REFLECTIVE QUALITIES OF THE ARTISTIC
CREATIVE PROCESS AND CHAOS THEORY: A STUDY
OF THEIR RELATIONSHIP AND THE IMPLICATIONS
FOR ART EDUCATION AND TEACHING


Candidate – PhD (Education)
Submitted – March 2002
I hereby certify that the work embodied in this thesis is the result of original research and has not been submitted for a higher degree to any other University or Institution.

(Signed)___________________________
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ABSTRACT

What is visual art making, the artistic creative process, and how does it work? These questions fuelled an investigation at first theoretical, then incorporating an empirical study centered on attaining understanding relating to the elements and dynamics involved in making visual art. The resultant study aims to offer an approach to gaining comprehensive understanding of the artistic creative process, an understanding that may inform art teaching practice, so that art teachers may better understand the related dynamics of their pedagogical processes.

Historically the artistic creative process has been accepted as one consisting of different sequential stages of development. This view however, is evolving due to the growing understanding of interrelated dynamics of life processes offered by, for example, neurological studies of the brain. New thinking links earlier philosophical and psychological ideas presented by such thinkers as James (1894) and Dewey (1934), to the work of Baars (1999), Brown (2000), Ellis (1999), Zeki (2000), in offering a deeper understanding of the natural human creative process. The reflective aspect of the artistic creative process is thus related to the way that we process information every minute of our lives; essentially it is the way we progress through life, minute by minute, learning and evolving, affirming self through finding meaning.

Study of current theory relating to the processes of the brain inevitably incorporates modern thinking that revolves around dynamic processes. Originating in thermodynamics, Chaos Theory has travelled far from physics to become incorporated into a broad spectrum of disciplines. It offers a common language that relates to the dynamics of human nature, and as such is totally applicable to areas of learning and human interaction. Here used metaphorically, Chaos Theory serves to elucidate interactive aspects of the discipline of art making, with much to offer an understanding of the artistic creative process as it describes exactly the same process of change and growth through experience.

A metaphorical use of the language of Chaos Theory provides visual art making with a means of sharing ideas with other academic disciplines that also constantly deal with the dynamics of the human condition, found for example in the close connections between the methods of exploration of both artists and scientists. In studying the phenomenon of ‘scale’ the physicist Feigenbaum commented on the
connections between perceptions of artists and those of scientists, pointing to the way
in which their perceptions and analysis of things coincide (Gleick, 1987). The visual
analysis evident in the work of Turner or Ruskin reflects the same process of detailed
conceptual exploration of material collected by the senses as that of a student of any
field of scientific exploration. Chaos Theory is important also in that it provides a
language accessible by varying levels of expertise, whether at a simple metaphorical
or a more sophisticated level. This work charts these dimensions because “The
challenge is to reverse the disconnectedness of the present world and to develop a
curriculum that is not based on separateness of knowledge from life and being, but
upon their inherent unity and integration” (Lovat and Smith, 1995, p.248).
INTRODUCTION

This project is at once a synthetic and analytic work, speculative, and observational. It aims to provoke thinking about the teaching of art, and the role of art in education. In the first two dimensions, - synthesis and analysis - it draws together in thematic form a wide-ranging literature, in a fashion that seeks to identify in detail and hold up for consideration the different elements that work together in the process of art making. That exercise is augmented by an empirical project which goes to the actual activity of art making in practice: observations of artists as they make an artwork, and dialogue with them concerning theirs and the researcher’s understanding of their own processes.

The project is speculative in terms of a well-founded view drawn from considerations of the literature relating to artistic creative process and Chaos Theory as these bear on the reflective process, and the information reviewed regarding artistic practice. This view promotes the usefulness of Chaos Theory concepts in clarifying understanding of the activity of art making. It is provocative in challenging previously accepted ideas on understanding artistic creative process, through the weight of literature, the quality of argument and analogy in that literature, and a coherent interpretation of observational data here derived. And, finally, whether the dimensions and their interrelations that Chaos Theory postulates are ‘found’ or ‘fitted’ to the process, there are challenging implications for art teaching, and for thinking about art in education for, and in, Life.

The work as a whole, through its comprehensiveness and multifaceted approach to the issue, will serve to contribute to an advancement in understanding of art making as a development of a natural creative human process that may be enhanced by means of art teaching.

In outlining what is to follow in the three parts of this dissertation it is first important to note that the basic thesis of this study is that the reflective element of artistic creative process facilitates all else in individual artistic self-expression. This process is considered in relation to Chaos Theory in anticipation that the complex way that artistic expression works may be elucidated by metaphorical reference to Chaos Theory concepts and terminology. It is therefore possible that these concepts may
provide an accessible and open form of structured order to an art maker who seeks, through teaching, to encourage others in attaining meaning through art making.

The three parts represent, respectively, an effort to draw together, in the above terms, a wide-ranging literature, a ‘free-standing’ empirical project, and a consolidation of the theoretical and empirical through a focus provided by the educational context.

In Part A, Chapter One, artistic creative process literature is explored in order to pull together ideas and gain insight into current understanding on the structure of the process. Chapter Two introduces Chaos Theory concepts in metaphorical form as they may be found to relate to fields other than ‘pure science.’ Chapter Three considers links and connections between artistic creative process and Chaos Theory concepts. Consideration of the foregoing theory led to the conclusion that further elucidation of the artistic creative process may serve to illuminate what actually happens when we make artworks. Chapter Four therefore focuses on the areas that appear to be of most interest when considering the reflective process involved in art making, those of immersion and incubation. These two areas are aspects of the creative process that involve the artist in the processing of newly absorbed information in conjunction with that previously acquired. Chapter Four illuminates the dimension of knowing and reflection that is crucial here, by reference to contemporary work in the field of consciousness studies.

Part B consists of an empirical study that explores the creative processes of a number of practicing artists. Chapter Five describes the project, whilst Chapter Six contains the research report and conclusions. Synthesis of the information collected here, considered in relation to the findings of Part A, is aided by use of the computer software ‘Nudist-4.’ In order to achieve an understanding of the interrelatedness of the complex process, data has been subjected to a search for what appear to be the most important aspects of the processes by all concerned, followed by an explanation of these aspects by means of the most appropriate language, that is, with reference to Chaos Theory concepts. This process resulted in a diagram that illustrates those interrelated activities that appear to be involved in artistic creative process, according to synthetically evolved definitions. This provides a guide to the variable elements that may be encountered in relation to artistic creative process, rather than providing a strictly invariant model. The variable quality of these elements from one occasion to
another leads one to recognise the ever-changing character of artistic creative process as a naturally ordered structure that is suitably described in Chaos Theory terms.

Part C approaches the area of art education in relation to the results of Parts A and B. Chapter Seven offers a recent history of Art Education, and Chapter Eight offers ideas on possible new reflective directions. Chapter Nine contains a discursive conclusion on the whole work.

A CD Rom is provided as an adjunct to the printed work, as it contains appendices to support the study. These consist of empirical data, interview transcriptions, field notes, and photographs, pertaining to artist participants and their creative work processes, information relating to research methodology, and a comprehensive Bibliography offered as a scholarly resource. There is also an example of a self-organized curriculum that was developed in connection with experience in community based teaching.

This study offers an understanding of the underlying structure of a process which is in itself variable according to individual and group ontogenies and contextual elements. The elements that comprise the creative process are universal, in that they form an integrated natural human process, and as such function within the structure of our ever-changing human boundaries. A diagram of a process such as that which has emerged from this study may provide heuristic reference when contemplating concepts that have learning implications for those designing a curriculum, a syllabus or a lesson plan. Such conceptual references may be born in mind when actively teaching artistic creative process through art making, thus enhancing teacher-student understanding.

Significantly, this project itself developed as any self-organizing creative process may be expected to, by working within continually expanding structural boundaries, developing according to the growth of ideas as the project progressed, resulting in a truly reflective creative product. It is chaotic in character, being open-ended in aspect and projection of ideas.

The creative process initiated by this work is reflected in the Afterword and the section on the CD labelled Researcher Interpretations. These refer to some of the artworks produced by the researcher while this project was in progress, which are offered as concurrent artistic reactions to the material encountered by the researcher, as a supportive interpretation to the written word.