to grow the Findings also suggest that what TLC provides is *particularly* relevant for some people and less so for others. The high initial interest at the Foundation level may well indicate that a deeper strata exists of people seeking creativity orientated experiences and developmental pathways. Perhaps with TLC we have many people simply having a 'look see' and then moving on to explore other options. In other words, the profile of engagement with TLC may represent a particular manifestation of a broader phenomenon. This might be described variously in terms of needs relating to: self; identity; style; the search for meaning and meaningfulness – which presumably can occur in many different contexts and which will reflect profiles particular to those contexts. This perspective invites consideration of the types of organised educational experience that may be effective in 'life-long' learning contexts and which may impact on people's sense of 'well-being'. The well-being perspective is one that invites particular emphasis. The findings of: more confidence; regained confidence; more relaxed; more settled in life direction; more open to new ideas; more intuitive; and more positive about oneself, are indicated at levels that are not easily glossed over. Given that the observation, self-study and narrative work also revealed similar indications, a general hypothesis of 'improved well-being' likely to result from a person self selecting a period of image-making, seems justified. If this is so, the question then arises: what is it about image-making that might enable or contribute to this, and this is one of the major themes pursued in the following chapter, which also towards its end returns to a specific focus on the three research questions.

CHAPTER SIX

ANALYSIS AND INTERPRETATION

In this chapter the emphasis is on extending the descriptive level into analytical and interpretive discussions which draw on various perspectives and themes as outlined in the methodology chapter and which reach back to material from the three earlier chapters. Section 6.1 continues the discussion begun in Chapter Five at the organisational level and considers further The Learning Connexion's aims, philosophy and practice. The heading for this is: Sustainable Creativity and Creativity Transference, which reflects material about TLC introduced earlier with this providing an overarching theme. Section 6.2 shifts back to considering the processes and influences within the research participants image-making and reaches out to chapter two material and the second research question with 'well-being' providing the main theme. Section 6.3 also remains focused on the image-making of the research participants, and explores this in relation to the Upper Palaeolithic and the themes and perspectives relating to ritual presented at the end of Chapter 3. The overarching theme for this section is that image-making involves 'transformational spaces'. Section 6.4 returns to an explicit consideration of the three research questions and an opportunity for an overall summary of the findings and analytical and interpretive discussions which connect into these.

6.1 SUSTAINABLE CREATIVITY AND CREATIVE TRANSFERENCE

In the previous chapter it was noted that The Learning Connexion emphasised the concepts of 'Sustainable Creativity' and 'Creative Transference' (Milne 2008). From other sources it can be seen that the school is not alone in advocating such concepts, and here are a few other examples identified through a web search:

- Nelson (2005) *A platform for Sustainable creativity. Lessons from the Neo-Futurist.* Design is intensely collaborative. Highly functioning teams can produce experiences that fundamentally alter cultural or social fabrics … Design teams increasingly recognise that structured, sustainable creativity is crucial to their on-going success.
- SCODA Collectivex.com (2008) *Sustainable Creativity On Demand, Always*: Every successful enterprise relies on the spark of creative genius … SCODA is a specialized self-improvement technique that empowers the individual to remain in an inspired state and respond to battle-station commands with lightening reflexes. Now everyone can be creative.
- Trompenaars (2007) - *from an address given at the Inaugural Professorial Lecture, 12th September 2007, Free University of Amsterdam.* The research is intended to make a contribution to knowledge by proposing a new conceptual model that extends established theories of creativity and theories of innovation. It seeks to provide a generalisable framework that shows how to develop more creative people and how organisations can create a culture of innovation which can harness this creativity. In the increasingly oligopolistic world of business, in which old ideas can be copied and replicated at lower and lower costs, it is the constant renewal of creative solutions that is the ultimate differentiator of survivors.

The point here is not to suggest that some approaches are more on the mark than others but to make the point that at an organisational level (education, business, and research) a distribution of responses has occurred around the creativity theme. Within that distribution one idea that has taken root is that the enhancement of 'the creative individual' potentially contributes both to individual and collective adaptive advantage in the contemporary world and TLC aligns itself with this orientation.

6.1.1 The Findings in Relation to Sustainable Creativity and Transference

Specifically in The Learning Connexion context, the belief is that the processes of making visual art leads to enhancement of 'generic' creative attributes, attitudes, skills and strategies, and these are transferable to other domains. As part of the justification for this view the school draws on research which indicates that peak level innovators and creators, such as Nobel prize winners in non-arts

fields, are also noted for their involvement and achievements in areas of the arts as well (Root-Bernstein et al 1993, in Mine 2008). This is an area where TLC Principals had a particular interest in this project and its findings, and in response to this the following questions were formulated by this writer:

- Were there indications that some enhancement in attributes relating to creativity occurred for people through their time at The Learning Connection?
- Was there evidence of students taking 'creative' personal or other steps following their period of engagement with the school?
- Was there any evidence of any transference of enhanced creativity between knowledge domains following involvement with The Learning Connexion?

Information relevant to the first question can be drawn from results of the personal development questions in the surveys, where a number of questions were influenced by a review of creativity literature. The following are drawn from a variety of lists of characteristics often associated with creative people (Cropley 2002):

- Openness to new information and ideas
- Perseverance and commitment to the work in hand
- Tolerance of ambiguity
- Ability to put aside incomplete work
- Use of intuition, flashes of insight
- Self identification (belief) as a creative person
- Confidence
- The courage to 'create'
- Arrogance
- Single-mindedness
- In-depth knowledge
- Prolonged experience in particular knowledge domains
- Ability to apply both divergent and convergent styles of thinking
- Looking at the world in a 'child-like' way

This list is not exhaustive and reflects apparent contradictions, something which some writers also point to as another characteristic of creative people (see Cropley 2002 for an overview). This list helps illustrate the challenge for arts educational approaches which aim to enhance generic creative characteristics, this being the issue of what characteristics apply, and in what measure, in what situations? When creativity (broadly defined as the production of what is both novel and effective) is examined in different domains such as: art, music, science, mathematics, medicine - the 'rules' for determining 'what is effective and novel' involve 'systemic' elements. That is, they derive not only from the nature of a particular field, and the products produced, but also factors stemming from the broader social context impacting on a field at a particular time, as well as many important factors operating in the personal environment of the creators (Csikszentmihalyi 1996).

6.1.2 Personal Development and Well-Being

With the reservations identified above in mind, the survey data indicated that many people self reported marked improvements in some personal areas. Depending then on the degree to which these are generic to creativity, a claim that the school's programme enhances personal creative potential may have some justification. In terms of the experience resulting in people taking 'personal creative steps' during and after leaving the school this may also have some validity, in that a high proportion indicated an intention to work and earn as artists, or to go on to further arts study. This is arguably 'creative' in a personal developmental sense if people take themselves further along a trajectory, or to a new level of capacity which is in some way 'novel and effective' for that person. This may of course occur following many types of educational experiences or periods of reorientation.

More generally the survey results are interpreted as indicating a general improvement in 'well-being' associated with engaging with image-making, with people therefore presumably having a more positive frame of mind about what ever is to be next in their lives - people are thus in 'better

shape' to adapt to the situation they find themselves in, or to act positively to establish new pathways for themselves.

In terms of the question of 'creative transference' the means to contribute significantly to such a question proved to be beyond the parameters of the project, but there may now be a platform of experience and data in hand, as well as more developed theoretical perspectives, which could be used to frame the longer term follow-up research that is required in this regard. For future work along these lines to be productive though, some criteria clearly needs to be established in relation to the concepts of sustainable creativity and creative transference, and unpacking the meaning of such terms as part of the preparation for further research could be a very productive project in itself. On balance it is felt that the findings in this project point more strongly to an adult 'developmental' interpretation, with people moving into or through to a new stage in life, coupled with a particular desire to make 'art' and develop artistic skills. This opinion is certainly not meant to suggest that the concept of creativity is not relevant, as the dividing line between personal development and personal creativity is perhaps a matter of emphasis rather than substance. Given that there is little evidence of creative or cognitive transfer on offer from the findings (which is not meant to imply that it may not occur) the salient organisational aspects identified are those that contribute to attracting and supporting people through a developmental period that results in improved well-being, and this perspective is pursued in Section 6.2.

6.1.3 TLC Educational Philosophy

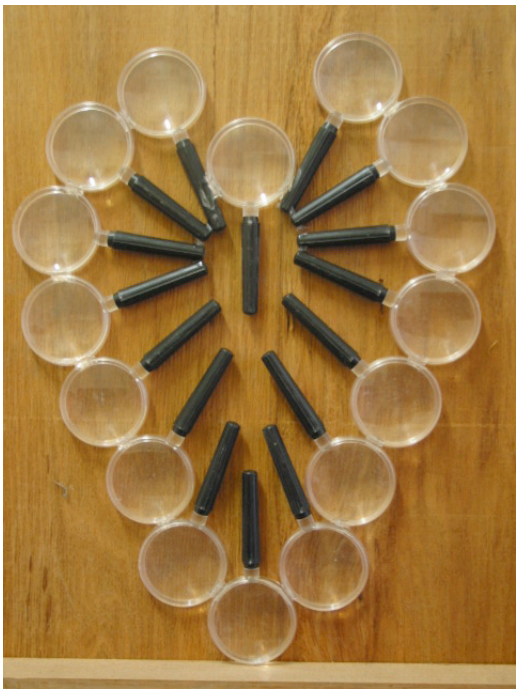
The school centrally emphasises 'creativity' through 'art' and the interpretation offered here is that the school broadly aligns with an instrumental orientation to cognitive development. While 'art thinking' is recognised (see Milne 2008) the school ultimately justifies its educational role by seeing the art experience as leading to improved 'ways of thinking' about themselves in relation to the world, with the essence of this captured in their marketing phrase 'Turn your life into a work of art'.

This is certainly not meant to imply that the student was unassisted, far from it. Both on-sight and distance/on-line students had access to a tutor environment which contained various levels of expertise in different media, which they could draw upon to develop skills and techniques, and to pursue particular interests. The content of people's image-making though was very much an area of free choice, as was the degree to which they could choose to develop specific techniques. Nevertheless, the general emphasis in terms of educational progress was on students demonstrating engagement with 'creative processes' through the production of a minimum amount of 'work' for a particular stage, (e.g. more work was expected at Stage Two than Stage One), coupled with appropriate levels of attendance. Development of art skills and creative attributes was therefore seen as largely self-organising as 'a natural result' of engaging with the making of visual art within a community of other image-makers. There was little connection with DBAE or a 'critical paradigm', and during the research period no comprehensive curriculum documents were noted that were used as a basis of structured lessons.

From numerous interview statements included below in this and the previous chapter, it can be seen that the openness of the programme ideally suited some but not others, with this openness a major factor in some research participants engaging with the school over a number of years.

In a sense then, if there was any sort of 'transference' of abilities to a new domain identified through this project, it was that people with previously well developed 'cognitive' skills, applied these within their image-making. This relates to a theme of recoding existing knowledge and experience and is pursued further in the final chapter. In the next section, the discussion pursues various perspectives on the theme of well-being, and uses a number of research participant's images with accompanying interview statements to look at these, with the first group from Marlene immediately below.

Marlene 1



2



3



4



M1 Magnifying Glass Heart	**M2 Cigarette Butt Heart**
… I wanted to explore … my experience … through the material of wire and cement and lace … express parts of my heart … expressing all the different types of love I have experienced in my life … or conditions of the heart … I started with a chicken wire frame and maybe that talks about the initial flirtatious and getting to know one another stage … treading on egg shells, we only have a very fragmented view of what they are like … it takes a long time to make a solid thing.	
M3 Metal Parts Heart	**M4 String Heart** *Do you know why you have this compulsion to make art?* This is when I feel whole … I am compelled to continue down this road simply because of what happens to me when I am active in this … my physical biological model somehow benefits from me expressing this creatively …my spirit sings … if I step away from this, my body or my spirit feels unwell … … it is what has given my life the most purpose …

6.2 IMAGE-MAKING AND INCREASED WELL-BEING

The interpretation of 'increased 'well-being' resulting from a period of image-making was not only supported by the survey data, but also directly reported by most of the narrative group. The following discussion unfolds through a number of vantage points: appropriation of the known; style and identity; synchronicities; and well-being through culture, brain, and mind integration. Images and interview statements are also used to illustrate that research participants image-making appears to reflect an integration between: neurological/physiological factors associated with 'style'; environmental 'signals' from the school; and the recoding of life experience into image based narratives.

6.2.1 Appropriation of the Known

One of the basic processes occurring through peoples images is that of 'appropriation' whereby something 'known' is used as a means to express emotional states and events within a broader narrative. The four works above from Marlene (*M1-4*) used a 'heart' motif which provides a linking theme to a range of personal experiences, with each heart constructed from different material. These harness the perceived properties of material such as wire, tobacco stubs, fabric, and concrete to materialise and express complex emotions and memories. Lynsie (Ly) also produced work from a similar 'materiality' perspective, though her aim was to explore the properties of material without initial preconceptions. That is, there was no explicit linking theme brought to the material, such as Marlene's 'hearts'. The creative process in these instances involve artist and material in the discovery of 'affordances' - that is, discovery of properties in the material and how it could be used to 'afford' particular mental operations in relation to those properties and uses.

At the same time, Lynsie's work also indicates that opting out of existing pre-conceptions is not so simple, for the titles reveal a need to communicate 'meaning' through some level of conceptual labelling. The titles enable her images to 'work' at multiple levels of meaning and connection – which is the essence of the symbolising and symbol building process. In *Ly1-3* below, at one level the

properties of string, vacuum cleaner bags, paper, sticks and walls are explored based on a stacking theme in works such as: *Minor Equilibrium; Minimal Intervention; and Critical Mass*. From another perspective these offer the means to express and experience personal feelings of being balanced or unbalanced, as well as affording visual metaphors about the relationship between humans and their environment more generally. So, for Rosemary and Paula (previous chapter) the appropriation process involved explicit memories of their lives, whereas Marlene (above) and Lynsie (below) appropriated aspects of the physical environment within their particular process.

The images and statements by Lesley below also help make the point that engaging with image-making can be far from smooth sailing. Lesley was the eldest of the participants (about 60) and worked in both paint and ceramics, often taking ideas in one media and transferring it to the other. She left the school mid-way through the programme, feeling somewhat dissatisfied with aspects of the organisation. She continued to work independently from home, but maintained some links with the school. Within her 'narrative' it is possible to see the emergence of work which is increasingly confident and distinctive, with her general comments also reflecting a settled and happier person towards the end of the period of contact. *Le 1-3* below is a sample of earlier work done at the school which seem bold and positive, and where images in one media are readily transferred to another. *Le 4* on the other hand (and also reflected in her comments) seem to project uncertainty.

This emphasis on the emotional dimensions being the primary foundation for understanding what 'works' in many of the research participants images reflects something like a language facility for emotions, a syntax in effect (Turner 2000) which enables 'emotions to be strung together in some material form to produce configurations of emotional responses. For example, 'bold work' may be created from people feeling bold, and 'fragile work' from people feeling fragile. At a 'feeling' level then (or what Domasio 2000 regards as the conscious experience of emotions) a transformation of unconscious primary emotional 'templates' occurs, with these drawn, through the actions of making something into 'a feeling currency' captured in peoples material creations. (Cont. page 154).

Lynsie 1



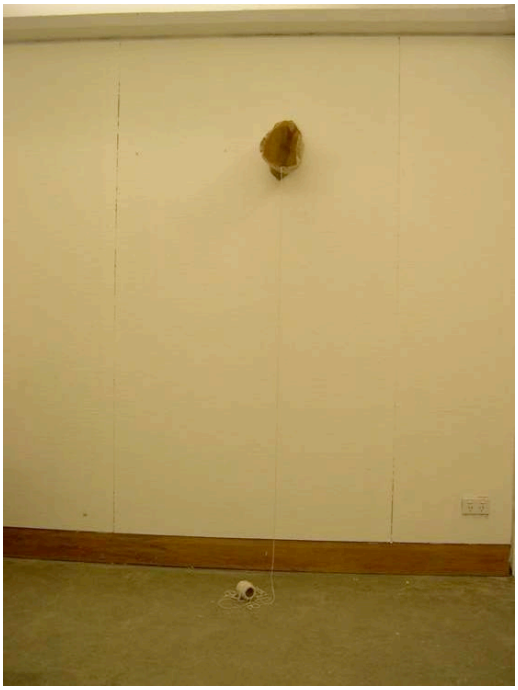
2 *Minor Equilibrium*



3 *Minimal Intervention*



4 *Critical Mass*



Le5



Le 6



Le5 Ceramic Tea Pot Figure	Le6 Ceramic Vessel
So you're very committed to your path as an artist now? Yes, if I don't do it, and I hadn't done it for five days because … I had to come back here and do a little something [laughter] *It's got to a point that it's a necessity … so what is it that is necessary.* For me it's the creativeness, the making … the doing, the physical doing is some of it … the throwing, the handling … and I think I don't get the same fun with paint … because it's not as three-dimensional as clay. *So that physical process makes you feel what …*Satisfaction, a wholeness perhaps … a connectedness … a completeness, taking something right through, do the whole lot. I just need to do it, to get satisfaction actually … when I don't do it I feel the opposite, and I have to do something.	*Going off on a slight tangent here, where do words fit into this,* Words don't trigger me, I can read things … I teach literacy actually , but I can read things and it doesn't affect me … it doesn't reach into the guts, the soul of who I am … words are out there … I went through Varsity and came out with a degree and thought 'so what' … I actually didn't … change my thinking, my way of life … it was just a journey in an established form of education and a means to an end … degree in English , which is lovely because its in words isn't it [laugher] I was very good a regurgitating. I don't start with the talk, the concept, it comes from what I do physically …

Le 1



2



3



4



Le1 Seed Painting	**Le2 Ceramic Seed Opening**
That was when I really started here … and its interesting I have come back to the nikau … I have been painting nikau's this term … which is a rather nice beginning and end *You have been here full-time?* No full-time for one and a half years and part time since then … for a number of reasons … I still think this stuff is good … better than what stuff I do now … I can't put my finger on it … there's an essence there, I went to nature because I wanted a source.	… I'm not a conceptual person … so I don't go into my self to find what I want to do, I tend to look outside myself so nature was the first thing, and I have a desire to take something which is quite small and make it quite big because in making it big, you change it, you see things differently …
Le3 Ceramic Urn and Opened Seed … what I needed [at TLC] was an independent mentor … I didn't need a teacher … some who was not involved, someone who could come in objectively .. and question where was I going what …what were the problems … but there has been no … rhythm … to see my year's progression if you like … *So, you were looking for, in a sense, the narrative?* I was looking for guidance to find the narrative … I wasn't finding it in myself … I needed some outside objective person who could ask the right questions of me …	Le4 Fragile and Black I think I'm still as insecure as I was when I came … *Insecure in a specific sense* In the artistic sense in particular … I still feel very unsure of my art and unsure of where I'm going … and quite emotional about it at times, I got very emotional this year about my art … *You were struggling with these … You had made the decision you were going to go …* They were done with an exhibition in mind … a bit of a panic … it seems that with ceramics one is always pressed by something [laughter] your dependent on the weather, and its a long process … its really interesting to see them as a collection now … very static … did not managed to get the glazing … uncertain.

6.2.2 Style and Well-being

In Chapters Two and Three the concept of identity was also seen as an important if not a necessary 'structure' to bind together the processes which make higher consciousness possible. In The Learning Connexion setting perhaps this is embodied in the concept and experience of 'self as artist', with a very high response rate given to this question in the first survey. Identifying self as an artist may therefore also be important to experiencing 'well-being' through image-making, just as symbolic identity it may be important to support the capacity for symbolic consciousness itself.

The particular interest here is once again in 'style' as this perhaps more than anything else, offers 'artists' a source of unique identity. The findings from the narrative group (as well as through general observation) show that students at TLC generally had a unique 'style' and hopefully some sense of this is on offer through the relatively few images selected to be included in this document. It was also suggested in Chapter Two that humans appear to have many variations in how we function physiologically and neurologically which may accumulate into distinct patterns, or styles for operating in the world. Therefore while 'artistic style' involves more than this, it can be said that human neurological uniqueness provides a foundation which can be harnessed, conserved and strengthen over time. Indeed self-study by the researcher suggests that conservation in individual styles occurs despite there being several decades between periods of image-making. Style then, offers one source of artistic identity.

6.2.3 Synchronicities

It was also suggested in Chapter Two that without some basic ability for brains to recognise that an action by conspecifics has some relevance to themselves, the very possibility of building shared 'currencies of thought' and collective ways of life may not exist. The mirror neuron system appears to offer a foundation for this, as it involves the direct mapping of neural patterns between brains performing and observing certain behaviours.

There were a number of findings that invite discussion from the synchronicity direction. Already mentioned were this researcher's own experiences in the foundation class, where a collective mood change was felt within the group once they began to paint to music with their fingers and hands and the vortex images were produced. This experience clearly involved a set of external stimuli that was common for the group - the setting, the music, the tutor's instructions, the materials provided, and given this perhaps similarities in responses should be expected - but to hang it all on environmental factors does not explain why a common vortex shape was produced with an accompanying feeling of a 'child-like' dreamy state (vortex and spiral images were quite common, and are discussed further in the next section). A mirror neuron explanation for this synchronicity of experience seems tenuous, if directed conscious observation is necessary. On the other hand unconscious visual and auditory monitoring of the emotional environment probably occurs if we accept the interpretation of the Blindsight and other syndromes by Ramachandran (1999) as also discussed in chapter two.

Observational as well as interview data also suggest that some sort of synchronicities may have occurred for some people through life drawing sessions. Paula for example (see page 112: P9) reported that she felt very connected to others during such sessions and something similar was suggested by Belinda (see *B 1* page 169-70 *)*. The life drawing sessions involved a model in the middle area of the room with class members roughly distributed around. The model was thus the dominant source of attention. At the same time it was not uncommon for people to wonder around quietly looking at other peoples work as well as periodically shifting vantage points. So, as with the Foundation class experience, some less obvious levels of subconscious monitoring between people could occur. More importantly, sessions often had a level of intensity, where an 'extraordinary space' was created, perhaps because people were explicitly observing nakedness. Heightened sensitivity stemming from connection with a sexual/biological context at some level may have occurred, with is harnessed, redirected and transformed into a cultural context. Describing the environment as similar to a 'religious service' may also not be inappropriate. In this 'extraordinary

space' high levels of 'joint attention' and perceptual sensitivity may be activated. Connecting this with the mirror neuron perspective, speculatively, it is possible that the mirror neuron system can be 'bypassed' or 'turned down' in conceptually orientated cognition but re-engaged when the focus is on environmental clues are predominantly emotional.

6.2.4 Well-Being as Culture, Brain, Mind Integration

Drawing on these various perspectives presented above, it is suggested that well-being can stem from a 'resonance' between three sets of factors actively engaged through image-making in particular contexts. Firstly, it can involve what is physiologically unique about how an individual perceives and acts with this expressed materially through (or as) 'their style'. People are, literally, deeply connected to themselves - their physiological make up. Secondly, people are appropriating and refashioning what may be most salient and accessible to memory about one's own life. Therefore a person's unique physiology can be combined with a unique life story and manifested in a set of unique material forms. The third contributing factor to experiencing well-being could be the presence of particular environmental clues, signals which affirm that what people are doing, and how they are doing it, is appropriate or not. If positive environmental clues were not perceived and instead people generally picked up signals of, say, competition or threat of some kind, it is difficult to imagine the 'well-being' reflected in the survey results occurring. Put another way, The Learning Connexion appears to offer a legitimising and supportive 'container' which provides emotional and contextual clues which enable people to 'safely' engage in image-making as a way to deeply explore themselves and their world. Through this a type of integration occurs which perhaps reflects a general emotional state where a person feels more related (adapted one might say) to the time of life they find themselves at and the circumstance which surround that life. In the following Section 6.3 this 'systems' view on well-being is considered further with reference to a number of ritual aspects which are identified in research participants narratives.

6.3 IMAGE-MAKING AS A TRANSFORMATIONAL SPACE

The TLC findings offer numerous examples which reflect a connection to ritual, and in some cases there are quite explicit connections with shamanistic ideas and practices. These are explored here using the themes and perspectives indicated in the methodology chapter. As will be seen there is a great deal of over lap between these vantage points and examples provided in one area often apply to other areas as well.

- Ritual and Altered States of Consciousness
- Gesture
- Accessing other Realms
- Gender and Sexuality
- Abstraction
- Animal Images
- Style and Identity
- Image-Makers as Appropriators of Transformational Knowledge and Power

6.3.1 Ritual and Altered States of Consciousness

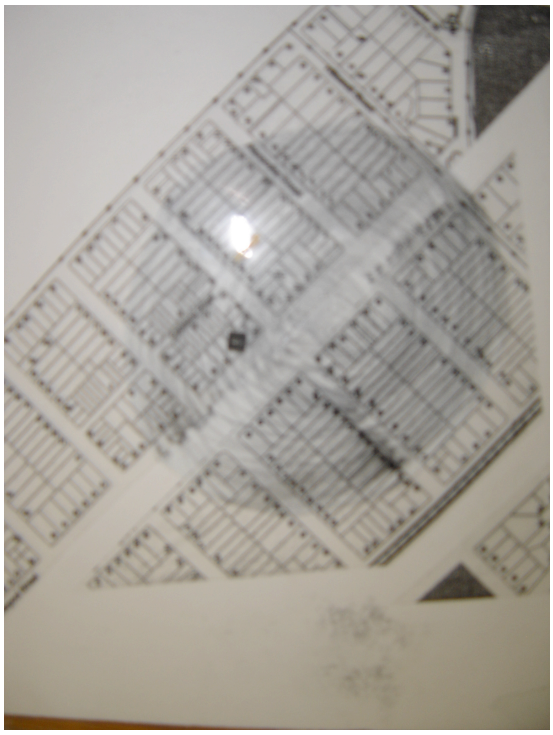
The material evidence from the Upper Palaeolithic reflects a high level of ritual practice, with ritual associated with altered states of consciousness and 'visions' and other hallucinogenic experiences. The 'vortex' or 'tunnel' images noted in the findings are therefore of particular interest, as such visions and experiences are the intended outcomes of some shamanistic rituals, produced 'phenomenologically' in more extreme states of altered consciousness (Baruss 2002, Lewis-Williams 2002, Winkleman 2000).

The comments by Marlene below about her vortex images are therefore pertinent, she seeing these as passageways linking to other dimensions or worlds *(M 5-7).* The vortex image in one form or another will also be seen in a number of other works in this section. (Cont. page 164).

Marlene 5



6



7



8



M5 Solar Vortex	**M6 Spiral Over Street Map**
The spiral for me is life … all that there is … were sitting side by side in this room on a planet that is spinning … by going into there … I'm trying to talk about that too, that we're a huge mass of things which are spinning around … *So for you science doesn't explain it* Not at all! Not for a minute, not for a nothing … it doesn't have any feeling …	… marks on the street, the ground I stand on, these are layers … by putting it as spiral and not just a rubbing - it's the whole source of my energy … *Is it a doorway way …* Yes it is, it's a hole, it's a passage, it's a doorway … to what? Well to all that there is … all of existence … its very difficult to have the actual words for it … you almost don't need the language …it's a feeling a connectedness that no words actually describe very well …so when I stand in one place and I go into a zone, I can sense my body spiralling …
M7 Five Vortices	**M8 Marlene**

M9



M10



M11



M12



M9 Waiting at the Train Station … a photo of a clock, and empty length of railway track and a pair of legs sticking out from behind a pillar … I just had to take it …. Because it's about waiting …. and what I have used on each side is concrete powder, which talks about the structure of the building ... the columns, and I've allowed the white of the canvass to frame the photograph, and at this time my friend was dying of cancer, in fact she died the week I did this work Yeah she had been waiting; I guess this was her waiting to die …. The only part of here not affected were her legs … so when I say this, it was about G… this is about a train that hasn't arrived yet … I didn't plan to work around that, but when I saw that I just thought about G**.** I suppose the concrete is also about the heaviness, and the solidness that her cancer had become … and that you can't really see underneath.	**M10 Orange and Blue Series 1 of 7** [It was] a class about emotions, and we had to describe emotions … and that gave me the idea to explore blue and orange … layering each of those colours by seven, because seven is monumental in my life … It changes on the screen, …. I can't remember the title, …it was just called series 7, I didn't want there to be … emotive titles … that was really about what happened for me as I was making the works … that was extreme work … a huge process I went through … and I felt that the material softened the extent to which that put me through, physically, mentally and emotionally**.** That's called dryness [?] … I used a piece of wood to apply the colour and I did it all horizontally … so it was beneath me, I was over the work to explore the closeness …
M11 Orange and Blue 2 I used my hands … as I was putting the orange on top of the blue … these were totally instinctual paintings and I just wanted to stop and leave this horizon line, and just wanted to stop and leave … this something, it's the way my hand went when I was putting the colour on … its like there is a world beneath the murkiness. … and I fall constantly through [laughter].	**M12 Orange and Blue 3** … you can see the marks. I remember, leaving this area in the middle, it was play, some how I wanted the central part of this work to … say more maybe, by covering the blue up it stopped it from having the opportunity to speak …

M13



M14



M15



M16



M13Orange and Blue 4 I think this is called anxiety … *Did it express or create anxiety* … it caused me a great amount of anxiety by only layering the orange, especially that big mark there, its like a funnel … yeah … and to allow this mark to come through the middle of the work … … by putting the mark of blue, it is an escape route for the volume of the blue … or is it a channel which comes in and feeds the blue, and fills it up … and I think this was anxiety, more the angst actually, leaving that in there. I've used a stick like a sponge, I've dragged it up …	**M114 Orange and Blue 5** Now … this one's called moisture? … no this one is called silence, because this is how it stays, but you can see the blue underneath, there is still a conversation going on, so in effect I didn't silence the blue, but I had a pretty good shot at it [Laughter].
M15 Orange and Blue 6 Moisture? … it went through a stage where it looked undressed … I worked on seven of them at the same time … each layer of colour went down at the same time on each canvass, and I tried to do it on the same day so I was touching each one.	**M16 Orange and Blue 7** [The tutor] took a photo of me and I was absolutely exhausted … I was contemplating the canvasses …It was me exploring paint in a big way … didn't do much painting after that …

6.3.2 Gesture

M 8-16 above also invite a ritual-gestural interpretation as the making process for Marlene was very physical and emotionally demanding, with the final 'fixed' expressions essentially 'intuitive gestures' that deeply resonated for her. The meaningfulness of these particular works are thus not in any conscious attempt to create a particular finished shape or representation. In Chapter Three it was suggested that 'gesture' may have still played an important language function during the Upper Palaeolithic and aspects of this may have been captured and recoded into some images. In this writers mind some vortex images presented in this chapter have a gestural' element to them and this suggests that it offers an archetypical shape that, once transformed into a fixed image, can then be appropriated to as part of some broader narrative. Fixing gesture also creates a materialised foundation from which abstracted marks can come to 'resonate' within communities of minds. The use of the term 'resonance' in fact invites speculation that this may be how the sounds and rhythms of ritual are able to be recoded into a material form. The detailed patterns of markings in Figure 1.1 (page 6) come to mind here. Put another way, if such patterns do *not* reflect the recoding of the sounds, rhythms and movements of transformational ritual, what do they reflect, and what other form could such recoding take?

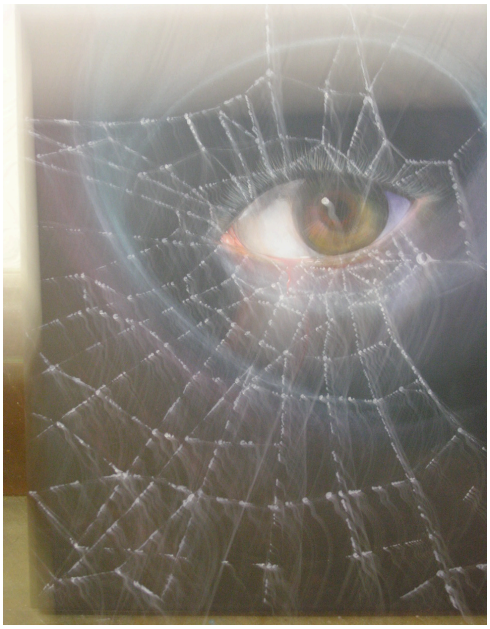
6.3.3 Accessing Other Realms

Spiral shapes in particular can be associated with entrance or passage ways into another realm (Winkleman 2000, Lewis-Williams 2002). This was noted above in Marlene's spiral drawing over the street map and is there again below in images by Chas, Lesley and Bernadine. As mentioned earlier the vortex experience occurs in extreme states of altered consciousness, with the altering of consciousness an indispensible aspect of shamanic transformational rituals. If we view this capacity to access other realms from a more basic cognitive perspective, it reflects minds which have gained the ability to access to 'the symbolic domain' itself.

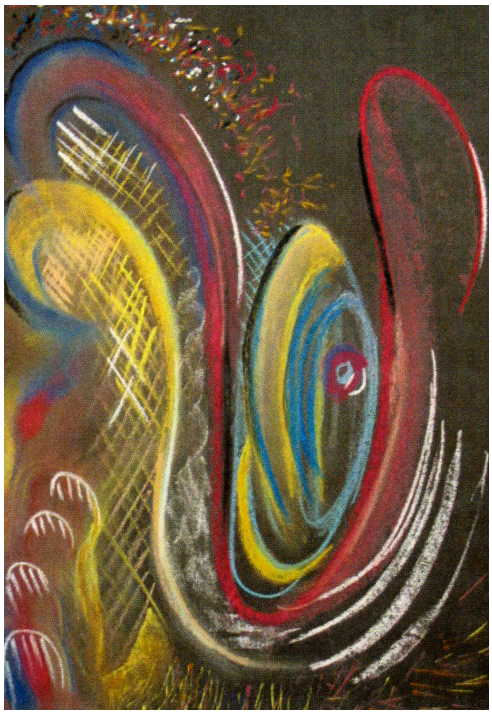
Chas 1



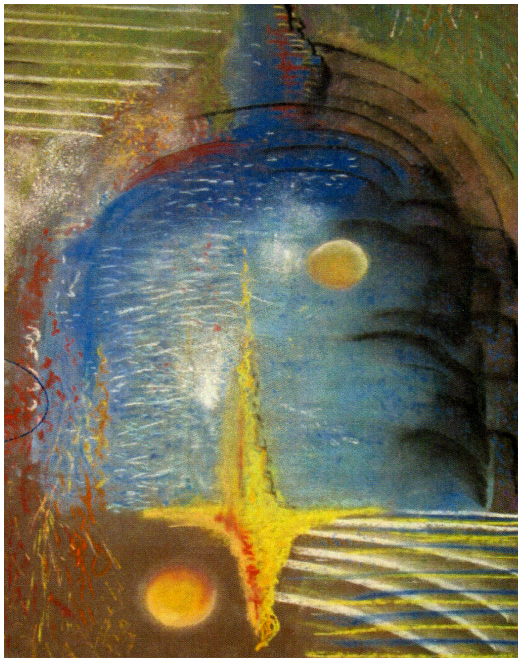
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Lesley 7



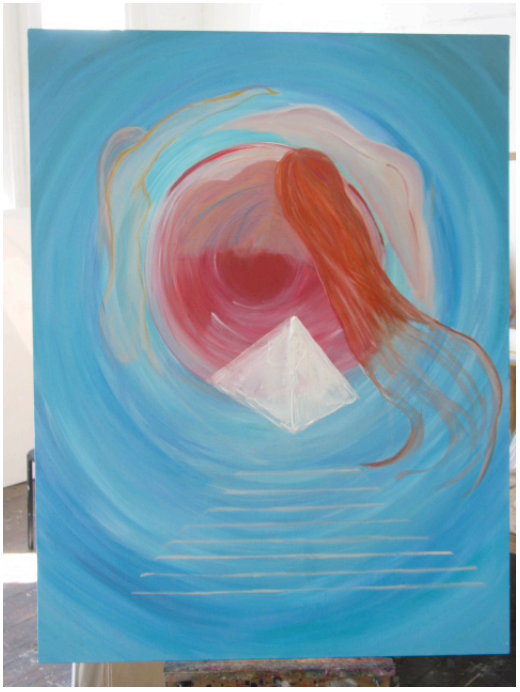
8



Belinda 1



2



3



4



B1 Vortex	**B2 Vortex and Other Forms**
… there's a certain harmony where ever you have a body of people …generally it's a harmonious environment … *You felt that sort of a synergy occurs within the group you work within?* I will feel that synergy this weekend, with the way the weekend will flow in a series of events that will occur … with another group of people … yeah, I'm always looking out for synergy … I'm becoming more aware of it now, and I will in the future, of the effect [TLC has] had, not just technically with my painting but its probably had more of a profound effect than I know, in a confidence and … being able to be true to myself and create …	The people I now associate with are different people in my life … because I'm moved from the city … consciousness with money, possessions, parties dancing to something that was on a more soul level- *Where does TLC fit in that?* … It supports and accepts me in my creative journey, as an individual, without bias … I feel completely at ease in this environment … I'm allowed to be … it gives me space … it's a vacuum in time maybe … I'm not having to struggle to justify my existence … and be something I'm not …
B3 Opening	**B4 Flower**
They're a bit erotic aren't they … Well, I have people who see penises and vaginas in everything I see, it doesn't matter what I paint, they see something erotic, where ever there are openings- *But do you, do you see it?* Well after I painted it, but the fact is this plant does have, does look like this … I don't mind saying this, but I'm exploring my sexuality in my forties now in a way, in the last couple of years, it's like a new beginning again, a bit like teenage-hood, so maybe that is coming out in my artwork if it is a bit of an erotic … nature … yeah, probably .	I did another one last week and, the woman with the parrot, the model was where underwear, lime green underwear … and she was very erotic, she wasn't naked .. and I haven't been able to do any decent drawings, I'm not a life drawer, but because she was erotic, and this eroticism came through … I had this with a male model … if they're hunched over I can't draw them, but if they've got nice lines and they're standing in their sexuality I can draw, so its very dependant on my outer stimulus … I have to be moved by it, like this flower

The ritual perspectives on image-making also suggests the possibility that some type of 'reverse engineering' can occur, which give access to processes which enable people to transform (in a softer safer way than other means e.g. drugs) existing knowledge, experience and 'belief about self' into a 'higher' level of consciousness, a consciousness which is essentially metaphorical and symbolic.

6.3.4 Gender and Sexuality

The surveys showed a consistent pattern of females making up 85% of those attracted to the school. The evolutionary and ritual perspectives discussed in Chapters Two and Three suggest gender-based knowledge-power divisions and tensions have been a (if not the) major force structuring human social existence, with this having continuity stretching far back into our non-human past. The question therefore arises, is the gender bias of female involvement with TLC some sort of contemporary reflection of this lineage? While rejecting the notion that the impulse to engage with art and arts learning is largely 'a female phenomenon' (it clearly is not) the gender data, perhaps in association with the age data, may indeed reflect a contemporary manifestation of some more fundamental processes relating to women. Moreover, given that in contemporary Western society 'gender neutrality' is often seen as a desirable goal in most, if not all social contexts, the emergence of such a strong gender bias within a recently emerged educational environment should be of some interest.

In terms of sexually related imagery itself, this was an explicit aspect of a number of participant's works, as already noted in Paula's work in Chapter Five, Belinda's work immediately above also had a fairly high orientation around both sexuality and transformation *(B1-4*page 196*).* In her mid to late forties, she had been a part-time student for about two years and a clear theme of moving through a new phase of life is present in her interview material and her work. From the transformational perspective the vortex is present once again and in *B3* an entry or exit way leading to a place that radiates bright light as well as sexuality.

Lynsie 5



6



7



8



Chas 3



4



5



6



.

6.3.5 Abstraction

One of the basic ideas that link processes of 'artistic' abstraction with processes of symbol creation is that, over time more and more understanding is facilitated between brains by less and less perceptual information, and how this process may occur through culture interacting with neurology via image-making is of particular interest. It is suggested that the foundation for this ability is some sort of exaptation of the perceptual ability of the brain to extract survival related meaning from environmental clues provided by contrast, movement, colour, outline, coupled with intuitive understanding of emotional contexts (fight, flight, mate, eat, protect).

In a second group of works by Lynsie *(Ly 5-8* page 171*)* above there is a series where a Venetian blind has been used as a materiality work, and then appropriated into an initial 'blind-like' painted image, then further modified into a more abstracted pattern of layers and spaces. Also, as *Ly8* indicates, similar developmental processes were used with forms which were circular or dot-like in their original form. Chas also produced works presented immediately above which reflect a slight shift from detailed 'scenes' *(C3-4)* to the increasingly detailed but abstracted 'forms' which exist in their own context *(C5-6).* He produced many works which involved fantasy environments and the high level of detail in them also suggests meditative states in their creation.

At this juncture the most pertinent connection to note is that 'abstraction' while it occurs in different ways and is used in different narrative contexts, is a distributed process. That is, it occurs to varying degree within any community of image-makers and this distributed perspective is one aspect carried forward in the next chapter.

6.3.6 Animal Images

In chapter three it was suggested that there has been a continuous use of animal and animal-like representations since the very beginning of image-making, with the ritual 'recreation' of creatures with non-human attributes probably pre-dating this. It was also suggested that 'animal

representations' may connect to common intuitive knowledge that promotes biological survival. This also connects with the view that humans have evolved discrete intuitive intelligences (or evolved developmental biases towards such intelligences) with some 'tuned' into the natural world and others into the social world. It was also suggested that animal representations may have formed 'a bridgehead' for capturing and directing joint attention which enabled these intuitions to be harnessed and manipulated for collective cultural solutions to biological survival challenges. The interest here then is whether or not the artworks of the research group reflect any patterns of animal images, and if so, do they connect with Upper Palaeolithic art and/or behaviours which might be deemed adaptive?

What seems clear is that ideas of transformation and journeying via or as animals are common. This was explicit in Rosemary's narrative with her use of the unicorn, seagull and other images (5.2.2) and implicit in Paula's horse images (5.2.1). Parallels and continuities with Upper Palaeolithic art therefore appear to orientate, once again, around ideas of transformation, journeying, accessing other domains, appropriating power with these coupled with expressions of identity and belonging. In terms of connections between the use of animal forms and expressions of intuitive knowing that relate to survival, one plausible connection relates to survival in the cultural symbolic domain. The themes of needing to 'flee', 'change', 'grow', 'get back on the horse' and find 'connection with place' and 'where I belong' are clearly associated with animal-like images in research participant works, but these speak of the felt need to survive psychologically in the symbolic world, and obviously not direct survival in a biological sense. It is therefore survival in a symbolically organised social world where continuities between the earliest image-making and the art of the research participants can be identified.

The Upper Palaeolithic material evidence indicates that social processes and structures were moving well beyond direct individual biological survival based on individualistic patterns of behaviour. The presence of animal images in the Upper Palaeolithic context points to the 'survival'

of the biological individual self and survival of the cultural collective 'self' having merged. Taking this argument a further step and applying it within the contemporary setting, if engaging with 'art' is a means for a significant number of people to experience 'survival' within the symbolic domain, *and* the symbolic domain is itself the means of biological survival because of the complex systems symbolising minds make possible - then engaging with 'art' should perhaps be seen as something which promotes both individual and collective 'fitness' and 'survival' within that symbolic world.

6.3.7 Identity and Style

The interest here is in connections between style and identity and how that relationship appears to be expressed within the two contexts. It was suggested earlier that 'artistic style' reflects a complex mixture of elements which are conserved and strengthened over time. This conservation in different styles is certainly found within the Upper Palaeolithic, and is the foundation for the defining divisions within the period itself (see Table 3.2 in Appendix 1). It is felt that the strong conservation of styles through a period of many millennia also supports the argument that the explicit communicative aspects of language may have been weaker, or less developed in some way. If this was the case, then the role of materialised symbolic culture in maintaining group solidarity through the millennia may have been essential. Related to this is the view that the first human 'image-makers' making images of whatever they wanted in whatever way they wanted may have simply been outside existing conceptions, and that a people's 'art', its stylistic elements, and their symbolic identity were probably inseparable. A group's images and associated rituals may have provided a sort of 'archetypical centre ground' of forms, patterns and themes around which symbolically structure social life could be organised. Style in the context of the research participants on the other hand may reflect some basic processing and developmental differences which stem from variations at the pre-neuron levels and upwards, which accumulate into stable configurations, influencing how people act and think. 'Artistic style' then, in a contemporary context offers one accessible way to express unique individual identity.

In terms of relating one context to the other, it is tempting perhaps to emphasise a general transition through historical time from one to the other (as suggested in the prologue), that is, from collective to increasing individual symbolic identity. While this is worth exploring further (in another project) what is more important here is to see the Upper Palaeolithic as offering a window into image-making and consciousness changing processes occurring through a deep time period, while the work within the TLC setting provides a window into distributed process, and discussion of how these through time and distributed perspectives can be drawn together into a model of changing consciousness is explored further in the final chapter.

6.3.8 Image-makers as Appropriators of Transformational Knowledge and Power

This theme of image-makers as appropriators of transformational knowledge and power embraces many of the vantage points presented above and is used here to draw this section to a close. Helping to set the scene is the following quote from Winkleman:

> Shamanism's relations to the animal world and to generic others constitute the natural ecology of human consciousness. Shamanic traditions involve models of knowing that provide an extension of representation through metaphoric predication. The neurophenomenological approach illustrates that shamanic, religious and mystical thought play important roles in representing human perceptual and conceptual structures and in producing a variety of individual and collective effects that are central to human social life, self, consciousness, and healing. These potentials, first institutionalised in shamanism, represented an evolution to a more inclusive and integrated consciousness. This … demonstrates that shamanistic healing activities and ASC [altered states of consciousness] are primarily based in elicitation of integrative processes, particularly related to the paleomammalian brain (Winkleman 2000:52-3).

It is argued in Chapter Three that image-making originated through ritual. Discussion above indicates that 'ritual-like' elements can be identified in the images of research participants and in the processes and influences which lie behind these. From a systems perspective the transformational aspect of image-making can be sensed as occurring at multiple levels. At the level of the individual it involves the transformation of 'ingredients' into 'paint', paint into marks, marks into something the brain sees as 'like' or 'pointing to' something known in the three dimensional world. At another

level the person making the images (the artist/shaman) is transforming themselves into something and/or to somewhere else through images that make present 'other worlds' and the means of gaining entry to these, from which experiences of power and knowledge can be gained which enable 'healing' and 'well-being' to occur in 'this' world. Such processes are possible because belief in the transformational power of ritual and 'ritual-like' image-making is at some level shared. The following quote, also from Winkleman, (2000) seems to sum up the essential connections between image-making, ritual transformation, well-being and how the individual's capacity to engage transformational processes is intrinsically embedded in collective worlds and communities of minds.

> Shamanistic healing involves the interaction of symbolic and physiological levels that instil confidence in ways that counteract anxiety and its physiological effects. The multiple mechanisms include the 'biology of hope' – attitude-induced immunological system responses; persuasion and positive attitudinal induction, the restructuring of social relations and attachments; the enhancement of expectations… ; the resolution of the sick role; the provision of (re)conditioning experiences; …; and psycho-dramatical enactments, including catharsis, which may provide a way of expressing unacceptable emotions … Valle and prince (1989:51) characterised the standard healing mechanisms of self-healing religious experiences as based on producing 'a sense of certainty-of belongingness in the universe' a sense of euphoria and omnipotence which may be linked to the production of … the body's own morphine like substances, the endorphins' (Winkleman 2000:253).

6.4 THE RESEARCH QUESTIONS REVISITED

To bring this chapter to a close the three research questions are revisited here and discussed in light of the findings, analysis and interpretations offered above.

6.4.1 Research Question 1. What personal and organisational influences can be associated with or seen to be reflected in, the images created by art students at The Learning Connexion?

The 'gaps' in current thinking about art, education and change associated with this question had a number of aspects to it. Firstly, there was an interest in illuminating the processes and influences occurring within the image-making of maturer age 'novice' art students, with this helping to address what may be a false assumption that thinking about arts, education and change needs to be primarily directed at youth and the transition period into adulthood. This project began from the

insight that increased participation in visual arts learning was occurring as part of a general escalation in engagement with the arts, and that there was wide spread interest in creativity orientated learning from people of all ages and backgrounds. The project also sought to illuminate where TLC fitted within contemporary arts educational philosophy, and to identifying what was distinctive about organisation and how this contributed to the arts learning experience at the school.

The data to address the three research questions was gathered through a case study involving surveys, self-study, participant observations and in-depth interviews. Taking a broad perspective on the findings it is felt that patterns of engagement with the school do support the general proposition that there continues to be a general escalation in engagement with 'the arts' and a corresponding demand for arts learning. During the course of the project TLC saw significant growth in student numbers with most of that growth reflecting more general tertiary patterns of increased extra-mural (on-line) and part-time study. The age data indicates that the school consistently attracts people from late teenage years through to post retirement with this distributed fairly evenly, with an average age in the early forties for females, and late thirties for males. A consistent pattern in the four years that data was gathered indicates that females make up about 85% of the student population.

In terms of retention rates of enrolling students, there was also a consistent pattern of about 50% of people leaving the school after they completed the first level of the course, but at the same time most people regarded the experience as positive and that they were leaving at the level they originally intended if not at a higher level. Therefore, despite the high early leaving rate, the data is interpreted as generally supporting the proposition that there may be a depth of people in contemporary New Zealand society motivated to engage with creative activities and organised arts learning, with The Learning Connexion providing an initial experience for many who go on to explore other options elsewhere. The data also indicates that many people attracted to this initial experience have significant prior educational and career experience, also suggesting that the

motivation to engage with arts learning may relate to a wish, or need, for people to change track or reorientate themselves in mid-life. While such people made up a significant proportion of those who left the programme early, it was also such people who appeared to be most likely to go on to complete all three levels of the Advanced Diploma Course.

A number of distinctive organisational characteristics and processes were identified which contributed significantly to the school 'culture' and the time with the school being experienced positively and different from the mainstream. As noted in chapter five, the school recruited many staff from its own graduates. The school was housed in an old convent school and was physically very distinct from conventional mainstream educational settings. Few formal areas of hierarchy existed apart from an unambiguous distinction between the organisational Directors/Principals and other staff. Many organisational functions and systems were developed by the staff performing or managing these, and through the research period these was seen to be a general environment of trust and autonomy within most academic and general staff area. Many staff members were also enrolled in the programme. The programme itself, apart from aspects of the foundation course, gave students a wide range of media options to work in and considerable freedom to pursue personal interests within their work, but with access to skilled tutors often on an interest or needs be basis. A philosophy of 'the rules for making your art are your own' appeared to be generally experienced, with some people responding more positively to this while others at times struggled with this openness and what they experienced as 'a lack of direction and structure'.

Observation, self-study and the work with the smaller group of researched revealed that what most people principally explored through their image-making was themselves, often exploring in depth specific events, relationships, family, or life periods. People's images therefore essentially 'recoded' many aspects of their lives into a visual 'narrative'.

Many people also identified their image-making as an essential aspect of their lives and their 'well-being', something they needed to do in order to feel 'whole' or 'well' or 'connected'. This

interpretation of a general improvement in a person's sense of 'well-being' was not only explicitly revealed in numerous statements by research participants, but interpreted as being reflected more generally in responses to many questions included in the completing student and graduate follow up surveys. Through the process of image-making, people tended to conserve and strengthen distinctive personal artistic 'styles', which not only embraced particular subject interests but revealed patterns of treatment of their chosen media which was unique to each person.

6.4.2 Research Question 2. How might findings from The Learning Connexion be interpreted by Theory that brain, culture and mind function systemically to continually reshape human symbolic consciousness?

This question had its origin in the perception that 'multilevel interconnected change' could be associated with art and art education (as discussed in the prologue) and it was felt that image-making in The Learning Connexion setting offered a research window into aspects of how this. It was also felt that an approach was needed which moved beyond traditional psychology-sociology orientations was necessary. Working from the premise that Brain, Culture and Mind function 'systemically' offered a way forward which reached out to changing consciousness occurring through the dynamic interaction between evolved (and evolving) neurological functioning and changing culture.

Chapter Two helped illustrate that brain and culture are essentially 'two sides of the same coin', with culture comprising 'cognitive devices' which enable people to 'think' about novel things in novel ways. A central idea put forward in this context, is that symbolic culture enables the processes which give rise to individual core or basic 'consciousness' to be integrated or 'bound' in new ways, which make mental processes increasingly transparent. This emerging transparency is achieved by shared 'currencies of thought' which enabled communities of minds to achieve and maintain solidarity around core survival needs. In essence, culture in this conception emerged and headed in the direction of 'the symbolic domain' because it functioned as an adaptive evolutionary force, enabling the necessities for the survival of the biological individual to become merged with processes which

involved the survival of a group or symbolic entity. The concept of 'mind' in this view is quite conventional in one way, in that 'the mind' is where the conscious experience occurs. On the other hand seeing 'the mind' as independent from culture becomes meaningless as soon as we recognise that the currencies of thought and how these change are essentially collective endeavours. Therefore it is suggested that a conception of 'mind is a bridge' which is anchored in culture in one domain, and anchored in neurology in the other provides a more appropriate metaphor. A mind disconnected from neurology simply can not exist, and any solipsistic mind disconnected from culture could not survive in this or any other world, without others performing the bridging functions for them.

The relevance of this discussion and this research question to The Learning Connexion findings is twofold. Firstly, with regard to the interpretation that improved 'well-being' can be associated with a period of image-making, it is suggested that reflects a 'systemic' process whereby neurological factors, environmental clues, and personal histories are integrated, and recoded into material forms which reflect a uniqueness about the image-maker and their lives. Well-being in this conception therefore stems from a sense of increased 'adaptive fit' between a person and the life stage, place and/or circumstances they find themselves in. In The Learning Connexion context, the organisation contributes a legitimising and supportive 'cave' which provides the emotional and contextual clues which enable people to deeply engage in personal exploration through image-making. Through this process a unique 'style' is also manifested, which, it is suggested, provides a source of materialised identity, with identity part of the systemic 'structure' which enables all the elements involved to 'bind' together into a unique visual currency.

As pointed out in section 6.3.7 above, this approach to 'well-being' also reflects processes of 'shamanic healing'. A general hypothesis therefore seems to be on offer that: a sense of improved well-being associated with a period of image-making; the achieving of shamanic healing; and the

emergence and ongoing reshaping of higher levels of human consciousness, all stem from the same systemic processes.

In addition to this general 'systemic' perspective, a number of specific factors are able to be associated with research participant image-making which can be regarded as critical to how the 'system' functions to change consciousness through time. From Section 6.3 above, discussion looked at how processes of appropriating 'the known' was central to people's creative processes, with this occurring in a number of ways. People often used their own life histories as the core subject matter of their narrative. Some people also appropriated the property of materials (hard, soft, tangled, wet, balanced, equilibrium) as a way to not only express ideas, but to 'materialise' emotions associated with particular aspects of their life story. Other work appeared to have an underlying 'emotional 'grammar' which reflected a person's more general emotional disposition at the time they made those works (fragile, vulnerable, weak, bold, strong).

Also noted was the process of abstraction. While some participants strove for 'iconic' completeness, others were inclined to reduce images down from an iconic representation of a thing or event to a 'self contained' condensed form. This condensing down whereby less visual information may in some instances create greater density and connectivity in the meanings experienced, reflects the visual brains ability to extract only those key elements in the perceived world which integrated into a constructed reality, enable appropriate meaning to be experienced and appropriate action to occur. Abstraction through human image-making arguably then, reflects an exaptation of the evolved visual brain ability to construct meaning and inform action in relation to perceptions in the 'natural' world, and apply these in ways to construct meaning and inform action in worlds structured by symbolic realities.

Discussion also suggested the possibility of synchronicities occurring through some image-making activities, with this possibly reflecting mirror neuron activity. It was suggested that perhaps the mirror system was 'turned up' in some contexts, such as in life drawing life classes, which may

heighten people's perceptual sensitivity and awareness. Related to this, earlier discussion identified that image-making for research participants appeared to involve some degree of 'altered states of consciousness.' That is, shifts in the nature of consciousness were experienced, where people moved away from conceptual reasoning into an engagement with their material through more intuitive and emotionally orientated frames of mind. At times for some, these were emotionally and physical intense experiences, while at other times more dream-like states appeared to occur. Different types of images, such as the vortex, or meditative repetitive image-making, or the making of highly detailed drawings, or a sense of approaching or entering and journeying within spirit worlds, all appear to be associated with some level of altered states.

In relation to these specific elements, the general conclusion reached is that within any group of image-makers, it is likely that there will be a distribution of responses involving these core processes: appropriation of the known through the visual recoding of life narratives; the harnessing of physical properties to construct emotional currencies; abstraction of forms and 'symbol' construction within peoples narratives; with these process involving altered states of consciousness and experiences of journeying and transformation. In terms of how this question and its associated lines of exploration address identified gaps and weaknesses in current knowledge, this has two main components. Firstly, current cognitive approaches to art education, while they reach out to processes of symbol construction and the formation 'literacies', appear to have an overly strong focus on the individual. A 'systems' perspective leans more towards symbol building processes associated with 'the arts' reflecting more fundamental processes which underpinned the emergence of symbolic consciousness in the first place. Secondly, in terms of using image-making as a window into aspects of change, and changing consciousness in particular, such an interest needs to not only embrace distributed processes occurring around any one time, but also 'through time changes' as well.

The 'creolisation' effect discussed in chapter three for example is a 'through ontogenetic and intergenerational time' effect of brain and culture pushing and pulling cognition to a new level of linguistic capacity. In the view of this writer, any attempt to come to grips with the nature of 'consciousness and how it changes' (and how art may illuminate this) which does not seek to embrace and integrate both distributed and through time perspectives, is likely to be of limited value. In this project, the window into some of the distributed processes occurring at one time in this project has come from the TLC data, while the 'through time' perspective comes from the Upper Palaeolithic, and that brings discussion of the third research question to the fore.

6.4.3 Research Question 3. What Light on the Findings from The Learning Connexion can be drawn from an examination of the first known human fixed image-making?

The Upper Palaeolithic period offers a unique opportunity to explore from a systems perspective possible cognitive and developmental effects associated with image-making. Recent cognitive approaches to this field also offer insights that are relevant to thinking about art, educational and change in the contemporary world, and drawing attention to these is why this research question has been included in this project.

The' through time' perspective offered by the Upper Palaeolithic not only encompasses the 30,000 years of the period itself, but reaches back and through the emergence of our own species in Africa around 200,000 years ago. The cognitive potential to make images with symbolic intent was therefore in existence as long ago as this, but it took another 160,000 odd years before this potential was realised in the European setting. This gap between potential and its realisation indicates that 'culture' as much as evolved physiology must have provided some key element in the emergence of the new forms of consciousness that symbolic image-making must reflect. The main idea pursued in Chapter Three was that patterns of ritualised behaviour within groups existed well before fixed image-making and it was this ritually orientated culture that probably structured community life and laid the foundation for image-making to emerge about 35,000 years ago.

The predominance of animal and to a lesser extend therianthropic images during the Upper Palaeolithic indicates that something already 'known' in a ritual form provided an 'iconic bridgehead' to be appropriated and used indexically to 'point to' something intangible, a 'force' or 'power' that was unknowable other than through the charged emotional experiences provided by ritual. Such processes are essentially collective, and therefore require the presence of 'shamanic' mediators with the knowledge and 'some of the power' to fashion and use materials which could capture and direct the attentional, emotional and associative systems in the brains of individuals bound together by a common identity. That is, the shaman had the power to fashion materials with symbolic force. When Upper Palaeolithic image-making is examined from cognitive and symbolic perspectives and combined with recent insights from neurology, shamanic ritual interpretations for many Upper Palaeolithic images now seem the most tenable. In sum then, the material evidence suggests that ritual and image-making played critical roles in maintaining symbolically constituted group identities and the knowledge-power structures which regulated, ritually, the interdependence between hunting, distribution of resources, opportunities to mate and procreate. Survival of the group as a symbolic entity, and survival of the biological self had, by the Upper Palaeolithic, become inseparable.

As also discussed in relation to the 'cultural solution' to the evolutionary challenges posed by encephalisation, biological difference and tensions between the sexes, mediated through gender bases selection rituals, would have been a fundamental driver of the evolutionary process which brought the capacity for symbolic culture within reach.

The material evidence also indicates that significant changes in how communities represented reality occurred through the Upper Palaeolithic itself. A cognitive interpretation points to increased mental complexity being intertwined with increased social diversification and complexity, which is also consistent with the view that gender-based knowledge-power structures would have continued to drive change through this period. Some images suggest the emergence of a new female 'self

consciousness' while others suggest that distributed cultural 'narratives' were recoded into materialised image-based narratives. This 'pushing and pulling' between brain and culture also saw, more towards the end of the period, increased use of abstracted 'signs and symbols', indicating that the brain-culture 'system' was giving rise to further modifications in cognition which could more readily use abstracted signs as a way make thinking more transparent. When the creolisation perspective is also applied in this context, increased social and cognitive complexity coupled with increased use of symbolic abstractions, and the general existence of some more basic protolanguage, a scenario for the emergence of a new level of linguistic cognition, seems theoretically possible. This was perhaps an adaptive step made possible when the complexity of the symbolic domain reached a certain threshold. In this view then, modern symbolic syntactical language is an adaption to *culture* which enables elaborating cognition within an elaborating materialised symbolic world to bind into a new level of integration via linguistic consciousness. This view of culture comprising ritual and image-making essential preceding (or alternatively co-evolving with) modern language, challenges more traditional processual views within anthropology and archaeology that have tended to see 'cognitive fluidity' based on a pre-existing linguistic capacity as the necessary cognitive foundations for communities that had the capacity to make 'art' and symbolic images.

When ritual is used as the focus within the systems approach and applied as a lens to the image-making of the research participants from TLC, a number of connections and parallels are clearly identifiable. The following themes were identified and discussed earlier in this chapter under the general heading of image-making as a transformational space.

- Ritually Altered States of Consciousness
- Emotional Gestures
- Accessing other Dimensions
- Gender and Sexuality
- Abstraction

- Animal Images
- Style and Identity
- Image-Makers as Appropriators of Transformational Knowledge and Power

The overall interpretation that emerges from these perspectives is that the image-making of the research participants involves people gaining access to what might be termed a 'transformational ritual space'. In this people (some more clearly and successfully than others) become something of their own shamanic beings, achieving through their image-making effects and experiences which are central to some forms of ritual (e.g. soul flight, transformation into animal or therianthropic forms, vortex images, emotional gestural communications, access to 'spiritual domains, and in varying degree altered states of consciousness). Given that many people also report increased well-being in association with their image-making, the idea of there being some basic link between the processes which lead to an increased sense of well-being, and the processes which enable shamanic healing to occur seems justified.

Moreover, ritual and image-making both appear to systemically harnesses, through time, some of the basic properties of how the evolved brain iconically and indexically constructs solipsistic meaning and informs action. Ritual and image-making enable these individual capacities to be 'transformed' into culture, and the fashioning, through time, of novel and sharable 'currencies of thought'.

CHAPTER SEVEN

IMPLICATIONS

This final chapter looks at aspects of this project that can be carried forward to inform relevant educational policy and debate, arts practice, further related research, and further development of a systems theory relating to consciousness change. The title for section 7.1 is 'Adult Education and Inquiry in a World Experienced as Changing' and carries forward a number of themes introduced in chapter one which are discussed further with reference to the findings, analysis and interpretations. Section 7.2 then focuses more on the Outer Frame and the theoretical ideas relating to the 'systems' perspective. A more condensed theoretical model of consciousness change and meta-language development is presented which integrates the 'through time' perspectives based on the Upper Palaeolithic material with the 'distributed processes' drawn from The Learning Connexion material. Section 7.3 extends this to embrace the theme of 'Art as Inquiry' and outlines a field of inquiry into changing consciousness which has image-making at its core. This section also explores further the theme used in the second part of the title of the dissertation 'Towards a Methodology of Interconnectedness'. A Final summary of the implications is given in Section 7.4.

7.1 ADULT EDUCATION AND INQUIRY IN A WORLD EXPERIENCED AS CHANGING

In the following the themes: A Post-modern shift to the visual; The Creativity Education Dilemma; Adult Reorientation and Transformation; Art, Cognition and Consciousness; and Art as Inquiry are considered further.

7.2.1 A shift to the Visual

One core idea which prompted this project was a sense that there has been a massive expansion in engagement with the 'arts' in recent decades, and that in some way this may be 'adaptive'. This idea

can be placed within an even broader post-modern perspective which recognises a major 'shift to the visual' in how meaning is constructed and communicated, and therefore also how consciousness is experienced. In other words, any attempt to evaluate the relevance of research in The Learning Connexion context, should have at least one eye which looks to a broader cycle of change towards more visually intense culture. Three potential 'adaptive pressures' for visually orientated 'ways of thinking' are considered further here: information technology; environmental changes, and social change impacting on identity.

From a technological perspective, the digital revolution now places before us vast amounts of information compared with previous technologies. Given that through historical time we have come to predominantly be conscious in 'a speech-like' lineal fashion, the potential for bottleneck problems arise if we keep multiplying the amount of information that needs to be processed in this way. One solution is to divide information and 'knowledge' into ever more discrete domains so 'the load' is distributed and this appears to have been the main strategy over the last few hundred years. Another solution is to create meta-levels in how information is represented and used, so new over-arching forms of integration and coherence emerge. This process of diversification leading into meta-level linguistic reintegration is possibly one of the messages that can be carried forward from the Upper Palaeolithic.

New information technologies tend to be visual not only in what they produce but also in how they are used. A critical breakthrough in recent decades was the creation of the interface programmes between software and hardware (Windows by Micro-Soft for example). These enable the unseen computer 'language' to become 'transparent' within a virtual world of visual icons and indices which can be manipulated by anyone with a rudimentary knowledge of how to operate a computer. So while contemporary technologies may well be creating information bottle-neck and threshold problems, they also offer solutions to such problems by enabling humans to transform how information itself is represented and communicated. The 'windows' interface is thus arguably part of

a systems level meta-level response to a capacity threshold problem, which enables us to reorganise information into, and via, visual fields.

From the environmental perspectives numerous themes can be associated with a visual orientation. Climate change is now generally predicted to have a major if not devastating impact on the world's communities in this and following centuries. Indeed, if anything is likely to reshape how the species thinks about itself in relation to its habitat, it is likely to be a combination of impacts from environmental change, or, changes in human behaviour which are required to limit these impacts. Increased exposure to visual media about environmental and social effects will no doubt be central to people, generally, engaging with this issue. At the same time, just being exposed to images about the environment is likely to only be part of a process leading to possible meta-level change, and the identity perspective may be relevant here as well. Reaching back to Chapter Two material, it seems clear that individual humans have unconscious perceptual and emotional abilities for monitoring their relationship with their surroundings, but there does not appear to be any 'hard-wired' capacity for making collective judgments that something about the environment is 'good' or 'bad' other than what's immediately 'in it' for each of us. At the same time, this work suggests that when the right sets of symbols are created, our evolved capacities for self preservation may be able to be harnessed and used in new ways. Contemporary symbolic identities appear to be largely orientated around membership of a particular nation, race, ethnic or religious group, club, team, etc, with these clearly having a potential to unlock powerful and at times destructive emotions and energies in defence of these identities. A shift to a species and earth orientation in identity may unlock our primary emotions and energies in defence of such a meta-identity.

These views are of course somewhat speculative, and no particular time frame for their realisation is suggested here. Nevertheless, from the technological perspective it is possible that visual technologies are demonstrating a potential to capture the attentional, associational and emotional functions in developing brains in ways which may well be altering the ontogenetic trajectory in some

way. What points to this possibility is the observable ease with which successive generations of developing brains embrace and use new technologies, while older generations who were not developmentally imbedded in these, do not generally easily and quickly achieve the same mastery.

The identity perspective has also been at the centre of much discussion already. In brief again, image-making enables people to (individually and collectively) materialise representations of what is physiological and experientially unique to them, offering, both in our past and today, a means to *create difference from others and certainty of self.* Moreover, if this contributes to the experience of 'survival of self' and increased 'well-being' within the symbolic domain, *and* the symbolic domain is itself how we achieve the collective systems that enable biological survival today – then arguably, engaging with image-making should perhaps be seen as central to promoting 'fitness' within the symbolic domain.

Whether 'artistic' identity can be part of a pathway of change towards some more generally experience global, earth or species based identity can only be a source of speculation at this stage. What does seem to be on more solid ground though is the possibility that debates about the value of arts education generally, and the type of processes and experiences occurring in settings such as The Learning Connexion should include recognition of broader and largely self-organising change processes which impact on consciousness and how it is experienced. The theme of 'a shift to the visual' seems to capture and sum up this broader environment of change.

7.1.2 The Creativity Education Dilemma

From the highly condensed view given in Chapter One, Western education can be viewed historically as an organisational media *through which* both change and equilibrating forces influencing the meta-level languages of consciousness move, but that education itself has not been a particularly direct creative force in this regard. This is not meant to suggest that education has not provided a crucial link in the broader and deeper developmental and creative cycles emphasised in

this work – it clearly does, linking the minds of a percentage of every generation to current peak symbolic levels, thus giving such people the potential to appropriate, manipulate and change things at this level. Nevertheless as a generalisation, it is suggested that education essentially functions overtime as an instrument of some centralized power which is primarily concerned with transmission of the orthodox and the 'known'.

More recent changes have given rise to a rhetoric concerning the necessity for education to be able to promote creativity, this being seen as a premium attribute for individual and organisational adaptation in a world of rapid change. The creativity theme then is one that has emerged with different meanings and emphasis depending on where it is located within tertiary educational practice. What this touches on can be termed 'the creativity education dilemma' in education. Numerous researchers in the creativity field comment on this (see Cropley 2002 for an overview) and it concerns the degree to which 'creativity' can be enhanced through 'orthodox' organisational cultures and processes. Given the current high levels of accountability and central 'steerage' in contemporary tertiary education as well as the tendency to develop courses where the process and information engaged with, and how this is assessed, reflects small accredited modules, the overall result may well be an even stronger emphasis on replication of 'facts' even if these have 'just come to be known'. Creativity, on the other hand, tends to be seen as 'a risky business' that requires tolerance of the unknown, the making of mistakes, the crossing of boundaries, the gaining of multiple perspectives, the right to be emotional and to have 'a passion and courage' to seek what is novel (new, different) and effective in a particular context. Orthodox large scale highly accountable structures pursuing peak level agendas may function under overarching constraints that make genuine longer term commitments to personal creativity difficult (which is not to say they do not self-organise in 'pockets' when conditions are right).

Arts education through non-orthodox structures and unconventional practices are likely to have a certain attraction and logic as these 'naturally' align with certain aspects of creativity (see Eisner

2002:10). Certainly, in The Learning Connexion context, ideas about creativity 'itself' and its ability to be enhanced, sustained and transferred are a central aspect of the organisation's educational philosophy. In mainstream tertiary environments (i.e. Universities and Technical Institutes) the creativity rhetoric appears to be more discipline orientated, that is, concerned with creative teachers, engineers, researchers, musicians, and others who can drive and accept innovation within their specific but ever changing fields.

There is therefore something of a structural divide as things currently appear, with TLC locked into and perhaps, increasingly vulnerable, within a private vocational training sector which must justify its funding through certain levels and types of instrumental outcomes (employment, transition to further education, course completion rates). This is something the school may well be hard pressed to do given the established pattern of low retention rates indicated in the findings. If justification for the public funding of 'alternatives' such as TLC within the spectrum of tertiary provision is needed, this is not likely to be based on claims of direct instrumental outcomes. Nor does a conventional cognitive development argument appear particularly strong, as it is maturer aged people with well developed 'thinking skills' who seem to want to engage the longest and strongest.

There appears little evidence at this stage that people are developing creativity skills and attitudes and transferring these out of the 'visual arts' domain into other fields. If anything, what can be seen is a pattern whereby life skills and history are brought as the main source of inspiration into peoples image-making, and it is in these areas of reframing previous life experience knowledge, and the development of increased well-being where implications for changes in arts and non-arts educational practice and further research seem most worthy of exploring further.

7.1.3 Adult Re-Orientation and Transformation

The Learning Connexion findings and the systems analysis invite a reconceptualisation of certain aspects of adult life-span education. It appears that a focus on visual arts learning in the style

provided by TLC can enable people to move away from any emphasis on 'learners' as recipients of new information and skill development services as a means of vocational reorientation, towards a process which involves exploring and refashioning existing knowledge, experience and their sense of self. It is thus essentially a transformational process, and perhaps this type of educational experience may now be emerging as a key need in a world that, on one hand will be experienced as changing, and on the other, offers increasingly longer and active life spans.

The average age of TLC survey participants was over 40 and the average age of the smaller research group was over 50, stages of life which now are seen as a very long way away from old age. The changing age participation in tertiary education generally raises questions about what may be effective for tertiary participants at different life stages. Rather than assuming that educational processes are age and gender neutral, it may well be that for some, the educational experience required in mid to later life will be quite different for those at a younger age. Engagement with image-making as a means of reframing self and re-orientating within (or without) the mainstream workforce, may well prove to be as, if not more effective, than 'retraining' for some.

What also stands out in this regard is the possible necessity for some educational environments to be seen as unorthodox in order for the 'ritual' aspect to occur, with this possibly central to people's image-making journey being transformational. Indeed, The Learning Connexion findings invite the possibility of seeing adult education generally in a new light, whereby the educational provider does not deliver learning services so much as creates the conditions for the emergence of what might be called 'developmental or creativity zones'. Such zones in theory may 'self-organise' when students participate with others within such environments, with these stemming at least in part from the organisation itself having a culture made up of conducive processes and attributes.

Part of the discourse which can be carried forward from the findings is to see that processes of reorientation and transformation are not limited to individuals, but these essentially occur with a

broader environment of ongoing organisational and social change. In other words, if individuals need periodic access to 'art making' as a personal transformational space, and, organisations and societies necessarily need to transform themselves in the face of change pressures, public investment in such processes may potentially be sound. At the same time a problem exists as things stand because the findings show that the numbers entering and leaving early in The Learning Connexion setting are high, and this may make it hard to justify ongoing public funding for such organisations given current political realities in education as touched on in Chapter One. It is not the purpose of this project to argue for the continued public assistance for the organisation so much as to draw attention to the distinctive and positive aspects identified and to suggest ways these might be developed and or researched further.

In terms of further research, the well-being and ritual aspects of maturer aged novice image-making perspective stands out as areas to refine and pursue further, with a reach that can embrace longitudinal strategies to track subsequent career and life changes and levels of personal well-being for research participants over a number of years. It is felt that a foundation for aspects of such a project has been achieved through this project.

With regard to recommendations concerning educational policy and practice, what stands out is the structural isolation between TLC as an unconventional part of the private vocational sector and the mainstream, which make effective levels of interaction, if not integration or cross-fertilization problematic.

7.1.4 Art as Inquiry

Where there appears to be a focal area for new debate which might contribute positively to addressing such structural constraints, is to recognise that 'inquiry itself' is a common ground between unconventional non-mainstream arts educational practice and main stream post-graduate education. The point was made earlier that Western Education has centrally been concerned with

the replication of the known and the orthodox. Where this view may fall short in the contemporary setting is where social change and education intermingle through research at the postgraduate level. As noted above in Chapter One, a major feature of more recent changes in education has been a massive expansion in postgraduate programmes, many of which embrace development of research skills and projects. Sullivan (2004) suggests that much contemporary research is 'disciplined' in ways which restrict it to an illumination of 'the obvious' and therefore a maintenance of the status quo, and it therefore channels effort away from the potential to explore 'the possible'. This idea that inquiry should be concerned with 'the possible' is itself a facet of post-modern thought, and stems from constructivist orientations to the human mind that recognise that novel forms of cognition and consciousness must indeed be possible. In discussing 'trans-cognitive' and 'post-discipline research' Sullivan (2004:804) points out the difficulties of studio art practice being accepted as a form of research lie in it having 'the imaginative, intellectual rigor, and systematic inquiry of the traditional sciences'. The challenge here though, is not to reconceptualise 'art' as 'a science' but to recognise that they share a common foundation of knowledge generating and transforming processes which can be directed in different ways at different aspects of the world. Image-making can involve inquiry into emotion, memory, attention, perception, abstraction and symbol construction associated with an in-depth examination of life experience. Moreover such inquiry intrinsically stems from how 'the self' is (or becomes) conscious of such phenomena, and it is in these somewhat intangible areas of aesthetics that discipline based social science struggles to get really close to. This is of course a point many arts educators have made over many decades (See Chalmers 2004). Putting aside what appears to be a more general emphasis on arts based inquiry primarily needing to be concerned with arts educational practice (e.g. Sullivan 2004) the thrust here is on seeing such inquiry and social science eventually coming together with complimentary methodologies that connect to common 'peak' or trans-disciplinary areas of interest. Higher or symbolic consciousness is clearly such an area of interest because its systemic complexities make it out of reach of any one discipline.

7.1.5 Art, Cognitive Development and Consciousness

In this project the relationship between art and cognitive development has been approached from a systems vantage point which links novel forms of cognition with novel forms of consciousness brought about through the interaction of culture and our evolved neurology. Rather than focusing on individual cognitive development isolated to a particular time, the emphasis has been to look for distributed processes occurring across any one time creating potential cognitive effects through time. With this framework in mind, only looking at isolated artists and isolated works of art really does not make too much sense. Rather it is better to see individual artists and their works as contributing to 'waves' of energy as well as 'particular' phenomena which impact on other things through time. In this view, technology, the environment, identity, and the making of 'visual culture' are considered interdependent interweaving phenomena which, through complex self-organising processes enable symbolic systems to emerge which enable us to exploit: our evolved natures; how we perceive the world around us; and the developmental plasticity of the brains during ontogenesis. In Section 7.2 below a more condensed model of the thinking about these processes is presented. This is following in Section 7.3 by discussion of a model of image-based inquiry which may be integrated into a trans-disciplinary approach to pursue aspects of the systems theory further. A summary of the main discussion, research and policy implications considered through this chapter is then given.

7.2 EXTENDING THE SYSTEMS THEORY APPROACH

7.2.1 Integrating Distributed and Through Time Perspectives

The key idea here is that aspects of Upper Palaeolithic Image-making give insight into 'through time' processes while The Learning Connexion findings gives insight into distributed processes influencing cognitive development and how consciousness is experienced.

7.1 A Developmental-Creativity Model of Changing Consciousness

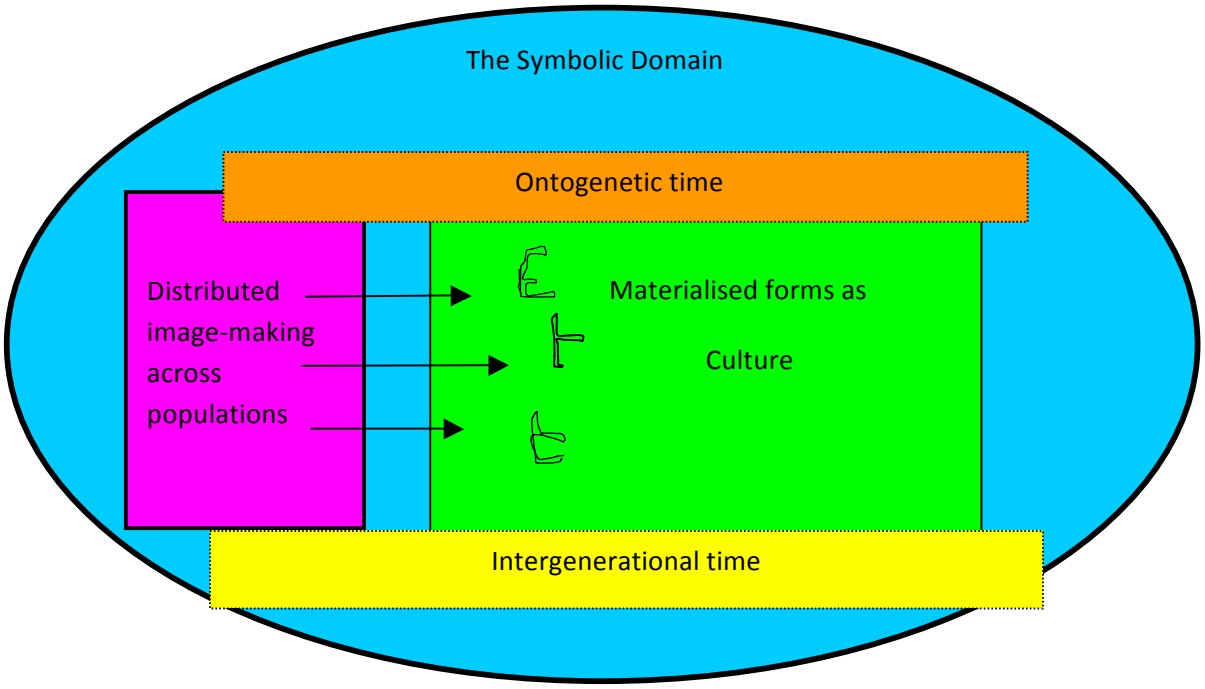
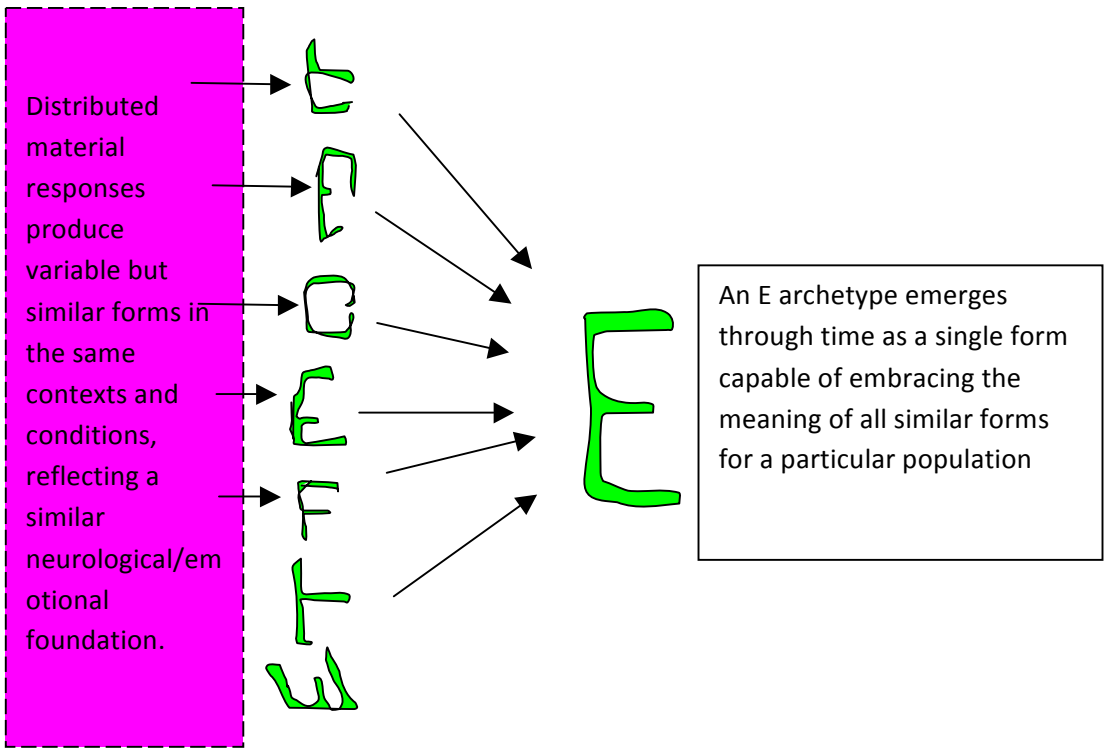


Figure 7.2 Archetypical Forms Emerging From Distributed Activity



The through time and the distributed processes provide a structure for the model in Figure 7.1 above. The figure indicates, in addition to these dimensions: ontogenetic time; the presence of material culture itself and the encompassing symbolic domain within which these other elements interact. In terms of the distributed processes, the core idea is that: given similar environmental conditions coupled with evolved intelligences of some sort, while there will be some variability in material manifestations (actions, images, sounds and signs) there will also be some common features occurring within the distribution of responses.

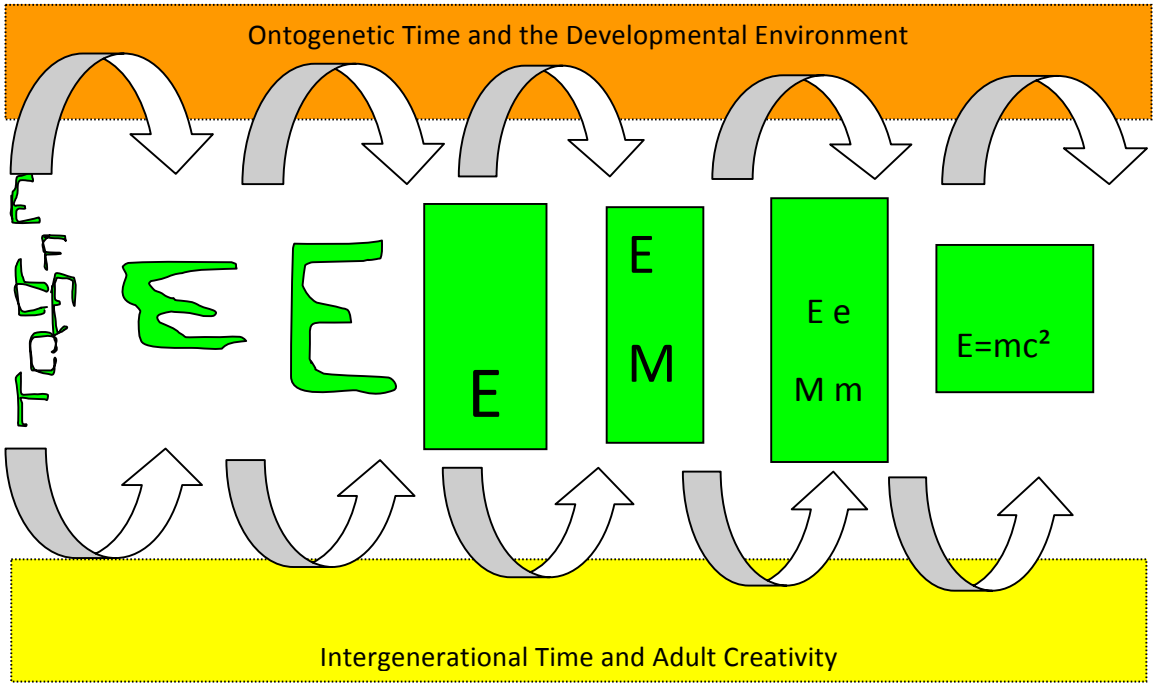
It is the (largely subconscious) identification of the common features through intergenerational and ontogenetic time, which allows the formation of archetypes, or standardized forms, which provide cultural currencies of thought in relation to particular things, events and settings for a particular population. This view harks back to the views expressed by Zeki (1999) in chapter three, that the visually dominant brain searches for constancies in the chaos of possible environmental perceptions, but the emphasis here is on this occurring within the symbolic domain. In Figure 7.2 the thinking about this process has been reduced down to (for example) an 'E' form as a kind of 'archetype', which might also be characterised as an emotional-meaning 'bit', materialised in some form as a gesture, a movement, a mark, or a sound.

7.2.2 Meta-Language Development.

Figure 7.3 then adds the developmental loops occurring through ontogenetic time, which involve the abstraction processes and the eventual crossing of a 'collective' developmental threshold and emergence of meta-languages based on sets of abstracted symbolised archetypes. The conception here is that iconic and indexical 'clues' which were distributed across material forms gradually condense into explicit 'symbolic' forms and sets of symbolic relationships. This 'symbolic' level can then be used and experienced as 'something in itself' based on a density of meaning that is now directly accessible to an individual's consciousness, indeed, constitutes the contents of

consciousness which can be worked with by manipulation of the symbols themselves. Mental operations once trapped in a solipsistic mind have, firstly, become materialised as implicit and distributed forms within culture, and then transformed again into a more complete 'syntactical' form. This is then accessible for individual appropriation during ontogenesis, and then further manipulated by creative 'adults'. We do this through 'conventional' language, but also, *now*, through the 'meta-languages' of dance, music, visual-art, and of course the languages of science and technology. Indeed, all domain defined human activities (cooking, sport, work, academic disciplines etc.) have the potential to generate meta-languages for participating populations.

Figure 7.3 Abstraction of Archetypes to Symbols and Meta-Languages.



This perspective builds on two core ideas relating to language that have been advanced throughout the dissertation. Firstly that 'language' is essentially a distributed collective capacity which draws on the brain as a whole, and secondly, that the brain has an intrinsic plasticity which allows shifts in brain organisation via 'top down' cultural clues, when the clues are sufficiently abstracted and the environmental conditions are right. An important connection with this process

has already been noted within the Inner Frame, this being that the abstraction process is clearly reflected across participants works, some more than others, but a fairly common feature. In other words within any group engaged with the transformational operations involved in material creation, some people are likely to be inclined as part of their 'style' towards abstraction. Abstraction is of course well represented across 20th century and contemporary visual arts, but it is also a feature in many other periods and contexts through historical time, particularly within indigenous societies where the 'abstracted art' was once, inappropriately, considered to be 'primitive'. In other words, the abstracting aspects of how human symbolic consciousness unfolds appear to be intrinsic to 'art' if we look at this as a distributed as well as a through-time phenomenon. It is thus hypothesised that abstracted elements of once more complete forms are continuously being created and offered up into the symbolic domain – little 'bits' of neurological processing that are transformed and off-loaded into novel material forms, with these potentially contributing to an eventual crossing of thresholds in consciousness and the emergence of a new meta-levels of comprehension.

It is tempting perhaps, given the way the model is presented above, to fall back into a lineal cause and effect conception of the processes occurring here, with one thing occurring after another. It is considered more accurate to approach the model as intrinsically systemic, involving interwoven processes that at their various levels occur simultaneously. In the scheme of things being proposed here - archetypes, abstractions and meta-language formation all continually feed back into a broader fabric of clues, intuitions and rituals which reshape areas of the symbolic domain, which are then also ritually 'fixed' once more into an apparent equilibrium expressed in particular currencies of thought.

Parallels with Piaget's conceptions of individual cognitive development are on offer, but the emphasis here is on the foundations for individual development of meta-language capacities deriving from conditions created *in culture* and through the collective nature of the symbolic domain and its elaborating sub-domains. This of course reaches out once again to the developmental-

creative conceptions of Vygotsky (cf. Sawyer et al 2002), but it is suggested that a synthesis between Piagetian and Vygotskian perspectives – often seen as irreconcilable approaches – lies in recognising that the developing brain itself has a plasticity which enables its structures and operations to be modified in response to changes in the *symbolic* environment.

This process is implied by the use of Einstein's relativity equation which was used in Figure 7.3 above. In Einstein's context, the meta-language elements fashioned into consciousness via production of archetypes and the abstraction process, were eventually appropriated within the symbolic 'sub-domains' of science and physics as they existed in the later half of the 19th century, and were part of Einstein's ontogenetic environment and eventually part of the structure of his cognising mind. It was then his creative 'adult mind' that could refashion these into his novel conceptions of the powers of the universe. The reason for using the symbols which came to make up Einstein's relativity theory is to make the point that the processes which enable the shift from iconic, to indexical to symbolic cognition do not belong to either art or science, but are fundamental processes, occurring through time, which underlie all symbolic systems of knowing.

7.3 IMAGE BASED INQUIRY INTO CHANGING CONSCIOUSNESS

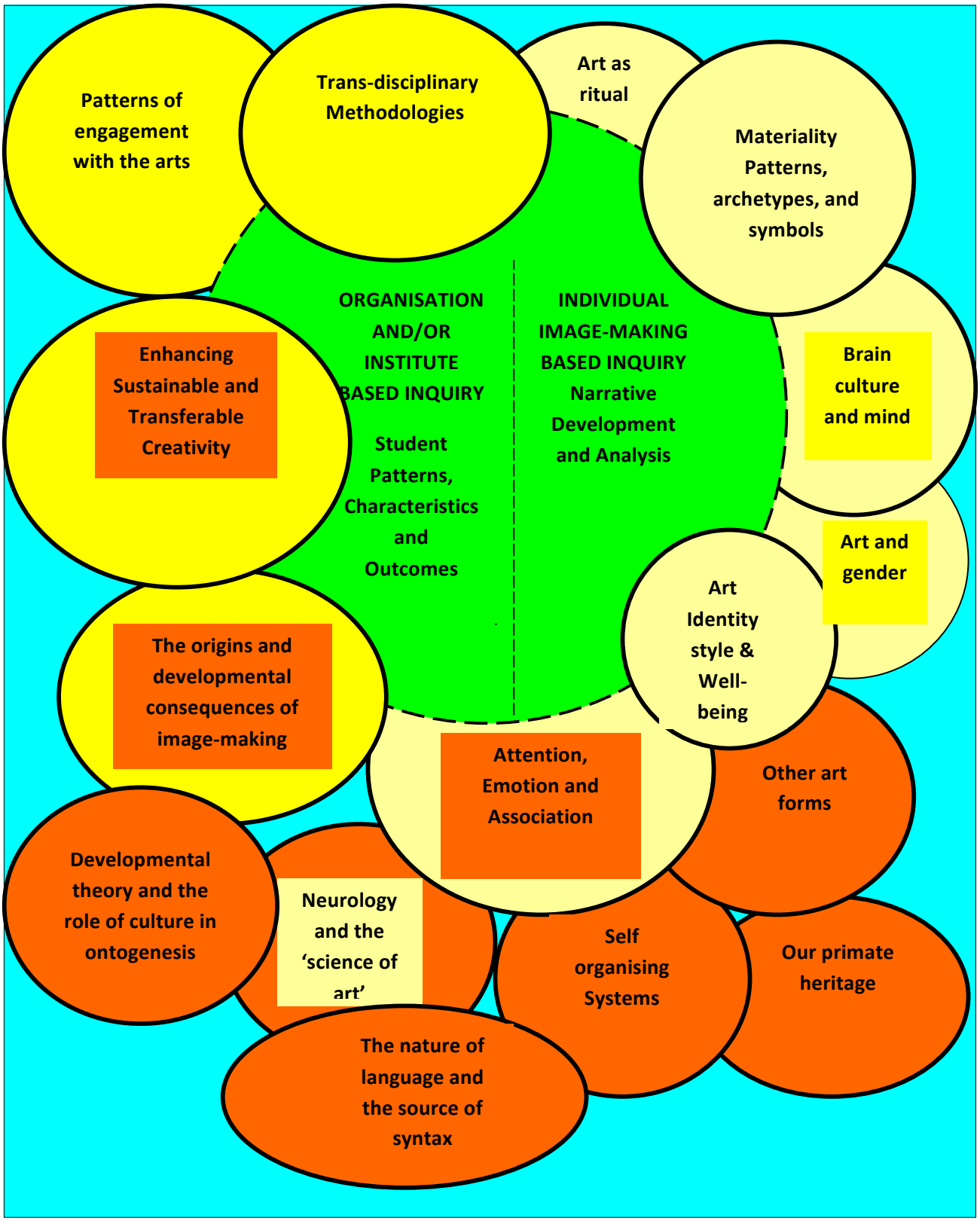
In this section a model for an image-based research process within a larger field of inquiry into consciousness is presented. The ideas put forward below are done so for two main reasons. Firstly, they represent a logical 'next step' for this project, which is to more explicitly engage image-making by image-makers as a means of researching aspects of personal development and consciousness change. Secondly, these ideas require bridges being built, at least at the postgraduate research level between mainstream and less orthodox educational structures, and are therefore also about promoting discussion which reaches towards a very different type of tertiary system than that which currently exists in New Zealand.

7.3.1 Core and Extended Aspects of an Image-Based Field of Inquiry into Changing Consciousness

The heart of the idea here is the explicit embedding of research processes within environments such as TLC, which may not only align with learner and organisational objects, but also contribute to a broader research enterprise. Figure 7.4 below articulates the potential scope of such a field, which is defined along the lines of: seeking to illuminate the interrelationships between the arts (and image-making in particular), adult development and creativity, and the ongoing reshaping of human consciousness.

The core of the field is the green area at the centre of the figure, which itself is divided into research associated with the activities of 'students' and research associated with the activities of the organisation. In the student area, image-making is the primary focus and builds from the insight that this inevitably explores and represents something of a narrative about the artist and their relationship with the world. From the organisational side, the focus is on continuing to map patterns of engagement and program progression, as well as reaching out to follow-up graduate outcomes. These are of course what art students and art schools already do, but the suggestion here is that these activities can also be drawn into an explicit exploration of image-making and its interconnections with consciousness change, in ways that are not only compatible with organisational objectives but may enable some of these to be achieved more effectively. Figure 7.4 also indicates a number of topic areas and the colours used reflect likely degrees of accessibility or connectedness to the green core. The lighter toned areas are seen as 'options' which student researchers may explore further directly through their own arts-based inquiry, with one of the stepping stone to these being the students own guided analysis of 'their narrative'. The yellow areas relate to organisational processes or longer term research interests by the organisation. The darker orange areas are perspectives and issues which are largely embedded in the work of other disciplines which interest in some aspect of consciousness. In the topic areas where multiple colours are used the intention is to suggest that multiple approaches and sources might be engaged.

Figure 7.4 Core and Extended Areas of Image-based Field of Inquiry into Consciousness Change



A brief review follows of the more important areas encountered through this project that connect into a research field on consciousness with the intention to provide something of an overall map for image making researchers who wish to reach further out into the field for general interest and as a way to inform their own research process.

7.3.2 Self-Organising Systems

There is a growing literature which focuses on concepts and processes of self-organisation at physical, biological and cultural levels. Other descriptors relevant here are dynamical systems, complexity theory, systems theory, chaos, emergence, and autopoiesis. While these have not been pursued in depth in this work, symbolic consciousness can be seen as reflecting self-organising processes which enable new levels of capacity to emerge out of the dynamic interaction of lower order elements which make up 'a system'. Looking more closely at this area may help strengthen the general 'systems' orientation adopted in this work. Suggested readings are: Abraham & Gilgen (1995), Georner (1995, 2006), Gleick (1988), Johnson (2002), Lemke (1999), Maturana & Varela (1992).

7.3.3 Attentional, Emotional, and Associative Systems

It has been argued that it is the brains attentional, emotional and associative functions working in concert, which appear to provide the interface, or the bridge, between brain and culture. That there is a high level of integration *and* accessibility to cultural influences here is largely an assumption (given certain premises) but this orientation was not explicitly encountered in the literature indicated. This is not that surprising perhaps, given that neuroscience generally seems to side-step the role culture plays in top-down restructuring of neurological functioning. Nevertheless, the lighter yellow background colour in figure 7.4 indicates that this is another area where some work could move ahead through direct image-based inquiry, with this also connecting with the 'science of art' theme (Ramachandran et al 1999) as discussed in Chapter Two. In particular the 'fuzzy logic' and

'peak shift' (and related) perspectives offer avenues that could also be explored more directly through image-makers working in concert with neurologists and evolutionary psychologists. Turner's (2000) *On the origins of Human Emotions: A Sociological Inquiry into the Evolution of Human Affect*, was another particularly useful work in this context. This has a focus on human emotions but recognises the essential interconnectedness between emotion and the functioning of the brain as a whole within cultural contexts. Donald's *A Mind So Rare: The Evolution of Human Consciousness* has also been quoted numerous times throughout the dissertation, and his idea of the 'hybrid mind' (2002:157) where we have evolved as part 'analogisers with direct experience of the world' and part 'symbolisers', embedded in a cultural web has been a major stimulus for the orientation pursued through this project. For specific neurologically orientated articles see Arbib (2003) and for a more recent Cognitive Science perspective on how the brain creates our mental world see Miller (2000) in Frith (2007).

7.3.4 Materiality Approaches to Culture and its Relationship to Ontogenesis

The 'materiality' approach to culture introduced at the end of Chapter Two also have a common ground with ideas of cultural manipulation of attention, emotion, and association – but reaches out to neurology and developmental and evolutionary psychology from an anthropological standpoint. The materiality pathway is possibly a more conducive and accessible means to engage with many of these issues rather than getting too deeply immersed with neuroscience itself. The series of papers in *'Rethinking Materiality'* DeMarris, Gosden & Renfrew (2004) was a particularly useful starting point on these approaches, in particular from this see DeMarris (2004) and Renfrew (2004).

7.3.5 Human Primate Heritage

The nature of our primate heritage is another field which contributes important ideas to this work, but it is acknowledged that there is a range of positions here. One difficulty is that the study of contemporary primates is usually the basis for making extrapolations about our last common primate ancestor and what characteristics might have been passed down to us. Many existing

primate groups show strong areas of cooperation, particularly amongst females, as well as traits of individualism amongst males, but there is a great deal of variability between different primate species (see DeWaal 2001, 2006). Another area of interest is the cognitive abilities achieved by encultured primates, as animals brought up by humans within symbolically structured environments develop mental and language/communication abilities not usually found in 'the wild'. This adds support to the position that 'culture' and 'pedagogy' play a dynamic role in the emergence of new levels of conscious ability. (See Savage-Rumbaugh et al (1998) and Rumbaugh & Washburn (2003).

7.3.6 Gender and Symbolic Culture

The dynamics between the sexes appear to underlie the emergence of human culture and symbolism. See *The Evolution of Culture: An Interdisciplinary View* (Dunbar, Knight and Power Eds. 1999), *Thicker Than Water: The Origins of Blood as Symbol and Ritual* (Meyer 2005). These provide insights into how biology and culture function dynamically through gender and blood related symbols and rituals. See also Bem (1993), Gamble (2004), and Ingold (1997). Related insights come from *The Ancestress Hypothesis: Visual art as adaptation* by Coe (2003) who argues that increasing maternal investment was the catalyst for the evolution of modern human anatomy, physiology, and culture. While interesting viewpoints in themselves, where the pertinent gap lies in this area is not so much in terms of 'origins' but in the idea that there are continuities which are carried forward into contemporary contexts. While the findings give some support for this position it is speculative and this issue offers a focal area for more work.

7.3.7 Language and Syntax

The position advocated in this work is that 'language' can be understood as a distributed phenomenon, existing in culture as a whole, and comprises material forms and processes as much as specific forms of interpersonal communication. Related to this position is the idea that meanings flow through different forms to create multidimensional 'currencies of thought'. This idea, while

perhaps at odds with some branches of linguistics which privilege speech itself as the source of the modern mind, is a theme reflected in some literature. See A. Galaburda. et. al.(2002), Corballis (2006, 2002), Dunbar (1999, 1996), Hurford (1999), Knight (1999, 1998), Lock (1997) Wray (2002).

7.3.8 Other Art Forms

If space had permitted a greater focus on music in this project would have been included, because in many ways, it also offers a particularly enticing window into the facets which underlie brain, culture, mind and consciousness. 'Music' is also seen by some as playing a far more important role in the Upper Palaeolithic than is indicated in this work. In Mithen (2005) *The Singing Neanderthals: The origins of music, language, mind and body,* evidence for some type of music during the Upper Palaeolithic is indicated by what may be early types of flutes being made near the beginning of the period (See also Rudgley 1999). For connections between consciousness and music, see Gougen (2000, 1999) and Trevarthen (2002) is also a researcher with a particular interest in music. Another recent work to hand, *The Soul in the Brain: The Cerebral Basis of Language, Art and Belief* (Tremble 2007) is representative of a new wave of work, and has a particular focus on poetry and draws on contemporary brain studies. Dance and drama surely offer similar avenues and literature in these areas might be anticipated. Graffiti also is another area that offers a fantastic window into the themes of style, identity and the symbolization of power.

7.3.9 Creativity Education

It has been suggested that fostering creativity is a challenge for orthodox structures while unorthodox structures, which may have more potential for this, tend to be marginalised. The following literature provides a framework for pursuing this issue and creativity education more generally. Cropley (2002), Csikszentmihalyi (1996), Eisner (2002), Eisner et al (2004), Runco & Pritzker (1999), Runco (2003), Houtz (2003), Sawyer et al (2003), Sternberg (2003), Usher et al

(1997), Wolf (2001), Grierson & Mansfield (2003). For further insight into TLC's practices and philosophy see Milne (2008).

7.3.10 Consciousness as a Peak Level Focus

Understanding and exploring consciousness is essentially a trans-disciplinary endeavour, with many players now in this field. This perhaps signals momentum towards new meta-languages which will enable methodologies to reach across existing academic antinomies towards what Sullivan (2004) perhaps means by the term post-disciplinary research. The literature in this area is vast and growing, and the following is intended only to help with an introductory engagement: Dennett (1991, 2005), Ellis (1999), Frith (2007), Goguen (2000, 1999), Gazzanigna (1998), Greenfield (2000), Harth (1999), and Morgan (2003), Penrose (1991) for quantum consciousness, Ramachandran (2004), Ramachandran & Hirstein (1999) for art and the brain, Rizzolatti et. al. (2006) on mirror neurons and for consciousness more generally Hunt (1995), and the *Journal of Consciousness Studies*.

7.3.11 Methodologies of Interconnectedness

Any move towards trans-disciplinary fields of inquiry at some stage must overcome the problem of how different methodologies from different research traditions 'talk to each other' and this might be viewed as the challenge of interconnecting methodologies. The systems approach to consciousness is of course only a 'subsystem' within a broader fabric of interconnected phenomena within the universe that is constantly changing, and the Concept of a Methodology of Interconnectedness ultimately relates to this. In this regard Heisenberg's uncertainty principle has some relevance in relation to visual art and how it relates to consciousness, and also makes the point that being able to accommodate both through-time and distributed perspectives is surely an essential part of inquiring into what and how things 'change'. The uncertainty principle is based on light having properties of both a wave of distributed energy, as well as properties of a particle which are discrete and solid.

The dilemma stems from the problem of measurement and prediction in relation to such phenomena, because it is impossible to predict with absolute certainty *both* its speed *and* where it actually is (Susskind 2006). A metaphor is thus on offer here relating to both art and consciousness, as these appear as distributed 'wave-like' phenomena moving through time, brains, minds and cultures, as well as having a materiality which can directly impact and influence things.

If we push the interconnectedness theme a little further, it can be imagined that this metaphor may one day be shown to have some deeper substance to it. That is, connecting principles may well exist, but the meta-languages to reveal and engage with these simply do not yet exist. This is of course speculative but at some point in the future such languages may reveal that the 'ambiguity' and multiple dimensional nature of electromagnetic energy (light) is connected with: the fuzzy logic processing of perceptions in the biological world; how replication 'errors' in genes occur; and in how processing variations in human physiology contribute to cognitive 'styles' and 'personality'. The idea of there being fundamental interconnections and interdependencies between physical, biological, neurological, psychological and cultural dimensions, certainly does not originate in this work, and is pursued within many fields. What this project does promote is the view that research into and via image-making offers windows into aspects of this interconnectivity.

7.4 OVERVIEW

7.4.1 Further Research

The three areas of: narrative development; ritual; and increased sense of well-being through personal arts practice stand out as interrelated areas of research to refine and pursue further. In particular development of longitudinal studies which look at vocational and personal outcome patterns over a number of years following engagement with image-making may help firm up claims that engagement with art leads to sustainable positive outcomes. The gender, age and background characteristics of associated with enrolment with TLC also offer focal areas to refine and pursue

further, as the findings here reveal areas of marked difference which TLC might wish to build on in some way.

7.4.2 Educational Discourse and Policy Implications

The project offers numerous perspectives which can contribute to more general education and arts education discourse and policy development. The combination of age, gender and well-being findings suggest that current discourse needs to be broadened to recognise that effective educational processes for people in mid-to later life may be quite different for those making the transition into work or explicit career pathways for the first time. Given that periodic retraining and re-orientation periodically through the life span is likely to become a feature of educational and vocation life, focusing on well-being and the reframing of existing knowledge and experience may be as important for some as acquiring new types and levels of accreditation. What also stands out are the structural constrains which currently exist between organisations such as TLC and the mainstream. While this is no doubt a result of complex political agendas which have unfolded over the last few decades, some level of integration at a post-graduate level may mean that the benefits which unorthodox structures might confer are accessible to more participants and in a more cost effective way.

7.4.3 Improving TLC Arts Education Practice

While this project has not been directly concerned with arts educational practice, the findings do suggest areas that TLC may like to consider further. For example, the project not only revealed that image-making often involves a narrative through the body of people's work, but also that opportunities for people to talk in-depth about this narrative aspect was welcomed and seen as adding insight into themselves and the processes occurring through their work. Incorporating these aspects within the school's programme may be relatively simple to do and likely for some to 'add value' to their TLC experience. It could possibly contribute to improved retention rates at the lower

levels of the programme. The openness of the TLC programme as seen during the research period clearly suited some more than others. The age, gender, prior educational and career information gathered through the surveys is now also gathered at the point of enrolment by TLC itself, and could enable the organisation having some sense of the likely level of commitment people will have to the programme, and allow strategic options to be explored early for those more at risk of leaving at the lower levels.

7.4.4 Image-making and a Systems Theory on Consciousness

This project unfolded from the premise that the emergence and reshaping of symbolic consciousness can be explored through a 'systems' approach whereby 'the languages' or 'currencies' of consciousness are shaped by the interactions between the evolved foundations of human neurology and any existing 'culture' as a domain of symbolic realities. In this conception 'the mind' can be conceived as 'a bridge' which links and integrates these dimensions into the experience and the contents of consciousness.

This project also unfolded on the premise that insight into the image-making by research participants in The Learning Connexion setting coupled with a cognitive approach to image-making in our deep past could offer a viable research windows into the systems approach to consciousness. These two perspectives on image-making were then integrated into a systems model of consciousness change which embraced 'distributed elements' occurring in any one time providing the potential for 'through time' developmental effects on cognition and consciousness.

7.4.5 A Trans-disciplinary Research Field into Cognitive Development and Consciousness Change

This project reached the conclusion that image based research had the potential to contribute to a trans-disciplinary research field concerned with consciousness and how it changes and that this was a logical progression from research *on* image-makers to research *by* image-makers into consciousness. This project suggests that such inquiry can be founded on a recognition that 'the arts'

take transformational operations occurring in the brain, and literally places these in our hands and bodies, enabling us to do in analogous ways 'out here' what the brain is doing 'in there'- creating meaning and informing action. In our deep past, when such materialisations resonated perceptually and emotionally between brains, neurology was essentially transformed into 'culture', and the pathway to our capacity to intentionally create and use symbolic culture to reorganise how the brain itself functions and develops was created. While implementing such proposals may not to be something easily achieved in the short term, such a trajectory whereby 'art as a form of inquiry' can be interconnected methodologically with other streams of inquiry is something discernable on the post-modern horizon, and may well be taking us in the direction of 'post-disciplinary' research paradigms, in which distinctions between 'art' and 'science' may well in the end have little currency.

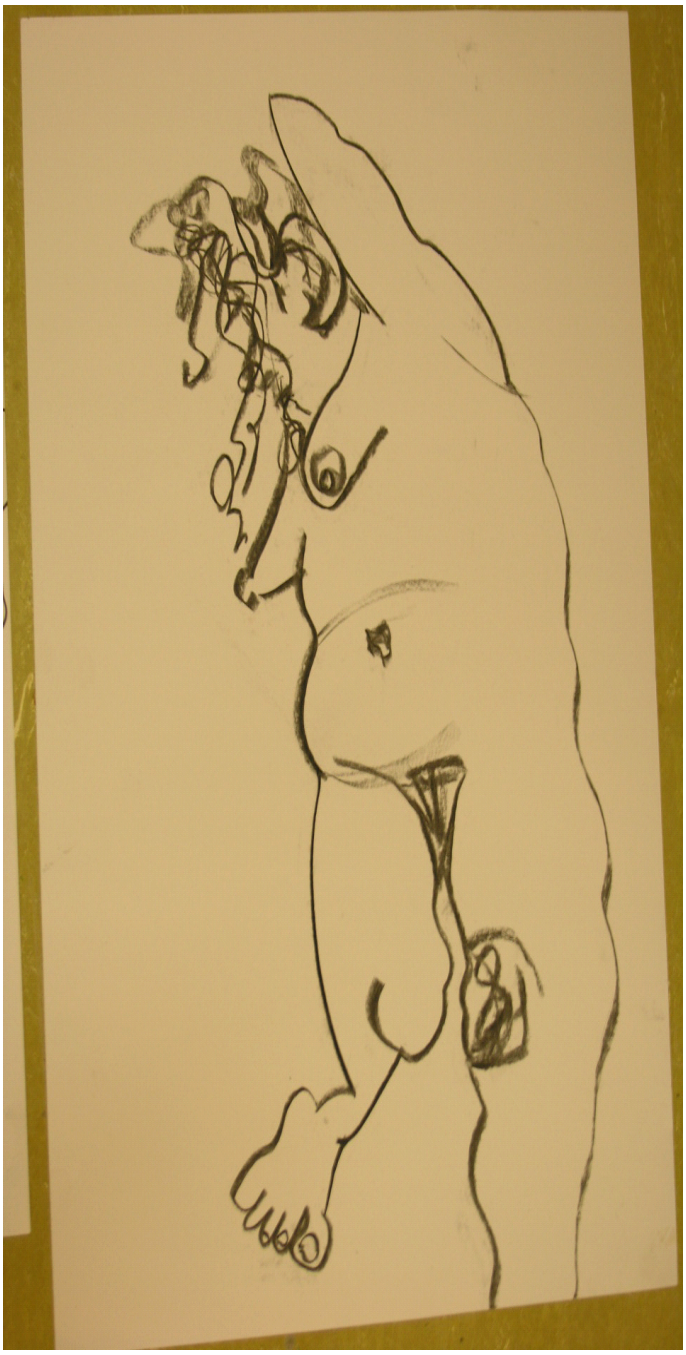
7.4.6 In Conclusion

The centre ground for all that is above is a conviction that what we currently call 'the arts' express the foundations of how we achieved the ability to create, function in, and continually reshape our symbolic environments. That is 'the arts' are part of what has enabled us to have the type of minds we have today, and part of what will enable the type of mind our species may have tomorrow. This argument is hardly conclusive, rather it 'feels' as if it is heading in the right direction based on the information gathered, the way it has been worked with, and the way the project has reached out to literatures which have common premises and interests. The theme of how 'art' and 'science' interrelate emerged as an important focal area to carry forward with the conclusion reached that at certain levels, these involve the same transformational operations occurring between brain and culture. Both are forms of inquiry, expressing in different ways the fundamental need for brains to make sense of perceived, experienced and imagined worlds. What we call science today has achieved a social bias towards certain 'currencies of thought' which emphasise rationality, logic, consensus and the use of certain sets of procedural rules. On the other hand the arts have a bias towards exploring meaning in relation to the experience of perception, emotion, movement,

association, memory, identity, self and culture - the very things that, working in concert perhaps made the symbolic domain and therefore contemporary science possible. To conclude then, one last image is offered with an accompanying comment. The drawing below is from Rosemary, the research participant discussed in chapter five with her life drawings and other works. The drawing speaks of integration between perception, action and intention captured in a unique 'currency' that identifies Rosemary from all others. The comments also resonate at many different levels with the view that as a species we are, still, 'a work in progress'.

Figure 7.5 Just Scratching the Surface

I feel like I'm just a beginner, scratching the surface … I feel totally happy and totally lucky that this place exists … Because if it didn't I don't know what I would have done … its actually saved my life, really!



EPILOGUE

In the prologue it was indicated that an important background to this project was my own involvement with various art forms and arts environments in roles as organiser, tutor, performer and researcher. This epilogue looks at how particular aspects of this project have influenced my own thinking in relation to my roles as a researcher, artist, and educationalist. The discussion relating to my role as a researcher begins with reflection on ways this project might have been done differently. This leads into my personal area of arts practice as a pianist. That discussion in turn reaches out to issues associated with art, education and a changing world, and I consider how the project has influenced my current thinking in this area. I conclude with some speculation about how the three roles of researcher, arts practitioner and educationalist might be drawn together in a future project.

In terms of aspects of this project which, given the experience, would have been undertaken differently, the narrative approach in particular stands out. I would have engaged with fewer research participants, in more depth (perhaps four or five people only) and committed myself to a much longer period of self-study – that is, to have really taken that journey and not just the first few steps. Being a co-participant in a smaller group I would have utilised group sessions with discussion statements (rather than just individual interview statements), to build the narratives. Such an orientation would also have shifted the process of inquiry from research <u>into</u> image-making, much more towards research <u>by</u> image-makers. In terms of future projects, as already suggested earlier, this approach is something that could be quite easily incorporated in The Learning Connexion programme and may greatly enrich the learning and transformational experience.

The survey approach was a very important component in this project, for it also met organisational as well as research objectives, and that mixture of agendas was a factor in gaining access to the research field. While such an approach did seem necessary for this project, with the survey findings providing a useful general level of insight into student characteristics and specifically the TLC experience, such information in the future could be gathered in a much more effective and

efficient manner through the administration systems of the school itself. Moreover, the more in-depth narrative strategy suggested above, with the researcher clearly working as a member of the school community, would not sit so well with the role of an independent researcher gathering data through surveys, as the relationship with the organisation and the research participants is fundamentally different in each case.

At the same time gathering specific insights into the relationship between arts practice and well-being is an aspect of such research that I would want to see continued and strengthened, and the surveys did prove useful in laying a foundation for this. For possible future projects I think there are ways this interest could be pursued that are also intrinsically embedded in the learning process and the student experience, and not such an imposition as the survey approach I used. In particular I see the possibility of self-assessment processes relating to personal development and well-being being built into TLC student self-evaluation processes. This could perhaps involve students identifying the criteria (a list of options could be provided) that they think are appropriate measures for them. This could also embrace opportunities for students to identify specific aspects of the school which they feel contributed or inhibited their development. Once again, the need as I see it, is to shift the emphasis from research on students to innovative forms of evaluation by students themselves in partnership with their school.

Yet as I say this I am also aware that one of the major issues identified at the beginning of this project was the necessity for educational research to embrace perspectives which reach well beyond education itself. I sense a tendency for educators to be too inward looking in their thinking about the educational process and what is good and desirable in this. One relevant example is perhaps demonstrated by the 2000 Arts in the New Zealand School Curriculum Statement (Ministry of Education 2000) which assumes that art education is a necessary and legitimate aspect of contemporary schooling. Yet, as revealed in discussions in Chapters One and Seven, this perspective can be questioned and I discuss this further below. At a practical level for the moment, what I see as

a logical next step is to encourage TLC to develop its own internal research capacity. The agenda for this, in my mind, would need to embrace on-going development of appropriate means of evaluating the student experience and learning processes and outcomes, while at the same time also reaching out to connect to other research fields, some of which will be outside education. TLC clearly has an ongoing interest in creativity research generally and creativity-orientated education specifically, but other related areas, such as personal development and well-being are also fields that TLC could both draw on and contribute to. I am certainly not suggesting TLC accept or attempt the 'whole package' as indicated in Chapter Seven (such a model really requires a major paradigm shift with the tertiary system as a whole anyway), but I am suggesting the organisation consider exploring these more modest suggestions further.

Another aspect of this project that has been the source of considerable reflection and discussion is its breadth. Without a doubt this project has been ambitious in its scope and it took some time to find a balance between what I called the Inner and Outer Frames. The suggestion came from numerous people that I should really just focus on The Learning Connexion itself, rather than pursuing the 'theory building' associated with research questions two and three. I do recognise that the broadness of the project did generate problems, such as the need to find a style and 'a language' about phenomena such as consciousness, cognition and symbolism, which could bridge between diverse perspectives. It also meant that sometimes it was difficult to keep track of the overall objective and it certainly took some time to fit the range of interests the project embraced together in a way that usefully addressed specific gaps within existing approaches to art, education, cognition and consciousness. While I now see the weaknesses inherent in such broadness, I also feel that looking for a broader and novel 'systems' perspective on how aspects of art interconnect with education, social change and human consciousness, *is the gap* that this project ultimately aimed to address.

The second issue addressed here relates to my own arts practice, as an extemporising pianist, something that I began to develop from the age of seven and have been doing ever since. While it has always been important to me, this project has made me much more aware of how central the making of my own music and sharing it with others has been throughout my life. I now see that it has offered me a means to develop a unique style that, over the decades has been strengthened, and has gained a power to move others. Moreover, this power (when it happens) comes from the music being my story, my narrative, captured in an emotional imagery (and I stress this idea of imagery) embedded in a fabric of patterned sounds and rhythms and the silences in between these. It alters my state of consciousness, it transforms me, and at times offers access to other realms and the means to travel within these. From the narrative perspective then, it is my thing, my trick, my line, and in one way or another reaches out to who I am and all that has happened to and for me, and I can only imagine I will be doing it, when I can and want to, for the rest of my life.

I recently heard, in relation to the experience of playing and listening to music, the phrase 'we *are* the music' which seems to capture the essence of the musical experience for me. What I now also sense is that the creative processes which integrate many ingredients in me so that I do indeed 'become the music', are reflective, indeed part of, the self-organising processes that underlie the evolutionary journey from a primate mind to a distinctly human form of symbolic consciousness. Put another way, I can now feel that 'my art' is, however infinitesimal, part of a broader wave of energy moving through time, which has the potential to reshape human experience.

My engagement with music resulted from an investment by my parents, my mother in particular, who used her own music in her teaching work with 'intellectually handicapped' children. Music was used by her for many different reasons, such as a means to help people who often had severe physical disabilities to develop muscle strength and co-ordination, but also often just as something from which people seemed to naturally gain pleasure. My mother, like many of her generation,

believed an opportunity to learn music (or dance, or drama) was an essential part of growing up and everyone in my large family received private music lessons.

Yet fifty years later, of the surviving members of my family, I am the only one still making music. This is also reflected in my own experience as a music tutor, where out of every 100 children brought by their parents to learn music (not just with me) only a very few will likely be playing as adults. Moreover, I suspect that for this 'very few' the role of 'the educator' beyond the very early stages is largely a matter of encouraging, supporting and inspiring a developmental journey which is largely self-driven by the students themselves.

I sense many parallels between aspects of music and the ideas explored in relation to image-making. One source of experience that comes to mind involves the music sessions I would enjoy in Australia, whereby people with a common interest in Irish and Scottish 'folk' music would sit in a group, usually in a pub, facing each other as they made music. In these groups, sometimes involving upwards of twenty people, more accomplished players would play along side the less experienced and the novices, who would listen, and watch intensely other people's hand movements (giving clues to chord changes and the rhythm patterns) as they picked out bits of the tunes. If they already knew the tune being played, the challenged would be to keep up with the pace set by the leaders. Alternatively people might just play along with a bass accompaniment or an underlying drone. In other words, everyone, irrespective of ability or experience 'could be the music'. The developmental/creative zone concept discussed in Chapter Six in relation to image-making seems a particularly apt description of what occurs in such music making sessions.

Without a doubt, this project, coupled with other insights into aspects of music making and learning indicated above, suggests to me that mass education involving the teaching of arts practice is, irrespective of the form involved, problematic for a number of reasons (I am not talking here about the subject of art history, or any study about 'the arts' but the teaching of the practice of a

particular art form). Discussion of the creativity education dilemma in Chapters One, Six and Seven for example identified the problem of orthodox structures promoting and teaching unorthodox behaviour and belief. This project also strongly suggests that engaging with image-making over time involves the creation of ritualistic transformational spaces, where powerful emotional experiences occur and which at times involve implicit or explicit sexual material. A major problem then perhaps exists, given that many contemporary mainstream institutions may be required, if not by law, then by public or parental expectation, to avoid or limit such experiences, especially at the school level. Another problem with practical art education is that it is not really like 'other' subjects' as it is 'unbounded' in its possibilities. Paradoxically perhaps, but for me it is in this direction, of recognising that the arts are not easily disciplined and structured as subjects, that the educational and developmental benefits of arts practice may primarily lie. That is, arts practice offers a space where one can step outside programmed orthodoxy and the replication of 'the known'.

At the tertiary level of education there may be more room to manoeuvre in terms of the factors which constrain arts education at the school level, but possibly only really at postgraduate levels and in areas where high level of self-direction are possible. Given that 'self-direction' really is one essential element in the relationship between contemporary arts practice and well-being, the educational strategy of TLC of providing a very open and supportive environment and a programme where self-direction is paramount is quite appropriate. The problem here is that TLC, at this stage at least, needs to justify its funding on levels of course completion and the learning and vocational outcomes which result from people enrolling with the school, and not from indications of improved well-being. Therefore, for many reasons, practical arts education within the education system, which leads on to major identifiable outcomes, appears problematic.

Yet this project clearly adds weight to the idea that the benefits of personal arts practice in terms of improved well-being may be extensive. It does not necessarily make people 'nice' or 'well-off' but it does seem to offer a powerful source of integration and identity based on what is unique to a

person, something that may increasingly be a necessity in a changing world. What this project also suggests, in terms of supporting personal arts practice as a transformational process, is that 'visual art' is a particularly accessible medium for personal creativity and development, very open to anybody at any stage of life. Moreover, the systems perspective indicates that there is probably a necessity for some sort of organisational container, 'the cave', the 'creator and manager of the developmental/creative zone', 'the community' which not only provides the opportunity but also the signals which enable people to commit to a transformational journey via their art practice. I think TLC is a particular good example of the emergence an organisation that, because of its unconventional nature, has been able to draw together a community of practising artists who have been able to form a learning community based primarily on arts practice. Some members of this community work as tutors alongside novice artist members who are attracted to that environment, and who learn by 'doing' and working with those who are more experienced.

Is TLC then some sort of model for the future of arts education (if not education itself) more generally? To my mind TLC certainly heads in the right direction, creating the potential within a broader tertiary environment for the conventional to productively rub up against the unconventional, but in practice, at this stage, there are major structural limitations to this. Notwithstanding this, the arts in general appear alive and well, flourishing, finding a place in more and more homes and hearts. That they are marginalised, as many claim within mainstream education, may well be true, but this may also be a blessing in disguise, as well as probably an intrinsic feature of a system which by its nature is an instrument of the state. The 'arts' on the other hand offer the means of constructing and exploring the unique self, (or selves) arguably an important means of counter-balancing the necessary restrictions and impacts of the mass systems which make the contemporary social world possible.

This is not meant to suggest that orthodox educational and other structures should not be involved with the arts whenever possible. What I am suggesting is that opportunities for practical

involvement with the arts should indeed be an essential part of the educational process in the contemporary world – but the real issues in my mind are not how mainstream education can achieve this itself, but how to achieve effective interaction between state controlled educational processes on one hand and the open-ended self-driven world of the practising artist on the other.

Given these views, what then of my roles as researcher, musician and educationalist in the future? While numerous 'next step' projects have been mentioned at various stages above, my inclination at this time is to try to draw these roles together in some way, with my own music being the main focus. The project I have in mind centres on a programme of extemporised music which I have been developing over a number of years, and involves a series of public performances of this. I also envisage that over time, these could also become open to participation by other interested musicians. The research component could have multiple perspectives - recordings could track development of the music itself, and I also envisage a narrative development process which would capture the mental images generated and emotional experiences of each performance for my self and other participants. The research process would also reflect upon learning processes and outcomes and the factors influencing these. Such a project feels to me to be a natural beginning of another journey of inquiry that this current project has made possible, and I think the following words by T.S. Eliot (from Little Gidding, Quartet No. 4) capture the essence of such journeys, and are therefore an appropriate way to conclude this project:

> *We shall not cease from exploration*
> *And the end of all our exploring*
> *Will be to arrive where we started*
> *And know the place for the first time*.

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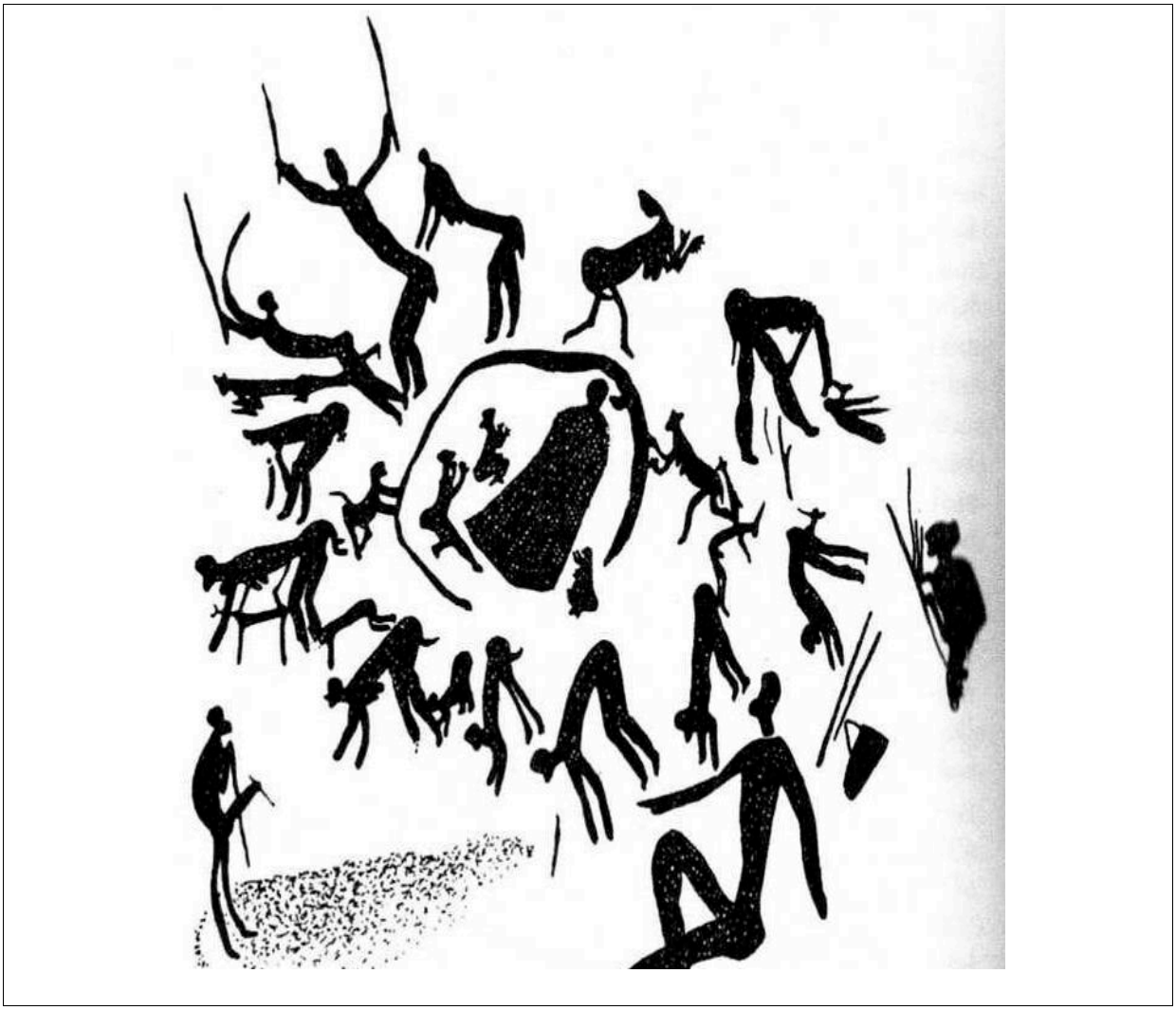
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APPENDIX 1

Chapter Three: Upper Palaeolithic Figures and Tables

Figure 3.1. The Eland Bull Dance



'Wrong sex/wrong species/wrong time': Southern San Rock painting, Fultons Rock, Drackensberg Mountains, Natal, South Africa. (redrawn after Lewis-Williams 1981: fig. 10.) The image depicts a young woman undergoing her first menstruation ceremony –the 'Eland Bull Dance'. The young woman is shown enrobed within the circular outline of her special menstrual hut. In ritual cognition she is both gender reversed and species reversed. She herself is 'The Eland Bull'; around her dance 'eland cows' playfully engaged in copulation with her. Note the 'eland tails' of the female dancers and the barred penises (indicating ritual sexual abstinence) of the males (Knight 1999:244).

Figure 3.2 The Hohlenstein-Stadle Therianthrope

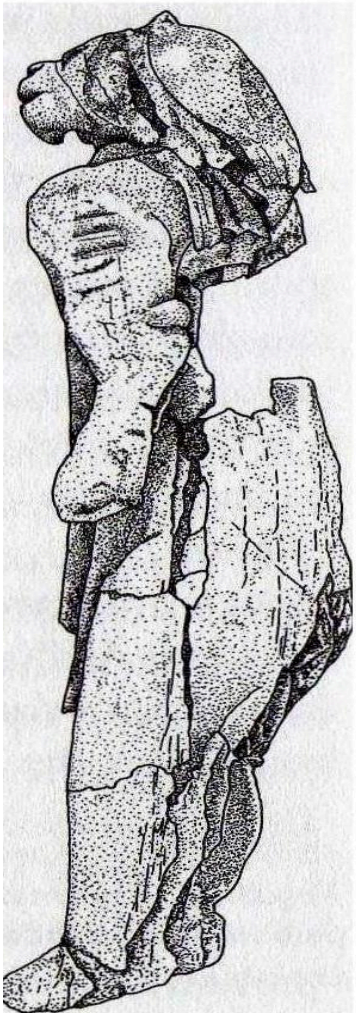


Figure 3.3 The Abi Blanchard Lunar Calendar



Figure 3.4 Venus of Willendorf



Figure 3.5 The Lascaux Dying Man 'Narrative'



Table 3.1 Entoptic Images

ENTOPTIC PHENOMENA			SAN ROCK ART		COSO	PALAEOLITHIC ART			
			ENGRAVINGS	PAINTINGS		MOBILE ART		PARIETAL ART	
	A	B	C	D	E	F	G	H	I
I									
II									
III									
IV									
V									
VI									

From Lewis-Williams in Conkey 1997.

Table 3.2 General Overview of Upper Palaeolithic Art

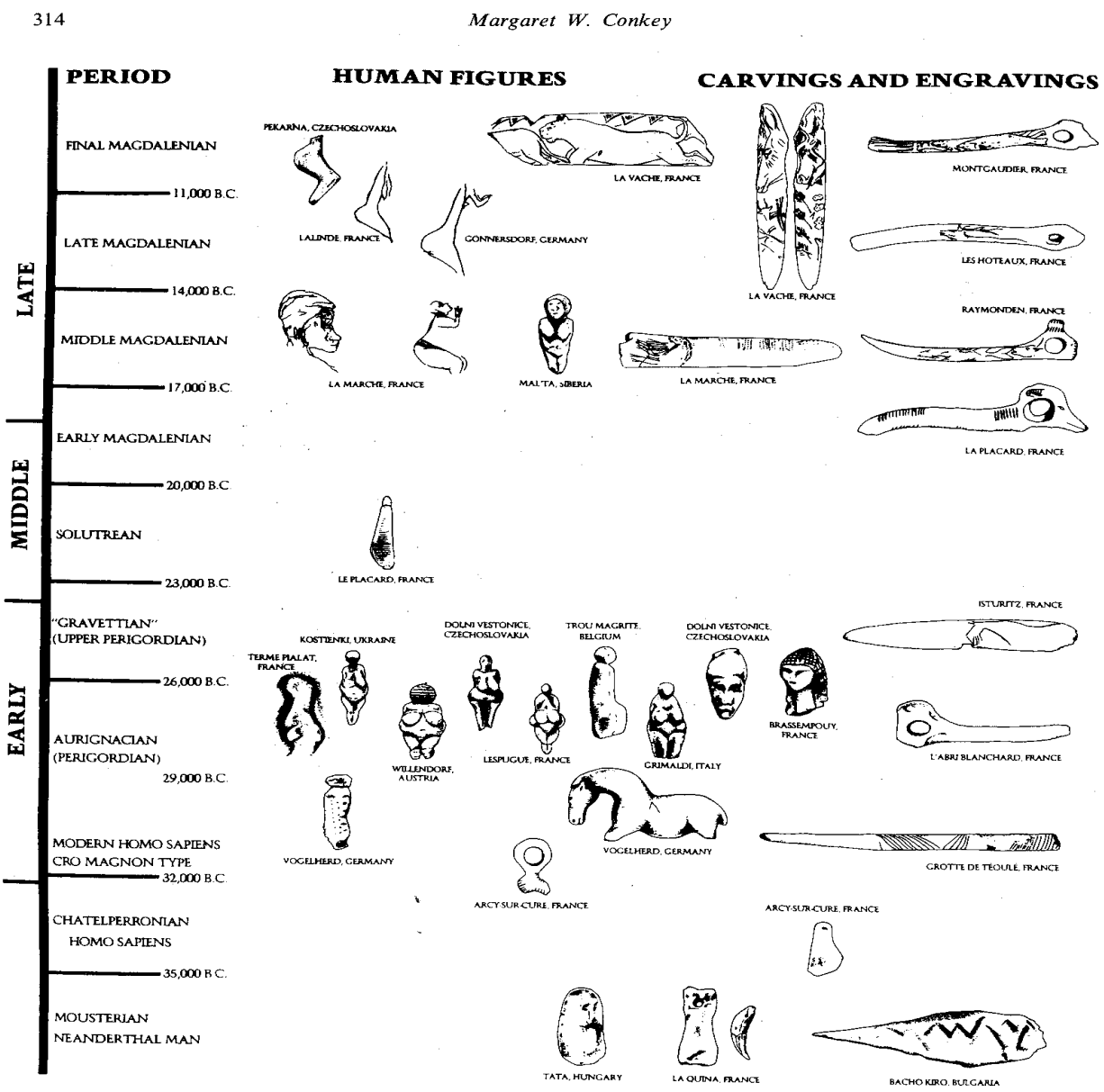
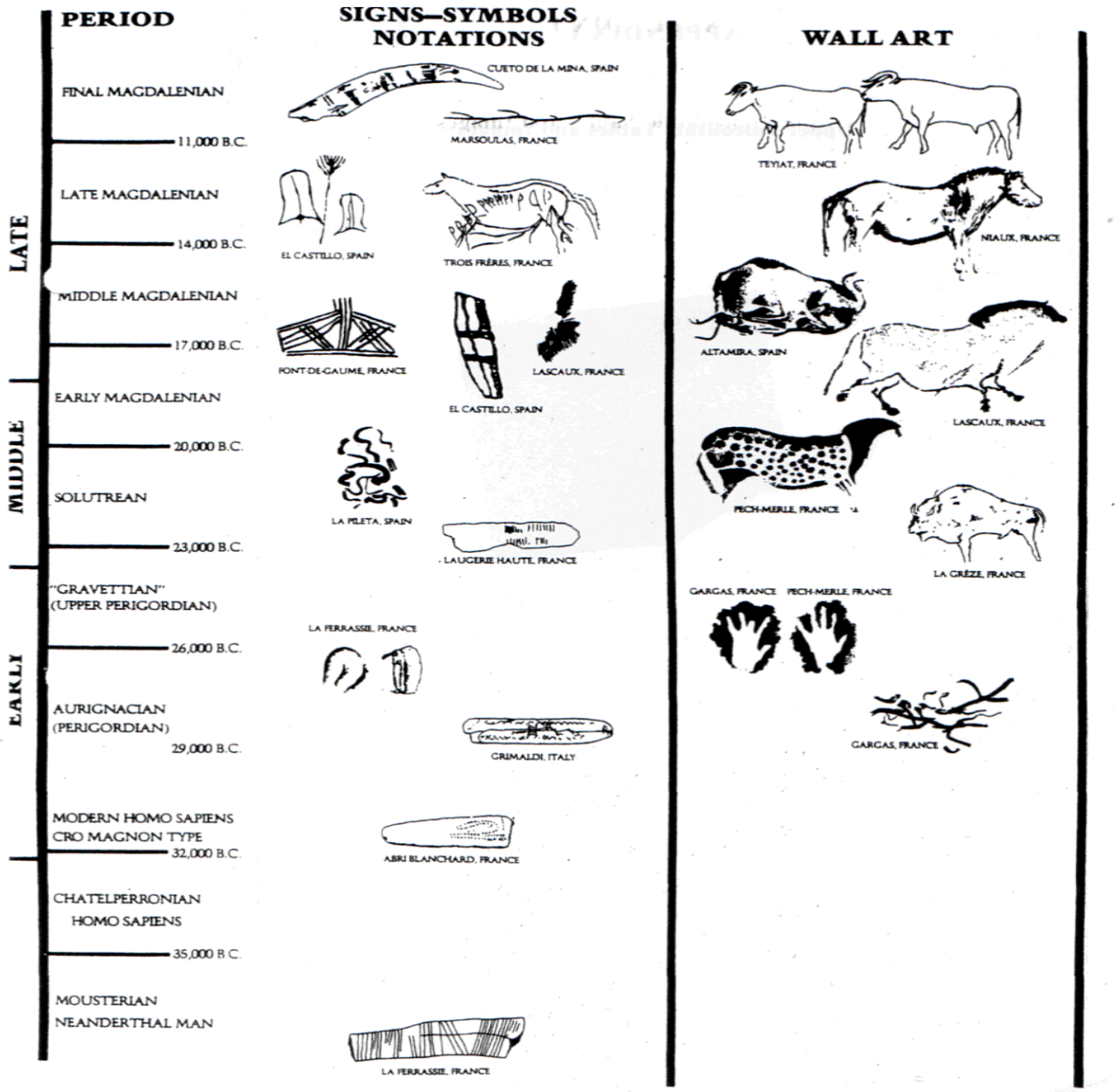


Fig. 11.3 A general chronology of the Upper Palaeolithic. Based on a style chart/chronology prepared by Dr Alexander Marshack for the 1978 *Ice Age Art* exhibition at the American Museum of Natural History. Reproduced courtesy of Dr Marshack.

Table 3.2 General Overview of Upper Palaeolithic Art (Cont.)



2

Table 3.3 Signs and Symbols

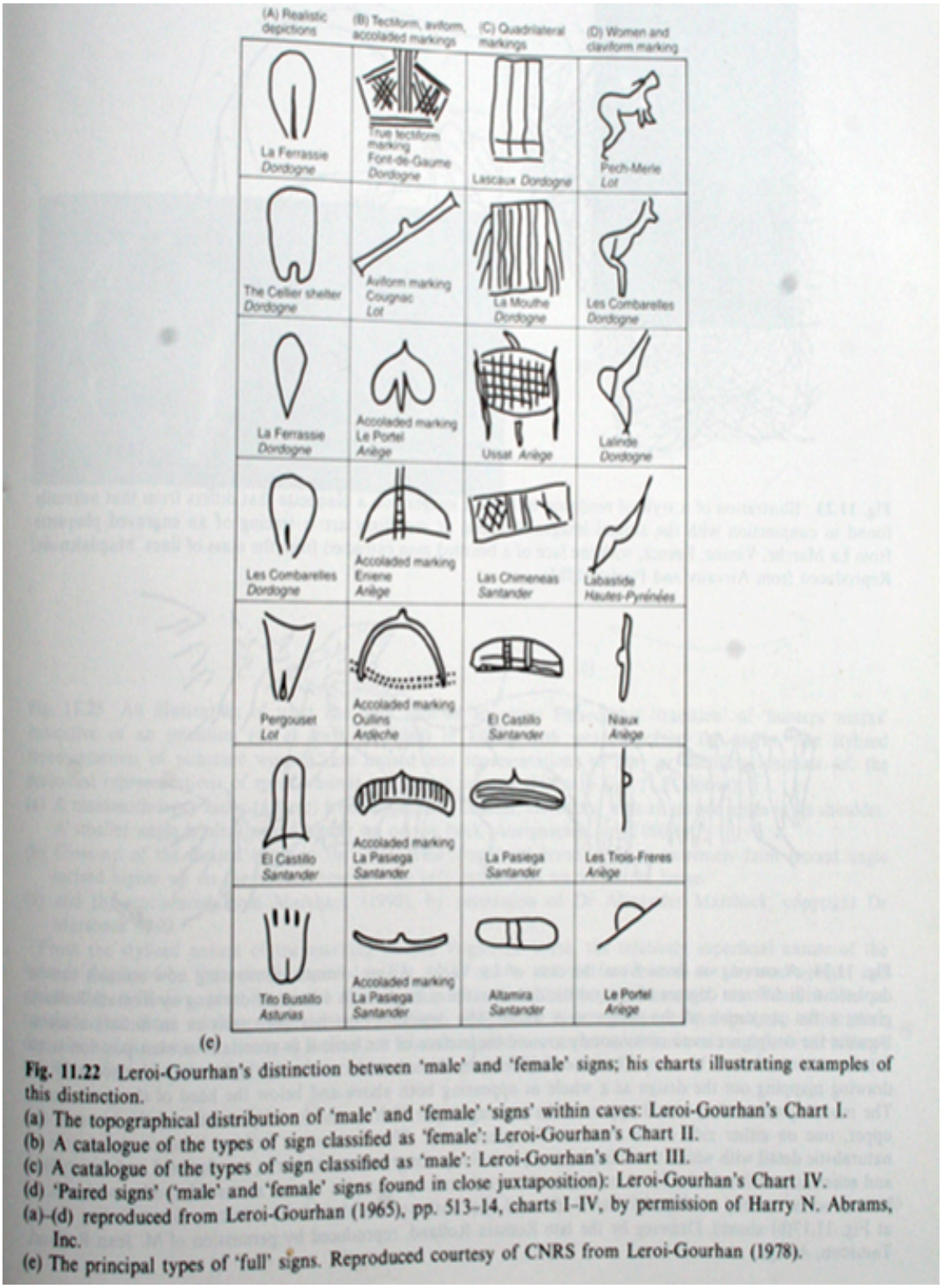


Fig. 11.22 Leroi-Gourhan's distinction between 'male' and 'female' signs; his charts illustrating examples of this distinction.
(a) The topographical distribution of 'male' and 'female' 'signs' within caves: Leroi-Gourhan's Chart I.
(b) A catalogue of the types of sign classified as 'female': Leroi-Gourhan's Chart II.
(c) A catalogue of the types of sign classified as 'male': Leroi-Gourhan's Chart III.
(d) 'Paired signs' ('male' and 'female' signs found in close juxtaposition): Leroi-Gourhan's Chart IV.
(a)–(d) reproduced from Leroi-Gourhan (1965), pp. 513–14, charts I–IV, by permission of Harry N. Abrams, Inc.
(e) The principal types of 'full' signs. Reproduced courtesy of CNRS from Leroi-Gourhan (1978).

APPENDIX 2

Chapter Four: Survey Forms,

Interview Consent and Confidentiality Forms,

Information Sheet and Question Guides

Permission to Use Name, Images and Interview Statements

4.1 Completing Student Survey Form

THE TLC ONSITE COMPLETING STUDENT SURVEY

Dear Student

Congratulations on reaching this stage of your course. This survey should only take a few minutes and will help us evaluate our programmes and to plan for the future. We are also required to provide information to the Tertiary Education Commission about patterns of student progress and learning outcomes, and what sorts of things people generally intend doing after studying with TLC. No specific information about you will be provided to any other person or organisation, and the information provided to the Tertiary Education Commission will only be statistical in nature.

- All you have to do for most questions is tick a box.
- To change an answer, cross out the tick given and tick another box.
- Return the survey to Programme Support or leave it at reception.

Please do not do this survey if you will be continuing with the Diploma programme, but please do it if you intend going on to Stage Three.

If you are unsure of your plans, or would like further information about this survey you should contact programme Support. This survey is very important to the future of TLC and we greatly appreciate your help at this time.

Kindest regards

Name	Postal address Email address

Tick the upper course level you will have completed when you finish studying with TLC.

Foundation	Stage One	Stage Two	Stage Three	

What was the main type of study you did.

Extra-mural full-time	Extra-mural part-time	Onsite full-time	Onsite part-time

Please indicate approximately how long you were enrolled with TLC.

Tick the appropriate box.

Male	Female

If you feel ok about it please put your age in the box or indicate an age range you are in.

These questions are to do with learning outcomes.

While at TLC, I feel that -	**Strongly Agree**	**Agree**	**Only a little**	**Disagree**
I developed skills for making art **in a range of media.**				
I achieved the skills to undertake work for **professional exhibitions and commissions**				
I developed **a good understanding** of the importance of art and artists in our culture.				
I achieved a **practical understanding** of how the visual arts industry works.				
I developed a portfolio of work that is **suitable for exhibition.**				
My portfolio **is suitable to support** applications for jobs.				
My portfolio **is suitable to support** an application to study art elsewhere.				
I improved my skills for finding information about things.				
I learnt **what is required** to set up as a professional artist.				
I **developed skills** for working with other people in the arts industry.				

This question asks you to give a single overall assessment of how valuable you feel the TLC programme has been for you. Please circle one box only.

Overall I found the TLC programme to be:	**Excellent**	**Good**	**Satisfactory**	**Fair**	**Poor**

An important outcome for some people during their time with TLC was the sale of their art at the school's or other exhibitions, and/or the receiving of commissions for work.

Tick in the box if you:	Sold 1 to 2 pieces of art work	Sold 3 or more pieces of art work
Received any commissions for art works during your time with TLC		

These questions ask you about what you now intend doing. Please tick the single most relevant item. If you intend doing something other that these please tick E and briefly describe what this is.

I now intend studying art at another tertiary institution.	
I now intend studying in a non-arts subject at another tertiary institution.	
I intend doing similar work to that which I did before TLC.	
I now intend to work and earn as a professional artist.	
Other (briefly describe)	
If you have already arranged or started further study with another tertiary provider, would you please state the name of that provider and the course you have chosen to do.	

These questions are about your decision to finish your studies with TLC at this time. Please tick the single most relevant item.

I completed to the course level I originally intended.	
I am finishing earlier than intended because I found that the course was not what I expected or wanted.	
My circumstances changed and I had to finish earlier than expected.	
I finished at a higher level than originally intended.	
Other (briefly describe)	

If you have already started or arranged employment, briefly describe the nature of this work here.

Very briefly outline any qualifications you acquired at anytime before coming to TLC.

These questions are about the things that may have changed or developed for you during your time with TLC. It is possible that for you some areas were well developed before you came to TLC. If this is the case, just indicate that no change occurred for that item.

While studying with TLC	**Strongly agree**	**Agree**	**Only a little**	**No change from before**
I came to realise what I wanted to do next in my life after TLC.				
A major personal problem or issue for myself was resolved.				
I came to see myself as an artist.				
I learnt to appreciate art and artists more generally.				
My feelings about myself changed in a positive way.				
I came to realise that making art is a way to explore ideas about myself.				
My artwork helped me explore my relationship with NZ.				
I came to recognise when my artworks were complete.				

I became more sensitive to environmental issues.				
I developed or regained greater confidence in myself.				
I became more open to new ideas				
I became more able to work independently				
I came to understand other people's points of view better.				
I learnt to trust and act on my intuition.				
I became more able to accept criticism of my work.				

If you have suggestions or comments to make about TLC, or this survey, please write them here.

Congratulations once again, and thank you very much for your assistance.

4.2 Graduate Follow-up Survey Form

THE LEARNING CONNEXION FOLLOW-UP SURVEY

Re: Follow-up survey

We are sending this survey to all people who completed studying with TLC during 2006.

It is very important that as many people as possible complete the survey. Everyone returning the survey within three weeks will go into a draw for a prize of $80 in art materials. There will be 3 draws so when you return your survey you will have three chances of winning.

The survey will only take a few minutes to complete and will help us evaluate our programmes and meet our reporting requirements to the Tertiary Education Commission. The information gathered will only be used for statistical purposes and will not involve us using any details relating specifically to you.

To complete the survey, please follow the instructions for each set of questions.

- If you change your mind about an answer, cross this out and make another mark.
- If you need help to fill in the survey or if you have any questions about it, please call me at TLC, and I will be happy to assist you.

When you have finished the survey please return it in the envelope provided for which no stamp is required. Thank you very much for your assistance and we look forward to hearing from you. If you need help with the survey, please call Annette at TLC on 383-4333.

Kindest regards

1. The items in the box below concern the most important outcome that may have occurred for you following your time with TLC. Please read through all the items first and then choose one. If you feel there are no items that apply to you but another important outcome occurred, you can describe this below

Do you think your time and experiences at TLC mainly helped you:	**Tick one only**
Secure employment related in some way to the arts industry?	
Secure employment not related to the arts?	
Go on to further tertiary level arts study?	
Go on to further non-arts tertiary level study?	
Set up as a self-employed artist, in your own arts related business?	
Set up your own non-arts related business?	
Undertake work as a volunteer?	
Have the confidence to travel overseas?	
Other (Give details in the box at 2 below)	

2. If you feel that your time with TLC has enabled you to go on to do something other than the items listed above, briefly describe this outcome here.

3. Describe very briefly any employment positions held since you left TLC

4. If you have enrolled in another tertiary educational institution since leaving TLC, please name the institution and indicate the nature of your studies.

5. These questions ask you to compare how some things are for you now compared with the time before going to TLC. You may feel you were well developed in some areas before studying with TLC. If this is the case just tick 'no change from before' for these items**.**

Compared with the time before TLC:	**Strongly agree**	**Agree**	**Only a little**	**No change from before**
Are you generally more relaxed?				
Are you more settled about where your life is heading?				
Do you feel more confident?				
Have you regained lost confidence?				
Do you now feel more connected with New Zealand as a place to live?				
Do you think you are now more open to new ideas and new ways of doing things?				
Do you think you are more tolerant of others?				
Are you more intuitive in your response to things?				
Do you now look for more personal meaning in the things you try to do?				
Do you think you are more imaginative?				
Do you now work more co-operatively with others?				
Do you think you are more committed to the things you work on?				
Do you deal with personal problems differently?				
Are you now more sensitive to environmental issues?				
Are you less troubled by a major problem or issue in your life?				
Do you consider you are now more analytical about things?				
Do you feel you are now able to work more independently?				

Are you now better able to put aside work that you have difficult finishing and go on to something new?				
Are you more interested in art and culture generally?				

6. These questions are specifically about any arts related outcomes that may have occurred since you left TLC. **Please answer all items.**

Since you left TLC:	**Regularly**	**Fairly often**	**Occasionally**	**Not at all**
Have you produced work for professional exhibitions or commissions?				
Have you produced income for yourself by selling your artwork?				
Have you been employed in anyway in the arts industry as a worker, organiser, artist, or as a tutor?				
Has any employment in the arts industry been full-time?				
Has any employment in the arts industry been part-time?				
Have you worked as a volunteer in the arts industry?				
Are you working in your own arts related business?				
Are you involved in an association or group of artists?				

7. If you have any other comments you may like to make about TLC, or how your life is going now, or this survey, please use the space below.

4.3. Research Group Participant Forms

4.3.1 Consent To Participate

Massey University

Wellington Campus
Private Box 756,
Wellington,
New Zealand
Telephone: 64 4 801 27
Facsimile: 64 4 801 269

Project Title

Doctoral Thesis Research Project.

CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5)YEARS

I have read the information sheet and have had the details of the study explained to me.

My questions have been answered to my satisfaction, and I understand I may ask further questions at anytime.

I agree/do not agree to the interview being audio taped.

I agree/do not agree to having my artwork photographed during the interview

I agree to participate in this study under the conditions set out in the information sheet.

Signature _____ Date _____

Please print your full name _____

PL Cotton Ph.D Research Project Consent Form – February 2004

4.3.2 Confidentiality Form

Massey University

Wellington Campus
Private Box 756,
Wellington,
New Zealand
Telephone: 64 4 801 2794
Facsimile: 64 4 801 2692

Project Title

Doctoral Thesis Research Study

CONFIDENTIALITY FORM

I Philip (Pip) Logan Cotton agree to keep safe and confidential all information concerning the research study entitled:

Assessing the Development and Transference of Creativity Skills

I also undertake to only use personal, organisational or sensitive information with the explicit permission of the people providing or responsible for that information.

Signature _____ date _____

Full name _____

Te Kunenga ki Pūrehuroa
Inception to Infinity: Massey University's commitment to learning as a life-long journey

4.3.3 Information Sheet For Interview Participants

Massey University

Wellington Campus
Private Box 756,
Wellington,
New Zealand
Telephone: 64 4 801 279
Facsimile: 64 4 801 2692

Project Title

Doctoral Thesis Research Project. 2003 - 2007

INFORMATION SHEET

Introduction

Researcher/doctoral candidate
Pip (Philip) Cotton
275 Peka Peka Road
Peka Peka
Kapiti Coast
Phone 04 293 5678
Email pipcotton@yahoo.com.au

Principle Supervisor Dr Marg Gilling
Department of Social and Policy Studies in Education
Massey University – Wellington
Phone 04 9012794 x 6662
Email mgilling@massey.co.nz

Type and purpose of the research.
The research project is a qualitative study involving in-depth interviews and the development of case studies with students from The Learning Connexion. This project will contribute the research component to a doctoral thesis, which examines the interrelationships between art, creativity and processes of individual and social development.

Researcher's Employment Status
The researcher is a self-employed development consultant and researcher in areas of adult education and community development.

Participant recruitment

Particiation
Participation in the study will be invited from completing students from TLC who match the selection criteria.

Selection Criteria
All potential participants will be on-site students who have completed a minimum of the Foundation and Diploma level courses, and, prior to TLC were in the workforce in fields not related to the arts.

Participant Numbers
Up to forty case studies from this target group may be possible in 2004 and 2005 based on a profile of completing students at the end of 2003. Up to 10 interviews are anticipated each term between mid 2004 and mid 2005.

Reimbursements
No reimbursement or compensation will be being offered to participants.

Discomforts and Risks
No discomforts or risks are envisaged for participants as a result of participation.

Project Procedures

Collection and Use of Data
The data to be used for analysis will be gathered through recorded interviews. Participants will be invited to review attitudinal, skill and knowledge changes they feel occurred during their time at TLC. Participants will also be invited to discuss artworks produced by them as TLC students, as a source of evidence for any changes and developments they believe have occurred.

Data will also be gathered through follow-up interviews six to nine months from the first interview. These will look for signs of transference of any changes occurring during the time at TLC to participant's circumstances at that time. Additional observational data will be also gathered through a period of participant observation over a minimum of one term during the first half of 2004. The researcher will also have access to data from TLC's Completing Student Survey.

Individual case studies will be established through analysis of interview transcripts, which will be transcribed by the researcher. Following the development of individual case studies, analysis of patterns, themes and content occurring across case studies will be undertaken. The findings of this process will then be interpreted with reference to a range of individual and social development theories and a series of propositions that have been formulated to guide the project.

Storage and Disposal of Data
All data gathered will remain in the safe keeping of the researcher until completion of the research project. It will then be stored in archival boxes within Massey University Department of Social and Policy Studies in Education storage facilities for a period of five years and then destroyed.

Access to Project Findings
A copy of the study findings will be sent to each study participant. The full research report will be available in Thesis copies held at Massey University.

Confidentiality
A confidentiality agreement is offered which provides assurances that confidential information relating to study participants, or The Learning Connexion and it's staff, will not be used without permission. Otherwise, if material relating to a specific participant's case study is to be incorporated in published material, pseudonyms will be used, and any information that can identify individuals and there circumstances will be withheld.

Participant Involvement

Participants will only be involved in the project through two interviews. It is anticipated these will take about one hour each.

Participants Rights

Right to Decline Involvement
All potential participants in the study will be invited to participate, and all people so invited have the right to decline involvement in the study.

Participants Have the Right to:
- Decline to answer any particular question
- Withdraw from the study at anytime
- Ask any questions about the study at anytime during participation
- Provide information on the understanding that no information identifying a participant will occur in any public material without permission
- Be provided with a summary of the of the project findings when it is completed.
- Ask for the audio tapes to be turned off at anytime during the interviews

Support Processes

While no support processes are envisaged as necessary, should any issues arise, advice in the first instance will be sought through Massey University counseling services.

Project Contacts

Participants are invited to contact the researcher and/or the supervisor at anytime during the project if any questions or concerns arise. The contact details are provided at the beginning of this information sheet.

Compensation for Injury

If physical injury results from your participation in this study, you should visit a treatment provider to make a claim to ACC as soon as possible. ACC cover and entitlements are not automatic and your claim will be assessed by ACC in accordance with the Injury Prevention, Rehabilitation and Compensation Act 2001. If your claim is accepted, ACC must inform you of your entitlements, and must help you access those entitlements. Entitlements may include, but not be limited to, treatment costs, travel costs for rehabilitation, loss of earnings, and/or lump sum for permanent impairment. Compensation for mental trauma may also be included, but only if this occurred as a result of physical injury. If your ACC claim is not accepted, you should immediately contact the researcher. The researcher will initiate processes to ensure that you receive compensation equivalent to that to which you would have been entitled had ACC accepted your claim.

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee: WGTN Protocol 04/05. If you have any concerns about the conduct of this research, please contact Mr Jerry Hubbard, Chair, Massey University Campus Human Ethics Committee, Wellington, telephone 04 801 2974 extension 6358 J.Hubbard@massey.ac.nz.

4.3.4 MUHEC Approved Interview Question Guide

MUHEC ATTACHMENT

FIRST INTERVIEW QUESTIONS

The questions and statements given below are best considered a guide that maps out the territory to be covered, rather than being an explicit question schedule. It is unlikely all interviews would follow the pattern below and the intention is to allow conversation to occur in a guided but reasonably open fashion. The questions in bold represent primary questions. The associated dot point questions will be used as prompts for elaboration and a check-list of progress. It is anticipated interviews will take up to sixty minutes, but longer or second interviews may occur if appropriate.

Preamble (Tape on)

The date is ... the time is ... and at the moment I'm interviewing X. Thank you very much for agreeing to this interview. Is there anything you would like to ask me about this interview before we begin?

What I would like to do is explore what has been important for you while at TLC, and some of the things that may have changed for you during this time. What I would also like to do is refer to your works that are here as the discussion unfolds.

When we talk about a particular work, would you mind describing it, and I will take a photograph of it as well. Are you OK with this?

- It is possible I may want to use other types of reproductions of your work in my research report, and if this is the case I will ask your permission to do so before hand, and ask how you would like that work presented and acknowledged. Is this all right with you?

Can we talk now about some of the things that may have changed for you during the time you have been a student at TLC?

- In particular, I'm interest in changes in attitudes, or any skills you may have developed, and changes in understanding and new areas of knowledge.
- What do you think has changed for you in terms of attitudes to things? For example, what about art, do you think about art differently now? What about other things?
- What about your attitude to yourself and to others, has this changed?
- Skills can include the way you work or interact with others as well as how you do your art work, or how you go about finding information to go into an art project.
- Do you feel that anything has changed for you in any of these ways? Do you do things now you didn't do before?
- Do you think any of these changes are expressed or explored in any of your works? Can you tell me more about that?

What about your ideas about the nature of life, the nature of society, and your relationship with the world. Has anything changed for you in this area?

- Do feel differently about yourself compared to before coming to TLC?
- What about your relationship with others here, how has that been?

- How important has the interaction with others here been?
- These ideas, did you think that before or has that happened more recently?
- These things that have change for you, why do you think this has happened?
- Are there particular things about being here at TLC that helped these things to happen? Can we talk a bit more about these things?
- That idea, where do you think that came from? Did you think that way before you came here?
- Are any of these ideas expressed in these art works?

I noticed in your Completing Student Survey responses that you indicated ...
- Do you still think or feel this way?
- Can you tell me more about these responses?

Your art works suggest the following ideas to me ..., how do you respond to these ideas?
- Do you think I am imposing a meaning here or are these some of the things you were working on through your art?

What about the things which motivated you to come and spend the time at TLC and do this art?
- Can you tell me about why you came to TLC, what's that story?
- What sorts of things were you looking for? What did you hope for?
- So why TLC particularly, what attracted you to this place?
- What were the important things for you in this decision,?
- What you were looking for?
- Did this decision come about slowly, or quickly?
- How do you feel about that decision now at the end of your time here?

What about your 'intuition', do you think you understand or relate to things now on a more intuitive, or feeling level?
- What I mean by intuition is that something 'feels' the right or the wrong thing, it fits, works, belongs, or the opposite, but it is a feeling thing and not a clear process of logic or consciousness. Like the choice of colour perhaps, or the shape of something that you find beautiful?
- Are there any works here that express intuitive ideas and processes? What about this work here, is this expressing some of the things we are talking about?
- Can you describe how you went about these works? In one go, or stop start, or in the middle of the night, that sort of thing?
- How do you know when a work is finished?

What about things at an emotional level. Making art and expression of strong emotions seem to go together at times, is that the way it has been for you?

- Are these ideas expressed in any of these art works?
- Can you tell me what it felt like to do these works?
- This work here, seems to have a strong emotional aspect to it, do you agree with that? Can you tell me more about that work?
- Is it finished?

- When did you know when this work was finished?
- Can you tell me more about how you did this work?

What do you feel about art now?
- Is it a way to come to understand more about yourself?
- What about others and the world more generally, has the process of making art helped you understand or relate to certain things, ideas, or places?
- What about sensitivity to environmental issues, has this increased at all?
- There seem to be some of these themes being explored in your art, is that correct?
- Do you feel you are an artist now? What does that feel like? What does it mean? Did you feel that way before TLC?
- What do you think is the importance, or role of art in society?
- Have you traveled? Do you think you will be travelling overseas in the near future?
- Do you think we all need to become artists in some way? Do you think this is happening?

What sorts of things have been important to you while you have been here?
- What sorts of things have helped you?
- What sorts of things have hindered?
- How do you feel about TLC, the tutors and the other students?

Before coming to TLC you had been working for a number of years, you were a ... Can we talk about that?
- What about your knowledge and experience from this time, do you value this now?
- Was coming to TLC about deciding to leave all that behind, or to build on it in a new way?
- Was coming to TLC from that background like moving away from the mainstream, towards a way of life outside the conventional? Perhaps a sort of 'opting out for awhile'.
- How would you describe the difference between that time and the time at TLC?
- Do you think any of these ideas are expressed in any of these works?

What is most important to you now? What is of most value to you in the way you live your life at the moment?
- What sorts of things about life have high meaning for you at the moment?
- Is this different from the time before coming to TLC?
- Are any of these ideas reflected in your art works?

What about the next phase in your life, can you tell me about that? What is next for you?
- Are you going back to what you did before, or does the future hold a different path now?
- What do you hope to be doing in six months to a year from now?
- What role do you think art, and making art yourself will play in your life in the future?

- How do you feel about me making contact in a few months and arranging a follow-up interview in six to nine months from now?

What about your experience of the culture of TLC? What I mean by culture are the prevailing patterns of belief and behaviour here, a sense of what is the appropriate thing to do? A sense of what the rules are? The 'way things are done' around here?

- What did it feel like for you here, compared with your working life – more free, open, or closed, lots of rules, or no rules?
- Did it feel to you like a safe place to explore things through art?
- What sorts of things made you feel that?
- Who made the rules here in terms of the making of your art?
- Did these things change overtime while you were here?
- Have you experienced other work and learning situations like this?
- What about being around others from different ages and backgrounds, the mixture of people here is very diverse isn't it? Was that important to you?
- Some people have described their time here like being in a community, or even like being in a family, do you have similar feelings?
- How would you describe the type of experience you have had here?
- Did you feel strongly linked to others in the classes you attended or did you really feel you were just working on your own?
- Did these things change over time here for you?
- We talked about 'intuition' earlier, did the ideas of working intuitively come from others here, the tutors? Other students?
- Can you think of other areas, attitudes, ideas about things, ways of working on your art that developed by working around other people here?
- Did someone specifically teach you that, or did you pick it up in other ways?
- Are the ideas we have been discussing here reflected in your art in any way?

Looking at your art works one more time again here. When you see them all together like this, do they tell some sort of overall story for you?

- How would you describe this collection of works now?
- What would you like to do with these now?

I think we are pretty well finished now. Thank you very much indeed for your time and sharing your work with me. I hope it has been a valuable experience for you as well. Do you have any final comments or ideas that come to mind?

4.3.5 Consent to Use Name, Images and Interview Statements

PIP COTTON DOCTORAL PROJECT
MASSEY UNIVERSITY NEW ZEALAND
2004-2008

PROJECT TITLE

Image-making, Personal development, Creativity, and Social Transformation: In Search of a Methodology of Interconnectedness

RESEARCH PARTICIPANT PERMISSION TO INCLUDE MATERIAL IN THE FINAL DISSERTATION.

Permission to use images as supplied **yes**

Permission to use interview quotes as supplied **yes**

Permission to use photographs of your self as supplied **yes**

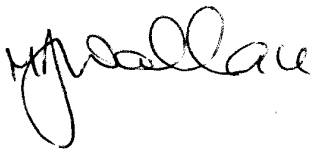
Permission to use your real name **Yes**

Suggested pseudonym if required

Your name Marlene June Wallace

Date 6th October 2008

Signature Marlene June Wallace

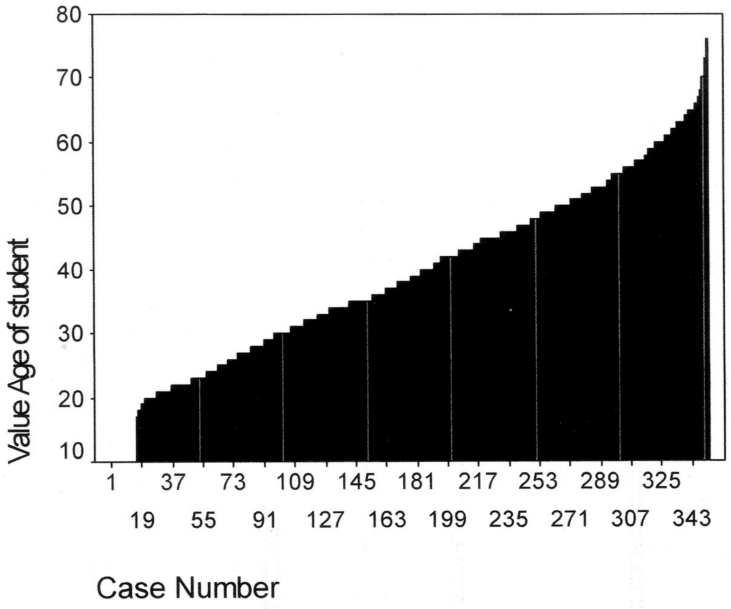


Please return ASAP to:pipcotton@Yahoo.com.au
or C/- The Learning Connexion, PO Box 9811 Wellington NZ

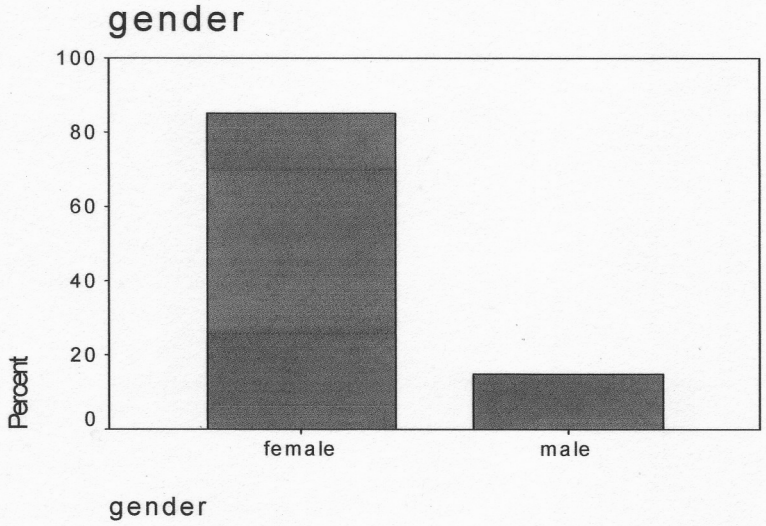
APPENDIX 3

CHAPTER FIVE SURVEY GRAPHES AND TABLES

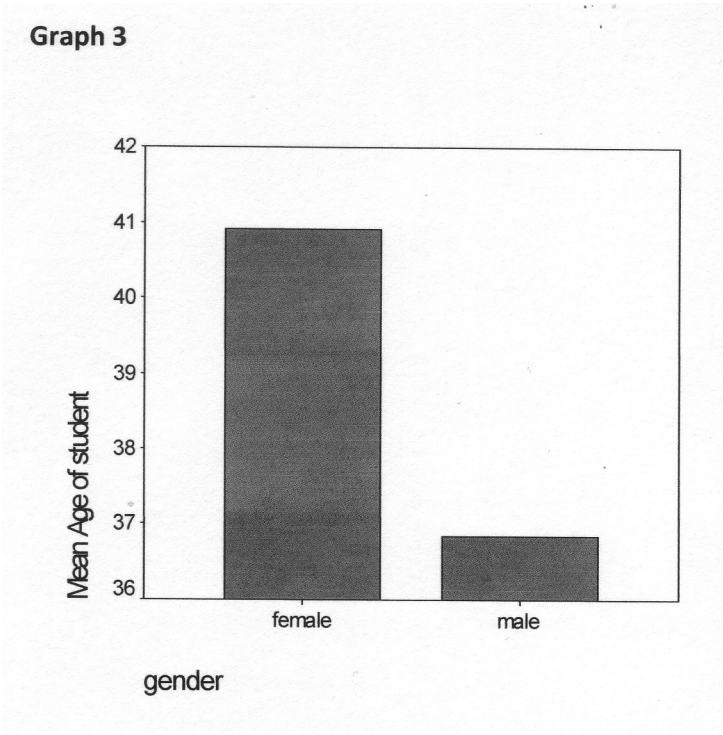
Graph 1



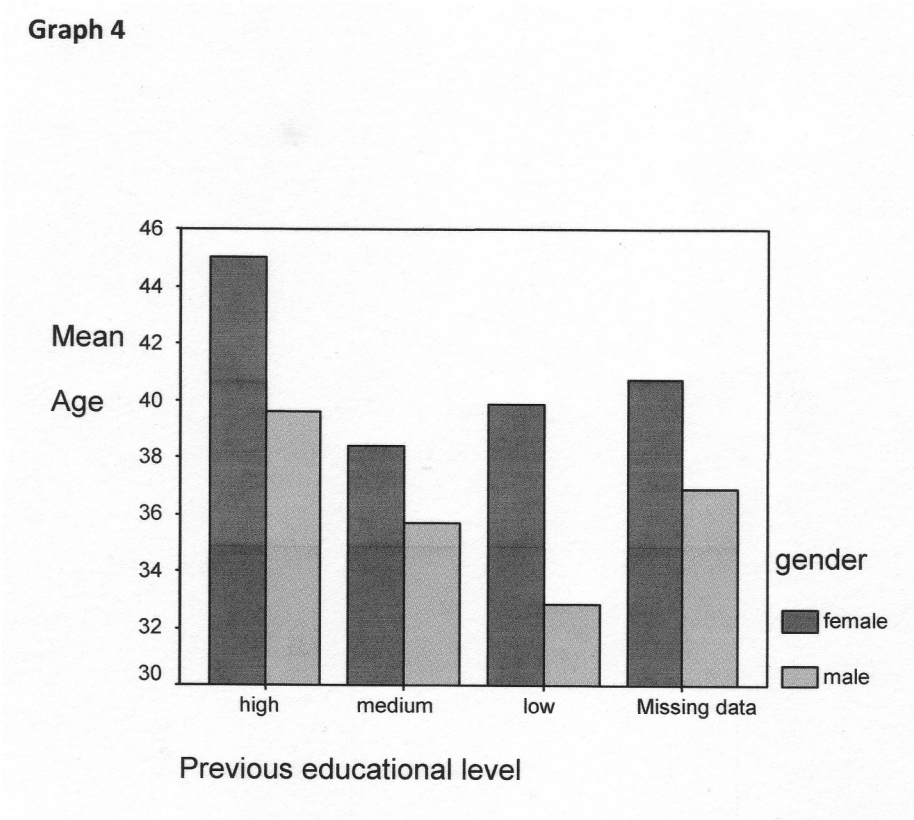
Graph 2



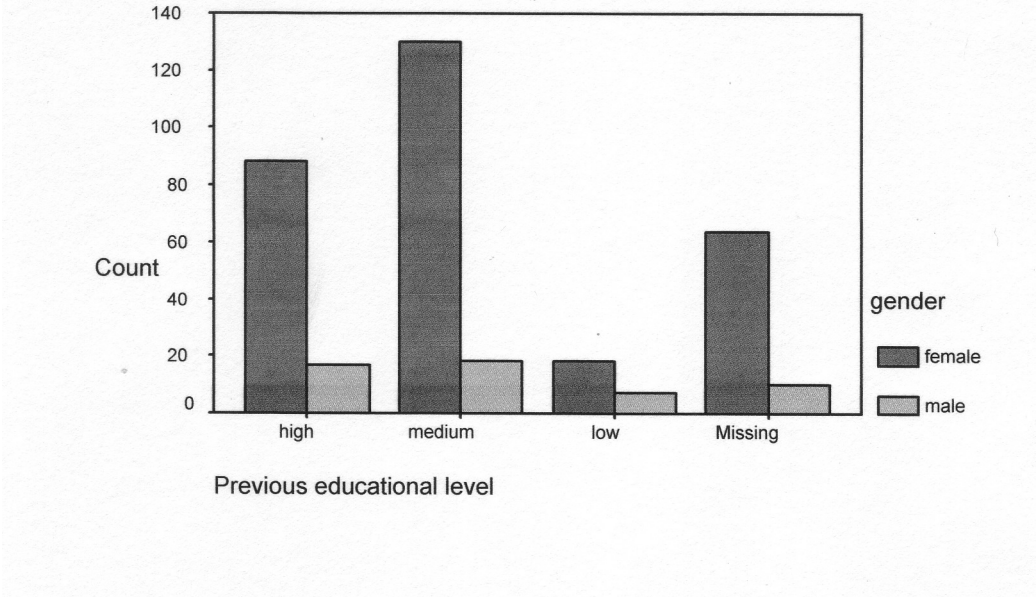
Graph 3



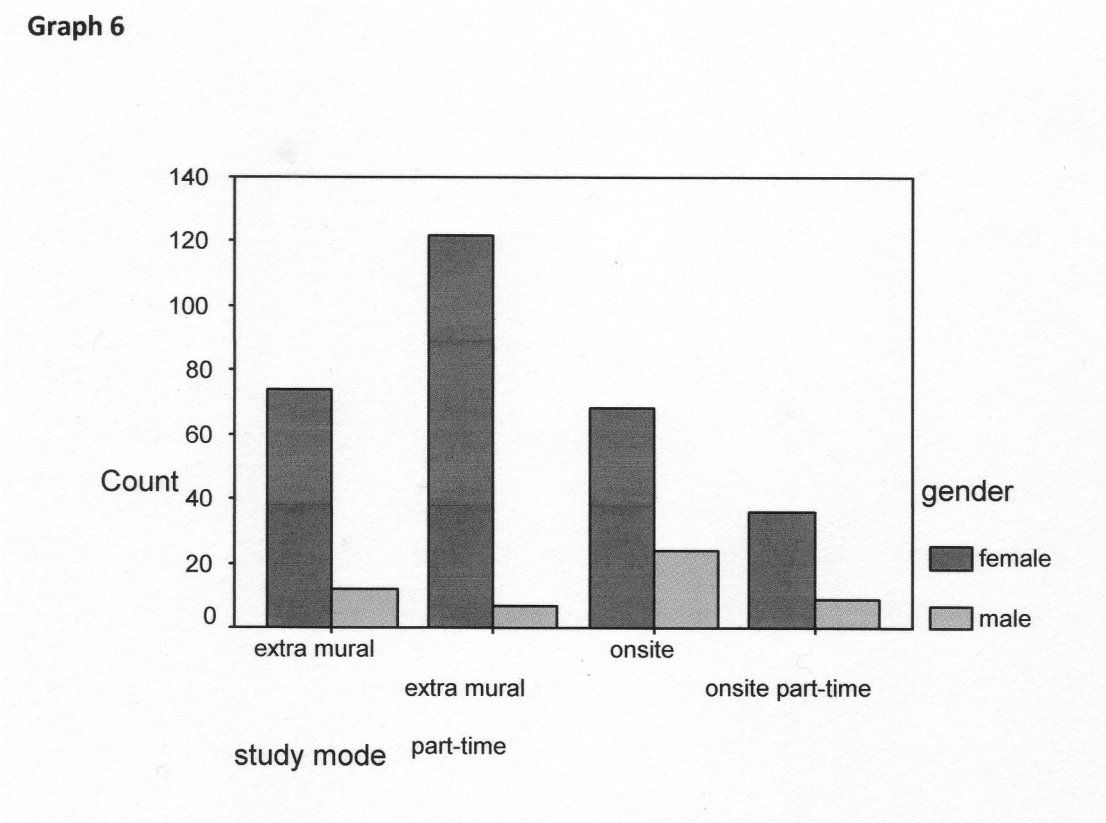
Graph 4



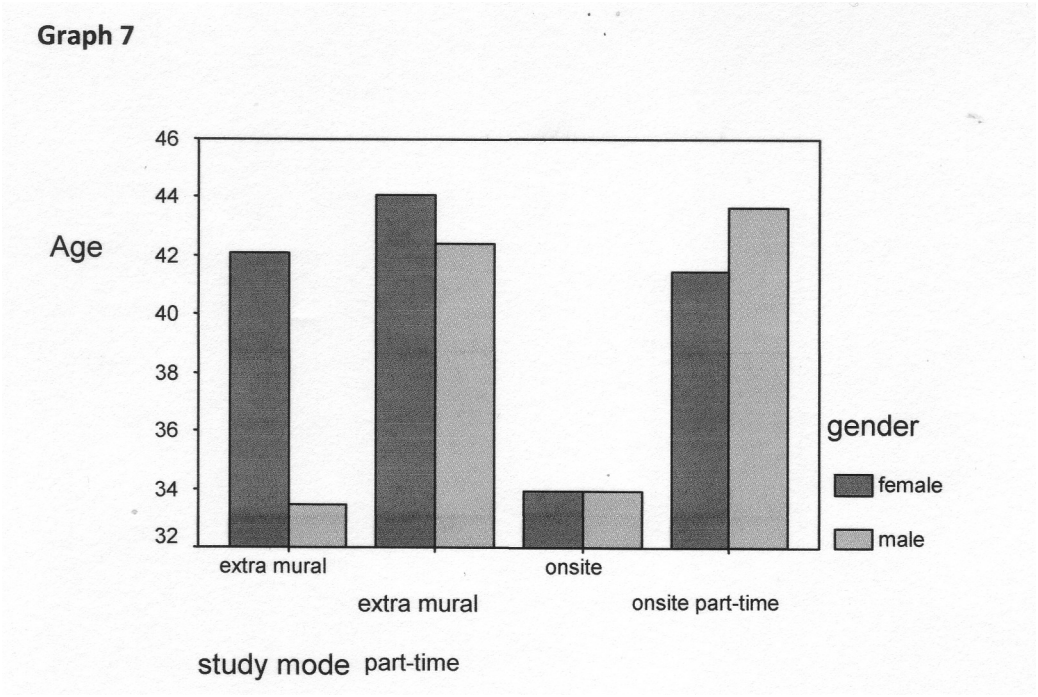
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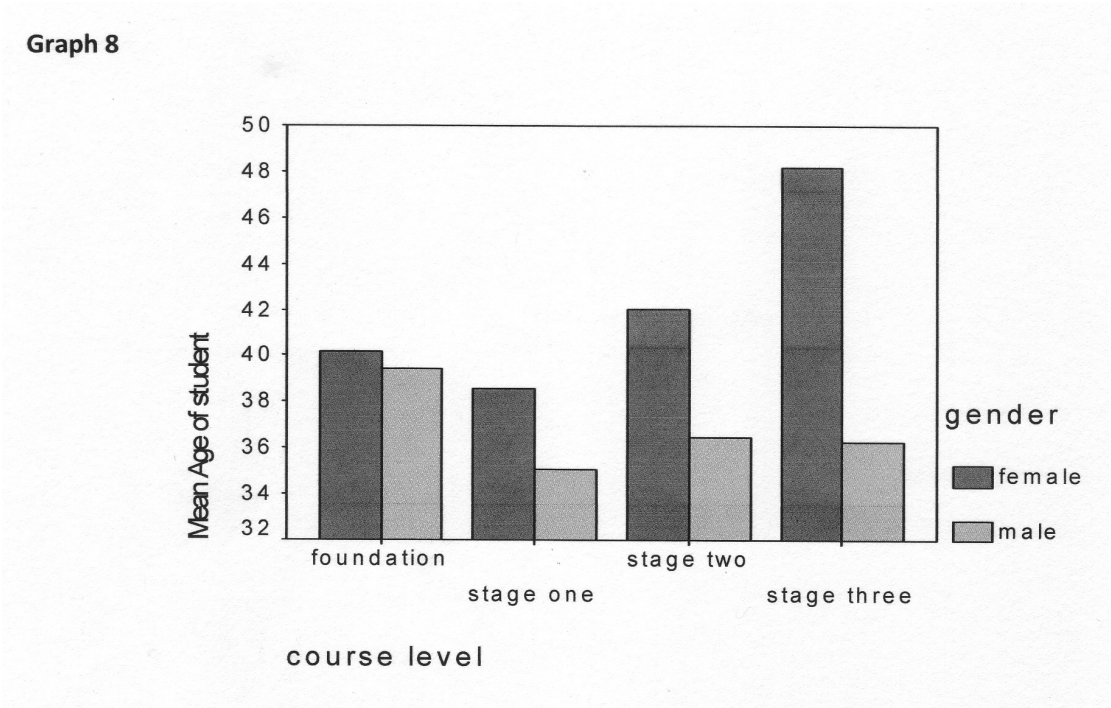
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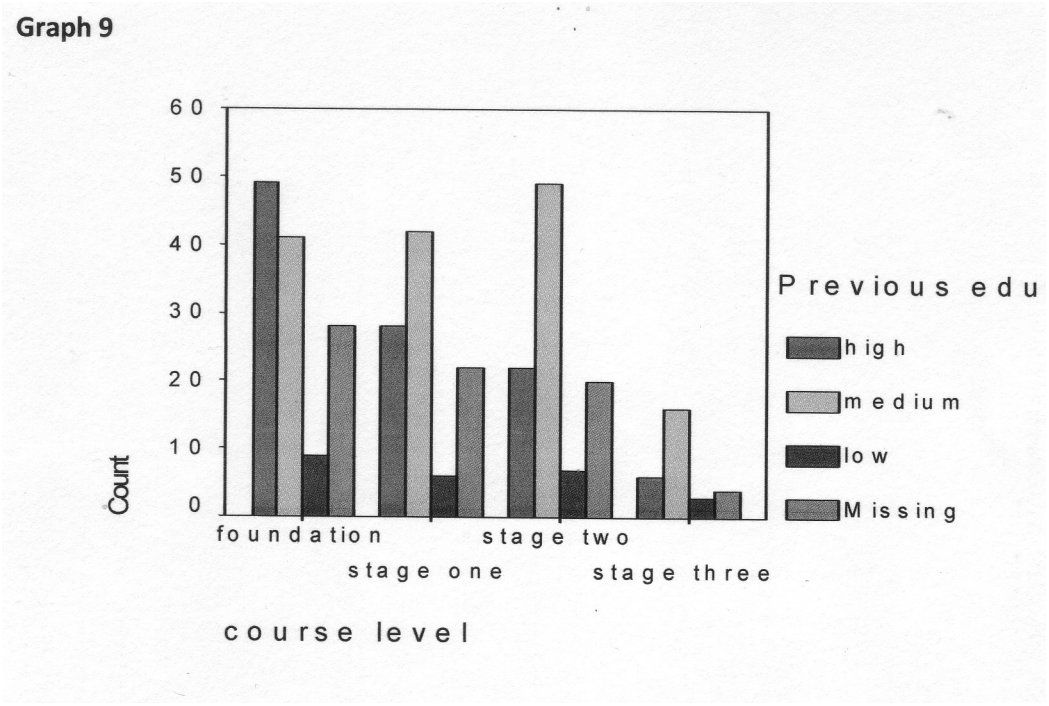
Graph 7



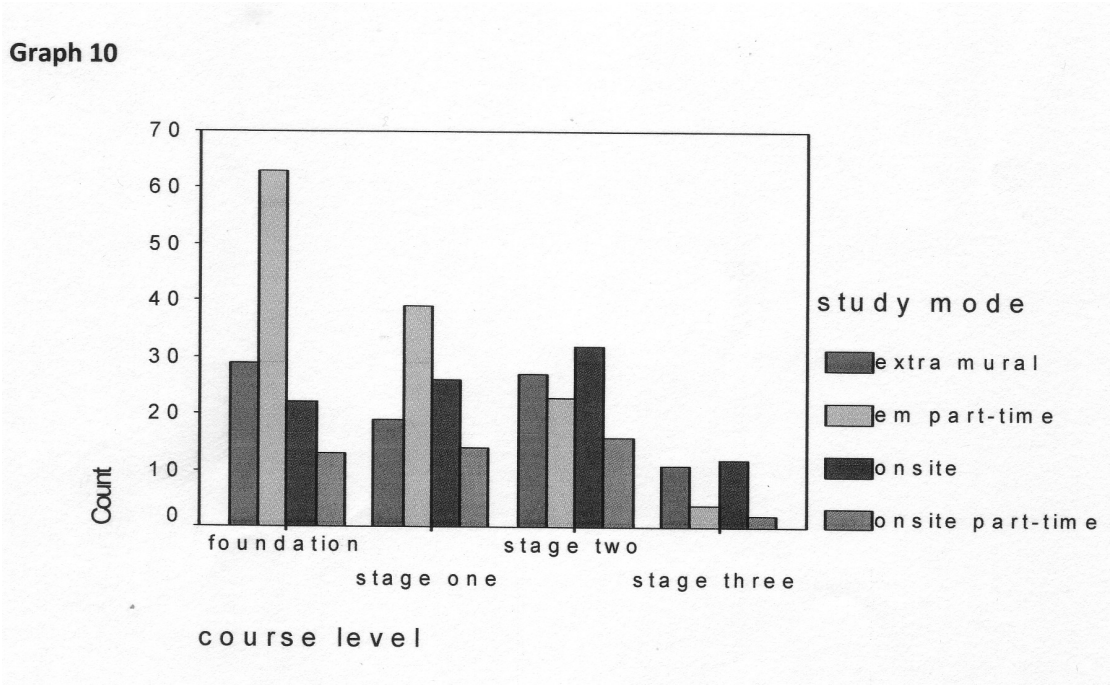
Graph 8



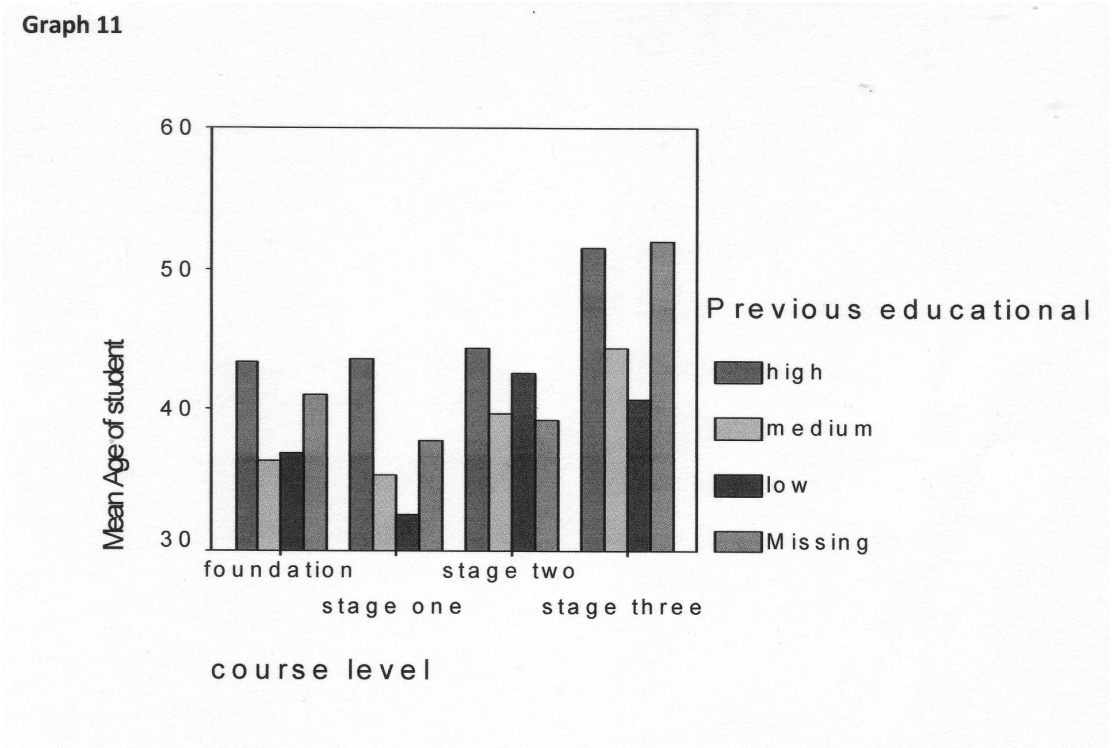
Graph 9



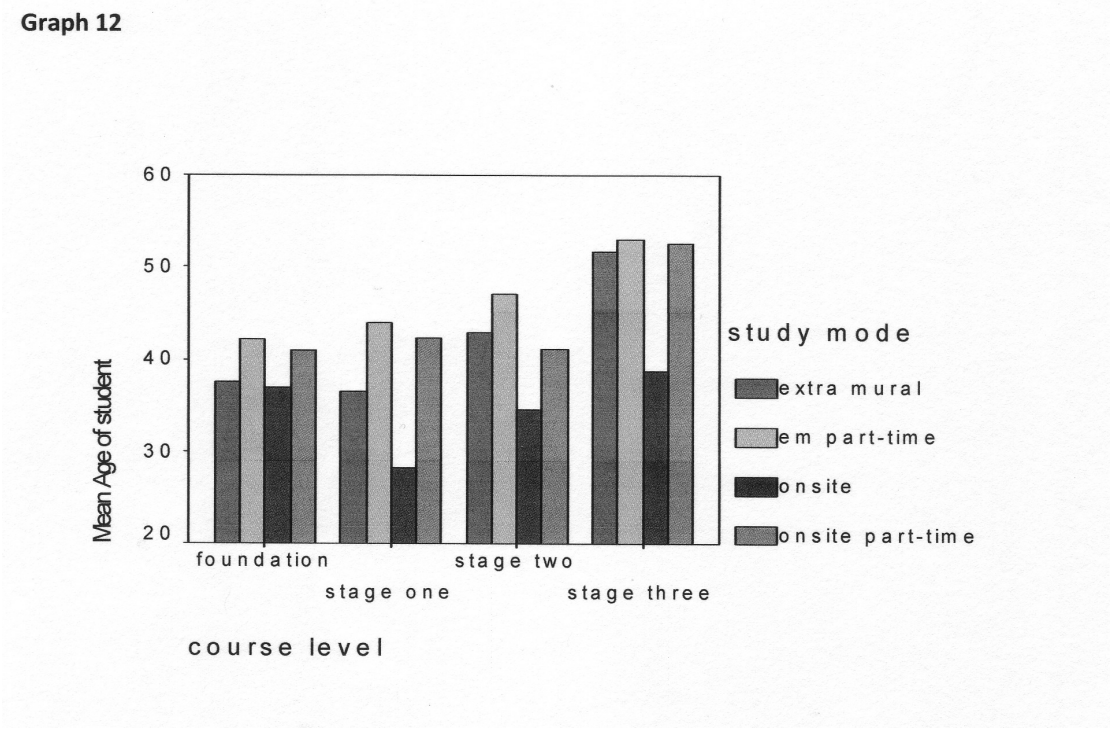
Graph 10



Graph 11



Graph 12



Graph 13

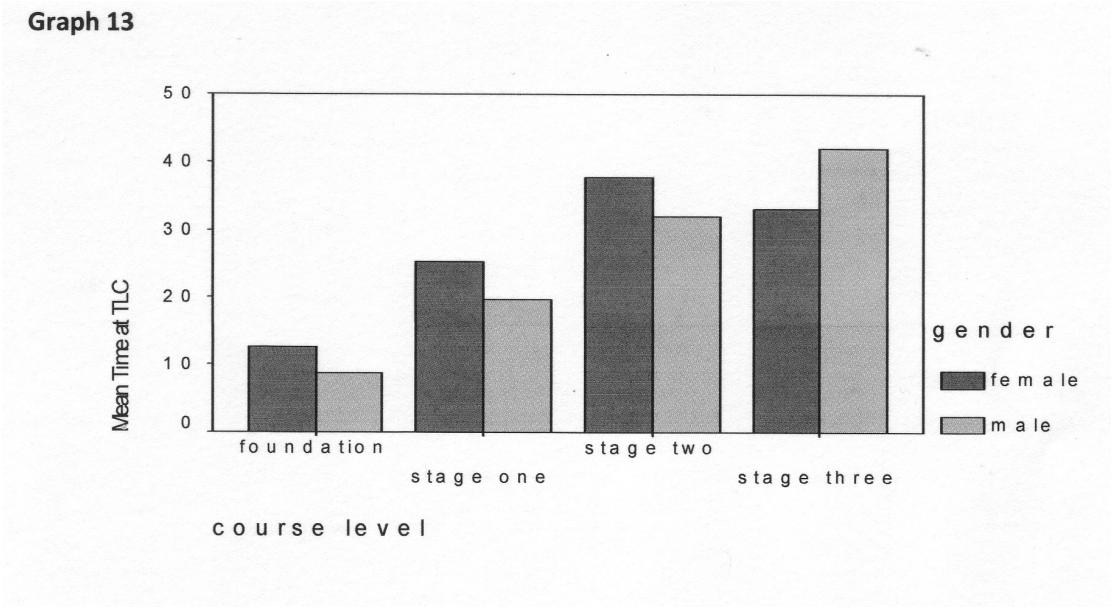


Table 1

course level * study mode * gender Crosstabulation

Count

gender			study mode				Total
			extra mural	em part-time	onsite	onsite part-time	
female	course level	foundation	25	60	18	11	114
		stage one	16	36	20	12	84
		stage two	22	22	22	11	77
		stage three	11	4	8	2	25
	Total		74	122	68	36	300
male	course level	foundation	4	3	4	2	13
		stage one	3	3	6	2	14
		stage two	5	1	10	5	21
		stage three			4		4
	Total		12	7	24	9	52

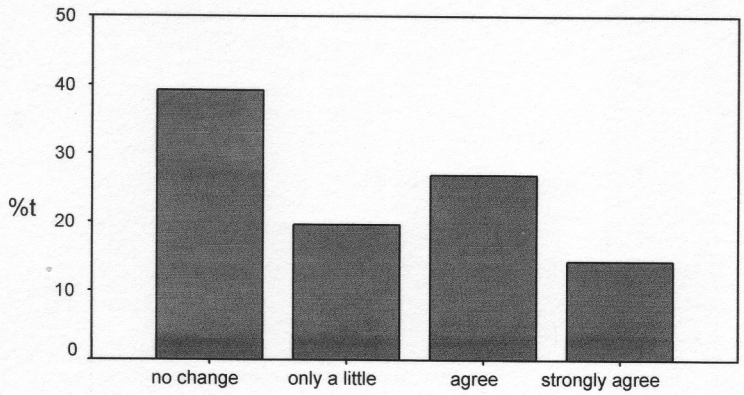
Table 2

Report

course level		Age of student	Time at TLC	Overall score for Industry outcomes	Overall score for personal changes
foundation	Mean	40.07	12.18	45.16	51.15
	N	117	127	126	125
	Std. Deviation	13.51	6.68	18.49	21.65
stage one	Mean	38.10	24.43	63.37	59.03
	N	93	98	98	98
	Std. Deviation	11.82	9.61	17.65	21.84
stage two	Mean	40.87	36.54	72.32	64.14
	N	98	97	97	98
	Std. Deviation	13.29	13.81	16.54	22.36
stage three	Mean	46.55	34.11	76.10	53.32
	N	29	27	29	28
	Std. Deviation	13.08	17.03	17.59	27.22
Total	Mean	40.31	24.09	60.35	57.19
	N	337	349	350	349
	Std. Deviation	13.09	14.80	21.34	22.93

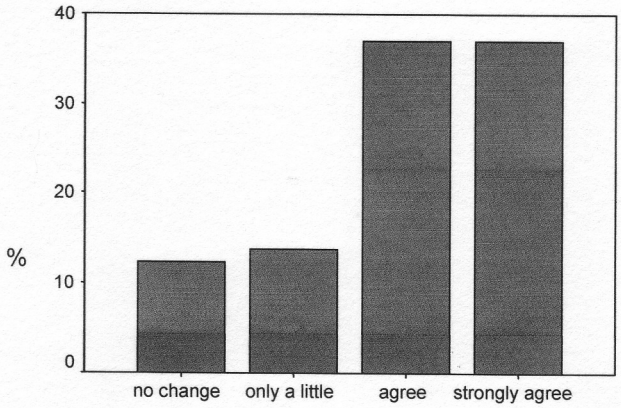
PERSONAL CHANGES FROM COMPLETING STUDENT SURVEY

Graph 14



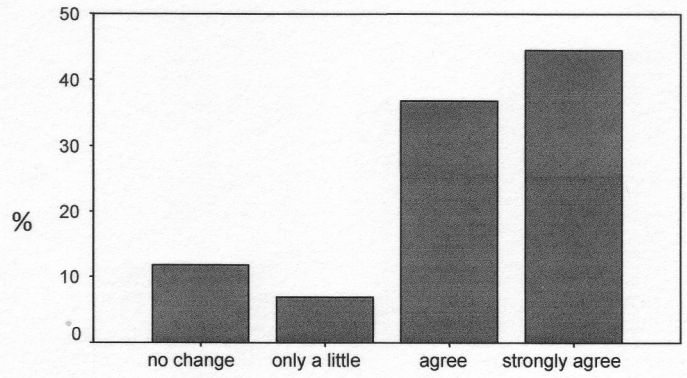
A major personal problem was solved

Graph 15



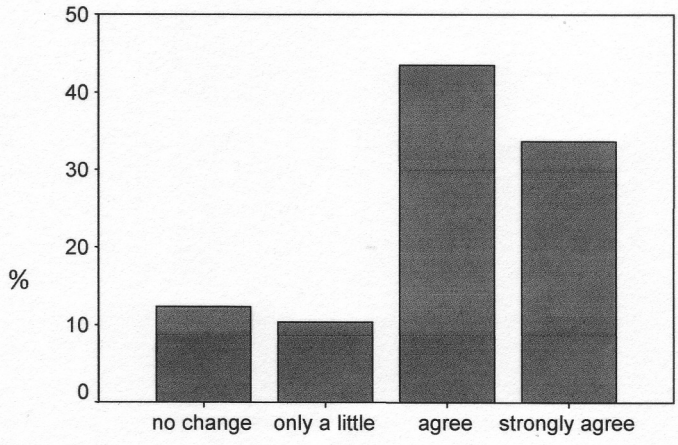
Came to see myself as an artist

Graph 16



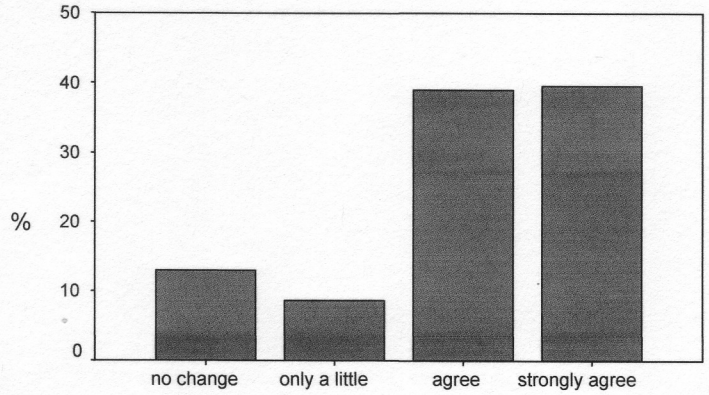
Appreciate art and artists more

Graph 17



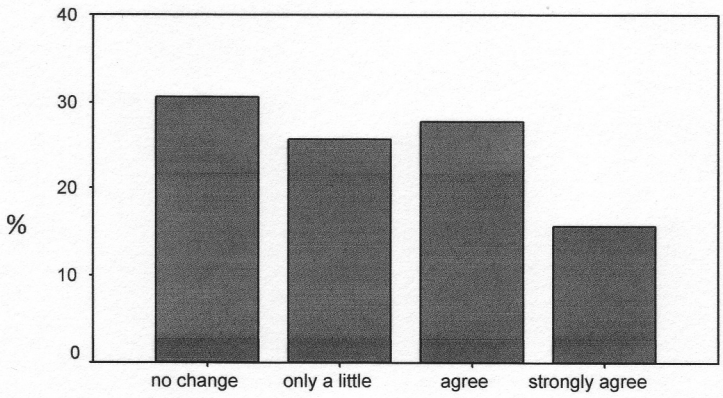
Feelings about myself changed positively

Graph 18



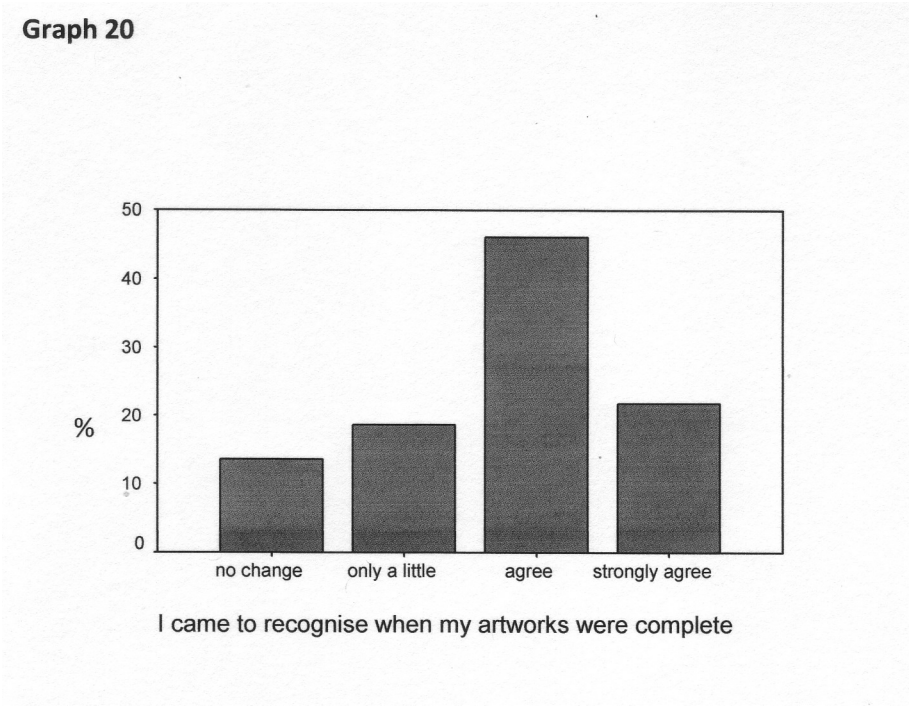
I realised art was a way to explore myself

Graph 19

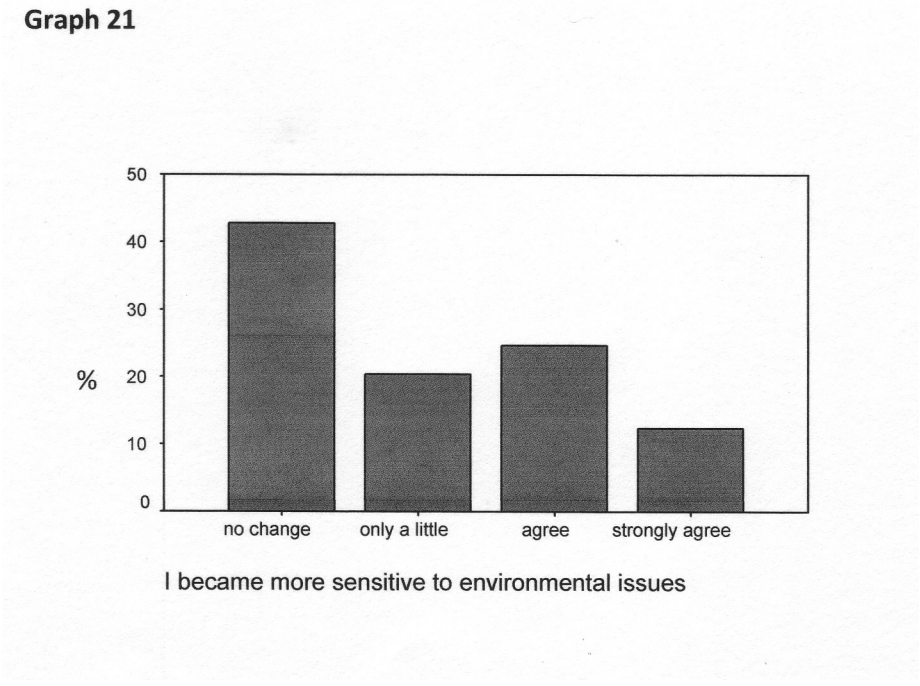


Artwork help me explore my relationship with NZ

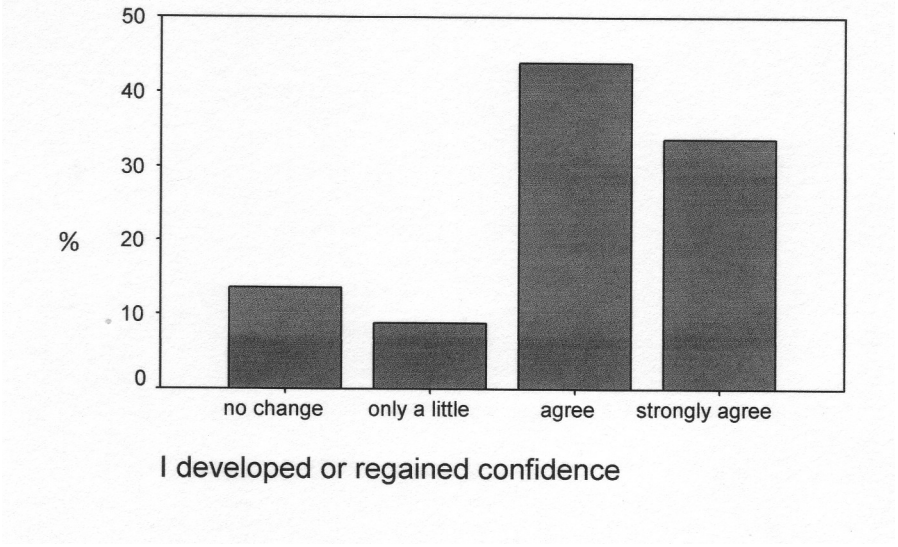
Graph 20



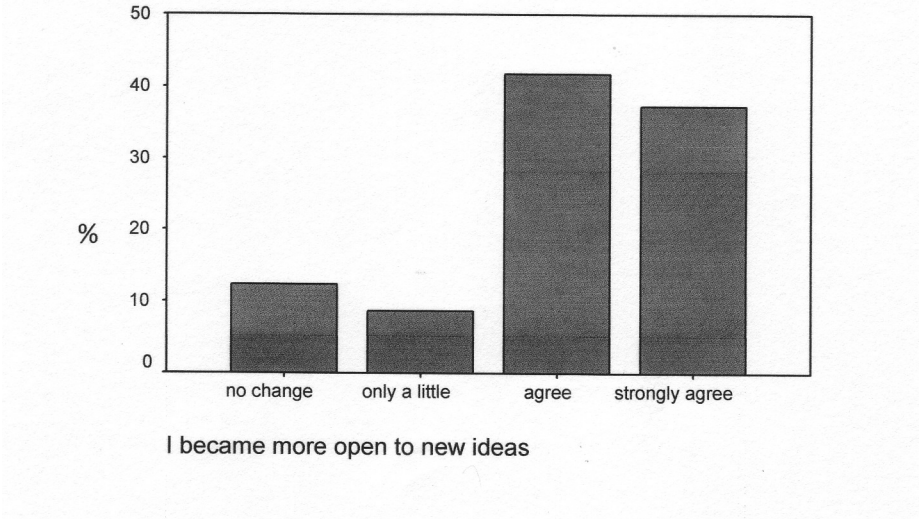
Graph 21



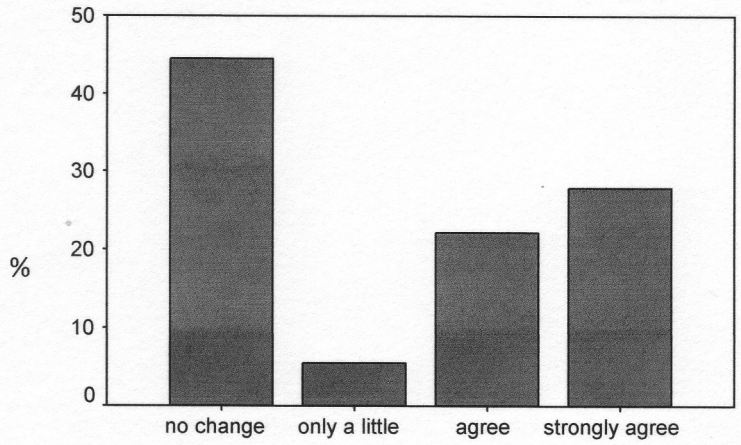
Graph 22



Graph 23

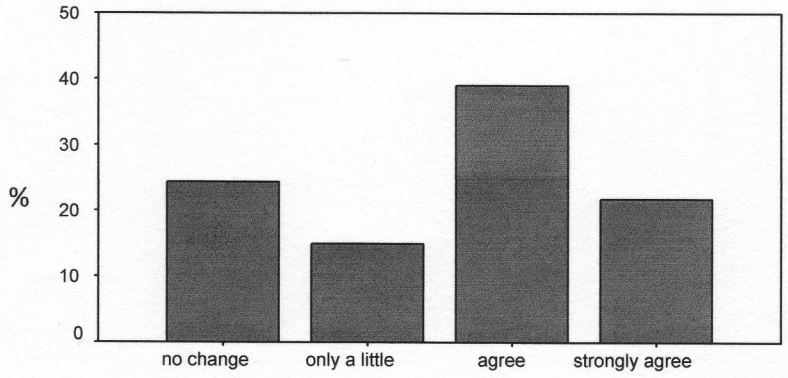


Graph 24



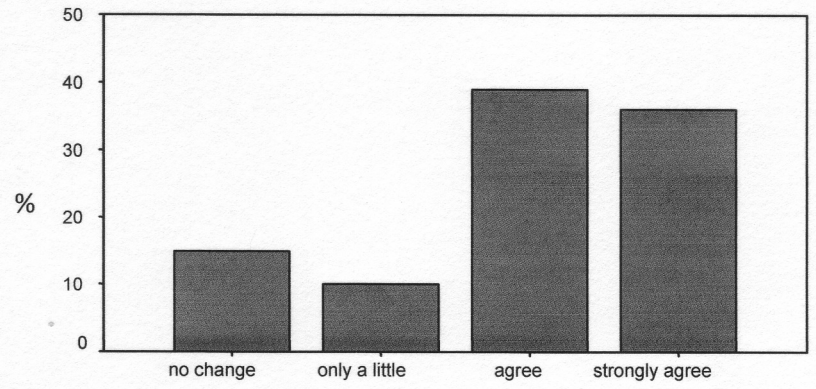
I learnt to work more independently

Graph 25



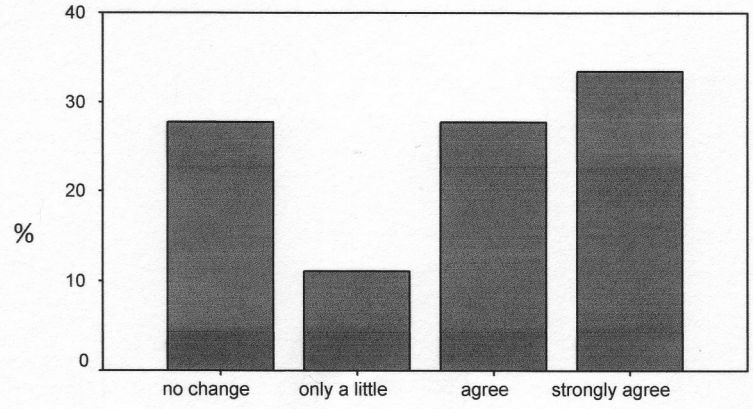
I came to understand others points of view better

Graph 26



I learnt to trust and act on my intuition

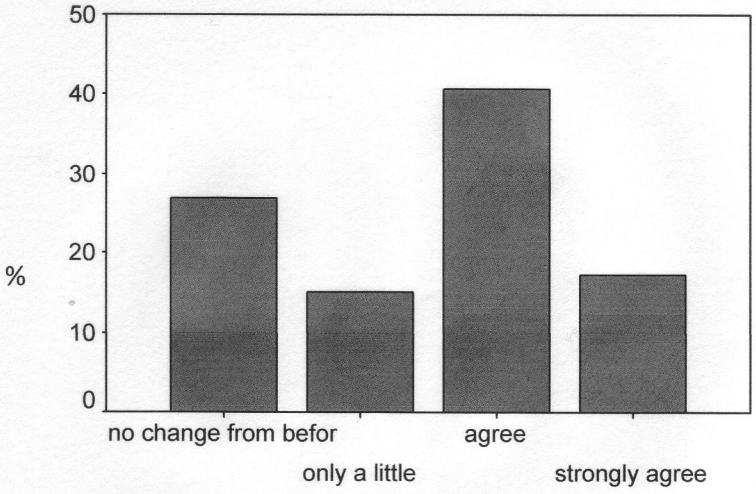
Graph 27



More able to accept criticism

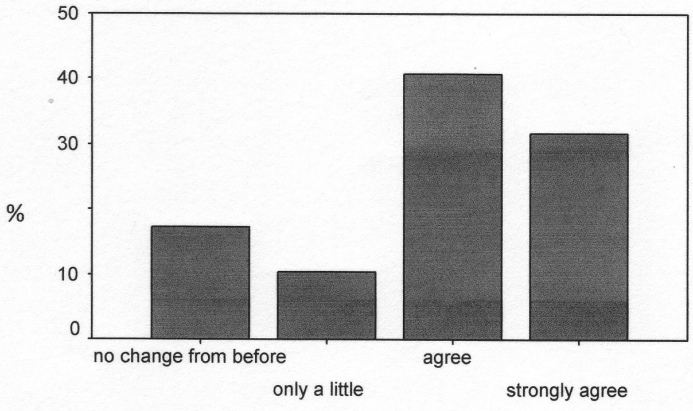
PERSONAL CHANGES FROM FOLLOW-UP SURVEY

Graph 28



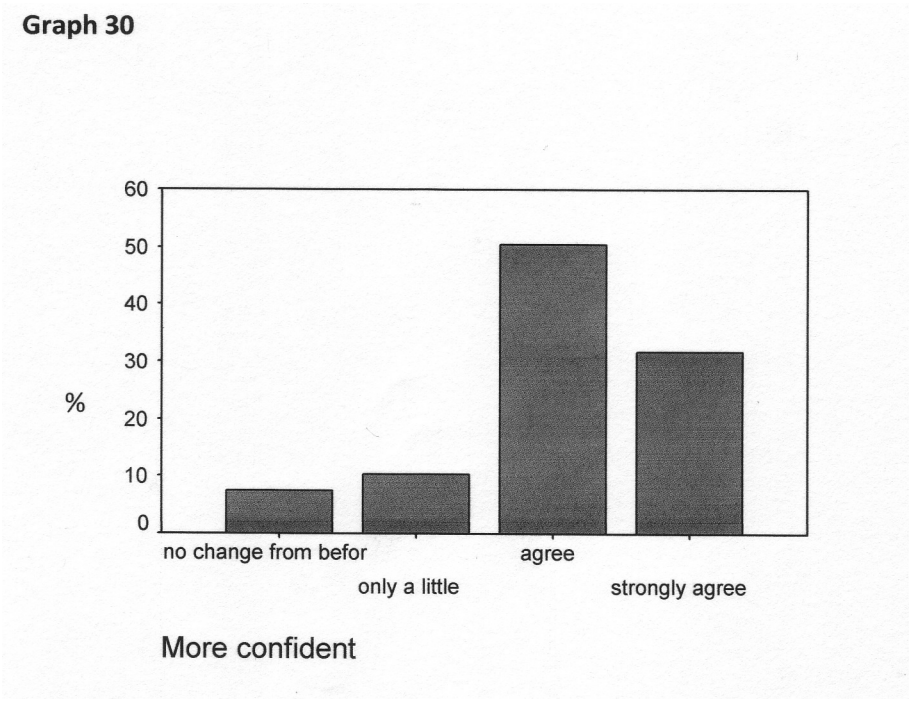
More relaxed

Graph 29

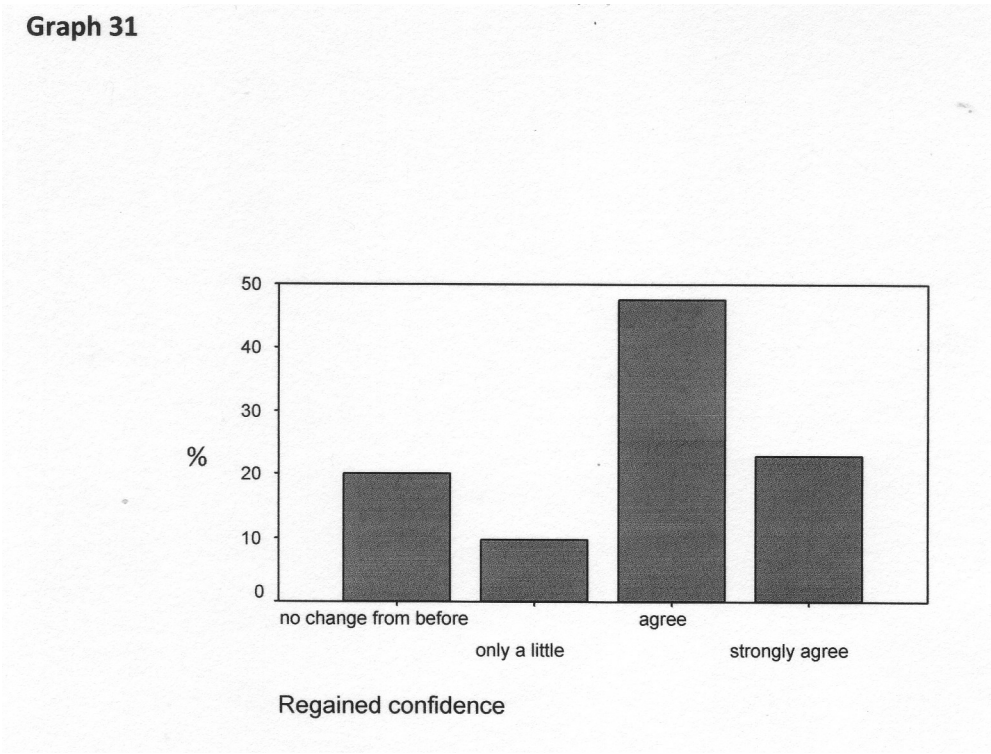


Settled in life direction

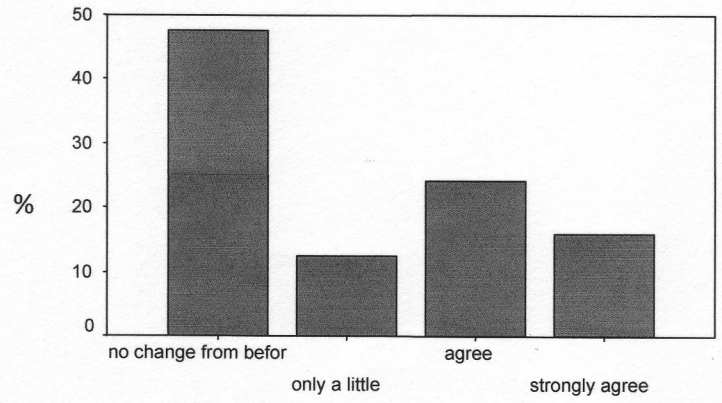
Graph 30



Graph 31

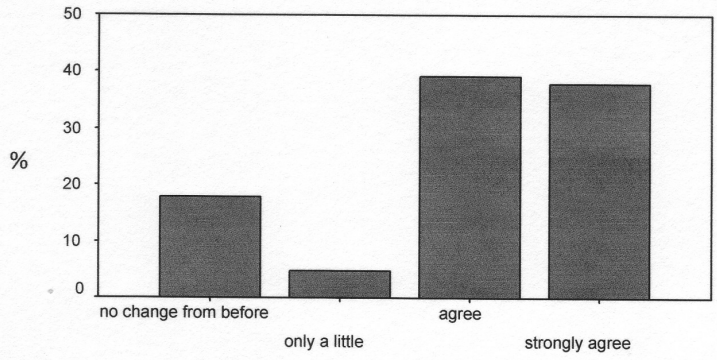


Graph 32



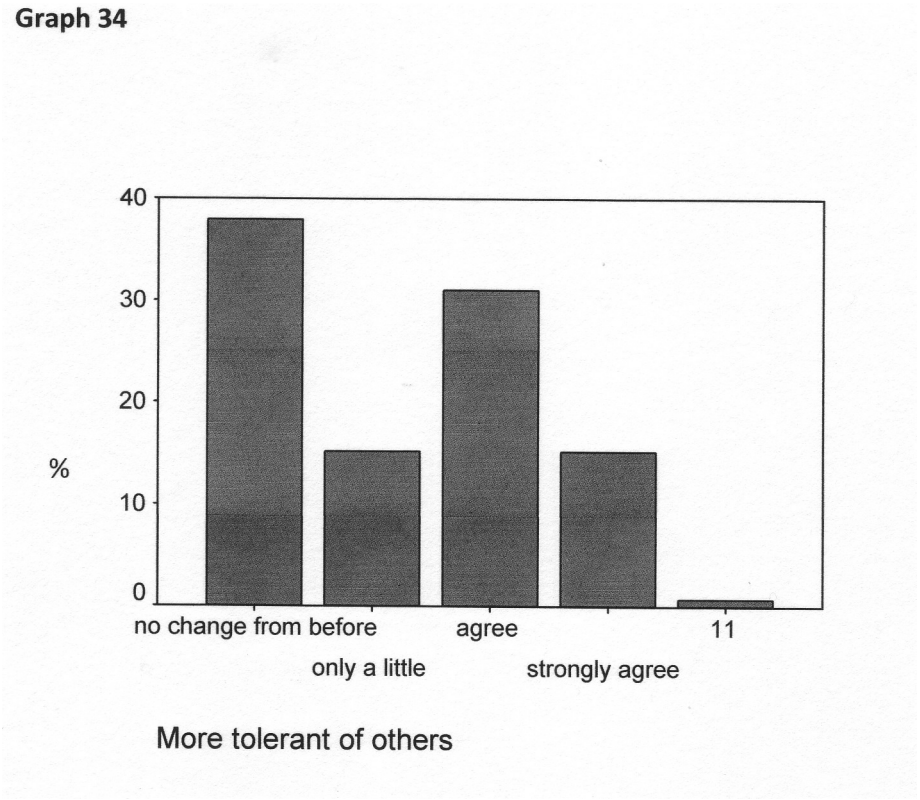
More connected to NZ

Graph 33

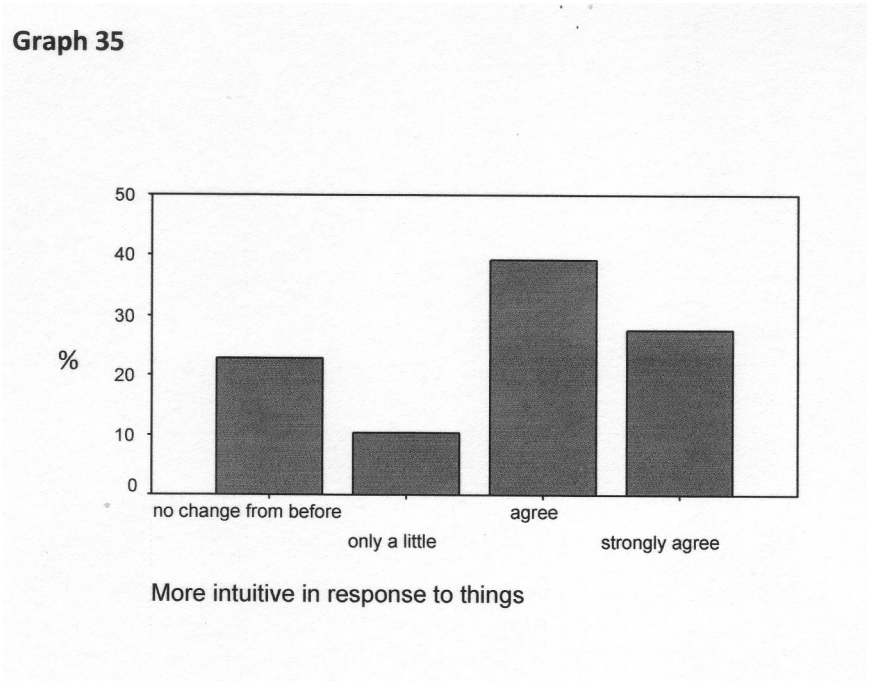


More open to new ideas

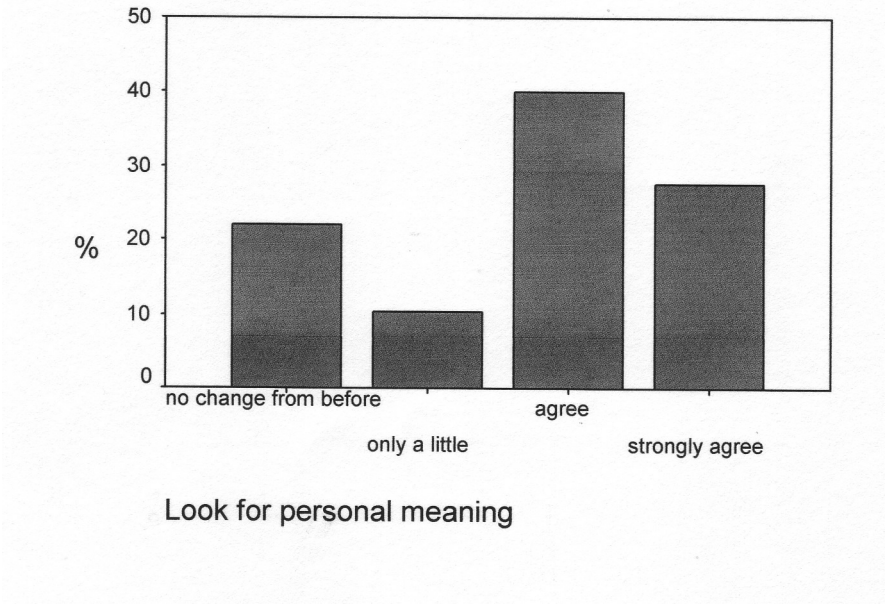
Graph 34



Graph 35

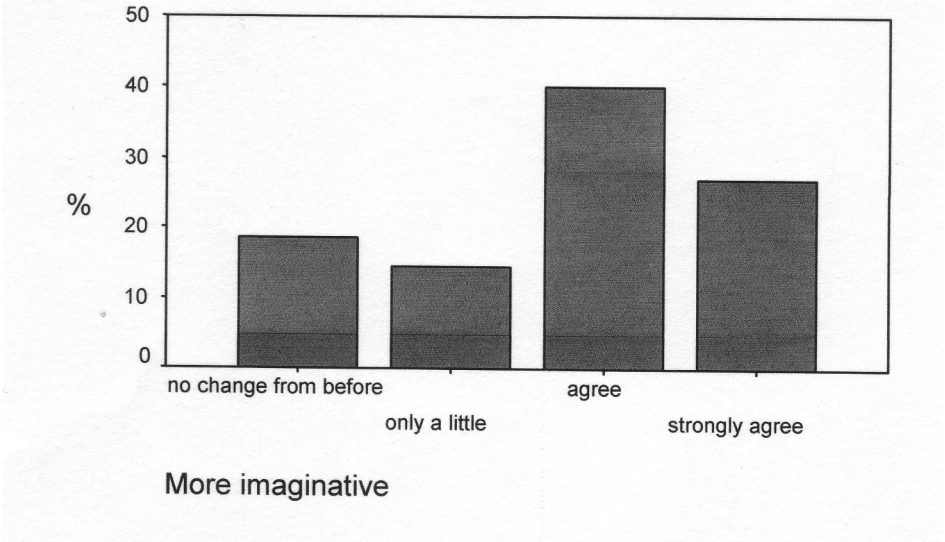


Graph 36



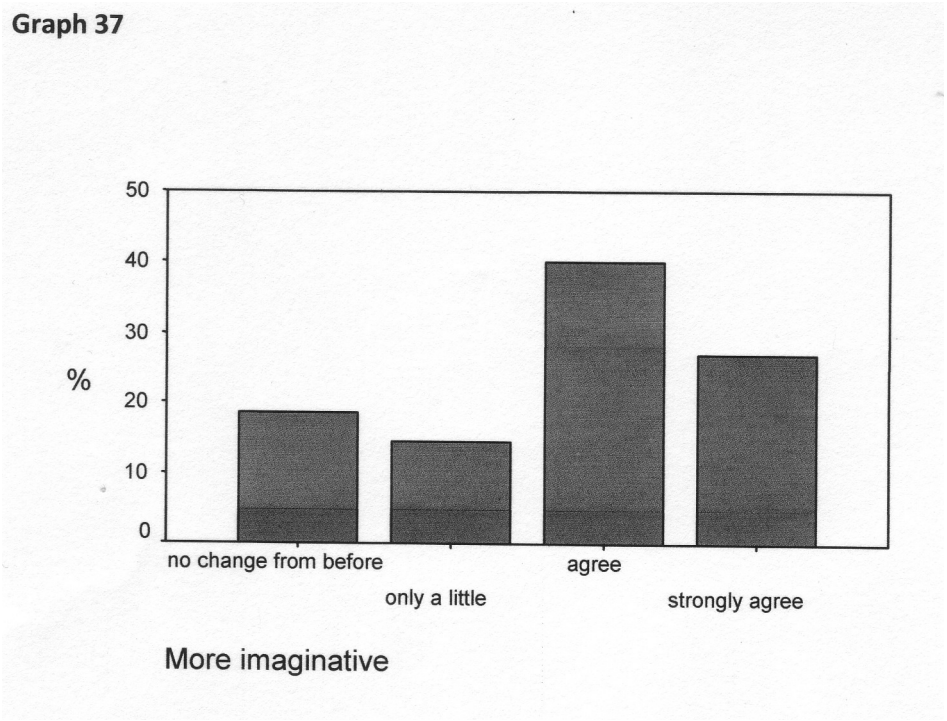
Look for personal meaning

Graph 37



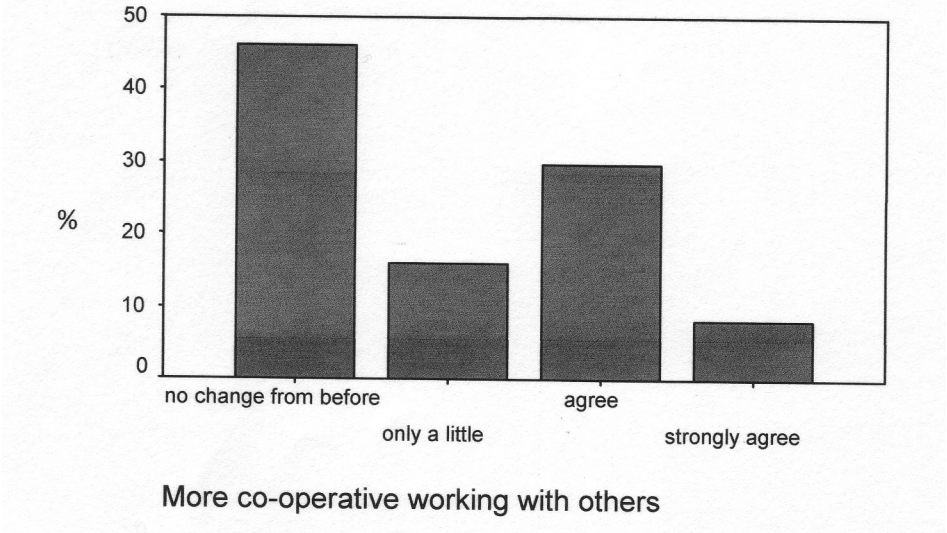
More imaginative

Graph 37



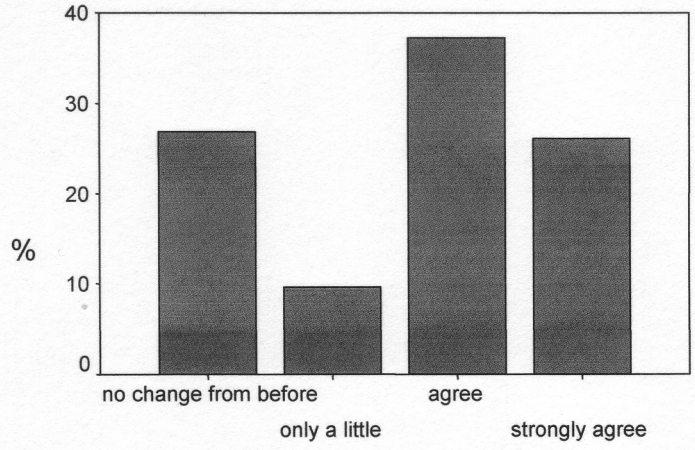
More imaginative

Graph 38



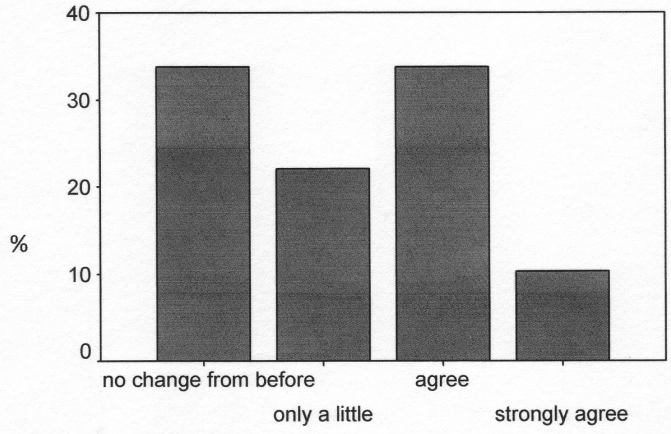
More co-operative working with others

Graph 39



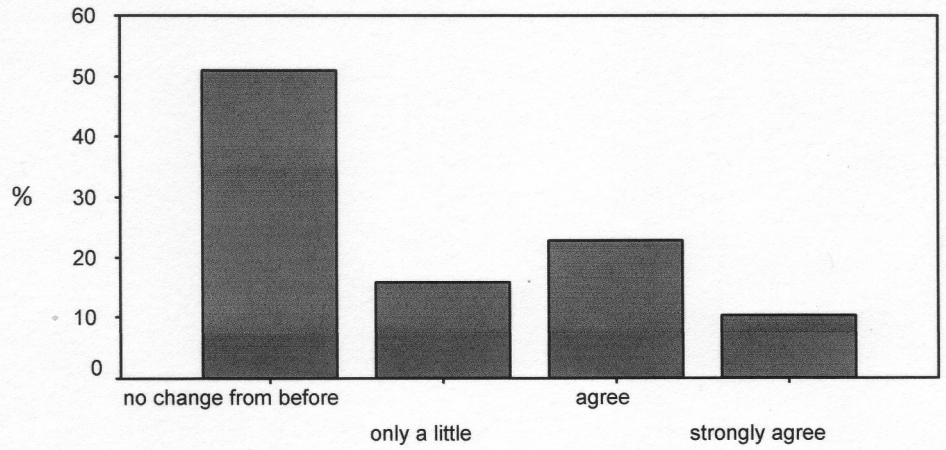
More committed to the things you work on

Graph 40



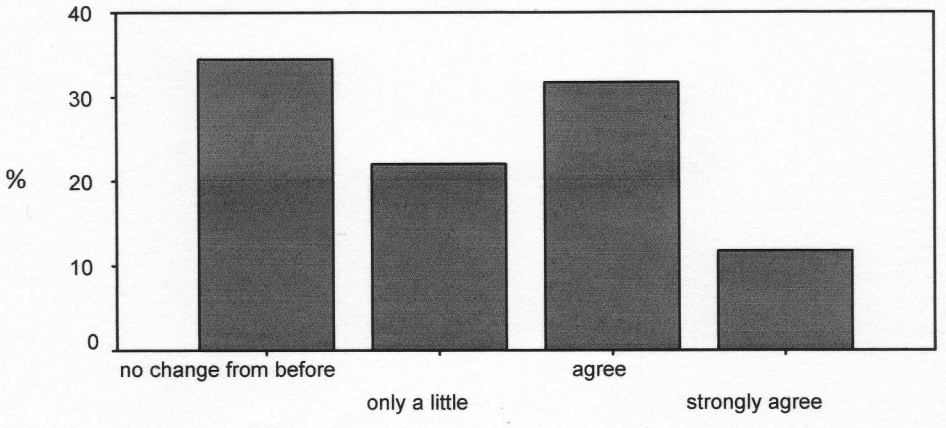
Deal with personal problems differently

Graph 41



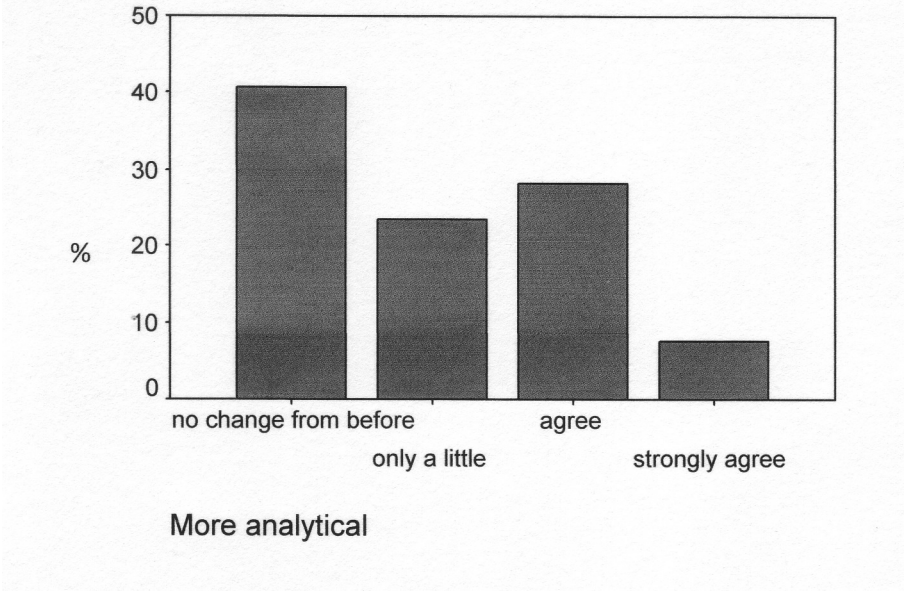
More sensitive to environmental issues

Graph 42



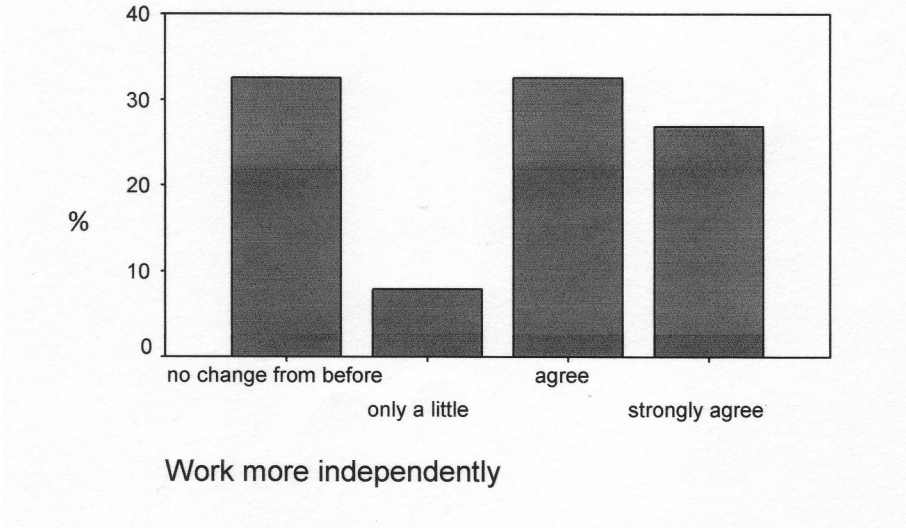
Less troubled by a major problem or issue

Graph 43



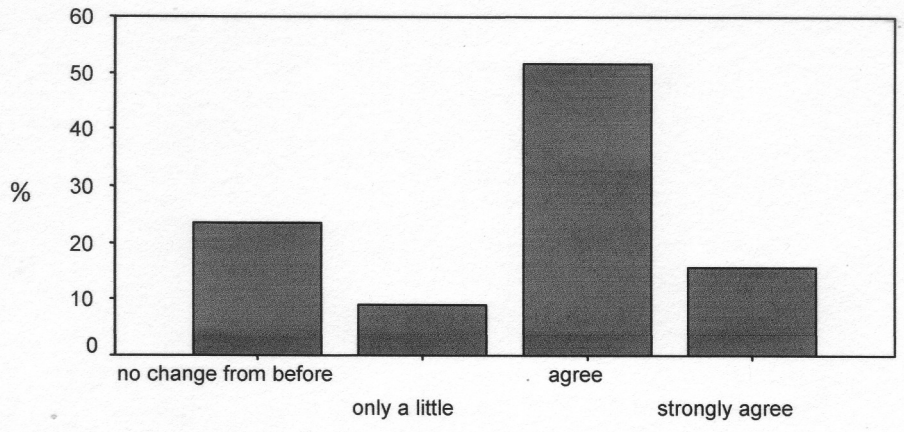
More analytical

Graph 44



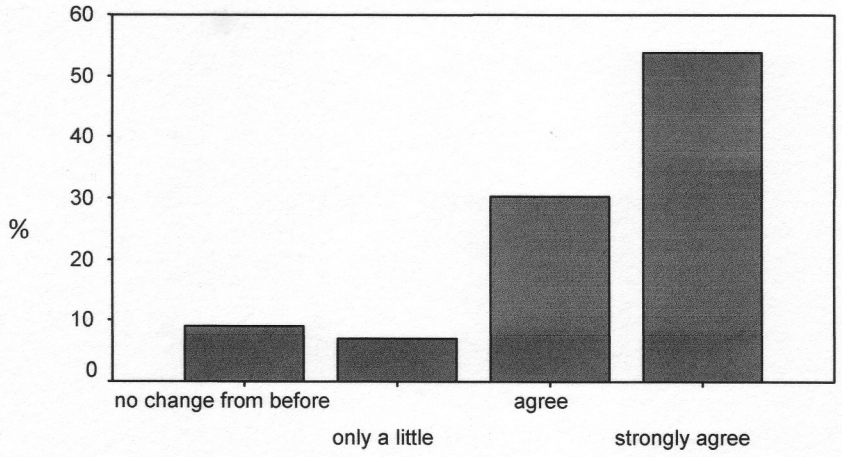
Work more independently

Graph 45



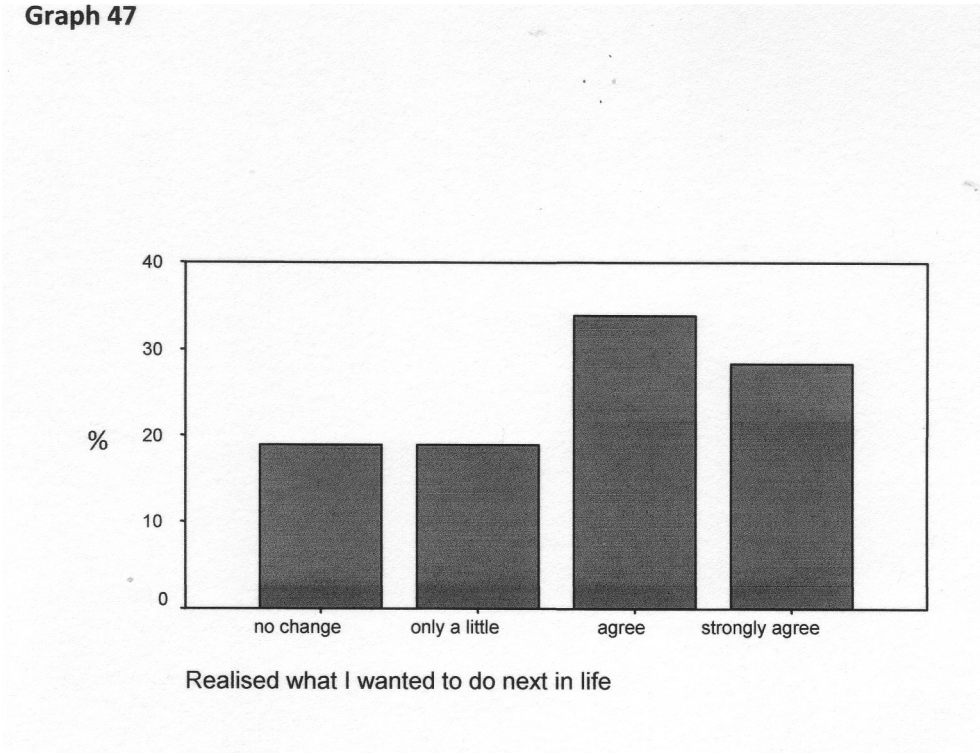
Can bracket incomplete work

Graph 46



Generally more interested in art and culture

Graph 47


40
30
%
20
10
0
no change
only a little
agree
strongly agree
Realised what I wanted to do next in life

OTHER OUTCOMES

Table 3

Reasons for leaving at that course level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completed as originally intrended	179	50.9	63.9	63.9
	Course not what I expected or wanted	13	3.7	4.6	68.6
	My circumstances changed	18	5.1	6.4	75.0
	Finished higher level than intended	34	9.7	12.1	87.1
	Other	36	10.2	12.9	100.0
	Total	280	79.5	100.0	
Missing	99	72	20.5		
Total		352	100.0		

Table 4

Overall rating for course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	poor	3	.9	1.5	1.5
	fair	4	1.1	2.0	3.5
	satisfactory	11	3.1	5.5	9.0
	good	74	21.0	36.8	45.8
	Execellent	109	31.0	54.2	100.0
	Total	201	57.1	100.0	
Missing	Not in survey	151	42.9		
Total		352	100.0		

Table 5

Intentions as graduates * course level * gender Crosstabulation

Count

gender			course level				Total
			foundation	stage one	stage two	stage three	
female	Intentions as graduates	further arts study	14	11	11	1	37
		further non arts study	19	3		2	24
		work as before	19	8	2	2	31
		Work and earn as artists	10	28	37	17	92
		other	24	17	19	3	63
	Total		86	67	69	25	247
male	Intentions as graduates	further arts study	2		2		4
		further non arts study	1				1
		work as before	1	1	1		3
		Work and earn as artists	4	8	10	4	26
		other	2	2	4		8
	Total		10	11	17	4	42

Graph 48

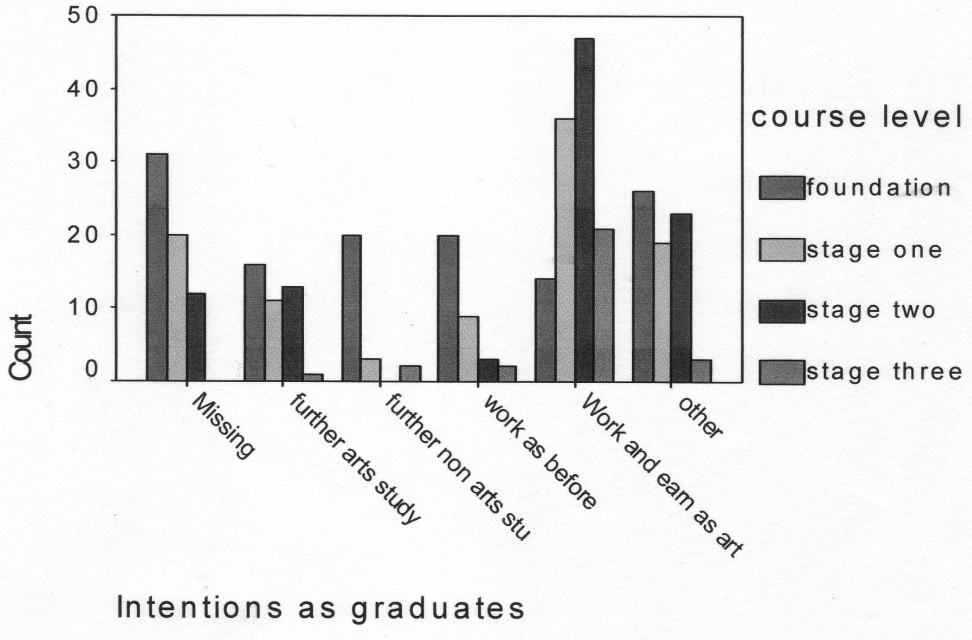


Table 6

Intentions as graduates

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	further arts study	41	11.6	14.2	14.2
	further non arts study	25	7.1	8.7	22.8
	work as before	34	9.7	11.8	34.6
	Work and earn as artists	118	33.5	40.8	75.4
	other	71	20.2	24.6	100.0
	Total	289	82.1	100.0	
Missing	99	63	17.9		
Total		352	100.0		

Table 7

Most Important Outcome

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	secured employment related to arts	20	13.8	13.8	13.8
	secured employment not related to art	8	5.5	5.5	19.3
	go on to further arts study	30	20.7	20.7	40.0
	go on to further non arts study	13	9.0	9.0	49.0
	set up as self employed artists	53	36.6	36.6	85.5
	set up non arts business	1	.7	.7	86.2
	worked as a volunteer	5	3.4	3.4	89.7
	other	15	10.3	10.3	100.0
	Total	145	100.0	100.0	