

The Big Fish

Consciousness as Structure, Body and Space

ANNA BONSHEK

with CORRINA BONSHEK

and LEE FERGUSON

Consciousness
Literature & Arts 06

The Big Fish

Consciousness
Literature
the & Arts

06

General Editor:
Daniel Meyer-Dinkgräfe

Editorial Board:
Anna Bonshek, Per Brask, John Danvers,
William S. Haney II, Amy Ione,
Michael Mangan, Arthur Versluis,
Christopher Webster, Ralph Yarrow

The Big Fish

Consciousness as Structure, Body and Space

ANNA BONSHEK

with
CORRINA BONSHEK
and
LEE FERGUSSON



Amsterdam - New York, NY 2007

Cover image: Still Frame, *Reverie II* (2002), Anna and Corrina Bonshek, 22-minute single screen DVD projection. From Project Reverie (2002)

Cover Design: Aart Jan Bergshoeff

The paper on which this book is printed meets the requirements of "ISO 9706:1994, Information and documentation - Paper for documents - Requirements for permanence".

ISBN-13: 978-90-420-2172-3

ISSN: 1573-2193

©Editions Rodopi B.V., Amsterdam - New York, NY 2007

Printed in the Netherlands

TABLE OF CONTENTS

Acknowledgements	vii
Contributors	ix
Introduction	xi
Part One	
Infinite Mind/Infinite Body: Awakening and Re-envisioning Consciousness	
<i>Anna Bonshek</i>	1
1. Preamble—What is Consciousness?	3
2. In Sight—Cognition or <i>Darshana</i> : Expanding Artistic Vision	35
3. Memory as <i>Smriti</i> —100% Wakefulness The Seat of Creativity and Retrieval	77
4. Performance as <i>Yagya</i> or Offering: Socially Responsible, Transformational Art	115
5. Capturing Light—Outer and Inner The Maharishi Vedic Observatory as Site Specific Cosmic Structure, Astronomically Aligned Monuments and Sun-Dependent Art	161
6. In Visible Cities: Metaphor? Or Body and Built Environment as Structures of Wholeness	225
Part Two	
Expressions, Visions, Perspectives	271
Foreword	273

7. Agnes Martin on Beauty and Perfection in Art <i>Anna Bonshek and Lee Fergusson</i>	275
8. Unified Field Based Art Education: Toward a Socially Responsible College Art Curriculum <i>Anna Bonshek and Lee Fergusson</i>	287
9. Allegories of Consciousness: Perfection in Printmaking from the Renaissance <i>Anna Bonshek and Lee Fergusson</i>	297
10. Signs of Reconciliation—Prints by Michael Kane Taylor <i>Anna Bonshek and Lee Fergusson</i>	305
11. Ocean of Beauty In the Mind of the Beholder —A Suite of Photographs by Mark Paul Petrick <i>Anna Bonshek</i>	327
12. Deleuzian Sensation and Unbounded Consciousness in <i>Reverie I</i> <i>Corrina Bonshek</i>	333
13. <i>Reverie II</i> : Revelation, Consciousness and Peace <i>Anna Bonshek</i>	343
14. 1 Stands Out <i>Anna Bonshek</i>	361
Bibliography	
Part One: Infinite Mind/Infinite Body	365
Part Two: Expressions, Visions, Perspectives	379
Glossary of Sanskrit Terms	387

ACKNOWLEDGEMENTS

Many thanks to all those who have helped *The Big Fish* come to fruition either for their contributions, feedback, or support—Dr. Daniel Meyer-Dinkgräfe, Dr. Lee Fergusson, Corrina Bonshek, John Danvers, Dr. William Haney II, Dr. Geoffrey Wells, Dr. John Price and Sandy Price, Dr. Bevan Morris, Fran and Asher Fergusson, and Dr. Sam Boothby, and to the artists who supplied photographs and permission to print images of their artwork including: Judy Bales, Gillian Brown, David T. Hanson, Mark Paul Petrick, Lawrence Sheaff, and Michael Kane Taylor. In addition, thanks to the Des Moines Art Center for permission to publish prints by Albrecht Dürer and William Blake from the permanent collection, particularly Mickey Koch, and to Tim Fitz-Randolph, Jonathan Lipman, Tower Companies, and Anthony Lawler, for images of the Maharishi Vedic Observatory and Maharishi Sthapatya Veda designed buildings. Recognition should also go to the journals and institutions that have published essays that appear (most in edited form) in Part Two of this volume. These include: *Modern Science and Vedic Science*, *Social Science Perspectives Journal*, *the Des Moines Art Center*, *the Institute for the Creative Arts*, *Tractor*, *Consciousness*, *Literature and the Arts*, and *Body, Space and Technology*. The author would also like to express appreciation for the efforts of all those at Rodopi, especially Marieke Schilling, who have made this publication, and the entire *Consciousness, Literature and the Arts* series, possible. Finally, deepest gratitude is reserved for His Holiness Maharishi Mahesh Yogi and the Vedic tradition for the knowledge that has inspired much of the material in this book.

A few points to be noted at the outset: Certain terms used throughout this volume including: ®Transcendental Meditation, TM, TM-Sidhi, Yogic Flying, Maharishi Vedic Science, Maharishi Sthapatya Veda, Maharishi Vedic Approach to Health, Maharishi Gandharva Veda, Maharishi Jyotish and Yagya, and Maharishi Vedic Observatory are registered or common law trade marks licensed to Maharishi Vedic Education Development Corporation. In this book these terms are discussed in the light of, and referenced to, primary sources (listed in the footnotes and bibliography). Any further enquiry

into trademarks, the related licensing organization, and knowledge of Maharishi Vedic Science and its technologies of consciousness, can be directed to www.mou.org, www.mum.edu, and www.tm.org.

In addition, regarding transliteration, Sanskrit words quoted in subsequent chapters are not shown with diacritical marks. For example, the term *Vastu* would be written with a dash over the letter “a” indicating a long “ah” sound, *Vaastu*. *Smṛiti* would be written *Smṛti* with a dot under the “r”. Likewise, in the transliteration of *Rk*, the name of the first of the four Veda, the “R” would usually have a dot beneath the letter. Otherwise, *Rk* is often written, to more accurately indicate phonetics, as *Rik*.

For simplicity sake, the transliterated Sanskrit terms that appear in *The Big Fish* do not include diacritical marks but for a precise indication of pronunciation, the reader can ideally refer to the quoted primary sources or a Sanskrit dictionary. A simple glossary of Sanskrit terms is provided at the end of this book.

CONTRIBUTORS

Anna Bonshek is a multi-media artist and founder of Akshara Productions, an organization that facilitates collaboration across the digital, visual, sonic and performing arts. Interested in consciousness-based knowledge, living, and creative practice, Bonshek has taught art, theory and Vedic Science, received awards from the Royal Society for the Arts, the Science Policy Foundation, and the National Endowment for the Arts, and was a visiting fellow at the University of Tasmania. She studied at the Slade School of Art and gained her PhD in Vedic Science from Maharishi University of Management. Her work has been shown internationally at the Visual Arts Gallery—India Habitat Centre, New Delhi, the DakshinaChitra Museum, Chennai, the Des Moines Art Center, CSPS and the Cedar Rapids Museum of Art, Iowa, Novosibirsk State Art Gallery, Russia, A.R.C. Gallery, Chicago, and the Royal College of Art, London. Bonshek has written articles for: *Body, Space and Technology*; *Consciousness, Literature and the Arts*; *College Student Journal*; *Modern Science and Vedic Science*; *Artlink*; *Tractor*; *Artist's Newsletter*; and the anthologies *Reframing Consciousness* and *Visibly Female*. With Lee Fergusson she has curated several exhibitions and was reviewer and regional editor for the Chicago-based journal *New Art Examiner* in the 1980s and 90s. Her book 2001 *Mirror of Consciousness: Art, Creativity and Veda* applies a Vedic understanding of consciousness to art theory. She is currently involved in independent art and digital media projects.

Corrina Bonshek is an Australian composer and sound artist with a passion for multi-arts projects. Completing a Doctor of Philosophy in Contemporary Arts at University of Western Sydney (UWS)—where she undertook a composition/musicology degree programme—Bonshek also lectures at UWS and has published and presented numerous papers on her work and related research. Her recent work *Shadows and Dreams at the Female Orphan School* (2005) was performed at the Female Orphan School, Rydalmere, sponsored by Parramatta City Council. In 2000-2003, Bonshek was musical director for Akshara Productions for which she composed three electro-acoustic musical pieces as part of a collaborative enterprise resulting in the

installation works *This and That* (1999), *Reverie I* (2002) and *Reverie II* (2002). In 1999, Bonshek co-composed music and text for Caesura's premiere production *Interstices* (1999) and has had instrumental works premiered at the Sydney Opera House. She has received several awards, including the Shane Simpson Composition Prize and the Marianne Rosenberg Musicology Prize in 1998, and the Guitar Factory and Sound Devices Scholarship to a Double Major in Performance plus Composition in 1997.

Lee Fergusson has written articles and research papers on college art practice and consciousness-based education, and has been involved in establishing new educational institutions in Australia, Cambodia and the U.S.A. His research has been published in *History of Education, Education and Research Perspectives, Higher Education Research and Development, Journal of Instructional Psychology, Perceptual and Motor Skills*, and *College Student Journal*, while his articles appear in *Modern Science and Vedic Science, Artlink*, and *Social Science Perspectives Journal*. With Anna Bonshek, he curated shows for the Des Moines Art Center, the Institute for the Creative Arts, and the Gallery of Art—University of Northern Iowa, and was reviewer and regional editor for *New Art Examiner*. In addition to being featured in the publication *Frieden*, Fergusson's prints and multi-media works have been shown in Australia, France, Japan, Canada, England, and the U.S.A., including venues such as Gerstman Galleries, Pinacotheca, Fremantle Art Gallery, Bendigo Art Gallery, Warrnambool Art Gallery, Royal College of Art, London and Harbourfront Gallery, Toronto. In the 1990s Fergusson's interests led him into business and he is currently involved in environmental remediation and sustainable business and management solutions. He continues to collaborate with and support Akshara Productions.

INTRODUCTION

The Big Fish encompasses a broad range of material as the reader may have gathered by the subtitle: *Consciousness as Structure, Body, and Space*. Appropriately, therefore, *The Big Fish* is divided into two main sections, Part One, *Infinite Mind/Infinite Body—Awakening & Re-envisioning Consciousness* and Part Two, *Expressions, Visions, Perspectives*.

As introduced in Part One, Chapter One, the term “big fish” refers to the self-referral dynamics of pure consciousness and its expression into sound and form as discussed by foremost scholar in the field of consciousness, Maharishi Mahesh Yogi. Maharishi’s description of “a big fish” of self-referral “coming up under the water” (the ocean of consciousness) was discussed in the author’s doctoral thesis, *Art—A Mirror of Consciousness*,¹ as documented in a lecture given by Maharishi in 1995. Since that time, the idea of the big fish as representative of the creative mechanics of nature’s functioning, the very seed of creation and all creative action, germinated into the title and the material for this book on consciousness, creativity, structure, form, the body, and the visual arts. While it may be tempting to refer to the capturing of the big fish as a metaphor for harnessing infinite creativity, in this context the big fish is, more precisely, the move of the individual’s own infinite, self-referral consciousness or *Atma*. Therefore it would be more fitting to refer to knowing and being the big fish—i.e.: witnessing the mechanics of one’s infinite awareness as the creative play on the unmanifest level of consciousness.

To this end, Part One examines and draws upon Maharishi’s insights into the nature of consciousness and the Veda and Vedic Literature, and while direct quotes precisely elucidate important concepts, further reading on key areas are referenced in the bibliography for this section. While many scholars have provided

¹ Bonshek, 1996, p. 411.

commentaries on Vedic theory, Maharishi presents a holistic understanding, bringing an integrated perspective on the Veda and Vedic Literature and locating self-referral consciousness—the structure of pure knowledge called Veda—at the basis of all streams of knowledge.

Part One is essentially written by one author and considers principles of Maharishi Vedic Science² and their application to art and creativity through an understanding of *Darshana* or Vedic cognition, *Smriti* or memory as pure wakefulness, *Yagya* or Vedic performance, the relationship of the microcosmic and macrocosmic worlds in the Maharishi Vedic Observatory, and in architectural forms and spaces designed according to *Sthapatya Veda* or *Vastu*.

Accordingly, Part One is based on a unique understanding of consciousness as a self-referral, subjective field of awareness or existence that gives rise to all forms and phenomena in creation. This field can be experienced and accessed by the individual through Transcendental Meditation and advanced technologies of consciousness. The aim of repeatedly experiencing self-referral consciousness is to gain higher states of consciousness and live a “normal” life—where one’s awareness and creativity are unbounded and unlimited. According to the Vedic perspective the human physiology can be seen as a perfectly designed instrument to experience self-referral consciousness. For this reason, current debates about the nature of consciousness, the body, technology, and the posthuman, are touched upon and revisited across various chapters. More importantly, Transcendental Meditation and advanced technologies of consciousness are continually referred to as a means to experience self-referral consciousness, unlock the individual’s full potential, and go beyond simply an intellectual or philosophical debate about the nature of consciousness and human experience. Speaking about Vedic Science without discussing technologies of consciousness is like describing a house without providing the key to enter it. These techniques provide the means to enter and to know all the details of the blueprint, the structure, the materials, the history and function of the

² The term *Maha* means “great”. *Rishi* means “seer”, and *Veda* translates as “complete knowledge”. *Vedic* means pertaining to Veda. Maharishi Vedic Science is a complete science of consciousness and its expressions as explained by Maharishi; introduced in Chapter One, it comprises various bodies of knowledge and practical technologies including Maharishi’s Transcendental Meditation technique and the advanced TM-Sidhi Programme and Yogic Flying.

house. Precisely because these technologies are a practical means to gain knowledge and experience of the full potential for human awareness and human life in general, they reemerge, from chapter to chapter, as crucial techniques for developing the artist's and, indeed, any individual's, creativity and awareness.

In the 1990s, concern was expressed about the role of the contemporary artist. Donald Kuspit argued for the artist to be an exemplary human being who can speak through their work with a universal human voice—speaking to people from their innermost being.³ Kuspit felt that for the arts, this was no longer the case. Several assumptions are inherent within this argument; 1) that one *can* become an “exemplary” or universal human being; 2) that artists can communicate via a universal voice; and 3) when they communicate in such a way, their art is expressed from a deep, universal, inner level of being.

Kuspit does not directly address the idea or influence of collective consciousness but he does discuss art in an “age of glamour,” thus, suggesting that at particular times there is an overarching trend, where the artist behaves in a certain way (for example, he or she is a “postmodern ape”) or creates art of a certain kind (narcissistic, vacuous art). According to Maharishi, the most important function for the artist—in the transition from a period when people are not able to live their full potential to an age where they are increasingly able to do so—is to be an example, a role model, and to express the full value of life. Expressing the full value of life involves drawing from the unseen, universal basis of existence.⁴

Examining the themes of art and creativity distilled from lectures by Maharishi, Dr. Lee Fergusson—the first graduate of the Ph.D. programme in Vedic Science—published a series of definitive principles of art as part of his doctoral thesis⁵. This document continues to be a valuable pedagogical resource for consciousness-

³ Kuspit, 1987, p. 121; 1990, pp. 32-42.

⁴ As Maharishi states, “During the phase transition, the role of the artist in society is to create a model human, an individual who is growing in the ability to express the full value of life. The life of an artist should always be a model to other people in society. We have the tradition of the artist gaining respect in society, gaining honour in society. This tradition occurs because artists are breathing life to expose something that lies behind the scene.” Maharishi Mahesh Yogi, in Fergusson, 1991, p. 194.

⁵ Fergusson, 1991.

based art educators and an inspiration to visual artists and filmmakers who have an interest in this field.

While the issue of the universal in art and theory has been discussed at length in *Mirror of Consciousness: Art, Creativity and Veda*,⁶ the topic and related nuances are extended in *The Big Fish*. Therefore, sub-themes that are informed by the above assumptions surface in ensuing chapters in Part One. These include the use of technologies of consciousness to develop individual and collective consciousness, the discussion of not only what it means to have fully developed consciousness (to be “enlightened”) but also the social implications of life lived in such a state. As a result of performing life-supporting action, it will be argued that increased positivity, universality, and peace can be created by the artist, by any individual, and through collective action. This goal is no small order for the artist. Even so, some artists reveal in their work a deep concern for the environment, for useful, sustainable social action, and for the future of humanity. In this context, the exemplary, universal or enlightened artist/individual can be defined as one who has inner vision or *Darshana*, the capacity for infinite memory—100% wakefulness—or *Smriti*, the ability to perform evolutionary action or *Yagya*, and the cognizance to appreciate structures, environments and technologies that can assist in attaining these goals—including site-specific *Yantras* and adequate *Vastu*.

With respect to the overarching strategy of this book, Part One presents principles of Vedic knowledge applying these to an understanding of concepts that inform the visual arts and the development of human life. In many scholarly settings, intellectuals will debate opposing issues or positions in the presentation of new material. In some instances the process of debate becomes more critical than the topic at hand. Although the device of debate has merit, here the Vedic approach is simply presented and applied to art in the broadest sense with respect to notions of cognition, memory, performance, cosmologically significant sites and architecture.

Some of the general topics of discussion in Part One are touched upon again in Part Two, which presents additional but varied perspectives on the arts. However, with chapters authored by varying individuals, Part Two does not present a single voice or viewpoint and

⁶ Bonshek, 2001.

does not in all cases apply a Vedic reading to art. It does, however, explore a broad consciousness-oriented perspective.

Essentially, the first part of this book is largely about the enormous potential for the scope and impact of art practice in a situation or world where self-referral consciousness could be lively in individual and collective awareness. In this sense it projects itself into a future of all possibilities. It also looks at some past and current art in the light of the idea of art having the *potential* to embody self-referral consciousness or lamenting the lack of it. In so doing, art examples referred to should not be taken as representing what could be called Vedic art or embodying principles of Vedic knowledge. They are drawn upon by the author to highlight points of discussion including the idea that self-referral consciousness is the basis of existence and may be present, more or less, in creative expression.

Starting with Part One, in order to prepare the reader for material in subsequent chapters, Chapter One, *Preamble—What is Consciousness?* encompasses the main ideas and principles of Vedic theory as outlined in Maharishi Vedic Science, considering these in reference to recent scientific theories, definitions, and research on consciousness and consciousness states—setting the groundwork for the rest of this section. Reading this chapter with an open mind will help pave the way for an appreciation of later chapters.

Chapter Two, *In Sight—Cognition or Darshana: Expanding Artistic Vision*, looks specifically at cognition as identified in Vedic knowledge and the implications of this understanding for art and creative practice. While cognition is considered in the context of “divine” sight or “celestial” perception, the reader should not let this terminology inhibit his or her ability to grasp the incredible possibility for refined perception, cognition, and insight in higher states of consciousness. While in each chapter, art and art practice (be it historical or contemporary) are interwoven into the discussion, illuminating the main themes, these art examples are the author’s choice; ultimately inferences made may or may not be entirely supported by the artists or the culture in which they would locate or position themselves.

Chapter Three, *Memory as Smriti—100 % Wakefulness: The Seat of Creativity and Retrieval* examines the idea of memory as complete, fully awake consciousness or *Smriti*. Discussing memory as *Smriti*, art and history are re-evaluated. Chapter Four, *Performance as Yagya or*

Offering: Socially Responsible, Transformational Art, expands the notion of performance, while Chapter Five, *Capturing Light—Outer and Inner: The Maharishi Vedic Observatory as Site Specific Cosmic Structure, Astronomically Aligned Monuments and Sun-Dependent Art* explores sun-dependent art, ancient astrological sites, and the purpose of the *Yantras* of the Vedic Observatory in detail, suggesting that these *Yantras* are ideal consciousness-based, site-specific installations. Finally, Chapter Six, *In Visible Cities: Metaphor? Or Body and Built Environment as Structures of Wholeness*, touches upon three areas: architectural metaphors for consciousness states in the work of Italo Calvino; descriptions of the body as the abode or habitat of consciousness in the *Srimad Devi Bhagavatam*, and the architecture and town planning of *Maharishi Sthapatya Veda* as cosmic habitat.

Whereas Part One examines principles of Maharishi Vedic Science, bringing out the unique relationship of consciousness, the physiology, and the universe, showing that consciousness is a field of intelligence expressing itself in all of these, Part Two presents a collection of essays (previously published elsewhere and variously authored by Lee Fergusson, Corrina Bonshek and Anna Bonshek) reviewing art, art education, and creativity. Part Two, *Expressions, Visions, Perspectives*, includes writing that spans 20 years. Selected essays present a consciousness-based analysis with a Vedic interpretation. Other essays may refer to consciousness, Indian culture and art production in a general sense.

Chapters Seven through Ten are jointly authored by Lee Fergusson and Anna Bonshek. Chapter Seven, *Agnes Martin on Beauty and Perfection in Art*, presents Agnes Martin's view of beauty and perfection in art. Martin articulated her ideas as a guest speaker at Maharishi University of Management, in the late 1980s—providing a historic record of her profound insights into art and creativity. This chapter includes connections made by the authors to Martin's ideas and principles of Vedic Science, which she endorsed. Around the same time the U.S. art world was embroiled in an ongoing, explosive, public debate about artistic freedom and funding for the arts. Issues of censorship and artistic freedom were being argued. Chapter Eight, *Unified Field Based Art Education: Toward a Socially Responsible College Art Curriculum* considers this debate in the light of consciousness-based educational practice.

Chapter Nine, *Allegories of Consciousness—Perfection in Printmaking from the Renaissance*, is a republished essay from the catalogue of an exhibition of prints selected from the Des Moines Art Center. As the first in a series of shows from the gallery's extensive print collection, it focuses on the theme of perfection in printmaking and prints as allegories of consciousness. The show—a formidable snapshot of printmaking in the West across six centuries—included works by Dürer, Cranach, Carracci, Rembrandt, Canaletto, Piranesi, Blake, Fantin-Latour, Kollowitz, Hopper, Morandi, Grant Wood, Picasso, Leger, Matisse, Chagall, Johns, Cornell, and Arakawa.

Another joint publication with the title *Signs of Reconciliation—Prints by Michael Kane Taylor*, appears in Chapter Ten. On the work of Michael Kane Taylor, this chapter is, again, a catalogue essay. It accompanied an exhibition the authors curated for the Institute for the Creative Arts—one aspect of a broader showcase of Australian film and creative practice supported by the Iowa Arts Council. Here, the authors review modernist and postmodernist thought before considering the Australian art context and print processes behind Taylor's work.

Chapter Eleven, *Ocean of Beauty in the Mind of the Beholder: A Suite of Photographs by Mark Paul Petrick* was originally printed in *Tractor*, in 1996, under the title: *In the Mind of the Beholder*. By Anna Bonshek, this essay reviews an impressive series of photographs by American Mark Paul Petrick. Referring to the Vedic text, the *Saundarya-Lahari* (*Ocean of Beauty*), Petrick juxtaposes images accrued over several years, including individuals meditating, scenes from trips to various locations and performance sites in India, diagrams of body parts and ritual drawings, Sanskrit words, and natural forms.

Authored by Corrina Bonshek and first published in *Body, Space, and Technology* in 2003, Chapter Twelve—*Deleuzian Sensation and Unbounded Consciousness in Reverie I*—considers a dual-screen, quadraphonic, multi-media installation in the context of expanded states of awareness and the Deleuzian definition of sensation and intensities. *Reverie I* is one aspect of *Project Reverie*, (2002), a collaborative multi-media project (also including *Reverie II* and *Reverie II: Images and Trajectory*). In Chapter Thirteen—*Reverie II: Revelation, Consciousness and Peace*—Anna Bonshek then discusses the structure and making of *Reverie II*, a 22-minute single screen DVD installation work. Last but not least, Chapter Fourteen, *1 Stands Out*,

presents a text written by Anna Bonshek as part of the same project on the idea of Resonance.

In sum, while Part One builds from chapter to chapter on previous arguments and knowledge, examining the principles of Maharishi Vedic Science applied to art and theory, Part Two is more of a collection of consciousness-related ideas and expressions, which do not necessarily refer to Vedic theory and can be read in, or out of, sequence. Underlying the material in general, however, is the assumption that there is a field of self-referral consciousness—a *Big Fish* of self-referral—that may be “hidden” or is “obscured” by much contemporary discourse and experience, but has been, is, and, will always be, the foundation of existence at all levels, and the very structure of the human nervous system, ever present and available through direct awareness.

What type of sentence (I asked myself) will an absolute mind construct? I considered that even in human languages there is no proposition that does not imply the whole universe.... I considered that in the language of a god every word would enunciate that infinite concatenation of facts, and not in an implicit but explicit manner, and not progressively but instantaneously.... A god, I reflected, ought to utter only a single word and in that word absolute fullness. No word uttered by him can be inferior to the universe or less than the sum total of time. Shadows or simulacra of that single word equivalent to a language and to all language can embrace are the poor and ambitious human words, all, world, universe....

Then there occurred what I cannot forget nor communicate. There occurred the union with the divinity, with the universe (I do not know whether these words differ in meaning). Ecstasy does not repeat its symbols; God has been seen in a blazing light, in a sword or in the circles of a rose. I saw an exceedingly high Wheel, which was not before my eyes, nor behind me, nor to the sides, but every place at one time. That wheel was made of water, but also of fire, and it was (although the edge could be seen) infinite. Interlinked, all things that are, were, and shall be formed it, and I was one of the fibers of that total fabric.... I saw the universe and I saw the intimate designs of the universe.... I saw the faceless god concealed behind the other gods. I saw infinite processes that formed one single felicity and, understanding all, I was able to understand the script of the tiger.¹

—Jorge Luis Borges—*The God's Script*

¹ Borges, J.L., 1964, pp. 171-173.

*May God, who in the mystery of his vision and power transforms his white radiance into his many-coloured creation, from whom all things come and into whom they all return, grant us the grace of pure vision.*²

—*Svetasvatara Upanishad, Part 4*

² The Upanishads, 1965, Penguin, London, (Translator, Juan Mascaro), p. 91.

PART ONE

INFINITE MIND/INFINITE BODY
AWAKENING AND RE-ENVISIONING CONSCIOUSNESS

This page intentionally left blank

1

PREAMBLE—WHAT IS CONSCIOUSNESS?

*In my view, the most important problem in the biological sciences today is the problem of consciousness...understanding the nature of consciousness crucially requires understanding how brain processes cause and realize consciousness. Perhaps when we understand how brains do that, we can build conscious artifacts using some nonbiological materials that duplicate, and not merely simulate, the causal powers that brains have.*¹

—John Searle

Over the last decade there has been a burgeoning interest in, and extensive body of research on, the topic of consciousness. The rich and rather fertile field of consciousness studies continues to be hotly debated and examined across the modern sciences (from physics and physiology to psychology, political science, sociology and peace studies), to philosophy, history, and the arts (including the visual arts, performance, theatre, music, literature, film, and digital media) and cultural studies.²

¹ Searle, 2002, p. 58.

² Travis, Munly et al., 2005; Wallace, 1988; Alexander, Boyer, & Alexander, 1987; Orme-Johnson, 1988, 1992, 2005; Hagelin & Herriott, 1991; Davies & Alexander, 2005; Wells & Boothby, 1995; Walton et al, 2005; Sands, 1998; Balakier, 1991; Cain, 1988; Haney, 1989 & 2000; Orme-Johnson, 1987; Rothenberg, 1999; Olson & Sorflaten, 2005; Ascott (Ed.) 1999; Travis et al., 2005; Meyer-Dinkgräfe, 1996, 1999, 2005, 2006; Bonshek, A., 2000, 2001a, 2001b, 2004, Bonshek, C., 2003; and in general: *Journal of Consciousness Studies*; *Consciousness, Literature and the Arts*, (<http://www.aber.ac.uk/cia>); *Modern Science Vedic Science Journal*;

While consciousness studies have expanded under the lens of contemporary thought and investigations, consciousness has traditionally been a central pillar to any understanding of life from the perspective of Vedic Science.

Looking at standard definitions of consciousness, as Amy Ione³ states, consciousness can refer to:

- the state of being aware, especially of something within oneself;
- the state or fact of being conscious of an external object, state or fact;
- awareness or concern for a social or political cause;
- the state of being characterized by sensation, emotion, volition and thought (where consciousness is seen as a synonym for mind);
- the totality of conscious states; and
- the upper level of mental life of which a person is aware (as opposed to the unconscious).

These definitions of consciousness all depend upon *something* (or a group of things) being an *object* of awareness. The object of awareness, here, may be: something within oneself; an external object; a state (including that characterized by a sensation, emotion, volition, thought); a fact; a social or political cause; a grouping or totality of varying states; or mental life in general (i.e., the thinking mind rather than the unconscious). In each case, the term consciousness implies being aware of something. But when, and for whom, does this occur?

Consciousness as Brain Processing

John Searle identifies consciousness as states experienced during waking. He explains that consciousness is

those subjective states of sentience or awareness that begin when one awakes in the morning from a dreamless sleep and continue throughout

Body, Space and Technology (<http://people.brunel.ac.uk/bst/>); *Cultural Values* (The Journal of the Institute for Cultural Research, Lancaster University) among the many scholarly forums and

³ Ione, 2005, pp. 42-43.

the day until one goes to sleep at night, or falls into a coma, or dies, or otherwise becomes, as one would say, ‘unconscious’.⁴

Awareness of something occurs during wakefulness, (i.e., not during sleep, a coma, death, etc.). Having consciousness implies wakefulness and requires a subject that is awake. While consciousness is understood in relation to objects of awareness, there must be a subject or experiencer. It makes no sense to speak of consciousness without addressing the subject. Subjectivity is inherent within consciousness. Searle maintains that conscious states only exist when experienced by a human (or animal) subject—a rock, plant or tree does not have consciousness. When we speak of consciousness, we are necessarily speaking of a subjective state or states. He goes on to argue that although philosophers and neuroscientists resist the idea of a science of subjectivity, it is a fact that scientists are working with the subjective domain all the time. Therefore, the idea of a science of consciousness dealing with subjectivity is completely tenable.

Searle further states that brain processes cause consciousness.⁵ Although he suggests that “consciousness is a biological phenomenon like any other”,⁶ he argues against either a purely dualist (mind/body) or materialist (biological) model, presenting, what he calls, *biological naturalism* and his *unified field approach*.⁷ This approach investigates how the brain produces a unified field of subjectivity (rather than a building block model which looks at the brain as having separate modes of consciousness—for example, visual consciousness, aural consciousness, etc.).

His unified field model looks at how the brain unites the various inputs into a unified conscious experience. To illustrate his point, Searle stresses that the introduction of visual experience is not the introduction of a visual consciousness but a modification of a preexisting consciousness. There is an existing field of awareness that takes different forms, or within which various conscious states are experienced. While consciousness expresses itself in different ways, unified field consciousness is a precursor to various modes of

⁴ Searle, 2002, p. 7.

⁵ *Ibid.*, p. 42-43.

⁶ *Ibid.*, p. 48.

⁷ *Ibid.*, p. 47. Searle asserts that, like phlogiston and vital spirits, dualism and materialism have no application to the real world and therefore should be abandoned, *Ibid.*, p. 49.

consciousness. Searle's analysis, while presenting consciousness and the brain's biological, chemical and electrical functioning as something like the two sides of the same coin, looks at the activity of the brain itself to find answers to the question of what is consciousness and how it functions as a unified field rather than a conglomerate of different kinds of consciousness. He suggests that the activity in the thalamocortical system is "probably the best place to look for unified field consciousness".⁸

So here we see that: a) definitions of consciousness are articulated in terms of an object of awareness; b) consciousness is understood as occurring while the subject is awake; c) inherent within consciousness is subjectivity; d) it is necessary to consider a science of consciousness to understand the domain of consciousness and subjectivity; e) while consciousness can be understood as being *caused* by brain processes, there is a preexisting unified field of consciousness which takes varying forms experienced as different modes of consciousness or conscious states; and f) there should be some part of the brain where one can look for unified field consciousness.

Maharishi Vedic Science, from which the material in this book will draw its inspiration, provides a comprehensive understanding of consciousness and creativity.

Consciousness as Infinite Awareness

*Consciousness is the existence of everything, and consciousness is the intelligence of everything. Consciousness is wakefulness, unbounded alertness, pure intelligence, pure existence, self-referral fullness, all knowingness—the self-sufficient and unmanifest source, course and goal of all creation.*⁹

—Maharishi Mahesh Yogi

Brought out by Maharishi—the founder of the Transcendental Meditation technique and advanced technologies of consciousness¹⁰—Maharishi Vedic Science is a complete science of consciousness and

⁸ *Ibid.*, p. 55.

⁹ Maharishi Mahesh Yogi, 1994, p. 58.

¹⁰ In Part One the central principles of Vedic Science are introduced—supported by descriptions and quotes by Maharishi.

its expressions. The contribution of this science to art and creativity has been considered at some length elsewhere,¹¹ but it should be re-emphasized that from the Vedic perspective consciousness is, in its most expanded sense, an infinite field of awareness—the source of all creativity and creative action. While Vedic knowledge has been maintained in India over the centuries, Maharishi explains that consciousness is an infinite field of intelligence at the source of creation and of the mind, available to anyone at anytime as their own simplest form of awareness. Thus, the Vedic approach starts with the understanding of consciousness as a field of *pure subjectivity* or *pure awareness* called *Atma*, and subject and object are aspects of one *unified field of pure consciousness*.

As noted previously, Searle identifies consciousness specifically with respect to the waking state only—i.e., a state of being awake and not being unconscious, in a coma, asleep or dead. In Maharishi Vedic Science, waking state consciousness is just one of seven states of consciousness. The waking state of consciousness is called *Jagrat Chetana*, sleeping state is known as *Swapn Chetana*, and the state of dreaming is referred to as *Sushupti Chetana*.

Maharishi Vedic Science goes on to identify a fourth state of consciousness, beyond the three states of waking, dreaming and sleeping, called *Transcendental Consciousness* or *Turiya Chetana*. Also referred to as *pure consciousness*, *pure awareness*, *pure intelligence*, or *self-referral*¹² *consciousness*, Transcendental Consciousness is the state of unbounded awareness. In addition, there are still further states of consciousness that the individual can experience.

While the three common states of sleeping, dreaming and waking consciousness have been researched extensively, since the 1970s experience of the fourth state of Transcendental Consciousness has also been closely studied showing that it has its own unique style of physiological functioning.¹³ In the fourth state of consciousness the individual experiences a sense of expanded awareness, where the self

¹¹ Bonshek, 2001a.

¹² *Self-referral* means it does not have reference outside of itself. It does not need anything to justify its existence, its position, its size, its being. Absolute and self-sufficient, it needs nothing outside of itself.

¹³ Wallace, 1970; Wallace & Benson, 1972; Wallace, Benson, & Wilson, 1971; Banquet, 1973; Banquet & Sailhan 1976.

becomes infinite, unbounded; called the *Self* it is also referred to as the cosmic self or *Atma* in Vedic terminology.

Ultimately, to speak of, research, and know consciousness in its fullest sense, we must at least have experience of pure consciousness in this fourth state. Maharishi Vedic Science not only defines and describes in detail the nature of this state of consciousness but also provides a technology to experience it. This technology of consciousness is the Maharishi Transcendental Meditation technique—designed to allow the individual to effortlessly access this field of unchanging, unbounded consciousness:

Maharishi's Transcendental Meditation Technique is a simple, natural, effortless procedure practiced for 15 to 20 minutes in the morning and evening while sitting comfortably with eyes closed. During this technique the individual's awareness settles down and experiences a unique state of restful alertness—as the body becomes deeply relaxed, the mind transcends all mental activity to experience the simplest form of human awareness—Transcendental Consciousness—where consciousness is open to itself. This is the self-referral state of consciousness.¹⁴

Having identified, described, and provided a means to experience and research the effects of this fourth state, some may ask: why would anyone want to experience self-referral consciousness? What is the real, practical value of this experience? Maharishi explains that, in fact, all three commonly experienced states of consciousness are constantly changing, unreliable states. The fourth state of consciousness, as Maharishi emphasises, is a reliable, unchanging, infinite field of awareness at the basis of creation, at the basis of existence and of the human mind. It is the domain of the cosmic mind—a field of *bliss consciousness*—where individual awareness gains its cosmic status.

In the waking state, as Searle notes, the conscious mind may be aware of any number of things: the comfort of sitting in a soft chair; having an itch; perceiving colours of a sunset; feeling sad or thirsty; etc. All of these experiences involve the subject and an object—whether the object be a thought, an external thing or a feeling. While we can say that the subject is awake, experiences gained through the objects of the mind and perception register as specific modes of

¹⁴ Maharishi Vedic University, 1994, pp. 260-261.

consciousness. According to this perspective, the subject is derived, or coloured, by experience of the object. If I feel tired, tiredness may become the predominant experience by which I characterize my state. Who is feeling tired? “I”, the subject. But this “I” is overshadowed by the sense of tiredness. The object—the thought or feeling of tiredness—predominates. Thus, subjective experiences of relative consciousness states are analysed by looking at objects of consciousness.

Maharishi Vedic Science provides a means whereby the subject can research his or her own consciousness from the platform of pure subjectivity—Transcendental Consciousness. What exactly does this mean? In Transcendental Consciousness, subject and object are both aspects of consciousness. Through the process of transcending, the mind settles down, until it becomes consciousness by itself. At this level, subject and object are both aspects of self-referral consciousness. There is no separation. This is why the term *self-referral* consciousness aptly describes this state. It is where consciousness refers only to itself. The process of transcending, from “gross” to “subtle” levels of the mind to experience self-referral consciousness,¹⁵ has been described by Maharishi as follows:

Through Transcendental Meditation, the attention is brought from gross experience to subtler fields of experience until the subtlest experience is transcended and the state of transcendental consciousness is gained. The march of the mind in this direction is so simple as to be automatic; as it enters into experience of a subtler nature, the mind feels increased charm because it is proceeding towards absolute bliss. Once the mind reaches transcendental consciousness it is no longer a conscious mind; it gains the status of absolute Being. This state of transcendental pure consciousness, also known as Self-consciousness, Self-awareness, *Samadhi*, represents the complete infusion of cosmic Being into the individual mind.¹⁶

Here, the conscious mind is described as becoming absolute Being, Self-consciousness, Self-awareness or *Samadhi*. It is “no longer a conscious mind” but “gains the status of absolute Being”. One can

¹⁵ The process of transcending takes one from the thinking level of the mind, through the finer discriminating value of the intellect, to the sense of ego or “I”, and beyond this to unbounded awareness.

¹⁶ Maharishi Mahesh Yogi, 1969, p. 144.

speak of absolute bliss since, at this level, there is no division as such, no lack. The mind has identified with the *source* of the mind, absolute Being.

To recap, in waking state consciousness there is a subject and object of awareness (or several objects of awareness). The conscious mind identifies with the object of awareness. If I feel cold, the sense of coldness becomes my point of reference. In waking state consciousness, the mind shifts from one object to another and the sense of “I” is defined in reference to, or simply overshadowed by, the object of awareness—what “I” feel, see, taste and so on.

In Transcendental Consciousness all there is *is* consciousness. Consciousness is self-referral. Consciousness is the subject, object and their relationship—the process whereby the subject knows the object. In Maharishi Vedic Science this state is also referred to as the *unified field of transcendental consciousness* or the *unified field of self-referral consciousness*.

The Unified Field of Transcendental Consciousness

*I regard consciousness as fundamental; I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing postulates consciousness.*¹⁷

—Max Planck

The state of Transcendental Consciousness, Maharishi points out, is the same unified field described by modern physics—the underlying field that unifies all force and matter fields at the source of creation. It is a field of pure subjectivity, an infinite field of intelligence. All laws of nature are governed from this level.

Maharishi states that there must be intelligence governing everything in creation. This field of intelligence is a field of consciousness:

We see things around us exist. We also see that things around us change and evolve. We also see that there is order in evolution—an apple seed will only grow into an apple tree, etc. Thus, it is obvious that

¹⁷ Planck, quoted in Jitatananda, 2004, p. 28.

existence is endowed with the qualities of intelligence—existence breathes life by virtue of intelligence. By virtue of intelligence everything in creation is aware of itself, is aware of its own existence—is conscious of itself, and at the same time it is aware of its environment. It is self-referral (it knows itself), and it is object-referral (it knows itself as the object of knowing). Thus, existence is intelligence, it is consciousness. Consciousness is the existence of everything, and consciousness is the intelligence of everything.¹⁸

Everything in creation exists; everything in creation must have intelligence—as there is order and evolution in creation. Maharishi emphasizes that everything in creation is aware of itself.

Everything in creation is made of self-referral consciousness or intelligence. Existence is intelligence; it is consciousness. Consciousness is the basis of life. Consciousness in its infinite value is, therefore, not restricted to an anthropocentric sense of awareness. It does not simply apply to humans although humans can know this field.

Physicist and quantum field theorist, John Hagelin best articulates the principle of the existence of consciousness and its inherent intelligence with respect to unified field theory:

In any unified quantum field theory, the most obvious essential property of the unified field is that it *exists*. As in Maharishi Vedic Science, everything else may be said to exist by virtue of its existence. For this existence to be substantial it must be permanent, i.e., the field should exist eternally. This property is expressed in physics as the time-translational invariance of the Lagrangian density—an essential characteristic of any realistic unified field theory.

The second major property of the unified field which one is led to expect on the basis of our previous analysis is *intelligence*. By assumption, the unified field is the unified source of all the laws of nature governing physics at every scale. These laws of nature formally express the order and intelligence inherent in natural phenomena. If there were no laws of nature, there would be no constant patterns of natural behavior, and nature would be unintelligible. If, as particle physicists believe, all the laws of nature have their dynamical origin in the unified field, then the unified field must itself embody the total intelligence of nature's functioning.¹⁹

¹⁸ Maharishi Mahesh Yogi, 1994, p. 58.

¹⁹ Hagelin, 1989, p. 9.

Hagelin argues that the unified field exists permanently (it is eternal) and everything else exists by virtue of it. Taking the unified field, as identified by physics, as the same field of Transcendental Consciousness experienced as unbounded awareness by the individual, then one can appreciate that Transcendental Consciousness, as described by Maharishi, is a reliable state of consciousness. The nature of this state is that it is unchanging or eternal and it is bliss consciousness. Furthermore, the unified field of pure consciousness is the source of all laws of nature. It embodies the total intelligence of nature's functioning. If nature's intelligence is the same unified field of pure consciousness at the source of thought, then it can be accessed by the human mind and experienced by the nervous system. This being so, if the human mind could access this level, it would be highly significant for the individual and society.

Searle's notion of a more holistic brain functioning with respect to consciousness states (where the brain operates as a field rather than a conglomerate of isolated types of consciousness) seems on the face of it to be sympathetic with this Vedic perspective. However, in contrast, Searle clearly discusses consciousness specifically in reference to waking state human or animal subjects and as states of awareness *caused* by brain processing. Exploring completely new territory, and addressing questions raised by Searle (such as the relationship between the brain and consciousness), in identifying aspects of Vedic knowledge within the human nervous system, its structure and function, Tony Nader precisely articulates how brain activity corresponds to the self-referral dynamics of the unified field of consciousness. He presents the entire functioning of the human physiology in terms of the numerous divisions and subdivisions of the Veda and Vedic Literature,²⁰ which, according to Maharishi Vedic Science, *are* impulses of self-referral consciousness or unmanifest sound²¹—frequencies of *Natural Law*²² reverberating within the unified field, the total intelligence of nature's functioning.

²⁰ The Vedic Literature is an age-old literature of India, preserved throughout generations in the Vedic families of India. It is a large collection of verses and books, which are divided into 40 branches or disciplines. Of these 40, one is called *Rk Veda*, the specialty of which is *wholeness*, the holistic aspect of total knowledge. The term Veda in this context will refer to the first 4 aspects: *Rk, Sama, Yajur* and *Atharva Veda*, and the Vedic Literature will refer to the remaining 36 branches.

²¹ Nader, 2000.

²² The term "Natural Law" refers to the integrated, balanced and holistic functioning of all the laws of nature.

Veda: The Structure of Knowledge Within Consciousness

Consciousness is that which is conscious of itself. Being conscious of itself, consciousness is the knower of itself. Being the knower of itself, consciousness is both the knower and the known. Being both the knower and the known, consciousness is also the process of knowing. Thus consciousness has three qualities within its self-referral singularity—the qualities of knower, knowing, and known—the three qualities of ‘subject’ (knower), ‘object’ (known), and the relationship between the subject and object (process of knowing). Wherever there is subject-object relatedness; wherever subject is related to object; wherever subject is experiencing object; wherever subject (knower) is knowing object, these three together are indications of the existence of consciousness. The universe with its observer expresses the three values of observer, process of observation, and object of observation; therefore it is the indicator of the existence of consciousness.²³

—Maharishi Mahesh Yogi

The term Veda means knowledge. Maharishi gives an exhaustive account of how the Veda and Vedic Literature are expressions or reverberations of self-referral consciousness, and not simply a collection of ancient texts demonstrating relative meaning informed by historical context. He explains that Veda is the *structure of pure knowledge*. So what exactly is the significance of this statement for our understanding and experience of consciousness?

Returning to the discussion of subject, object and their relationship, Maharishi explains that at the level of pure consciousness, there is only awareness—pure awareness. This means that awareness is open to itself. Because it is awareness, it must be conscious of something, but there is only consciousness at this level, all by itself. Thus, by virtue of being aware, consciousness knows itself and creates a division within its undivided status. The one unbroken, infinite field of pure consciousness called *Kaivalya* (singularity) or *Atma*, by virtue of being pure awareness, differentiates values within itself. Maharishi refers to this self-referral move of *Atma* (the Self) as a *big fish of self-referral* coming up under the water—the ocean of consciousness.²⁴ Thus, consciousness, being awake, knows itself as subject, object and

²³ Maharishi Mahesh Yogi, 1994, pp. 53-54.

²⁴ Maharishi Mahesh Yogi, in Bonshek, 2001a, p. 354.

their relationship. Consequently, there are three values or shades of consciousness within one field of consciousness. This *three-in-one* structure of knower, known and process of knowing, within consciousness, Maharishi describes as the structure of pure knowledge.

The subject or knower (*Rishi*), the object or known (*Chhandas*) and their relationship, the process of knowing (*Devata*), are values of consciousness within one wholeness (*Samhita*). These three principles of *Rishi*, *Devata*, and *Chhandas* together constitute the three-in-one structure (*Samhita* of *Rishi*, *Devata*, and *Chhandas*) of pure knowledge at the basis of creation. As Maharishi states:

In its ‘self-referral’ state, or transcendental state, consciousness knows itself alone; as such, it is the knower of itself. By being the knower of itself, it is also the object of knowledge and the process of knowing. Thus, in its self-referral state, consciousness is the unified state of knower, knowing, and known. In the Vedic language this ‘three-in-one’ structure of consciousness is called Samhita of Rishi, Devata, Chhandas—Samhita (unity) of Rishi (knower), Devata (dynamism of the process of knowing), and Chhandas (the known).²⁵

At this level, the knower, knowing itself, is simultaneously the subject, object and process of knowing. Furthermore, in this process, an infinite dynamism is located:

When we have one and three together in that self-referral state of pure consciousness, there is that infinite contraction for remaining one and there is that quick expansion to become three. When they are simultaneously three and one there is infinite dynamism.²⁶

In the dynamic reverberation of one to three, three to one, an infinite frequency vibration within consciousness gives rise to all the diverse expressions of creation. In this we can see that the structure of pure knowledge, through reverberation and further diversification, creates the blueprint for all of creation and the ever-expanding universe.

So we see that the self-referral dynamics of consciousness give rise to unmanifest sounds—frequencies—of the Veda and Vedic

²⁵ Maharishi Mahesh Yogi, 1994, p. 59.

²⁶ Maharishi Mahesh Yogi, 1985, pp. 65-66.

Literature,²⁷ frequencies that structure all forms and phenomena. Furthermore, due to the infinite contraction and expansion of self-referral consciousness, the three-in-one structure of pure knowledge has inherent within it *infinite organizing power*—the organizing power that structures the universe. As Maharishi states: “Veda, the structure of pure knowledge and its infinite organizing power, is an eternal disclosure of how singularity transforms itself into diversity.”²⁸ Veda is, as Maharishi describes it, the *Constitution of the Universe*,²⁹ since all the impulses or laws of nature responsible for the phenomenal world are contained in seed form within this structure of pure knowledge, within pure consciousness.

This insight into the relationship of consciousness and its precipitated expression as matter is one of the most important contributions of Maharishi Vedic Science. Ultimately, all of the infinite interactions of consciousness emerging from that self-referral dynamic create diversity and are contained in, or are expressed as, the various aspects of the Veda and Vedic Literature. From this perspective, one can see how the Veda and the Vedic Literature are frequencies that structure creation—the body, the universe, all forms and phenomena. They represent the frequencies of the unified field of transcendental consciousness at the source of creation and the source of the mind.

Veda and the Physiology

Richo Ak-Kshara parame vyoman... (Rk Veda, 1.164.39)

*The Hymns of the Veda are unmanifest dynamism—self interacting dynamics (Devata)—the structure of dynamic intelligence—the structure of the Laws of Nature within the self-referral state of Transcendental Consciousness (Parame vyoman).*³⁰

—Maharishi Mahesh Yogi

²⁷ The sounds of Veda are the sound value in the texts of Veda. A word has two aspects: sound and meaning. When one hears a foreign language we hear the sound without knowing the meaning. In Veda and Vedic Literature the sound value of the Vedic Recitation is given importance rather than the meaning.

²⁸ Maharishi Mahesh Yogi, 1994, p. 79.

²⁹ *Ibid.*, pp. 203-214.

³⁰ Maharishi Mahesh Yogi, 1996a, p. 515.

In Maharishi Vedic Science, books, chapters, verses, hymns, words, and syllables, from the four Vedas *Rk Veda*, *Sama Veda*, *Yajur Veda*, *Atharva Veda* through the entire Vedic Literature, are impulses of consciousness expressed as sound, which give rise to the diversity of nature.³¹

The Rig-Ved [Rk Veda] presents a complete record of the structure of the dynamics of the unified field in the form of sound. Indeed, the syllables of the Rig-Ved are the actual sounds generated by the self-interacting dynamics of the unified field and the mechanics of symmetry breaking through which the unified field sequentially gives rise to the diversified structure of natural law seen in nature.³²

For this reason, in Vedic Science there is an intimate, one-to-one relationship between sound and matter, name (*nama*) and form (*rupa*). While every aspect of the Veda and Vedic Literature brings out some aspect of the self-interacting dynamics of consciousness at the basis of creation, the entire Veda and Vedic Literature also unfolds in a sequential progression—each subsequent expression elaborating upon the previous. For example, *Rk Veda*, the first of the four Vedas and accompanying Vedic Literature, is the first expression of self-referral consciousness. It contains the totality of knowledge; it contains within it the structuring principles of the Veda and Vedic Literature. Maharishi gives a beautiful explanation of this in his discussion of the *uncreated commentary* of the Veda, which he refers to as his *Apaurusheya Bhashya*,³³ and how Veda elaborates upon its own dynamics, providing its own uncreated commentary, through *Mantra* (sound) and *Brahmana* (gaps). The details of this unprecedented analysis of Vedic knowledge is exhaustively discussed elsewhere³⁴ with respect to the physiology, creativity and art, and quantum network architecture, and has been introduced with respect to theatre and performance.³⁵

In terms of the physiology, Nader gives a startling analysis of the dynamics of consciousness with respect to the structure and

³¹ The term *Nature* is understood in its broadest sense to include all animate and inanimate objects, all forms of life, all that exists in the universe, from its unmanifest, unified level to all its expressions, forms and phenomena.

³² Hagelin, 1989, p. 33.

³³ Maharishi Mahesh Yogi, 1996a, pp. 495-505.

³⁴ Nader, 2000; Bonshek, 2001a; Routt, 2005.

³⁵ Meyer-Dingräfe, 2005.

functioning of the human nervous system,³⁶ showing that *Rk Veda* embodies the holistic functioning of the physiology and that the human brain displays the intricate dynamics of self-referral functioning contained in the mathematical unfoldment of the syllables and gaps of *Rk Veda*. With respect to the thalamus, he identifies its function as the connecting point between outer and inner, the specific and the holistic—balancing and maintaining parts and wholeness, in relation to consciousness.³⁷ In this it can be seen that Maharishi Vedic Science, unmatched in its breadth and scope, is totally revolutionizing consciousness studies.

Having introduced the structure of knowledge in relation to consciousness, it is useful to return to the discussion of higher states of consciousness and how the individual can rise to and verify this reality.

Perception and Knowledge in Higher States of Consciousness

For the individual, after Transcendental Consciousness, there are an additional three states of consciousness that can be realized or experienced. These are identified by Maharishi as Cosmic Consciousness (*Turiyatit Chetana*), Refined Cosmic Consciousness or God Consciousness (*Bhagavad Chetana*), and Unity or Brahman Consciousness (*Brahmi Chetana*). Each has its own corresponding physiology and sphere of knowledge. In the development from the experience of Transcendental Consciousness to Cosmic Consciousness, the individual experiences more of the field of Transcendental Consciousness until eventually Transcendental Consciousness becomes a *permanent* feature of awareness. How does this process occur? Maharishi explains that:

For transcendental consciousness to become permanent and co-exist with the waking state of consciousness, it is necessary that the two states of the nervous system corresponding to these two states of consciousness should co-exist. This is brought about by the mind gaining alternatively transcendental consciousness and the waking state of consciousness, passing from one to the other. This gradual and systematic culture of the physical nervous system creates a

³⁶ Nader, 2000.

³⁷ *Ibid.*, pp. 131-133.

physiological situation in which the two states of consciousness exist together simultaneously.³⁸

When Transcendental Consciousness (pure, bliss consciousness, unbounded awareness) is experienced permanently along with the three states of waking, dreaming and sleeping, practically speaking, the individual witnesses the three changing states. He or she witnesses experience as it shifts from one state to the next, but is established permanently in unbounded awareness, or self-referral consciousness. Therefore, in Cosmic Consciousness the individual is *always* awake or aware. Indeed, the states of waking, dreaming and sleeping are witnessed or observed as changing modes of activity on the ground of unbounded, unchanging awareness. This reality, this experience, is only possible because it is within the capability of the human nervous system to support different styles of functioning:

It is well known that there exist in the nervous system many autonomous levels of function between which a system of coordination also exists. In the state of cosmic consciousness, two different levels of organization in the nervous system function simultaneously while maintaining their separate identities. By virtue of this anatomical separation of function, it becomes possible for transcendental consciousness to co-exist with the waking state of consciousness and with the dreaming and sleeping states of consciousness.³⁹

When Transcendental Consciousness does become a permanent feature of awareness, the state of *Cosmic Consciousness*—the fifth state of consciousness—has been gained. Pure consciousness is lived permanently in daily life. The individual is cosmic.

In speaking of the difference between the various states of consciousness, each state of consciousness has its own corresponding style of physiological functioning. Maharishi points out that:

Any state of consciousness is the expression of a corresponding state of the nervous system. Transcendental consciousness corresponds to a certain specific state of the nervous system which transcends any activity and is therefore completely different from that state of the

³⁸ *Ibid.*

³⁹ *Ibid.*

nervous system which corresponds to the waking state of consciousness....⁴⁰

While the state of consciousness of the individual is the expression of the state of their nervous system, ultimately, the nervous system can be seen to be the expression of self-referral consciousness. To fully realize this, individual consciousness has to be fully developed.

The state of consciousness and its corresponding physiology evolve during the development from Transcendental to Cosmic Consciousness. As Maharishi teaches:

In the early stages of the practice of Transcendental Meditation, these two levels of function in the nervous system are unable to occur at the same time; the function of the one inhibits the function of the other. That is why, at this stage, either transcendental consciousness or the waking state of consciousness is experienced. The practice of the mind in passing from one to another gradually overcomes this physiological inhibition, and the two levels begin to function perfectly at the same time, without inhibiting each other and still maintaining their separate identities. The function of each is independent of the other, and that is why this state of the nervous system corresponds to cosmic consciousness, in which Self-awareness exists as separate from activity. Silence is experienced with activity and yet as separate from it.⁴¹

Although an individual who has gained Cosmic Consciousness is said to be *enlightened* (permanently established in that cosmic status), there is, in effect, further potential for development to still higher states of consciousness. Maharishi explains that the sixth state of consciousness, *Bhagavad Chetana*, is where the individual begins to perceive the finer or “celestial” values of the object, and finally, in the seventh state of consciousness, *Brahmi Chetana*, even the object of perception is seen to be one’s own self-referral consciousness. Then subject and object are unified at this level.

Just as each state of consciousness has its own psychophysiology, knowledge is different in different states of consciousness. In waking state, from one moment to the next, knowledge and experience are ever changing. Knowledge in waking, dreaming and sleep states is unreliable. Our moods, perceptions and experiences change from day

⁴⁰ Maharishi Mahesh Yogi, 1969, p. 314.

⁴¹ *Ibid.*

to day. In dreaming even the imaginary tiger seems palpably real. The only state where consciousness is unchanging, unbounded, eternal, is Transcendental Consciousness. Only at this level can reliable knowledge, or *absolute knowledge*, be gained. Here the structure of pure knowledge is open to awareness. In Cosmic Consciousness the unchanging reality is maintained along with the changing states of waking, dreaming and sleeping, but in God Consciousness the individual goes on to appreciate finer values of the object of perception.

For the individual to gain God Consciousness the nervous system has to be cultured so that it functions in an integrated manner. This integration of the nervous system results from a refinement of the mind, through refined mental activity. As Maharishi states:

In order to define activity of this quality [mental activity of ultimate refinement], we must analyse the whole range of activity. The activity of the organs of action is the most gross, the activity of the senses of perception is more refined, the mental activity of thought is finer still, and the activity of feeling and emotion is the finest of all. One could further classify different levels of quality in emotional activity, such as anger, fear, despair, happiness, reverence, service and love. The activity of devotion comprises the feelings of service, reverence and love, which are the most refined qualities of feeling. It is through the activity of devotion that cosmic consciousness develops into God-consciousness.⁴²

Finally, in Unity Consciousness, the object of perception is seen in terms of the dynamics of one's own self-referral consciousness. In this state *complete knowledge* is gained. The individual has complete knowledge of subject, object and their relationship. The last stroke of Unity Consciousness, *Brahman Consciousness*, is when the individual appreciates that the self-referral dynamics of his or her own self-referral consciousness are the fabrics of everything in creation, of the ever-expanding universe. In this sense, consciousness is all embracing and is described in Maharishi Vedic Science as *wholeness moving within itself*. So the expression that one has become one with Brahman, or attained Brahman Consciousness, refers to the state where there is nothing "outside" of consciousness so to speak. All previously perceived object-referral states are seen to be subject-referral—the

⁴² *Ibid.*, p. 315.

move of self-referral consciousness, the structure of pure knowledge, generating diversified values within an infinite ocean of consciousness. At this level of reality, every move of creation is a move of one's own self-referral nature. Then, as Maharishi indicates, the individual is a lively embodiment of Natural Law, all the laws of nature work for him:

This is what is known as the totality, Brahman. Unity consciousness in the midst of all diversified structures of knowledge, and all activities, performances, behavior, interchanges and exchanges—all lively in one unity consciousness and unity consciousness lively in one human personality—that is the representative of Natural Law, Brahman Consciousness, the totality.⁴³

This supreme goal of life, full enlightenment, is completely natural and within the range of human experience—Unity Consciousness in the midst of all diversified structures of knowledge, all activities, performances, behaviour, interchanges and exchanges—lively in one human personality. Maharishi emphasizes that this occurs from within through Vedic Science, through the practice of technologies of consciousness. It is not gained through affectation, or intellectual study, or thinking. As Maharishi states, devotion on the level of thinking and assuming “an attitude of feeling” cannot create unity.⁴⁴

Development of consciousness is for practical experience and knowledge. It occurs spontaneously with the practice of technologies of consciousness. As stated in the Veda and Vedic Literature itself, there is little value to studying the Vedas without a technique of consciousness. Knowledge in books stays in books. Without a technique and without the experience of Transcendental Consciousness, the container of knowledge (the knower, the subject) cannot fully expand. Without developed consciousness, the Vedas are taken to be obscure texts with little practical relevance. With development of consciousness through the practice of appropriate technologies, the individual can act in accord with nature or Natural Law, and can know anything, do anything, accomplish anything. The knower reaches his or her infinite potential; furthermore, the Veda and the Vedic Literature can be appreciated as the dynamics of one's own self-referral awareness, lively in the physiology.

⁴³ Maharishi Mahesh Yogi, 1986, p. 34.

⁴⁴ Maharishi Mahesh Yogi, 1969, p. 314.

Obviously experience is different in different states of consciousness. As Maharishi goes on to emphasize:

To rise from the waking state of consciousness to God-consciousness, one has to pass through the states of transcendental consciousness and cosmic consciousness. In the sequence of development, one state leads to another in the order of waking, transcendental, cosmic and God-consciousness. They are as different from one another as spectacles of different colours through which the same view looks different. When the same object is cognized in different states of consciousness, its values are differently appreciated. Life is appreciated differently at each different level of consciousness.⁴⁵

Because knowledge and experience are different in different states of consciousness, if criteria that apply to waking state consciousness are used to comprehend higher states, valid areas of knowledge and experience will be dismissed, rejected, even considered myth or fantasy, or simply not part of the real world. Ironically, rejection of experience beyond waking state can mean rejection of the infinite, untapped potential of human life—the ultimate Reality (or the “real”) as opposed to the ever changing (or “unreal”). Therefore, it is vital that any study of consciousness, mind and brain, takes into account the potential for higher states of consciousness.

The ‘Hard’ Problem of Consciousness

Looking at the relationship between consciousness, the brain and physiological changes, in a discussion of the “hard” problem of consciousness, Travis, Munly, Olson and Sorflaten examine the practice of Transcendental Meditation and the experience of self-referral awareness with respect to EEG coherence, breath quiescence, autonomic orienting and frequency of peak EEG power.⁴⁶ They suggest that current research into cognitive abilities and functions only considers easy problems such as investigation of:

- the ability to discriminate, categorize and react to environmental stimuli;
- the integration of information by a cognitive system;

⁴⁵ *Ibid.*, p. 316.

⁴⁶ Travis, et al., 2005, pp. 123-135.

- the reportability of mental states;
- the deliberate control of behaviour;
- the mechanics of divided, sustained and selective attention; and
- the difference between wakefulness and sleep⁴⁷.

Furthermore, theories that look at more global understandings of cognitive functioning and awareness do not offer an explanation for the problem of consciousness, although they present a “global workspace” model. Travis, et al. go on to note that the traditions of Vedic, Buddhist and Taoist cultures, which share the view that “surface phenomenal experiences cover a silent ground of self-awareness”, include specific meditation practices designed to investigate *inner experiences* or consciousness. Others in the West, such as William James, have identified a difference between the sense of *me* and *I*—where the self as *me* can be identified as the *empirical ego* and the self as *I* as the *pure ego*. Travis, et al. mention that Searle argues against James’ concept, stating that the subject cannot observe his own experience—the subject cannot have two experiences simultaneously (i.e., experiencing and observing experience at the same time).

Clearly from the perspective of Maharishi Vedic Science, it is possible for the experiencer to both *observe* and *have* experience simultaneously. This is the reality of experience in Cosmic Consciousness and is the foundation for further development to more evolved states of consciousness. Searle does emphasize that he does not consider self-awareness in his examination of consciousness. He focuses on different aspects of waking state consciousness. However, this is somewhat limiting, given that there is the potential for experience in additional states of consciousness.

In examining experience during meditation practice, Travis, et al. suggest that there can be an investigation into the phenomenological and physiological correlates of deep meditation experiences and that these can present some insights into the so-called hard problem of consciousness. The authors present three emergent themes in the analysis of meditator’s experiences, including: the absence of space, peacefulness, and unboundedness. For example, one participant observes: “my mind becomes free of the grip of thinking and planning—then I am.... There is nothing I can report about this

⁴⁷ *Ibid.*

state.... It's absolute silence". Travis, et al. go on to discuss physiological markers of Transcendental Consciousness (e.g., changes in breath patterns, skin conductance responses, and increasing frequencies of peak EEG power) suggesting increased alertness during this state.⁴⁸

Continued research can only highlight the enormous potential of the human brain physiology and the range of experience that is open to us. From the perspective of the Vedic tradition, there are no limitations on experience. Consciousness is a field of infinite awareness accessible to the human brain physiology. This Vedic understanding provides a profoundly deep insight into self-referral consciousness and the mechanics of creativity. The mechanics of creativity that govern the universe are the same mechanics of creativity that structure the human brain, cognition, perception and the structure and function of human life. Ultimately, object-referral awareness can be seen as the play of self-referral consciousness.

For this reason, in this volume discussions are based on an understanding of consciousness as a self-referral field giving rise to object-referral consciousness—to thinking and perception, and the whole material universe. In this sense, it looks behind the scenes, as it were, beyond consciousness as seen in relation to *things* or objects of awareness (i.e., something within oneself; an external object; a sensation, emotion, volition, thought; a fact or political cause; a grouping of states; or mental life in general). Any object-referral consciousness (and various consciousness states) will be taken to have their basis in the self-referral nature of pure consciousness, *Atma*.

Coming back to Searle's observation that consciousness only occurs when the subject is awake, the idea that the subject must be awake for consciousness to occur makes complete sense. However, if consciousness is seen as an eternal reality, an infinite field of intelligence, then it is always present whether the subject is awake to it or not. Given this, the subject must be *totally awake* for that self-referral state to be experienced and known. This is so for the subject in Transcendental Consciousness. However, being *fully awake* ultimately means that self-referral consciousness is permanently lively in individual consciousness. This is true for Cosmic Consciousness, God Consciousness and Unity or Brahman Consciousness but especially so for Brahman Consciousness. In the state of Cosmic Consciousness,

⁴⁸ *Ibid.*, p. 130.

self-referral, Transcendental Consciousness is at no time overshadowed—covered, lost, obscured—by the relative states and vagaries of waking, dreaming or sleeping states. However, in Brahman Consciousness self-referral awareness is seen to be the reality of everything. Self-referral consciousness is by definition fully awake. It's only that the individual has to rise to experience and realize this reality. In speaking of being fully awake, we are speaking of a human subject. The human nervous system is that nervous system that has the potential to rise to and experience higher states of consciousness.

Another important point raised by Searle with respect to any research and understanding of consciousness, is that subjectivity is inherent within consciousness. From the perspective of Maharishi Vedic Science, self-referral consciousness *is* a field of pure subjectivity, where all that there is *is* consciousness knowing itself. Searle emphasizes that science must be able to encompass and address subjectivity, and to comprehend consciousness. As stated, Vedic Science is the complete science of pure subjectivity and all phases of consciousness. It provides the precise details of what consciousness is, how the individual can experience and know it, and how to verify its nature and applications.

While Searle does not endorse mind/body dualism, he does maintain that consciousness is caused by brain processes. Maharishi Vedic Science, in identifying the self-referral nature of consciousness at the basis of all conscious states, locates this infinite field of intelligence as the foundation of all dynamic structures and processes, including brain processes. In fact, Nader presents a unique correspondence between the structures of consciousness recorded as the Veda and Vedic Literature and the brain physiology. The more expressed processes of the mind's activity are the outcome of dynamics of consciousness. This idea will be revisited in the chapter on *Darshana* or *Vedic cognition*.

Searle also talks about a unified field model of consciousness where he sees consciousness as taking on various states during waking. He says that the brain unites various stimulus inputs into a unified conscious experience, such that, visual consciousness, for example, can be understood as a modification of a preexisting consciousness and not the introduction of a different consciousness. This concept resonates with the Vedic model, in as much as different modes of consciousness are seen to be fluctuations of one unified field of self-referral

consciousness. However, the Vedic understanding significantly expands this idea. It illustrates that self-referral consciousness functions on the level of the entire physiology, from the DNA, the molecular level, the cellular level, to the level of organs, and in perception, experience and cognition. The Vedic approach finds the unified field lively at every point in the brain and physiology. However, as Nader points out, certain areas of the brain *do* have a one-to-one correspondence with aspects of the sequential unfoldment of the self-referral dynamics of consciousness—specific aspects of the Veda and Vedic Literature.⁴⁹

Searle suggests looking in the thalamus for his “unified field” consciousness. As Nader explains, a specific *quality* of intelligence (one aspect of the self-referral dynamics of consciousness) expresses itself as *unmanifest sound* (frequencies) in a particular part of the Vedic Literature, which in turn is expressed in *form* as a certain part of the human physiology.⁵⁰ Different qualities within the unified field of pure consciousness are expressed directly in different corresponding parts of the physiology. Nader finds that the thalamus is the *form* of the *Distinguishing and Deciding* quality of intelligence⁵¹ called *Nyaya* in the terminology of the Vedic Literature. Furthermore, the physiology of the thalamocortical fibres, Nader shows, is the *form* of the *Unmanifesting the Parts but Manifesting the Whole* quality of intelligence, called *Sama Veda Pratishakhya (Pushpa Sutram)* in Vedic terminology. This analysis of the brain physiology reveals far deeper connections between consciousness and the “real” world than many scholars would give credit. Vedic Science is all encompassing, showing that previously unexplored areas of knowledge are valuable examinations of reality. With its profound insight into the dynamics of consciousness and their expression in the brain, this knowledge has applications in all fields and disciplines, including the arts, performance, and creativity. By approaching the topic of creativity and the arts from the unique Vedic perspective, from the perspective of self-referral consciousness, this volume hopes to contribute to a new wave of thinking that describes a more expansive reality that is “out of the box”, that heralds a new paradigm, one which we are progressing

⁴⁹ Nader, 2000.

⁵⁰ *Ibid.*, pp. 42-43.

⁵¹ “Intelligence” refers to intelligence as impulses of consciousness—intelligence of Nature’s functioning.

toward—whether observed or not, whether written about or not, whether articulated or not.

Returning to the consideration of higher states of consciousness, according to Maharishi Vedic Science, while each state of consciousness has its own world, each of the various states of consciousness can be defined according to the degree to which self-referral, pure awareness is established, or open to, the subject—and perceived in the object. Having looked at individual development in terms of an expanded definition of consciousness, how does this understanding apply to the collective?

Creating Coherence in Collective Consciousness

The concept of collective consciousness has long been recognised and discussed by sociologists and cultural theorists. In Maharishi Vedic Science any understanding of collective consciousness can only be fully appreciated in the context of the dynamics of self-referral, pure consciousness.

At the social level, consciousness can be discussed in terms of the collective, whether expressed as tribal, community, national or world consciousness, or collective consciousness in general. In Maharishi Vedic Science, all are defined with respect to the degree of *pure self-referral consciousness* lived by individuals within a group at any time. The collective consciousness of a society can be said to be the fundamental force governing the quality of social life. Collective consciousness refers to the wholeness of consciousness of a population. The quality of any collective consciousness relates to the degree of self-referral consciousness lived by the population.

Each level of society has its own characteristic collective consciousness: family consciousness, community consciousness, city consciousness, state or provincial consciousness, national consciousness, world consciousness. Just as the consciousness of an individual determines the quality of his or her thought and action, the collective consciousness of a group has its own reality reflecting the level of consciousness of its members. While the character and quality of collective consciousness influences the individual, conversely, the quality of individual consciousness of the individuals within a group,

influences collective consciousness. As Maharishi states in his discussion of the evolution of individual and collective consciousness:

As individual consciousness grows, collective consciousness rises; as collective consciousness rises, individual consciousness grows. Individual consciousness is the basic unit of all levels of collective consciousness—family consciousness, community consciousness, national consciousness, and world consciousness—influencing them all and in turn being influenced by them.⁵²

Maharishi discusses life-supporting influences in terms of right and wrong, explaining that due to the fact that everything in the universe is interconnected, it is difficult to know in every instant what is right and wrong.⁵³ However, *right action* is precisely defined in Maharishi Vedic Science as “action in accord with Natural Law”, or action performed from the level of the unified field of Transcendental Consciousness—the level of Nature’s functioning which is life-supporting for every phase of existence. So the individual spontaneously behaves rightly when he or she is fully established in Cosmic Consciousness. In discussing collective consciousness and its impact on the individual, Maharishi points out that when people “behave rightly, a corresponding atmosphere is naturally produced, and when such an influence is dominant, the individual’s tendencies are affected by it”.⁵⁴ Similarly, when an atmosphere is saturated with non-life-supporting influences it is not possible for virtue “to survive for long”.

As mentioned, the quality of life lived by a group can be defined by the degree to which the individuals within the group are living pure, self-referral consciousness. If a large number of individuals in a family, society, community, tribe, population, etc., enliven Transcendental, self-referral consciousness then positive trends increase in that group—an *evolutionary* effect is created. An evolutionary effect means a life-supporting effect. Due to the relationship between individual consciousness and the unified field of natural law, the home of all the laws of nature, when the individual contacts and activates the unified field all the life-supporting qualities of that field are enhanced. The practical demonstration of this principle

⁵² Maharishi Mahesh Yogi, 1977, p. 124.

⁵³ See: Chapter 16, *Traditions: Modes of Activities Governed by Dharma*, in Bonshek, 2001a, and specifically: pp. 239-241.

⁵⁴ Maharishi Mahesh Yogi, 1969, p. 63.

has been documented in research on Transcendental Meditation, Maharishi's advanced *TM-Sidhi Programme* and *Yogic Flying*. While Transcendental Meditation allows the mind to settle down to the least excited state of awareness or Transcendental Consciousness, the advanced technologies of the TM-Sidhi programme and Yogic Flying allow the individual to act from this level. More importantly, when practiced in a group, these technologies have a remarkable effect on trends in society.

As early as 1960, Maharishi explained that with the practice of Transcendental Meditation by one percent of a population, positive, life-supporting trends would increase in that population. In keeping with scientific protocol, this phenomenon is called the *Maharishi Effect*. Likewise, when only the square root of one percent of a population practice Transcendental Meditation, the TM-Sidhi programme and Yogic Flying together, the *Extended Maharishi Effect* is observed. Over the years, hundreds of research studies have examined these effects. Whereas the Transcendental Meditation technique facilitates the experience self-referral consciousness, the TM-Sidhi Programme and Yogic Flying train the individual to operate from that level to create specific outcomes and develop increased mind-body co-ordination. The phenomenon of Yogic Flying (where the body lifts up from the ground through the application of a specific mental formula), Maharishi points out

illustrates that the individual nervous system has sufficient, integrated complexity to function at the level of the unified field. It proves the nervous system's capability to function at the level which all the laws of nature are unified. From this perspective, the brain wave coherence which is maximum during 'yogic flying' represents an upsurge of coherence from the level of the unified field.⁵⁵

When individuals in a group practice these technologies of consciousness there is an increase in positive trends, or an increase in *coherence*, in the society as a whole as documented in research studies worldwide. Davies and Alexander explain that coherence is the degree of order with which consciousness is functioning in a system. As they explain, coherence is

⁵⁵ Maharishi Vedic University, 1987, pp. 18-19.

reflected in the degree of functional integration among various components of an individual mind and nervous system, or in the degree of spontaneous coordination and complementarity among the diverse goals and activities of the individuals and groups comprising a society. Higher coherence thus allows better use of resources for balanced development, satisfaction of needs, and a dynamic and diverse, but stable and peaceful society; greater incoherence (equated with stress), if persistent, is reflected in narrower perspectives, greater conflict, frustrated development, and susceptibility to violence, disease and social disintegration⁵⁶.

The principle of generating coherence in society is contained in the *Yoga Sutras* in the following expression: “In the vicinity of *Yoga*, hostile tendencies are eliminated.” Commonly associated with physical postures, the word *Yoga*⁵⁷ actually refers to the state of self-referral consciousness itself. *Yoga* means “union”. Maharishi explains that the state of *Yoga*, on the individual level, is gained in Cosmic Consciousness.⁵⁸ When a group of individuals enliven the unified field of self-referral consciousness or *Yoga*, a positive influence is created; hostile or life-damaging tendencies are eliminated. Research studies confirm this principle, revealing that factors such as hospital admissions, traffic fatalities and war deaths decline and positive factors increase when a significant number of individuals practice these technologies of consciousness in a group.

Davies and Alexander discuss several assemblies—social experiments where groups gathered to practice the Transcendental Meditation and TM-Sidhi Programme to test the prediction of

⁵⁶ Davies & Alexander, 2005, p. 289.

⁵⁷ In the physiology, *Yoga* corresponds to the association fibres of the brain. Nader explains that chapters 1-4 of the *Yoga Sutras*, correspond to the four lobes of the cerebral cortex: the occipital, frontal, parietal and temporal lobes. Each of the *Sutras* in the four chapters directly relates to one of the numerous cortical gyri (folds) in this part of the brain. Nader states that: (of Chapter One) “the longer *Sutras* occupy a larger area of the cortex...*Sutras* 14, 15, 24, 30, and 41, are long, and occupy a long fold on the gyri of the brain. A further correspondence is found in considering the functioning of the brain. The right side of the brain is understood to have a more general, synthetic quality, while the left has a more analytic, specific quality. Study of the *Yog-Sutra* suggests that some *Sutras* focus on the specific values, while others focus on general values”. Nader, 2000, p. 173. Maharishi points out that, by virtue of this relationship between sound and brain physiology, in listening to recitation of or reading the Vedic Literature that quality of intelligence in the physiology is enlivened in the physiology. This means that the Veda and Vedic Literature have a significant value and impact, from the perspective of sound alone, for the physiology and its optimum functioning. In this context, *Yoga* has significant value, both in its social and individual physiological application.

⁵⁸ Maharishi Mahesh Yogi, 1969, p. 317.

increased quality of life and reduced tensions in various locations and areas of conflict.⁵⁹ They document the effects of seven such assemblies in: Israel (August 1-October 1, 1983); Fairfield, Iowa, U.S.A. (December 18-January 6, 1984); Lebanon (March 1-17, 1984); Yugoslavia (April 13-23, 1984); Fairfield, Iowa, U.S.A. (July 1-15, 1984); the Netherlands (December 21-January 12, 1985); and Washington, D.C., (July 9-17, 1985), presenting evidence that the group practice of these technologies of consciousness minimizes “social entropy” and reduces violence.

Another well-documented demonstration project revealed that when 4,000 coherence-creating experts gathered together to collectively create coherence in Washington D.C., (recorded then as having the highest crime rate of any capital city in the world), violent crime dropped by 18% below the predicted levels for that time of the year.⁶⁰ Further studies show that even individual biochemical changes (decreased levels of cortisol and increased levels of the main metabolite of serotonin—associated with reduced stress) were observed in people who live within the vicinity of a group of coherence-creating meditators but who were, themselves, non-meditators.⁶¹

Obviously, these technologies of consciousness have value in increasing coherence and positivity in social and individual life. Trends that can be defined as negative—i.e., terrorism, ill health, natural and man-made disasters, violence and aggression, life-threatening tendencies—do not contribute to life and therefore, one can say, are opposed to creativity. Creativity, by definition, is opposed to destruction. As discussed at length elsewhere,⁶² such technologies of consciousness are not only important for society and the creation of world peace, they are vital, if not essential, tools for the creative individual. By embracing these themes, this book will look not just at individual consciousness, but also the phenomenon that promotes creative tendencies in society, in collective consciousness, as a means of performance from the level of self-referral consciousness. This kind of action, called *Yagya*, could be defined as the most creative performance work.

⁵⁹ Davies & Alexander, 2005. p. 304.

⁶⁰ Institute of Science, Technology and Public Policy, 1994.

⁶¹ Walton, Cavanaugh & Pugh, 2005, pp. 339-344.

⁶² Ascott, 2000; Bonshek, 2001a; Meyer-Dinkgräfe, 2005.

Consciousness and the Arts

Recently, the acclaimed filmmaker David Lynch has spoken on consciousness, the brain and creativity, and on the benefits of practice of Transcendental Meditation for creativity and stress reduction.⁶³ In the last five years, much has been written on art, film, performance and consciousness. Concerned about the growing trend of movies perpetuating images of war, Wim Wenders stated that in the 1990s, influenced by an age of consumerism, film students were not interested in content and that big films showing around the planet refuse and deny the knowledge that we need.⁶⁴ Bonshek⁶⁵ and Meyer-Dinkgräfe⁶⁶ have argued the case for an art, film and theatre of consciousness, where the effect on participants is a life-supporting one. While some may feel this limits the range of the arts, it has long been an aspiration of writers, artists, performers, musicians and creative practitioners in various fields, to have a profound effect on the viewer/participant—one that goes beyond either a temporary emotion, aesthetic shock, dramatic or intellectual effect, or straight forward sense of enjoyment.

The technologies of consciousness themselves are fundamentally the means for the artist, performer, writer, director, to develop individual consciousness, to enliven collective consciousness and to provide greater insights into the mechanics of creativity and the vast potential for the human mind and experience. Consequently, this volume will, for the most part, draw from and enlarge the above discussion of consciousness.

Coming back to the question: What is consciousness? The following chapters will present ideas based on the theme of consciousness as a self-referral field of awareness and intelligence that reverberates in terms of unmanifest sound (recorded as the Veda and Vedic Literature) creating structure and form. Ultimately, the creative dynamics of self-referral are the creative dynamics of our own fully awake consciousness—the “big fish” of self-referral coming up under

⁶³ Lynch established The David Lynch Foundation to fund students who want to learn the Transcendental Meditation technique. “In today’s world of fear and uncertainty, every child should have one class period a day to dive within himself and experience the field of silence—bliss—the enormous reservoir of energy and intelligence that is deep within all of us” Lynch, in Egenes, 2005; also see link at: <http://www.davidlynch.com>.

⁶⁴ In Bonshek, 2001b, p. 19.

⁶⁵ Bonshek, 2001a.

⁶⁶ Meyer-Dinkgräfe, 2005.

the water, an infinite ocean of consciousness. Therefore, while consciousness is the basis of everything, the human brain physiology can know and experience the dynamics of this level of awareness in higher states of consciousness. Based on this understanding, this book will examine cognition, memory, the phenomenon of Vedic performance or *Yagya*, Vedic Observatory structures, and Vedic architecture (*Sthapatya Veda* or *Vastu Vidya*). It will also review developments in contemporary art practice that reflect a growing interest in the theme of consciousness and include previously published articles on art and consciousness.

This page intentionally left blank

2

IN SIGHT—COGNITION OR *DARSHANA*: EXPANDING ARTISTIC VISION

When we believe we see something as existing, this thing, before being transformed into another state, corresponds to the speed of our senses. That is to say, its position at a given moment is maintained long enough to allow our senses to perceive it, or register its presence.... Through our senses we are unable to perceive the infinite, for our senses themselves are limited. This does not affect the existence of the infinite, and we are subject to it.... While we are perceiving a phenomenon we believe we see it, yet we do not see its perpetual transformation. All is born, lives and dies for our senses, but not for the universe. Despite this, man possesses a more or less developed sensibility...an imagination...and the ability to observe and deduce. Thus, he can see the invisible, or, if you like, take a sounding on the incommeasurable.¹

—Georges Vantongerloo

The world of Beauty, like the Absolute, cannot be known objectively...the mere intention to create beauty is not sufficient: there must exist an object of devotion.²

—Ananda Coomaraswamy

¹ Vantongerloo, in Brett, 2000, p. 21.

² Coomaraswamy, 1997, p. 200.

Visual perception supplied philosophers looking for permanence with evidence of the arche, the world substance beneath the variability of material things, “which suffers these changes and is the origin from which all particular things spring and into which they retransform themselves”. Perception likewise offered visible proof that all things are in a flux of constant modification.³

—Rudolph Arnheim

Various readings of *Darshana* (or *Darshan*⁴) have been presented by scholars of Indian philosophy and art but most agree that *Darshana* is a “seeing” or “viewing” that involves interactivity and a heightened perception. *Darshana* might be said to be a kind of insight—a realization or revelation. Translations of *Darshana* embrace the concepts of seeing, looking at, observing, perceiving, discerning, becoming visible or known,⁵ and literally “sight” or “viewing,” including the auspicious viewing of a sacred image for the purpose of taking into oneself the power of the deity, and a blessed glimpse of the divine.⁶ The word *Darshana* can also mean “cognition” and in speaking of cognition, one inherently speaks of the ability to know. Having cognizance of something is to have knowledge or perception of something. In Maharishi Vedic Science, the term *Darshana* refers to *form* or *Vedic cognition*, gained in higher states of consciousness. Also known as six systems of Indian philosophy, *Darshana* is a six-fold iteration of self-referral consciousness. In its fullest sense, *Darshana* is the realization of the details of the sequential unfoldment of self-referral consciousness.

The Interactive Gaze Bestowing Transformative Experience or Grace

Darshana is discussed in different contexts as Indian philosophy and as revelatory insight. In his book, *Derrida and Indian Philosophy*, Coward defines *Darshana* as a system of ideas comprising

³ Arnheim, 1969, p. 53.

⁴ *Darshana* and *Darshan* will be used interchangeably here.

⁵ Monier-Williams, 1993, pp. 470–471.

⁶ Rossi, 1998, p. 73.

epistemology, ethics and soteriology⁷ (the study of knowledge, ethics and the doctrine of salvation),⁸ while Roy Craven describes *Darshana* as the experience of being moved by the sight or presence of a sacred person or object,⁹ or a mysterious ecstasy experienced by Buddhist devotees and pilgrims, generated when in the presence of a holy person or place.¹⁰ Defining *Darshana* as ‘seeing’ in the Hindu cultural context, Vidya Dehejia states that:

Hindus visit a temple for *Darshan*, or ‘seeing’ the image of the enshrined deity. Such seeing does not literally mean merely using one’s eyes, but a dynamic act of awareness. This type of ‘seeing’ lies behind the choice of ‘seer’ to designate a holy prophet or sage. The deity, in presenting itself for *Darshan*, bestows blessings upon worshippers who, by their act of seeing, have made themselves receptive to this transfer of grace. The concept of *Darshan* lies at the heart of the creation of images of the divine and of temples to enshrine them.¹¹

Here, *Darshana* is more than looking at a person or object, but the receiving of grace or blessings from a deity, holy person, prophet or guru. It necessarily involves interaction—between the object of the viewer’s gaze and the viewer’s receptivity to the transfer of grace. Dehejia suggests that this principle of *Darshana*, as a giving of grace, may have been assimilated into a routine established by Islamic Mughal ruler, Shah Jahan, of giving audience to his people each day at noon in a designated hall in the Red Fort, Delhi.¹²

Lovejoy and Jacob find *Darshana* to be a spiritual experience, specifically in Hindu practice and philosophy, gained through the effect of the gaze. They stipulate that the participant may “surrender human agency and experience overpowering feelings of loss of control”,¹³ in exchanging gazes with the divinity. This is a way of touching or making contact through the gaze, via which power is given and received. Through absorption, the deity’s superior powers facilitate knowing or a superior state of consciousness. In this sense, the eye is

⁷ The term soteriology refers to the doctrine of salvation and is derived from two words: *soter* meaning “saviour” or “deliverer”, and *logos*, meaning “word” and also “matter” or “thing”.

⁸ Coward, 1990, pp. 4-5.

⁹ Craven, 1997, p. 72.

¹⁰ *Ibid.*, p. 169.

¹¹ Dehejia, 1997, p. 137.

¹² *Ibid.*, pp. 330-331.

¹³ Lovejoy & Jacob, 1999, p. 62.

not just a receptor but an active transmitter or organ of action. The eye can be seen as a locus of power and energy radiating in all directions and from where energy is focused onto a selected target—with either beneficial or malevolent effect.¹⁴ Lovejoy and Jacob stress that this notion of the eye's extramission capability was upheld by Western culture but with the rise of eighteenth-century, rationalist Enlightenment, the eye increasingly was studied as a passive receptor, like the *camera obscura* pin hole, through which light travels.

In contrast, the participatory, collaborative and interactive process of *Darshana*, allows the subject to "see" himself as the deity or guru would see him and to gain the deity or guru's power of perception. Even looking at a photograph or digital image accessed via the Internet in the correct spirit is a means of *Darshana* and is felt to have the same power. Having the desire to contact and receive grace, in being the object of the (Divine) gaze, the subject receives *Darshana*. The deity or guru "gives" and the spectator "takes" *Darshana*—the eyes being the locus of energy exchange. Lovejoy and Jacob state that while the roots of the concept and practice of *Darshana* may be traced to Vedic philosophy (which they identify as circa 1500 BCE), in contemporary India *Darshana* and associated ideas persist, informing visual discourse in new-media contexts. They observe that the practice of *Darshana* "habitually extends from spiritual to secular realms",¹⁵ perhaps akin to the assimilation of this principle by the Mughal ruler, Shah Jahan, seeking to demonstrate kingship. Lovejoy and Jacob emphasize that electronic media has, in fact, increased the avenues for the practice of *Darshana*. Focusing on parallels between *Darshana* and *diegesis* (the latter they define as a mediated experience through technological construction of reality—as for example in film, video and digital media—that can bring suspension of disbelief), they find that both involve an interactive seeing which potentially transforms consciousness.

These discussions of *Darshana* revolve around the ideas of seeing through the eye, a unique state of awareness, gaining a state of grace, a transformative experience or consciousness, spiritual practice, systems of Indian philosophy and knowledge, and the gaze as transformative power in interactive digital media imagery. Maharishi Vedic Science

¹⁴ *Ibid.*

¹⁵ *Ibid.*, p. 63.

presents another, more comprehensive, universal approach to *Darshana*, simultaneously pulling back to give a wide-angle lens view, and zooming in to analyze the precise structure and mathematics of *Darshana* in terms of the self-interacting dynamics of consciousness, perception and the physiology.

Although *Darshana* and Vedic knowledge are discussed by scholars within the framework of religion, philosophy and ritual, Maharishi Vedic Science shows that Vedic knowledge is not bound by religious or historical constraints or readings. Maharishi Vedic Science, as a *science* of consciousness, unfolds the reality of consciousness and its expressions—which is true for any time and place. In addition, it provides new readings of devotional practices, modes of worship and objects of worship. Considered as deities, the *Vedic Devatas*, for example, are found to be functions and structures of the physiology. *Devata* usually translated as “god”, refers to a *Law of Nature*, a governing principle of Nature’s functioning, in Maharishi Vedic Science. In this and in other contexts, *Darshana* can be re-defined revealing it to signify the cognition of the self-referral dynamics of consciousness—with the innumerable laws of nature responsible for the orderly functioning of the universe operating at that level. In order to explore this theme further, it will be necessary to review the six-fold structure of the Vedic Literature.

A Six-Fold Self-Referral Loop Within Consciousness

As mentioned earlier, the Veda and Vedic Literature are sequentially elaborated values of unmanifest sound—expressions of the self-referral dynamics of consciousness. The three values of *Rishi*, *Devata* and *Chhandas*, inherent within pure consciousness or *Atma*, interact to generate ever more elaborated versions of consciousness. Understanding this one principle is vital to any consideration of *Darshana* as the universal, eternal phenomenon of cognition. The values of intelligence of *Samhita*, *Rishi*, *Devata* and *Chhandas* (respectively the *togetherness* of *knower*, *process of knowing*, and *known*) form the three-in-one structure of knowledge of pure

knowledge displayed in the four Veda: *Rk*, *Sama*, *Yajur* and *Atharva Veda*.¹⁶

Consciousness continues to expand and submerge within wholeness or *Samhita* through a six-fold dynamic (from *Rishi*, *Devata* and *Chhandas*, to *Chhandas*, *Devata* and *Rishi* values). The rest of the Vedic Literature follows this dynamic of emergence and submergence in a series of *self-referral loops*. The emergence and submergence properties of consciousness are inherent within the nature of self-referral awareness and will be discussed from different perspectives in this chapter, including bi-directional awareness, silence and dynamism, the *Lamp at the Door*, and the seat of creativity and balance.

In the case of the Vedic Literature, each subsequent “loop”, following the previous, gives an elaborated version of knowledge bringing out another aspect of the expansion and return to source in the self-referral move of consciousness. In this way, the 36 branches of the Vedic Literature are, in fact, six multiplied by six self-referral loops or clusters of knowledge demonstrating that the Veda and Vedic Literature have a perfect self-referral structure. They have a *Mandala* or circular structure.

Following the four Veda, the six loops or clusters are known as:

- 1) *Vedanga*,
- 2) *Darshana* (or *Upanga*),
- 3) *Upa-Veda*,
- 4) *Ayur-Veda*,
- 5) *Brahman*, and the
- 6) *Pratishakhya*.¹⁷

¹⁶ *Rk Veda* is the expression of *Wholeness* or totality of knowledge, and contains all values of knowledge within its structure in seed form. It contains all values of silence and all values of dynamism and expresses infinite dynamism moving from infinity to its own point. All values of silence and dynamism are contained in the syllable *Rk*. *Sama* is the flow within *Wholeness* or the flow of the *Rishi* quality within *Rk*; *Yajur* is the dynamics of flow, the dynamism of the *Devata* quality within *Rk* and *Sama*; and *Atharva* is the vibrating intelligence, the quality-less reverberation of wholeness, the vibrating, unmanifest relationship between *Rk*, *Sama* and *Yajur*; it is *Chhandas*, the finest measure of infinity, the hidden dynamics of relationship between *Rk*, *Sama* and *Yajur*, between *Samhita*, *Rishi* and *Devata*. Maharishi Mahesh Yogi, 1997a, p. 82.

¹⁷ The *Vedanga* are comprised of *Shiksha*, *Kalp*, *Vyakaran*, *Nirukt*, *Chhand*, and *Jyotish*. The *Darshana* contain *Nyaya*, *Vaisheshik*, *Samkhya*, *Yoga*, *Karma Mimansa*, and *Vedanta*. *Upa-Veda* is made up of *Gandharva Veda*, *Dhanur-Veda*, *Sthapatya Veda*, *Harita Samhita*, *Bhel Samhita*, and *Kashyap Samhita*. *Ayur-Veda* includes *Charak Samhita*, *Sushrut Samhita*, *Vagbhatt Samhita*, *Madhav Nidan Samhita*, *Sharngdhar Samhita*, and *Bhava Prakash Samhita*. The *Brahmana* comprises *Upanishad*, *Aranyak*, *Brahmana*, *Itihas*, *Puran* and *Smriti*. Finally, the *Pratishakhya* bring out the last self-referral loop of *Rk Veda Pratishakhya*, *Shukl-Yajur-Veda Pratishakhya*,

In this sequence, *Darshana* is the second self-referral loop highlighting six qualities of intelligence. These are: the *Distinguishing and Deciding* quality known as *Nyaya*¹⁸ (*Rishi*); a *Specifying* quality called *Vaisheshik* (*Devata*); an *Enumerating* quality known as *Samkhya* (*Chhandas*); the *Unifying* quality of intelligence called *Yoga* (*Chhandas*), an *Analysing* quality known as *Karma Mimansa* (*Devata*); and finally, the *Lively Absolute*¹⁹ quality known as *Vedanta* (*Rishi*).

In every case, Maharishi considers each value in the context of experience in higher states of consciousness. For example, *Vedanta*, meaning “end of the Veda” actually unfolds the experience of Unity Consciousness or *Brahmi Chetana*, which is living wholeness. Similarly, Maharishi reveals that *Nyaya*, the first of the *Darshana*, is the value of holding together opposites. As such, it is bi-directional, maintains perfect balance, and acts as a *Lamp at the Door*. The term *Lamp at the Door* expresses the reality of being illuminated inside and outside simultaneously and refers to bi-directional awareness. It also highlights the expanding and contracting dynamic of intelligence.

Bi-Directionality—The Interactive, Balancing, and “Just” Function of Nyaya

Nyaya, the first of the six divisions of the *Darshana*, maintains the coexistence of opposite values, and represents the value of going and coming back at the same time. Maharishi explains, being the first of the *Darshana*, *Nyaya* follows on from the last of the *Vedanga*²⁰, which is *Jyotish*.²¹ As such, *Nyaya* is the expansion of *Jyotish*. Why is this

Atharva Veda Pratishakhya, *Atharva Veda Pratishakhya (Chaturadhyayi)*, *Krishn-Yajur-Veda Pratishakhya (Taittiriya)*, and *Sama Veda Pratishakhya (Pushpa Sutram)*.

¹⁸ *Nyaya* was mentioned in the previous Chapter with respect to the thalamus. *Nyaya* is also divided into sixteen categories generally known as: 1) *Pramana*, means of valid knowledge, 2) *Prameya*, object of valid knowledge, 3) *Samshaya*, doubt, 4) *Prayojana*, purpose, 5) *Drishtanta*, example, 6) *Siddhanta*, established principle, 7) *Avayava*, parts of a logical argument, 8) *Tarka*, process of reasoning, 9) *Nirnaya*, art of drawing conclusion, 10) *Vada*, discussion, 11) *Jalpa*, polemics, 12) *Vitanda*, cavil, 13) *Hetvabhasa*, fallacies, 14) *Chhala*, equivocation, 15) *Jati*, futile argument, 16) *Nigrahasthana*, disagreement on first principles.

¹⁹ This quality is described in Maharishi Vedic Science as the *Lively Absolute (Living Wholeness—I-ness or Being)* quality.

²⁰ The first self-referral loop of six aspects.

²¹ In Maharishi Vedic Science, *Jyotish* is the *all-knowing* quality of intelligence. *Jyotish* deals with Vedic astrology and is the knowledge of past, present and future, all aspects of self-referral consciousness.

important? *Jyotish* is the value of all-directional awareness and *Nyaya* features this reality. As Lovejoy and Jacob mention, the eye (in *Darshana*) is a locus of power and energy radiating in all directions and from where energy is focused onto a selected target. In Maharishi Vedic Science, the value of all-directional awareness is a function of the *Jyotish* quality of intelligence featured by *Nyaya*—that quality of self-referral intelligence that *becomes* silence and dynamism and which is bi-directional awareness. It is more than a function of sight. It is the reality of self-referral consciousness on the non-physical, transcendental level. As Maharishi states:

The first *Nyaya Sutra* says: *Prama-na prameya*—That is *Prama*, consciousness, intelligence. Intelligence, not physical. And it has another meaning to it: *Prama-na prameya*—*Prama* is authenticity. What is the authenticity of all-knowingness? It is *Prama*, consciousness, not physical. It is unphysical, unmanifest, transcendental. In *Nyaya*, the whole knowledge is in a balanced state, balancing state, of silence and dynamism. Silence and dynamism, perfectly balanced, is justice (balance). Now this balance is the balance of two opposite qualities of Self-referral intelligence. And that is termed as *Lamp at the Door* which lights inside and outside at the same time. So *Nyaya* features the reality of the quality of all-knowingness, that is, the quality of that intelligence which becomes the silence value and the dynamic value of consciousness.²²

In being bi-directional, awareness demonstrates justice; as justice, *Nyaya* is perfect balance between silence and dynamism. These antithetical values are the basic nature and structure of self-referral consciousness contained in *Rk Veda*. Balance, here, is justice, in as much as it is the balance of two completely opposite qualities of intelligence on the nonphysical, unmanifest, transcendental level. Again, Maharishi locates the deepest meaning and reality of the notion of justice within the structure of consciousness itself.

In terms of individual behaviour, when a person is enlightened, this principle manifests as thought, speech and action that is spontaneously balanced and life-supporting—i.e., supportive for the individual, for society, and for all of existence. Every thought, word and performance is generated automatically from the level of pure wakefulness—justice,

²² Maharishi Mahesh Yogi, in Routt, 2005, pp. 107-108.

perfect balance, the coexistence of opposite values, the total potential of Natural Law—and therefore is “just” for all phases of life. As noted earlier, the term Natural Law refers to the integrated, holistic and balanced functioning of all the laws of nature. Moreover, this level of coexisting opposites is, in fact, the level of infinite creativity. How is this so? As Maharishi explains, pure wakefulness is pure silence. In being wakefulness, it is alert or awake to its own singularity. In this is the potential for dynamism. Pure wakefulness is the comprehension of the simultaneity of silence and dynamism. Maharishi points out that:

In its pure wakefulness, human awareness comprehends the details of its own structure and finds that the silent value of its own nature is co-existing with the dynamic value of its own nature. This co-existence of silence and dynamism presents a picture of silence partaking of dynamism and dynamism partaking of silence. The phenomenon of silence ceaselessly partaking of dynamism and dynamism ceaselessly partaking of silence within the structure of pure wakefulness displays creativity within the singularity, which forms the basis of all creative and evolutionary processes of the diverse universe.²³

Silence and dynamism together are in the nature of consciousness. Creativity is inherent within the singularity of pure wakefulness by virtue of their coexistence. The details of the creative dynamics of consciousness are displayed in all the creative and evolutionary processes of the universe. This reality can be cognized by fully awake individual awareness. In sum, awareness, in maintaining coexistence of opposites, has the property of being bi-directional. In being bi-directional, it has inherent within it knowingness and knowingness is the basis of cognition. Extending Lovejoy and Jacob’s description of *Darshana*, where the eye is both a receptor and transmitter, a conduit potentially both radiating power and energy in all directions and focusing energy onto a specific point, Maharishi Vedic Science shows that self-referral consciousness is all-directional awareness and a state in which *Vedic cognition* can occur.

Maharishi states that the experience of all-directional awareness is gained in the fully awake consciousness during the practice of the flying sutra and is indicated by observations of the brain functioning

²³ Maharishi Mahesh Yogi, 1993, p. 160.

(via electroencephalograph or EEG) at the time of practice. During *Yogic Flying* the state of fully awake, pure consciousness is:

Stimulated by the intention of the *Sutra* (Maharishi Yog-Sutra), as if the unqualified, self-referral state of fully awake consciousness is qualified or coloured by the intention of the *Sutra*. This internal functioning of self-referral consciousness...generates the 'FIELD EFFECT'—activity within the structure of Unity—the underlying field of all diversity.... When human awareness achieves this level, then because this level of intelligence underlies every grain of the physiology, the body as a whole becomes lively in the quality of the intention of the *Sutra*.... Specificity is promoted on the generality of the Unified Field; direction is born in the all-openness (360° openness) of the Unified Field of Pure Intelligence.²⁴

The all-directional value of awareness is described in terms of all-openness or 360° openness. This means that there is not only an effect in terms of the phenomenon of *Yogic Flying* but also, correspondingly, throughout the field, throughout creation. In higher states of consciousness, with all-directional awareness, technically, nothing is out of the range of awareness. Clearly, cognition is not simply about vision but experience in higher states of consciousness. However, *Darshana* does refer to “seeing” at the finest level of perception. Vision is enhanced, but this enhanced perception is due to the individual living higher states of consciousness, where he or she has all-directional awareness. The implication is that the individual can *know* anything in this state. They can know and see the creative mechanics of nature’s functioning.

A true artist, as a creator—translating inner consciousness into outer vision—should have this ability. Then he or she can create work that embodies the structuring dynamics of consciousness. Such a work thereby radiates infinity and unboundedness and inherently embodies and reflects the value of all-directional awareness. The art work then, whatever it may be, radiates unboundedness, affecting the environment, whether one knows it or not. It can radiate the value of pure consciousness “to every level of consciousness—no matter what”.²⁵ In the context of Lovejoy and Jacob’s discussion, such art could be said to have the power to give *Darshana*. With a glimpse of

²⁴ Maharishi Mahesh Yogi, 1995a, p. 381-382.

²⁵ Maharishi Mahesh Yogi, 1970, pp. vii-viii.

the art object, some transfer of energy should occur. In any case, *Darshana* clearly is an interactive, transformative phenomenon, which, according to Maharishi Vedic Science, is inherent within alertness or wakefulness.

Lamp at the Door—The Thalamus and Higher States of Consciousness

Wakefulness or alertness, Nader finds, is maintained in the physiology in part by the thalamus. The involvement of the thalamus in the maintenance of alertness contributes to its quality of a *Lamp at the Door*. As already noted, this phrase *Lamp at the Door* describes the bi-directional function of awareness that illuminates inside and outside simultaneously. *Nyaya* corresponds to the thalamus, which, in the brain, is the home of justice. Nader comments that there is “‘justice’ between innocent perception—recorded through the senses of perception coming to the thalamus—and intellectual conclusion to initiate action”.²⁶ Moreover, the distinguishing and deciding quality of consciousness, which is *Nyaya*, is fulfilled by the thalamus and the five chapters of *Nyaya* correspond to the five divisions of the thalamus.²⁷

In his analysis of the sense of sight from the perspective of *Nyaya*, Nader explains that in the seeing of a flower, the eye captures the reflection of light from the object. This light reaches the retina and excites or inhibits a number of cells. There is no sense of the flower (or any object) inherent within the retina’s individual receptor cells. The cells are either simply inhibited, excited or neutral. However, any *particular* characteristic of the flower (referred to as its *point values*) leads to a stimulation or inhibition of a specific type and number of cells in the retina. The information from these cells is carried through various stations to the thalamus and from there to the cerebral cortex where it is perceived as a flower with specific characteristics. The specific response of the retinal cells corresponds to the specific values or “outer, specific, relative and changing point values”.²⁸ The rebuilding of the flower by the cerebral cortex into a wholeness (the holistic concept of flower that transcends the particular characteristics

²⁶ Nader, 2000, p. 131.

²⁷ *Ibid.*, p. 136.

²⁸ *Ibid.*, p. 132.

of any one flower), represents the holistic, inwardly directed and more transcendental aspect or function. The thalamus is the connecting point between inner and outer, specific and holistic. It is the *Lamp at the Door* upholding both the parts and the whole.

Returning to the discussion of how knowledge is different in different states of consciousness (as introduced in Chapter One), the principle of *Lamp at the Door* can be reviewed in terms of the seven states of consciousness. In sleeping consciousness the thalamus is in a “sleeping” mode, the thalamus gates are shut off, or the *Lamp at the Door* is not lit, so to speak, and there is no perception. In dreaming consciousness, awareness processes stored impressions giving them an illusory reality. Again, the lamp is unlit, but the subject is absorbed in an imaginary reality. In waking state, sensory stimulus facilitates perception of an object but overshadows the Self or *Atma*. The lamp is lit outside but not inside. The underlying “screen” of pure consciousness is overshadowed so that the perception of the object is coloured or prejudiced by the tendencies of the individual’s nervous system. If the nervous system is more stressed, the perception is more shadowed or farther from reality. In Transcendental Consciousness, the individual enjoys a transcendental state beyond thought and sensory perception; *Atma* is maintained without specific values. In this case, it is as if the lamp is lit inside but not outside.

By contrast, in Cosmic Consciousness, both the inner transcendental reality and the outer field of relative perception are experienced; the lamp is “at the door” illuminating inside and outside. In even further developed states of consciousness, God Consciousness and Unity Consciousness, the full value of the outer comes into focus. In God Consciousness, on the basis of a clear inner screen of consciousness, outer perception is refined and sharp, seen in its full glory. In Unity Consciousness, the inner Self or *Atma* becomes the only inner experience and permeates all conditions of perception, thought, speech and action. The thalamus maintains its distinguishing and deciding qualities and allows awareness to detect specific values, such as a flower but instead of seeing them as small wholenesses it sees *Totality*, wholeness moving within itself. The inner is never overshadowed but the distinct values of the outer are appreciated. Nader explains that this is how *Nyaya* maintains justice or balance between change and non-change, outer and inner, relative and Absolute, dynamism and silence. The flower is seen but infinity is

never lost. It is “like the vision of the goldsmith who sees the form, but in every form sees the gold. This is called enlightened vision, which has no darkness at any level—whether on the level of the senses, the mind, the intellect, or the ego”.²⁹ In this sense, *Darshana* refers to cognition beyond waking state. When analysed from the perspective of Maharishi Vedic Science, *Darshana* can be viewed as a universal phenomenon of higher states of consciousness, with enormous implications for any experience or understanding of the power of perception, and the interactivity of the gaze in art.

As discussed here, *Darshana* not only refers to the six-fold referral loop of emergence and submergence (from *Nyaya* through to *Vedanta*), it also refers to the bi-directional quality of intelligence, the *Lamp at the Door*; it is found in the physiology in the functioning of the thalamus and, in higher states of consciousness, is experienced as Cosmic Consciousness, God Consciousness and Unity Consciousness. The idea of the simultaneous illumination “inside” and “outside” on the level of individual consciousness means that the subject can know anything—all phases of existence, all structures, functions, forms and phenomena.

Ritam Bhara Pragya:

That Level From Where All Differences Emerge

*A truly immortal work of art can only be born through revelation. Schopenhauer has, perhaps, best defined and also (why not) explained such a moment when...he says, “To have original, extra-ordinary, and perhaps even immortal ideas, one has but to isolate oneself from the world for a few moments so completely that the most commonplace happenings appear to be new and unfamiliar, and in this way reveal their true essence”.*³⁰

—Giorgio de Chirico

As discussed earlier, in illuminating opposites simultaneously, awareness, fully awake, is the *Lamp at the Door*. In being fully awake, awareness is all-knowingness or *Jyotish*. All-knowing or fully awake consciousness is referred to as *Jyotish Mati Pragya*, where awareness

²⁹ Nader, 2000, p. 136.

³⁰ Giorgio de Chirico, *Meditations of a Painter*, in Chipp, 1968, p. 397.

includes everything in its range and all action is computed from the field of Natural Law that governs the universe. *Jyotish Mati Pragya* is available as *Ritam Bhara Pragya*, in the self-referral consciousness of the individual. *Ritam Bhara Pragya* refers to that level which “only knows truth”, the level of “almost absolute consciousness”, and is that quality of consciousness which sees or comprehends the total reality of Natural Law in its absolute silence and infinite dynamism.³¹ As Maharishi states:

Anyone can know anything at anytime, from within himself, without losing himself (in his *Ritam Bhara Pragya*—fully awake consciousness—*Jyotish Mati Pragya*), and anyone can create anything from within himself.... Anyone can transform anything or any situation into any other thing or any other situation without any loss to himself. When one finds oneself everywhere and within everything, one is established in the state of absolute defence.³²

Ritam Bhara Pragya is also that level of no differences from where all differences arise. All number systems, mathematical structures, colours, elements, and time and space, are generated from this level. As Maharishi points out:

The source of all differences in creation is at a level which, in itself, is free from all differences. When there are impulses in this field, these impulses can be of an innumerable nature. From there arises the green color, orange color, yellow color, this and that form; from there arises time and space, all the elements, and all the finer particles. Therefore, on that level where there are no differences, the possibility of all differences starting from there is very clear. That is the level from where all the triangles come out, all the circles come out, all the squares come out, all the numbers—one, two, three—come out, alphabets come out, and creation expresses itself.³³

The individual who cognizes the mechanics of nature’s functioning at this level cognizes the source of finer particles, geometry, number systems, and alphabets or languages.

³¹ Maharishi Mahesh Yogi, 1997a, p. 92.

³² Maharishi Mahesh Yogi, 1996b, p. 376-377.

³³ Maharishi Mahesh Yogi, in Bonshek, 1996a, p. 112.

Historically, philosophers, artists, and scholars have studied geometry and mathematics in search of ideal proportions that reflect perfect balance, the workings of nature or the divine. Lucy Lippard notes that Plato looked to the triangle for essential sets of relationships and that his analysis was the re-exposition of an ancient oral tradition that reduced the essence of earth, water, air and fire to symbolic geometric figures as demonstrated in Neolithic polyhedral spheres (“Platonic solids”). She also finds that measures of three predominate in Neolithic painting and that most cultures believed in the principle that numbers were generated from one to many in a specific sequence, as encapsulated in the phrase by Lao Tzu: “Tao generates one. One generates two. Two generates three. Three generates all things”.³⁴ Maharishi explains that all numbers are derived from one and two by intelligence, the seer, in his self-referral state.³⁵ From prehistory to contemporary art, number and geometry permeate material culture and other visual forms. In the 1970s, Western artists like Mel Bochner, and Minimalists, Agnes Martin, Sol LeWitt, Tony Smith, and Robert Morris, referenced Pythagorean theory and the idea of perfect form. In India *Yantras*, or geometrical compositions revealing the expanding and contracting tendency of existence are seen as tools to enhance awareness. While the term *Yantra* means “instrument”, Madhu Khanna notes that the *Yantra* is a potent, dynamic sacred symbol, a geometric figure gradually growing away or towards its center, in stages, until its expansion or contraction is complete.³⁶ Not coincidentally, *Yantras* and cosmic diagrams appear in Indian art and cosmology representing themes such as the evolution of worlds from the Cosmic Egg, the World Tree, and diagrams of the cosmos.³⁷ From the 1940s, James Whitney, considered one of the greatest visionary film artists, created

³⁴ Lippard, 1983, p. 82.

³⁵ “We can keep on deriving any number we want from one and two because three comes out in adding one and two, and once you have three—add one to three make four; add two to three make five; add three to three make six; and then start to add again...keep on doing it, anything—once you have one and two, and one and three. And where do you have one and two initially? The seer, the intelligence, in its self-referral state, it becomes the observer, and the observer becomes the observed; then there are two. Then we have all the logic to know that one is Rishi, Devata and Chhandas; one is observer, observed, observation. These innumerable values are all the values of intelligence because it is the intelligence which argues within itself—I am one, I am two, I am three, I am the observer, observed, observation, and this and this and this”. Maharishi Mahesh Yogi, in Bonshek, 1996a, p. 456.

³⁶ Khanna, 1979, p. 9.

³⁷ Rawson, 1973, pp. 110-115.

kinetic film works that drew from the language of physics, Indian thought and meditation.³⁸ Three of his films, *Yantra* (1957), *Lapis* (1966), and *Dwijja* (1976), explore inner vision, using what he called dot patterns in a space/time *Mandala*. His aim was to effect a “totally balanced opposition of stasis and flow, holding paradox symbolically through wave and particle, pointing to a still center of emptiness”.³⁹ Presenting a dynamic, spiraling, ephemeral structure of light within a multimedia installation, *Modulation in Sync* (2000), the Guggenheim’s retrospective exhibition *The World’s of Nam June Paik*,⁴⁰ featured a laser sculpture spiraling up into the main atrium of the building—a universal structure that echoed the architectural, inner space of the museum.

World wide, concentric circles and spirals are represented in prehistoric, traditional, contemporary, and aboriginal, art. While these symbolic, archetypal or representative forms clearly have different relative, historic and cultural meanings, they persist across cultures and throughout time, giving vision to theme of consciousness (universally) inherent within human awareness. Observing an example of Niue bark cloth (hiapo) painting, Thomas comments that the work had a hypnotic affect on him: “built out of regular pattern, of rows of diamonds or paired sets of chevrons, that were at once powerfully repetitive, yet full of irregular ripple. The hiapo’s forms seemed to expand and contract, breathe and reproduce, to grow and mutate...”.⁴¹ In many cases, number, repetition, or geometric forms, are used to convey abstract principles, important, and possibly secret, restricted, or sacred knowledge.

Number, repetition and geometry, in Maharishi Vedic Science are understood in terms of the self-referral move of consciousness generating the entire cosmos from its own infinite creativity. Number and geometry are, essentially, derived and generated on the level of self-referral consciousness. Maharishi states that any number is the modified state of the number one. One represents Unity, where Unity is

³⁸ Whitney was influenced by “Ramana Maharishi, Jungian psychology, alchemy, yoga, Tao, quantum physics, Krishnamurti and consciousness expansion”. Wees, 2000, p. 278.

³⁹ In Wees, p. 279.

⁴⁰ *The Worlds of Nam June Paik* was presented at the Guggenheim Museum, New York, February 11- April 26, 2000.

⁴¹ Pule & Thomas, 2005, p. 61. Niue is a small Polynesian island nation (to the east of the International Dateline), approximately 480 kilometres east of Tonga and 560 kilometres south of Samoa.

the eternal continuum expressed as the number one written within a circle. The number one encircled represents the eternal continuum of Unity which, as Maharishi explains, can only be expressed in terms of zero (the self-referral loop of a circle). Thus, the self-referral loop expressed as number is expressed as “1” within a circle. Fundamentally, all numbers are the expression of the number one; when the number is zeroed it becomes unmanifest, or the *Absolute Number*. Circling any number indicates that it is part of the Absolute Number and its individual status has become cosmic, its boundaries are unmanifest, in spite of its boundaries it is a continuum.⁴² In this way, all numbers have their source in 1, and 1 zeroed, is unmanifest, Absolute; as such, it represents the irreducible, Absolute Number.⁴³

Maharishi states that without the use of the Absolute Number, “the intellect of the mathematician will always be questioning and searching for the ultimate on the ground of logic.”⁴⁴ He gives the example of two perspectives on mathematics given by Vasishtha and Vishwamitra⁴⁵—one based on wholeness and the Absolute Number, and the other based on natural numbers:

Vasishtha stands as an unshakable authority on the Samhita level of reality—the total reality, the reality of the Absolute Number—fully enlightened, fully awake on the supreme level of Vedic Mathematics; and Vishwamitra, bound by the (diversity-dominated) Rishi, Devata, Chhandas level of reality, time and time again approaches Vasishtha to understand the ultimate level of reality (the Samhita level of consciousness) which Vasishtha, the Brahm-Rishi, was living in daily life, demonstrating the ideal of...*Brahma bhavati sarathih (Rk Veda, 1.158.6)* where the total potential of Natural Law is enlivened in all the diverse fields of all the Laws of Nature.

Vishwamitra, the Raja-Rishi, was enquiring, questioning on the ground of logic, guided by the limitations of the mathematics of natural numbers—1, 2, 3...(Rishi, Devata, Chhandas—the diverse level of reality). This means that Vishwamitra was trying to understand the infinite world of wholeness (the Samhita level of reality) on the level of his fully awake intellect, which was held on the intellectual level of logic (limited to the mathematics of natural numbers—1, 2, 3...), and

⁴² Maharishi Mahesh Yogi, 1996a, pp. 613-614.

⁴³ *Ibid.*

⁴⁴ Maharishi Mahesh Yogi, 1996a, p. 612.

⁴⁵ see: *Valmiki Ramayan, 1.53.*

therefore could not fathom the depth of wholeness that transcends all numbers and is the common source of all numbers—the Absolute Number. The conclusion with reference to the Absolute Number is that Vasishtha’s intellect had the logic of the Absolute Number through which everything is explainable in terms of wholeness, whereas Vishwamitra’s logic was bound by natural numbers—1, 2, 3...and yet trying to understand the world of wholeness of the Absolute Number, the reality of Vasishtha—life on the level of Unity—life in the state of Brahman Consciousness.⁴⁶

A *Brahm-Rishi*, Vasishtha was *living* the reality of Brahman Consciousness or wholeness and, therefore, was not restricted as was Vishwamitra by the intellectual level of logic and diversity.

The structure of self-referral consciousness is also seen in terms of line and as the spiral or whirlpool. Maharishi explains that the evolution of consciousness is structured in self-referral loops of infinite frequency, or “flow and stop”. On the one hand, it can be said that there is a move backwards and forwards but it is entirely within unboundedness. In effect, there is no “in” or “out”, but, rather, “in” and “out” simultaneously. This is another description of the *Lamp at the Door* phenomenon. As Maharishi states:

Now that state of Being [pure, self-referral consciousness] is both ways at the same time. Outside lighted, inside lighted, but what do we mean by in and out in that state? In and out is the reality of dynamism and silence. But if we take it to be in and out then it is with infinite speed in and out. It’s a straight line representing silence and dynamism only when the dynamism is of infinite frequency—when at no time is it out or in; it is in and out at the same time.⁴⁷

Here, Maharishi describes the infinite frequency of the self-referral evolution of consciousness as a straight line. Thus, the principle of *Lamp at the Door* is represented by the straight line—the fundamental nature of consciousness. Consciousness can also be understood in terms of its circular structure.

Being self-referral, consciousness has a circular motion. It also has the motion of collapse from infinity to its point value. In this dynamic there is a spiraling or whirlpool, called a “Rk”. The structure of the

⁴⁶ Maharishi Mahesh Yogi, 1996a, pp. 612-613.

⁴⁷ Maharishi Mahesh Yogi, in Bonshek, 1996a, pp. 110-111.

circular motion on the “horizontal” surface accompanied by “vertical” motion creates a whirlpool and presents the dynamics of self-referral consciousness. Explaining the relationship of circle and point, Maharishi adds that in the maintenance of self-referral consciousness there is a continuous presence of the central point until the dynamic process of the formation of circles arrives at a point.

From another perspective, he describes how, from any point, the all-directional evolution of performance begins. From there a spontaneous bulging down tendency is created which balances the evolution of the point in all directions. This balancing effect is the constant connectedness of the point (the source) with the entire process of expansion. This phenomenon of expansion remaining connected to its source is displayed in the form “Rk”.⁴⁸ Maharishi indicates that these universal dynamics of consciousness are the mathematics of cognition or *Darshana*, contained in the *Darshana Sutras*. Clearly the dynamics of consciousness can be understood to generate number and geometry. This phenomenon is revealed in all-knowing awareness, which corresponds to Vedic Mathematics—the mathematics of consciousness in its self-referral state.

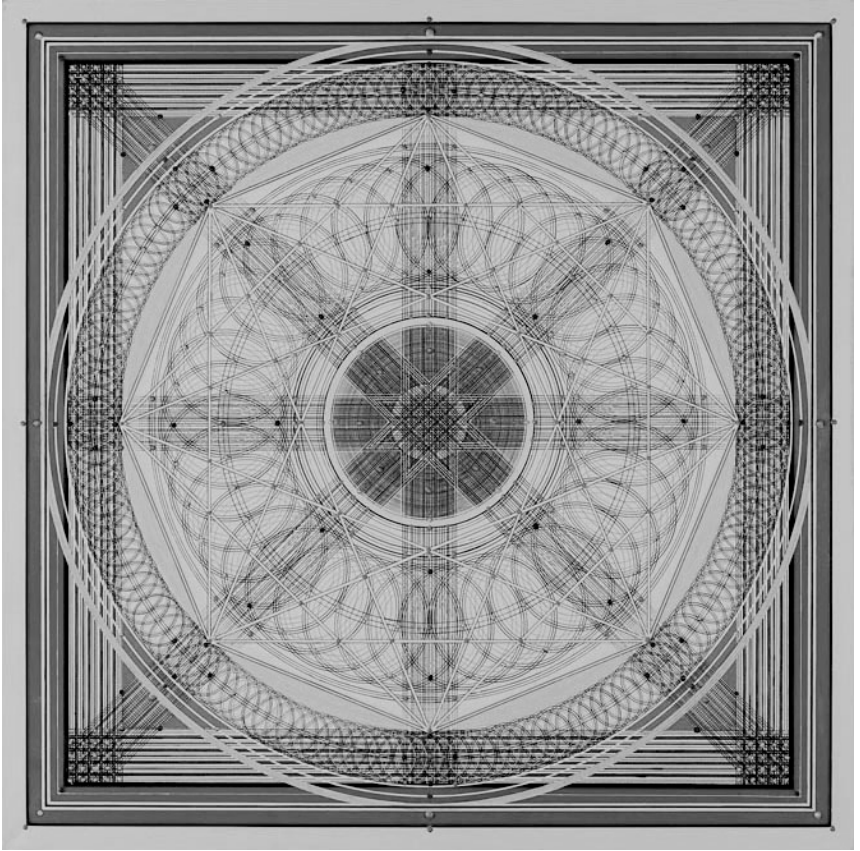
The prolific artist, Lawrence Sheaff, expressly refers to the mathematical dynamics of consciousness in his paintings—beautiful, vividly coloured *Mandala* or *Yantra*-type forms. Sheaff, a long-time meditator, has connected Vedic knowledge to art⁴⁹ in his forthcoming book *The Absolute Image*, material from which is available on the website of the same title.⁵⁰ Sheaff’s mesmerizing *Mandala* images, including: *Shrigarabhah: Containing Shri in Himself*, (2002), *Pranabhriti: The Sustainer of Prana*, (2003), and *Sarvadih: The Beginning of All*, (2004) are remarkable cosmic compositions that apparently reference the mathematics of the experience of consciousness as an infinite domain of precise relationships. Working in mixed media, another meditating artist, Madeline de Joly, directly refers to the sequential unfoldment of the Veda and Vedic Literature in ambitious and subtle art projects.⁵¹

⁴⁸ Maharishi Mahesh Yogi, 1995a, pp. 449-450.

⁴⁹ As discussed by Maharishi Mahesh Yogi.

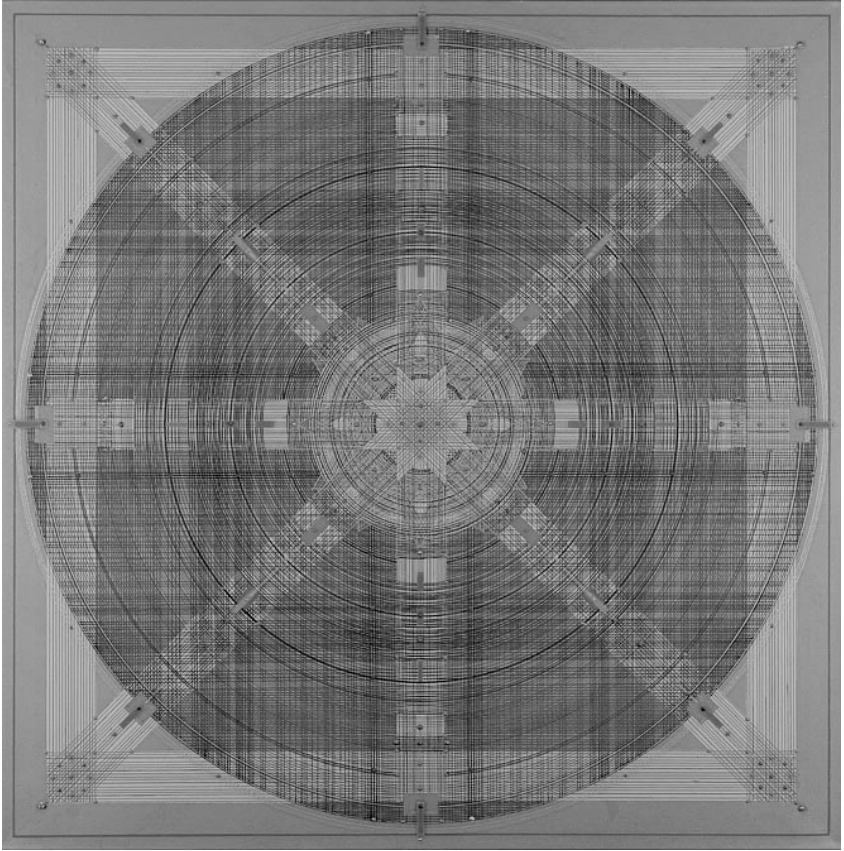
⁵⁰ See: <http://www.AbsoluteImage.net>.

⁵¹ See: <http://www.madelinede.joly.com/vedaproject>.



*Shrigarbhadh (376), Containing Shri in Himself, 2002, Lawrence Sheaff
Acrylic on canvas, (36" x 36")⁵²*

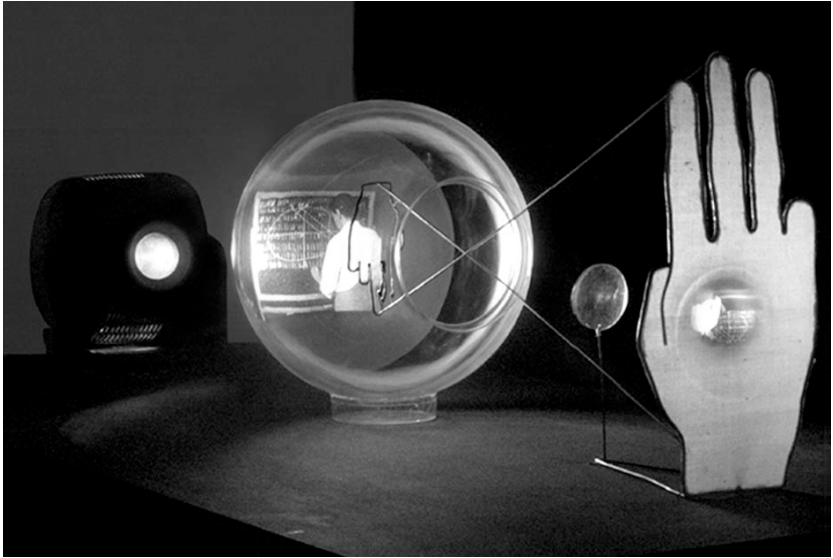
⁵² Printed with permission of the artist.



Pranabhriti (961), The Sustainer of Prana, 2003, Lawrence Sheaff
Acrylic on canvas, with 24k gold leaf, (36" x 36")⁵³

⁵³ Printed with permission of the artist.

One series of works from her *Veda Project* actually references the idea of cognition and *Darshana*.⁵⁴ Gillian Brown, a U.S. multi-media artist based in Fairfield, Iowa, again considers ideas about perception but in a very different medium and format. For example, Brown's *Insight Out*, (2003), presents a video of vertical chalk marks slowly transforming into the history of mathematics, projected onto a model of the eye and hand. Inspired by an illustration by Descartes of visual perception, *Insight Out* explores inner and outer vision.



Insight Out, 2003, Gillian Brown⁵⁵

Video of vertical chalk marks transforming into the history of mathematics projected onto model of eye and hand beyond, 9" high

The video, projected onto the back of the model eye, shows a person covering a blackboard with vertical marks, or marks that slowly change into numbers from different cultures and periods. This quietly transforming scene is reflected in a smaller version, upside down, via a

⁵⁴ <http://www.madelinedejoly.com/vedaproject/upangas.html>

⁵⁵ Image provided by the artist, printed with permission.

lens onto the surface of the hand "observed" outside the glass eye. A meditator who teaches at Maharishi University of Management Art Department, Brown states: "A lot of my work explores transformations that occur as mental events and perceptions that arise in our minds. Certainly meditation has sensitized me to these events."⁵⁶ While artists such as Sheaff and Brown address the theme of mathematics, Maharishi explains that in the Vedic Literature, with respect to Vedic cognition, the *Darshana Sutras* actually unfold the mechanics or mathematics of infinity.

Darshana as Vedic Mathematics

These sutras⁵⁷ are the tools of Vedic Mathematics, which break infinity, which bend infinity, which slice infinity, which sandwich infinity, which maintain the integrated structure of infinity in the midst of its diversified expressions, and which design the course of infinity on its own level of self-referral intelligence.... Vedic Mathematics does not make mistakes; it is flawless and faultless because its home is in self-referral consciousness—Parame vyoman.

*Richo Ak-kshare parame vyoman
yasmin Deva adhi vishwe nisheduh,
yastanna veda kim richa karishyati
ya it tad vidus ta ime samasate. (Rk Veda, 1.164.39)*

He who does not have self-referral consciousness is full of mistakes—he who is not established in self-referral consciousness does not know how to think spontaneously, mathematically right.⁵⁸

—*Maharishi Mahesh Yogi*

Maharishi states that all-knowing intelligence corresponds to the arithmetic involved in the structuring dynamics of self-referral consciousness. He points out that Absolute pure intelligence, Transcendental Consciousness, is endowed with the holistic value of Vedic Mathematics, which is why it is always correct, conforming with

⁵⁶ From an email exchange between the artist and author, July 2006.

⁵⁷ Sutras are the frequencies of consciousness—structures of Natural Law available within the Vedic Literature. Maharishi Mahesh Yogi, 1996a, pp. 346-347.

⁵⁸ Maharishi Mahesh Yogi, 1996a, pp. 347-349.

absolute order and perfection. These are all qualities of *Ritam Bhara*, which is, as the natural quality of pure wakefulness and as stated earlier, like a *Lamp at the Door*. Vedic Mathematics is the mathematics of the “ocean of intelligence” which in designing the mechanics of creation involves the maintenance of all values of relationship. As Maharishi explains:

Vedic Mathematics is the mathematics of the absolute, non-changing, eternal, unmanifest ocean of intelligence, which spontaneously designs, with the most systematic, perfect precision, the mechanics of creation emerging from the self-referral nature of pure singularity, self-referral consciousness.⁵⁹

In his exposition of *Darshana*, Maharishi defines Vedic Mathematics as the system of simultaneous sustenance of all values of relationship. Moreover, he emphasizes that mathematics arises due to the phenomenon of consciousness multiplying itself, of fullness expanding. It is a universal phenomenon, and not just some arbitrary insight of a gifted individual:

It is an *experience* of consciousness multiplying itself that has set mathematics to life. The phenomenon of the expansion of consciousness—one fullness going, and going, and going—this experience is the basis of mathematics. Mathematics is not the imagination of some wise dreamers. Had it been so, it would have been gone long before now. Mathematics comes from this experience, this phenomenon in nature. It’s a solid, concrete phenomenon on the level of consciousness. That is the reason why mathematics has continued.⁶⁰

Mathematics is not created out of human imagination but is rather the *experience* of consciousness diversifying—a valid, universal reality on the level of consciousness. How does one come to know this? Maharishi points out that the practice of the Transcendental Meditation technique is the programme of Vedic Mathematics precisely because it materializes an all-directional effect both in time and in space. The unified field of Transcendental Consciousness is the home of those governing principles that give rise to space, time, all structures, and all forms of existence. Being the source of everything, everything is

⁵⁹ Maharishi Mahesh Yogi, 1996a, pp. 368-639.

⁶⁰ Maharishi Mahesh Yogi, in Muehlman, 1993, p. 111.

interconnected at this unmanifest level. It is a field of infinite correlation. In accessing Transcendental Consciousness, one contacts this infinite correlation level where everything is intimately interconnected with everything else. Thereby, in accessing and enlivening this field, an all-directional effect can be created. As Maharishi states, Transcendental Meditation

enlivens and utilizes the holistic value of Natural Law to materialize an all-directional effect in all fields of space and time. It is this theme of Vedic Mathematics available through Transcendental Meditation that promotes absolute order from the common basis of all activity in the universe—the self-referral field of consciousness.⁶¹

In this way, the practice of Transcendental Meditation facilitates the experience of Vedic Mathematics and, in so doing, unfolds and promotes absolute order in human awareness, where coherence is supported. Furthermore, the practice of Transcendental Meditation promotes *Darshana*, that is, the unfoldment of self-referral consciousness, the mechanics of the transformation of self-referral intelligence into the ever-expanding universe, available in countable stages in the structure of *Rk Veda*. Not surprisingly, Maharishi emphasizes that this cognition is charming. Moreover, it is possible for anyone to experience, precisely because it is inherent within the *Atma* or consciousness of everyone. The precondition for *Darshana* is fully awake consciousness, fully established self-referral consciousness. As Maharishi elaborates:

The cognition of Vedic Mathematics is most delightful. It is available to fully alert consciousness—*Ritam Bhara Pragya*; it is available with the *Atma* of everyone, in the self-referral consciousness of everyone; it is available as the structuring dynamics of each *Sutra* of the Veda and Vedic Literature, particularly in the *Darshan Sutra* of the Veda, and most vividly in the structuring dynamics of the *Vedant Sutra*.⁶²

The details of Vedic Mathematics are especially displayed in the *Vedanta Sutras* (the last of the six *Darshana*), which bring out the

⁶¹ Maharishi Mahesh Yogi, 1995b, p. 135.

⁶² Maharishi Mahesh Yogi, 1996a, pp. 341-342.

experience of unity, *Brahman Consciousness*, lively in the brain physiology.

Lovejoy and Jacob speak of the experience of *Darshana* involving loss of control in the subject or seer, overpowering feelings and the surrender of human agency. From the perspective of Maharishi Vedic Science, gain rather than loss is experienced. One gains the totality of unity, *Brahman Consciousness*, expressed as *Vedanta*, cognized as the precise self-referral dynamics of awareness in terms of ultimate wholeness, *Samhita* of *Rishi Devata* and *Chhandas*. What is gained? Complete knowledge of the structuring dynamics of consciousness into matter, into the universe, the creative mechanics of nature's functioning—the total potential of Natural Law. Since cognition is only possible when consciousness is fully awake, there can be no lack. One could say that the “small” self or ego is transcended (or lost) for the gain of the cosmic Self, but this is merely the loss of the limitations of boundaries for the gain of infinity, totality, unbounded creativity.

In this way, *Darshana* represents the gain of the reservoir of infinite creativity, and is extremely important for any artist. Creativity, as stated earlier, has to do with coexistence of opposite values—the maintenance of the singularity and diversity of self-referral consciousness, or the simultaneous unity of *Samhita* and diversity of *Rishi*, *Devata*, and *Chhandas*. Vedic Mathematics brings out this theme. As Maharishi explains:

It is the quality of Creative Intelligence of consciousness which designs or structures the relationship between Samhita and Rishi, Devata, Chhandas; it unites Samhita with Rishi, Devata, Chhandas and the same time separates Samhita from Rishi, Devata, Chhandas—it maintains their individual identity in their togetherness. Here, at this level, the intelligence quality of consciousness is Creative Intelligence on the ground of Vedic Mathematics, and this creativity is characterized by opposing qualities—the unifying and diversifying qualities of consciousness. This illustrates the nature of Vedic Mathematics, organizing activity within the silent nature of self-referral consciousness. This system of simultaneously sustaining all values of relationship is Vedic Mathematics, which we call mathematics of relationship; it handles all diversifying and unifying values of evolution simultaneously.⁶³

⁶³ *Ibid.*

The principle of coexistence of opposites as the seat of creativity resonates with the idea of art practice as the skill of unifying disparate elements to create a bigger whole. The ability to handle and sustain innumerable values of relationship in a unique wholeness would be invaluable. Maharishi emphasizes that Vedic Mathematics is the tool to analyse and synthesize the total reality.

With respect to the discussion of a seeing which transfers or bestows grace, *Darshana* is even more than this. It is supreme balance (or grace)—the experience of unity on the level of pure consciousness.

Experience of Vedic Cognition—The Phenomenon of Intelligence

As we have seen, *Darshana* can be understood in terms of bi-directional awareness, fundamental forms and Vedic Mathematics, where Vedic Mathematics is the phenomenon of cognition and the system of simultaneous sustenance of all values of relationship. While *Darshana* means “form” or “cognition,” Maharishi states that *Darshana* is the actual phenomenon of cognition which the six *Darshana* highlight. Significantly, it is both the phenomenon of intelligence *and* a way to alert intelligence to the reality of what is cognized. As Maharishi goes on to elaborate, in the process of cognition there are several stages; the mind experiences a progression from cognition at the sensory level all the way to the unmanifest, transcendental level:

Cognition is fundamentally the phenomenon of intelligence. Cognition is the path to awaken intelligence to the reality of what one cognizes. Levels of cognition take the intellect from the surface levels of sensory perception to deeper levels of intellectual cognition, until the intellect, transcending the boundaries of the senses, ultimately transcends its own intellectual limitations. What is left is the field of pure existence, pure intelligence—unbounded, limitless, infinite, eternal, immortal totality, the ultimate wholeness, *Brahm*—pure knowledge, the Veda, lively in human awareness—Veda realized on the level of its own intelligence, *Samhita* of *Rishi*, *Devata*, *Chhandas*, the ultimate reality of human consciousness. This is *Brahma Vidya*, the knowledge of totality, the knowledge of Natural Law.⁶⁴

⁶⁴ Maharishi Mahesh Yogi, 1994, pp. 314-315.

In Maharishi Vedic Science, the mind is understood as having several levels from the transcendental, to subtle, to more expressed levels. These levels encompass Transcendental Consciousness or pure consciousness, ego, intuition, intellect, the thinking mind, senses, body, and environment. Cognition involves a progressive move of the intellect through levels of cognition, from sensory perception, to intellectual cognition, to transcending of the intellect in the experience of pure intelligence, where the self-referral structure of knowledge, the Veda, is lively in awareness. What is seen at this level? The form (*Darshana*) of the Veda. What is heard on this level? The sound of the Veda or *Shruti*. As Maharishi points out:

The structure of Veda, the sequential unfoldment of sound, which at the same time is the sequential unfoldment of the form (of the sound), is the sequential unfoldment of *Shruti*, that which is heard by self-referral consciousness, and *Darshana*, that which is seen by self-referral consciousness.⁶⁵

The sounds of the Veda, impulses of intelligence, in the form (the script) of Veda are *seen* by self-referral consciousness. This brings us to the consideration of the special relationship of name and form or *Nama* and *Rupa*.

The Unique Relationship of Name and Form

*Vedic Mathematics is Quantum Mathematics—the mathematics of the quantum field.... This field of Vedic Mathematics is expressed in syllables of speech rather than in numerical symbols.*⁶⁶

—*Maharishi Mahesh Yogi*

While the intimate relationship between native language and the physiology is touched upon in Chapter Three, in many traditions writing and language, as in the Arabic script of the Qur'an, are considered to be sacred. The exhibition *Word into Art: Artists of the*

⁶⁵ *Ibid.*, p. 317.

⁶⁶ Maharishi Mahesh Yogi, 1996a, p. 385.

Modern Middle East recently held at the British Museum, in London, partially examines this proposition in its presentation of work by artists who explore the significance of meaning and form through the Arabic text.⁶⁷ As stated, while the relationship between the mother tongue, the physiology and consciousness is touched upon in Chapter Three, according to Vedic Science, in the Veda and Vedic Literature, there is a one-to-one relationship between sound and form. What exactly does this mean? The sound “Ak”, for example, is the first syllable of the Veda. Examining “Ak”, it is obviously made up of two letters or sounds: “A” and “K”. Maharishi explains that whereas the sound “A” contains the fullness of consciousness, silence or infinity, the sound “K” presents the stop value or cessation of sound and, therefore, presents emptiness, or the collapse of infinity to its point value. Hence, “Ak” contains the expression of the total value of self-referral consciousness from fullness to emptiness, or consciousness as infinity collapsing to its own point.

“Rk”, the name of the Veda, phonetically, is also significant. It presents the collapse of dynamism to its own point. “Ak” contains the form of Veda as the collapse of silence to a point; “Rk”, the name of Veda, presents the collapse of dynamism to a point. Similarly, every syllable, every word, every line, verse, chapter, etc., of the Vedic Literature, brings out the dynamic structuring principles of self-referral consciousness. Ultimately, each sound is the fundamental structure of a corresponding form.⁶⁸ This principle can be further comprehended by analyzing subtle and gross levels of speech.

⁶⁷ Porter, 2006.

⁶⁸ The details of the unfoldment of the Veda and Vedic Literature as packages of wholeness or knowledge are outlined in Maharishi’s *Apaurusheya Bhashya* or uncreated commentary. As Maharishi explains, the uncreated commentary of the Veda reveals how each emergent expression of the Veda comments on the previous and is structured within the gaps between previous expressions. “In my *Apaurusheya Bhashya* I have mentioned that the ten *Mandals* of *Rk Veda* are available in the first *Mandal*; the first *Mandal* is available in the first *Sukt*; the nine *Richas* of the first *Sukt* are contained in the first *Richa*; the three *Pad* of the first *Richa* are contained in the first *Pad*; the eight syllables of the first *Pad* are contained in the first syllable, “Ak”; “Ak” is available in “A”; “A”, the continuous sound, stands for *Atma*—infinity; and “K”, whose pronunciation stops the flow of speech, establishes the relationship between infinity and its point. “A” indicates *Atma* and “K” indicates the point of *Atma*. “Ak” establishes the relationship between infinity and its point; “Ak” is *Akshar*, the *kshar* of “A”, the collapse of “A” onto its own point, “K”; “Ak” expresses the collapse of infinity to its own point; “Ak” stands for the total dynamic potential of the Self of everyone, the *Atma* of everyone; “Ak” expresses the relationship of “A” with its point “K”, and in this dynamism of “Ak” the total structure of *Veda* is lively”. Maharishi Mahesh Yogi, 1993, pp. 179-180.

Just as there are levels of mind, there are also levels of speech. Maharishi has discussed the relationship of name and form in terms of the four levels of speech which are: 1) *Para*, the transcendental level; 2) *Pashyanti*, the subtle level; 3) *Madhyama*, the level of the thinking mind; and 4) *Baikari*, the expressed level of speech. The transcendental level is the source of speech, the source of sound, the source of form and creation. Name and form are completely unified on this level. In the Veda, the sound is the form and each expression contains all the information of the object to which it refers:

The name of the object has the content of the form of the object. For example, the seed has all that the tree contains. Everything is there in the seed. The name has all the impulses which are present in the form...now, this is true in the words of the Veda.⁶⁹

In the same way as a seed contains the genetic information to structure the entire plant, the Vedic name, as a specific frequency or vibration, contains the structure and tendencies of its corresponding form. Maharishi adds that the name doesn't just contain tendencies that structure the form, "but it also has all those mechanics which weave those tendencies into one another to produce that particular structure of the form".⁷⁰ The term "name" refers to the sounds of the Veda and also the impulses of pure consciousness that, in their precipitated value, *become* form. The form is a more solidified structure of the impulse of sound. It is a more precipitated, or more manifest value of the name. Putting it another way, name is a more delicate expression of the form. Maharishi explains that the sounds of the Vedic Literature are actually the "hum of the intellect" which flows and stops in sequence:

The expression of melody, forming the whole Vedic Literature, gives us the entire process of the basic mechanics of transformation within the self-referral state of consciousness. In its momentum of transformation, the interplay (self-referral dynamism) of Rishi, Devata,

In this description, we can see that the Veda is like a set of Russian dolls; one within the other and each one a complete expression of knowledge. The first syllable contains complete knowledge, then the first line contains a further expression of knowledge, the first hymn, verse, collection of verses, chapter, and so forth, elaborate on the prior expressions of total knowledge. Each elaborated expression is also contained in seed form in the previous. Knowledge is complete at every point.

⁶⁹ Maharishi Mahesh Yogi, in Sands, 1994, p. 98.

⁷⁰ *Ibid*, p. 99.

Chhandas continues to create sound from sound—from one form of sound to the second more evolved form of sound to the next (third) more evolved form of sound (specific alphabets—vowels and consonants).

The evolution of material form commences from the frequencies (vowels and consonants)—speech, through its structured forms, progresses to generate different frequencies and their corresponding material forms. The infinite diversity and dynamism of creation is just the expression of the eternally silent, self-referral, self-sufficient, unbounded field of consciousness—pure wakefulness, unbounded alertness, pure intelligence, pure existence, all knowingness. Consciousness, functioning within itself in terms of flow and stop, in terms of Samhita of Rishi, Devata, Chhandas, is the ‘be-all and end-all’ of all life and creation.⁷¹

All of creation is structured out of the self-referral dynamics of consciousness, the progressive evolution of one sound to the next, the generation of frequencies and their corresponding material forms. The stages of development of the name and the form have the same number of steps in their progression. Using the example of a rose, Maharishi, states that the form develops from the finest level of expression—and this is open to the eyes on the level of the senses. When the name “rose” comes up on the sensory level of the ears and the rose comes up on the level of the eyes, both have the same number of steps of progression. The same steps of progression are true for the experience of sight as for hearing. This means that the process of perception follows the same steps of progressive evolution of consciousness into form that is demonstrated in the Veda. How can this phenomenon be further understood?

The Mechanics of Perception in the Physiology

Referring back to *Preamble—What is Consciousness?*, every experience obviously requires a subject or knower, an object or known, and a process of knowing. When the subject comes together with the object, through the process of observation, knowledge of the object by the subject can occur. Nader points out that the process of observation

⁷¹ Maharishi Mahesh Yogi, 1994, pp. 66-67.

includes attention, when the gateways of perception are open. When the gateways of perception are open but attention is not fully lively, only selected experiences will register. If the individual is reading, for example, music may be playing in the background but it may not be heard. The ears have the ability to hear, but due to attention being focused elsewhere, hearing does not take place. In addition, if the gateways of perception are closed, attention cannot surmount this obstacle. Say, for example, the individual is within earshot of the sound of music, but his ears are blocked. Hearing will not occur. Focused attention and the processing of the impulse through gateways of perception and inquiry, are both necessary for experience.

Nader describes the process of attention collapsing onto an object in terms of the dynamics of consciousness. He states that during the process of observation the infinite, unbounded Self of the observer (expressed in *Rk Veda* by the sound “A”) collapses through focused attention onto an object, i.e., a point value (expressed in *Rk Veda* by the sound “K”). This collapse of the infinite Self onto a point of attention is represented by the first syllable of *Rk Veda*, “Ak”. Furthermore, the perception of any object (smell, sound, taste, etc.) involves the detection of a sensory impulse. A sound (represented by *Rk Veda* as the sound “R”) reverberates in the air, travels through the outer ear and collapses into the tympanum and ossicles of the middle ear (represented by the point value, “K”). The steps leading to the experience of sound unfold in the sequence of this dynamic, this collapse, when the attention of the observer collapses to a point value, or specific observation. Nader maintains that the same dynamic occurs in the sequential transmission of impulses through specific stations of the nervous system, from one neuron to another through synaptic gaps. These impulses correspond in *Rk Veda* to the strings of syllables, verses and silent gaps between them.⁷²

In terms of the body, Nader shows that it is possible to see the dynamics of the physiology in the sounds of the Veda and Vedic Literature because these sounds correspond to the physiology and the functioning of the senses. The brain’s perception of sound and sight follow the same steps of progression as the development of impulses of consciousness. For example, Nader discusses this process with respect to the three steps of diversification of consciousness (*Rishi*, *Devata* and

⁷² Nader, 2000, p. 19.

Chhandas), and eight stages of transformation giving rise to the eight *Prakritis*; the term *Prakriti* generally refers to the creative quality of intelligence within consciousness. The eight *Prakritis* are, specifically, eight stages of transformation that take place within the gap⁷³ in the collapse of silence and dynamism. They are expressed as eight fundamental elements, also called *Prakritis*. In the collapse of fullness or infinity (“A”), to its point value (“K”), in the dynamic of consciousness knowing itself, eight stages of transformation occur. These eight are known as: 1) *Ahamkara* (ego); 2) *Buddhi* (intellect); 3) *Manas* (mind); 4) *Akasha* (space); 5) *Vayu* (air); 6) *Agni* (fire); 7) *Jala* (water); and 8) *Prithivi* (earth). Nader explains that sensory perception, thus, takes place through three (*Rishi*, *Devata*, *Chhandas*) times eight (*Ahamkara*, *Buddhi*, *Manas*, *Akasha*, *Vayu*, *Agni*, *Jala*, *Prithivi*) levels of transformation—making a total of 24 values of transformation following the sequential, mathematical unfoldment of self-referral consciousness. In fact, the elaborate, multifarious, and complete unfoldment of the different aspects of the Veda and Vedic Literature is contained in the transformation within the gap, revealed as Vedic cognition or *Darshana*.

The faculty of seeing or knowing these dynamics is also referred to by Maharishi as *Divine sight* or *artistic sight*, since this cognition unfolds knowledge of the creative mechanics of Nature’s functioning.

Darshana as Artistic Sight

*When a dreamer of reveries has swept aside all the ‘preoccupations’ which were encumbering his everyday life, when he has detached himself from the worry which comes to him from the worry of others, when he is thus truly the author of his solitude, when he finally contemplates a beautiful aspect of the universe without counting the minutes, that dreamer feels a being opening within him. Suddenly such a dreamer is a world-dreamer. He opens himself to the world, and the world opens itself to him.*⁷⁴

—Gaston Bachelard

⁷³ The gap refers to the silence between the sounds (syllables, verses, hymns, etc.) of the Veda. Maharishi discusses the transformation within the gaps or *Sandhi* between the sounds in terms of several stages. See Nader, 2000, pp. 55-57.

⁷⁴ Bachelard, in Brett, 2000, pp. 61-62.

Darshana as artistic, divine, or Vedic sight is that function of cognition in higher states of consciousness where the individual sees beyond or behind surface expressions. Artistic sight is the art of seeing the transcendental value within the object of perception. Defining artistic sight as sight that sees inside the surface expressions of life, Maharishi comments:

So there is the art of seeing in which you see behind the surface expressions, the art of hearing in which you hear behind the words being spoken, and the art of touching in which you feel behind the touch, you feel behind the sight, you sense something there. No matter what you are hearing, you have your target on the divine level in every hearing. This is Vedic hearing. The formula that is sung about it is, *Bhadram karnebhih shrinuyama deva [Rig Veda, 1.89.8; Nrisimhapurvatapaniya Upanishad, 1.1]. Bhadram* is divine, the finest value of hearing.⁷⁵

Divine sight (and divine hearing) involves a refinement of the senses where *Bhadram*, the divine or finest value, the transcendental value of form (or sound), is perceived and appreciated. This occurs in *Bhagavad Chetana* and is fully realized in *Brahmi Chetana*. This seeing or hearing happens through the eyes and the ears. As Maharishi states: “you hear through the ears, not that you just hear, but that you have divine hearing through the ears. This means that the gross is to be experienced in a lively state in terms of the subtle or subtlest”.⁷⁶ The ears and eyes are trained to capture this refined value. Eventually the transcendental value of sound and form are experienced and, in fact, the gross level is no longer in the field of hearing or sight. What exactly is the significance of this? As Maharishi points out:

When the ears have been trained to capture the divine value, when the divine value is there at the subtle level of every word, then you will be hearing the transcendental value of sound and the gross will not be in the field of hearing. In such a state of consciousness, the subtle will always be enjoyed, and that will be the art of hearing. No matter what you hear, you will only hear that which nourishes the ears and the mind

⁷⁵ Maharishi Mahesh Yogi, in *Bonshek*, 2001a, p. 340.

⁷⁶ *Ibid.* p. 341.

and the intellect and the ego. This means that you will only hear what is nourishing to life and you will unhear that which should not be heard.⁷⁷

When the transcendental value is always heard or seen, then one is living unity. The transcendental value of the object is predominant. This is so, even to the extent that the non life-supporting value is “unheard” or not seen. This is the art of hearing, the art of seeing. That which is heard and seen, is always nourishing on the level of the senses, mind, intellect and the ego—on all levels of mind. There is no experience, then, which is not life supporting. When speaking of the art of seeing, one is speaking of experience and cognition in higher states of consciousness where both inside and outside are “fully lit”; there is nothing damaging to life—no “darkness” or shadowing of pure awareness.

In another context Maharishi discusses the phrase *Bhadram Karnebhih Srinuyama Deva Bhadram Pashyema Kshabir-yajatra* as articulating the principle that all life relies on the ability to absorb or take in orderliness from the surroundings to maintain an orderly state or low entropy. As Maharishi puts it, life depends upon the ability to “drink orderliness from the environment” for a “continuing state of creative order”.⁷⁸ For this there must be orderly thinking. The brain’s capacity for orderly thinking increases with the practice of Transcendental Meditation, therefore it is a means for drinking “orderliness from the environment”. Moreover, Maharishi emphasizes that orderly thinking provides a productive and useful direction for imagination. Imagination and creativity can be expressed in activity most successfully when creativity takes a “straight line” from its source in the pure liveliness in the mind to its goal in achievement.

As noted earlier, the straight line represents the relationship between silence and dynamism on the level of consciousness, when the dynamism is of infinite frequency, when at no time is it in or out; or rather it is in and out at the same time—like the *Lamp at the Door*. Activity that is promoted from the level of pure liveliness of the mind, the unmanifest Self, the source of all the laws of nature, is “absolutely artistic” and totally spontaneous. It is action performed from the infinite correlation level of the unified field where everything is connected with everything else. This, Maharishi explains, is the “most

⁷⁷ *Ibid.*

⁷⁸ Maharishi Mahesh Yogi, 1995b, p. 172.

artistic place in the field of creation”.⁷⁹ This artistic place is the home of all the laws of nature or *Devatas*.⁸⁰

The *Devatas* Revealed

Devatas are conventionally represented in sculpture and paintings and are the object of worship, meditation, and, as discussed by scholars, the means of receiving what is commonly known as *Darshana*—the gaining of grace from the deity. Nader explains that the *Vedic Devatas* are, in fact, laws of nature operating in the physiology. In his discovery of Veda and Vedic Literature in the physiology, Nader shows that the *Vedic Devatas* are actually found to correspond to specific structures and functions in the body. Cognition or *Darshana*, from the perspective of Maharishi Vedic Science, involves the cognition of this reality.

Nader identifies several of the key *Devatas*, including *Brahma*, *Buddha*, *Surya*, *Shiva*, *Vishnu*, *Saraswati*, *Lakshmi*, *Durga*, and *Ganesh*, and their role in the brain physiology. *Brahma*, characteristically represented as having four heads, for example, is found in the four lobes of the brain.⁸¹ Similarly, *Buddha* can be visualized in the physiology in the diencephalons and brainstem areas sitting in front of the main shaft of the spinal cord that extends into the brainstem. The head of the *Buddha* coincides with the thalamus, while his hands and feet correspond to groups of cranial nerves, and his abdomen to the pons. The main shaft of the spinal cord is the banyan tree under which he gained *Nirvana*. The thalamus, as with *Buddha*, creates balance between inner and outer, relative and Absolute.⁸²

The thalamus is also associated with *Surya*, the sun. Located in the centre of the brain, the thalamus controls the basal ganglia, mediating their activity and transmitting their information to the cortex. Surrounding the thalamus is a crown like structure called the corona radiata like the crown of the sun king. The thalamus acts as a ruler,

⁷⁹ Maharishi Mahesh Yogi, in Bonshek, 1996a, p. 441.

⁸⁰ As mentioned at the start of this chapter, the term *Devata* is generally translated as “god” or “deity”. In Maharishi Vedic Science it refers to specific governing principles or laws of nature that structure and uphold life.

⁸¹ Nader, 2000, p. 374.

⁸² *Ibid.*, pp. 371-372.

setting the overall tone of consciousness in the brain.⁸³ The sun is the centre of our planetary system and has been globally revered and celebrated by different cultures from premodern times to the present day. The circle, halo, swastika, rosette, wheel, lotus, and radiating concentric forms are observed in the art and material culture of many countries and traditions, from Polish *wycinanki* (paper cutouts),⁸⁴ Mithila, *Dhuki-Citra* wall paintings⁸⁵ in Bihar, India, to Navajo medicinal, sand paintings.⁸⁶ These recurring forms display a profound recognition of the significance of the sun and on another level they seem to present a universal comprehension of the deeper reality of the expanding and contracting dynamic of consciousness itself.

Illustrating the importance of other *Devatas* in the physiology, Nader examines the values of *Shiva*, *Vishnu*, *Saraswati*, *Lakshmi*, *Durga* and *Ganesh*. He observes that in the brain, *Shiva* administers silence, while *Vishnu* administers dynamism. Taking the *Lingam* form,⁸⁷ *Shiva* corresponds to the whole brain, which, when functioning in perfect balance, facilitates the experience of pure silence or Transcendental Consciousness.

Representing knowledge, *Saraswati* is the consort of *Brahma*, who, as mentioned previously, has four heads that correspond to the main divisions of the brain. Likewise, *Saraswati's* four arms, as the four lobes of the brain, represent the seat of all knowledge, experience and action. Nader finds that the *Devatas* may have multiple functions in the human nervous system. In this instance, *Saraswati* also corresponds to the plasma that carries information and knowledge about physiological activities in the form of hormones and neurotransmitters. Similarly, representing wealth, health and nourishing power, *Lakshmi* has four hands which represent the four chambers of the heart, and, on the molecular level, the four chains of the haemoglobin molecule that bring life-sustaining oxygen to the body's tissues.

Looking at the base of the spinal cord, Nader points out that in the Vedic Literature the seed of the source of energy is seen as the lower tip of the spinal cord. The sacral bone in the vertebral column is the

⁸³ *Ibid.*, p. 378.

⁸⁴ Perkowski, in Singh, 1993, pp. 270-273.

⁸⁵ Singh, 1993, p. 91.

⁸⁶ *Ibid.*

⁸⁷ Nader, 2000, p. 334.

base of the vertebral column and the nervous system. *Durga*, representing power or *Shakti* has eight arms. Likewise, eight nerves emanate from the sacral bone. Nader states that this area of the physiology is responsible for purification and energy.⁸⁸ Moreover, *Durga* is the consort of *Shiva* who is infinite silence. At the tip of the spinal cord, on the same level as *Durga*, is the *filum terminale*, which represents the infinite silence of the Veda. Thus, the total silence of *Shiva* is shielded with the power of *Durga*, or *Shakti*.

One of the most popular *Devatas* is *Ganesh*. Nader states that within the physiology there is a set of structures that form the gateway to the brain: including the pons, the medulla, and the cerebellum. No information goes into or out of the brain without passing through or communicating with this set of structures. *Ganesh* and his various features (eyes, trunk, ears, etc.) correspond to different aspects of the brain, and specifically this set of structures. *Ganesh's* ears are the cerebellum, which governs balance, eye movement, bodily equilibrium and the ongoing execution of limb movement. It balances action with intention. In the Vedic Literature, the sage or *Rishi* named *Vyasa* dictated the *Mahabarat* to *Ganesh* asking him to compare sound and meaning, which, Nader comments, is like comparing action with intention. Interestingly, in the physiology, *Vyasa* represents speech centers and *Ganesh* is the structure that makes speech visible, giving form to sound.⁸⁹ There are several other structures representing *Ganesh* in the physiology. Their privileged position, in addition to their function as a gateway, Nader states, “explain why *Ganesh* is worshipped first in all rituals. The structures include the brainstem, which is the seat of control of the nervous system”.⁹⁰ *Ganesh* is associated with the centres of the brainstem that control vital functions of consciousness, wakefulness, heartbeat, and breathing. The *Vedic Devatas* can be seen, in this context, as intelligence operating in the physiology. They can be understood as universal principles, rather than religious, philosophical, mythic or poetic ideas. Ultimately cognition of the *Devatas* involves the realization of their characteristic role in the physiology and the structuring dynamics of consciousness.

Clearly, this relationship between the *Devatas* and the structure and functions of the physiology is highly illuminating, even radical,

⁸⁸ *Ibid.*, p. 375.

⁸⁹ *Ibid.*, p. 342.

⁹⁰ *Ibid.*, p. 346.

and provides an extraordinarily profound vision into self-referral consciousness and how it expresses itself into the functioning human mind and body. With this unparalleled insight, the initial consideration of *Darshana* can be redefined and understood as a universal phenomenon of cognition in higher states of consciousness and the expression of the dynamics of consciousness revealed in the Veda and Vedic Literature and upheld by the *Vedic Devatas*. Although artists throughout the ages have sought to articulate and express the unseen forces of nature, if art were to have the power to assist the experience of *Darshana* it would, technically, have to be created by an artist who was living higher states of consciousness. Then the artwork could embody and radiate unboundedness, infinity, Being.

While one could definitely not claim that contemporary art achieves this end, it is worth noting that artists are now exploring digital media forms to communicate various concepts of consciousness, from the creation of virtual temples to immersive, animated imaginary worlds.⁹¹ Creating a Hindu temple on the Internet replete with deities, Rajah and Srinivasan invite virtual pilgrimage. The artists maintain that the temple is modeled on the universe, which has its source in the human body and, by presenting this “structure” via the Internet, participants can interact with the “resident” icon, *Ganesh*, through bytes rather than bronze. The Internet is inherently decentralizing, promoting multiple sites of interactivity and dematerializing traditional forms. As Rajah states, the temple, essentially resides in the heart, and therefore the artists “construction” only serves to endorse or re-emphasize this reading. Japanese artist, Mariko Mori, has also explored the concept of the virtual temple for tea ceremonies in her *Dream Temple*, 1999. Connecting the subject and the cosmos via spirituality and ritual, the temple has been physically constructed—including its own stone garden of purification, “transcendental” images and celestial sounds.⁹²

Coming back to the perspective of Maharishi Vedic Science, presenting quantum network architecture in terms of the Veda, Vedic Literature (including the *Darshana*) and the *Vedic Devatas*, the computer scientist Thomas Routt takes an unexpected approach. He finds that the six *Darshana*—(*Nyaya*, *Vaisheshik*, *Samkhya*, *Yoga*,

⁹¹ Rajah & Srinivasan, 1999, pp. 56-61; Davies, 1999, pp. 196-201.

⁹² Jansen, 2002, p. 304.

Karma Mimansa, and *Vedanta*)—correspond respectively to: the central processing unit/network processing unit; system configuration/connection; arithmetic logic unit; logical network topology and associations; backbone network system; and integrated functioning of the backbone network system.⁹³ According to Routt, *Ganesh* relates to the “gateways” on the information quantum highway. As Routt states, within the Global Internetwork, security servers and appliances form gateways to Intermediate Systems—the “great intermediate net” of switches, routers, and intermediate servers—and to End System application, database, file system, e-mail, directory, Web, and security servers. *Ganesh* sits at the entrance to *Shiva’s* cave and nothing can go in or out without passing him. He is the gateway to *Shiva*. Similarly, that quality of intelligence represented by *Ganesh* relates to those gateways to the information quantum highway.⁹⁴

While scholars find *Darshana* to be associated with religious and secular interactive experiences of the gaze, Maharishi Vedic Science presents *Darshana* as the *cognition* of the dynamics of self-referral awareness within the *Atma* of everyone—displayed as the Veda and Vedic Literature. Nader adds to this analysis by showing how *Darshana* is found in the physiology’s structures and functions, while Routt goes as far as locating *Darshana* within quantum network architecture.

How to ‘See’ Everything in One Self

Rajah and Srinivasan and Lovejoy and Jacob highlight the fact that performance and interactivity are an integral part of Indian culture. *Darshana*, as defined by scholars and discussed at the beginning of this chapter, is unsurprisingly related to the condition of being seen and the attitude of devotion and surrender in the desire to receive *Darshana*. In his commentary on the Bhagavad-Gita, Maharishi elaborates on the relationship of Arjuna and Lord Krishna and the process of gaining enlightenment. In reference to Chapter 4, verses 34-35:

⁹³ Routt, 2005, pp. 107-116.

⁹⁴ *Ibid.*, pp. 236-237.

*Know this: through homage,
repeated inquiry and service,
the men of knowledge
who have experienced Reality
will teach you knowledge.*

*Knowing this, O son of Pandu,
you will no more
fall into such delusion;
for through this you
will see all beings
in your Self and also in Me.⁹⁵*

Maharishi states that it is through homage (submission or surrender) that the seeker sets aside his individual ways of feeling and thinking to become free from all that may overshadow his potentiality and to become receptive to the enlightened man, the embodiment of knowledge. Ultimately, submission of the individual intellect to cosmic intelligence takes place only in transcendence, gained through the practice of technologies of consciousness. Maharishi goes on to explain that the intellect has to be alert—discriminating and decisive—to discriminate different aspects of reality.⁹⁶ In this situation, to overcome the conflict between submission and intellectual alertness, the seeker engages in service. Maharishi adds that the right sense of service trains the seeker's mind to adjust itself to the status of the enlightened man. In this process, the heart and mind of the seeker become refined and more capable of devotion. This is crucial, for it is the activity of devotion that develops God Consciousness or *Bhagavad Chetana*, where “everything is expressed and understood in the light of God, in terms of God, in God” and “all beings are seen in the Self”.⁹⁷ Maharishi explains that the seeing of everything in God, “is not restricted to the limitations of vision; it is on the level of life as a whole; it is on that high level of life which corresponds to the Life of God Himself”.⁹⁸

⁹⁵ Maharishi Mahesh Yogi, 1969, p. 223.

⁹⁶ The distinguishing and deciding value of intelligence, as discussed previously, is the characteristic of *Nyaya*, first of the *Darshana*.

⁹⁷ Maharishi Mahesh Yogi, 1969, pp. 223-224.

⁹⁸ *Ibid.*, p. 224.

While worshippers may participate in the viewing of a deity to receive grace and the power of the deity (guru or prophet), to gain God's grace, as it were, the individual has to rise to higher states of consciousness. Then he or she can live on that level where one sees all beings in the Self—where one has the experience of *Darshana*. The simple, effortless technique of Transcendental Meditation, as Maharishi points out, is the programme of *Darshana*. It is the direct means to unfold knowledge of all phases of existence and know everything as the Self. Despite this, surrender and devotion are important for the development of higher states of consciousness. However, without a technology to develop consciousness spontaneously from the deepest level of the mind, attitudes or feelings of devotion alone are not sufficient to facilitate *Darshana*.

Darshana is more than the interactive gaze in waking state; it is the cognition, in higher states of consciousness, of the dynamics of self-referral intelligence within *Atma*. It is the cognition of infinite creativity, all systems and values of relationship and the bi-directional value of intelligence, the *Lamp at the Door*. *Darshana* is the mathematics of the Veda, the realization of *Jyotish Mati Pragya* in one's *Ritam Bhara Pragya* (from where all numbers, geometry, space, time, alphabets, colours, and differences spring). It is "artistic sight". It is the six-fold self-referral loop emerging and submerging within wholeness—the creative mechanics that give rise to the ever-expanding universe.

Ultimately, *Darshana* involves *memory* of Veda, of the self-referral dynamics of intelligence on the level of one's fully awake consciousness. In this sense, *Darshana* as cognition requires the regaining of memory of our own Self, Veda, within awareness.

3

MEMORY AS SMRITH—100% WAKEFULNESS: THE SEAT OF CREATIVITY AND RETRIEVAL

A parallel to the two antagonistic tendencies in perception and memory, and surely to some extent a manifestation of them, can be found in the visual arts. A striving toward “beauty” in the classical sense of the term makes for simplified shape and for tension reduction in compositional relations. Expressionist leanings, on the other hand, lead to distortion and high tension created by discord, mutual interference, avoidance of simple order, and so on...

Antagonistic though the tendencies of leveling and sharpening are, they work together. They clarify and intensify the visual concept. They streamline and characterize the memory image. This process is further enhanced but also hampered by the fact that no trace is left to its own devices. Every one of them is susceptible to continuous influences by other traces. Thus, repeated experiences with the same physical object produce new traces, which do not simply re-enforce the existing ones but subject them to unending modification...

Although the total content of a person’s memory can hardly be called an integrated whole, it contains organized clusters of small or larger range, families of concepts bound together by similarity, associations of all kinds, geographic and historical contexts creating spatial settings and time sequences. Innumerable thought operations have formed these patterns of shapes and continue to form them.¹

—Rudolph Arnheim

¹ Arnheim, 1969, pp. 83-84.

The notion of art as a kind of mark making, or registering and re-registering of the trace, continues to fascinate artists and art theorists. Michelangelo described actions of humankind, from traveling across continents, sailing the seas, and even waging wars, as a kind of drawing or impression making. Increasingly, acts of quotation and citation, as traces of memory and desire, contribute to the creative impulse in the retrieval, re-iteration, preservation and documentation of personal and cultural experience.

In his essay, *Casablanca and Men in Black: Consciousness, Remembering and Forgetting*, Michael Punt considers the role of social, scientific, and historic forces on the psychoanalytic understanding of memory, forgetting, personality, realities of mental states, and identity. Today, electronic communications networks, he states, have extended previous technologies like photography and cinema, which were embraced for their ability to quantify, objectify or efficiently capture ‘reality’, providing a more materialist form of memory. Electronic media, with an unparalleled capacity for data storage, apparently disallows forgetting. Punt finds this somewhat problematic, but acknowledges the value of institutionalized recollection where “constructive forgetfulness is necessary for the purposes of building a national identity—especially in coming to terms with the unspeakable atrocities of a nation”.²

Similarly, Bruce Brown speaks of the inherent redefinition of cultural identity in the electronic age and the use of memory maps.³ He notes that cultural identity is, historically, circumscribed by geographic location. In the preservation of cultural knowledge, biological memory is an essential tool. For Brown, developments that shift memory systems away from the biological to artificial technology, such as writing, printing and more recently, the introduction of the digital domain, hasten the obsolescence of biological memory.

Arguing for the importance of memory for cultural knowledge, Brown uses the example of ancient Peruvian memory systems, finding that the equivalent of our digital form of encoding and storing knowledge for retrieval was found, for pre-Columbian cultures, in a device called a *Quipu*—a fibre construction with strands and knots. The sub-fibres and knots represented numbers that in turn represented knowledge stored in biological memory. *Quipas* would be transported

² Punt, 1999, p. 41.

³ Brown, 1999, p. 49.

across extensive road systems to disseminate knowledge. In the same way, stories of the culture were carried on the surfaces of objects such as pots, ponchos, jewelry, furniture and statues, and buildings. Earlier Nazca cultures made gigantic drawings on the desert floor, each made from a continuous line. These were intended to be: “transported from the desert surface into the memory landscape of the each person”,⁴ who walked the line of the drawing.

Contemporary environmental/land artists, such as Richard Long, Robert Smithson, and Bill Witherspoon,⁵ continue to work directly with and in the landscape, inscribing journeys, observations, and symbolic structures, in various (often remote) locations—as in Witherspoon’s case tracing an Indian-Amerindian design in a dry lakebed in the south-east Oregon, Alvord Desert. However, these works do not necessarily act as memory maps.

Knowledge transmission and maintenance through biological memory and similar devices is not foreign to traditional and aboriginal cultures. For the indigenous people of Australia, the geography, indeed, the land itself, is a vital component of the preservation of knowledge and cultural memory. Dhyayirra Yunupingu, a Yolngu⁶ writer, explains:

This land of ours, it provided our ceremonial objects...and it wasn’t only the sacred things which were given but the land also provided the sacred names, the kinship, the sub-sections, the homelands, and whatever language you may speak.⁷

As Jennifer Isaacs points out, the ownership of designs is at the core of Aboriginal intellectual property. Contained in songs or song cycles recording journeys, speech, and actions of the Creation Ancestors, and the making of the first designs, is sacred information about designs. The songs and the designs had to be learned by initiates at various levels of complexity, according to age and training.⁸ Thus, according to Isaacs, Australian Aboriginal knowledge is maintained and transmitted via various means—including designs, visual maps, string games, performance and songs—favouring performative and

⁴ *Ibid.*

⁵ Fergusson & Bonshek, 1992, p. 46.

⁶ The Yolngu are people of northeast Arnhem Land.

⁷ Yunupingu in Isaacs, 2004, pp. 5-6.

⁸ Isaacs, 2004, p. 6.

oral rather than written forms. Historically, and even today, the preferred method of preserving knowledge in many cultures is via oral means.

In the Vedic tradition, trained individuals (*pundits*), who have committed them to memory, recite selected branches of the Veda and Vedic Literature. The value of memory and recitation, as discussed by Nader, is due to the relationship between sound and form; for Vedic Sanskrit, in reciting those sounds, the individual is enlivening a corresponding value of intelligence in the physiology. Since the sound value is so important, recitation involves, among other factors, precise, correct pronunciation. This precision of utterance is maintained from generation to generation.

In our increasing reliance on external memory systems, and more recently on electronic media, Brown suggests that the capacity for biological memory is in danger of being diminished or totally lost. Over two thousand years ago, Socrates feared a similar outcome as a result of the effects of writing. As Brown notes, Plato states that Socrates claimed that writing would

...place outside the mind of each person that which should rightly be within it. And he has Socrates say in the *Phaedrus* that the effect of this upon us would be threefold: 1) we would lose our memories; 2) we would cease to be private individuals; 3) we would change the way we educated ourselves. History has proven Socrates right on each of these accounts, though the shift was gradual until around 500 years ago with the invention of printing from movable type.⁹

Brown also observes that with the invention of printing,¹⁰ objects and buildings were no longer seen as texts, resulting in a reduced capacity to design and navigate biological memory. Our current technological culture has further externalized knowledge so that cultural memory is mass-produced in films, photographs, videotapes, CD-Roms and DVDs, effectively placing it outside the individual's mind, "causing us to forget the need to remember".¹¹ In addition, by linking people from

⁹ Brown, 1999, p. 50.

¹⁰ Johann Gutenberg (c.1397-1468) is believed to be the first European to invent movable type, although some historians state that Laurens Janszoon Koster (Holland) and Pamfilo Castaldi (Italy) preceded him. Despite this, type had already been used for printing in China (where it is commonly held to be invented) during the Sung Dynasty, 700 years before Gutenberg. In addition, half a century before Gutenberg, movable type was used in Korea.

¹¹ *Ibid*, p. 51.

remote and disparate locations, each person is the recipient of fragmentary knowledge. Brown calls for a resensitizing of our biological memory system and the ability to virtualize things into our own landscape of memory.¹²

Increasingly, art addresses themes of memory, definitions of the self, and individual and cultural identity. From Guillermo Gómez-Peña,¹³ to Andrea Polli, Paul Coldwell, Ravinder Reddy, Gillian Brown, Shirin Neshat, and Paul Schütze, artists deal with concepts of attention, memory, and identity. Schütze's *Third Site: Vertical Memories*¹⁴ uses sound and architectural references as models for the conscious mind, while Gillian Brown also alludes to the thinking mind and processes of attention in her multimedia installations. In an essay on Reddy's work, Ajay Sinha states that the artist's

Sensuous myths synthesise heterogeneous memories—folk and popular, urban and rural, ancient and contemporary. The exuberance of his sculptures both refines and questions the discourses which explore notions of subjectivity in the Third World, especially that heterogeneous and hybrid subjectivity, which, as cultural theorists write, emerges from a postcolonial and postmodern context.¹⁵

Reddy draws from popular and folk Indian iconic imagery, while Coldwell investigates transience using images of objects that reflect a space somewhere between illusion and reality, "in which memory is formed".¹⁶ Polli considers the influence on perception of various

¹² As stated in Chapter One, with respect to the Vedic tradition, Maharishi comments that studying the texts of the Veda and Vedic Literature has little value without the development of consciousness. It is the development of consciousness that expands biological memory and the mind of the knower. As for the Vedic texts, without development of consciousness, they are interpreted from the limited perspective of unreliable, waking state consciousness. Over time, their true significance and meaning is distorted, lost or forgotten. Thus, they become obscure texts that seem to have little if no practical value. Despite this, because Veda *is* the eternal structure of pure knowledge at the basis of creation—the knowledge of reality gained in one's own self-referral awareness, reverberating as the evolving sounds of the syllables and verses of the Veda and Vedic Literature—it can never, actually, be completely lost. How is this knowledge regained? Maharishi points out that the introduction of technologies of consciousness allows the individual to re-enliven this ultimate reality. Technologies of consciousness, through enlivenment of consciousness on the collective level, are also vital for maintenance of cultural integrity and collective memory of the basic reality of life.

¹³ Gómez-Peña, 1996.

¹⁴ See: *Sonic Boom: The Art of Sound*, The Hayward Gallery, 2000.

¹⁵ Sinha, 1999, p. 56.

¹⁶ Coldwell in *Concerning Memory*, The London Institute, 2000, p. 6; see also: *Paul Coldwell: Case Studies*, The London Institute and The British Council, 2002.

modes of memory retrieval, motion and time in her exploration of concepts of short-term memory and long-term memory in sound and music structures.¹⁷ Although she states that the complex working of memory is not completely quantifiable, she discusses experiences with common objects stored in permanent memory as members of a class or ideal. A prototype of an object, feeling, person, idea, stored in our long-term memory, allows us to recognize and classify similar objects. Polli maintains that art can be viewed as parallel to memory: both are representations that employ and integrate the senses and refer to a sense of timelessness.

Acknowledging this influence of memory on perception, Rudolf Arnheim asserts that memory plays a part in artistic expression, particularly where the artist has an inner concept or “inner design” that he or she is working to express externally. This process of working with an inner concept, design or vision, seems in principle to reflect the definition of the artist according to Maharishi Vedic Science, while Polli’s idea of art and memory referring to a sense of timelessness, resonates with the purpose of art.

From the perspective of Maharishi Vedic Science, memory can essentially be understood in two different contexts: 1) in terms of impressions stored in the mind in waking state consciousness in a cycle of experience, impression, desire and action; or 2) as the underlying character of intelligence, called *Smriti*, that remembers its own self-referral nature, always remaining connected to the source in pure awareness. These two contexts present a view of memory in waking state and in enlightenment.

Memory as *Smriti* reveals the unlimited capacity for memory and knowledge, in individual and collective consciousness, and the importance of *Smriti* for cultural integrity and creativity.

The Cycle of Experience, Impression, Desire and Action

In waking state consciousness, we act upon a thought as a result of an unending cycle of experience, impression, desire and action. Such action leads to further experience and feeds a continuous cycle of cause

¹⁷ Polli explains that short-term memory (STM) includes chunking, holds its contents for 3-12 seconds and has a limited capacity of 5-9 items. Long-term memory (LTM) she notes includes non-declarative, declarative, episodic and semantic memory. Polli, 1999, p. 47.

and effect. Maharishi explains that experience results when the senses come into contact with their objects. When this occurs an impression is left on the mind. The impulse of this new impression resonates or associates itself with some similar or equivalent past impression in the storehouse of the mind. The collision of the two impressions creates an impulse, which, as it rises to the thinking level of the mind, is acknowledged as a thought. Then, in concert with the senses, a new desire is born and spurs one to action. As Maharishi states:

The coming together of the two [impressions] gives rise to an impulse at the deepest level of consciousness, where the impressions of all experiences are stored. This impulse develops and, rising to the conscious level of the mind, becomes appreciated as a thought. This thought gaining the sympathy of the senses, creates a desire and stimulates the senses to action.¹⁸

An impression is the trace of a particular experience registered in the subject's consciousness in the deepest recesses of the mind. Maharishi states that when something, i.e., a beautiful rose, is perceived through the senses, the impression of it is stored in the brain. In waking state consciousness, when *Being* or pure consciousness is not established in individual awareness, this process is analogous to a mark made when a line is inscribed into stone. The line endures because of the material quality of the stone; it is like a permanent feature. The important point here is the brain physiology, if not flexible enough, if not lively in the value of pure consciousness, allows the impression to register deeply. As Maharishi comments: "when Being is not established in the mind, the impression made by the object is like the impression of a line cut into stone, difficult to erase".¹⁹ Multiple impressions continue to be accumulated, as the individual goes through life, creating a storehouse of impressions. In waking state, activity is motivated by this cycle of impression, desire, action and experience. Past experiences form seemingly indelible impressions that trigger thoughts, arising in the mind, spurring one to act. Bound to this cycle, in creating art or performing action, thought or memory is governed by past impressions and experiences. Any creative output can only be expressed from the level of the individual's nervous system, the individual's specific

¹⁸ Maharishi Mahesh Yogi, 1969, p. 284.

¹⁹ Maharishi Mahesh Yogi, 1966, p. 120.

experiences, impressions, or memory, on the relative levels of the mind.

In this way, the individual mind, Maharishi points out, is the expression of pure consciousness as moulded by all the impressions of past experience. Just as the seed shapes the pattern of the tree, the impression of past experience shapes Being or pure consciousness into the specific pattern of the individual life force. To be free of the binding influence of past impressions, the cycle must be broken. Otherwise life is always determined by experience and impressions stored in the mind. This cycle is broken in Cosmic Consciousness when the impression of the object no longer overshadows the mind. As Maharishi points out, when, “Being is maintained, the impression of an object on the mind is just enough to give an experience. It is like the impression of a line drawn on water which is simultaneously erased”.²⁰ In higher states of consciousness experience is like a line drawn on water or air, it leaves no lasting trace that will promote, or bind the individual to, the cycle of impression, desire and action.

To explain this phenomenon further, Maharishi points out that in living the full value of consciousness, one is experiencing bliss at every moment. This experience of bliss is like concentrated honey on the tongue, which no other sweet taste can overshadow or compete with.²¹ As stated earlier, there are levels of the mind from the senses, thinking mind, intellect, intuition, ego, to pure consciousness. Only when the artist is functioning from the level of pure consciousness is the unbounded value of memory—memory of that universal self-referral level of awareness—lively in the artwork. Firmly established in pure consciousness in higher states of consciousness, the individual not only is free from the cycle but is also able to act from self-referral awareness—infusing creative acts and expressions with the infinite intelligence of Nature’s functioning.

Most art, performance, and creative expression in our time would be motivated and created from the level of individual desire and memory, driven by the cycle of experience, impression, desire and action. In this process, the ideas generated from the level of the thinking mind bubble up, are processed, and translated into art. The media of printing and photography are dependent upon impression making, as is, even more so, video and film. With printing the

²⁰ *Ibid.*

²¹ Maharishi Mahesh Yogi, 1969, p. 285.

impression is more permanent; a somewhat non-erasable image is created. With film and especially digital media, the impression is the effect of light constantly moving, transforming, and creating a sense of reality out of the ephemeral. The impression dissolves (24/25 frames per second) as quickly as it appears. These processes seem apt as a metaphor for the functioning of mind (in waking state consciousness), where impressions register on the screen of consciousness.

Artists like Polli and Schütze reference processes such as the mechanics of thought and memory within the conscious mind, while Mark Paul Petrick's *The Ocean of Beauty* (1996), seems to reflect deeper mental processes—visually generating meaning via relationships between photographic images potent with cultural memory.²² Some of Gillian Brown's recent video work deals with the way in which the brain conceives of or constructs reality. Brown describes her video projection *Untitled* (2002) as a wire frame sculpture of a head with a translucent gauze nautilus shell inside, instead of a brain, onto which metaphoric imagery is projected. These projections, in turn, reflect onto two glass silhouettes behind the head, and again onto the walls beyond, apparently creating multiple traces seemingly generated from the brain.

Having said this, what are the dynamics of memory and creativity in higher state of consciousness—and their significance for individual action? As Maharishi explains, to perform action that is life supporting for everything and everyone—for the environment, for the whole universe—one has to act from the level that governs life, the unified field of Natural Law. Action is then performed due to the need of Nature and the environment. Living life established in pure consciousness, the individual is not bound by any localized sense of self; the cosmic value of consciousness, or Natural Law, governs action. Indeed, memory, in higher states of consciousness, is memory of the mechanics whereby consciousness, through its self-interacting dynamics, gives rise to the laws of nature that structure existence at all levels. Furthermore, the limitations and associations of past impressions no longer grip the mind, binding one to an endless cycle.

²² Bonshek, 1996b, p. 49.

The Character of Awareness and the Mistake of the Intellect

Memory, as defined by Maharishi Vedic Science, is ultimately the value of self-referral intelligence that always remains connected to the source, or unity, in the midst of diversity and change. The term *Smriti*²³ means memory and refers to memory of that *Samhita* or unifying value of awareness. It is the character of awareness, itself. As Maharishi points out:

Awareness is just memory. If I remember something, that thing is open to the awareness. Smriti means ‘memory’. So the aspect of the Vedic Literature that is called Smriti deals with the character of awareness. It is concerned with how the awareness could be such that when it is in terms of fluctuation or excitations it does not forget its unmanifest value. In other words, when the awareness is acting in terms of specific values of Natural Law, the non-specific, general character of Natural Law is not out of awareness. When the totality of Natural Law is out of awareness then we say that a man is ignorant of his own nature. When the totality of Natural Law does not disappear from memory then the individual is established in enlightenment. He is living the totality of life through all his individual expressions. The individuality is in tune with universality through memory of the totality of Natural Law being maintained.²⁴

Smriti is that aspect of intelligence that reveals the nature of the connection between the unmanifest and the manifesting process of nature. In this sense, *Smriti* goes beyond recollection of past events, impressions stored within the mind, or historical facts, it is the character of fully awake consciousness which does not forget its unmanifest, unified value. How do we lose sight of *Smriti* and get caught up in the binding cycle of experience, impression, desire and action?

Maharishi explains that the answer to this question lies in the fact that it is the “mistake of the intellect”, or *Pragya-aparadha*, where the mind favours diversity over unity. The intellect plays both a part in forgetting and remembering its true, unmanifest nature—pure consciousness. Maharishi identifies the “mistake of the intellect” as where consciousness diversifies or bifurcates into the values of *Rishi*,

²³ In the Vedic Literature, *Smriti* is part of the six-fold self-referral loop of the *Brahmana*.

²⁴ Maharishi Mahesh Yogi, 1980, p. 16.

Devata, and *Chhandas*. In so doing, the intellect is responsible for “forgetting” the source and (the corresponding) step-by-step, development of consciousness. The intellect favours the play of diversity over the unified, unbounded status of *Samhita*. Maharishi states that, for the individual, when this track of memory is lost one is disconnected from the rhythm of life. He adds that, in this situation, due to the excitement of the mind, balance is lost and “delusion” results. Delusion refers to ignorance of the Self, where diversity is seen at the expense of unity. Delusion, Maharishi points out, obscures the track of memory and the intellect ceases to function properly. Maharishi states that when *Smriti* is thus lost, i.e., when memory of unboundedness is “no more, then the “correctional institution” of pure knowledge is introduced.”²⁵ Pure knowledge, as discussed in Chapter One, is the self-referral structure of pure consciousness. The introduction of pure knowledge means regaining one’s own self-referral consciousness.

Pure Knowledge, The Intellect and Absolute Number

Pure knowledge is that integrated state of awareness—*Samhita* of *Rishi*, *Devata* and *Chhandas*—where knower, process of knowing and known are unified within awareness. Pure knowledge is re-gained through the practice of Transcendental Meditation and the TM-Sidhi Programme, through re-connection with, and enlivenment of, the silent source of the mind—pure, self-referral awareness. Through these technologies of consciousness, the “mistake of the intellect” can be corrected in individual life.

As Maharishi points out, as long as the mind is one-sided, subjected only to activity, without the influence of pure consciousness, the mind is not a successful mediator:

It fails to safeguard the freedom of the self from the influence of action, and at the same time fails to safeguard actions from the limitations of individuality, so that activity remains without the direct support of the almighty power of Nature.²⁶

²⁵ *Ibid.*, p. 17.

²⁶ Maharishi Mahesh Yogi, 1969, p. 350.

The intellect, Maharishi maintains, is the finest aspect of one's subjective nature. As long as it remains intact, there is the possibility for evolution, that is, advancement to enlightenment. Furthermore, to maintain direct support of Nature, *Smriti* must be lively in individual awareness. In this analysis, the intellect can be said to be both responsible for forgetting, and reconnecting or remembering, the source—the unified value of consciousness. This theme of forgetting and remembering (or losing and then re-enlivening the value of *Smriti*) is applicable also on the collective level as will be considered later in the discussion of history, collective memory, and specific eras called *Yugas*.

Continuing with the idea of the emergence of diversity as knower, process of knowing, and known, Maharishi adds that the point where *Samhita* expresses itself into the three values of *Rishi*, *Devata* and *Chhandas* is also the seat of Vedic Mathematics. As discussed in the previous chapter, this is the level of emergence of all values of relationship. Transformation takes place at this level of emergence of *Rishi*, *Devata* and *Chhandas* within the reality of *Samhita*—from where everything is designed.²⁷

Smriti—as the value that always remains connected to the source—plays a role in the experience of *Darshana*, which is Vedic Mathematics. As noted earlier, unity in Vedic Mathematics is expressed as the number one, circled. This represents the eternal continuum of Unity, zeroed, which has its source in the irreducible, Absolute Number. *Smriti*, as memory of unity, reveals the structure of self-referral consciousness. As Maharishi explains, *Smriti* is the move of intelligence in the opposite direction to that of the evolution of sound. It could be said to be the trace back to the source. *Smriti* is involved in the reconnection to *Samhita*, Absolute Number; it is the memory of the steps of evolution of consciousness.

***Smriti* and the Structure of Veda**

The actual structure of the Vedic Literature in its self-referral (looping) form continues to bring out the details of the value of *Smriti*. For example, in looking at the emergence of the Veda, Maharishi

²⁷ Maharishi Mahesh Yogi, 1996a, p. 342.

identifies intelligence as expressing itself in *Rk Veda* in the progressive evolution of ten *Mandalas*—ten circular structures commonly known as ten chapters. These ten *Mandalas* demonstrate the self-referral nature of consciousness; the progressive move of intelligence is the evolution of *Shruti* or sound in the form of these ten *Mandalas*.

As discussed in the previous chapter, there is an emergent and submergent direction in the flow of intelligence knowing itself. In submergence, intelligence gives expression to qualities that are opposite to those structuring emergence. As Maharishi explains:

In the return journey, intelligence is giving expression to the structuring dynamics (*Smriti*) of the structure of *Rk Veda*, until the source of *Rk Veda* is fathomed in terms of the qualities opposite to those which initiated the process of evolution (*Shruti*).²⁸

In this process, we see the self-referral move of consciousness as the evolution of sounds (*Shruti*), and the return to the source as memory (*Smriti*). Here, retrieval is retrieval of the self-referral basis of creation, retrieval of one's own infinite, transcendental awareness. In this context, considering "writing" or "script" as one step removed from speech, the forms of the Veda and Vedic Literature²⁹—syllables, verses, and so forth—are the "writing" or "script" of nature. The Veda and Vedic Literature embody the dynamics of consciousness in terms of sound, which also has form. How can this "sound," "script," or "writing" relate to biological memory?

Green notes that in his deconstruction theory, Jacques Derrida refers to the neuronal traces in the brain, identified by Freud as memory, as a kind of "writing". Derrida also suggests that DNA is a "writing" or trace present in all living substances.³⁰ Nader explains that the self-referral dynamics of consciousness, recorded as the Veda and Vedic Literature, are expressed directly in the DNA, the cell, and all aspects of the body and that memory is the flow of intelligence at all levels of the physiology. He states that *Smriti* represents the structure of intelligence in terms of the display of the total potential of the observer or *Rishi*—from individual to cosmic, point to infinity—with

²⁸ Maharishi Mahesh Yogi, 1995a, p. 427.

²⁹ Sound (*Swara*) is *Swa* (*Atma*), and *Ra* (reverberation). *Mantra* or *Swara* is reverberating self-referral consciousness. This is the character of *Mantra*. Maharishi Mahesh Yogi, 1997b, p. 17.

³⁰ Green, 1993, p. 241.

reference to the memory quality of consciousness. It maintains spontaneous right action and in the physiology is represented by all the memory systems and reflex arcs—involving the appropriate response to any situation from changing one's posture to complex adjustments to social and traditional behaviour in the presence of changing circumstances or environmental demands.³¹

Smriti, he adds, is lively in the synaptic gaps, in the DNA of every cell, and in the grey matter of the spinal cord and brainstem as well as in the hippocampus in the brain. In this sense, “writing” as the trace present in all living substances, or the play of Veda and Vedic Literature, is not external to “biological memory”. Memory or *Smriti* as abstract intelligence is expressed on the biological level as the same fundamental operating principle.

Like the knots of the *Quipas*, generating a series of points on a line, a sequence of coalesced points or sounds, indicate a flow of language—“writing” that carries knowledge and defines memory. Influential writers, Gilles Deleuze and Felix Guattari articulate a resistance to memory, suggesting memory is antithetical to *becoming*. They see memory as restricting—collapsing identity into a specific idea or value and find that, in its inherent coalescence, memory creates a point—a localized value that necessarily denies or obscures the value of becoming. Described by Deleuze and Guattari as a line rather than point, “becoming” is more fluid than memory. In resisting the point, a non-localized zone is favoured. This non-localized zone is a becoming that is always in the middle.³² It is always potentiality.

If memory is the retrieval and emergence of deep impressions stored in the mind that form identity shaped by past experience, then this sense of memory could be said to have the effect of confining the self. When this cycle of experience, memory, desire, and action predominates, the individual is lost to the vagaries of changing notions of the self and point values of relative experience. This occurs at the expense of unboundedness. Conversely, when *Smriti* is lively, memory of the transcendental nature of the self—pure consciousness or the non-localized, infinite, unbounded Self—is appreciated and ultimately seen in finite values of the point, of diversity. The individual, then, always enjoys the state of pure Being and potential becoming, even when engaged in point values.

³¹ Nader, 2000, p. 218.

³² Deleuze & Guattari, 1987, pp. 292-293.

In the state of pure Being and becoming the individual acts according to *Smriti*. Such action is upheld by *Dharma*, which Maharishi describes as Cosmic Creative Intelligence, the infinite organizing power of Natural Law also called *Purushottama*:

Action according to *Smriti* is action that is spontaneously upheld by *Dharm* (that which upholds the universe), by the Cosmic Creative Intelligence of Natural Law. Action according to *Smriti* is action that is spontaneously promoted by the infinite organizing power of Natural Law—*Purushottam*—the supreme administrator of the universe. This means that the authenticity of action for being in accord with Natural Law is derived from the *Smriti*, which in turn derive their authenticity from the spontaneous, sequential, orderly, progression of Rk Ved. Absolute, eternal order, available in the sequential progression of Rk Veda (*Shruti*), is the absolute structure of pure intelligence, the lively dynamics of evolution—the ultimate source of all order in the universe. The structuring dynamics of the intelligence of Rk Ved, portrayed by *Smriti*, is the guiding light of perfect action.³³

While *Purushottama* and action in accord with Natural Law will be discussed further in the next chapter on performance as *Yagya*, here, the structuring dynamics of intelligence at the self-referral level, portrayed by *Smriti*, Maharishi states, is the example or “guiding light” of perfect action—action in accord with Natural Law. What is the relationship between the values of individual intelligence and Cosmic Intelligence on this level of action? Maharishi points out that:

The memory of the Cosmic Mind,... maintains connectedness of steady, silent Cosmic Intelligence with the active, functioning Cosmic Intelligence. The performance of individual intelligence is an aspect of the performance of Cosmic Intelligence, and this is how the element of memory maintains connectedness with Cosmic Intelligence during the performance of any activity.³⁴

It can be said that *Smriti* maintains the connection between silence or pure Being and activity as becoming on the level of the Cosmic mind. The value of *Smriti*, lively in individual awareness in higher states of

³³ Maharishi Mahesh Yogi, 1993, pp. 38-39.

³⁴ *Ibid.*

consciousness, is also lively on the macrocosmic scale of the universe and the microcosmic scale of the cell, the DNA.

While not addressing *Smriti*, the relationship between micro and macro levels of life are dealt with in Charles and Ray Eames' film *Powers of Ten* (subtitled as "a film dealing with the relative size of things in the universe and the effect of adding another zero")³⁵ in a very powerful and compelling sequence. In addition, by examining identity, either individual or socially constructed, artists continue to look to psychology and psychoanalytic theory for ways to mine memory and experience, and create meaningful art.

Vedic Psychology and Retrieval

Memory and analysis are important to the navigation of the human condition as is evidenced in work by many artists, including Mary Kelly, whose early work directly applied psychoanalytic theory. While those such as Kelly may reference personal development through strategies of feminist analysis, in his discussion of creativity, art, and artists from Michelangelo to Rothko, Peter Fuller applies psychoanalytic readings to aesthetics.³⁶ Fuller suggests that Rothko's minimal works representing a 'negative sublime' encapsulate a fear of 'nothingness' or 'non-existence' and are (as much of the abstract painting of North America was at the time) the out-pouring of an exile wrenched from his mother/land.³⁷ With respect to selfhood, Donald Kuspit, argues that art that has any lasting or universal value should be able to articulate a new sense of identity—not a "transcendental illusion" of selfhood but a "real possibility" of achieving a new sense of self.³⁸ His view of aesthetic experience, involves an aesthetic disinterestedness, something like the Buddhist idea of detachment. Despite this, Kuspit denies the validity of the experience of a "unified self".

³⁵ Stungo, 2000.

³⁶ Fuller, 1983.

³⁷ One could also compare Rothko's colour field paintings with mid-Western (Lancaster County, Pennsylvania) Amish quilts from the 1880s to the 1920s that use a strikingly similar colour palette in simple, "plain" and "diamond in square" designs, that create their own field effect. Pellman & Pellman, 1984, pp. 12-19; pp. 58-61.

³⁸ Kuspit, 1990.

Obviously from the perspective of waking state consciousness there is no stable reference point or experience of a universal, Cosmic, or unified self. Granted, there may be glimpses of it, but it is via repeated experience that the unified Self can be established. This may be accomplished through practice of technologies of consciousness. The shortcomings of modern psychology and psychoanalysis lie in the fact that these disciplines do not provide a complete picture of the mind, identity, or the potential of the self; neither do they include techniques to realize the unified Self. While scholars accept the notion of the subconscious mind and the complex inner workings of memory, the fact that the brain only uses a limited percentage of its full potential should be a concern for those studying the mind and its functioning. Modern psychology does not provide a means to access the untapped, infinite reservoir of creativity that is the silent level of pure, Transcendental Consciousness at the source of the mind.

In contrast, Vedic Psychology³⁹ develops the unified self, through memory of the Self. Orme-Johnson presents a review of modern psychology from experimental psychology to behaviourism arguing that modern psychology misses the universal basis of consciousness and is therefore unable to solve both individual and national problems. He also presents a series of principles defined as “old principles” and “new principles” contrasting the approach of modern psychology and Vedic Psychology.⁴⁰ Alexander, Boyer and Alexander define and present research on the seven states of consciousness with respect to cognitive development⁴¹, while Dillbeck presents an informative analysis of the *Bhagavad-Gita* as a case study in Vedic Psychology.⁴² In each of these analyses, the authors explain that the infinite, unchanging nature of the Self, the Cosmic Self, is the basis of the ego, intellect, thinking mind, body and environment. The changing definitions of the ego as the “I” that undergoes constant transformations are seen to be only the individualized expressions of unbounded consciousness.

Analyses of memory and the self that are based on deep impressions stored in the mind and efforts to retrieve such impressions, Maharishi points out, may, in fact, be detrimental for the individual. As

³⁹ Alexander, Boyer, & Alexander, 1987; Dillbeck, 1989 & 1991; Orme-Johnson, 1988.

⁴⁰ Orme-Johnson, 1988.

⁴¹ Alexander, Boyer, & Alexander, 1987.

⁴² Dillbeck, 1991.

he states: when psychology brings to the conscious mind the trauma of a person's past, "even for the purpose of enabling him to see the cause of his stress and suffering [it] is deplorable, for it directly helps to strengthen the impressions of a miserable past".⁴³ It can actually depress the person's consciousness by overshadowing it with the memory of past events or trauma. Like Punt, who feels that the ability to forget is important, particularly when the past involves the unspeakable,⁴⁴ Maharishi notes that it is a blessing that we normally forget the past, even though the present is a result of past experience, because, "the fact remains that the past represents a less developed state of consciousness, and the present belongs to a more developed state. Therefore it is only a loss to overshadow the more evolved present with memories of the less developed past".⁴⁵

From this discussion one can appreciate the value of realizing the "self" as the Cosmic Self—as not just the accretion of memories of events, experiences and emotions, but as an infinite reservoir of intelligence and creativity. The aim of the motivated artist is to find and draw from this inner resource. For this reason, Maharishi recommends that subjects of psychoanalysis be spared digging into "the mud" of the past by simply practicing the Transcendental Meditation technique. Through this technique, in gaining the experience of Transcendental, bliss consciousness, the mind is strengthened. Over time, deep impressions stored in the mind will lose their potency. Then, as the value of *Smriti* is enlivened, the individual finds that he or she is Cosmic; the self is experienced as unified, universal. In this situation, the individual can do anything, know anything, and accomplish anything. For the artist, the possibility arises to create work that, embodying the universal value of consciousness, radiates that quality into the environment, to the viewer/participant.

It should be noted that in full enlightenment, every aspect of the past, present and future can be known and is available in self-referral consciousness—nothing is lost. Despite this, as stated in the previous chapter, for the enlightened individual, only that which should be heard and seen (i.e., the subtle, transcendental value of life) registers in consciousness.

⁴³ Maharishi Mahesh Yogi, 1966, p. 265.

⁴⁴ Punt, 1999, p.41.

⁴⁵ Maharishi Mahesh Yogi, 1966, p. 265.

History or Collective Memory

*The truth of Vedic wisdom is by its very nature independent of time and can therefore never be lost. When, however, a man's vision becomes one-sided he is caught by the binding influence of the phenomenal world to the exclusion of the absolute phase of Reality, when he is thus confined within the ever-changing phases of existence, his life loses stability and he begins to suffer. When suffering grows, the invincible force of nature moves to set man's vision right and establish a way of life which will again fulfill the highest purpose of his existence. The long history of the world records many such periods in which the ideal pattern of life is first forgotten and then restored to man.*⁴⁶

—Maharishi Mahesh Yogi

As Punt and Brown comment, memory (and forgetting) has value in shaping individual and collective memory and definitions of self, individuality and national identity. Artists who focus on hybridity and diaspora see the reenactment of history as a way of retrieving past events and experiences that have informed current social behaviour and of addressing the unspeakable.⁴⁷ Others like Iranian born, New York artist, Shirin Neshat deal directly with issues that document social life. As Lars Bang Larsen states:

Neshat focuses on emotional complexity within the discussion of identity. Her double channel video work *Turbulent*, 1998, enacts a visual dialogue between two screens. In the work's first half a man sings a traditional Sufi mystical poem, surrounded by other men. From the other screen a solitary woman responds, singing wordlessly with haunting sounds, provoking shocked reactions from the male audience opposite. The duality at stake in the work, between male and female space, organized discourse and disorganized sound, is never redeemed. Isolated from each other, the two protagonists observe separate, almost antagonistic codes of culturally prescribed behaviour, each from their own side of the gallery space.⁴⁸

⁴⁶ Maharishi in, Bonshek, 1989.

⁴⁷ Gómez-Peña, 1996; King, 1999, p. 49.

⁴⁸ Bang Larsen, 2002, p. 332.

Neshat's *Turbulent* is a powerful reminder of the unresolved issues of gender, cultural identity and social law. These issues can be addressed from a completely unique and holistic perspective with the understanding of Vedic knowledge.

According to Maharishi Vedic Science, collective memory as history, is instructive to those in the present when it inspires evolution. Evolution means growth to higher states of consciousness. In terms of individual life, it means being able to live life free from the constraints of problems and injustices. With this understanding, the ultimate purpose of history is to inspire evolution,⁴⁹ where history is the story of the eternal continuum of Natural Law expressing itself or quantifying itself in various expressions of knowledge. Unlike the scholar who amasses and organises data, records material evidence, to interpret the past like the piecing together of a sometimes seemingly unsolvable jigsaw puzzle, Maharishi states that the enlightened historian is able to maintain a vision of the whole span of time beginning from the day of creation. This infinite conception of time is based on the experience of pure consciousness.

In this context, time is conceived of with respect to that which has the longest life span in creation. This is the life of *Mother Divine*. *Mother Divine*, according to Maharishi, is the “supreme Cosmic Intelligence”,⁵⁰ described as *Devi*—“the most exalted state of awareness”.⁵¹ This state of awareness is the experience of:

‘I am all there is without a second’. This is the merger of diversity into unity; the whole reality being self-referral, is visualized in terms of unity, pure wakefulness, where every aspect of diversity has been dissolved, and having dissolved all variations of unity, the spirit of unity rejoices in its ultimate sovereignty. For eternity, there is nothing other than one exalted, supreme sovereign Mother Divine, the source of creation—supreme Creative Intelligence in her magnanimity, supreme invincibility, totality, pure potentiality—the source of everything...⁵²

The various sub-divisions of the period of one life of *Mother Divine* are quantified in years of the lives of *Lord Shiva*, *Lord Vishnu*,

⁴⁹ For a further discussion of history in Maharishi Vedic Science, see: Bonshek, 2001a, pp. 216-231.

⁵⁰ Maharishi Mahesh Yogi, 1993, p. 277.

⁵¹ *Ibid.*

⁵² *Ibid.*, pp. 277-278.

and *Brahma*, and in further divisions measured as the *Kalpa*, *Manu*, *Manvantara*, and *Chaturyugi*.

The Division of Infinity into Eras or Yugas

To give some sense of the enormity of these eras, a *Chaturyugi* is comprised of four *Yugas* or periods that unfold cyclically. These are *Sat Yuga*, *Treta Yuga*, *Dvapara Yuga*, and *Kali Yuga*; a *Kali Yuga* is 432,000 terrestrial (human) years and is one quarter the period of a *Sat Yuga*.⁵³ The time it takes to traverse the four *Yugas* is ten times one *Kali Yuga* or 4,320,000 years (one *Chaturyugi*) and a life span of *Mother Divine* can be calculated as 154,586,880,000,000,000 years. Time follows a progression through the four *Yugas* in a continual, cyclical dynamic.

Graham Hancock discusses the different *Yugas*,⁵⁴ from *Krita Yuga*⁵⁵ through to *Kali Yuga* in relation to symbolism in ancient Khmer architecture, as does Eleanor Mannikka, who has published an exhaustive treatise on sacred measurements and the structure of Angkor Wat located in Siem Reap, Cambodia. Providing a link between Vedic concepts of time and architecture (considered in later chapters) Mannikka presents a correlation between the *Yugas*, sacred measurements and the structure of Angkor Wat itself.⁵⁶ While these *Yugas* are documented in Vedic texts and represented in Vedic art and

⁵³ A *Sat Yuga* is 1,728,000 years, *Treta Yuga* is 1,296,000 years, and *Dvapara Yuga* is 864,000 years. A *Chaturyugi* consists of 4,320,000 years, a *Manvantara* equals 306,720,000 years, one *Kalpa* (14 *Manus* or one *Manvantara*) is 4,294,080,000 years, a *Kalpa* is one day of *Brahma* and one life span of *Brahma* is 154,586,880,000 years. A life span of *Vishnu* is one thousand life spans of *Brahma*, which is 154,586,880,000,000 years. One life span of *Shiva* is one thousand life spans of *Vishnu* or 154,586,880,000,000,000 years. The life span of *Mother Divine* (of which there are an innumerable number) is one thousand life spans of *Vishnu* or 154,586,880,000,000,000,000 years.

⁵⁴ In *Heaven's Mirror: Quest for the Lost Civilization*, Hancock describes the *Yugas* as the great ages of Hindu cosmology. Hancock & Faiia, 1999, p. 150.

⁵⁵ *Krita Yuga* is equivalent to *Sat Yuga*.

⁵⁶ Mannikka, 1997, p. 66.

Discussing the significance of number in Vedic knowledge with reference to the measurements of Angkor Wat, Mannikka notes that the number 108, considered to be a sacred number, "transforms time into divinity, or divinity into time. Moreover, the terrestrial yuga cycles are all divisible by 108, and there is a maximum 108 degrees of arc in the north-south lumisolar oscillation each year. Curiously, when the celestial yuga cycles (*kali* to *krita*) are divided by 108, they come to 11.1111, 22.2222, 33.3333, and 44.4444. The decimals could be continued indefinitely. *Krita* means "four"." Mannikka, 1997, p. 68.

architecture, Maharishi Vedic Science provides an understanding of how these epochs come about and how a *Sat Yuga* can be re-enlivened. In this context, what is the main characteristic of each of the *Yugas* with respect to *Smriti* and how does *Smriti* contribute to practical concerns of everyday life in any age?

According to Maharishi Vedic Science, in *Sat Yuga* the majority of the people spontaneously live 100% in accord with Natural Law. Therefore, national laws are, strictly speaking, not required to govern the population. The value of memory or *Smriti* is fully lively in collective consciousness. In *Treta Yuga*, pure consciousness begins to become shadowed or “forgotten”; people are only able to live 75% Natural Law. In *Dwapara Yuga* only 50% Natural Law is lively in individual and collective life, and finally in *Kali Yuga* just 25% of Natural Law is lived by the people. Eventually the value of *Smriti* is no longer lively. Pure consciousness is, as if, obscured or forgotten. The result of this gradual loss of the ability to which people are able to live pure consciousness in daily life, is the increasing need for more laws and religious, moral and social codes of conduct. Thus, social and moral guidelines articulated by new religions spring up and provide codes or guidelines of behaviour for the people.

In *Kali Yuga*, when suffering becomes a tenet of religion, zero percent of Natural Law is reached and the pendulum begins to swing back to *Sat Yuga*. As Maharishi states:

As Natural Law declines in human awareness, religious codes arise to help man and guide him to maintain the ability to live Natural Law as much as he can... As Natural Law continues to decline through the passage of time, man’s ability further deteriorates, and he ceases to be capable of living up to the full value of the religious codes. Diluted or simplified expressions of the religious codes, in the form of the codes of the different sects of the same religion, arise in response to the need of the time. By the time Natural Law is expressed in its zero value in daily life, it has reached the lowest limit of its extreme range.

The acceptance of suffering by religion is the indication of the complete decline of Natural Law in daily life. Thence comes the point of return. The beauty is that at this point in time the total value of Natural Law is in its pure potentiality; it is fully awake within itself. This fully awake potential of Natural Law naturally begins to express itself in daily life. This is the *great leap* of the nature of Natural Law

within itself from its zero level of expression to one hundred percent level of expression in practical life.⁵⁷

This analysis of history can be seen in terms of an infinite continuum upon which the eras or *Yugas* unfold and progress through the various phases of life lived according to different degrees of Natural Law. As discussed at length elsewhere,⁵⁸ one can analyse any given period with respect to the degree of Natural Law being lived by the populace and the degree to which universal value is being expressed in art—or even discussed as a possibility for art and culture.

Creativity and Suffering

If zero percent of Natural Law is found to correlate to the acceptance of suffering by religion, a similar principle could be reflected in art, where creativity and suffering are seen to go hand in hand. It has become a unquestioned assumption today that there is a correlation between art practice and suffering, often to the degree that the artist is portrayed as a martyr for the cause of art. Classic examples of this in Western art history are Vincent van Gogh and Jackson Pollack. In contemporary art practice artists such as Stuart Brisley even go as far as exploring the limits of human endurance of pain.

Despite this, Maharishi categorically states that creativity is opposed to suffering.⁵⁹ When creativity is equated with suffering, it could be said that collective consciousness has reached a low ebb. As Maharishi points out,

All this story of creativity and the statistics drawn from the lives of good writers, good painters, good sculptors, indeed all the geniuses in the world, were defective. Until now, the measuring balance for the increased Creative Intelligence was in a deplorable state, but now it will be on a very laudable level. When life is taken to be a struggle then utilization of Creative Intelligence is limited to survival. But when life

⁵⁷ Maharishi Mahesh Yogi, 1994, p. 219-220.

⁵⁸ See: Bonshek, 2001a, Part IV, pp. 214-258, for a discussion of the universal foundation of history, traditions, culture and language, including: the purpose and dynamic of history—the rise and fall of Natural Law as the cyclical unfolding of consciousness; traditions as different modes of activity governed by *Dharmas*; and culture as the expression of laws of nature governing geography, climate, mannerisms, language and accents of different people.

⁵⁹ Maharishi Mahesh Yogi, in Bonshek, 2001a, p. 297.

starts to be lived on a natural level of existence where the physical nervous system is natural, then the possibility is for a supernatural state of existence—we would want to call it very natural, the normal state of a human being—when that unbounded awareness is spontaneously lived for the maximum utilization of Creative Intelligence. Until now, we do not accept that this has been the understanding of creativity derived from observing how geniuses in the past struggled and suffered in order to create, and that these works may have been enjoyed down the ages. But this does not establish a valid principle for the development of Creative Intelligence.⁶⁰

The record of outstanding individuals, who apparently suffered to create, does not, Maharishi asserts, present a valid argument for a relationship between creativity and suffering. Creativity is, in fact, opposed to suffering. It is in the opposite direction to suffering. Creative Intelligence, that infinite intelligence at the basis of life accessible in the individual's self-referral consciousness, can be utilized for maximum output, to live life on a natural and normal level of existence. A normal level of existence here means something more than the common concept of "normal." It refers to a state where the individual is able to use their full potential and be infinitely creative.

Clearly, any Vedic definition of history and creativity necessarily expands current thinking. For example, since history is infinite, it makes no sense, indeed, it would be impossible, to chronologically document the entire march of events through the corridor of time. Maharishi emphasizes that the *value* of historical events is more important—inspiring people in the present to evolve towards enlightenment. In addition, Maharishi stresses that events, such as the stories documented in the *Ramayana* and *Mahabharata*, often dismissed by modern historians as "myths," are actual records of history, and it is reprehensible that they be devalued or rejected by modern historians.

Renewal of History

When collective consciousness is expanded and lively in the value of *Smriti*, then the whole story of creation is available to awareness.

⁶⁰ Maharishi Mahesh Yogi, in *Bonshek*, 1996a, p. 339.

Consequently, recollection of events and their significance in the present becomes increasingly appreciated. Additional material evidence continues to be unearthed, causing the retelling, renewal, or rewriting of histories, and expansion of previous theories about our forebears. As collective consciousness evolves and is livelier in the value of *Smriti*, anything can be available to memory or ripe for retrieval.⁶¹ With the understanding of the cyclical unfoldment of the *Yugas*, what is important to history, or what is at stake, is not who supposedly “discovered” what first, but which cultures are able to live more of the full value of consciousness.

As stated above, an era when the majority of the people live Natural Law or pure consciousness is called *Sat Yuga*. Maharishi points out that such a period is documented in accounts of ideal civilizations, as in the reign of *Ram* described in the *Ram Charit Manas* (*Uttar Kand, 20.1.4*), which provides a picture of life during that time:

In the whole of Ram’s realm there was no one who suffered from bodily pains, ill fortune, or evil circumstance. Every man loved his neighbour and, contented with the state of life to which he had been born, conformed to the teaching of Scripture and sound morality. The four pillars of religion were established throughout the world; no one even dreamt of sin. Men and women alike were devoted to Ram’s worship and enjoyed all the blessings of highest heaven.

There was no premature death and no sickness, but everyone was comely and sound of body; no one was in poverty, in sorrow or distress, no one was ignorant or unlucky; all men and women were unaffectedly good and pious, clever and intelligent. Everyone appreciated the merits of his neighbour and was himself learned and wise; everyone was grateful for kindness and guilelessly prudent.⁶²

Quoting Mackenzie, Hancock provides a similar description of the *Krita Yuga* that he states began our present *Kalpa* (epoch of creation). He notes that it was recorded as an age when:

⁶¹ With changes in collective consciousness and the emergence of new evidence, changes in socially accepted ideas reveal that history is constantly being re-written. A case in point is the shift in art historiography that began during the 1970s and 1980s; scholars came to accept there had been women artists. Editions of the history texts prior to the 1980s provide little evidence of that fact (i.e., Janson’s *A History of Art*).

⁶² Maharishi Mahesh Yogi, 1993, pp. 125-126.

Righteousness is eternal. In the time of that most excellent of Yugas everything had been done and nothing remained to be done... [There was] no disease or decline of the organs of sense through the influence of age...no malice...no hatred, cruelty, fear, affliction, jealousy or envy.⁶³

Hancock continues to compare this account with that of the concept of the “First Time” in ancient Egyptian cosmology, a time that was born before, “anger came into being; which was born before noise came into being; which was born before strife came into being; which was born before tumult came into being.”⁶⁴ This view of history asserts that there was a golden age prior to our modern era where life was lived to its fullest value. In many instances, the social order was maintained and governed by a sage/ruler through a monarchy.

Leadership and Collective Consciousness

Maharishi presents three points about the rule of leaders or monarchs and their relationship to Sun, God, and the connection to government and collective consciousness: 1) in ancient civilizations of the world the ruler/monarch was seen to be the representative of the Divine and his or her authority was held to come from God—the power of national law was seated in the relationship of government to Natural Law; 2) the king was seen to be the living embodiment of the kingdom; for example, his health reflected the health of the people—he was the embodiment of the collective consciousness of the population; 3) there existed the principle of establishing a group of individuals to create integration in collective consciousness by aligning their consciousness with Natural Law. This last, Maharishi states, was

⁶³ Hancock & Faiia, 1999, p. 154.

⁶⁴ *Ibid.*, p. 154-155. Hancock discusses the *Treta Yuga*, *Dvapara Yuga*, and *Kali Yuga* in terms of *Dharma* (who he describes as the god of justice and duty similar to the Egyptian goddess Maat). In *Treta Yuga* he states, *Dharma* walked on three legs rather than four legs (as in *Krita Yuga*). It is “a less happy age in which virtue fell short”; in *Dvapara Yuga*, *Dharma* is now only two legged. Lying and quarreling flourish. Truth declines “and there came desire, disease and calamities... It was a decadent age, but many still trod the right path.” In *Kali Yuga*, *Dharma* stands on one leg; “only one quarter of virtue remaineth. The world is afflicted; all creatures degenerate; men turn to wickedness... They are unlucky because they deserve no luck. They value what is degraded, eat voraciously and indiscriminately, and live in cities filled with thieves...They are oppressed by their kings and by the ravages of nature, famines and wars.” From: Hancock & Faiia, 1999, p. 155.

acknowledged in the European Middle Ages when monks prayed for the salvation of the king and, through him, the kingdom. By the end of the thirteenth century in 1000 monasteries, as many as eighteen thousand monks were recorded as performing this function in England alone.⁶⁵

As Maharishi points out, this principle, seen in this case in religious terms, can be understood scientifically in the documentation of the *Maharishi Effect* and *Extended Maharishi Effect*. With the advent of the modern era, what was understood as the influence of “Divine Law” is comprehended as the influence of Natural Law, which can liberate the individual, create coherence in society, and, upon which, Maharishi adds, the principle of democracy was established:

With the growth of the modern scientific age, the idea came that a large proportion of the population, educated in the scientific understanding about Natural Law, would constitute a powerfully coherent collective consciousness, based on knowledge of Natural Law, that would support the government in serving the real interests of the people. Politics was described as the end and aim of education, and what had been a religious understanding was transformed to a scientific one—that scientific knowledge of Divine Law would inevitably lead to civil freedom. This was the basic principle upon which the democracies were founded...⁶⁶

Through the group practice of technologies of consciousness, not only is coherence generated allowing greater civil freedom, but also collective consciousness and culture are enriched and strengthened. (This theme of coherent collective consciousness and leadership will be returned to in Chapter Five, which touches upon the relationship of the sun to rulership with respect to Natural Law). When *Smriti* is lively in collective consciousness then the populace “remembers”, as it were, how to live spontaneously according to Natural Law; the leaders of society reflect the coherence generated by the collective. In such a situation, individual and collective life becomes more cultured or refined.

⁶⁵ Maharishi Mahesh Yogi, 1993, pp. 133.

⁶⁶ *Ibid.*, pp. 133-134.

Refinement as the Purpose of Culture

In his book, *The Idea of Culture*, Terry Eagleton starts by explaining that “culture” is one of the more complex terms in the English language. He comments that one of the original meanings of the word is “husbandry” or “tending of natural growth.” He goes on to state that:

If culture means the active tending of natural growth then it suggests a dialectic between the artificial and the natural, what we do to the world and what the world does to us. It is an epistemologically ‘realist’ notion, since it implies that there is a nature or raw material beyond ourselves; but it also has a ‘constructivist’ dimension, since this raw material must be worked up into humanly significant shape.⁶⁷

Eagleton continues to discuss problems with various concepts of culture that are elitist and reveals the conflicts between differing cultures or notions of culture—“Culture” (High Culture, majority culture, Modern culture) versus “culture” (mass culture, minority culture, postmodern culture).

In Maharishi Vedic Science, the word “culture” means “to refine”. Here, refinement is not an arbitrary concept or set of values. In Maharishi Vedic Science, culture is a part of nature. The term “nature” refers, in its broadest sense, to all animate and inanimate objects, all forms of life, and all that exists in the universe, from its unmanifest, unified level to all its expressions, forms and phenomena. In this context, the purpose of culture is to refine individuals from birth until they become enlightened. Like refining gold ore from a mix of mud and gold particles, in the refining process the ore is cultured from a crude muddy form to refined gold. The culture of a country has the same purpose: to refine the human element through an evolutionary process, to enlightenment. The enlightened person does not violate any laws of nature and, as Maharishi states:

When a person acts in harmony with the laws of nature, he steps on the effortless and royal road of evolution. In evolution, life grows in steps of fulfillment and the person continually goes from more to even more and still more fulfillment. In higher states of fulfillment is the joy of

⁶⁷ Eagleton, 2000, p. 2.

life and strength. We call this inner fulfillment integration of life, because mind and body act in full co-operation and co-ordination. Such culturing of life is culture according to natural law. The nation's cultural integrity is built up on this basis of integration within the individual.⁶⁸

Here, Maharishi defines culture according to Natural Law and how cultural integrity is dependent upon, or built upon, the integration—the refined consciousness—of the individual. There are essentially two aspects to culture: a universal aspect and a relative aspect. The holistic, or universal, value of Natural Law handles the holistic value of culture. The specific values of different laws of nature are concerned with the particular aspects of relative, localized culture. As noted previously, Brown states that traditional means of cultural knowledge are influenced by geographic parameters and can be maintained via memory maps. According to Maharishi Vedic Science, particular laws of nature govern culture, the people, and their locality. This is true also on the national level. Local laws of nature give rise to the specific geographic and climatic conditions, accents, languages and trends of society on all levels of life—spiritual, social, material.⁶⁹ In this way, religious, social and economic structures are seen to be governed by laws of nature and differ from place to place, from people to people.

The degree to which Natural Law is being lived by the people at any time will govern the effectiveness and ease with which Natural Law and the local laws of nature are able to operate and maintain the smooth, harmonious, life-supporting influence for the people and environment. In this way, culture is intrinsically linked to nature, Natural Law and all the laws of nature. When culture is divorced from nature, when individuals no longer “remember” or remain connected via *Smriti* to the source of culture, then problems arise. Remembering one's culture involves enlivening the laws of nature that structure the local aspects of life for a given people or community. Living one's culture means enlivening the laws of nature which give rise to and sustain the geographic and climatic conditions, language, accents (the mother tongue), and mannerisms of the people. As noted earlier, individuals of some indigenous cultures have articulated the unique and vital relationship they have with the environment, explaining how

⁶⁸ Maharishi Mahesh Yogi, 1978, pp. 91-92.

⁶⁹ Maharishi Mahesh Yogi, 1995b, p. 72.

their tradition and ancestors come from the land and how it is to be respected, tended, preserved, and revered through various means, including the arts of painting and ritual. As Yolngu artist Wandjuk Marika states: “The land is not empty, the land is full of knowledge, full of story, full of goodness, full of energy, full of power. Earth is our mother, the land is not empty.”⁷⁰

From the perspective of Maharishi Vedic Science, the locality, the geography and climatic conditions of a particular place, are as much expressions of the governing principles of a population as the language they speak and the physiology they are born with. Given this situation, the question arises: How can cultural integrity be maintained in the contemporary, global environment of transformation, rapid change, electronic media and internet technology and what is the significance of maintaining local language and customs in the face of change and development?

Cultural Integrity, Language and *Smriti*

The mother tongue, Maharishi states, is governed by laws of nature that structure the individual physiology. As Maharishi emphasizes, Vedic language is the “Language of Nature, which is upheld by universal Laws of Nature, which are the common basis of all physiological structures in the universe.”⁷¹ The language of the Veda is the mother of all languages; intelligence expresses itself in its own language, but is also expressed in the various languages of different people throughout time. For this reason, there is not only an intimate relationship between Veda and the physiology, but between mother tongue and the individual physiology. Mother tongue, Maharishi explains, is the closest expression to Vedic language for any group or people. Consequently, there is a direct correspondence between language and meaning or sound and form for each language, even though different words are used in different languages. As such, it is essential that the mother tongue be always used so that there is no gap in communication, so that cultural integrity is maintained. The laws of nature that structure the physiology of the individual, the tendencies, culture, traditions and social fabric of a people need to be enlivened to

⁷⁰ Wandjuk Marika in Isaacs, 2004, p. 15.

⁷¹ Maharishi Mahesh Yogi, 1994, p. 361.

ensure life continues in a progressive, evolutionary direction. This is why foreign language and influences are disruptive to a host culture. They do not spring from the local laws of nature that govern the geography, climate and traditions of the land and its people.

Maharishi points out that people when they live in another land miss their old habits and surroundings. He explains that this is not a psychological weakness because, as stated above, each land has a specific culture determined by geography, climate etc., and each nervous system is cultured differently, starting from birth. When a person moves to another land, his or her nervous system tries to adapt and can do so to a great extent, but even if there is some small factor where one cannot adapt, this will become a drag to the person and for the host culture. The person will not be able to fully cohere with the environment. To cohere with the environment one should not be forced to forget, or conversely forced to remember, relative values. In our global village one's own culture requires "support for survival due to the influence of all kinds of foreign cultures."⁷²

Considering collective consciousness and the dissemination of cultural knowledge, Maharishi expresses concern over the influence of foreign powers in their long-range policy of dominating other countries, infusing foreign principles and programmes that weaken national integrity in a host country and thereby breaking the local bonds that hold the nation together. He states that when religion is undermined through conversion, politics dismantled through foreign ideology, economics disrupted by creating "storms" in the money market, and foreign ideals creep into society via the media, traditional bonds are broken and cultural integrity is lost. This is damaging to any culture, to any country.⁷³ Consequently, to encourage strong national bonding and to strengthen cultural integrity, "memory" of that which nourishes cultural difference must be maintained. The laws of nature that structure the unique bonding of a specific culture need to be enlivened, not only to nourish difference on the ground of unity but also to avoid the kind of neo-nationalism criticized by multimedia performance artists such as Guillermo Gómez-Peña.

In the visual arts, digital art increasingly reflects a growing concern to preserve cultural knowledge. With work such as *The*

⁷² *Ibid.*

⁷³ Maharishi Mahesh Yogi, 1996a, pp. 522-523.

*Crossing Project*⁷⁴, electronic media is utilized to preserve and showcase Indian traditions and creative collaboration. Drawing from his multimedia experience, Ranjit Makkuni, a researcher at Xerox Palo Alto Research Center (PARC), set up a lab in Delhi to create a series of interactive exhibits. The word “crossing” comes from “*Tirtha*”, which means pilgrimage place or sacred site of transformation. Collaborating with a team of experts, Makkuni’s *The Crossing Project* displays the environment of Varanasi through, among other things, a specially made wearable coat, a knowledge-egg, paper-multimedia and virtual documents. Asked by Alka Pande: why Benaras? (Varanasi), Makkuni states that Benaras, the

‘City of Light’ is an ancient site of pilgrimage Tirth, where one ‘crosses’ into a place of learning and spirit. The beautiful image of the pilgrim bathing in the river comes to symbolize the united man, at one with nature and humanity. With 2800 years of intellectual tradition behind it, and the faces of innumerable wise men and sages looking over its shoulder, Benaras endures as the definite ‘Knowledge Centre’.⁷⁵

Makkuni uses technology but wants to make it “disappear and reappear in meaningful forms.”⁷⁶ He states that we are “in danger of forgetting how to use our hands; our levels of experience are reducing, as are our cognitive insightful faculties.”⁷⁷ Through work like *The Crossing Project* Makkuni wants to re-connect and create body-friendly devices questioning assumptions about today’s technology and about the flow of technological knowledge from “west” to “east”. He sees India as the creator of the next wave of technology.⁷⁸

While new technology and media are vital for education and the dissemination of cultural knowledge, it is also vital that the universal basis of culture is enlivened. Precisely because people from very different cultures are living together, it is all the more important to nourish the universal value of culture that supports all cultures. This is possible through the practice of the Transcendental Meditation technique, TM-Sidhi Programme and Yogic Flying. Maharishi explains

⁷⁴ <http://www.crossingproject.net/>.

⁷⁵ Makkuni in Alka Pande, 2002, pp. 74-75.

⁷⁶ *Ibid.*, p. 75.

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*

that the practice of these technologies of consciousness enlivens the basis of culture and cultural difference, strengthening the individual and cultural integrity.

To live one's culture, one must live according to Natural Law. All activity in nature begins from the common ground of silence which is found in the mind's settled state of awareness. Through the [Transcendental Meditation] technique, whenever we reach the settled state of mind we get some blessing from the home of all the laws of nature, and our actions become more evolutionary. The basis of growth is culture, and the basis of culture is life according to Natural Law.⁷⁹

The result of cultural integrity is happiness, affluence, harmony within the nation and complete impenetrability from any disturbing, outside influence—in short, *national invincibility*. Invincibility is characterized by: 1) freedom from fear of outside attack and disturbance; 2) internal coherence through harmonious existence of diverse elements; and, 3) complete lack of fear from natural calamities, i.e., balance in nature.

Freedom, internal coherence and balance in nature can be maintained through five fundamentals of culture: stability, adaptability, integration, purification, and growth. When a nation or people exhibit stability, no outside influence can overthrow cultural integrity. Through adaptability, integration, purification and growth, any destructive aspect coming from an outside influence will be purified out, while the life-supporting element is integrated into the host culture, helping it to adapt without compromising cultural integrity. These five factors are simultaneously enhanced when a significant proportion of a population⁸⁰ practices technologies of consciousness.

Without these factors, a culture will have the propensity to adopt outside influences that lead to the host culture's degradation. Maharishi stresses that, even if the value of just one culture is threatened, the dignity of the whole world is at stake. Every culture contributes to the whole. "Like the many-coloured pieces of a mosaic or the varied tunes of an orchestra, each fully integrated culture contributes to form a harmonious world".⁸¹ Because living one's culture means living

⁷⁹ Maharishi Mahesh Yogi, 1978, p. 138.

⁸⁰ 1% of the population practicing Transcendental Meditation, and the square root of 1% practicing the Transcendental Meditation and TM-Sidhi Programme and Yogic Flying.

⁸¹ Maharishi Mahesh Yogi, 1978, p. 319.

according to Natural Law, the universal value of culture has to be enlivened for every culture to be strengthened. What is required is not just a remembering of tradition, culture, customs, practices, stories, events, language, through various forms such as art, music, performance, theatre, film, writing and new media but the enlivenment of *Smriti*—the enlivenment of consciousness as the universal basis of culture. With the enlivenment of *Smriti*, memory of the specific aspects of culture for any people or population are also revitalized. The laws of nature that structure cultures are strengthened.

Tradition and *Smriti*

Maharishi explains that since pure consciousness is the source of culture, traditions and knowledge, the specific aspects of culture can never actually be lost. In maintaining culture and the strength of a society, Maharishi acknowledges the value of traditions. Allowing communication through a stable framework or structure of relationships, tradition, like grammar in language, has a role in the evolution of society. If a new grammar or alphabet were continually being introduced, it would be counter-productive to communication and creativity. Without tradition/s, Maharishi states, life is like a leaf left to the mercy of the wind. Those traditions that have survived the longest are more likely to represent the genuine path of evolution. When collective consciousness is enlivened through the practice of technologies of consciousness, even traditions that have been forgotten can be re-enlivened, remembered. Thus, traditions based on the universal value of truth or pure intelligence, which is essentially eternal, are expressed in the culture and continue to remain useful generation after generation.

The principle of nothing being lost, or complimentarily, nothing being new, is illuminated by Maharishi when he points out that it is *Smriti* that maintains the set sequence of creation—the invincible and eternal unfoldment of creation. This is expressed in the Vedic Literature as: “*Yatha purvam akalpayat. (Rk Veda, 10.190.3)*, The emergence of creation is always set—it is as it was before.”⁸² As Maharishi explains:

⁸² Maharishi Mahesh Yogi, 1996a, p. 527.

It is on the basis of memory—*Smriti*—that *Shruti*, the expression of Natural Law, advances in a set sequence—*Anupurvi* of the Veda—the sequence of the Laws of Nature that is always eternal and invincible in Nature. This is how time and again creation is as it was before—all possibilities keep on expressing themselves within the unbounded range of point...(K) and infinity...(A) in the same perfect sequence, again and again. Even the common proverb: ‘There is nothing new under the sun’, expresses this most profound reality of Nature’s functioning.⁸³

Traditions, artistic output, and any cultural expression, with the full enlivenment of *Smriti* in individual and collective awareness, will spontaneously endorse the set sequence of creation while upholding the uniqueness of the individual and his or her culture—thus promoting the universal value of culture as unity in diversity. The value of memory as *Smriti* is therefore crucial to the preservation and maintenance of culture (the principle of refinement), cultures and cultural integrity.

Art and Memory

Photographic, media-based art and film, including documentary, docudrama, installation, and news media, can often have as their focus the desire to bring to attention stories that reflect social imbalance, inequality, atrocities or calamities, in order to help eradicate injustice and misfortune. This creative practice is founded on the premise that we need to recollect, remember and continually be aware of life damaging, anti-social behaviour and events. Commendable though this may be, the most effective way to reduce life-damaging trends in collective life, as recommended by Maharishi Vedic Science, is to introduce the “correctional institution of pure knowledge”. This means: help individuals and society live spontaneously in accord with Natural Law—allow individuals and society to enliven memory of the self-referral field of pure consciousness that nourishes and structures all of life. This idea will be considered further in the next chapter on *Vedic Performance* or *Yagya*, which is the most effective and profoundly

⁸³ *Ibid.*

creative performance—generated from the level of nature’s functioning.

As noted earlier, Brown, like Socrates with his fear of writing, articulates concern about the loss of biological memory and traditional forms of memory retrieval with the current increasing reliance on digital technology. From the perspective of Maharishi Vedic Science, while human consciousness may lose track of the source, and become “deluded”, the infinite range and potential of awareness is not lost. All that is needed is memory of, or wakefulness within, consciousness. How does this value of *Smriti* or memory further inform our understanding of artistic creativity?

If awareness is just memory, *Smriti* is concerned with how awareness never forgets its unmanifest value, even it is in terms of excitation or fluctuations—even during the creative process of artistic conception and production. As Arnheim mentions, memory is involved in creative acts where the artist takes inner vision and translates it into outer material expression. In Maharishi Vedic Science, a genuinely creative act or work of art must involve the outer expression of the artist’s inner vision. In fact, the artist, if he or she is to be defined as a *true artist*, holds within consciousness the vision they want to create and then, over time, the actual work is manifested, step-by-step, in conformity with the original. In this context, the value of *Smriti* can be said to be utilized in this process. At no time is the vision lost, disconnected, or unrelated to its source in pure consciousness. The result of this creative endeavour is that the artwork spontaneously has imbibed within in it universal value—the unbounded, infinite value of pure consciousness. Therefore, it speaks to the viewer, the environment, no matter what. It creates a nourishing effect whether one knows it or not.

As Maharishi states, “In creating a piece of art, the awareness of the artist is connecting two levels: a very deep level of feeling in which he imagines what he wants to create, and the field of behavior in which he translates his inner feeling into outer performance.”⁸⁴ He goes on to explain that:

When the artist’s awareness remains on the surface level of thinking, his awareness is not involved in the mechanics through which awareness comes out. Such an artist is not involved in the process of

⁸⁴ Maharishi Mahesh Yogi, in Fergusson, 1991, pp. 193-194.

creation; only the hands and eyes are involved, but the inner structuring, the awareness, is untouched by that procedure which structures the steps of manifestation. It is a very beautiful point. The awareness remains untouched. ‘Untouched’ means that the surface value of awareness touches the creative process but the deeper value of awareness remains completely uninvolved with the steps of manifestation. It remains uninvolved with the mechanics which structure the steps of manifestation. In this situation, creativity, as such, remains unenlivened.⁸⁵

As stated earlier, what is described as the “mistake of the intellect,” or the forgetting of the unbounded, infinite value, occurs when there is a lack of *Smriti* lively in awareness. When lack of *Smriti* dominates, awareness favours diversity at the expense of unity.

Thus, for the artist, the inner structuring, the awareness, is untouched by the procedure that structures the steps of manifestation. The artist, not involved in the process of creation, only uses superficial levels of the mind in the creative act. “Creativity” is, as such, unenlivened. Art created from this level does not speak beyond individual, temporal constraints. It is governed by individual memories or impressions from past experiences within the artist’s mind. The artist creates art from the platform of *Pragya-aparadha*—the mistake of the intellect.

Returning to Punt’s “constructive forgetfulness”, forgetfulness is perhaps necessary to rebuild a sense of integrated national consciousness, healing collective trauma in the face of atrocities historically performed and recorded by a people. However, with the simple enlivenment of *Smriti*—memory of that which reconnects individual and collective consciousness to their source in unity, where everything is seen as the Self—the foundation of harmony, tolerance, integrity, and coherence, can be restored. One could say that, then, only that which should be seen and heard (i.e., artistic or refined perception defined as *Darshana*—perception of the celestial and transcendental values of creation), registers in awareness. That which is not life supporting is unheard or unseen. This is a precondition for artistic practice for the enlightened artist and one would expect it to be a reality for individuals living in a *Sat Yuga*. In such an age, universal

⁸⁵ Maharishi Mahesh Yogi, in *Bonshek*, 1996a, p. 342.

value—the transcendental value of consciousness—would automatically be expressed and appreciated in art.

Clearly, for the artwork to have universal value, according to Maharishi Vedic Science, the artist must be living higher states of consciousness—where *Smriti* is permanently lively in awareness. Then the artwork embodies the process of creation. The inner value of consciousness is expressed in every phase of the manifesting process and in the final work of art or performance. This is “artistic performance”. Also, on the relative level, artistic expression will enliven those laws of nature that uphold local traditions and culture and help to “refine” life on all levels. This kind of refinement can be thought of as a kind of working up of a crude element, but is ultimately seen in the context of realizing the full potential of life. The refined nervous system is an enlightened, stress-free, normally functioning nervous system that sees everything in creation as the Self. The term refinement or culture, in this case, applies to the ability for all-directional awareness, to see creative intelligence in all forms and phenomena, and to act from this level of intelligence—to act intelligently. This leads to the next chapter and the idea of performing action from that level.

The idea of artistic or Vedic performance in the strict sense of the term is referred to as *Yagya*, that is, performance from the level of pure consciousness, creative intelligence. As with artistic sight, artistic performance is achieved in higher states of consciousness.

4

PERFORMANCE AS YAGYA OR OFFERING: SOCIALLY RESPONSIBLE, TRANSFORMATIONAL ART

“Dadirri” recognizes the deep spring that is inside us... It is inner, deep listening and quiet, still awareness.... The stories and songs sink quietly into our minds and we hold them deep inside. In the ceremonies we celebrate the awareness of our lives as sacred.... I love to see the painted bodies and to watch the dancers. I like the sound of the digeridoo and clap sticks. I never feel alone at the ceremonies...

Quiet listening and stillness, dadirri, renews us and makes us whole. There is no need to reflect too much and to do a lot of thinking. It is just being aware. My people are not threatened by silence. They are completely at home in it. They have lived for thousands of years with nature’s quietness.... We wait for the right time for our ceremonies and our meetings.... Sometimes many hours will be spent on painting the body before an important ceremony. We don’t like to hurry. There is nothing more important than what we are attending to.¹

—Miriam-Rose Ungunmerr

While the word performance means different things to different people, it broadly refers to the act of performing before an audience and embraces the disciplines of theatre, dance, music, recitation, film and contemporary performance art, which may be enacted in non-

¹ Ungunmerr, in Isaacs, 2004, p. 14.

traditional formats or settings. Performance not only refers to acting or story telling to create a transformation within an audience, but also embraces the concept of sacred activities that are enacted to bring the favour of the gods or God, to bring timely seasons, to mark transitional events, liminal states, or initiations, and to celebrate or enhance particular transformative modes of activity. Thus, performance encompasses sacred ceremony, ritual, transformational and participatory action, or simply, art and entertainment.

The term *Yagya* translates as “sacrifice” or “offering.” Sacrifice, as a transformative performance or act is central to much religious art, has come to signify giving up something, even the physical body and life itself, for a greater goal. Martyrdom and sacrifice, with accompanying suffering or extreme emotion, are prominent concepts or practices across cultures. Whether it be the one sacrificing itself for the many or the relinquishment of one state of being for another, this theme recurs in various forms, from Christian art including: *The Crucifixion* from *The Isenheim Altarpiece* by Matthias Grünewald,² *The Descent from the Cross* by Peter Paul Rubens³ and Rembrandt van Rijn;⁴ to new video work by Bill Viola, such as *The Quintet of the Astonished* (2000),⁵ and recent films, *Life is Beautiful*⁶ and Zhang Yimou's *Hero*⁷. These potent images owe much to the idea of having to forfeit something to transform life.

A different sense of offering—as a means to gain favourable results—is prevalent in traditional Indian celebrations and festivals. Stephen Huyler states that local Indian, and particularly Hindu, festivals including *Dussehra*, *Divali*, and *Pongal*, involve offering, worship, and blessing of material objects such as tools of profession. Participating in *Chak Puja*, he documents his observations of the event:

For the festival of Kurala Panchami during the month of Margashira (November-December), the family stopped all activities for five days of

² Gardner, 1991, pp. 724-725.

³ Kissick, 1993, pp. 238-239.

⁴ *Ibid*, pp. 242-244.

⁵ Viola has completed work in reference to important works of Christian art: Livingstone, 2000, pp. 309-323.

⁶ *Life is Beautiful (La Vita e Bella)*, 1994, by Italian director, writer, star, Roberto Benigni, is the account, set during the Second World War Holocaust, of the love and sacrifice of a father for his son (running length: one hour, 54 minutes).

⁷ Chinese film, *Hero (Ying xiong)*, 2003, by director Zhang Yimou is the story of an emperor and an assassin who use conflict to gain peace.

celebration and prayer. With their hands the women covered all the exterior and courtyard walls of their house with a fresh layer of adobe-like mixture of mud and dung. Then dipping the fingers of their right hands into small bowls of rice paste, they painted the surfaces of each wall with white decorations depicting mounds of rice, lotuses, sacred trees, elephants, and peacocks. Each was symbolic of, or believed to be pleasing to, Lakshmi, the goddess of prosperity, fertility and abundance, the supreme provider and protector of the home. The paintings portrayed the householders' reverence for the goddess and their respect for the spirits of their home.⁸

Huyler goes on to observe that the festival revolved around *Chak Puja*; where the potter's tools were decorated with rice paste, and a Brahmin priest presented offerings before the wheel. He explains how the Brahmin priest took

Vermilion powder out of a pouch, lit the lamp, and smeared the brilliant red dye upon the cardinal points of the wheel and on the tools before adorning those same spots with yellow marigolds and red hibiscus flowers. Then, lighting sticks of incense, he sang sacred *shlokas*, prayers and mantras to the spirits of the tools and to Rudrapal, the potter's first ancestor and tutelary deity, the god who gave the potters their craft. After sprinkling the tools with holy water, he took the food, now blessed by the god and shared by the spirits of the potter's tools, and distributed it evenly among all the members of the family...⁹

In this process, Huyler notes that:

By actively participating in the *puja*, honoring their patron deity and the spirits of those objects that help them create their livelihood and sustenance, and by eating the offerings now saturated with ritual energy, the potter and his family displayed admiration for the most essential material aspects of their lives. In Hindu thought, not only does every individual component of existence have its own soul, but objects that are regularly used, and particularly those that are venerated, store the psychic energy devoted toward them.... The natural spirit of a place or an object becomes intensified and more vibrant with the attention given to it. Thus the stone or bronze image of a deity in a temple or

⁸ Huyler, 1992, pp. 4-5.

⁹ *Ibid.*

shrine is believed to almost pulsate with life, containing the combined presence of the deity who invests it and the accumulated force-fields of years of devotion.¹⁰

Huyler, here, describes a procedure that can be categorized as “sacred” performance, involving elements devoted to deities such as *Lakshmi* and *Rudrapal*. It is however, very practical in intention, aiming to bring about success in the family enterprise and register respect for the force of tradition. As Huyler notes the objects used or the sculptures and images that are revered or worshipped, accumulate what he calls “force-fields” from all the years of devotion that have facilitated the bestowing of what could be termed positive or constructive attention and energy.

Other performance events, such as festivals like the *Brahmatsavam* festival¹¹ documented by Joanne Punzo Waghorne, and a Snake ritual of Kerala¹² discussed by Pepita Seth, respectively involve dressing and displaying of *Shiva* in a ten day ceremony, and the communication with snake spirits in a seven day event that encompasses elaborate ground drawings, building of shelter structures, and performance of *Puja* in a snake shrine. Waghorne notes that in the *Brahmatsavam* festival held in South India, the process of ornamentation or dressing of the mobile sculpture of the deity is highly significant and that in this dressing, “humanity shares in divinity just as a god shares in everything that ornaments his own body. The rituals that install the image-body and give it life end with dressing the god.”¹³ The idea of decoration, here, goes beyond arbitrary beautification. Ornament is, rather, art itself—a means of bestowing potency and living vibrancy to the object. In this sense, the various aspects that are involved in performance, such as proper attire, painting objects or the body, and so forth, are integral parts of the overall event.

Use of particular decoration, clothing and artifacts are important for successful completion of ceremonies in many cultural traditions both in the present and historically. In the context of a discussion of Fijian *tapa* (bark cloth), called *masi*, Neich and Pendergrast note that:

¹⁰ *Ibid.*

¹¹ Waghorne, 1992, pp. 9-34.

¹² Seth, 1992, pp. 53-79.

¹³ Waghorne, 1992, p. 32.

At a presentation from the people of Somosomo to the chiefs of Bau in 1858 more than twenty large bales of cloth were bought out, one by one, and were laid down amid shouts and the blowing of trumpet shells. Each of these bales were 4 to 6 metres (15 to 20 feet) long and took many men to carry it. Soon Ratu Vaalolo, the son of the chief of Somosomo, appeared under a load of stained cloth, hanging in folds from his shoulders to his knees, and followed by a train of tapa 20 fathoms (36 metres, or 120 feet) long. This he threw down in front of the Bau chiefs and returned to repeat the act five times. Each time he threw down the cloth the warriors shouted. Rau Vaalolo and O Mai Tavui then rushed twice into the open space twirling their fans before Ratu na Vu appeared among loud shouts. His train was 90 metres (300 feet) long and he was followed by 200 men with large *masi* hung from their shoulders. Next came two men carrying a long pole with four large *masi* tied up and hung on it. These were followed by one 100 men with large *masi* who seated themselves near the bales, where they were joined by another 250 similarly attired men who approached from another entrance. The importance of tapa also extended to religion. The only way to obtain access to the influence of the gods was through the medium of the priest. A long piece of white cloth, suspended from the beam of the temple house, hung down so that the end lay on the floor in front of the corner post. When summoned, it was down this path that the god passed to enter the priest and commune with him.¹⁴

In this case, performance involves the appropriate attire and presentation of the physical body as well as the actual exchange during an event at a specific time and place. In such performance, the distinctions between various “arts” (which would be categorized in contemporary practice as painting, sculpture, performance art, etc.) are inconsequential. All these activities are part of a larger act of creating meaning, transformation, and potency in life.

Western Desert Australian Aboriginal artists, such as those represented in the exhibition *Papunya Tula*, remain intimately connected via ceremonial acts to their land, sites that

Originated in the primordial adventures of ancestor beings whose ‘creative dramas’ established the appearance and patterns of life experienced today. Whether belonging to the Arrernte, Warlpiri, Pintupi, Luritja, Anmatyerre or other language groups, they share the idea of a sacred landscape and, in most cases, an artistic style derived

¹⁴ Neich & Pendergrast, 2004, pp. 102-103.

from ritual adornments of ground sculptures, bodies, sacred boards, rock faces, and ceremonial objects such as decorated poles.¹⁵

The creative dramas of the ancestor beings present the stories of the emergence and establishment of life in its various processes and forms. In this context, again, performance encompasses various “arts”, bringing them into its fold, communicating knowledge about the group, place, and world of the people it relates to. It is part of social life and culture in a way that contemporary performance art is not. The need to categorise some activities or material processes as “low” versus “high” art or “kitsch” versus “fine art” does not arise. The term, “decorative” would not carry the pejorative (Modernist) connotation that has been associated with it. All the component objects, structures, and activities have their use value.

Extending this idea, from the perspective of Maharishi Vedic Science, all action and creative expression performed in higher states of consciousness, has what could be called cosmic or universal use value. It has a role in promoting evolution for the individual, for the community, and indeed, the entire creation. This kind of performance is holistic, unifying and profound in its processes and outcomes.

Performance and Posthumanism

According to Meyer-Dinkgräfe, performance in contemporary art contexts does not possess this kind of transformative value for the wider community.¹⁶ Among its many meanings and commentaries, performance art has become a vehicle of protest, highlighting issues of identity and oppression, as in the work of Lee Wen¹⁷, Mona Hatoum¹⁸, and Dadang Christanto.¹⁹ However, this kind of performance, with its roots in theatre, is multidisciplinary. The tendency for cross-fertilization or collaboration across the arts was formalized in the 1920s by the Bauhaus, the school of art and design founded in Weimar. Through the *Stage Workshop* the Bauhaus’ unifying approach to theatre and dance became the forerunner of contemporary performance

¹⁵ Langton, 2000, p. 259.

¹⁶ Meyer-Dinkgräfe, 2005, p. 145-146.

¹⁷ Lee, 1999, p.130.

¹⁸ Arthur, Brett & de Zegher, 1997.

¹⁹ Turner & Clark, 1999, p. 200.

art and multimedia theatre. Performance continues to influence visual art forms as in the work of artists such as Bundith Phunsombatlert and Stelarc. Phunsombatlert translates the printmaking process into challenging, sculptural installations like *Ready-made Human Product* (1998)²⁰ and Stelarc deals with the technological extension of the physical or biological body²¹ and the artist as cyborg. Discussing the concept of cyborg and the potential shortcomings of posthumanism and bionic technology, Haney states that individuals have the ability to develop naturally through inner consciousness without the risks associated with new technology.²² The posthuman, Haney states, refers to a human-technology symbiosis.²³

One could argue that the Posthuman desire for “extension” of the body and human consciousness is inherent within the mind. As stated earlier, the basic nature of the mind is unbounded consciousness and the mind is naturally drawn to this field of infinite awareness, to a sense of the unlimited self. However, without a technique of consciousness to actually extend waking state experience, external means are derived to enhance this “ordinary” experience—whether conceptual forays into philosophy or via technologies that entertain a sense of indeterminacy. As Haney notes, there are natural techniques to effectively develop consciousness, which do not involve external, bionic technology:

It is not inconceivable that the powers recorded in the *Yoga Sutras* would increasingly become accessible by natural means without the neurobiological risk of bionic technology. The problem, however, is that posthuman society, which is driven by an instrumentalist orientation, lacks the patience to achieve these powers by natural means.²⁴

Posthumanism, Haney adds, emphasizes the object-referral aspect of consciousness and does not acknowledge consciousness as a transcendent, self-referral field of awareness that can be experienced by the individual, and which is, in fact, the basis of the individual mind, body, psychology, the environment, and universe.

²⁰ Kirker, 1999, pp.60-62.

²¹ Stelarc, 1997, p. 241.

²² Haney, 2006, p. 24.

²³ *Ibid.*, p. 2.

²⁴ *Ibid.*, p. 24.

Just as Brown suggests that *Quipas*, writing and Internet and digital technologies, aid in memory mapping, new computer technologies can be seen as tools to compensate for the lack of power of the individual mind, when it is not fully developed. In contrast, the individual with fully developed consciousness can know anything, have memory (*Smriti*) that extends to the infinite dynamics of nature's creative functioning, and can perform from the universal level of infinite organizing power and infinite correlation—extending beyond time and space, throughout time and space.

Haney suggests that our posthuman society may lack the patience to achieve its goals by natural means. This may be as much a consequence of the limited development of collective consciousness in our time, as any lack on the individual's behalf. With a collective consciousness that is not lively in the value of pure consciousness (when the population is not living 100% Natural Law), even if an individual has the foresight/insight to seek out a means to fathom his or her own self-referral awareness, the individual's progress toward that goal may be inhibited. Thus, our posthuman society requires a paradigm shift on the level of collective consciousness as well as a change in individual awareness. Meanwhile, the tendency to utilize computer technology to extend our abilities, experience, and transform notions of the self,²⁵ will remain irresistible.

Haney goes on to suggest that bionic modifications may have negative side effects for development of consciousness but this is overlooked by posthumanists since they do not define consciousness as awareness-as-such but in terms of intentional objects of awareness²⁶—i.e., object-referral consciousness. He states that posthumanists blur the distinctions between “real and artificial, original and simulated, organic and mechanical,” reading these as semantic distinctions, and, since matter is held to be the ultimate reality, it can be altered, fixed, or replaced.²⁷ As Haney notes, by manipulating the body as machine, through bionic and genetic engineering, the physiology as an instrument for experiencing consciousness may be rendered less capable of realizing its full potential. Despite this, artists like Stelarc examine potentialities of the bionic and the extension of human consciousness through the cybernetics. Others like Mona Hatoum, in

²⁵ Turkle, 1997.

²⁶ Haney, 2006, p. 24.

²⁷ *Ibid.*, pp. 24-25.

Corps Étranger (1994), tackle inherent issues of surveillance and invasiveness, using medical technology to literally enter the inner structure of the human form²⁸. In addition to concerns about the bionic body, Haney notes that digital media and the Internet has facilitated the navigation of a universal apparently “real,” cyberspace that replaces the notion of what theorists refer to as an imaginary, philosophical, conceptual, or transcendental realm.²⁹ Some scholars refer to the “non-real” as *Maya* or “illusion”³⁰. In this context, the so-called “real” cyberspace could be seen, in fact, as a further iteration of the non-real or *Maya* (mimicking unboundedness, but another aspect of object-referral consciousness), tantalizingly giving the illusion of limitlessness—evoking the non-physical, through computer-assisted extensions of the physical.

From the perspective of Maharishi Vedic Science, the transcendent is the “real”, precisely because it is never changing, eternal, and always accessible by anyone in any age through their own self-referral awareness. In Maharishi Vedic Science in the first six states of consciousness, the non-real can be understood as the relative, ever-changing field, experienced in the waking state of consciousness. The real is the absolute, unchanging field of consciousness, experienced in the fourth, fifth and sixth states—*Turiya*, *Turiyatit*, and *Bhagavad Chetana*. However, in Brahman Consciousness or *Brahmi Chetana* even the non-real is known to be real.

According to Maharishi, *Maya* is, more precisely, a phenomenon of the self-referral move of consciousness diversifying within its own unified status. Maharishi states that *Maya* is relationship; it is a concept; it is the source of creation, realized as unbounded in nature in *Brahmi Chetana*.

It is from this conceptual (intellectual) aspect of intelligence within the nature of pure unity that the wise locate the existence of *Maya*, and enjoy deriving the creation from the field of *Maya*. *Maya* is a concept, which is the lively awareness of two values: dynamism of Rishi, Devata, Chhandas, and silence of Samhita. *Maya* is understood to be the source of creation. Its seat is in the relationship of Samhita with Rishi, Devata, Chhandas. Because Samhita of Rishi, Devata, Chhandas is the eternal unified reality, the seat of *Maya* (relationship) in it can

²⁸ Arthur, Brett, & de Zegher, 1997, pp. 134-141.

²⁹ Haney, 2006, p. 37.

³⁰ Kaul & Chattopadhyay, 1999, p. 282.

only be a conceptual reality, and this concept is the rightful status of *Maya*.³¹

In this description, Maharishi clearly states that *Maya* can only be a conceptual reality. In relative states of awareness, in identifying with *Maya*, one identifies with the diversified, object-referral value of consciousness. As discussed in the previous chapter, it is due to the “mistake of the intellect” that the value of unity, *Samhita*, is forgotten.

However, as Maharishi explains, in Brahman Consciousness, when *Smriti* is fully lively, *Maya* is, indeed, experienced as the nature of *Brahm*.

Its first display is in the wakefulness of self-referral consciousness and the self-interacting dynamics within its nature, which appears as Rishi, Devata, Chhandas within the singularity of *Samhita*. It is derived from the relationship of Rishi, Devata, Chhandas with *Samhita*. *Maya* is the nature of *Brahm* (totality), inseparable from it. It enjoys all credit for creation...

Mayadhyakshen prakritih suyate sacharacharam.

(Bhagavad-Gita, 9.10)

Under my presidentship [my] nature creates all creation.

It is on this level of experience that the awakening of Unity Consciousness, Brahman Consciousness, blossoms. It is on this level of experience that Lord Krishna’s teaching becomes significant...

*Daivi hyesha gunamayi mama maya duratyaya
Mameva ye prapadyante mayametam taranti te.*

(Bhagavad-Gita, 7.14)

*Because I am unbounded, my Maya is also unbounded.*³²

Nothing is outside of the real. All of creation, all of object-referral consciousness is unbounded self-referral consciousness, my Self; *Maya* is also unbounded. From this understanding, if the world of computer

³¹ Maharishi Mahesh Yogi, 1994, pp. 320-321.

³² *Ibid.*, pp. 321-322.

science and Internet technology were a map of the real (as defined by Vedic knowledge), what would it look like? As noted in the Chapter on *Darshana*, with his analysis of quantum network architecture Routt finds that the *Vedic Devata* can also be identified in terms of their function in computer systems. For example, described in the *Brihat Samhita* as the controller of “*Yagya* and other *Vedic performances* that involve chanting the Vedas in a specifically prescribed manner,”³³ Routt identifies one of the seven *Chakravarti Rishis* as corresponding to one of the seven quantum network architecture layers. He states that *Rishi Kratu* correlates with the physical layer, which

Activates, maintains, and deactivates physical interfaces (optical, opto-electronic, and electronic) and circuits (terrestrial and celestial) between DTE [Data Terminal Equipment] and Data Circuit-terminating Equipment (DCE). Provides local and remote network locking and signaling.³⁴

Routt thus suggests that even the function and structure of quantum computer systems can be seen in terms of the function of the self-referral dynamics of consciousness, *Vedic Devata* and *Rishis*.

If matter and intelligence are an expression of consciousness, then, in looking deeply into to the fabrics of new technology one should be able to find the structure of Veda, the dynamics of the self-referral functioning of awareness. Having said this, the technologies to develop human awareness to the level where Veda can be seen or appreciated in matter, remain technologies of consciousness itself. It is technologies of consciousness that refine the nervous system to experience its own unbounded nature that allow the individual to fathom the subjective basis and structure of objective world.

Performance Art: Time-based Collaborative Art

Performance, like sound art, dance and music, is time-based and not “object-oriented”. It has a temporal dimension and immateriality. In contemporary dance theatre an array of issues, including philosophical premises, cultural identity, and the breaking with or re-

³³ Routt, 2005, p. 243.

³⁴ *Ibid.*

presenting traditional forms, have been explored in works by Merce Cunningham, Martha Graham, Twyla Tharp, Sankai Juku, Pilobolus, and more recently, Bangarra Dance Theatre and Stephen Petronius. While Danza.Da Improvisational Dance Theater tackled consciousness and performance directly through improvisational techniques from 1990 until 2000,³⁵ other challenging, innovative collaborations across the arts continue in sound art exhibitions such as *Sonic Boom* (2000),³⁶ epic productions like Stephen Petronius and Sydney Dance Company's *Underland*,³⁷ and more modest work, as in Chamber Made's *Phobia*—a performance based on sound production in film referred to as Foley³⁸.

Petronius' work *Strange Attractors* involved set designs and lighting created by sculptor Anish Kapoor. Kapoor's minimal metaphysical installations, infused with sensual physicality through light, optical devices and rich colour, define spaces that themselves become sculptural form. Dealing with movement in space, there is a natural synergy between sculpture and dance. As a powerful medium for expressing the human condition, dance is an important component of cultural expression worldwide. John Guy states that in the Hindu tradition dance is a metaphor for creation. It expresses the life force through movement. Captured in sculpture, dance is expressed in images such as *Vishnu* taking three strides to encircle the earth (*trivikrama*) or *Shiva* as the Supreme Dance who as "Shiva Nataraja embodies through the medium of dance the progenitive powers of cosmic energy, through whom...the entire phenomenal world is kindled into life."³⁹ Contemporary approaches to traditional dance forms, as in the work of Akram Khan⁴⁰, a UK dancer of Bangladeshi origin integrating Kathak and contemporary dance methods, and London-based Menaka Bora,⁴¹ an Assamese Sattriya dancer, seem in

³⁵ *This and That*, a 5-minute video installation work (principal collaborators included: Anna and Corrina Bonshek; Juliette Daley, Jenna Riegel and Lucia Rich of *Danza.Da*; James Meyer and Roland Wells) on consciousness as subject, object and liminal space, was presented at Brunel College, London, in 1999. Bonshek, 2000.

See: <http://www.brunel.ac.uk/depts/pfa/bstjournal/1no1/journal.htm>

and <http://www.mum.edu/arts/faculty/daley.html>.

³⁶ Hayward Gallery, 2000.

³⁷ *Underland* was performed at the Optus Playhouse, Queensland Performing Arts Centre, Brisbane, Australia, June 18-28, 2003.

³⁸ *Phobia* by Chamber Made was performed at the *Powerhouse*, Brisbane, 22-25 June, 2005.

³⁹ Guy, 1997, p. 32.

⁴⁰ http://www.akramkhancompany.net/html/akram_home.htm.

⁴¹ Bora performed *Dancing through Soul and Body at Heaven and Earth: A Multidisciplinary Conference*, The Tate Modern 27-29 January 2005.

principle, to extend this idea. Certainly they promote transnational dance forms.

Meyer-Dinkgräfe provides an in-depth discussion of theatre and Vedic theory, in his book *Theatre and Consciousness: Explanatory Scope and Future Potential*, considering the history of dramatic theory, Indian aesthetics, higher states of consciousness, the effect of theatre and performance art on the audience,⁴² *Yagya, Natyashastra*⁴³ and Maharishi Vedic Science.⁴⁴ He reveals how Vedic knowledge continues to influence contemporary performance art and theory. Meyer-Dinkgräfe states that according to *Natyashastra*, the art of dancing was developed into art of theatre “to enable people who had lost touch with their unmanifest source to gain familiarity with Vedic truths” and that *Gandharva-Veda* assumes that “dance originally symbolizes the subtle, rhythmical dynamics of transformations from one note to another, a manifest expression of unmanifest processes on which the entire creation is based.”⁴⁵

Performance in the general sense of the sacred ritual or theatrical event persists in what can be called living traditions or modes of acting at designated sites and times such as the creation of sand *Mandalas*, and accompanying monistic chanting by Namgyal monks of Tibet.⁴⁶ But how can the underlying value of performance indicated in this discussion effectively be actualized—taking performance beyond emotionally transformative theatre, social or political commentary, or maintenance and re-presentation of cultural, spiritual and religious traditions?

As considered in the previous chapter, from the perspective of Maharishi Vedic Science, culture and tradition have a role in maintaining balance in social life. There are specific laws of nature that govern a locale and community. These laws of nature need to be enlivened to create an integrated society that enjoys the support of the local laws of nature and the universal aspect of culture, the field of Natural Law. This is possible through performance activated from the

⁴² Meyer-Dinkgräfe, 2005.

⁴³ The *Natyashastra* represents “the codification of Indian knowledge on the dramatic arts, dance, music and aesthetics.” Guy, 1997, p. 33.

⁴⁴ Meyer-Dinkgräfe, 2005, pp. 160-164.

⁴⁵ Meyer-Dinkgräfe, 1999, p. 110.

⁴⁶ The Namgyala Monks of Tibet performed and created an exquisite *Mandala* out of coloured sand at the *Judith Wright Centre*, Brisbane, 2006. The sand *Mandala* is created over five days and then ceremonially destroyed, signifying the impermanent nature of life.

level of transcendental, pure consciousness—which can be called universal performance. Having said this, what does it mean to engage in such performance and how is it artistic in the sense that has been defined previously: i.e., how does it transform and embody consciousness?



Tibetan sand Mandala design

The eight images represent eight symbols of happiness.

The first (top) is the parasol, used as protection against evil and a sign of high dignity (on the Mandala it faces north). The second (clockwise from top round the circle) is the wheel with eight spokes, embodying the eight-fold path to enlightenment. Continuing round the circle are: the banner (facing East) symbolizing the victory of the Buddha's teaching, the golden fishes that announce release from suffering; the vase containing the water of eternity and representing spiritual wealth; the perfect lotus corresponding to purity; the shell shaped bugle that prevents evil from occurring; and the infinite knot symbolizing infinite love and a long life.

The holistic value of performance with all its accompanying aspects involving various artistic practices or forms is fundamentally enlivened through performance at the level of self-referral consciousness—the holistic source of creation, the source of all forms and phenomena and their evolution. Such performance is for knowledge. It is knowledge. In order to fully grasp this idea and the

potential of such performance, it is necessary to understand the principle of offering at the transcendental level, and the relationship and qualities of the four Vedas as absolute realities.

‘Offering’ and Knowledge

Performance from the level of pure, self-referral consciousness is referred to, in Maharishi Vedic Science, as *Yagya*. While *Yagya* is translated as “sacrifice” or “offering,” Maharishi points out that *Yagya* is, in effect, offering on the level of self-referral awareness—where the knower, process of knowing and known (*Rishi*, *Devata*, and *Chhandas*) offer their separate identities to merge into the fourth value of knowledge, the three unified as *Samhita*.

As noted briefly in Chapter Two, in the discussion on *Darshana*, as one of the four Vedas⁴⁷, *Yajur-Veda* follows *Rk Veda* and *Sama Veda*. *Rk Veda* brings out the quality of dynamic silence within consciousness; *Sama Veda* brings out flowing wakefulness. *Yajur-Veda* is that aspect which brings out the value of offering at the self-referral level;⁴⁸ it relates to *Yajan*, which is “offering” or “sacrificing” called *Yagya*. It is important to understand that this offering is on the unmanifest level of the self-referral move of consciousness. But what exactly does this phrase, “offering on the unmanifest level,” mean?

As Maharishi explains, this sense of *Yagya* refers to the phenomenon of knowledge, when consciousness knows itself at the self-referral level. As he points out, *Yagya* is the process through which knowledge or *Gyan* emerges:

(*Gyan*) emerges with the coming together of the knower, process of knowing, and known—the unity of the three—knower, process of knowing, and known creating the fourth element—knowledge. All three offer to each other their separate identities, and the whole process of each merging with the others blossoms into the fourth value—knowledge. This process of offering (or sacrificing) is the activity that is called *Yagya*, which is the activity, or process, for knowledge to blossom.⁴⁹

⁴⁷ *Rk, Sama, Yajur, and Atharva Veda*.

⁴⁸ Maharishi Mahesh Yogi, 1997a, p. 87.

⁴⁹ *Ibid*.

The process of each of the values of knower, process of knowing and known offering themselves to become knowledge, is the activity of *Yagya* on the level of self-referral consciousness. The four Vedas, including *Yajur Veda*, demonstrate, in fact *are*, the expression of this dynamic process of consciousness knowing itself. What is the relationship of the four qualities represented by the Vedas within the structure of knowledge?

Silence, Flow, Offering, and Vibrating Intelligence As Absolute Realities

Just as *Rk Veda* is the quality of dynamic silence, *Sama* is the flow of self-referral consciousness. This flow is the reality of the process of self-referral expressing the dynamism inherent in silence. As Maharishi states, that dynamism is the quality at the basis of silence that maintains it as an eternal continuum and gives it the characteristic quality of flowing wakefulness;⁵⁰ he goes on to provide an account of the four Veda as qualities of consciousness:

Sama is the flow of WHOLENESS—the flow of the Rishi quality within Rk; Yajur is dynamics of flow—the dynamism of Devata quality within Rk and Sama; and Atharva is vibrating intelligence—the qualityless reverberation of WHOLENESS—the qualityless eternal silence indicated by...(A). It is the vibrating, unmanifest relationship between Rk, Sama and Yajur; it is Chhandas, the finest measure of infinity—the hidden dynamics of relationship between Rk, Sama, and Yajur—between Samhita, Rishi, and Devata. Sama, Yajur, and Atharva all have their unmanifest status, their own quality within the Samhita of Rk Veda.⁵¹

Clearly, *Yajur* is identified as the dynamism of *Devata*, the process of knowing, within *Samhita*. As discussed in Chapter One, because consciousness is awareness it knows itself, or is aware of itself; in this process there is a move within consciousness. Consciousness, at this self-referral, unmanifest level, is complete; it contains the total potential of all possibilities—all possible relationships. It is infinite; it is wholeness. It is also qualityless; but in the move of consciousness,

⁵⁰ *Ibid.*

⁵¹ *Ibid.*, p. 82.

there is flow. This flow is the inherent dynamism of *Yajur* within silence.

In this dynamic flow is vibrating intelligence, the value of *Atharva*—the value of *Chhandas* or the known within wholeness. *Chhandas* is the finest measure or quantification of infinity, and, as Maharishi explains, it is the hidden dynamics of relationship between *Rk*, *Sama* and *Yajur*. In this context, Maharishi specifically identifies each of the four Veda, as wholenesses in their own right. Indeed, he states that the four independent qualities of wholeness—*Rk*, *Sama*, *Yajur*, and *Atharva*—are all *absolute* values of wholeness. Each one is effectively independent of the others but contains the others within it.⁵² As Maharishi points out,

This question on the reality of the four Veda in one wholeness of *Atma* is resolved when we understand them all as absolute realities. Each being Absolute (non-relative) can be easily seen to be one within the other—four Absolutes in one absolute value of *Atma*—Totality—*Brahm*.⁵³

In this way, these qualities are self-sufficient but contain the other within each. They are multiple Absolutes in one absolute. This is the nature of *Brahm*, the totality of consciousness. This principle demonstrates an apparent paradox: multiple discrete infinities exist within one holistic infinity.

In sum, *Yajur* is one Absolute reality within *Atma*. It is the dynamics of flow, the process of knowing or *Devata* within self-referral consciousness. It is the value of offering, where the values of knower, process of knowing, and known (*Rishi*, *Devata* and *Chhandas*) offer (or sacrifice) themselves for knowledge—giving themselves to the unified value of the three, *Samhita*, Totality, *Brahm*.

As noted above, “this process of offering (or sacrificing) is the activity that is...the activity, or process, for knowledge to blossom.”⁵⁴ Offering is thus necessary for knowledge. Maharishi explains that this entire process occurs within one’s own self-referral consciousness. It is not outside of oneself. This value of offering has also been discussed

⁵² *Ibid.*

⁵³ *Ibid.*

⁵⁴ *Ibid.*, p. 87.

by Maharishi in terms of silence and dynamism in one's own self-referral consciousness.

Silence Offers Itself to Dynamism and Vice Versa

Pure dynamic action within a limited sphere is only possible on the spiritual plane. Fundamentally, style is the human attitude towards these questions of the immanent and the transcendent.⁵⁵ Accordingly, the field of style has two main parts. In the first, the static concept and the classical resemble one another; in the second, there is a kinship between dynamics and romanticism. Between the two meeting-places, the static-classic and the dynamic-romantic, there is an intermediate realm, where statics yearn for dynamic freedom. Pathos is expressed in art as a motor impulse off the vertical, or as denial or disruption of the vertical. There are also more peaceful syntheses of the two realms; where what is static, well-balanced and, often, quite symmetrical, is given a touch of the dynamic.⁵⁶

—Paul Klee

Silence and dynamism were considered previously in the discussion of *Nyaya* and bi-directionality in the context of *Darshana*. Here, silence and dynamism are seen as integral to the dynamic of offering or *Yagya*. *Yagya* can be articulated as the process of silence offering itself to dynamism and dynamism offering itself to silence in an eternal dynamic. As Maharishi points out:

The process of *Yagya*—dynamism offering itself to silence and silence offering itself to dynamism...(Rk) is the process of *Yajan*—*Yagya*—the knower is offering himself to the known, and the known is offering itself to the knower through the process of *Yagya*, which puts them together in one structure of knowledge; and because the whole process of offering (sacrificing) is the process of flow, it is clear that the structure of *Yajan* (*Yagya*) is the structure of Rk as it is also the structure of Sama; it is the blossoming of the full awakening of consciousness—all the three Veda, Rk, Sama, and Yajur, in one's own self-referral consciousness.⁵⁷

⁵⁵ Immanent: statics; transcendent: dynamics.

⁵⁶ Klee, 1973, p.191.

⁵⁷ Maharishi Mahesh Yogi, 1997a, p. 87.

As Maharishi continues to point out, the interplay between silence and dynamism is *Yajan*, “which means the active aspect of the Self is offering itself to the silent aspect of the Self.”⁵⁸ *Rishi*, *Devata*, and *Chhandas* are attributes of the field of silence but in their relationship they structure dynamism. On the level of *Samhita* of *Rishi*, *Devata*, and *Chhandas*, silence is dynamism and dynamism is silence. Maharishi explains that “this means that silence is offering itself to dynamism and dynamism is offering itself to silence; this is what renders *Samhita* of *Rishi*, *Devata*, *Chhandas* to be *Yajur-Veda* through and through”.⁵⁹ He goes on to describe the process of *Yagya* with respect to the process of evolution and the means to enliven the mechanics of transformation at the basis of creation:

The whole thing is absolute, beyond space and time; that is why it goes on for ever and ever, forming the basis of the eternally evolving, ever-expanding material universe within the WHOLENESS of silent Unity; and as the ever-expanding universe emerges from *Samhita* of *Rishi*, *Devata*, *Chhandas*, the phenomenon of *Yajur-Veda* is present everywhere. This is borne out by the phrase that describes the fundamental, spontaneous process of evolution in Nature... *Navo navo bhavati jayamano*—as *Apurva*—that which did not exist before; that means every newly evolved expression in the process of evolution newly emerges from *Yagya*.

Apurva—that which did not exist before—that which did not exist within the constituents of *Yagya*—that which was at the unmanifest basis of the constituents of *Yagya*—is generated from the process of *Yajan*. *Apurva* results from *Yajan*. This means that *Yajan* mobilizes the process of evolution and creates something new that was non-existent in the mechanics of *Yajan*, the creative process. *Yajan* is a spontaneous, all-time absolute reality at the basis of all creation. This means that the process of *Yagya* is just a means to enliven the mechanics of transformation already present on the level of intelligence at the basis of creation in order to propel the total organizing power of intelligence in the desired direction, to spontaneously materialize the *Sankalp* (resolution). Gaining perfection in the science and technology of *Yagya* means gaining authority over the Laws of Nature—the ability to move Natural Law to materialize desires.⁶⁰

⁵⁸ Maharishi Mahesh Yogi, 1997b, p. 38.

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*, pp. 38-39.

In sum, the process of offering on the level of self-referral consciousness is the *process of flow*—the knower offering itself to the known, and the known offering itself to the knower to create the structure of knowledge. In the dynamic relationship of *Samhita* and *Rishi*, *Devata*, *Chhandas*, silence offers itself to dynamism and vice versa. This dynamic illuminates the principle of *Darshana* discussed earlier. Offering can here be understood as the process of gaining knowledge. On a practical level, in gaining this knowledge one gains the structure of pure knowledge on the level of individual awareness. This is the experience of cognition or *Darshana*. Ultimately, the science and technology of *Yagya* are about gaining the ability to spontaneously materialize desires or the *Sankalp* by enlivening the mechanics of transformation on the level of intelligence at the basis of creation.

Bi-Directional Flow

As also discussed in Chapter Two, there is a bi-directional aspect to awareness. Maharishi explains this further, in the context of the four Veda and their corresponding values: dynamic silence, flowing wakefulness, offering, and reverberating wholeness. *Atharva Veda* as stated, is the value of reverberating wholeness; it is, Maharishi adds, that quality which elaborates the bi-directional flow of intelligence within *Atma*. He explains that with flow in two directions simultaneously, the neutralisation of flow occurs—effectively maintaining non-flow or silence within flow.⁶¹ Silence flows toward dynamism and dynamism flows toward silence. This dynamic is located in the structure of *Rk*. Maharishi points out the phenomenon of flow in two opposing directions is the structure of *Rk*. This can be seen:

In terms of neutralizing the flow in each direction and maintaining perpetual silence in the flow. The picture is of a series of points of silence constituting the flow. This continuous structure of points of silence within the flowing structures of *Rk* Veda, *Sama* Veda, and *Yajur-Veda* produces such points in the field of self-referral motion in Transcendental Consciousness—points of silence fully awake—points

⁶¹ Maharishi Mahesh Yogi, 1997a, p. 88.

of silence without motion throughout the passage of evolution, which is the reality of creation.⁶²

Points of silence, or non-motion, are found to constitute points of silence within the flow of silence and dynamism. These points of silence are found in the self-referral motion within Transcendental Consciousness.

Crossing Points of Silence as All-Directional Vibrating Potential

As Maharishi explains, these points are the juncture where the flow of silence and the flow of dynamism cross. The crossing point is a structure lively within itself but without specific direction. To be precise, each crossing point is all-directional.⁶³ Thus, these points have a pulsating quality. Having a pulsating quality, they are the vibrating potential or reverberating wholeness of “A” within the point, “K”. As introduced in Chapter Two, the sound “A” represents the wholeness of consciousness, fullness, or infinity, and the sound “K” represents the collapse of fullness to its point value. *Atharva* is the “*Tharva*” of “A” (reverberating wholeness within ‘K’, the point of speech) or the *Vrittis* (*Tharva*) of *Atma* (“A”). The term *Vritti* means frequency—frequency of self-referral consciousness,⁶⁴ or frequency of self-interacting dynamics of consciousness.⁶⁵ The *Vrittis* of *Atma* (frequencies of unmanifest sound) emerge from the self-interacting dynamics of wholeness, Transcendental Consciousness, “the vibrating potential, the self-referral dynamics at the basis of everything.”⁶⁶

Maharishi examines this phenomenon further by explaining that, in fact, *Atharva* is the finest fibre of unbounded silence. The first phase of the shift from point to unboundedness, is where the point becomes the point of the point. The point of the point becoming unboundedness is the finest fibre of unbounded silence fully awake within itself. Maharishi articulates this dynamic in terms of the sounds “A” and “K”. As he states, the letter “K” has two parts to its pronunciation; “K” includes “A” in its pronunciation:

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ Maharishi Mahesh Yogi, 1994, p. 357.

⁶⁵ *Ibid.*, p. 158

⁶⁶ Maharishi Mahesh Yogi, 1997a, p. 88.

First is stop, point, and second is...(A)—unbounded. ...(K) represents point and unboundedness—...(K) represents point shifting to unboundedness. In the first stage of this shifting the point becomes the point of the point. The point of the point gaining the reality of unboundedness is the faintest fibre of unbounded silence—...(A). This point of the point is Atharva—the finest fibre of unbounded silence, fully awake in itself at the basis of all the Veda and the Vedic Literature—the structure of Law and its evolution in the universe.⁶⁷

The finest fibre of *Atharva* is the basis of all creation. In *Atharva*, one direction of flow can be said to offer itself to another, generating a state of non-flow, the “self-reverberating fibre of eternal silence”⁶⁸—*Atharva*. Thus, *Yajur* is found within *Atharva*. When point offers itself to its own point, this is referred to as *Yajan*. The point gains unboundedness through offering. This offering is *Yagya*, or the *Atharva* “eternally going on at the basis of creation.”⁶⁹ This understanding of *Yagya* expands any relative sense of offering. It brings the idea and actuality of offering to the deepest level of meaning and reality.

This sense of offering, on the face of it, may seem to resonate with the idea of becoming articulated by Deleuze and Guattari in their discussion of “arborescence.”⁷⁰ Arborescence,⁷¹ they state, is the submission of the line to the point where the line represents the function of becoming in the condensation of identity. In their analysis, the idea of becoming is a non-localizable in-between; it is relation or a zone, neither one nor two. A line of becoming has no beginning or end but only a middle.⁷² With a punctual system, Deleuze and Guattari maintain that there are always two base lines, horizontal and vertical. The horizontal line and vertical line can be moved interchangeably and diagonals can be drawn between points, levels, or moments, generating

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

⁷⁰ Deleuze and Guattari, 1987, pp. 292-293.

⁷¹ Deleuze and Guattari consider “arborescence” in reference to arborescent schemas of Julien Pacotte and the status of centered or hierarchical systems discussed by Rosenthiehl and Petitot. See: *Notes to pp. 287-293*, Deleuze and Guattari, 1987, pp. 544-555.

⁷² Deleuze and Guattari, 1987, p. 293.

As the authors state: “If becoming is a block (a line-block), it is because it constitutes a zone of proximity and indiscernibility, a no-man’s land, a nonlocalizable relation sweeping up the two distant or contiguous points, carrying one into the proximity of the other—and the border-proximity is indifferent to both contiguity and distance.” *Ibid.*

frequencies and resonances. The punctual system intrinsically opposes the linear system. Deleuze and Guattari assert that the role of the musician, writer or painter is to free the line and diagonal from the territorializing tendency of the punctual system.⁷³ It is the artist's role to break with or influence history.

In Maharishi Vedic Science, the discussion of the point and flow relate to the move of unbounded consciousness in its self-referral tendency. In this context, the point is taken to be the finest fabric of reverberating intelligence. The continuous structure of points of silence within the flow of consciousness is comprised of points of silence within the flow of silence and dynamism. These points are all-directional crossing points. They are the pulsating, vibrating potential of infinity or wholeness, pure potential. Maharishi adds that in shifting to unboundedness, the point becomes the point of the point, the faintest fibre of unbounded silence.

This description is not a metaphor but the reality of experience on the deepest level of individual awareness. To know consciousness as the point, or the point of the point, is to experience the finest fibre of unbounded silence within awareness. In this dynamic, the point offers itself to its own point. This is *Yajan* or offering, where the point gains unboundedness through offering. The delicate details of this dynamic are revealed to the artist, writer, musician, in his or her own self-referral awareness. In higher states of consciousness this reverberating pure potential is spontaneously expressed through the action and art of the creator in art, writing and music. Thus the arts have the potential to stir the consciousness of the viewer, reader, or listener. This can be said to be the most profound role of art, to facilitate the enlivenment of the finest value of consciousness and contribute to refinement and evolution throughout time.

From the perspective of philosophy and theory, a sense of unboundedness can be implied through a constant deferral of meaning or sensation through perpetual becoming. This denial or deferral of a fixed point, identity, or locus, is alluring. According to Maharishi Vedic Science, the natural tendency of the mind is to be drawn to a field of non-confinement, a field beyond space, time, location and identity. The most charming field for the mind is this field of complete unboundedness; it is the mind's own self-referral nature—infinite, non-

⁷³ *Ibid.*, p. 295.

localized awareness, accessed through the practice of Transcendental Meditation. This is one reason why it is inaccurate to categorize Maharishi Vedic Science as philosophy or theory; philosophy only presents ideas and concepts that approximate unboundedness but does not include technologies to provide the individual with a means to practically test or experience its claims. In Maharishi Vedic Science the two areas of experience and knowledge go hand in hand.

As we have seen, at the transcendental basis of creation is the eternal dynamic of consciousness as silence and dynamism, as knower, process of knowing and known, and as the point of the point, each offering themselves to create the structure of knowledge, the structure of Law—Natural Law or *Dharma*. This value of offering is going on eternally at the basis of creation. For the individual established in higher states of consciousness life is spontaneously lived on this refined level. Every action involves offering or *Yagya*. Indeed, all action in higher states of consciousness is offering or *Yagya*. It could be argued that *Yagya* is the only valid and significant transformational performance; it is action performed from the most artistic place in creation where offering is constantly occurring on the unmanifest level, within consciousness as the structure of knowledge. Coming back to the idea of ritual performance and offering to the gods, as introduced at the start of the chapter, how can such activities be said to contribute to the principle of *Yagya*?

Living Yagya

As discussed in Chapter Two, in the Veda and Vedic Literature there is a direct correspondence between name and form. There are also multiple levels of meaning for any term or sound, from the Transcendental, subtle, to gross levels of linguistic expression. With this understanding, in reference to selected verses of the Bhagavad-Gita, Maharishi further discusses action in higher states of consciousness and the process of *Yagya* as offering through material means, offering through knowledge, offering to the gods, *Yoga*, and the experience of *Brahman*. The verses in question read as follows:

*He who is freed from attachment,
liberated, whose mind is established*

*in wisdom, who acts for the sake of
yagya, his action is entirely dissolved.*

*Brahman is the act of offering.
Brahman the oblation poured by
Brahman into the fire that is Brahman.
To Brahman alone must he go who is
fixed in Brahman through action.*

*Some yogis perform yagya merely
by worshipping the gods, others by
offering the yagya itself into the
fire that is Brahman.*

*Some offer hearing and other senses
in the fires of control; some offer
sound and other objects of the senses
in the fires of the senses.*

*Others offer all the activities of
the senses and of the life-breath
in the fire of Yoga, which is self-
control kindled by enlightenment.*

*Some likewise perform yagya by means of
material possessions, by austerity and by
the practice of Yoga; while other aspirants
of rigid vows offer as yagya their scriptural
learning and knowledge.*

*Others again, who are devoted to
breathing exercises, pour the
inward into the outward breath
and the outward into the inward,
having restrained the course of
inhalation and exhalation.*

*Yet others, restricting their food,
offer breaths into breaths. All
these indeed are knowers of yagya,
and through yagya their sins are
cast away.*

Eating the remains of the yagya, which is nectar, they reach the eternal Brahman. This world, O best of Kurus, is not for him who offers no yagya, much less the world hereafter.

In this way yagyas of many kinds are set forth in the words of the Veda. know them all as born of action. Thus knowing you will find release.

Better than the yagya through material means is the yagya of knowledge, O scorcher of enemies. All action without exception, O Partha, culminates in knowledge.⁷⁴

—*Bhagavad-Gita, Chapter IV, Verses 23-33*

Maharishi provides a rich commentary on the meaning of these verses, explaining that *Yagya* of material means is performed through material offerings, whereas *Yagya* of knowledge is performed through “mental activity leading to the state of transcendental consciousness, and also the mental activity of understanding of the Transcendent.”⁷⁵ Maharishi emphasises that *Yagya* of knowledge is better, because *Yagya* of material means can only, at best, raise the level of consciousness in the relative field of life. Conversely, *Yagya* of knowledge “transforms the entire human mechanism into a means by which the Divine expresses Itself in the world.”⁷⁶ However, Maharishi does point out that any form of *Yagya* aims at purification. The extreme limit of purification is when the individual lives Unity Consciousness, when life is lived in fulfillment, in eternal freedom. This is the goal of *Yagya*.

Yagya as discussed by Maharishi, Meyer-Dinkgräfe states, “comprises all kinds of means, or practical tools, for an individual to achieve the ideal state of human spiritual development, *moksha*, or enlightenment.”⁷⁷ In Maharishi Vedic Science the Vedic Literature is

⁷⁴ Maharishi Mahesh Yogi, 1967, pp. 210-220.

⁷⁵ *Ibid.*, p. 220.

⁷⁶ *Ibid.*, p. 221.

⁷⁷ Meyer-Dinkgräfe, 2005, p. 160.

understood as having various branches or *Shakas*, each of which has three sections dealing with the gross, subtle and transcendental aspects of *Yagya*: 1) *Karma Kanda* (Chapter of Action) deals with gross aspect of *Yagya*; 2) *Upasana Kanda* (Chapter of Worship) provides information on how to gain support from the laws of nature or *Vedic Devatas*; and 3) *Gyana Kanda* (Chapter of Knowledge) contains the techniques to transcend and gain “wisdom of eternal life”. Meyer-Dinkgräfe continues to explain that enlightenment is the goal of theatre according to the Vedic text, the *Natyashastra*.⁷⁸

However, the practice of the simple mental technique of Transcendental Meditation, itself, is *Yagya*. It is practiced in the field of action but leads to the Transcendent, the field of silence, the goal of *Yagya*. Indeed, Maharishi states, in the *Bhagavad-Gita* Lord Krishna declares that in not performing *Yagya*, the individual will not be successful. He elaborates by explaining that the *Yagya* of Transcendental Meditation, of all the *Yagyas*, is the most effective, “for it is a direct means of bringing the mind to absolute purity and enabling it to contact the source of limitless life-energy and intelligence”.⁷⁹ Maharishi also comments on the other aspects of *Yagya* mentioned in the verses above. For example, *Yagya* by means of material possessions refers to giving away wealth to the deserving, and the performance of rituals by offering sacrificial fires. *Yagya* by austerity means subjecting the body to heat, cold, etc., for purification. *Yagya* as the offering of scriptural learning relates to sitting and meditating to transcend the field of learning and experience the Transcendent—the field of knowledge, which is the goal of all learning.

Yagya as the worship of the gods, offered to *Brahman*, is explained by Maharishi in terms of growth to higher states of consciousness. He points out that Cosmic Consciousness is the state of *Brahman*, in as much as it is the permanent state of enlightenment. As discussed earlier, in Cosmic Consciousness, Transcendental Consciousness is experienced throughout all the relative states and phases of life; no activity can take one out of Transcendental Consciousness. Action performed in this state, can therefore be defined as action performed on the level of *Brahman*. Maharishi goes on to consider this in the light of worship:

⁷⁸ *Ibid.*, p. 161.

⁷⁹ Maharishi Mahesh Yogi, 1967, pp. 218-219.

Since it is transcendental Self-consciousness that develops into cosmic consciousness, in order to achieve cosmic consciousness through worshipping, one has to transcend through worshipping. This necessitates entering into the subtle phases of the act of worship. And this is most successfully done in a systematic manner by taking the name or form of the god and experiencing it in its subtler states until the mind transcends the subtlest state and attains transcendental consciousness. Those who are highly emotional, however, may even transcend through an increasing feeling of love for the god during the process of making offerings.

Transcending the act of worship is said to be the offering of the worship to Brahman. It has the advantage of receiving the blessings of the god and at the same time of helping to develop cosmic consciousness. By transcending, a worshipper arrives at the ultimate fulfillment of yagya and thereby develops cosmic consciousness, the state where his every action will prove to be yagya. All that concerns him will be helpful to evolution and, established in his Being, he will fulfill the purpose of life. That is why transcending the field of yagya to arrive at the state of Brahman also ranks as yagya. When a man has gained cosmic consciousness, all his actions assume the status of yagya. Because such action is performed in the state of Brahman, it is already on the level of Brahman. This is offering the yagya itself into the fire that is Brahman.⁸⁰

In this context, Maharishi points out that the name or form of the god is experienced in its subtle values until the subtlest value has been transcended. Individuals who have a more emotional disposition can even transcend through the feeling of love for the god while making offerings. In transcending, the individual transcends the relative field, achieves the fulfillment of *Yagya* or offering, and eventually develops Cosmic Consciousness. This transcending of *Yagya* to gain *Brahman* is *Yagya*. When a person has attained *Brahman*, all action is *Yagya*; it is already on the level of *Brahman*, as is illustrated by the expression “offering the *Yagya* itself into the fire that is *Brahman*”. As Meyer-Dinkgräfe notes, according to Maharishi, “offering to the gods does not ‘imply surrender to them or coming under their subjugation’, because pure consciousness is completely free ‘from all influences of relative life, including the gods.’”⁸¹

⁸⁰ *Ibid.*, p. 214.

⁸¹ Meyer-Dinkgräfe, 2005, p. 161.

All actions, performed in higher states of consciousness, are performed from the level of Transcendental Consciousness, and are consequently life-supporting and aid cosmic evolution. Such action is “for the sake of yagya”.⁸² All such action is offering. It is not motivated by individual desire or gain.⁸³

In the context of art practice and performance, with enlightenment as the goal of life, there is no action that is not life supporting, that does not have evolution and enlightenment as its motivating force. Therefore, it makes sense for the artist to be living higher states of consciousness if he or she is to act universally, spontaneously performing *Yagya*, always involved in evolutionary, transformative action. How can the artist practically achieve this in a systematic and effective way and what are the ramifications of this in terms of the artist’s range of abilities?

Skill in Action and Yogic Flying

“Skill in action” is a phrase one would associate with physical prowess and athletic performance in sport, dance and even in the visual and performing arts. In Maharishi Vedic Science, skill in action refers to the ability to perform action with least effort and maximum effectiveness. This kind of action is spontaneously computed from the level of nature’s functioning, the infinite organizing power of Natural Law. It is action in silence on the level of infinite correlation.⁸⁴ Action in silence, Maharishi states, is action from the level of the field where the total energy of Natural Law is utilized to fulfill intention: “Action propelled from this level of silence consumes least energy and utilizes the total organizing power of Natural Law...to hit the target with maximum speed and least resistance.”⁸⁵

Maharishi’s technologies of consciousness, including Transcendental Meditation technique, the TM-Sidhi Programme and Yogic Flying, are described as *Yagya* and demonstrate skill in action. The term *Sidhi* means “perfection” and refers to the development of perfect mind-body co-ordination. While Transcendental Meditation

⁸² Maharishi Mahesh Yogi, 1967, p. 210.

⁸³ As discussed in Chapter Three, in the cycle of experience, impression, desire, and action.

⁸⁴ Maharishi Mahesh Yogi, 1995b, pp. 127.

⁸⁵ *Ibid.*, pp. 126-127.

allows the individual to experience pure, Transcendental Consciousness, the TM-Sidhi Programme and Yogic Flying develop mind-body co-ordination and the ability to function from the silent level of pure consciousness. Over time, with the regular practice of the Transcendental Meditation technique and TM-Sidhi Programme, the individual operates from the level of self-referral consciousness. Indeed, the successful performance of Maharishi's Yogic Flying technique demonstrates mind-body co-ordination and the ability to act from self-referral awareness.

The demonstration of 'yogic flying' illustrates that the individual nervous system has sufficient, integrated complexity to function at that level of the unified field. It proves the nervous system's capability to function at the level, which all the laws of nature are unified. From this perspective, the brain wave coherence which is maximum during 'yogic flying' represents an upsurge of coherence from the level of the unified field itself.⁸⁶

Maharishi adds that the proof of "thought emerging from self-referral consciousness is that while practicing the *Flying Sutra* during the TM-Sidhi Programme, the body lifts up and moves forward in the air".⁸⁷ What is happening in the physiology at this moment? The intelligence that is the common basis of the various levels of intelligence in the cell and parts of the body becomes lively and enlivens the holistic intelligence of all these specific aspects in the physiology. Maharishi describes the situation as follows:

Because the conscious mind has accessed this level of intelligence with the intention to fly, every level of intelligence in the body under the indomitable influence of the command of pure intelligence to fly, every level of intelligence functioning in different parts of the body is spontaneously taken over by the overall intention to fly, and inevitably the body as a whole spontaneously and most naturally comes under the full influence of the intention of the *Sutr (Flying Sutr)*—the body lifts up. The phenomenon of the intention holds the body in the air.⁸⁸

The TM-Sidhi Programme, through formulas called *Sutras*, enables the individual to perform action from the self-referral level of

⁸⁶ Maharishi Vedic University, 1987, pp. 18-19.

⁸⁷ Maharishi Mahesh Yogi, 1995a, p. 42.

⁸⁸ *Ibid.*, pp. 42 & 118.

pure intelligence. What is remarkable about this phenomenon is not just that it *can* be performed but that practice of the TM-Sidhi Programme and Yogic Flying create an influence of coherence in the environment and in collective consciousness. This is why Maharishi recommends the practice of these technologies of consciousness by significantly large groups in the countries of the world. Creating coherence means increasing positive trends on all levels, social, natural, cultural. While artists and computer games experts (in conjunction with the United Nations) have developed games to help educate people about the plight of those in places such as Darfur,⁸⁹ preventing war, eliminating poverty and starvation, promoting health, prosperity and cultural integrity, are all “by-products” of the practice of group technologies of consciousness by sufficient numbers of trained experts. The performance of the *Sidhis*⁹⁰ is completely in the range of normal human ability; it is the outcome of mind-body co-ordination of the stress-free nervous system. Maharishi comments that the whole of cosmic life is within the range of everyone’s own nature and that it is only in the days of ignorance that this ability is thought to be superhuman. Everything is within the normal range of human ability.⁹¹

The Collective Effect of Self-Referral Performance —The Ultimate Socially Responsible Art

As evidenced throughout time, as for example in stories such as the exploits of Icarus, humankind has been fascinated with the idea of flight; *Small Planet*, Myron Kreuger’s digital work, involves the viewer’s physical action to stimulate the piece. Entering a room with a computer-generated image of a planet on the far wall, standing opposite, in raising and moving the arms (like a child pretending to be an airplane) the viewer can create the effect of soaring above the planet—swooping or gliding over mountains, seas, and rivers.⁹² Craig Pearson explains, in his publication *The Complete Book of Yogic Flying*, that in Europe levitation has been attributed to more than 200 individuals, and is the most commonly mentioned miracle in the

⁸⁹ <http://www.DarfurIsDying.com>.

⁹⁰ *Sidhis* being the performance of formulas to create specific outcomes.

⁹¹ Maharishi Mahesh Yogi, 1994, p. 25.

⁹² Bonshek, 1997, p. 11.

Roman Catholic tradition. The 17th-century Italian saint St. Joseph of Copertino is recorded as performing over a hundred flights. Inspired by a beautiful picture or melody, St. Joseph was witnessed as he swept into the air, remaining suspended from periods of fifteen minutes to up to two hours. Pearson also states that during travels to India in the first century AD, the Greek philosopher Apollonius of Tyana saw Brahmins levitating high off the ground and, more recently, Ernest Wood, a writer on Eastern philosophy, witnessed similar feats commenting that levitation is an accepted fact in India.⁹³

Individuals who practice the Transcendental Meditation, the TM-Sidhi Programme and Yogi Flying are referred to as *Sidhas*. Through collective practice, individual *Sidhas* can generate a life-supporting influence for their community, their country, and the world family as a whole—generating bliss for the performer and increased well being for the community. New York-based artist Bill Jorden, created a *Sidha Portrait Series*—photographs of practitioners of Transcendental Meditation and TM-Sidhi programme, and has photographed individuals performing the first stage of yogic flying as an extension to his work on this theme.

As practicing *Sidhas* many artists contribute to the collective *Extended Maharishi Effect*, practicing Maharishi's technologies of consciousness in Fairfield, Iowa, U.S.A.⁹⁴ and in similar communities around the globe. While these artists create work driven by their interests and concerns (in some cases referencing Vedic knowledge), their Transcendental Meditation, TM-Sidhi and Yogic Flying practice, is, arguably, their most profound "performance art." This concept was presented along with the exhibition, *Field Effects: Recent Work by Eleven Fairfield Artists*—which featured work by sidhas from the Fairfield community at the time.⁹⁵ In offering degree programmes in art and consciousness, MUM's Department of Art fosters creativity by expanding the consciousness of the student and facilitating the students and faculty to contribute to coherence creating performance.

⁹³ Pearson, 2000.

⁹⁴ The home of Maharishi University of Management (MUM) and Maharishi Vedic City.

⁹⁵ *Field Effects: Recent Work by Eleven Fairfield Artists*, curated by Anna Bonshek and Lee Fergusson was presented from February through March, 1992, at the Gallery of Art, Kamerick Building, University of Northern Iowa, Cedar Falls and comprised painting, drawing, sculpture, photography and installation work by practitioners of the Transcendental Meditation and TM-Sidhi Programme at the time, including: Loretta Smetana Jansen, Julia Preminger, Judy Bales, Jennifer Kaeding Blair, Will Mentor, Michael Peter Cain, Mark Paul Petrick, John Eastman, Bill Witherspoon, Jim Shrosbree and Brad Keen.

In the early 1990s, Lee Fergusson conducted research on the effect of this unique art curriculum, examining the relationship between field independence, grade point average (GPA), and art achievement, in college fine art students who practiced the Transcendental Meditation technique and a non-meditating comparison group.⁹⁶ The meditating group showed significantly higher levels of field independence, reflecting a greater ability to maintain broad comprehension while focusing on parts. Field independence is held to be a measure of an individual's part-to-whole awareness and is thought to refer to an analytic style of perception displayed as the ability to simultaneously experience the discrete parts of a stimulus field and the overall context in which they appear. According to Maharishi, field independence demonstrates developed consciousness since it shows that when individuals are focusing sharply on any one area they do not lose broad comprehension of the total field of concern.⁹⁷ As noted, the curriculum at MUM, designed to develop individual consciousness, also creates an influence of coherence for the wider community and the nation via the group practice of technologies of consciousness by students, faculty and staff. As stated in Chapter One, in the vicinity of the practice of these technologies, in the vicinity of *Yoga* or unity, hostile tendencies are eliminated, and unity is enlivened. This phenomenon is a naturally occurring "socially responsible" phenomenon and a force for collective change that one could define as a paradigm shift.

American writer and artist, Suzi Gablik, also in the 1990s, increasingly focused on art and artists that dealt with what she identified as socially responsible art or performance—art that she felt had something important to contribute to society. Her book *ReEnchantment of Art*⁹⁸ articulated her concerns about the relative significance or rather insignificance of contemporary art at the time. Since then Gablik has curated exhibitions and written articles featuring work by artists that she feels present a socially responsible approach to art. One of these individuals, mixed-media installation artist David T. Hanson, has consistently created work with a social and environmental conscience since the 1980s. Hanson remains one of America's most powerful, critical photographers. Displaying a finely honed moral

⁹⁶ Fergusson, 1992, 1993.

⁹⁷ Maharishi Mahesh Yogi, 1995a, p. 201.

⁹⁸ Gablik, 1992.

compass, his work documents the systematic exploitation and devastation of the U.S. environment.

In Hanson's work, as Van Sicien suggests, the Romantic American landscape tradition gives way to a chilling record of environmental degradation—through unsustainable extraction of energy resources, storage of weapons of mass destruction, and the proliferation of toxic waste dumps. In his photographs and triptychs Hanson uses both the traditional from-the-ground-view and aerial perspectives, but notes that eventually the aerial view seemed more appropriate.



California Gulch, Leadville, Colorado. From Waste Land (1985–86).

A series of 67 triptychs.

*Ektacolor print, modified U.S. Geological Survey map,
& gelatin silver-print text panel. (Each triptych 17 x 47")*

David T. Hanson⁹⁹

In 1997, featuring a number of Hanson's environmentally-conscious photographic series, Aperture published a monograph of Hanson's work entitled: *Waste Land: Meditations on a Ravaged Landscape*¹⁰⁰; images from his *Waste Land* series were recently shown at *The Body At Risk* exhibition at The International Center of Photography, New York.

⁹⁹ Image printed with permission of the artist.

¹⁰⁰ Hanson, 1997.



*View from First Baptist Church of Colstrip: company houses and power plant.
From Colstrip, Montana (1982–85). A series of 66 Ektacolor prints
(Each 11 x 14")
David T. Hanson.¹⁰¹*

Hanson's images present a powerful reminder of the effects of man's impact on nature when life is not integrated and social expansion is pursued at the expense of the holistic progression of life. While Hanson's work highlights the need for more socially responsible action at all levels of society, students and faculty at MUM and the large number of artists who have been attracted to live in the Fairfield community who are practitioners of programmes for development of

¹⁰¹ Image printed with permission of the artist.

consciousness, are all engaged, it can be said, in socially responsible performance as a spontaneous outcome of their daily routine.

Indeed, in 2001 Gablik addressed the Fairfield art community presenting ideas about what she sees as a new shift in collective awareness in a talk entitled *Paradigm Spinning and Visionary Criticism: A Personal Profile* which was followed by a panel discussion on consciousness, social responsibility and art.¹⁰² Gablik criticized the art for art's sake view of Modernist thinking, vacuous postmodern art, the rise of art as a commodity, conceptual play or soulless enterprise. For at least a decade she has been arguing for an art of beauty, an art that carries wider social meaning and participation, and revivifies social use-value. Despite this, Gablik states that

The hegemony of the eye is very strong in our culture, and to challenge the commitment to its ocular-centric, or vision-centered aesthetic, replacing it with a paradigm shift that displaces vision with the very different influence of listening, is to open oneself up to the complaint that what is being described here is not art at all, but environmental activism, or social work.¹⁰³

The idea of an ocular-centric aesthetic being more forceful than an aural one seems to have merit. But the problem rests not just with the idea of vision versus listening but on creating art that speaks to and enlivens all levels of mind from the transcendental level up: i.e., from pure consciousness, to ego, intellect, mind, (all the) senses, body, and environment—including society and all phases of life. This is only possible when the artist is operating from the foundation of pure consciousness, the source of all these levels—the source of individual and collective consciousness. Furthermore, any shift in paradigm or collective awareness reflects a deeper shift or change in the degree of pure consciousness being lived by a population at a given time. If the universal value of pure consciousness is not lively in collective awareness, the result is that society does not reflect the full value of its potential. For art, only surface values remain in focus. Furthermore, if the artist's creative action is not based on the experience of pure consciousness, there is no connectedness between inner and outer—between inner, infinite creativity and art. Art only speaks of the

¹⁰² Panelists included, Matthew Beaufort, Anna Bonshek, Gillian Brown, Michael Peter Cain, and David T. Hanson.

¹⁰³ Gablik, 1998: <http://www.ru.org/81gablik.html>.

individuality of the artist. It has a limited range of influence. It cannot communicate universally. It falls into the trap of becoming a game, an illusion or transitory commodity. It becomes anything that is defined as art, presented in an art context. It may even achieve the opposite of inspiring evolution.

In a population where pure consciousness is lively in collective awareness, art has a role to inspire development of consciousness. This does not necessarily mean that it is didactic or instructive. It simply means that it has the effect of creating some value of upliftment, inspiration, and bliss in the viewer/participant. Ultimately, presenting the truth of knowledge—the silent, universal basis of life—is the “beauty” of art.

Coming back to the idea of a new era, on the collective level it is important to acknowledge the possibility of an emergent, transformative paradigm. Increasingly artists are creating socially responsible art in the digital context. But what is the cause of this change? If the degree of pure consciousness lived by the collective is the measure for any shift (in either a plus or minus direction, as described by the changing *Yugas*), it is important to ask: On the microscopic scale, on the individual level, what occurs that relates to the collective phenomenon of change? Taking this change to be related to the group practice of technologies of consciousness, one needs to also ask: What exactly occurs on the level of individual consciousness and the physiology during the practice of technologies of consciousness and specifically Yogic Flying?

The Physiology of Self-Referral Performance: Enlivenment of Silence and Dynamism

Looking into the phenomenon of Yogic Flying and the effect of this on the physiology, Maharishi explains the mechanics of this technique in terms of the qualities of consciousness that are lively in the brain physiology and in every cell of the body. Maharishi explains that on the level of consciousness there is a value of ‘holistic rulership’ called *Purushottama*. This is the totality of consciousness—within which the innumerable values of *Samhita* are all infinitely correlated. While *Samhita* is the unified wholeness of *Rishi*, *Devata*, and *Chhandas*, there are multiple values of *Samhita* within the total field of

consciousness. This total sum, ‘the totality’, of innumerable values within consciousness is governed by the holistic rulership called *Purushottama*. In the performance of Yogic Flying, the individual experiences this value of *Purushottama* as a witnessing value. It is the witnessing of the dynamic and silent quality of consciousness simultaneously within the individual’s awareness. As Maharishi explains:

When a Yogic Flyer, performing from the level of Transcendental Consciousness, experiences the lifting up of the body, he experiences two qualities of his own consciousness: dynamic (which lifts the body), and silent (which quietly witnesses the dynamism within its own nature). The phenomenon of Yogic Flying brings to experience three qualities of consciousness: dynamic (*Prakrti*), silent (*Purush*), and the witness of both (*Purushottam*).¹⁰⁴

Discussed earlier, silence and dynamism are seen to be experienced as lively values within consciousness during the practice of Yogic Flying. Not only does the individual experience these values but every cell in one’s physiology is the site of the lively integration of the *Purush* (silence) and *Prakrti* (dynamism). Every fibre of every cell is awake to the holistic value of the cell. Thus, *Purushottama* is enlivened in every cell. This is complete mind-body co-ordination. As Maharishi states, the physiology generates, “supreme mind-body co-ordination—that level of consciousness which witnesses both *Prakrti* and *Purush*”¹⁰⁵—which occurs when

every cell in the body, the whole body wakes up in the quality of holistic intelligence—the *Purush* and *Prakrti* value of each cell become the parts of the grand *Purush* and *Prakrti* value—the whole body is awake in the quality of supreme *Purush* and supreme *Prakrti*—*Purushottam*. This is the grand awakening of the *Purushottam* quality of intelligence in the physiology of everyone.¹⁰⁶

Those values of silence and dynamism, considered earlier in terms of offering, are experienced, are lively, in every cell. Silence offers itself to dynamism and dynamism offers itself to silence in the process

¹⁰⁴ Maharishi Mahesh Yogi, 1995a, p. 111.

¹⁰⁵ *Ibid.*, pp. 112-113.

¹⁰⁶ *Ibid.*, pp. 111-112.

of *Yagya* at the self-referral level of physiological functioning, just as the three values of knower, process of knowing and known, offer themselves to the unified value of knowledge, *Samhita*, wholeness. In the same way as the individual physiology awakens to *Purushottama*, or supreme rulership during Yogic Flying, when a group of individuals practice the TM-Sidhi programme of Yogic Flying together, they create an influence of *Purushottama* in the atmosphere. Coherence is generated in society because *Purushottama* is that level of intelligence that contains *all* levels of intelligence within it.

In this discussion, it is clear that the values of silence and dynamism are lively qualities experienced by the individual on the level of consciousness during the practice of Yogic Flying and enlivened on the microscopic scale of the intelligence of each cell in the physiology as well as the macroscopic scale of the environment and society at large. This demonstrates the infinite correlation of intelligence at the self-referral level of the unified field. It is possible to have an effect at all levels because one is functioning from the transcendental source or basis of everything—the level where everything is intimately connected with everything else. Action that brings about such an evolutionary effect is *Yagya*.

In addition, there are specific performances included in the science of *Jyotish* and *Yagya*, designed to generate particular effects. These are also ranked as *Yagya*, which can be understood as *Vedic engineering* for defence.

***Yagya* and *Jyotish*: Vedic Performance as Defence**

Related to the four values of intelligence—*Samhita*, *Rishi*, *Devata* and *Chhandas*—there are four strategies of defence identified by Maharishi Vedic Science. Transcendental, beyond reproach, and eternally invincible, the first strategy, the field of *Samhita*, is absolute defence. Maharishi explains that this level of consciousness was bestowed to *Arjuna* (the hero of the *Bhagavad-Gita*) on the battlefield. Relating to *Rishi*, *Devata* and *Chhandas*, the next three strategies are called *Adhyatmik*, *Adhidaivik* and *Adhibhutik*.

The *Adhyatmik* level of defence is the *Yogic* aspect of defence and involves the practice of Yogic Flying by a small percentage (3%-5%) of the military personnel who create an abstract, indomitable,

invincible armour for the nation. Defence has become a complex issue as terrorist acts become more prevalent. In 1986 Maharishi clearly articulated the cause and problem of terrorism, stating that

Terrorism is such a dry rot in the human race. It has no national boundaries, because 24-hour communications are going on everywhere. We know that there are governments that are training guerrillas here and there. We know there are governments behind the scenes promoting violence here and there. Everyone knows this. All the governments know it, but no one can help it. It can never be eliminated by anything in the relative field, because the basis of terrorism is stress in world consciousness.

The basis of terrorism can be understood in this: Whatever may seem to be the cause of the outbursts of terrorism, whatever little excuses there are, these excuses arise on the surface of the human race only from stress in world consciousness, and stress is not seen until it bursts out. The basis of the stress in world consciousness is the violation of natural law by the people. The basis of the violation of natural law is the fact that the educational systems do not educate the people to spontaneously think and act according to natural law.¹⁰⁷

Terrorism and violence are the result of stress in world consciousness; stress results from violation of Natural Law by the people. The answer to this problem, Maharishi asserts, can only be to educate people how to live spontaneously in accord with Natural Law and thereby eliminate stress in world consciousness. As noted earlier, research studies show that when even the square root of 1% of a population practice Transcendental Meditation, the TM-Sidhi Programme and Yogic Flying, negative trends, (including war deaths in trouble spot areas) and crime decrease.

The *Yogic* strategy of defence is the total value of defence. With reference to *Rishi*, it is dedicated to the silent quality of *Samhita*, the silent transcendental field of consciousness beyond space and time, the level of invincibility. In the maintenance of cultural integrity (as noted in Chapter Three), it is this strategy that provides coherence and integration in collective consciousness by disallowing the birth of an enemy or disruption from outside influences.

¹⁰⁷ Maharishi Mahesh Yogi, 1986, pp. 83-84.

The third strategy, *Adhidaivik* defence, is related to the influence of the *Grahas* (planets), *Rashis* (12 solar constellations) and the *Nakshatras* (12 lunar constellations), dealt with in Maharishi Jyotish (*Vedic Astrology*—including *Yagya*). It involves the *Devata* or dynamic aspect of *Samhita*—the unified dynamism of all the laws of nature as well as the influence of the celestial bodies. As noted:

The *Grahas*, *Rashis* and the *Nakshatras* project their positive and negative influences on the individual and on national life. It requires all-time vigilance to ensure their influence is always nourishing and supporting to life, so that individual and national consciousness is saved from any negative influence. This is called *Graha Shanti* in India.¹⁰⁸

Maharishi Jyotish is the science of transformation and prediction, which can free life from unhelpful influences and circumstances. This science is for the development of enlightenment—life free from dependence on surroundings and circumstances, and mastery over one's destiny. As stated:

The Maharishi Vedic Astrology program—Maharishi Jyotish program—comes from that level of all-knowing intelligence, 'Jyotishmati Pragyā', that can fathom the influence of the threads of karma in all directions. The Maharishi Yagya program is a means to accomplish perfection in life. Everything is possible through Maharishi Yagya performances.¹⁰⁹

In this strategy of defence, *Yagya* as Vedic engineering is critical for averting or dissolving negativity. The science of Vedic engineering involves action to promote enlightenment or action through which anything can be transformed. Maharishi Jyotish uses a precise mathematical approach, involving knowledge of cycles of time and transformation, identifying connections between the universe and the human physiology.

Indeed, according to *Jyotish*, the solar system has an influence on the human brain, the cell¹¹⁰, and the DNA. Nader, for example, identifies a one-to-one relationship between the planets (*Grahas*) and

¹⁰⁸ Maharishi Mahesh Yogi, 1998, pp. 153-154.

¹⁰⁹ Maharishi Mahesh Yogi, 1997c, p. 1.

¹¹⁰ As mentioned in Chapter Two, the sun (*Surya*) relates to the thalamus, etc..

the DNA.¹¹¹ Similarly, the 12 *Rashis*, the 12 *Bhavas* or houses, and the 27 *Nakshatras*, correspond to specific aspects of the physiology.¹¹² As a result of these interrelationships, there is an intricate web of connections between the individual, the environment, and the celestial bodies or cosmic counterparts.

As discussed, *Purushottama* is enlivened in the DNA, cell, brain, etc., during Yogic Flying. Therefore, due to the unique correspondence between the DNA, cell, and brain, and their cosmic counterparts, during Yogic Flying, *Purushottama* should also be enlivened simultaneously in these counterparts (the Cosmic body). Vedic engineering or Maharishi *Yagya*, specifically targets influences from the cosmic counterparts that can be favourably influenced, averting the danger that has not yet come. Performed by trained experts to affect a specific outcome, this kind of action is part of this systematic science and a means of defence.

The fourth strategy of defence, the *Adhibhutik* strategy related to *Chhandas*, is Vedic Architecture or Maharishi Sthapatya Veda. This, with *Dhanur-Veda*, includes a material or physical means of preventing the enemy. *Sthapatya Veda* provides details of how the built environment can be constructed so that life can be aligned to Natural Law and is discussed further in Chapter Six. Clearly, Vedic performance or *Yagya* relates to a range of action—all, however, involve “offering” at the transcendental level. This principle of offering as defence—as a means to promote the enlivenment of laws of nature that support an activity, culture, an aspect or process in

¹¹¹ Maharishi points out that the hydrogen bonds which make up the central axis of the DNA correspond to the sun (*Surya*); guanine, the heaviest constituent of DNA, corresponds to Jupiter (*Guru*), the heaviest planet; likewise, adenine corresponds to Saturn (*Sani*), cytosine to Mars (*Mangal*), thymine to Venus (*Shukra*), sugar to Mercury (*Budh*), phosphate to the Moon (*Chandra*), and the enzymes which act within the DNA (but are not a real part of the DNA) correspond to the ascending and descending lunar nodes called the shadowy planets or *Rahu* and *Ketu* in *Jyotish*. Maharishi Mahesh Yogi, 1998, p. 250.

¹¹² As considered in the following chapter, Nader explains that in the brain the Sun corresponds to the thalamus, the Moon to the hypothalamus. The other *Grahas* correspond to parts of the brain as follows: Mars—amygdala, Mercury—subthalamus, Jupiter—globus pallidus, Venus—substantia nigra, Saturn—putamen, *Rahu*—nucleus caudatus (head), *Ketu*—nucleus caudatus (tail). In the cell the correspondence is seen as the following: the Sun—nucleus, Moon—cytosol, Mars—mitochondria, Mercury—membranes, Jupiter—golgi apparatus, Venus—endoplasmic reticulum, Saturn—lysosomi, *Rahu*—endosome, *Ketu*—pores. In general, the *Grahas* relate to the basal ganglia, the thalamus and the hypothalamus, the 12 *Bhavas* relate to 12 cortical areas, the 12 *Rashis* relate to the 12 cranial nerves, and the 27 *Nakshatras* correspond to the 27 mono-aminergic groups of the brainstem. Nader, 2000, pp. 116-129. Maharishi Mahesh Yogi, 1998, pp. 247-256.

individual and social life that fosters evolution—can also be said to be expressed in tradition.

Traditions, Celebrations and the Enlivenment of Laws of Nature

While performance in the theatre, film and art has become the primary vehicle for contemporary cultural expression, local traditions and celebrations continue to have lasting use-value in community life. In Maharishi Vedic Science tradition has a role in the evolution of society. Discussing India's traditions, Maharishi explains that in the earth's orbit around the sun during the calendar year, the quality of life changes from day to day. These changes are varying qualities of Natural Law, which happen to be celebrated in India. The celebration of the different qualities of nature's intelligence each day and night, Maharishi adds, "naturally unifies, integrates, and harmonizes the collective consciousness of the whole population of India every day, day after day, throughout the year."¹¹³ As a result, tradition is a nourishing, unifying power for national consciousness. Each day marks a different quality of intelligence, which is enlivened by the individual in his or her daily routine. Furthermore, Maharishi comments, with respect to worship performed in the temples throughout the country, at morning, noon, evening and midnight, that this also integrates national consciousness, hour by hour.

Here traditional practices are said to maintain national consciousness in the same way that the alert mind maintains alertness in the body. Despite changes wrought by time, such traditions uphold India's cultural integrity. Maharishi emphasizes that on specific days a particular quality of intelligence can be enlivened in the consciousness of the people:

India has a tradition of celebrating festivals with reference to the structures and functions of the Laws of Nature as they have been portrayed in the Vedic Literature in terms of *Ganapati*, *Shiva*, *Vishnu*, *Surya*, *Devi*, etc....

On the day of *Maha Shivaratri*, the whole national consciousness wakes up in the quality of *Shiva*; on *Dipavali*, the whole national

¹¹³ Maharishi Mahesh Yogi, 1998, p 338.

consciousness wakes up in the consciousness of *Maha Lakshmi*; on the nine days of *Navaratri*, *Maha Durga* dominates national consciousness; on *Krishn Janmashtami*, the whole national consciousness is awake in that holistic quality of Natural Law lively in the name ‘*Krishn*’; on *Ram Navmi*, the quality of the administering intelligence of Natural Law lively in the name ‘*Ram*’ is awake in national consciousness. Every day in the Indian calendar (*Panchang*) brings to the awareness of the people some special quality of Natural Law.¹¹⁴

The unique relationship of name and form is alluded to here. The value of intelligence contained in the name “*Ram*”, for example, comprises the administering intelligence of Natural Law lively on the day of *Ram Navmi*. Thus, the purpose of each celebration is to maintain national integrity and enliven in awareness the particular quality of Natural Law or intelligence pertaining to each day as defined by the earth’s orbit of the sun. These celebrations and acts of worship have a profoundly unifying effect on collective consciousness. In this context, such performance can be seen to be much more than theatre, entertainment, art, sacred invocation, or preservation of archaic practices. It is a living, holistic activity that enlivens consciousness.

As noted earlier, David T. Hanson, has dealt directly with social and environmental issues throughout his career¹¹⁵; however, recently he has turned his attention to sacred places. This current work, it can be said, has shifted to the theme of offering—documenting shrines or performance locations in places such as India. Photographs from his *Cloud of Unknowing* series with titles such as *Shiva lingam*, *Yogamaya Temple*, *New Delhi*, *Shri Parsvanatha Jain Digambara Temple*, *Jaipur*, *Rajasthan*, and *Durga Pandal*, *Varanasi*, *Uttar Pradesh*, disclose Hanson’s preoccupation with sites of worship or focal points for offering.¹¹⁶

Gablik writes that Hanson has switched from his ravaged landscape images to a geography of hope—“photographing ritual spaces that humans around the globe create to express what they hold most sacred.”¹¹⁷

¹¹⁴ *Ibid.*, pp. 337-338.

¹¹⁵ Hanson, 1997.

¹¹⁶ Hanson, 2005, pp. 9-15.

¹¹⁷ Gablik, 2005.



Kailasa Temple, Ellora, India.
From The Cloud of Unknowing (1998–2005): A series of 108 Ektacolor prints
(15 x 18 1/2")
*David T. Hanson*¹¹⁸

As Huyler comments, such sites seem to be imbued with a spirit of place that is more intensified and vibrant with the attention given to them; pulsating with life, they combine the presence of the deity and the “accumulated force-fields of years of devotion.”¹¹⁹ As stated above, while there are different kinds of *Yagya*, according to Maharishi Vedic Science, *Yagya* is ultimately performance from the level of pure consciousness. It is offering at the self-referral level. *Yagya* is not simply a ritual performance that satisfies a local understanding of social action. It is performance from the level of the unified field of

¹¹⁸ Image printed with permission of the artist.

¹¹⁹ Huyler, 1992, p. 5.

self-referral consciousness. It is artistic performance that generates a positive, life-supporting influence. It is the most fundamental principle of offering at the self-referral level and a strategy of defence. In any consideration of art, creativity and performance practice, *Yagyic* performance can be seen to be the ultimate transformational act—an act that stimulates enlightenment.

Much recent performance and video installation art deals with problems of cultural identity, war, terrorism, and intolerance.¹²⁰ From the perspective of Maharishi Vedic Science, through the practice of *Yagya* these problems can be reduced and eventually eliminated. Such performance can be re-defined as creative practice or action that is celebratory, universally applicable, and potentially enlightening. In our time, *Yagya* and Yogic performance may be the most successful, artistic, unseen, “paradigm spinning” force of transformation and change. The theme of transformation with respect to the influence of the heavenly bodies and their interaction will continue to surface in the following chapter, which examines sun-dependent art, astronomically aligned monuments and the effects of viewing the structure and instruments of the Maharishi Vedic Observatory—which can be thought of as a site specific cosmic installation.

¹²⁰ Meyer-Dinkgräfe, 2003.

CAPTURING LIGHT—OUTER AND INNER
THE MAHARISHI VEDIC OBSERVATORY AS SITE SPECIFIC
COSMIC STRUCTURE, ASTRONOMICALLY ALIGNED
MONUMENTS AND SUN-DEPENDENT ART

*It is always easy to attract soul (or the universal essence) and particularly easy to keep it, by constructing an object fashioned so as to be influenced by it and to receive a share of it.*¹

—Plotinus

*The Vedic seers vision rta² as ranging over the vast spaces, moving straight to its farthest goal, laying out paths, ‘ordering’ the manifest universe. At rta’s command the waters flow; the dawns appear with unfailing regularity making the sky radiant, and the horses of the sun loosened to start their daily journey racing through space, and enlivening the world.*³

—Chandra Rajan

A means to chart the transformation of time and space through light, observatories, built by astronomers, learned scholars, and “divine” rulers, facilitate the charting of heavenly bodies and the derivation of astronomical calculations, allowing ascertainment of

¹ Plotinus discussing stone monuments, already ancient in his day—quoted in: Lippard, 1983, p. 29.

² Rajan defines *Rta* as the eternal and immutable law, physical and moral, that governs the entire universe and regulates every aspect of creation. Rajan, 2004, p. 269.

³ *Ibid.*

measurements of time, the prediction of cyclical events and celestial phenomena, and the expansion of scientific knowledge. With the understanding that consciousness is an infinite field of intelligence and that individual intelligence is cosmic, can further insights be gained into the potential for sun or light-dependent art, the uses of observatories and astronomically aligned structures, and even the significance of observatories in governance and rulership?

Certainly the relationship of the individual to the sun, moon, and celestial bodies is recognized and acknowledged in astronomy, observatory structures and sun-dependent art. Reflecting its centrality in our lives, the sun features prominently in a range of historical and contemporary monuments and artworks. Indeed, one could refer to sites, such as Stonehenge⁴ and Angkor Wat,⁵ and recent art, like James Turrell's *Roden Crater* and *Sky Space*⁶, as site-specific constructions that enhance perception, extend experience, and develop knowledge. All employ the naturally changing values of light in relation to the movement of the celestial bodies. As discussed earlier, the planets, constellations, and zodiac signs have their counterparts in the brain physiology. The celestial bodies, indeed, the universe, are not only located "outside" in space, but also "inside" within the physiology, within the structure of consciousness. Due to this relationship, according to Maharishi Vedic Science, if designed appropriately, the instruments of an observatory can create balance in the human physiology, promote growth to higher states of consciousness and enhance perception, facilitating the experience of "light filled awareness" or *Darshana*. When consciousness is lively in the value of *Purushottama*, when the individual is living higher states of consciousness, the relationship of the microcosm (the cell, DNA, etc.) to the macrocosm (the universe) is fully enlivened. Connections between the inner and outer are realized and revitalized.

⁴ Lippard, 1983, pp. 28-30. Honour and Fleming state that Stonehenge was initially created from 2100-2000 B.C.E.; they explain that the stones were carefully aligned on specific points on the horizon: sunrise on midsummer day, sunset on midwinter day, and the most northerly and southerly points of the moon-rise in the 2nd millennium B.C.E. Honour & Fleming, 1995, p. 18.

The sun has been associated with the 'male' aspect and the moon a 'female' aspect, leading to some theories that Stonehenge also may have served the purpose of linking male and female oriented activities and transitions in society. In Maharishi Vedic Science, both the sun and moon have their counterparts in the physiology.

⁵ Hancock & Faiia, 1999, pp. 113-198; Mannikka, 1997.

⁶ Rugoff, 1999, pp. 6-28.

The intimate relationship between consciousness and the structure of the universe is beautifully articulated and demonstrated in the Maharishi Vedic Observatory⁷. Addressing the significance of orientation and the different qualities of consciousness lively at various times of the day and year, the role of the observatory is to promote enlightenment and the cognition of one’s own consciousness as containing the universe within it. Like other astronomically aligned monuments, the Vedic observatory is located in reference to the celestial sphere. Throughout time, sites have been constructed, revealing a sophisticated knowledge of celestial phenomena and human acknowledgment of the order and intelligence of nature.

Stonehenge as Sun Temple



*Stonehenge, England*⁸

Used and adapted over 2,000 years (from the fourth to second millennium B.C.E.), Green argues that Stonehenge was a “sun temple”.⁹ Paterson states that the site was originally established in

⁷ A fully functional Maharishi Vedic Observatory has been constructed at Mandala One Village, Maharishi Vedic City, Iowa, U.S.A.

See: <http://maharishivediccity.net/attractions/observatory.html>.

⁸ Photograph, the author.

⁹ Approximately 700 years after the original Neolithic “henge” was created, 80 bluestones were brought from 150 miles away to form two concentric circles with their entrance directed toward the rising (northerly midsummer) sun. Additional modifications during the Bronze Age resulted in a large-scale circular, lintelled structure with inner horseshoe pointing to the midsummer sunrise. Still further changes included erection of a concentric circle and horseshoe of bluestones inside the exiting structures and, finally, around 1100 B.C.E., an extension to the sunrise oriented avenue. Green, 1993, pp.296-297.

3,100 B.C.E.¹⁰, while Critchlow argues that Stonehenge may have been laid out in a similar manner to that used in temple orientation prescribed by the *Manasara Shilpa Shastra*¹¹. He explains that after the site is chosen, a central pillar is placed (used as a *gnomon*—a device that casts a shadow) and a circle traced around it. Shadows thrown onto the circle at dawn and dusk are marked to denote the east-west axis. Then the north-south axis is delineated, establishing a square or “quadrature” of the solar system. In this process a “fish” shape is drawn defining directions in space.¹² Critchlow states that while there is no evident connection between Stonehenge and the Vedic texts, the “geometry and “rite” of orientation appears to be “universal.”¹³

Official guidebooks state that ever since the 18th-century it has been acknowledged that the axis of the Sarsen stone circle points to where an observer at the center of Stonehenge would see the sun rise on the longest day of the year in its most northerly position on the horizon:

The lines joining the four Station Stones could also have marked the most northerly and southerly positions on the horizon of the risings and settings of the sun and moon, and that the latitude of Stonehenge was chosen so that pairs of these directions would be at right angles.... It has also been claimed that Stonehenge served as an observatory for very precise observations of the extreme risings and settings of the moon.¹⁴

Likewise, the Babylonians and Chinese constructed observational instruments over 4,000 years ago. Other objects have been found that indicate that Bronze Age man was an accomplished astrologer.

Gold Calendrical Cone Forms

Archeologists have unearthed golden calendrical cone forms in Europe commonly referred to as “gold hats”, since it has been speculated that Bronze Age oracles may have worn them. Four of these

¹⁰ Paterson, 2002.

¹¹ Critchlow, 1978, pp. 63-65.

¹² Bonshek, 1996a, pp. 409-411.

¹³ Critchlow, 1978, p. 64.

¹⁴ English Heritage, 1995, p. 20.

objects have been found at sites in Switzerland, Germany and France over the past 167 years. The symbols on one of the ‘hats’ are a logarithmic table, enabling the movements of the sun and moon to be calculated. Bronze Age people would have been able to make empirical astrological observations to determine the appropriate time for sowing, planting and harvesting crops.¹⁵ Paterson states that archeologists in Germany have also found an accurate depiction of the cosmos embossed in gold on a 3,600 year-old disc, which, it has been proposed, would lead to the site of a German “Stonehenge”. These instruments provide evidence of a fairly sophisticated knowledge of astrology. As Paterson notes:

The disc adds to a growing body of evidence about the Bronze Age in Europe, which is causing historians to revise radically their understanding of the period. Until recently the era was considered to have been relatively primitive. Scientists are beginning to discover, however, that Bronze Age man was a highly adept astronomer whose religion was intrinsically linked to the heaven's movements. The disc bearing elaborate gold leaf images of the sun, 32 stars, and a crescent moon, was found three years ago at the site of a Bronze Age camp near the town of Nebra in East Germany.¹⁶

From these findings, historians and archeologists conclude that Bronze Age culture did not suffer from lack of knowledge of celestial phenomena. Historically, observatories have been constructed in sites world wide based on knowledge passed down through the ages and additional scientific discoveries and technological developments.

Observatories in Persia, China, India, Europe and Cambodia

Adding to work in Persia and Europe¹⁷, in 18th-century India Sawai Jai Singh (1688-1743) built observatories or *Jantar Mantars* that can still be viewed in Delhi, Jaipur, and Ujjain¹⁸. Earlier during the Ming

¹⁵ Paterson, 2002.

¹⁶ *Ibid.* One of the “gold hats” is displayed at the *Historisches Museum der Pfalz* in Germany.

¹⁷ For example, the Maragha observatory in Central Asia (1259) and Tycho Brahe’s observatory which operated for 20 years.

¹⁸ Singh, 1993b, p. 183. Astronomy developed rapidly in India from 400 to 1,200 A.D. with the work of Varahamihira (d. 587), Aryabhata (b. 476), Bhaskaracarya I, Brahmagupta, Lalla, Vateshvara, Sripati, and Bhaskaracarya II (b. 1114). Later astronomers included Mahadeva,

Dynasty in China, instruments such as the *Armillary Sphere* and the *Abridged Armilla* (1439) were built to chart celestial bodies; following this in the 17th and 18th-centuries during the Qing Dynasty new instruments were constructed¹⁹—some of these are on display at the Beijing Ancient Observatory. In Europe, by Jai Singh's time, Nicolaus Copernicus had already published *On the Revolutions of Heavenly Spheres*²⁰ reviving the Greek idea of a heliocentric universe.

Padmanabha, Makaranda, Keshava, Ganesha Daivajna, and Nityananda. Some of the instruments used during that time and before Jai Singh include the: *Nadika Yantra* (clepsydra, outflow water clock), *Ghatika Yantra* (sinking bowl clepsydra), *Nadivalaya Yantra* (equinoctial sundial), *Phalaka Yantra* (sundial), *Kartari Yantra* (equinoctial sundial), *Dhruvabhrama Yantra* (measuring the time by the rotation of the Big Dipper), *Kapala Yantra* (hemispherical sundial), *Pratoda Yantra* (whip shaped gnomonic device), *Yantraraja* (astrolabe), *Turiya Yantra* (quadrant), and, *Golananda* (armillary sphere). Those displayed in Jai Singh's *Jantar Mantars*, include the: *Samrat Yantra*; *Jai Prakash Yantra*; *Rashi Valaya Yantra*; *Ram Yantra*; *Chakra Yantra*; *Digansa Yantra*, *Kapali Yantras*; *Dakshino Bhatti Yantra*; *Kranti Yantra*; *Unnatasha Yantra*; *Narivalaya Yantra*, *Shasthansa Yantra*; and *Yantra Raj*. Sharma notes that Jai Singh reinvigorated Indian astronomy (a discipline that drew from Hindu and Islamic traditions) by designing instruments, building observatories, compiling a comprehensive library, and sending a fact-finding mission to Europe during his 20-year long career. Sharma, 1995, pp. 4-7.

¹⁹ Instruments that can be seen at the Beijing Ancient Observatory include: the Quadrant (for measuring altitudes or zenith distances of celestial bodies); the Ecliptic Armilla (measuring longitude difference and latitudes of celestial bodies and the 24 solar terms); the Altazimuth (for measuring azimuths of celestial bodies); the Celestial Globe (for measuring altitudes, azimuths of celestial bodies as well as the time and azimuth of the rising and setting of celestial bodies); the Sextant (designed for measuring the angular distance less than 60° between any two stars and the angular diameter of the sun and moon); and the Equatorial Armilla (measuring true solar time and right ascension difference and declination of celestial bodies). This observatory also includes the Azimuth Theodolite (1715, Qing Dynasty) (for measuring azimuths and altitudes of celestial bodies), the Abridged Armilla (1439, Ming Dynasty) and New Armilla (1744, Qing Dynasty) (for measuring true solar time and right ascension difference and declination of celestial bodies). Just as we locate cities on the globe using latitude and longitude, astronomers locate stars and celestial objects through declination and right ascension in the equatorial system (longitude indicates a city's position east or west along the earth's equator; latitude indicates a city's position north or south of the earth's equator).

In addition, the Azimuth is a term used in the horizontal coordinate system; it is the horizontal component of a direction (compass direction) and is measured in degrees around the horizon (usually from north toward the east, i.e., clockwise). The horizontal coordinate system is a celestial coordinate system using the observer's local horizon as the basic plane. As such, the sky is divided into the visible upper hemisphere, and the lower hemisphere that can't be seen. The pole of the upper hemisphere is called the *zenith*. The pole of the lower hemisphere is called the *nadir*. The coordinates are the altitude (the angle between the object and the observer's local horizon) and the azimuth (the angle of the object around the horizon). Since this system is fixed to the Earth rather than the stars, the altitude and azimuth of an object change with time, as it appears to drift across the sky. Furthermore, as the horizontal system is defined by the observer's local horizon, an object viewed from different locations on earth at the same time will have different values of altitude and azimuth. Horizontal coordinates are used for determining the rise and set times of an object in the sky.

²⁰ Copernicus (born in Poland, Mikolaj Kopernik) published this groundbreaking treatise in 1543. Nader points out that in the 4th-century B.C.E., the "concept of a heliocentric world system by



*The Altazimuth, Beijing Ancient Observatory*²¹

Evidently, the mobility of the earth was, likewise, not new to Indian astronomy. As Sharma points out, the scholar Aryabhata (b. 476) explained how, in his *Ayrahatiya*, the cause of night and day was based on the rotation of the earth on its axis.²² Also available in Jai

Aristarchus of Samos emerged” as a dominant perspective which became the basis for “the Almagest of Ptolemy in the 2nd -century A.D. and for the work of Copernicus in the 16th -century A.D.”. Nader, 2000, p. 463.

²¹ Photograph, Lee Fergusson. Made in 1673, the *Altazimuth* instrument determines the azimuth of celestial bodies.

²² Sharma, 1995, p. 311.

Singh's era was Kepler's *The New Astronomy*²³ (expounding the first two laws of planetary motion), Newton's *Principia*,²⁴ and, in 1609, Galileo had built a telescope for observing lunar motions, phases of the planet Venus and the moons of Jupiter.²⁵



*The Equatorial Armilla, Beijing Ancient Observatory*²⁶

²³ Published in 1609.

²⁴ The *Principia* described the laws of mechanics and universal gravitation with which the orbital motion of celestial bodies could be precisely calculated.

²⁵ Sharma, 1995, p. 10.

²⁶ Photograph, Lee Fergusson.



*Jai Singh's Jantar Mantar, Delhi*²⁷

In spite of the proliferation of European developments up to and during the period of Jai Singh, Singh's Jaipur *Jantar Mantar* was inspired by an observatory in Afghanistan at Ai Khanum (a colony associated with Alexander the Great)²⁸ and he continued to promote the work of earlier Islamic scholars in the tradition of Nasar al-Din al-Tusi and Ulugh Beg.²⁹

In fact, as Mookerjee and Khanna state, Indian mathematicians were no strangers to working with astronomical calculations:

Indian mathematicians have long worked with number of the order of billions, even conceiving of infinity as a unit. The smallest measure of time mentioned by the Indian astronomers is the *truti*, 1/33,750 second. The unit of time required for the passage of the sun over an atomic object is mathematically calculated in the *Siddhanta-siromani* to be 17,496,000,000 *paramanus*; *paramanus*, 'extreme atoms', are generally

²⁷ View from *Samrat Yantra* with *Jai Prakasa Yantra* (foreground) & *Ram Yantra* (background). Photograph, the author.

²⁸ Singh, 1993b, p. 183.

²⁹ Sharma, 1995, p. 316.

measured as being between 1/1,000,000 to 1/349,525 inch. Mathematical units of time were considered an integrated category for recording observations of a constellation correct to one second. There were three ranks of time. The first, cosmic or epochal time, is referred to the eternally recurring cosmic ages. The four ages, or yugas, are calculated to be in the order of ratio of 4 : 3 : 2 : 1, each of which precedes the other until the universal cataclysm.... The second range of time is the solar or lunar calendar which determines the days, weeks, months and seasons. The third rank, the smallest unit of duration, is horologic time. To achieve accuracy in calculation, the span of a day was converted into smallest atoms of time. Thus, a day was conceived of as lasting for 86,400 seconds and is further divided into 46,656,000,000 moments.... The mean position of a planet is calculated in relation to the number of revolutions during a yuga, or age.... Extant astronomical charts were used to ascertain the sun's altitude and zenith distance and its declination; to find the declination of a planet or star; to find the degree of azimuth of a planet or star; to determine celestial latitudes and longitudes; to calculate position during eclipse. For the same purposes, astronomical observatories, or Yantras, were also built.³⁰



*Digansa Yantra (foreground), Jai Singh's Jantar Mantar, Jaipur, Rajasthan*³¹

³⁰ Mookerjee & Khanna, 1977, pp. 114-117.

³¹ Photograph, Lee Fergusson.

The Indian conception and measurement of time allowed astronomers to record the movement of constellations precisely to one second. It also allowed for the understanding of cosmic time in relation to “the smallest atoms” of time. This knowledge was available to Khmer culture and applied to the construction of Cambodia’s national monument, Angkor Wat.³²

Revealing that earlier societies had sophisticated knowledge of the celestial bodies and calendrical systems, architectural structures and monuments in Mayan, Ancient Egyptian, and Khmer cultures, have been shown to mirror the constellations and embody mathematical relationships that refer to the progression of definite epochs throughout time.³³



*View of Angkor Wat, Siem Reap, Cambodia*³⁴

³² In his discussion of Vedic cosmography and astronomy, Richard Thompson suggests, “Vedic cosmology, or something very similar to it, may once have been widely accepted throughout the world.” Thompson, 2004, p.62. In one example, he notes that a description of the Vedic concept of the *Bhu-Mandala* or earthly planetary system, is similar to descriptions in Norse mythology, and that the idea of “three worlds with a universal axis” can be found in “ancient cultures of Egypt, India, China, Greece and Mesopotamia, and it is also found in tribal societies throughout Asia, Africa, and the Americas.” Thompson, 2004, pp. 63-64.

³³ Hancock & Faia, 1999.

³⁴ Photograph, the author.

Mannikka states that one of these, Angkor Wat, is so mathematically precise in its layout that “if our current calendrical systems were destroyed in the future but Angkor Wat remains as it stands today, these systems could be derived from the temple once again.”³⁵ Indeed, Angkor Wat can be described as a cosmic “memory map”, as discussed in Chapter Three. It contains within its structure, dimensions, proportions and bas-reliefs, information disclosing the progression of time in terms of the *Yugas* and the movement of the celestial bodies, i.e., the “history” of the universe. Not surprisingly, as Mannikka and Hancock disclose, structures like Angkor Wat intrinsically functioned not only as temples but also as observatories.



*View of Angkor Wat*³⁶

³⁵ Mannikka, 1997, p. 69.

³⁶ Photograph, the author.

Art, Light, and the Cosmos

While ancient monuments may present an edifice acting as a window into man's relationship to the cosmos, this relationship has also fascinated 20th-century artists. Alexander Calder held that his approach to art was influenced by an event he witnessed as a youth. He noted: "off Guatemala I saw the beginning of a fiery red sunrise on the one side and the moon looking like a silver coin on the other.... it left me with a lasting sensation of the solar system."³⁷ As such, Calder's art was derived from a sense of the form of the universe. As he stated

What I mean is that the idea of detached bodies floating in space, of different sizes and densities, perhaps of different colours and temperatures, and surrounded and interlarded with wisps of gaseous condition, and some at rest, while others move in peculiar manners, seems to me the ideal source of form. I would have them deployed, some nearer together and some at immense distances. And great disparity among all the qualities of these bodies, and their motions as well.³⁸

As Recht observes, "some of Calder's compositions are filled with celestial conjunctions, and other coincidences, which can be observed as the eye becomes aware of the recurrent cycles of movement."³⁹

Of the all the celestial bodies in our solar system, the sun is most often referenced in art. In 1960s kinetic art, constructing "light machines", artists researched the dynamics of illumination. Using revolving motors, Liliane Lijn (*Liquid Reflections*, 1966-1967) and Julio Le Parc (*Continuel-Lumiere-Cylinde*, 1962) exploit and manipulate beams of light.⁴⁰ Brett states that there were others who created related innovative effects, such as P. K. Hoenick—a Professor in the Department of Architecture of the Israel Institute of Technology in Haifa. Inventing a system of movable reflectors and filters, a "cosmic projector" tracing patterns of sunlight on the walls of a darkened room, Hoenick experimented with "sun art". As Brett states,

³⁷ Calder, in Brett, 2000, p. 11.

³⁸ Calder, in Arnason, 1971, p. 60.

³⁹ Recht, in Arnason, 1971, p. 29.

⁴⁰ Brett, 2000, p. 48.

Hoenicke's cosmic film-projector, "with the sun its lamp and the earth its motor...moved rows of reflectors relative to the sun."⁴¹

More recently, artists like Turrell relate celestial bodies to concepts of light, experience and perception. Ione comments, however, that it is important to distinguish between the context of Turrell's work and that of earlier cultures, since Turrell uses state-of-the-art technology and modern scientific ideas about perception.⁴² Despite this, Turrell is interested, as Ione puts it, in "facilitating higher levels of experience" thereby connecting his work with that of earlier societies.⁴³ Ultimately, Turrell himself states, "I have an interest in...the light perceptible only in the mind. A light which seems to be undimmed by entering of the senses.... Light has a regular power for me. What takes place in viewing a space is a wordless thought."⁴⁴ Whether intended or not, Turrell's description resonates with the Vedic understanding of the Transcendent, the silent level of the mind. Influenced by quantum physics, Turrell's work deals with the ephemeral nature of light and how it "has an awareness of when we're looking and when we're not. [How]...light actually behaves differently when we observe it,"⁴⁵ and how it creates "spaces of uncertainty."⁴⁶

In response to work's like *Soft Cell* (1992)—a light/sound-proof chamber giving a sense of unbounded space—Turrell's art is often discussed in spiritual or mystical terms⁴⁷ and apparently has transformative effects on the viewer's perception. Obviously deeply moved, Count Panza di Buono optimistically claims that if everyone had the kind of experience generated by Turrell's art, "no one would commit suicide and violence would stop."⁴⁸

Certainly, some of his works (such as *Roden Crater*, a volcanic cinder cone in the Arizona desert, and *Sky Space* constructed on a hillside in Cornwall) require a pilgrimage of sorts in order to experience them. Playing with the dynamics of illumination, such works require the sun's movement over time to make their mark. Clearly, those of Turrell's works that are sun-dependent can be said to

⁴¹ *Ibid.*

⁴² Ione, 2004, p. 194.

⁴³ *Ibid.*, pp. 194-195.

⁴⁴ Turrell, in Ione, 2004, p. 195.

⁴⁵ Turrell, in Rugoff, 1999, p. 28.

⁴⁶ Rugoff, 1999, p. 25.

⁴⁷ *Ibid.*, p. 26.

⁴⁸ Count Panza di Buono, in Rugoff, 1999, p. 26.

conceptually owe allegiance to early monuments. They allow the perceptual apparatus of the body to extend itself. They enlarge rather than confine the range of the viewer's experience, and, in this sense, they create a feeling of or move toward unboundedness.

As Rugoff comments, "One of the chief effects produced by Turrell's work is an experiential blurring of boundaries, and in some cases a correlation of inner and outer space."⁴⁹ Speaking of Turrell's art in the context of earlier structures may, in one sense, seem fanciful. However, both connect the human with the celestial; both invite us to inquire into our relationship to the cosmos.

The Sun—Sustainer and Signifier of Light, Knowledge, and Order

The celestial bodies have tremendous power and significance in our life, from a practical level, creating the possibility for existence, to the visionary and symbolic. Often the focus of religious and cultural practices—from Japan, China, South Asia, Indonesia, sub-Saharan Africa, ancient Egypt, and Russia, to Greek, French, Mayan, Aztec, Andean and Slavic societies⁵⁰—the sun and light signify life and knowledge. Zaleskaya and Piatnitsky explain that while sun worship is incompatible with Christian teaching, even in Christian art and writing the figure of Christ is portrayed as the true sun, radiating light from heaven. Using the sun as a metaphor, Zaleskaya and Piatnitsky state that the Gospels exhort: "And His face did shine as the sun, and His raiment was white as light" (Matthew, 17.2),⁵¹ and in Byzantine art, they find, color conveys religious meaning. For example, red refers to purifying fire, the source of life-giving heat, the symbol of life, and the token of future salvation of humankind. White symbolizes divine light, purity and exaltation of the spirit. Blue represents the transcendental world.⁵² *The Descent of the Holy Spirit*, a 12th-century Byzantine icon in the Hermitage Museum, Zaleskaya and Piatnitsky observe, depicts white-and-red and red-and-gold lights radiating from

⁴⁹ Rugoff, 1999, p. 26.

⁵⁰ Singh, 1993a.

⁵¹ Zaleskaya & Piatnitsky, 1993, p. 258.

⁵² *Ibid.*

the Holy Spirit associated with “the fiery red rays of the sun that give light and warmth and awaken life in all living beings”.⁵³

The sun was also revered in China. Tao notes that this is evident in historical remains from the Yangshao culture (5,000-3,000 B.C.E.), which include the sun’s image on potsherds.⁵⁴ In the Da-wen-kou culture (4,300-2,500 B.C.E.) in eastern China, pottery was found with images of the sun with eight horns and a picture of the sun with a portion of a cloud, the sea, fire and mountains. This latter image is considered by scholars to be a primitive form of Chinese script (similar to bone inscriptions of the Shang Dynasty, c.1,500-1,000 B.C.E.). Tao notes that one meaning of the pictogram is “day”. The Chinese pronunciation of this character is “*ri*”.⁵⁵

In Europe during the 18th-century, the sun and light were not only associated with reason but also with enlightenment and knowledge. Light came to signify clarification and order. Artists such as the English painter, J.M.W. Turner devoted themselves to the theme of light. In his final moments, Turner explicitly referred to the sun as God. Turner’s declaration, Morley suggests, represents an underlying theme of western philosophy and literature: light and the sun are inextricably linked to the idea of rational thought and order. Our world and culture revolve around the sun:

“The sun is God.” J M W Turner’s last words, spoken on his deathbed, capture in stark outline the source of his faith, and also the motive of his art. But Turner could have been speaking for all of us, for we are very much a solar culture. As a central metaphor, the attributes of the sun not only illuminate our art, but also radiate throughout our philosophy and literature as a symbol and guide to what is to be most valued. Indeed, the very notion of reason, the mental faculty that separates us from the other animals, can be seen to originate in a celebration of what we perceive as the fundamental effect of light: clarification, definition, ordering.⁵⁶

⁵³ *Ibid.*, pp. 256-258.

⁵⁴ Tao, 1993, p. 153.

⁵⁵ *Ibid.* It is interesting to note that while the relative meaning of the sound *ri* in Chinese pronunciation is “day”, this sound is the same sound as the first letter of *Rk*. On the level of self-referral consciousness, *Rk* (“*Ri*” + “*K*”) represents the collapse of dynamism to a point, where “*Ri*” is infinite dynamism and “*K*” is the point value. As discussed in various essays on the Vedic concept of cosmic order or *Rta* (“*Ri*” “*ta*”), in art, philosophy, religion, and social systems, the idea of an illuminating, ordering principle, governing life persists. Khanna, 2004. *Rta* also relates to the sun.

⁵⁶ Morley, 1999, p. 37.

The theme of order as related to light and the sun is extended in Vedic theory. According to Khanna and other scholars, the Vedic concept of order is expressed in the term *Rta*, or Cosmic order, which is found inherent within nature, art, architecture, social structures, life as a whole,⁵⁷ and with respect to rulership or governance. In the case of an “ideal” ruler, *Rta* is embodied in ideal governance or rulership related to the influence of the sun. In this association of the ruler with the sun, the ruler is considered enlightened, part god, or “divine”. Some rulers made obvious their apparent relationship to solar power, by initiating and constructing elaborate sites honouring the planets. In one example, Mannikka explains that historians described the Cambodian ruler, King Udayadityavarman, as a “god-king” or *devaraja*. While she finds this reading initially stemming from a mistranslation, she reveals that an 11th-century inscription describes King Udayadityavarman as possessing a “subtle inner self” that resided in a lingam in the king’s royal pyramid-temple. Further inscriptions refer to him as having within himself a portion from *Shiva*.⁵⁸ As Mannikka states, obviously, the king was felt to possess some degree of the divine nature of *Shiva*, a supreme deity.

As Nader points out, according to Maharishi Vedic Science, in the physiology *Shiva* administers silence and the lingam form corresponds to the whole brain. When the brain is functioning optimally, the individual experiences pure consciousness and can gain enlightenment, the full realization of the self as the cosmic Self, the subtlest value of consciousness or selfhood. Applying this understanding, if King Udayadityavarman possessed the value of *Shiva* lively in the brain (the lingam), one could say that he would, indeed, possess a “subtle inner self”. In fact, from the Vedic perspective, everyone possesses a subtle inner self. It’s simply a matter of being awake to or open to this reality. Such inner wakefulness is the governing force of life. As introduced in Chapter Three, the light of consciousness can be understood as inner wakefulness, the source and governor of life; as such, light and the sun can have a role in rulership or governance.

⁵⁷ Khanna, 2004.

⁵⁸ Mannikka, 1997, p. 6.

Rulership and Collective Consciousness

Maharishi states that the life-giving sun has the inexhaustible power to nourish everything, helping to facilitate the administration of life. Administration, he asserts, occurs via three hierarchical levels through the power of Natural Law. Thus, three aspects of rulership can be identified, including:

- 1) *Purushottama*, the administration of the universe through Natural Law;
- 2) rulership of the life-giving sun; and
- 3) rulership of enlightened leaders⁵⁹ represented by the Solar Dynasty on earth.

Maharishi indicates that, when embodying *Purushottama*,⁶⁰ great rulers maintain a life-giving ability by upholding the nourishing power of the sun in their awareness. This is the principle of ruling in the tradition of the sun, which Maharishi states, accounts for the history of Solar Dynasties throughout the world. In this context, the “ordering” or “clarifying” value associated with light and the power of the sun is displayed in rulership supported by the life giving sun. Rulership also involves the maintenance of coherence in collective consciousness.

Examining Chinese tradition and socio-political order, Chung notes that Confucian teaching about the importance of order with respect to the moral example of the ruler is expressed as follows:

Jun zheng mo buzheng. Yi zheng jun er guo ding yi.

When the ruler is correct, all his subjects will not deviate from correctness. Just by making the ruler correct the country will be in proper order.⁶¹

In this statement the ruler’s so-called “correctness” apparently filters out to stimulate and encourage order in society.

As already stated, from the perspective of Maharishi Vedic Science, a great ruler administers by having his or her awareness

⁵⁹ King *Ram* portrayed in the *Ramayana* is considered to be one example of such enlightened leadership in the Vedic tradition.

⁶⁰ Maharishi Mahesh Yogi, 1995a, pp. 36-39. As Maharishi states: “A ruler of a territory may be anyone in the infinity of time, but if he aligns his awareness with *Purushottam*, his administration will inherit the qualities of order, freedom, bliss, and the ability to nourish all.” 1995a, p. 43.

⁶¹ Mencius, in Chung, 2004, p. 157.

established in *Purushottama*.⁶² As such, the ruler's awareness inherently draws from the second level of rulership, the life-giving sun; "correctness", in this context, is expressed in thought, speech, and action in accord with Natural Law—always life-supporting, orderly, nourishing, and always spontaneously right. This is the source of what can be referred to as good nature. In another instance, according to Chung, humans should have faith in their own good nature, because, as Mencius states, "Everything is inbuilt within the self. (*Wanwu jie bei yu wo*)".⁶³ From the Vedic understanding, the self is the basis of life and the source of the "good nature" of the individual and society. It is the cosmic Self, the level of *Purushottama* or the cosmic administration of Nature. Everything is contained within, and governed from, here. Therefore, certainly, everything can be said to be within the Self. However, the individual can be also be affected by the quality of collective consciousness.⁶⁴

How does this manifest in the life of a leader or the functioning of government—especially in an age when the population may not be living a high degree of Natural Law? Recalling the previous discussion of group practice of technologies of consciousness, it was established that *Purushottama*, enlivened during Yogic Flying, creates coherence for both the individual and the population. Increased coherence in collective consciousness has an impact on the individual and society, but, more importantly, it also has an impact on the governing body or ruler of a population. Indeed, Maharishi asserts that the leader or Head of State is like an innocent mirror reflecting the relative coherence or incoherence in national consciousness, or, put another way, the degree of Natural Law lived by the population at any given time. Therefore, if the collective consciousness is incoherent, the leader's actions will reflect that lack of integration. Conversely, if the collective consciousness is lively in *Purushottama*, the leader will display integrated thinking and action; they will be an "ideal" leader. This

⁶² Maharishi comments that, ultimately, it is the intelligence of Natural Law that governs because *Purushottama* is that level of intelligence that "contains all levels of intelligence within it; it contains the whole universe within it." 1995a, p. 378.

⁶³ Mencius, in Chung, 2004, p. 166.

⁶⁴ As discussed in Chapter Three, the quality of collective consciousness differs throughout the *Yugas*. The degree to which people are able to live Natural Law will determine the kind of era (religious codes, philosophy, quality of life, etc.) that is lived and documented in historical records—for example, whether it is a more peaceful, constructive, creative age or a destructive, war-torn age of suffering and hardship.

principle holds for leaders in general— (i.e.; monarchs, Heads of State, or government as a whole).

Maharishi goes on to add that it is the collective destiny of the nation that determines the leader's actions. In this sense, a population or a nation (with its evolving collective consciousness) is like an entity with its own history of previous actions and accrued influences. For this reason, a country can benefit from *Jyotish* and *Yagya*, which mitigate potential, untoward influences. In sum, when collective consciousness is coherent, government and administration will be spontaneously life supporting, harmonious, and constructive for everyone, taking into account the different needs of the people. As Maharishi states:

Government is the pure innocent mirror of the nation, faithfully reflecting whatever is presented to it.... Every decision of government is the expression of national consciousness. National consciousness governs the activity of every nation in the same way that the consciousness of the individual governs the activity of the individual... The achievements of government are the achievements of national consciousness, and every individual in the nation shares the credit for them. Likewise the failures of government are the failures of national consciousness, and every individual shares the blame for them. Although the members of every government have their own individuality and their own opinions of the nation's needs, while engaged in the process of governing, their actions are determined by factors beyond their personal lives—by the collective destiny of the nation....The ruler cannot rule with full justice, even if his own thinking is right and just, if national consciousness is not coherent and integrated.⁶⁵

This being so, the issue of coherence in collective consciousness cannot be over-emphasized. A ruler cannot rule with full justice, even if his or her thinking is “full of integrity” or “right”, if the national consciousness is incoherent. But when collective consciousness is lively in the value of *Purushottama*, administration and leadership can be ideal.

How is this principle illustrated in terms of the experience of “illumination” on the level of consciousness? Maharishi explains that the *Purush* (silence) level of intelligence of each individual is like a

⁶⁵ Maharishi Mahesh Yogi, 1995a, pp. 61-62.

light bulb in a room—when all the bulbs are illuminated the total light in the room represents *Purushottama*. It is this level of supreme intelligence, enlivened by the group performance of Yogic Flying, that raises the “quality of rulership of any government to the supreme quality of rulership of *Purushottam*.”⁶⁶ On the individual level, one could say that consciousness assumes that value of “light filled awareness.” On the collective level, due to the infinite correlation value of consciousness, beyond time and space, *Purushottama* radiates and illuminates life. Thus, fully awake consciousness can be a palpable experience with constructive outcomes for human existence. In this situation, fully awake consciousness (in accord with the nourishing power of the sun—the second level of administration of life) is directly related to the seamless governance of Nature, the supreme rulership of *Purushottama*, and coherence of rulership at the governmental level.

To recap, the orderly structure and sequential unfoldment of consciousness at the unmanifest level promotes the infinite order of life—from the inner workings of the cell and brain, to individual life, the world family of nations, the environment, the planets, and constellations to the cosmos. The brain has the capability to cognize this range of consciousness, from the microcosm to macrocosm.

Discussing the relationship between human insight and the neuronal energies, Brett notes that, even during the early 19th-century, Goethe and the Czech scientist, Jan Purkinje, studied the potential capability of the mind and human imagination. For example, Brett writes that Purkinje’s drawings (afterimages) of his closed-eye visions bore “striking resemblances to both macrocosmic and microcosmic phenomena.”⁶⁷ From the perspective of Maharishi Vedic Science, the structure of Veda governs life at all levels. Observations of this orderly, life-giving administration of Natural Law through the transitions and relationships of the celestial bodies defining time and engendering life have been represented in art and revered and worshipped in cultures world-wide. Through fully lively consciousness, the sun can be seen to directly impact rulership, facilitate the smooth operation of governmental administration, and the different areas of collective life.

⁶⁶ *Ibid.*, pp. 378-379.

⁶⁷ Brett, 2000, p. 51.

The Constellations and Inner and Outer Forms and Processes

How have the ideas of rulership and the influence of the heavenly bodies affected the design and purpose of selected sites and structures? As Hancock and Mannikka reveal, monuments, temples, churches and cities, have been constructed taking into account orientation with respect to the easterly rising sun, the North Star and the constellations. Indeed, our sense of direction in relation to the movement of the celestial bodies and the unfoldment of time can be considered in terms of architectural form, site layout, *Devatas*, and physiological structures and functions. In examining principles of architecture and town planning in more detail, the next chapter on *Maharishi Sthapatya Veda* will look at the practical implications of this knowledge, including the deeper impact of issues such as direction and orientation.

Coming back to the influence of the sun, Tao observes that even nomadic peoples oriented their tents towards the east, toward the rising sun:

The Turkic peoples of the steppe also worshipped the sun. The door of their Khaqan's tents faced east because they venerated the morning sun. The Khaqans of Uighur, a Turkic-speaking tribe, usually had the title of "Kun ai tangrida...Khaqan," of which "kun" meant "sun" and "ai" "moon".⁶⁸

Moreover, taking into account the constellations and planets, Hancock argues that the site plan of Angkor reveals the pattern of stars in the sky region surrounding the constellation of Draco on the spring equinox in 10,500 B.C.E. He also states that the Pyramids at Giza model the constellation of Orion, and the Sphinx is aligned to Leo at dawn on the spring equinox in 10,500 B.C.E.⁶⁹ In examining these structures, Hancock reveals that they mirror specific constellations.⁷⁰ They represent a snapshot of space from a defined location at a particular point in time. Hancock explains that the proportions of the layout of Angkor Wat relate to the length of the four *Yugas* or epochs identified by Vedic scholars and we are presently living in a *Kali Yuga*,

⁶⁸ Tao, 1993, p. 162.

⁶⁹ For diagrams illustrating these alignments, see: Hancock & Faiia, 1999, p. 98 & p. 130.

⁷⁰ The astronomer, Jean-Pierre Verdet notes that the constellations of the Bull, Scorpion, and Lion, can be traced to the Euphrates valley around 4,000 BCE. Verdet, 1992, p. 16.

which began in 3,100 B.C.E.;"⁷¹ he goes on to analyse the numerical significance of the different *Yugas* with respect to the precession of the equinoxes.⁷²

In addition, devoting an entire volume to an analysis of Angkor Wat, Mannikka examines space, time, and kingship as represented by the temple's structure, layout, and proportions, and its relationship to celestial bodies. Mannikka states that the establishment of the solar (*Surya*) lineage of kings, the *Suryavamsa*, was recorded in Khmer culture,⁷³ and that Angkor Wat was built during the reign of King Suryavarman II. She also explores the bas-reliefs adorning the galleries in terms of Vedic knowledge, concepts of time and divinity. She points out that Angkor Wat was dedicated to *Vishnu* and states that one of *Vishnu's* achievements was as his dwarf avatar, taking three steps to encompass the earth, air, and heaven.⁷⁴ The steps symbolize the sun's point of rising, its zenith, and point of setting.

⁷¹ Hancock & Faiia, 1999, p. 150. It is interesting to note that scholars identify the original establishment of the site of Stonehenge as 3,100 B.C.E.

⁷² The term "precession" refers to the "wobble" of the earth on its axis (forming a cone); the term "ecliptic" refers to the annual path of the sun (a great-circle) in the celestial sphere, as seen from the earth. The plane of the ecliptic (the plane of this path) intersects the celestial equator (the projection of the earth's equator on the celestial sphere) at an angle of approximately 23°27'. The two points at which the ecliptic intersects the celestial equator are called the equinoxes. (The sun is at the vernal equinox around March 21 and the autumnal equinox around September 23. The summer and winter solstices are halfway on the ecliptic between the equinoxes. The sun arrives at these points about June 21 and December 22, respectively). The equinoxes do not occur at the same points of the ecliptic every year, because the plane of the ecliptic and the plane of the equator revolve in opposite directions. Once every 25,868 years, the two planes make a complete revolution with respect to each other. The movement of the equinoxes along the ecliptic is called the precession of the equinoxes. To find the true position of the stars a correction for precession has to be applied to celestial charts.

With respect to the *Yugas* and the dimensions of Angkor Wat, Hancock states: "The numbers in the Indian scheme of world ages—432,000 (or 432), 864,000 (or 864), 1,296,000 (or 1296) and 1,728,000 (or 1728)—all have one thing in common. They belong to the sequence based on 72, which is an important unit of time in the Mayan calendar and which is linked to the precession of the equinoxes (it takes 72 years for the sun's position on the spring equinox to precess one degree against the background of 'fixed' stars). If you divide the 432 *hat* dimension on Angkor's causeway by 72 you get 6. If you divide the next dimension along the causeway, 864 *hat*, by 72 you get 12. If you divide 1296 *hat* by 72 you get 18 and if you divide the longest dimension of 1728 *hat* by 72 you get 24. So stepped down by a factor of 1000 in the architectural scale of Angkor, and then denominated by the 'ruling' number 72, the Krita, Treta, Dvapara, and Kali *Yugas* can be reduced to a simple mathematical regression: 24 → 18 → 12 → 6." Hancock & Faiia, 1999, p. 152.

⁷³ Mannikka, 1997, p. 5.

⁷⁴ *Ibid.*, p. 60.

The Three-Step Move of Consciousness

Reviewing the principle of “three steps” as discussed in Maharishi Vedic Science, Nader explains that in the Vedic Literature it relates to the three steps of *Vaman* (an incarnation of *Vishnu*) described in the *Purana* and the three-step move of *Brahm*. Maharishi clarifies this by explaining that in terms of consciousness the three-step move of *Brahm* or wholeness is the three-step move of *Rishi*, *Devata* and *Chhandas* within *Samhita*.⁷⁵ Nader points out that this move can be identified in the process of human embryonic development after fertilization. He states that the two cells, one silent and one dynamic, come together to create the first cell called a zygote. The zygote then divides into two cells, which goes on to divide again, and so on. In this progression, within three steps, one cell divides to two then four and then eight cells. This three-step move or multiplication reveals the progression from unity to diversity and mirrors the elaboration of the first syllable of *Rk Veda* (Ak) into eight syllables (“Ak”, “Ni”, “Mi”, “Le”, “Pu”, “Ro”, “Hi”, “Tam”) of the first *Pada* or line (*Agnim Ile Purohitam*). As Nader points out:

The Puran describe a 3-step move of *Vaman* covering the entire universe, which Maharishi explains as the 3-step move of *Brahm*—WHOLENESS—the 3-step move of *Rishi*, *Devata*, and *Chhandas*. In the example of the division of the zygote, 3 steps lead from 1 cell to 8 cells in a significant phase of cellular development that corresponds to the natural unfoldment of diversity from Unity.... The elaboration and expansion of the first syllable into the first *Pada* is therefore an expansion from 1 to 8. This corresponds to the development of the first 8 cells from the zygote, after which the zygote enters the uterus, where it is implanted. The timing is also significant in terms of the 3 steps: the 8-cell stage is reached the third day after fertilization. In other words it takes 3 rotations of the earth around its axis, with 3 sunrises and 3 sunsets, to reach that stage. Here again we see the value of 3 steps.⁷⁶

In this sense, the three-step move of *Vaman* can be seen to relate to the unfoldment of the dynamics of self-referral consciousness in the structure of *Rk Veda* and the division of the zygote in the primary stages of embryonic development which takes three rotations of the

⁷⁵ Maharishi Mahesh Yogi, in Nader, 2000, p. 24.

⁷⁶ Nader, 2004, p. 24.

earth (three days) to reach the eight-cell stage, after which it is implanted in the uterus. In this analysis, the three steps are not a mythical concept about the exploits of a divinity, but the description of the creative dynamics of consciousness and the beginnings of human life.

Constellations and *Devatas* in the Body

Returning to the theme of the *Devatas* and constellations, it is interesting to note that Mannikka mentions how *Vishnu* is associated with his mount, *Garuda* (a bird resembling an eagle). The star Altair in the constellation Aquila is referred to as the Eagle⁷⁷ and, as Mannikka points out, as early as 1899 Robert Brown noted that this constellation was referenced in ancient records before the Aquila constellation had been “defined”.⁷⁸ Indeed, Brown states

The Sumer-Akkadian Eagle was Alala (“the Great Spirit”...), “the symbol of the noon-tide sun”.... Here we have the pre-constellational history of the sign, which is subsequently reduplicated in stellar form as *Kakkab Idkhu, ilu Zamama*, “the constellation the Eagle, i.e., the god Zamama.”⁷⁹

The name eagle or great bird was given to the star Altair and the constellation Aquila. Mannikka explains that it was only later used in Ptolemy’s star lists, to eventually become part of modern nomenclature and known as *Vishnu*’s star.⁸⁰ This analysis suggests that the idea of *Vishnu*, the constellation Aquila and their association evolved over time. However, Nader clearly points out that the value of *Vishnu* can be located within the physiology, as can the constellations and their interrelationships. Nader’s account of the *Devatas* in the physiology is based on the assumption that pure consciousness is eternal, unmanifest and infinite and due to its wakeful nature, diversifies within its unified state and gives rise to the various *Devatas* as Laws of Nature

⁷⁷ Mannikka, 1997, p. 60.

⁷⁸ *Ibid.*

⁷⁹ Brown, in Mannikka, 1997, p. 60.

⁸⁰ Mannikka, 1997, p. 60.

responsible for the emergence of space, time, all forms and phenomena.

Taking this to be so, and assuming there have been countless *Yugas* before the present era, then it is logical to conclude that looking back in time, if one is “awake” (having the vision of an enlightened historian), then one could see that cultures in previous epochs could have had substantive knowledge of celestial phenomena. Evidence shows that early cultures knew of important relationships between humans and the heavenly bodies and that people throughout time were motivated to make images, form traditions, or construct monuments that demonstrate these relationships. The impulse to chart the movement of the planets and the course of time is deeply embedded within human consciousness. Given that consciousness, at the self-referral, transcendental level is eternal it is completely feasible that that this knowledge would surface again and again, in various forms, throughout time.

Is it not understandable, then, that the fascination with light and celestial bodies, understood to be the domain of astronomers, has surfaced in contemporary kinetic and environmental and land art and by artists such as Calder, Lijn, and Turrell? As Ione notes, artists like Turrell create a bond between their work and practices of earlier societies.⁸¹ From one perspective, on the level of self-referral consciousness, the level of infinite correlation, there is no gap between the contemporary world and the ancients. With simply a glimpse of this reality, it is plausible that individuals are able to gain insights into a level beyond time and space. As previously noted, there are artists who aim to demonstrate a connection with humanity and the greater cycles of nature via their work. Lynton observes that David Nash deliberately chooses to work with wood because it is a living manifestation of nature, a “weaving of earth and light”.⁸² As Lynton states, Nash’s artistic activity is a means of relating to the whole of mankind in time and space and that for him the tree has symbolic and practical significance: it refers to the “Tree of Life, axis mundi, the tree as inverted bridge to the cosmos”.⁸³

The inverted tree is shown by Nader to represent the human nervous system with the brain at the top and the spinal cord with its

⁸¹ Ione, 2005, p. 195.

⁸² Lynton, 1990, p. 14.

⁸³ *Ibid.*

nerve rootlets resembling the leaves of the tree.⁸⁴ Moreover, an expression in the *Bhagavad-Gita* describes the World Tree as the Vedic hymns themselves:

Rk Veda speaks of the eternal Ashwattha, the World Tree, whose roots are on top and branches with leaves below. They are the Vedic Hymns. He who knows it knows the Veda.

—(*Bhagavad-Gita*, 15.1)⁸⁵

Nader states that the upside-down aspect described here, relates to the way in which the brain inverts input coming to it. He gives the example of how the image of a flower is projected upside-down in the brain.⁸⁶

Other artists, like Shirazeh Houshiary, look to create a sense of wholeness. In a work that refers to the rotation of the earth and planetary system, Houshiary's suite of etchings *Round Dance, 1992*, references Iranian culture and western art. Houshiary states that she makes art "to manifest stages of the journey toward wholeness, which is the root of humanity."⁸⁷ Elliott observes that her work draws from Sufi thought, which holds that three movements (ascent, descent and expansion) make up the creation of the universe and "at the centre of this universe is the point of knowledge, in a state of purity, around which all forms of existence move."⁸⁸

Still others, such as Hamish Fulton, use text and print media to reference shifting perceptual modalities in response to cycles of nature. Referencing an eleven-day walk during the period of a lunar eclipse in Australia in July, 1982, Fulton employs words in a series of prints to register changes in perception. Fulton is interested in how indigenous peoples (including Australian Aborigines) seek to live in harmony with nature, and, in exploring parallels with Zen and Buddhism.⁸⁹ Recording his experience of various walks—for example, treks across mountains in Northern India and the landscape in Kent, England—Fulton

⁸⁴ Nader, 2000, p. 64.

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*

⁸⁷ Houshiary, in Elliott, 1995a, p. 116.

⁸⁸ Elliott, 1995a, p. 116.

⁸⁹ Elliott, 1995b, p. 86.

documents observations of star constellations above in print works.⁹⁰ While contemporary art and performance by those such as Nash, Houshiary, and Fulton, involve concepts of wholeness, the landscape, the extended environment, and the spectator's experience within it, the Vedic Observatory goes one step further. It is a precisely designed instrument, a technology to unfold the infinite structure of consciousness in individual awareness, the physiology, and the cosmic body.

The Shadow as the Trace of Relative States of Consciousness

*The Maharishi Vedic Observatory is an instrument to put one's awareness in alignment with the structural dimension of the structure of the universe, which is basically the structure of the Veda. The structure of the Veda is the most fundamental structure of the whole universe.*⁹¹

—Maharishi Mahesh Yogi

Central to the observatory is the principle and function of light passing across a form, creating a shadow that registers, or leaves a trace of, the movement of the celestial bodies in time and in space. As discussed in Chapter Two, Maharishi explains that from the level of *Ritam Bhara Pragya*—the level of consciousness where there are no differences but from where all differences arise—time and space, all the elements, numbers, circles, squares and triangles, and alphabets emerge.⁹² Anyone can know anything at any time from within himself in his fully awake, light filled awareness—*Jyotish Mati Pragya*.⁹³ In the study of space and the mathematics of astronomy, one is ultimately studying the pattern or sequential unfoldment of one's own consciousness.

The Maharishi Vedic Observatory presents a model of the universe as the structure of the first aspect of Veda, *Rk Veda*. *Rk Veda* is the first

⁹⁰ *Ibid.*, pp. 96-97.

⁹¹ Maharishi Mahesh Yogi, in Maharishi Global Vedic Observatories Corporation, 1996, p. 23. A photograph of the observatory can be viewed at: <http://maharishivediccity.net/attractions/observatory.html>.

⁹² Maharishi Mahesh Yogi, in Bonshek, 1996a, p. 112.

⁹³ Maharishi Mahesh Yogi, 1997b, p. 30.

expression of consciousness reverberating within itself, the self-referral structure of pure knowledge generating frequencies or sound. The instruments of the observatory are designed to have specific effects on the viewer/experiencer—enlivening individual awareness, reconnecting the individual with the structure of pure knowledge within consciousness. The observatory provides a map of inner and outer worlds and could be described as a precise site-specific work, a technology for enhancing creativity, enlivening consciousness, and creating balance in the physiology of the viewer.

While the instruments of the observatory essentially track the movement of the shadow caused by the sun, this phenomenon has been discussed in terms of experience in the relative, changing states of consciousness and Transcendental Consciousness:

The shadow follows the movement of the Sun, starting at the longest length, then disappearing, and then coming back into shadow again. This movement of the shadow exactly resembles the overshadowing influence of waking, dreaming, and sleeping on Pure Consciousness—this reality of the three is a mirage. Measuring the Sun from the shadow exactly resembles the phenomenon of locating Transcendental Consciousness from the state of waking consciousness.

Waking state of consciousness is a shadow; it's the mirage of a string being mistaken for a snake. The real string is Transcendental Consciousness. But we can't get to Transcendental Consciousness without going through waking, dreaming, and sleeping states of consciousness. The eternally awake Transcendental Consciousness, the fourth state of consciousness, has influence on waking, dreaming, and sleeping states of consciousness; it softens the density of the shadow; it softens the intensity of illusion—the reality dawns and prevails, and the purpose of the Maharishi Vedic Observatory is fulfilled.... All the different relationships of the planets and stars can be located inside, in one's own awareness. One can fathom, in one's own consciousness, the phenomenon of the ever-expanding universe; one can know everything from within one's Self. The Maharishi Vedic Observatory provides the means of observation to align the outer with the inner.⁹⁴

In this sense, the Maharishi Vedic Observatory is a device for revealing or “illuminating” the value of one's own self-referral

⁹⁴ Maharishi Global Vedic Observatories Corporation, 1996, p. 3.

awareness. It is not just about tracing the movement of celestial bodies but a means to uncover the reality of the relationship between inner and outer. It involves vision. It involves perception of the passage of light on the various forms of the instruments. Circumambulating the forms via this circular format in space involves visual recognition of the *Mandala* patterns of the layout. In observing these instruments one is looking at a model or mirror of the celestial sphere—indeed, one is viewing the dynamics of consciousness in “space” on a human scale.

The observatory could be categorized as a sophisticated, interactive, environmental artwork connecting not just with the landscape but also with inner consciousness and outer cosmic space. As one walks around the structures viewing them in relation to the changing effects of light, the individual can appreciate the fabrics of the universe. In this process individual consciousness is transformed and enlivened.

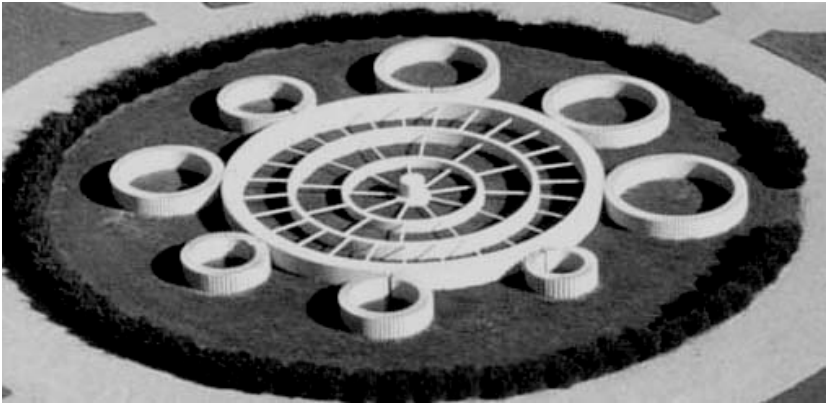
The Central Form of the Vedic Observatory as the Structure of Rk

In Maharishi Vedic Science, the outer celestial bodies have their counterparts within the physiology and represent the structure of *Rk Veda*, the self-referral dynamics of one’s own consciousness. The core of the observatory, around which the group of instruments is clustered, represents this structure of *Rk Veda*—the fundamental structure of physical creation, the physiology, and the universe.

At the centre of the observatory this can be seen in the circular wheel like form, encompassing three concentric circles that form a three-layered hub—with “spokes” radiating out from each. The innermost circle has nine spokes or linear structures radiating from it. This number refers to the nine *Grahas* or planets. The next circle has 12 linear arms radiating out corresponding to the 12 *Rashis*, solar constellations or zodiac signs. The last of the circles has twenty-seven arms extending out to an outer, enclosing double ring, which relate to the 27 lunar constellations or *Nakshatras* and two *Mandalas*—the “interlocking” or complimentary first and tenth *Mandalas* of *Rk Veda*.

The first and tenth *Mandalas* of *Rk Veda* are intimately interrelated. Each has 192 *Suktas* (parts or stanzas) with 192 gaps between these *Suktas*. The 192 *Suktas* of the first *Mandala* of *Rk Veda*, as brought out in Maharishi’s *Apaurusheya Bhashya*, express the

progression from the fullness of pure consciousness or total potential of Natural Law expressed in the first *Sukta*. This value of fullness decreases to become emptiness of pure consciousness at the mid-point or *Sukta* 97 of *Mandala One*. From here, the *Mandala* continues to progress to the value of fullness again, eventually found expressed in the last *Sukta*—*Sukta* 192—, which, on the *Mandala*, sits next to *Sukta* One⁹⁵ on the circle.⁹⁶ As such, the structure is self-referral and eternal. Maharishi explains that the transformations within the gaps between the 192 *Suktas* of *Mandala One* are commented upon or elaborated by the 192 *Suktas* of *Mandala Ten* and that *Mandalas* Two through Nine emerge from the gaps between the *Richas* of the first *Sukta* of the first *Mandala*. Thus, there is a complementarity between the two principle *Mandalas* (first and last), and, in addition, all other *Mandalas* emerge from the dynamics contained within the first *Sukta* of *Rk Veda*.⁹⁷



Detail, *Maharishi Vedic Observatory, Maharishi Vedic City, Iowa*⁹⁸

⁹⁵ An in depth description and diagram of the *Mandala* structure of *Rk Veda* and the Vedic Observatory layout, as described by Maharishi can be seen in: Bonshek, 2000a, pp. 142-145.

⁹⁶ Looking at any two *Suktas* on the circle sitting opposite one another, adding their values gives 100% Natural Law. The sum of any two opposite *Suktas* (i.e. 1 plus 97, or 149 plus 49) always amounts to 100% Natural Law or complete fullness of pure consciousness.

⁹⁷ Maharishi Mahesh Yogi, in Bonshek, 2001a, p. 142.

⁹⁸ Image printed with permission of Tim Fitz-Randolph.

Thus, the relative sizes of the ten *Mandalas* are presented in the layout of the central core of the Maharishi Vedic Observatory—*Mandala* One and Ten as the larger central ring around which eight variously sized rings (*Mandalas* Two to Nine) are situated. This entire central structure thus represents the dynamics of self-referral consciousness, the mathematical unfoldment of those dynamics in terms of *Rk Veda*, and, the relationship of consciousness to the *Grahas*, *Rashis*, and *Nakshatras*. *Mandalas* Two through Nine represent the eight *Prakritis* or the eight stages of transformation within the gap in the self-referral dynamics of consciousness.

Each *Mandala* has a specific number of *Suktas* as indicated by their relative sizes. Viewing the eight as they appear around the main circle of the two interlocking *Mandalas* (One and Ten), one circumambulates the form clockwise, from east, to south, west, north and back to the east again. Due to their varying sizes, as one walks around the structure, the eight *Mandalas* seem to pulsate from smaller to larger, smaller to larger, starting from *Mandala* Two in the southeast (the smallest ring) proceeding to *Mandala* Nine in the east (the largest ring of the eight).

In fact, several artists have been inspired to create works referencing Vedic knowledge and the observatory. Installed in a terminal at a busy mid-Western airport, passengers can view a mobile by Michael Peter Cain that refers to the planets and the spiraling “Rk” structure. Cain’s *Planets/Cosmos*, a 600 pound, 18-foot-high, 27.5 foot-wide kinetic sculpture installation in the form of spiral helix with celestial bodies floating and rotating in space, can be seen on the traveller’s departure from, and return to, distant locations.⁹⁹ In the same airport’s security area, *Transformations* (1996) a five-paneled, etched glass, work weighing 2,000 pounds by Patricia Innis, depicts the sky as observed for preparation for flight. *Transformations* is a semi-transparent, mural referencing elements of the Vedic Observatory and the evolving universe.¹⁰⁰ Another work entitled *Multiple Infinities* (1998)¹⁰¹ by Anna Bonshek, Neven Kovacic and Gurdon Leete, uses Soft-Image 3-D animation software and Adobe Premiere to animate

⁹⁹ Bonshek, 1998, pp.23-24.

¹⁰⁰ *Ibid.*, p. 21.

¹⁰¹ *Multiple Infinities* was previewed at the *Centre for Advanced Inquiry into the Interactive Arts* (CAIIA), in Caerleon, Wales, and at *Terror '98*, the *Inter Society of the Electronic Arts* (ISEA '98) annual symposium, Manchester, England, in 1998.

visual ideas inspired by the observatory. Jim Fairchild describes the video as opening: “with an intense white dot against a liquid blue background”, “generating multiple dots in sequence.” “Then circles...in a three-fold sequence.”¹⁰²

While artists have been influenced by its structure, the actual form of the observatory is precisely laid out for identifiable end results. In the observatory, the structure of *Rk Veda* relates not only to the celestial sphere but also to the functioning of the cell in the human physiology.

***Rk Veda* in the Embryonic Structure and the Cell**

The emergence of the eight *Mandalas* of *Rk Veda* identified in Maharishi’s *Apaurusheya Bhashya*, and represented in the ten *Mandala* form in the Maharishi Vedic Observatory, Nader states, are found reflected again in the embryonic structure during the first stages of cell development.¹⁰³ As noted previously there is a three-step move (taking three days) in cell division when the zygote progresses from its one-cell to eight-cell structure. From the eight-cell stage, Nader finds that in the overall cell division process there are a further three steps of division, creating 16, 32 and 64 cells. These 64 cells contain three values of cell skeleton and membrane, cell body and organelles, and cell nucleus, giving 64×3 , or 192 values. As Nader points out:

It is interesting to note that after 6 days after fertilization, the floating, fertilized, and dividing cells become attached to the cell wall of the uterus (the womb). This is called implantation. In other words, after the initial 3 days it takes 3 more steps (3 rotations of the earth around its axis) to reach that crucial stage of implantation. In 3 steps, therefore, the fertilized egg reaches the womb cavity; in 3 further steps it becomes attached to the wall of the womb. These are significant stages in development. They accompany stages of cell division that are also significant in the manner in which Unity develops into diversity, and how this process exactly follows the unfolding of the syllables, *Richas*, and *Suktas* of *Rk Veda*.¹⁰⁴

¹⁰² Fairchild, 1998, p. F4.

¹⁰³ Nader, 2000, p. 27.

¹⁰⁴ *Ibid.*

Nader states that when any new cell emerges, it enters a different stage of its life history. The rapidly dividing human cell goes through a complete division in a “cell cycle” which takes 24 hours and occurs through four phases. Nader goes on to discuss these four phases with respect to the qualities of *Samhita*, *Rishi*, *Devata*, and *Chhandas* brought out in the four Vedas: *Rk*, *Sama*, *Yajur*, and *Atharva*.¹⁰⁵

Nader also finds that the basic components of the cell again resemble the structure of the ten *Mandalas* of *Rk Veda*: for example, the nucleolus (the distinct, circular structure in the nucleus) is made of nuclear material with pieces of chromosomes attached in a circular form around it. Nader points out that the nuclear material is based on four nucleotides which when assembled into groups make 64 triplets of three nucleotides ($64 \times 3 = 192$), corresponding to the 192 *Suktas* of *Rk Veda*.¹⁰⁶ Because the structure of *Rk Veda* is the master key for understanding any aspect of knowledge, the physiology, and the structure of the universe, in viewing the pattern of the Veda:

The reality of the Veda is enlivened within one’s awareness and physiology. This enlivenment establishes balance between the inner value of Pure Consciousness and its expressed value of the physiology and of the universe.¹⁰⁷

In viewing the ten *Mandala* form laid out in the observatory, one is looking at a visual map of the seed of creation as the dynamics of one’s own awareness. This inner structure is unique to the Maharishi Vedic Observatory and not found in previous observatory sites. It presents the fundamental relationship of the celestial sphere to the structuring mechanics of self-referral consciousness.

The Function of the Observatory *Yantras*

Surrounding the central area (representing *Rk Veda*) of the Maharishi Vedic Observatory, are eight Vedic instruments or *Yantras*—two of which are each made up of a pair, giving a total of ten instruments. These *Yantras* include: the *Digansha Yantra* or Azimuth

¹⁰⁵ *Ibid.*, p. 285.

¹⁰⁶ *Ibid.*, p. 281.

¹⁰⁷ Maharishi Global Vedic Observatories Corporation, 1996, p. 20.

Instrument; the *Jai Prakas Yantra* or Armillary Sphere Instrument; the *Dakshinovritti Yantra* or Meridinal Wall Instrument; the *Samrat Yantra* or Equatorial Sundial; the *Nadivalaya Yantra* or Hemispherical Sundial; the *Ram Yantra* or Altitude/Azimuth Instrument; the *Chakra Yantra*—*Kapali Yantra* or Bowl Instrument—Circle Instrument; and the *Misra Yantra* or Composite Instrument.



*Maharishi Vedic Observatory (Aerial view), Maharishi Vedic City, Iowa*¹⁰⁸

The *Ram Yantra* is the first instrument one encounters as one enters the observatory from the east. The *Misra Yantra* sits to the south, the *Samrat Yantra* to the north, and the *Jai Prakas Yantra* to the west. Although the instruments are used to view the stars or the movement of the shadow of the sun or moon, their purpose is, in effect,

¹⁰⁸ Image printed with permission of Tim Fitz-Randolph.

to create balance in the physiology and promote higher states of consciousness. By viewing the *Yantras* for a few minutes each day the awareness and physiology are aligned with the Laws of Nature expressed throughout the cosmos.¹⁰⁹ As a result, damaging influences within the physiology can be neutralized.¹¹⁰ The success of any interaction with these site-specific forms is dependent on perception, i.e., the sense of sight. For this reason, the instruments are modestly sized, unlike some of the large-scale instruments of other observatories such as the Jai Singh *Jantar Mantars*. While the eight instruments have different balancing effects, as Maharishi states, the observatory “is the collection of instruments that makes it possible to observe Natural Law as it is displayed in the universe, and it quietly aligns individual awareness with the evolutionary direction of Natural Law.”¹¹¹

The *Ram Yantra*: Wholeness on the Move

The term *Ram* refers to totality or wholeness. Maharishi discusses the ruler *Ram* as portrayed in the *Ramayana* as the embodiment of perfect administration. As he states, “*Ram* is Totality—pure spirituality—self-referral intelligence—the total potential of Natural Law—the source, course and goal of all creation.”¹¹² *Ram* is the embodiment of “*Purushottam* level of rulership in the nourishing ability of the life-giving Sun...the ideal example of a sovereign ruler...”.¹¹³ *Ram* represents supreme rulership and the expression of order in the brain physiology. Maharishi adds that the ruler of any territory can align his or her awareness with *Purushottama*. Then, their administration will “inherit the qualities of order, freedom, bliss, and the ability to nourish all. Such an administration is called *Ram Raj*—the rule of *Ram*”.¹¹⁴ The principle of generating a nourishing influence and displaying order, freedom and bliss, by virtue of aligning one’s consciousness with *Purushottama*, is applicable to the artist who wishes to expand their territory of influence and contribute to society, as discussed in the previous chapter on *Yagya*, performance and

¹⁰⁹ Maharishi Global Vedic Observatories Corporation, 1996, p. 8.

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*

¹¹² Maharishi Mahesh Yogi, 1995a, p. 41.

¹¹³ *Ibid.*

¹¹⁴ *Ibid.*, p. 43.

socially responsible art. In this context, the *Ram Yantra*,¹¹⁵ the first instrument one encounters when entering the enclosure of the Maharishi Vedic Observatory, displays the totality of consciousness or “fullness” on the move.



*Ram Yantra, Maharishi Vedic Observatory*¹¹⁶

The *Ram Yantra* consists of a pair of instruments that take the form of a ring of six vertical columns connected, at the top to each other via a circular shelf, with a central post (the same height as the columns) in the middle of the instrument. There are six equal divisions radiating out from the post forming pie-shaped horizontal slabs that extend from

¹¹⁵ The *Rama Yantra* built by Jai Singh in Jaipur, is situated in the southwest corner of the compound. There is also a *Rama Yantra* in the Delhi Observatory (see image on page 169) but these are substantially larger in scale than the Maharishi Vedic Observatory instruments.

¹¹⁶ Photograph, the author.

the vertical columns. These have six equivalent spaces in between, forming equal “positive” and “negative” or “full” and “empty” slabs/spaces. Therefore, when one reveals a shadow cast by its post, the other has no shadow. From an aerial perspective, the two structures appear as concentric circles or a circle to point form like a “Rk”. Displaying the sun’s movement from the location of the individual on earth, these two complimentary instruments determine the altitude and azimuth of the sun by locating the shadow of the post on the interior surfaces of the *Yantra*. The base of the central post represents the zenith point and the ring on top of the vertical columns represents the horizon line. Looking at the instrument, one can see that each of the vertical columns and horizontal slabs have markings off which the shadow can be read; there are 360 lines on the vertical columns representing 360 degrees of horizon. From here the azimuth can be determined. There are also 90 concentric rings of markings radiating out from the central post to the vertical columns that continue on up the columns. These represent 90 degrees from the horizon to the zenith and the altitude of the heavenly body being observed. The instrument is a reflection of the overhead portion of the celestial sphere.¹¹⁷

As mentioned, the *Ram Yantra* represents fullness on the move—expressed in the following verse from the *Upanishads*:

*Purnam adah purnam idam purnat purnam udachyate,
Purnasya purnam adaya purnam evavashisyate.*

That is full; this is full; from fullness, fullness comes out;
Taking fullness from fullness what remains is fullness.¹¹⁸

(Shantipath, Kena Upanishad, 5.1.1)

Maharishi comments on this expression stating that

The expression of the evolution of fullness (or wholeness) appears to be a little bit strange at first sight. The question arises how can fullness evolve and to what can it evolve because it is already full. The word evolution here has a meaning in quality and not in quantity; it is wholeness of silence that evolves into wholeness of dynamism; it is

¹¹⁷ Maharishi Global Vedic Observatories Corporation, 1996, p. 14.

¹¹⁸ Maharishi Mahesh Yogi, 1995b, p. 185.

qualitative evolution of one kind of wholeness into another kind of wholeness.¹¹⁹

Consciousness as an infinite field of intelligence is always full. There is no lack. Creation emerges by virtue of the move of consciousness. At the same time, everything in creation is contained within consciousness. As stated before, there are two values of silence and dynamism within consciousness. In the perpetual move of silence becoming dynamism and dynamism becoming silence, an infinite frequency vibration gives rise to all impulses that structure creation.

The principle of fullness becoming fullness is illustrated in the *Mandala* structure of *Rk Veda* (represented in the inner form of the Maharishi Vedic Observatory). *Purnamadah* represents the fullness of silence contained in the first letter of the *Rk Veda*, “A”. Emerging from this, is the value of fullness of dynamism contained in the last letter of *Rk Veda*, “I”. The first and last expressions (letters) of *Rk Veda* are seen to contain the complete picture of the dynamic of fullness as silence and dynamism. These two values of fullness are contained within one holistic value of fullness.¹²⁰ In terms of awareness, Maharishi points out that this can be further understood as the experience of consciousness in individual life. In the following description, he uses the example of an enlightened manager to illustrate the point:

It is the holistic silence in the state of self-referral consciousness that spontaneously becomes the self-interacting dynamics of the manager’s consciousness. This means that the manager is not required to make any effort to transform the silent quality of his self-referral consciousness into the dynamic quality of its self-interacting dynamics.¹²¹

Maharishi goes on to discuss this principle in terms of the individual in Unity Consciousness who is able to actualize the supreme level of Vedic Technology, the technology of consciousness at the basis of creation.¹²²

¹¹⁹ *Ibid.*

¹²⁰ *Ibid.*, p. 184.

¹²¹ *Ibid.*, pp. 185 & 188.

¹²² Maharishi Mahesh Yogi, 1997b, pp. 69-72.

...the doer remains simply awake in himself, and remains uninvolved with action. He naturally remains fulfilled in freedom from the normal, or usual, binding influence of action.... Action does not bind him because...*Purnasya purnam adaya purnam evavashisyate*—fullness, having created fullness, remains fullness; so there is no minimizing of the performer; the performer does not lose any degree of WHOLENESS in performing it; it is the WHOLENESS that is performing, so there is no loss to WHOLENESS of life.¹²³

Maharishi adds that this principle is the key to Vedic Mathematics, again expressed in the *Brihad-Aranyak Upanishad* as: *Purnat purnam udachyate*; “from fullness emerges fullness—from fullness is structured fullness—from total Natural Law emerges total Natural Law.”¹²⁴ As discussed in Chapter Two, the details of Vedic Mathematics are brought out in the *Darshana* and specifically the *Vedanta Sutras*. *Darshana*, cognition of the mathematics of self-referral consciousness or Veda, is available to anyone in his or her fully alert consciousness—*Ritam Bhara Prayga*. The “art of seeing” is the cognition of this reality.

With respect to the built environment, Vedic Architecture or *Sthapatya Veda* (as considered in the next chapter) is the field of Vedic Mathematics. Maharishi Sthapatya Veda is the organizing power of Natural Law that establishes everything in universe in perfect relation with everything else—how town and city planning can be structured according to nature’s design. Constructed in line with *Sthapatya Veda*, Maharishi Vedic Observatory correspondingly facilitates the awakening of consciousness on the level of *Ritam Bhara Prayga*. As Maharishi points out:

On this level of awakening is the unity of Samhita of Rishi, Devata and Chhandas. From here every step of evolution is the togetherness of three—Samhita of Rishi, Devata and Chhandas—it is the mathematics of the Absolute that prevails. This is the reality of...*Purnat purnam udachyate*—from Samhita, Rishi, Devata and Chhandas emerge the structures of fullness—Sama Veda, Yajur-Veda, and Atharva Veda—each is specific without losing its generality; its specificity is embedded in its generality. When specificity is in terms of generality—Totality—

¹²³ *Ibid.*, p. 76.

¹²⁴ Maharishi Mahesh Yogi, 1998, pp. 165-166.

the non-specific level of WHOLENESS—then the specific structure is Vedic.¹²⁵

This unambiguous definition as applied to art, asserts that Vedic art is art which has a specific structure and value while maintaining or embodying wholeness.

As a Vedic structure, the *Ram Yantra* is designed to enliven in the viewer's awareness: 1) the unmanifest value of infinite intelligence and; 2) localized, manifest, physiological structures, as well as; 3) the transformation of the former into the latter.¹²⁶ Thus, the *Ram Yantra* is designed to help facilitate the awakening of the “mathematics of the Absolute” or wholeness—cognized in the fully awake consciousness of the individual.

Discussing the influence of eastern philosophy and the investigation of energy in art, Brett introduces the example of the Taoist notion of *Qi* to refer to that of which everything in the universe is composed, where matter and energy are interchangeable, where *Qi* is “matter on the verge of becoming energy, or energy on the point of materializing.”¹²⁷ Brett states that as a concept *Qi* crosses the fields of philosophy, art, spirituality, natural science, and medicine, and informs “both the elegant vitality which the calligrapher sought to achieve in his brush-stroke, and the psychosomatic functioning of the body. As such it could provide a metaphor for the efforts of 20th-century artists to reconcile the contingent and the infinite.”¹²⁸ The idea of energy or *Qi* gives the sense of a dynamic virtual realm, somewhere between an unmanifest and the manifesting process.

In the language of Vedic Science, this could be compared to the level of *Ritam Bhara Pragyā*, the field of Vedic Mathematics, from where all forms and phenomena emerge. While the concept of *Qi* crosses the various domains of science, philosophy and art, in Maharishi Vedic Science the underlying transcendental field of pure consciousness is seen to be the source of all fields of knowledge. The light of pure consciousness illuminates all domains and branches of knowledge bringing out their supreme value as fullness or wholeness. Only by expanding the consciousness of the knower, the subject, to

¹²⁵ *Ibid.*, p. 167.

¹²⁶ Maharishi Global Vedic Observatories Corporation, 1996, p. 14.

¹²⁷ Kaptchuck, in Brett, 2000, p. 61.

¹²⁸ Brett, 2000, p. 61.

gain the source of all streams of knowledge, can one truly appreciate the “crossing,” or unified basis, of the various disciplines and the dynamics whereby those streams of knowledge emerge.

The two instruments of the *Ram Yantra* display fullness on the move—the total intelligence of Natural Law becoming lively and appearing as laws of nature that give rise to physiological structures. They are designed to help facilitate the awakening of unity consciousness and, by implication, ideal rulership. Walking round the observatory viewing the instruments on a full moon night certainly gives a sense of their potency and role in connecting the individual with the cosmic. Continuing to walk around the observatory, one encounters the next instrument, the *Chakra Yantra—Kapali Yantra*.¹²⁹

The *Chakra Yantra—Kapali Yantra*: Locating the Silent Witnessing Value of Consciousness



*The Chakra Yantra—Kapali Yantra, Maharishi Vedic Observatory*¹³⁰

As discussed in Chapter One, in the growth to higher states of consciousness, Cosmic Consciousness is that state where the individual

¹²⁹ Earlier versions of these *Yantras* built by Jai Singh are located in Jaipur and Varanasi. Sharma, 1995, p. 176.

¹³⁰ Photograph, the author.

is a silent witness to the ever-changing field of relative existence. The second set of instruments displaying the complete structure of the sky and the movement of the stars around the earth is the *Chakra Yantra*—*Kapali Yantra*. This instrument is designed to enliven the silent witnessing value within consciousness, along with activity. The *Chakra Yantra* (of which there are two) consists of a circular ring mounted between two pillars between which it rotates at an angle parallel to the earth's polar axis. The angle here is 41 degrees, the latitude for the location of Maharishi Vedic City. On the centre of the ring is a sighting device used to view a celestial object. One can determine the time of day and the declination¹³¹ of the sun with this *Yantra* as well as the north celestial pole, the polar axis, the celestial equator, and, as noted, declination and altitude. The *Chakra Yantra* is situated alongside the *Kapali Yantra*, which again is another pair of instruments, consisting of two separate bowls. One (the *Western Kapali*) has a post in its centre and a horizontal ring on the top edge of the bowl. The solid bowl containing lines related to coordinate systems of the celestial sphere represents the sky, while the ring represents the horizon. The instrument determines the altitude, azimuth, the local solar time, summer and winter solstice, the spring and autumn equinox, and the rising zodiac sign of the sun. Also solid, the other bowl (the *Eastern Kapali*) displays the celestial sphere in a rotated position, illustrating the yearly path of the sun.

Apart from this function, the purpose of the *Chakra Yantra*—*Kapali Yantra* is to locate the silent witnessing value of pure consciousness from the point value of individual awareness.¹³² By observing these *Yantras*, the silent witnessing quality of unmanifest, unbounded consciousness is established in individual awareness along with activity.¹³³ The *Chakra Yantra* is designed to enliven pure knowledge and the *Kapali Yantra* to enliven infinite organizing power in the viewer's awareness. It is said that through the act of viewing the two, unbounded, pure consciousness becomes expressed in awareness while the point value remains. As such, silence is in located from the point of activity and the experience of Cosmic Consciousness is gained. The desired physiological correlate or effect is that the cerebral

¹³¹ Declination, like latitude, gives the distance of a star from the celestial equator.

¹³² Maharishi Global Vedic Observatories Corporation, 1996, p. 16.

¹³³ *Ibid.*

cortex—responsible for integration and unification of consciousness—is enlivened.

It should be noted that in the physiology, the *Pratishakhya* correspond to the grey matter of the cerebral cortex.¹³⁴ The *Pratishakhya* represents the aspect of consciousness that puts all the parts together to create a whole that is more than the sum of the parts. Nader discusses various layers of the cerebral cortex with respect to the qualities of the six *Pratishakhya*. He states that the plexiform layer (Layer I) of the cerebral cortex receives projections from all other layers. In Layer II neurons¹³⁵ of the cerebral cortex send their axons¹³⁶ to other cortical layers interconnecting them. Layer V contains neuronal cells called pyramidal cells, which send their axons outside the cortex and brain to unfold motor activity. Layer VI contains pyramidal cells, which send axons to the thalamus and keep its input in balance by dissolving unwanted inputs.

Layer III contains specific cells, projections of which are spread via the commissural and corticocortical fibres to all areas of the cortex. Distant cortical areas are connected by means of the commissural

¹³⁴ The cerebral cortex—the exterior surface of the cerebrum—is a convoluted, or folded, grayish layer of cell bodies known as the grey matter. The majority of the brain's high-level functions occur in the cerebrum, which is made up of two large hemispheres. The grey matter covers a mass of fibers called the white matter. The convolutions are made up of ridge like bulges, called gyri that are separated by small grooves called sulci and larger grooves called fissures. Approximately two-thirds of the cortical surface is hidden in the folds of the sulci. The extensive convolutions enable a very large surface area of brain cortex—about 1.5 metres squared in an adult—to fit within the cranium.

¹³⁵ Neurons are responsible for the transmission and analysis of all electrochemical communication within the brain and other parts of the nervous system. Each neuron is composed of a cell body (soma), a major fiber (axon), and a system of branches (dendrites). The two main types of brain cells are neurons and neuroglia (from *glia* or Greek for “glue”). Making up half the brain's weight, neuroglial cells provide structural support to, and are twice as numerous as, neurons.

¹³⁶ Communication between the two cerebral hemispheres of the brain (which are partially separated by a deep fold known as the longitudinal fissure) is through several concentrated bundles of axons, called commissures. Axons, also called nerve fibers, convey electrical signals away from the soma and can be up to 1 metre in length. Most axons are covered with a protective sheath of myelin, a substance made of fats and protein, which insulates the axon. Myelinated axons conduct neuronal signals faster than unmyelinated axons. Communication between neurons is both electrical and chemical and always travels from the dendrites of a neuron, through its soma, and out its axon to the dendrites of another neuron. Dendrites of one neuron receive signals from the axons of other neurons through chemicals known as neurotransmitters. The neurotransmitters set off electrical charges in the dendrites, which then carry the signals electrochemically to the soma. The soma integrates the information, which is then transmitted electrochemically down the axon to its tip. At the tip of the axon, small, bubble like structures called vesicles release neurotransmitters that carry the signal across the synapse, or gap, between two neurons.

fibres that cross from one side of the brain to another. Nader points out that, as a wide-ranging integrating and processing set of fibres they have the quality of omnipresence. Layer IV receives specific incoming sensory inputs and plays a part in manifesting wholeness. In this way, Layer I corresponds to the quality of *all-pervading wholeness*, Layer II to *silencing, sharing and spreading*, while Layer V represents the *unfolding* value of intelligence. Layer VI corresponds to the *dissolving* value of intelligence and Layer III and Layer IV, to *omnipresence* and *unmanifesting the parts but manifesting the whole*, brought out by the six *Pratishakhya*.¹³⁷ With this in mind, in observing the *Chakra Yantra—Kapali Yantra* the optimum outcome is that the viewer's cerebral cortex, and by inference, all the above qualities, can be enlivened.

Transformative Digital Art

While the *Chakra Yantra—Kapali Yantra* is specifically designed to enliven holistic awareness, in contemporary art, some artists strive to produce work that has some relative balancing effect. Michael Heim asserts that Char Davies' virtual reality, 3-D animation work, *OSMOSE*—rather than being divorced from nature, in one's head, or based on the Cartesian ego/eye—uses breath as a navigational tool aiming to bring the participant to a state of meditation within minutes. As stated in his book *Virtual Realism*, Heim acknowledges that there are problems associated with excessive reliance and interaction with the computer and virtual reality. He describes a malaise called “Zen sickness”¹³⁸ which refers to the result of continual periods of time in a sedentary position and extensive use of the head during visual and

¹³⁷ The six *Pratishakhya*s are *Rk Veda Pratishakhya* (bringing out the value of all-pervading wholeness), *Shukl-Yajur-Veda Pratishakhya* (the silencing, sharing and spreading quality of intelligence), *Atharva Veda Pratishakhya* (the unfolding value of intelligence), *Atharva Veda Pratishakhya (Chaturadhyayi)* (the dissolving quality of intelligence), *Krishn-Yajur-Veda Pratishakhya (Taittiriya)* (the omnipresent value of intelligence), and *Sama Veda Pratishakhya (Puspam Sutram)* (unmanifesting the parts but manifesting the whole quality). Nader, 2000, pp. 220-227.

¹³⁸ Heim states that the term Zen sickness was used by the first Buddhist in medieval China to refer to a nervous disease resulting from long periods of concentrated work and meditation. To counteract this condition, a set of simple physical movements based on yoga, were introduced to suffering individuals. Heim, 1998, p. 167.

mental concentration—overloading the brain and eyes while sitting for long hours. Of Davies’ work he states:

The hardware for *OSMOSE* uses a head-mounted display, but...eliminates the data glove.... Instead of navigating by pointing a finger or grasping objects with the hand, the immersed participant directs movements through a vest fitted with breathing and balance sensors. By inhaling the immersant floats up, and exhaling the immersant sinks down, all the while body orientation—forward/backward and left/right—controls direction.¹³⁹

Heim continues to explain why *OSMOSE* is radically different from other virtual reality art forms. It is unlike games and conventional computer graphics that consist of solid, textured, polygon blocks using Renaissance style perspective. He suggests that Davies recalls nature through interaction with fog, trees, clouds, water and plants and blurs distinctions between subject and object, self and world.¹⁴⁰ The seamless experience of inner and outer worlds can be heightened through the maintenance of the quality of witnessing while simultaneously being immersed in a virtual reality. Davies’ work draws the participant into the invented, yet subject dependent, 3-D virtual space. It creates a universe of sorts, responding to physiological correlates of the immersant. Davies’ *OSMOSE*, in creating a simulated “natural world”, is designed to provoke a desired mental response.

In contrast, with the *Chakra* and *Kapali Yantras* the *actual* form and movement of the celestial bodies in relation to the individual/viewer and the cerebral cortex, enlivens the values of knowledge on the level of consciousness and the infinite organizing power inherent within knowledge at that level. In this sense, these instruments are a technology that can stimulate higher states of awareness and a heightened appreciation of relationships in the actual world. Rather than overloading the brain, they integrate it.

In the discussion of new electronic and digital technologies and the effect of scientific developments on relative ideas about consciousness, one important point cannot be overemphasized: Accepting that consciousness is an infinite field of intelligence beyond space and time accessible to anyone in any era in their own simplest form of

¹³⁹ Heim, 1998, pp. 162-163.

¹⁴⁰ *Ibid.*, pp. 163-164.

awareness, the full potential of consciousness can be available to anyone, anywhere, at any time. Development of consciousness is not reliant on relative inroads of modern scientific discoveries.

Indeed, the question remains, with all our progress in science and technology, has humankind been able to establish lasting peace or enlightenment? The innovative technologies that provide us with electricity, urban environments, high rise buildings, space travel and nuclear power, can also be used to facilitate the production of deadly weapons of mass destruction, global warming, sick-building syndrome and the pollution of our environment. Changing consciousness means developing unbounded awareness so that thought, action, interventions, and means of living are fundamentally transformational, i.e., always life-supporting, completely sustainable. Any development in technology that does not take into account development of consciousness at the deepest level cannot provide holistic, effective solutions to the problems and issues of contemporary life.

Likewise, art which is not created from the level of pure consciousness and evokes only a sense of changing consciousness states, even if seemingly innovative, is not transformational on the level of consciousness itself.

The *Misra Yantra*: Balancing the Influence of the Movement of the Planets

The *Misra Yantra* or Composite Instrument as the name indicates is made up of several instruments, which measure the full range of the sun's movement and its journey on the ecliptic in relation to the observer's position. It combines the *Niyat Chakra Yantra* (equatorial sundial also called the stable instrument), *Samrat Yantra* (equatorial sundial), *Dakshinovritti Yantra* (meridian wall instrument), *Kark Rashivalaya Yantra* (Cancer zodiac instrument), and *Agra Yantra* (amplitude instrument). It is situated to the south of the observatory. The *Misra Yantra* at the Jai Singh observatory in Delhi stands as tall as a building so it is impossible to view the entire structure at close quarters. A set of steps allows the observer to climb the huge instrument. There is also a space underneath that is used as the office of the local representative of the Archaeological Survey of India. It has an impressive heart shape. Sharma notes that its image has been used

prolifically to promote international gatherings in Delhi, adorn covers of scientific journals, and as an icon on commemorative coins. Its design was even copied by a French entrepreneur for a roller coaster ride in Neully, near Paris, France.¹⁴¹



*Jai Singh's Misra Yantra, Delhi*¹⁴²

The Maharishi Vedic Observatory *Misra Yantra* is much smaller, completely within the range of vision and constructed on a human scale.

It is easy to observe the whole structure while standing relatively close to it. There are four inner half rings that denote other observatories. When the shadow falls on the center of any one of these, it will be 12.00 noon at the respective location. The various instruments that make up the *Misra Yantra*, thus, allow the viewer to determine: the location of other places¹⁴³ on earth and also present a sense of the spherical form of the earth (*Niyat Chakra Yantra*), solar time (*Samrat Yantra*), the altitude of the sun at noon (*Dakshinovritti Yantra*), the location of the Cancer zodiac sign and the position of the

¹⁴¹ Sharma, 1995, p. 112.

¹⁴² Photograph, the author.

¹⁴³ The four places whose meridian circles are located include sites in New York, Easter Island, Hawaii and the Canary Islands.

sun on the ecliptic giving accurate sunrise time (*Kark Rashivalaya Yantra*), and, the angle of the sun at noon on the spring and autumn equinox and winter and summer solstice.¹⁴⁴



*Misra Yantra, Maharishi Vedic Observatory*¹⁴⁵

Two kinds of movement occur as the planets revolve around the sun: the perpetual change of the planets moving in a cosmic circle, and the distinct, varying speeds of the planets. Both have an influence in the physiology. The aim of the *Misra Yantra* is to promote balance between these influences with respect to the observer's physiology and awareness. Viewing the instrument allows the observer to isolate specific points of focus on the background of nonmoving empty space—representing unmanifest, unbounded reality. In this way,

¹⁴⁴ Maharishi Global Vedic Observatories Corporation, 1996, pp. 17-19.

¹⁴⁵ Photograph, the author.

balance can be measured between inner unbounded consciousness and an isolated outer point of attention. Inner intelligence (via the intellect, mind, senses, and individual behaviour) can be taken to the level of cosmic behaviour. Thus, expressed values of Natural Law are connected with subtle values, and, ultimately, the transcendental level; the unmanifest is imprinted on awareness.¹⁴⁶ The next *Yantra*, located to the southwest of the observatory, comprised of concentric circles, is the Azimuth Instrument.

The *Digansha Yantra*: Balancing the Firing Patterns in the Brain

The *Digansha Yantra* or Azimuth Instrument displays the relationship of the sun, planets, and stars to the horizon of the observer. As noted earlier, an Azimuth instrument can be seen at the Beijing Observatory in China. At the Vedic observatory the instrument differs; it consists of two concentric ring walls with a central post and a bar connected to it, and wires running north-south and east-west over the post. The walls represent the viewer's horizon. The shadow of the cross wires falls within the walls; the bar can be moved until it intersects with the shadow. At this point the markings on the ring wall indicate the azimuth of the sun. This instrument is meant to regulate and balance the firing patterns in the brain physiology to support optimal physiological functioning, which is important for prevention and cure of imbalance.¹⁴⁷

As discussed by Nader, the brain orients itself with respect to the environment such that certain cells become activated when the individual is facing east; others respond to north, northeast, and so forth. Nader states, "there are cells in the brain that are sensitive to changes in the position of the head with respect to the body."¹⁴⁸ The sense of orientation is based on an internal nervous system compass that can reset itself in response to external reference systems.¹⁴⁹ Nader comments that the precise orientation of every cell, organ and organ system is necessary for the physiology to function in an integrated way and that the specific firing patterns, occurring predominantly in the

¹⁴⁶ *Ibid.*, p. 19.

¹⁴⁷ *Ibid.*, p. 9.

¹⁴⁸ Nader, 2000, p. 186.

¹⁴⁹ *Ibid.*, p. 187.

thalamus, govern physiological response to direction. As discussed earlier, the thalamus is the connecting point between outer and inner, the specific and the holistic. The thalamus is associated with *Surya* (the sun) and the head of *Buddha*. It is the function of *Lamp at the Door* brought out in *Nyaya*.¹⁵⁰ The purpose of viewing the *Digansha Yantra* is to balance the brain patterns in the individual's brain physiology and, as a technology for gaining increased life-supporting influence from the level of the sun's administration, would presumably be useful for any leader and, for that matter, any artist. Orientation is one of the central principles of *Vastu Vidya*, the knowledge of how to construct the built environment in terms of Natural Law. Both the artist and architect need to have this knowledge lively in awareness if they are to create life-supporting art and architecture. At the observatory, progressing on from the *Digansha Yantra* and continuing to the west, one encounters the *Jai Prakas Yantra*.

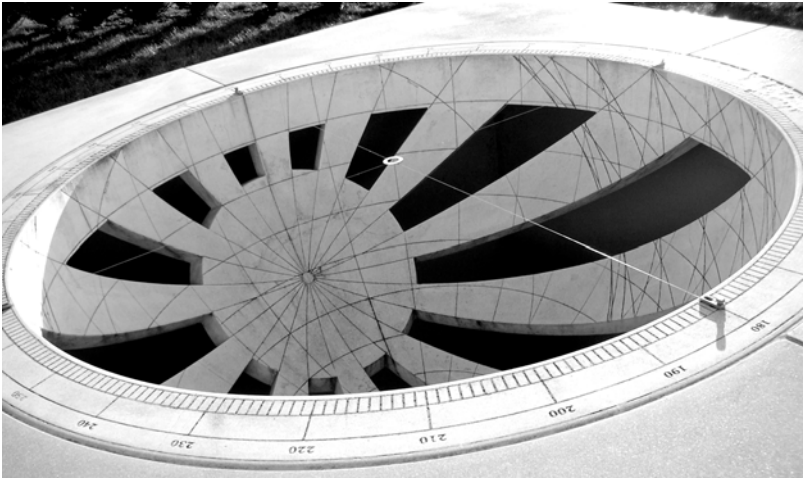
The *Jai Prakas Yantra*: Improving the Influence from the Movement of the Planets

The *Jai Prakas Yantra* also comprises a pair of complimentary instruments (like the *Ram Yantra* opposite to it in the east). They display the hourly movement of the sun and stars in relation to the movement of the earth around the sun. Declination, altitude, azimuth, rising zodiac sign, the zodiac sign on the local meridian, the winter and summer solstice, spring and autumn equinox and the local solar time can all be determined from this instrument.¹⁵¹ Again, in the Maharishi Vedic Observatory this instrument is smaller than that of Jai Singh's in Jaipur. The instruments consist of two hemispherical bowls, reflections of the celestial sphere, housed in an octagon. Like the *Ram Yantra* the bowls have open and solid (negative and positive) sections or fingers. Where one is open the other is solid and each finger represents a one-hour section of the sky. The upper rim of the bowl represents the horizon and two cross-wires connected by a central ring stretched across each bowl. The zenith point, or point in the sky directly above

¹⁵⁰ To recap, *Nyaya* represents the distinguishing and deciding quality of intelligence, which comprehends opposite qualities of consciousness. It refers to the simultaneous illumination "inside" and "outside" within consciousness. It is the value of artistic sight as *Darshana*.

¹⁵¹ Maharishi Global Vedic Observatories Corporation, 1996, p. 10.

the observer, is represented at the bottom of the bowl directly beneath the crossing point of the wires. The location of the shadow of the cross-wires on the bowl displays the sun's location with reference to the celestial sphere.



*One of the Jai Prakash Yantra instruments (detail), Maharishi Vedic Observatory*¹⁵²

As discussed, the influences of the movement of the planets, the rotation of the earth on its axis and around the sun, have their effects on the individual. According to Maharishi Vedic Science these influences can be improved by viewing the *Jai Prakas Yantra*.¹⁵³

The *Dakshinovritti Yantra*: Aligning the Thalamus with the Sun's Nourishing Power

The *Dakshinovritti Yantra*, in the northwest, is the next instrument progressing clockwise round the circular layout of the observatory. It displays the local meridian, the directional move of the sky, and is a

¹⁵² Photograph, the author.

¹⁵³ *Ibid.*

compliment to the *Samrat Yantra*. In the Jaipur observatory a *Dakshinobhitti Yantra* is situated on the site with its wall running north to south. The same orientation is used in the Maharishi Vedic Observatory. The instrument has two parallel, vertical walls aligned north south, parallel with the local meridian, and looks like a rectangular box structure with the top and narrow sides open. The instrument's east and west sides have two devices that measure the altitude of the sun at solar noon. When the sun passes the meridian overhead, a shadow runs along the length of the wall.

The observer can determine the altitude of the sun by recording where the shadow crosses the scale. The movement of the sun is indicated one degree at a time via markings on the instrument in the hollow space or gap in between the walls; they also indicate the sun's rising zodiac sign. The process of observing the *Dakshinovritti Yantra* "is said to remove or disallow any influence that may shadow" the "direct connection between the thalamus and its cosmic counterpart, the Sun."¹⁵⁴ It is said that in viewing the instrument at three key times during the day the thalamus can be aligned at the rising time of the sun, at solar noon when the sun is directly overhead, and at sunset.¹⁵⁵ As discussed earlier, in the physiology the thalamus represents the sun. This being the case, the nourishing value of the sun, promoting ideal leadership, can be said to be enlivened in the thalamus via the *Dakshinovritti Yantra*.

While some of Turrell's art is sun-dependent and Calder's works are said to be "filled with celestial conjunctions", they do not claim to directly reflect the inner structure of consciousness as represented in celestial phenomena. However, one could posit the question: If artists focus on solar-generated light and, as considered here, there is a correspondence between the sun and the physiology, shouldn't sun-dependent art have some effect on the brain and individual consciousness in some relative sense? Clearly, the answer to this question can only be quantified through scientific research. With this in mind, it would also be worthwhile to study and examine the effects of the Maharishi Vedic Observatory *Yantras*, to ascertain the degree to which these instruments might produce specific outcomes, possibly looking at brain wave activity and subjective states of awareness, just

¹⁵⁴ Maharishi Global Vedic Observatories Corporation, 1996, p. 11.

¹⁵⁵ *Ibid.*

as extensive research has been conducted on the effects of meditation. The next instrument situated in the north of the site (next to the *Dakshinovritti Yantra*) is its counterpart, the *Samrat Yantra*. This *Yantra* is designed to provide a constant, stable reference point for the physiology.

The *Samrat Yantra*: A Constant Reference

The term *Samrat Yantra* is referred to as the king of all instruments. Essentially an equatorial sundial, the *Samrat Yantra* at the Maharishi Vedic Observatory determines local solar time, the sun's rising zodiac sign, the winter and summer solstice, and spring and autumn equinox. Aligned north south, and with quadrants on each side, the *Samrat Yantra* consists of a triangular base whose upper surface, its hypotenuse, points directly to the North Star and the north pole of the celestial sphere.



*Samrat Yantra, Maharishi Vedic Observatory*¹⁵⁶

¹⁵⁶ Photograph, the author.

The North or Pole Star represents the fixed point of silence. The upper surface of the base (functioning as a *gnomon*) runs parallel to the axis of the earth and is like a spine. The plane of the quadrants is parallel to the earth's equator. The sides of the *gnomon* have line markings, indicating the angle of the sun at the winter and summer solstice and spring and autumn equinox, and which continue as parallel lines on the quadrants. The seven lines on the quadrants stand for the 12 zodiac signs.¹⁵⁷

Observing this instrument provides the physiology with a constant reference, facilitating measurement of 1) the quality, and, 2) the quantity of influence in the physiology from the movement of the planets. The first is by virtue of the planets moving around the sun and their distance (near or far) from the earth. The second is dependent upon the movement of earth on its axis (day and night).¹⁵⁸ This instrument, addresses, to some degree, the first two realms of time referred to by Moorkerjee and Khanna as cosmic or epochal time and solar or lunar time that determines the days, weeks, seasons, and so forth. The *Samrat Yantra* at Jai Singh's Jaipur observatory is a large instrument, having a ninety-foot high *gnomon* with steps up the hypotenuse; like a gigantic sundial, the *Samrat* identifies local time correct to 2 seconds. This instrument still plays an important role in the socio-economic life and is used by astrologers and Pundits to predict weather conditions.

In Europe, up until the end of the 19th-century, solstice rites were performed, the aim of which was to renew the strength of the sun.¹⁵⁹ As Green notes, the term "solstice" comes from *sol stare* meaning the stopping of the sun and refers to the time when the "sun pauses before continuing or reversing its passage. During this pause it is at its weakest and most vulnerable and, as a result, most receptive to external intervention."¹⁶⁰ Festivals, where torches are lit on the first Sunday in Lent apparently to revive the energy of the sun, still survive in villages in France today, despite the fact that their original significance has been obscured. In the High Alps large wheels of straw were set ablaze in the winter. Conversely, to celebrate the strength of the midsummer

¹⁵⁷ Maharishi Global Vedic Observatories Corporation, 1996, p. 12.

¹⁵⁸ *Ibid.*

¹⁵⁹ Green, 1993, p. 316.

¹⁶⁰ *Ibid.*

sun, on Midsummer Eve (on the summer solstice, around June 21) fires are lit and medicinal herbs collected for their purifying powers.¹⁶¹

In Maharishi Vedic Science, as discussed in Chapter Four, traditions and celebrations relating to the different qualities of intelligence lively on various days of the year can enliven specific qualities in the awareness of the people. This is part of the science of *Jyotish* and *Yagya*. In conjunction with *Jyotish* and *Yagya*, Maharishi's Vedic Approach to Health utilizes knowledge of imbalance within the individual physiology through pulse diagnosis to prescribe treatment modalities to bring balance to individual life.

One of the instruments of the Maharishi Vedic Observatory plays a part in this detection of imbalance in the pulse.

The *Nadivalaya Yantra*: Nullifying Imbalance in Vata, Pitta, Kapha¹⁶² —Connecting with the Pulse of the Heavens

Unique in its purpose, the *Nadivalaya Yantra* consists of two dials—faces on the two ends of a horizontal, somewhat cylindrical form—that run parallel to the plane of the earth's equator. One side of the instrument is used for six months of the year while the opposite end is active during the other six months. Indicating which hemisphere the sun is in, when one side is in sunlight, the other is in shadow, except for the day of the equinox when both sides are in sunlight. This happens as the changeover occurs from one side to the other. There are grooves forming rings on the dials and a peg that casts a shadow from which the observer can determine the sun's zodiac sign, the winter and summer solstice, local solar time.¹⁶³ The viewing of this instrument is said to nullify any imbalances in the "Vata, Pitta, and Kapha situation of the pulse of the individual that may be caused by the movement of the Earth around the sun and the rotation of the Earth on its axis (season and time of day)."¹⁶⁴ In Maharishi's Vedic Approach to Health the *Vaidya* or physician can detect the degree of imbalance through

¹⁶¹ *Ibid.*, pp. 317-318.

¹⁶² *Vata*, *Pitta* and *Kapha* are, according to *Ayurveda*, the three basic qualities or *Doshas* of material creation. In the physiology they can be detected in the pulse of the individual for their relative balance or imbalance. The three *Doshas*, on the level of precipitated matter, are related to the three values of *Rishi*, *Devata* and *Chhandas* on the level of consciousness.

¹⁶³ Maharishi Global Vedic Observatories Corporation, 1996, p. 13.

¹⁶⁴ *Ibid.*

feeling the pulse. This modality of detection is called pulse diagnosis or *Nadi Vigyan*. The fine qualities of the pulse, Maharishi points out

are influenced by a number of factors such as hormonal secretions, neurotransmitter activity, blood oxygenation, breathing rate, venous and arterial tension, and heart rate. The brain stem with its discrete groupings of neurons plays a central role in the modulation of all these factors. These constellations of neurons (twenty-seven in number) correspond in their structure and function to the twenty-seven constellations of stars in Maharishi Jyotish. This explains a major aspect of the relationship between the human physiology and the universe, and how the pulse can determine the level of balance in the physiology in relation to the cycles and rhythms of the universe.¹⁶⁵

The pulse of the earth can be thought of in terms of cycles of time; for example, yearly, monthly, daily cycles, and, as mentioned earlier, the “wobble” of the earth’s axis (or precession of the equinoxes) taking approximately 26,000 years.¹⁶⁶ The various cycles can be related to different qualities of *Vata*, *Pitta* and *Kapha*.

Pulse diagnosis as a technology has in principle been a part of ancient systems of health care used in China, Korea, Japan and Tibet, as well as India. Images of pulse reading techniques have been recorded in Tibetan paintings, as illustrated in the publication *The Buddha’s Art of Healing: Tibetan Paintings Rediscovered*.¹⁶⁷ *Nadi Vigyan* as practiced by physicians trained in Maharishi’s Vedic Approach to Health includes the knowledge of consciousness and its expression in the physiology and influences from the cosmic counterparts. Giving an explanation of the principle behind *Nadi Vigyan*, Nader explains that the interaction between the forces of nature, in addition to every vibration in the environment and physiology, leads to set of vibrations that can be detected by pulse diagnosis. The expert physician takes the pulse “on the radial artery—with three fingers and at different levels of pressure”; at different points on each finger he or she can detect the strength, quality, consistency and position of fluctuations and pulsations. This method of

¹⁶⁵ Maharishi Mahesh Yogi, 1996b, p. 51, & pp. 331-332.

¹⁶⁶ 25,868 years.

¹⁶⁷ Avedon, 1998, p. 68.

diagnosis is means to check the extent to which the physiology is aligned with Natural Law.¹⁶⁸



*Nadivalaya Yantra, Maharishi Vedic Observatory*¹⁶⁹

Removal of changing influences on the individual's pulse by viewing the *Nadivalaya Yantra*, allows the physician to more precisely detect imbalances in the physiology and prescribe treatment modalities to improve or restore health. This instrument can, therefore, play a role in disease prevention.

Having viewed all the instruments in the *Mandala* or circular layout of the Maharishi Vedic Observatory, one finds oneself to the east, back at the entry point where the *Ram Yantra* is located. Here, one can appreciate, as Hagelin states, that the Maharishi Vedic Observatory “expands the awareness and re-establishes the relationship between human intelligence and cosmic intelligence—spontaneously and automatically.”¹⁷⁰

¹⁶⁸ Nader, 2000, p. 431.

¹⁶⁹ Photograph, the author.

¹⁷⁰ Maharishi Global Vedic Observatories Corporation, 1996, p. 23.

The purpose of the *Yantras* is shown to be much more far-reaching than locating and observing positions and movements of the celestial bodies, or determining time. It is to do with creating balance in the physiology and promoting growth to higher states of consciousness. Any consideration of light and the influence of the sun and celestial bodies takes on a new meaning when viewed from the perspective of Maharishi Vedic Science and via the forms of the Maharishi Vedic Observatory. Consciousness as a lively, infinite field of awareness at the basis of the human mind and physiology is central not only to our understanding of human perception but also the functioning of the universe. It is impossible to isolate one branch of Vedic knowledge from another; all have their source in consciousness. All aim to fully illuminate our experience. Art, astronomy, health, science, indeed, all streams of knowledge are interrelated and unified at their source. In this context, how can one fully grasp the significance of the *Yantras* without looking more deeply into the relationships between the functions of the physiology (cell, brain, etc.), and the complex influence of the planets, constellations, and zodiac signs, as revealed by *Jyotish*?

The Physiology and *Jyotish*

In balancing the physiology at the deepest cosmic level, the *Yantras* inherently relate to the science of *Jyotish*. In his discussion of *Jyotish* in the cell, Nader explains that there is a one-to-one relationship between the internal structures of a cell and the nine planets or *Grahas*:¹⁷¹ the nucleus corresponds to the sun, cytosol to the moon, mitochondria to Mars, membranes to Mercury, golgi apparatus to Jupiter, endoplasmic reticulum to Venus, lysosome to Saturn, endosome to *Rahu*, and pores to *Ketu*. The 12 solar constellations are also mirrored in the cell. In one instance, Nader describes how Aries corresponds to adenosine tri-phosphate. As he notes, the first constellation in *Jyotish*, Aries or *Mesha*

Corresponds in the cell to energy in the form of ATP. ATP stands for adenosine tri-phosphate. This is the energy molecule of the cell. Energy

¹⁷¹ Nader, 2000, p. 295.

is the most important aspect of any cell activity, and since nothing can take place without energy, a large part of the cell life is spent in producing energy. The sign Mesha, or Aries, is characterized by dynamism, activity, command, and other aspects associated with energy. It is owned by Mars, or Mangal.... Mars corresponds to the mitochondria. It is in the mitochondria that the ATP is produced.¹⁷²

Nader goes on to consider all the zodiac signs, their values and the corresponding cell counterparts,¹⁷³ illustrating the structural similarities of the zodiac signs and specific cell structures. In addition, according to *Jyotish* the 12 houses or *Bhavas* also have a one-to-one correspondence to internal components of a cell, as do the 27 *Nakshatras* (lunar constellations). For example, Nader reveals that specific organic constituents of the information of the cell (20 essential amino acids, five nucleotides, and two sugars) mirror the configurations of the 27 *Nakshatras*.¹⁷⁴ In one example, Nader states that tryptophan, the largest of the amino acids, is a precursor of serotonin and is involved in the regulation of sleep-waking cycle, pain modulation, and mood. Influencing the individual's state of awareness, Nader comments, people who suffer from depression have a low level of this transmitter.¹⁷⁵ He goes on to explain that tryptophan corresponds to *Revati*, which is the largest of the *Nakshatras*, and has the characteristics of "giving spirituality, happiness, softness, sympathy, proper routine and daily living, and the ability to follow duty."¹⁷⁶ These characteristics, Nader asserts, relate to the role of

¹⁷² *Ibid.*, p. 297-298.

¹⁷³ Messenger molecules correspond to Taurus or *Vrishabh*, messenger transport system to Gemini or *Mithuna*, the transport medium in the cell corresponds to Cancer or *Kark*, the DNA transcription system to Leo or *Simha*, the RNA transport system to Virgo or *Kanya*, the RNA translation system corresponds to Libra or *Tula*, the RNA degradation system corresponds to Scorpio or *Vrishchik*, the protein sorting system in the cell to Sagittarius or *Dhamu*, the cell's system of cell maintenance and degradation of defunct material corresponds to Capricorn or *Makara*, the cell protection system corresponds to Aquarius or *Kumbh*, and, the protein liberation (excretion and secretion) corresponds to Pisces or *Minu*. Nader, 2000, pp. 297-301.

¹⁷⁴ The 27 aspects of the cell and their *Nakshatra* counterparts are: Guanine (*Shatabhisha*), ribose (*Dhanishtha*), glutamate (*Shravan*), uracil (*Uttarashadha*), methionine (*Purvashadha*), adenine (*Mula*), glutamine (*Jyestha*), arginine (*Anuradha*), thymine (*Vishakha*), serine (*Swati*), glycine (*Chitra*), phenylalanine (*Hasta*), cysteine (*Uttaraphalgumi*), valine (*Purvaphalgumi*), cytosine (*Magha*), deoxyribose (*Ashlesha*), asparagines (*Pushya*), leucine (*Punarvasu*), alanine (*Ardra*), proline (*Mrigashira*), histidine (*Rohini*), tyrosone (*Krittika*), aspartate (*Bharani*), lysine (*Ashwini*), tryptophan (*Revati*), threonine (*Uttarabhadrapada*), isoleucine (*Purvabhadrapada*). For a detailed diagrammatic representation of these relationships see: Nader, 2000, pp. 305-307.

¹⁷⁵ Nader, 2000, p. 303.

¹⁷⁶ *Ibid.*

tryptophan. With this understanding, by taking care of the influence from the planets, etc., through *Jyotish* and *Yagya*, the individual can impact the functioning of the physiology, right down to the level of the cell and DNA itself.

Indeed, there are further correspondences and complex relationships between different aspects of the physiology and the *Grahas*, *Rashis*, *Bhavas*, and *Nakshatras*. Continuing with his discussion of the physiology and its cosmic counterparts, Nader elaborates upon the connections between serotonin, tryptophan, the Raphe nuclei, Venus and the substantia nigra and dopamine, pointing out that:

The counterparts of the *Nakshatras* in the cell have an intimate and direct relationship with the counterparts of the *Nakshatras* in the human physiology.... For example, serotonin, whose precursor is tryptophan, is mainly concentrated in the brainstem in structures called the Raphe nuclei. The Raphe nucleus represents Revati, the same *Nakshatra* represented on the cellular level by tryptophan. Furthermore, the Raphe nucleus is the largest of the brainstem nuclei associated with the *Nakshatras*.... Another level of correspondence arises when we analyse the more complex relationships between planets, constellations, and *Nakshatras* and their counterparts in the physiology and the cell. As an example, one can examine the dynamics of the relationship between the substantia nigra of the brain corresponding to Venus (Shukra), and its association with dopamine (related to the *Nakshatra* Kritika). A decrease in dopamine in the substantia nigra, for example, contributes to the exacerbation of Parkinson's disease. A patient with Parkinson's disease experiences increased rigidity in his movements and shaking of the hands. By increasing dopamine one can alleviate these symptoms of the disease. The qualities of the *Nakshatra* Kritika show that it can act like dopamine in the physiology. Three-quarters of Kritika are associated with the constellation Taurus (Vrishabh). Vrishabh is owned by Shukra (Venus), which is associated with the substantia nigra. Furthermore, Vrishabh (Taurus) represents the stable, reliable qualities of the messengers in the cell.... Dopamine in the substantia nigra acts as a messenger (neurotransmitter).¹⁷⁷

This glimpse into the relationships of the celestial bodies to one another and the correspondence of their qualities and functions to the

¹⁷⁷ *Ibid.*, p. 304.

human physiology from the brain to the cell, gives some idea of the significance of *Jyotish*, the role of the Maharishi Vedic Observatory, and all the technologies of consciousness that have been discussed so far. In examining these approaches to development of consciousness one can see how the physiology is a mirror of the universe and an instrument to gain and experience enlightenment.

The desire to deal with themes of light, to create interactive, environmental art that draws upon the movement of the earth around the sun for its perception and appreciation, the continued examination and analysis of monuments built by cultures long before our time that have embedded within their design numerical calculations of eras of time, representations of zodiac signs, and indications of a deep understanding of astronomy, suggest that knowledge of the universe throughout the ages continues to surface, fascinating and serving humankind. As stated earlier, this knowledge, according to Maharishi Vedic Science, is available in the consciousness of every individual, on the level of transcendental awareness, regardless of time, culture or place. Thus, it can be expressed at any time, in any location.

Ultimately, the individual is cosmic. The Veda and the Vedic Literature as expressions of consciousness, eternally present the inner structure of the brain, the cell, the DNA, in relation to the celestial bodies and the *Devatas*. After looking at the purpose of the current Maharishi Vedic Observatory instruments, the idea of earlier observatory-like structures attempting to reveal cosmic forces and aid rulership, does not seem unreasonable.

***Chakravarti*, Ruler of the Universe, as the Brainstem**

In returning to the theme of the significance of the sun in relation to the brain and our solar system, Nader points out that one critical area of the brain, the brainstem, controls the entire set of structures in the physiology associated with the solar system and the stars. Nader explains that the brainstem perfectly fits the description of the ruler of the universe, *Chakravarti* and the structure of his kingdom. As mentioned earlier, *Surya* or the sun corresponds in the physiology to the thalamus. The thalamus is located in the centre of the brain and acts like a king. All sensory and motor activity is coordinated around this locus. Resembling the crown of the sun king, a group of fibres form a

crown-like structure around the thalamus. Nader comments that the thalamus is involved in “setting the overall tone of consciousness in the brain via the diffuse thalamic system, which is connected to key centres in the brainstem—the location of *Chakravarti*, the ruler of the universe.”¹⁷⁸ As Nader elaborates:

The thalamus, which represents the Sun (Surya), the hypothalamus representing the Moon (Chandra), and the subthalamus representing Mercury (Budh), sit directly on the brainstem, and are controlled by it. Venus (Shukra)—the substantia nigra—is itself part of the brainstem. The other planets, or *Grahas*, described in Jyotish are also directly associated with and controlled by the brainstem. The 12 *Rashis*, constellations, are themselves the 12 *Rajadhanis*¹⁷⁹ mentioned earlier. The 27 *Nakshatras* are contained in the brainstem. If the brainstem (in particular its reticular activating system) shuts down its output, everything in the physiology would come to a standstill and none of the counterparts of the solar system or the stars would be able to create any effect or influence. The physiology would immediately enter a coma followed by a total arrest—the thalamus (the Sun), the hypothalamus (the Moon), and all other counterparts would stop. We see, therefore, that *Chakravarti* in the physiology, as in the universe, rules every activity and movement.¹⁸⁰

Here, Nader articulates the correspondence between *Chakravarti* in both the celestial arena and the function of the brainstem—the latter controlling the thalamus (Sun), the Hypothalamus (Moon), and the subthalamus (Mercury) and of which the substantia nigra (Venus) etc., are a part.

Revealing Inner Light—The Individual is Cosmic

While much more can be said about the relationship between the human physiology and the cosmic body, by examining the relationship

¹⁷⁸ *Ibid.*, p. 378.

¹⁷⁹ As Nader points out, *Chakravarti* is said to control 12 *Rajadhanis*—12 *Raja Mandals*. Nader notes that there are 12 pairs of cranial nerves made up of nerve fibres on the right and left sides of the brainstem. These constitute 12 circular structures (*Mandalas*) formed by those cranial nerves around the brainstem. Nader states that these correspond to the 12 *Raja Mandals* described to be in the territory of *Chakravarti*. Nader, 200o, p. 385.

¹⁸⁰ *Ibid.*, pp. 385-386.

between consciousness and the universe as illuminated by Maharishi Vedic Science, the field of total knowledge is revealed. Clearly, if previous cultures had even some fraction of this understanding, then it is not astonishing that structures like Stonehenge, the pyramids, and Angkor Wat exist or that artists persist in creating light- or sun-dependent art.

Issues such as successful rulership, the relationship of the individual to the sun, moon and celestial bodies, balance in the cycles of nature, individual life and collective consciousness, can all be understood to be enormously practical and relevant to life as illuminated through the Vedic Observatory. In examining the structures and purpose of the Maharishi Vedic Observatory perhaps some additional light can be shed on earlier devices and architectural monuments. However, clearly the Maharishi Vedic Observatory has been designed to promote higher states of consciousness, which makes it entirely unique and especially useful from a consciousness-based perspective.

One could say that it is inherent within the human consciousness to seek and experience the full range of the mind and the unbounded nature of awareness. The fascination with light, inner perception and the relationship of the human to the cosmos, continues to preoccupy artists like Turrell, Nash, Housiary, Fulton, and Davies, working across various domains—environmental art, digital and print media, sculpture, performance, kinetic and installation art—indicating the desire to reveal a connection between inner perception and outer worlds. As noted, Turrell states that he is interested in light that is only perceptible in the mind. Indeed, collectively, the instruments of the Maharishi Vedic Observatory are structured to reveal inner consciousness as the source of energy, light and the celestial world. Through innocent perception, the Maharishi Vedic Observatory aims to promote individual alignment with Natural Law, attainment of higher states of consciousness, and cognition of the mechanics of creation. Along with *Yagya* or Vedic performance, the artist, or any individual, has many tools at their disposal to develop infinite creativity, tools that facilitate *Darshana* or artistic sight.

Just as the physiology is a mirror of the universe, architectural structures can also embody the structure of Natural Law through *Vastu Vidya*—the science of establishing the built environment in accord with Natural Law.

6

IN VISIBLE CITIES: METAPHOR? OR BODY AND BUILT ENVIRONMENT AS STRUCTURES OF WHOLENESS

Touring the cathedrals today with cameras and guidebooks in hand, we may experience something at odds with our practical secularism: a peculiar and embarrassing desire to fall to our knees and worship a being as mighty and sublime as we ourselves are small and inadequate. Such a reaction would not, of course, have surprised the cathedral builders...the purpose of their ethereal walls and lace-like ceilings being to make metaphysical stirrings not only plausible but irresistible within even the soberest of hearts.¹

—Alain de Botton

The principle of Sthapatya Veda is to establish any building, any village, and city, any country in full alignment with the structuring dynamics of the whole universe, which maintains the connectedness of everything with everything else. Buildings that are constructed according to Sthapatya Veda are very soothing, uplifting, and evolutionary to everyone because every individual is essentially Cosmic in nature—the structures and functions of the individual physiology are an exact replica of the Cosmic Physiology, the physiology of the universe, because Natural Law is the common basis of both.... The intelligence of every grain of creation is in tune with the whole cosmos, and that is how, structurally, the infinite diversity of the ever-expanding universe is upheld by one unified wholeness of intelligence.²

—Maharishi Mahesh Yogi

¹ De Botton, in *The Age*, 2006, p. 31.

² Maharishi Mahesh Yogi, 1998, pp. 168-169.

Marco Polo describes a bridge, stone by stone.

“But which is the stone that supports the bridge?” Kublai Khan asks.

“The bridge is not supported by one stone or another,” Marco answers,

“but by the line of the arch that they form.”

Kublai Khan remains silent, reflecting. Then he adds:

“Why do you speak to me of the stones? It is only the arch that matters to me.” Polo answers: “Without stones there is no arch.”³

—Italo Calvino

Artists increasingly re-define space, reference architectural form and influence landscape design, by creating innovative, and in some cases sustainable, environmental structures, gardens, and sites. Indeed, artists and writers have long been interested in architectural space as metaphor for states of mind, from castles, labyrinths, “perfectly” proportioned enclosures, and ideal cities, to the maze and structures such as the Panopticon. Visions and concepts of the built environment inform ideas about consciousness and the body. Using the city as a site of memory and desire, in his fictional book *Invisible Cities*, Italo Calvino presents a voyage through various locations or multiple versions of one location, as a voyage of inner experience. Another text, an important Vedic treatise—the *Shrimad Devi Bhagavatam*, has recently been discussed as illustrating consciousness, not metaphorically but through direct reference, in terms of specific enclosures mirrored in the brain physiology.⁴ Nader reveals that this text is not fictional. While, the enclosures described in the *Shrimad Devi Bhagavatam* are referred to as the “abode of Mother Divine” (where *Mother Divine* is the cosmic intelligence of Nature, discussed in previous chapters), Nader articulates how these enclosures relate to the human brain. What bearing does this have on the idea of the brain’s optimum functioning in an actual architectural setting? How can architectural structures, spaces and environments, embody that cosmic intelligence? While Calvino’s “cities” can be interpreted from the Vedic perspective as metaphors for consciousness states, the *Shrimad Devi Bhagavatam* in describing the brain’s enclosures divulges the functioning of the brain physiology. The architecture and town-

³ Calvino, 1972, p. 82.

⁴ Nader, 2000, pp. 388-419.

planning of Maharishi Sthapatya Veda adds to this understanding by explaining how intelligence or pure consciousness can be expressed in the built environment and how the individual can live in a truly sustainable environment, in harmony with those laws of nature that structure the brain physiology.

City as Metaphor—Map and City as Transposable Sites

It could be said that in the book *Invisible Cities* Italo Calvino uses the city as a concept to explore notions of consciousness states. Through the device of a dialogue between two men—Marco Polo, a Venetian traveler and adventurer, and Kublai Khan, a Tartar emperor to whom Polo gives an account of his journeys—Calvino weaves a web of impressions, constructing visions of numerous cities. While every city is different, each, it transpires, is a variation on the same place. For argument's sake, applying a Vedic reading, each city could be interpreted as a projection of consciousness giving shape to sites of memory and desire.

In one instance, for example, Marco Polo tells of the city Eudoxia, which apparently mirrors patterns of straight and circular lines embedded in a carpet design—a blueprint or template of Eudoxia. As Marco Polo continues with his tale, it becomes evident that the city and the carpet share a more complex relationship than that of a map and a geographical location. While threads, looped in rich colours, present the path to the traveler's destination, each inhabitant of the city, in comparing the carpet with his or her image of the city, finds “the story of his life” and the various “twists of fate”. The carpet contains not just threads that give an indication of how to reach an enclosure, but also the history and destiny of the inhabitant or the traveler. Marco Polo tells of an oracle who, when asked about the relationship between the carpet and the city, declares that one of the two represents the form of the celestial sphere created by the gods and the other is a human creation, a reflection of the former. As Marco Polo recounts:

In Eudoxia, which spreads both upwards and down, with winding alleys, steps, dead ends, hovels, a carpet is preserved in which you can observe the city's true form. At first sight nothing seems to resemble Eudoxia less than the design of the carpet, laid out in symmetrical motives whose patterns are repeated along straight and circular lines,

interwoven with brilliantly colored spires, in a repetition that can be followed throughout the whole woof. But if you pause and examine it carefully, you become convinced that each place in the carpet corresponds to a place in the city and all the things contained in the city are included in the design, arranged according to their true relationship, which escapes your eye distracted by the bustle, the throngs, the shoving. All of Eudoxia's confusion, the mule's braying, the lampblack stains, the fish smell is what is evident in the incomplete perspective you grasp; but the carpet proves that there is a point from which the city shows its true proportions, the geometrical scheme is implicit in its every, tiniest detail.⁵

Calvino goes on to write that although one can get lost in Eudoxia, when one looks at the carpet, its inherent order prevails and influences the traveler's notion of the cityscape:

It is easy to get lost in Eudoxia: but when you concentrate and stare at the carpet, you recognize the street you were seeking in crimson or indigo or magenta thread which, in a wide loop, brings you to the purple enclosure that is your real destination. Every inhabitant of Eudoxia compares the carpet's immobile order with his own image of the city, an anguish of his own, and can find concealed among the arabesques, an answer, the story of his life, the twists of fate.

An oracle was questioned about the mysterious bond between the two objects so dissimilar as the carpet and the city. One of the two objects—the oracle replied—has the form the gods gave the starry sky and the orbits in which the worlds revolve; the other is an approximate reflection, like every human creation. For some time the augurs had been sure that the carpet's harmonious pattern was of divine origin. The oracle was interpreted in this sense, arousing no controversy. But you could, similarly, come to the opposite conclusion: that the true map of the universe is the city of Eudoxia, just as it is, a stain that spreads out shapelessly, with crooked streets, houses that crumble one upon the other amid clouds of dust.⁶

In this description of Eudoxia, Calvino presents the reader with the question: which of the two objects, the carpet or the city, is of divine

⁵ Calvino, 1972, pp. 96-97.

⁶ *Ibid.*

origin? Which of the two is a true or original map of the universe? Calvino leaves us with the possibility that it can be either one.

Being Always Present in a Silent Mental Space

Interpreting the story of Eudoxia and the carpet from a Vedic perspective, it is interesting to view the carpet as a less expressed version of the city and the city proper as a more manifest construction. Likewise, for the purpose of this discussion, in analyzing the description of Eudoxia in the light of higher states of consciousness, one could say that from the viewpoint of the traveler living waking state consciousness, the predominant experience would be of the “anguish of his own”, and the city as a stain spreading out “shapelessly, with crooked streets...amid clouds of dust”. Both the carpet and city are perceived and experienced as actual spaces related to history and personal memory. If the traveler was living Cosmic Consciousness or *Turiyatit Chetana*, he would see the carpet and the city as relative constructions separate and distinct from his own inner silent, awareness—Transcendental Consciousness. Continuing with this line of thought, in *Bhagavad Chetana* the city could be seen as a more manifest version of the carpet. Despite this, the carpet and the city would both increasingly be revealed as the play of subtle values of consciousness, in the coloured threads, in the “crooked streets”, and “clouds of dust”. If the traveler was living *Brahmi Chetana*, then the city with all the stories of people’s lives—the “twists of fate” or destiny, the “crooked streets,” the “clouds of dust”, the relationship between the city and the carpet as a mirror of the celestial world, “the form the Gods give the starry sky and the orbits in which the worlds revolve”—would all be appreciated as the creation and play of the traveler’s own unbounded consciousness moving within itself. From this perspective, both the carpet and the city can contain information of the various histories, structures, people, worlds, and elements that make up life in Eudoxia. Indeed, they would reflect the mechanics of creation and transformation that occur on a universal level and on the level of each individual who, via their own state of consciousness, sees their own version of the city, with a view of either the carpet or city (or an oscillation between both) as a divine map.

Obviously, in his book Calvino introduces the idea of paradox and the role of the subject in creating realities or relative notions of inner and outer fields of space with respect to memory, desire and consciousness. In the end, no single viewpoint prevails; accounts of place seem simultaneously both real and imaginary, constructed and ephemeral, of great import and somewhat insignificant. In this way, Calvino opens up a sense of possibility and indeterminacy implying multiple consciousness states. However, in another instance in Calvino's *Invisible Cities*, Marco Polo is found describing a mental space of calm and silence equivalent to the garden in which he spontaneously finds himself located with Kublai Khan during a moment of concentration and reflection. At the same time that Marco Polo observes that he is (always) present in the garden (silent mental space), he also finds that he is simultaneously traveling across another terrain:

Everything I see and do assumes meaning in a mental space where the same calm reigns as here, the same penumbra, the same silence streaked by the rustling of leaves. At the moment when I concentrate and reflect, I find myself again, always, in this garden, at this hour of the evening, in your august presence, though I continue, without a moment's pause, moving up a river green with crocodiles or counting the barrels of salted fish being lowered into the hold.⁷

This passage seems to provide a metaphor for the idea of relative consciousness states that can be experienced on the ground of pure, silent consciousness. If the silent garden can be thought of as the inner, unbounded consciousness of the individual mind (on the ground of which inner structures that house desires and impressions are formed), the cities could be viewed as different psycho-physiological states related to experiences registered deep in the mind. Calvino's presentation of architectural spaces that seem to mirror consciousness provides a sense of the notion that inner states can fashion outer worlds.

Whatever Calvino intends, through the dialogue of the characters of Marco Polo and Kublai Khan one can see an analogy for the concept of an underlying silent, ever-present field of consciousness and the varying, relative, ever-changing world (the numerous cities which are

⁷ Calvino, 1972, p. 103.

in effect various versions of one city) experienced and enjoyed through the mind (and by extension, the senses and body).

The Brain Physiology as City or Abode of Consciousness

In contrast, in the *Shrimad Devi Bhagavatam* the idea of consciousness residing in the body is revealed in an unexpected way via descriptions of *Devi Gayatri* as actually residing in 19 different enclosures. These enclosures, like architectural environments, make up the abode of *Devi Gayatri* or Mother Divine. On first reading one could interpret these descriptions as referring to mythical cities or enclosures of a city, but Nader identifies a profound correspondence between consciousness as intelligence and the physiology in terms these enclosures, finding that they actually describe layers of the brain. He reveals that the brain is the residence of infinite creative intelligence called *Devi Gayatri*.⁸

As Nader points out, the enclosures listed in the *Devi Bhagavatam* feature numerous characters (*Devas*, military personnel, attendants, etc.), oceans, rivers, trees, flora and fauna, precious and semi-precious metals, gems, and so forth. Nader states that these all refer to structures or functions of the brain. For example, in Book 12 (Chapters 10-12), Nader states that there is a complete account of *Sarvaloka*,⁹ given by Sage *Vyasa*. Part of this account reads as follows:

*O King Janamejaya, what is known in the Shrutis, in the Shubala Upanishad, as the Sarvaloka over the Brahamaloka, that is Manidwipa (island of gems). Here the Devi resides. This region is superior to all other regions. Hence it is named Sarvaloka. (In the very beginning) Devi built this place according to Her will to serve as her residence.... Verily no other place in this universe can stand before it. Hence it is called Manidwipa, or Sarvaloka, as superior to all other Lokas. This Manidwipa is situated at the top of all the regions, and resembles an umbrella. Its shadow falls on the Brahmamanda (universe) and destroys all the pains and suffering of this world.*¹⁰

⁸ This is the pure potentiality of consciousness identified as Mother Divine as discussed in Chapter Three.

⁹ *Sarvaloka* is the abode of *Devi Gayatri*, Nader, 2000, p. 390.

¹⁰ From the *Shrimad Devi Bhagavatam* (12.10), quoted in Nader, 2000, 390-391. *Loka* is translated by Maharishi as "world". Maharishi Mahesh Yogi, 1967, p. 133; (*Bhagavad-Gita*, 3.3). *Sarva* means "all".

In reference to this description, Nader explains that in terms of structure and function, in the physiology the “highest region” is the head and brain and that these regions are superior to all other regions. Furthermore, the skull has a protective shape like an umbrella.¹¹ The brain’s function is to control and influence the entire body and ensure its survival—this means taking care of physical needs but it also involves guiding the individual to a state of bliss consciousness (which is the potential of human life) to overcome all pain and suffering.¹² It is interesting to note that in designs used for sand *Mandalas* by the Namgyala Monks of Tibet, the parasol represents protection against evil and is a sign of high dignity.

The Enclosures of *Sarvaloka* in the Head and Brain

Nader asserts that, from the outer layer of skin and hair to the skull and membrane coverings of the brain, to layers within the brain and finally the inner layers of individual cells, the 19 enclosures of the abode of Mother Divine correspond to 19 distinct layers of the head and brain. Nader states that Maharishi has brought to light these exact relationships highlighting that: the first 16 of the 19 enclosures relate to eight outward and eight inward values of the eight *Prakritis*; the last three enclosures relate to the transcendental aspects of *Rishi*, *Devata* and *Chhandas*.¹³ In this way, the layers reflect the self-referral dynamics of consciousness. How exactly does this present itself in terms of the structure and functions of the different enclosures?

The first enclosure, representing the first of the eight outward *Prakritis*, Nader asserts, is the epidermis. The second enclosure is the dermis, and the third the hypodermis. The fourth enclosure corresponds to the calvaria or cranium, the fifth corresponds to the periosteal dura mater, the sixth to the meningeal dura mater, the seventh is the arachnoid, the eighth is the pia mater.¹⁴ The next eight enclosures relate to the eight inward *Prakritis*. Enclosure nine is cortex layer 1; the tenth enclosure is cortex layer 2; the eleventh corresponds to cortex

¹¹ Nader, 2000, p. 391.

¹² *Ibid.*

¹³ Nader, 2000, pp. 388-389. As discussed earlier, the eight *Prakritis* are earth, water, fire, air, space, mind, intellect, and ego.

¹⁴ Nader further describes these layers and provides diagrams that illustrate their location in the brain in his discussion of *Devi Gayatri* in the brain. Nader, 2000, pp. 388-419.

layer 3; the twelfth is cortex layer 4; the thirteenth is cortex layer 5; the fourteenth corresponds to cortex layer 6; the fifteenth to the white matter of the brain; and the sixteenth is the inner brain grey matter. The last three enclosures representing *Rishi*, *Devata*, and *Chhandas* values, are: the seventeenth enclosure, which is the cell wall; the eighteenth—the nuclear wall; and the nineteenth enclosure, which is the DNA within the nucleus of the cell.¹⁵ Nader mentions that considered in another way, the enclosures also represent the aspects of *Rishi*, *Devata*, and *Chhandas* each with six aspects making $3 \times 6 = 18$, and the final nineteenth value being *Samhita*.¹⁶

Illustrating the correspondence of the brain and consciousness, Nader states that surrounding the 19 enclosures is an ocean called *Sudha Samudra*:

*Surrounding this Manidwipa exists an ocean called the Sudha Samudra (ocean of nectar), many yojanas wide and many yojanas deep. Many waves arise in it due to winds. Various fishes and conches and other aquatic animals play here and the beach is full of clear sand-like gems. The sea shores are always kept cool by the splashes of the waves of water striking the beach. Various ships decked with various nice flags are playing to and fro. Various trees bearing gems are adorning the beach.*¹⁷

This ocean of nectar, Nader explains, corresponds to the cerebrospinal fluid in which there are different molecules and neurotransmitters. He goes on to equate these with the “various fishes”, “conches” and “aquatic animals”, and “ships with various flags”.¹⁸

¹⁵ *Ibid.*

¹⁶ *Ibid.*, p. 389. Nader comments that this description is supported by the physiological functions of these layers of the brain. The first six layers are fundamentally protective—providing a covering and hiding function (*Chhandas*); the next six layers involve interconnecting, processing and nourishment of the brain functions (*Devata*); the final six layers lie with in the inner core of the brain (*Rishi*). The last layer is the DNA, the sum total of everything (*Samhita*). Nader, 2000, p. 389.

¹⁷ From the *Shrimad Devi Bhagavatam* (12.10), quoted in Nader, 2000, p. 391. The measurement of the *Yojana*, Nader points out, is used to describe in the first eight enclosures which are either 7 *Yojanas* high, long or wide (except for enclosure two for which no dimension is given), and the second eight enclosures which are described as 10 *Yojanas* high (except for enclosure nine). Nader assumes that the two enclosures not mentioned follow the same number of *Yojanas*. The final three enclosures are described as 100 *Yojanas* (seventeenth enclosure), still higher (eighteenth enclosure) and 1000 *Yojanas* (nineteenth enclosure). Nader, 2000, p. 389.

¹⁸ Nader, 2000, p. 391.

The phrase “waves arise in it due to winds” Nader comments, refers to the movement of the cerebrospinal fluid which occurs in waves—changing in rhythm and pace with breathing and blood pressure.¹⁹ Called arachnoid granulations, the channels of the cerebrospinal fluid possess tree-like branching structures (like “trees bearing gems adorning the beach”), while the flow of the cerebrospinal fluid performs a cooling and cushioning function in the brain. Hence the phrase “the sea shores are always kept cool by the splashes of the waves of water striking the beach”.²⁰

The First Eight Enclosures as Outward Layers

The first enclosure in the physiology, the epidermis, Nader points out, is the outer protective layer of the skin beyond which very little penetrates. In the *Devi Bhagavatam* the first enclosure is elaborated as follows:

*Across the ocean there is an iron enclosure, very long and 7 yojanas wide, very high so as to block the heavens. Within this enclosure wall the military guards skilled in war and furnished with various weapons are running gladly to and fro. There are 4 gateways or entrances; at every gate there are hundreds of guards and various hosts of the devotees of the Devi. Whenever any Deva comes to pay a visit to the Jagadishwari, their vahanas (carriers) and retinue are stopped here. This place resounds with the chiming of the bells of hundreds of chariots of the Devas and the neighing of their horses and the sounds of their hoofs. The Devis walk here and there with canes in their hands, chiding at intervals the attendants of the Devas. This place is so noisy that no one can hear clearly another’s word. Here are seen thousands of houses adorned with trees of gems and jewels, and tanks filled with plenty of tasteful, good sweet waters.*²¹

The phrase “carriers and retinue are stopped here”, Nader comments, refers to the protective function of the epidermis. The epidermis also contains immune cells (macrophages or T-cells), and, like the “military guards skilled in war” and “hundreds of guards”, it provides protection

¹⁹ *Ibid.*, pp. 391-392.

²⁰ *Ibid.*, p. 392.

²¹ From the *Shrimad Devi Bhagavatam* (12.10), quoted in Nader, 2000, p. 392.

from a host of potentially injurious agents including microorganisms, dehydration, ultraviolet radiation and mechanical trauma.²² The epidermal layer, Nader emphasizes, is the first level of attack against intruding organisms, chemical or physical agents and is also the site from where millions of sensory inputs are transmitted to the physiology; as such it corresponds to the description of a place “so noisy that no one can hear another’s word”. Furthermore, deposited in the molecular structure of the building blocks and enzymes of the epidermis is iron, including: rusty cytochromes²³, ferritin, and trichosiderin²⁴, corresponding to the “iron enclosure”. Finally, the epidermal layer consists of four main internal structures²⁵—“gateways or entrances”.

Nader continues to provide an analysis of the remaining enclosures. The second enclosure has a big, white copper, enclosure wall 100 times more brilliant than the previous and so high that “it almost touches the Heavens”; it has trees “casting nice cool shadows”, flowers and fruits, sweet fragrance, rivers of “juicy liquids”, birds, peacocks and entrance gates.²⁶ This is the dermis, which contains copper²⁷ and zinc;²⁸ Nader points out that zinc is contained in the “DNA finger” and that the hair follicles and glands of the dermis resemble trees and their roots. The dermis is also the site of great hormonal and biochemical activity represented by the phrase: “the wild mad peacocks are dancing with madness”.²⁹

The third enclosure is square-shaped, has a wall of copper, forests, golden leaves, flowers and celestial musicians living there. The fourth enclosure is made of lead with flowers that look like gold.³⁰ The fifth is made of brass with strong, flowing rivers and tanks that are dirty; the sixth enclosure is made of five-fold iron; the seventh is built of silver, and the eighth of molten gold.³¹ Nader comments that the square-shaped

²² Nader, 2000, p. 392.

²³ Coloured complex protein groups containing iron.

²⁴ An iron pigment abundant in people with red hair.

²⁵ 1) Stratum corneum, 2) stratum granulosum, 3) stratum spinosum, and 4) stratum basale. Nader, 2000, p. 393.

²⁶ Quoted in Nader, 2000, p. 393.

²⁷ Nader mentions that copper is an essential element in an enzyme that allows the formation of norepinephrine from dopamine. *Ibid.*, p. 393.

²⁸ *Ibid.*

²⁹ *Ibid.*, p. 394.

³⁰ *Ibid.*, pp. 392-394.

³¹ *Ibid.*, pp. 396-398.

third enclosure is the hypodermis, which extends over the entire body but on the top of the head is square-shaped due to surrounding muscle insertions.³² The hypodermis contains pheromones which Nader comments refers to the phrase in the *Devi Bhagavatam* “their perfumes spread...and gladden things all around”;³³ it also gives a softness to the form of the body and thereby “intensifies the desires of amorous persons”.³⁴ The fourth enclosure is the cranium, which is the heaviest part of the head, hence the phrase “made of lead”.³⁵ The fifth enclosure corresponds to the periosteal dura mater whose walls are “made of brass” (a compound of copper and zinc); copper is an essential element in an enzyme that allows the formation of norepinephrine from dopamine and, as mentioned before, zinc is found in the “DNA finger”.

The venous sinuses of this layer carry large amounts of blood and may contain waste materials collected from the cells and tissue components; hence “the tanks are very dirty”.³⁶ The sixth enclosure wall, made of five-fold iron is the meningeal dura mater, which folds into five septa dividing the cranial cavity into five compartments.³⁷ The seventh enclosure is the arachnoid, a delicate non-vascular web like membrane that is silvery in colour,³⁸ and the eighth enclosure is the pia mater, which follows the surface and fine ridges of the cortex. “it invaginates and surrounds the blood vessels that enter and leave the nervous system. The blood vessels give it a fine yellowish-reddish colour: *built of molten gold*”.³⁹

Eight Inward Layers of the Brain

The next eight layers are inward layers. In the *Devi Bhagavatam* they are all related to gems and together represent the second level of enclosure. The first eight coverings are thus followed by eight layers of the cerebral cortex, starting with enclosure nine—cortex layer 1—

³² *Ibid.*, p. 395.

³³ *Ibid.*

³⁴ *Ibid.*

³⁵ *Ibid.*

³⁶ *Ibid.*, p. 396.

³⁷ *Ibid.*, p. 397.

³⁸ *Ibid.*, p. 398.

³⁹ *Ibid.*, pp. 398-399.

which is “made of red kum kum (saffron) like Pushparagam gems”⁴⁰ Pushparagam gems or faceted yellow topaz or sapphire are associated with the planet *Guru* (Jupiter), which, Nader points out, has a holistic and balancing influence identical to the function of this layer of the cortex.⁴¹ The tenth enclosure is described as made of ruby and red like the rising sun. Nader state that this is cortex layer 2; it is made of cell bodies of neurons with various forms including stellate and pyramidal cells that resemble faceted ruby. Ruby is associated with the sun and the sun corresponds to the thalamus; the thalamus is “able to overpower the activity and function of all other structures of the brain through its influence upon this second layer of the cortex.”⁴² The eleventh enclosure is cortex layer 3, described as built of *Gomed*—a gem associated with *Rahu*.⁴³ *Rahu* has the property of hiding and releasing like the function of cortex layer 3, which inhibits and releases the activity of the cortex.⁴⁴ The twelfth enclosure is made of diamonds and corresponds to cortex layer 4, the main input layer for the whole cortex, receiving the thalamic fibres and bringing a flood of inputs from every sense organ and action demonstrating the phrase from the *Devi Bhagavatam*: “as if lightning flashes glimmer on all sides”.⁴⁵ Furthermore, the diamond is associated with Venus in *Jyotish*, which is related to enjoyment and sensory experience (directly related to the function of this layer).

The thirteenth enclosure is cortex layer 5; found to be made of lapis lazuli in the *Devi Bhagavatam*. Lapis lazuli is associated with the lunar node, *Ketu*, which signifies enlightenment. Nader points out that the fifth cortical layer controls and fine-tunes the mechanisms of perception and action, which when perfectly balanced, creates a state of enlightenment.⁴⁶ The fourteenth enclosure corresponds to cortex layer 6; it is “built of *Indranilamani* (blue sapphire).”⁴⁷ The cells of cortex layer 6 send their axons mainly to the thalamus which has 16 nuclear groups that, as Nader states:

⁴⁰ *Ibid.*, p. 400.

⁴¹ *Ibid.*

⁴² *Ibid.*, p 403.

⁴³ *Rahu* is one of the nodes of the moon according to *Jyotish*.

⁴⁴ Nader, 2000, pp. 404-405.

⁴⁵ *Ibid.*, pp. 406-407.

⁴⁶ *Ibid.*, p. 408.

⁴⁷ *Ibid.*, p. 409.

Correspond to the 16 aspects of Nyaya.... There are in cortex layer 6, therefore, 16 types of projections, coming from all sides like an all-encompassing fan that converges on the thalamus: *there is a lotus here consisting of 16 petals, extending to many yojanas in width, and shining like a second Sudarshana Chakra. On these 16 petals reside the 16 Shaktis of Bhagavati, with their hosts.*⁴⁸

Here, Nader reveals that the 16 aspects of *Nyaya*⁴⁹ relate to 16 projections that converge on the thalamus referred to in the *Devi Bhagavatam* as 16 petals of the lotus. In India, the lotus form proliferates in the ceiling designs of the Jain, Dilwara temples of Mt Abu and Adinatha temple at Ranakpur, Rajasthan; the lotus represents “at the microcosmic level, the enlightenment of the individual and, at the macrocosmic one, the entire cosmos or universe”.⁵⁰

Nader goes on to state that cortex layer 6 modulates the activity of other layers by means of its feedback to the thalamus via its interneurons, which connect to other layers. It is always at the service of the activity of the nervous system. Nader also points out that, while retrieving information, this layer can arrest or delay input, or the achievement of intention, until optimum balance is established serving the function of the planet Saturn which is associated with blue sapphire, *Indranilamani*.

The fifteenth enclosure is “made of pearls” (which are associated with the moon) and corresponds to the white matter of the brain. The moon has a nourishing, holistic influence similar to the functioning of the white matter.⁵¹ The sixteenth enclosure is made of emerald and is hexagonal, of *Yantra* shape. Here *Devatas* are said to reside at the northeast, east, southeast and south, southwest, west, and northwest.⁵² Nader states that this enclosure is the inner brain grey matter composed of neurons forming groups of deep-seated nuclei around the central hollow ventricles that in cross-section reveal a hexagon shape.⁵³

The *Devatas* mentioned include *Ganesh* who is said to “reside in the northeast corner”;⁵⁴ *Ganesh*, as discussed in Chapter Two, is found

⁴⁸ *Ibid.*

⁴⁹ *Nyaya* was discussed in relation to *Dharshana* in Chapter Two.

⁵⁰ Clermont, 1998, p. 43.

⁵¹ Nader, 2000, p. 410.

⁵² *Ibid.*, p. 411.

⁵³ *Ibid.*, p. 412.

⁵⁴ *Ibid.*

in the brainstem and cerebellum and is associated with centres of the brainstem that control the vital functions of consciousness, wakefulness, heartbeat, and breathing. Moreover, the four-faced *Brahma* and *Gayatri Devi* (residing in the east) Nader notes, describe the four lobes of the brain and their associated structures, which are the physiological basis of the expression of creativity and the search for knowledge and fulfillment.⁵⁵

Three Final Enclosures— Cell Wall, Nuclear Wall, and DNA —as “Transcendental” Values of *Sarvaloka*

The seventeenth and eighteenth enclosures are made of red coral and *Navaratna* (nine jewels) respectively and correspond to the cell wall and nuclear wall. These two enclosures with enclosure nineteen, represent the transcendental aspects of *Sarvaloka* identified by Maharishi.⁵⁶ Nader points out that the cell, fundamental to the layers previously discussed, is found everywhere in the body. The cellular level is, as such, omnipresent and relatively transcendental.⁵⁷ Nader notes that all of the immune system components and enzymes “used as facilitators in the chemical processes of the body are produced from genes within the DNA that are present within the space enclosed by the nuclear wall”⁵⁸ This corresponds to the phrase: “*all of the Avatars of Shri Devi, who kill the Daityas and show favours to the devotees, live here.*”⁵⁹

The final enclosure (enclosure or layer nineteen) is the DNA and is revealed and described in the *Devi Bhagavatam* at length, as partly shown in the following excerpt:

Next to this enclosure wall comes the chief and crowning place of Shri Devi, built of Chintamani gems. All the articles within this enclosure are built of Chintamani gems. Within this are seen hundreds and thousands of pillars built of Suryakantamani, Chandrakantamani, and Vidyutkantamani. The lustre and brilliance of these pillars is so strong that no articles within are visible to the eye. The Ratnagriha above

⁵⁵ *Ibid.*, p. 413.

⁵⁶ *Ibid.*, p. 414.

⁵⁷ *Ibid.*, pp. 413-414.

⁵⁸ *Ibid.*, p. 415.

⁵⁹ *Ibid.*

mentioned is the central, the chief, and the crowning place of the Mula Prakrti. This is in the center of all the enclosures. Within this there are the 4 Mandaps, halls built of 1,000 (i.e. innumerable) pillars. These are the Shringara Mandap, Mukti Mandap, Gyan Mandap, and Ekanta Mandap. On top of these are the canopies of various colours; within are many articles scented by the Dhupas. The brilliance of these is like that of one koti suns. On all sides of these 4 Mandaps are nice groups of gardens. There is a very big lotus pond here; the steps leading to it are made of jewels. Its water is nectar, and on it are innumerable full-blown lotuses with bees always humming over them. Many birds, swans, Karandavas, etc. are swimming to and fro...the whole Mandap is perfumed with various scented things.⁶⁰

Nader argues that the nineteenth enclosure is the DNA within the nucleus of the cell, which is “in the center of all the enclosures”. The DNA contains the intelligence of the whole physiology in compact form. The term *Chintamani* refers to gems of consciousness or intelligence. The DNA is made up of packets or sequences of intelligence. As Nader points out, this intelligence inherent in the structure and sequence of the DNA creates and regulates all physical structures and chemical processes of the body.⁶¹ He also points out that the four nucleotide bases (comprised of innumerable individual atoms bound together with thousands of chemical bonds) that make up the basic units of information within the double helical DNA structure correspond to the four *Mandaps* with halls built of 1,000 (innumerable) pillars. The four *Mandaps* are *Shringara Mandap* (love, desire, enjoyment), *Mukti Mandap* (liberation or enlightenment), *Gyan Mandap* (knowledge), and *Ekanta Mandap* (unified awareness) and the four nucleotide bases are: adenine, guanine, cytosine and thymine.⁶² The four bases are covered by the spiraling backbone of the double helix molecule, which in the *Devi Bhagvatam* is illustrated in the phrase “on top of these (*Mandaps*) are the canopies of various colours.” Nader goes on to articulate further correspondences between the *Devi Bhagavatam*’s description of the nineteenth enclosure and the DNA. He states that the DNA is “a perpetually self-repairing and self-reproducing structure, that has existed for millions of years, containing the mechanisms to ensure the perfect continuity of its structure and

⁶⁰ *Shrimad Devi Bhagavatam* (12, 11) quoted in Nader, 2000, p. 415.

⁶¹ Nader, 2000, p. 417.

⁶² *Ibid.*

function”,⁶³ as encapsulated in the phrases: “*never are seen here diseases, sorrow, old age, or decrepitude*” and “*all the inhabitants of this place are full of youth and look like 1,000 suns*”.⁶⁴

While one can interpret Calvino’s concept of the city as referring to the silent inner mind along with its various relative consciousness states, the architectural structures, environments, *Devatas* and personages of the *Devi Bhagavatam*, Nader shows, reveal the forms and dynamic processes of another kind of “city” or enclosure: the structure and function of the human brain physiology. In this sense, the *Devi Bhagavatam* presents something of a quantum leap in thinking. Here, the brain physiology as illustrated in the nineteen enclosures, is the home of functioning intelligence or consciousness. Taking the human body to be this incredible abode of creative intelligence, it stands to reason that it may benefit from being “housed” in an appropriate cosmic shelter or structure. Having said this, one may ask: how can the built environment further relate to or embody cosmic intelligence, contribute to the human development and any realization of the full range of human potential?

In the following sections, the discussion will turn to art, the environment, and architecture, and the unique approach of Maharishi Sthapatya Veda—also referred to as Vedic Architecture—which takes into account influences from the cosmic to the individual level. Maharishi Sthapatya Veda differs from contemporary design in several important ways, including its understanding of consciousness and its approach to orientation, proportion, and sustainability; it combines ancient knowledge with new technology. While consideration of orientation has been an integral part of traditional and contemporary practice to varying degrees, there has been a prolific exploration of innovative trends in architecture, art, and engineering, sparked by developments in new technology, electronic media and computer programming.

Environment, Art, and Architecture

[The] effects of worldwide digital telecommunications infrastructure are powerful and sweeping, but it obscures the issue to claim—as some

⁶³ *Ibid.*, p. 419.

⁶⁴ *Shrimad Devi Bhagavatam* (12, 11) quoted in Nader, 2000, pp. 416 & 419.

*cyber-smitten hypsters hyperbolically have—that they will yield the death of distance, the end of space, and the virtualization of just about everything.... It is more useful and illuminating, instead, to recognize that the resulting new linkages provide us with radical new means of producing and organizing inhabited space.... The time and the fashion for breathless, the-world-is-new, any-thing-is-possible rhetoric have passed. And it turns out that we face neither millennium-any-day-now nor its mirror image—apocalypse-real-soon. Instead, we have been presented with the messy, difficult, long-term task of designing and building for our future—and making some crucial social choices as we do so—under permanently changed, postrevolutionary conditions.*⁶⁵

—William J. Mitchell

Artists have long been intrigued by the impact of architectonic structures and spaces that can be experienced as large-scale environmental sculptures—installations of light and matter. Meanwhile, contemporary architecture and design have become tremendously diverse and innovative, while the distinctions between the creative arts seems less important as individuals work across disciplines to produce sites and forms that use space, light and technology via new integrative methodologies. Just as new materials such as steel revolutionized architectural design in the 1880s allowing the development of the skyscraper,⁶⁶ recently computer technology has helped facilitate developments such as deconstructivist architecture⁶⁷

⁶⁵ Mitchell, 1999, p. 29.

⁶⁶ Using cast-iron columns encased in masonry and supporting steel beams bearing floor weights, the American architect, William Le Baron Jenney (1832-1907) designed and built the *Home Insurance Company Building* (constructed 1885, demolished 1931) in Chicago—the prototype of all skyscrapers. This meant that the outside walls, no longer functioning as load bearers, could be made of windows allowing a greater flow of light. Known now as curtain-wall construction, this method continues to be employed in the basic design of modern skyscrapers. During the 19th and 20th centuries, Chicago became the city for leading architectural achievements and it was through the work of the Chicago School (Louis Sullivan, Daniel Burnham, William Holabird and Martin Roche—who all worked in Jenney's Chicago office) that the architectural landscape was redefined. Burnham designed New York's famous Flatiron Building (originally called the Fuller Building, 1902), Sullivan built the Wainwright Building in St Louis and Sullivan's pupil, Frank Lloyd Wright became one of the most important architects of the 20th-century. Chicago today, is like an open-air museum of skyscraper design, showcasing structures from the early period to the present.

⁶⁷ Deconstructivism is a term often used to refer to an approach to building that apparently uses disharmonious abstract forms; work by Frank Gehry, Richard Meier, Rem Koolhaas and Peter Eisenman is categorized as deconstructive architecture. In the definition and discussion of Modernism and Postmodernism, several theories of the postmodern have been articulated. Of these, deconstructive postmodernism and revisionary postmodernism have been well documented.

and unique, cutting-edge approaches to 3-D structures. Buildings like the Bilbao by Frank Gehry, the Tenerife Opera House (a “winged wonder” on 2.3 hectares of Santa Cruz waterfront) by Santiago Calatrava,⁶⁸ are not simply functional. They are sculptural, organic, asymmetrical, non-classical; they are sites of imagination.

Similarly, Federation Square—a combined cultural and commercial site in Melbourne (encompassing the Australian Centre for the Moving Image, the National Gallery of Victoria and the Australian television network, SBS) designed by Lab Architecture⁶⁹—relies not on the traditional grid but “triangulation”.⁷⁰ As Gibson notes, the architects clearly state that they are, “interested in systems and patterns that are coherent but not Euclidian.”⁷¹ He observes that this architecture develops:

A patterned order that is dynamic rather than merely geometrical or ‘established’. And because the underlying design registers gradually in the consciousness during observation and exploration, such order can

The former impacts art, architecture and art theory through the influence of semiology and philosophy—in particular the work of French philosopher, Jacques Derrida (who developed his theory of deconstruction), Ferdinand de Saussure and François Lyotard (Bonshek, 2001a, pp. 32-44). Writers such as Ken Wilbur and Thomas McEvelley consider the latter.

However, Charles Jencks, in his book *What is Post-Modernism?*, illustrates the difference between that which he refers to as postmodern and Late-Modern architecture and art, asserting that postmodernism began in the 1960s (Jencks, 1986). Thomas McEvelley states that there have been many modern/postmodern cycles—all of which share the same characteristics. One of the earliest documented modernist periods, he argues, occurred in 6000 B.C.E. As McEvelley writes, “The apocalyptic mood in which our Modernism and post-Modernism have been viewed has obscured the fact that there have been earlier Modernisms and earlier post-Modernisms. A Modernism is a cultural period characterized by two mutually supportive and mutually validating views about history and selfhood. 1) History seems to have an upward inner directive, a driving force of progress operating within it. In such a situation, innovation and change seem to be valued over the stabilizing force of tradition. There is a sense of confidence in history, which seems to be on one’s side. 2) Validated by the inner purpose of history, the self inflates. There is an apotheosis of will and personal creativity, as the sources of historical change. Self-expression and originality are revered as the expressions of history’s inner directive. There is an heroic view of the self as adventurer, innovator, and guiding force of history. A post-Modernism, on the other hand, is a period when the Modernist faith in history has been lost, usually through political developments. The support of history’s inner meaning being withdrawn, the self deflates. History now seems to have no shape and the self no anointed mission. There are attempts to reestablish connections with the traditions destroyed by Modernist innovation.” McEvelley, 1992, p. 136.

⁶⁸ POL Oxygen, 2003-2004, p. 58-59.

⁶⁹ See: www.labarchitecture.com.

⁷⁰ Gibson, 2002-2003, pp. 107.

⁷¹ Bates in Gibson, 2002-2003, pp. 107-109.

feel particularly satisfying, humming like a little riff of improvised composition in the beholder's sensibility.⁷²

Landscape architecture, following similar lines, provides a forum for artists working with constructed environmental spaces. Wade Graham writes that gardens are "limited local dialogues between human pleasure and natural process";⁷³ he explains how Robert Irwin's design for the gardens at the Getty Centre in Los Angeles, and the Garden of Australian Dreams (GOAD) at the National Museum of Australia in Canberra designed by landscape architects Room 4.1.3., present two entirely different artistic approaches to the concept of the "garden".⁷⁴ GOAD is intended to be a "microscopic representation of Australian self-consciousness, based on virtuality and simulacra as opposed to mimesis of 'nature'".⁷⁵ Irwin's garden is "a sculpture in the form of a garden aspiring to be art,"⁷⁶ and compliments the hardedge lines and pure spaces of the Richard Meier's Getty Centre.⁷⁷

Taking a personal approach, Patricia Innis' environmental art references both cultural and historical forces that impact nature. She creates work for public spaces like Michigan Legacy Art Park. Innis states:

Once a season for a year and a half I have been working in the park creating figures of lumberjacks on trees. In the fall the figures were line drawings done in leaves, in the winter snow, the spring clay and in the summer, black walnut dye. The project remembers the men who participated in Michigan's logging history and the affect they had on the environment.⁷⁸

Others, like Betsy Damon choose to work with the elements highlighting sustainability and the sacredness of nature. In her project *Living Water Garden* (1998), a 5.9-acre environmental park in Chengdu, China, she brings together "water treatment, water awareness, recreation and aesthetics", demonstrating that "nature has the power to clean water and that artists are a conduit through which

⁷² Gibson, 2002-2003, p. 109.

⁷³ *Ibid.*, p. 139.

⁷⁴ Graham, 2003-2004, p. 133-143.

⁷⁵ *Ibid.*

⁷⁶ Irwin in Graham, 2003-2004, p. 137.

⁷⁷ See: <http://www.richardmeier.com/projects/Getty.html> and <http://academic.reed.edu/getty>.

⁷⁸ Email communication with Anna Bonshek, July, 2006.

new means to sustain our fragile ecologies can flow.”⁷⁹ Along similar lines, the purification of toxic water from acid mine drainage in southwestern Pennsylvania became a collaborative environmental art project. Artists involved in such large-scale, public landscape artworks solving environmental problems, include Julie Bargmann, Stacey Levy, Michael Oppenheimer, Peter Richards, Angelo Ciotti, and Lily Yeh.⁸⁰



*View of part of Robert Irwin’s garden design, Getty Centre, Los Angeles*⁸¹

A far cry from traditional historic palaces and gardens (such as Blenheim Palace, Versailles, Amber Fort, Hawa Mahal (Palace of Winds),⁸² the Lake Palace⁸³ or even avant-garde work like GOAD) these projects engage artists, scientists, environmentalists and related organizations, who together regenerate toxic wastelands—creating sustainable art which seeks to close the apparent gap between “nature”

⁷⁹ Cohn, 2000, p. 51.

⁸⁰ Comp, et al., 1997, pp. 15-18.

⁸¹ Photograph, the author.

⁸² Nath, 1996.

⁸³ The Lake Palace, is located in Udaipur, Rajasthan, India and now functions as a hotel.

and “culture.” Having said this, traditional architectural design still informs creative practice.

Consistently drawing from built structures, often referencing the colours of Islamic architecture, British artist Tess Jaray has created evocative, minimal, and ethereal paintings. In response to a British Rail commission to refurbish a London station, in 1983, Persian brick and tile decorations served as platform for her work. In conjunction with Islamic references, Jaray looked at British brick laying and patterning. As the artist commented:

Architecture has been at least as great an influence on my life as painting or sculpture. It’s not the form *per se*, but the emotive values and properties of space, the emotional and spiritual impact of architecture achieved through form.... And, particularly...Islamic architecture, and the way the decorated surfaces reveal and unite the structure without merely decorating or adding to it.⁸⁴

The strength of Jaray’s work is in its restrained but precise mathematical propagation of the visual field. Jones states that the “generating source of much Islamic design is the circle”⁸⁵ which serves as the basis of multiple geometric developing into the square, triangle or polygon.

In contrast, working with more organic forms, the American artist, Judy Bales, collaborates on structures that unite engineering, aesthetics, and a sense of place in bridge construction.⁸⁶ Motivated to transform the debris of everyday materials into poetic form, Judy Bales states that: “cold, industrial materials intrigue me with their potential to be used to create objects that contain warmth and lyricism. Although materials cast off from industry and agriculture provide the raw materials for my work, the inspiration for the work comes from the landscape, my personal sense of place, and the human figure.”⁸⁷

For Bales, the landscape suggests the body—the undulations of hills, valleys, rivers, and “rich coverings of vegetation that suggest hair or fur. Perceiving this human connection with the land increases our awareness of the unity of all life on earth.”⁸⁸ Installed recently, her

⁸⁴ Jaray in: Petherbridge, 1984, p. 1.

⁸⁵ Jones, 1978, p. 170.

⁸⁶ http://www.judybales.com/index_noflash.php.

⁸⁷ <http://www.judybales.com>.

⁸⁸ *Ibid.*

public art work the *Maryland Avenue Bridge Public Art Project*, encompasses the superstructure, ramps, and landscaping for a bicycle and pedestrian bridge over I-17 in Phoenix, Arizona. In reference to this work and the *BNSF Railroad Trail Bridge Project* in Bales' hometown, Fairfield, Iowa, the artist states: "I find I have fallen in love with projects involving the infrastructure....these projects feel very real to me and I believe I am making a true contribution to society."⁸⁹



Maryland Avenue Bicycle Bridge, 2000-2006
Collaborators: Judy Bales & engineer Jerry Cannon
Over I-17 & Maryland Avenue, Phoenix, Arizona, USA.
Commissioned by the City of Phoenix through the Phoenix Office
*of Arts and Culture.*⁹⁰

⁸⁹ Email communication with Judy Bales, July, 2006.

⁹⁰ Image printed permission of Judy Bales.

Further references to architecture are acknowledged in the work of Indian-born, British artist Anish Kapoor. Reena Jana comments how Kapoor borrows from architecture “to conjure metaphors, so that we can see the buildings and forms of encasement and passageways in new and surprising ways.”⁹¹ She emphasizes, however, that just as “poetry distances itself from prose”, Kapoor’s forms both distinguish themselves from architectural form while acknowledging it. In *Marsyas*,⁹² for example, Kapoor creates massive, curving trumpet forms that could be said to echo structures such as Frank Lloyd Wright’s dendriform columns in the Great Workroom of the Johnson Wax Buildings. The latter, while acting as a vital and necessary structural component of the building, through constant repetition, have a powerful visual effect—like a forest of gravity-defying umbrella shapes towering above the central workspace of the open-plan office. As Lipman states:

The columns remain one of the most remarkable structural designs in twentieth-century architecture. In their unprecedented structural and aesthetic success they were the supreme example of Wright’s dictum. “Form does not follow function. Rather, form and function are one.”⁹³

Architecture involves participants interacting with and within its spaces. Due to the potential of digital technology, new kinds of virtual spaces can be incorporated into buildings as demonstrated in work, for example, by Diller + Scofidio (aka DISCO), including the Boston Institute of Contemporary Art, The Quadrant House, in Phoenix, Arizona, and the Slow House (unfinished). The Slow House had a four-foot-wide 18-foot-tall aperture as an entrance. Visitors could walk past 100 feet of windowless curved walls before reaching an expansive ocean view at the opposite end where “a camera recorded the view, electronically manipulated the image and played it in, or out of, sync with the actual view. Prerecorded weather could be played in contrast to the weather outside.”⁹⁴

⁹¹ Jana, 2004, pp. 24-25.

⁹² *Marsyas* references a 16th-century Titian painting *The Flaying of Marsyas* featuring the mythical narrative of Apollo killing a satyr. Made of PVC and steel, Kapoor’s *Marsyas* was installed at the Tate Modern. *Ibid.*

⁹³ Lipman, 1986, pp. 57-59.

⁹⁴ POL Oxygen. 2003-2004, p. 121.

At the other end of the spectrum, museums such as the *skansens* of Poland, the Peasant Museum (Muzeul Taranului Român⁹⁵) in Bucharest, and the Ironbridge Gorge Museums, in England⁹⁶ present object art and architecture, displaying historic work and structures. Similarly, honouring South Indian cultural and vernacular architectural heritage, the DakshinaChitra Museum in Chennai has resituated regional examples of building construction and styles.⁹⁷ Within the context of these building sites, the museum simultaneously presents contemporary installation work and traditional object art, redefining art practice and promoting cross-disciplinary, collaborative work.⁹⁸ As an outdoor museum plus gallery, the museum provides a snapshot of vernacular architectural styles and techniques,⁹⁹ at same time supporting the living arts—from village to urban and international sources. In a sense, the museum promotes a more holistic approach, perhaps reflecting a deeper principle: culture, history, environment, and nature, are inextricably interlinked.

For indigenous and earlier cultures, applying creativity across platforms is often a given. The Mesquakie Indians of Iowa, for example, “like many people in the world, do not distinguish between the fine and applied arts. Utilitarian objects such as clothing, mats, spoons, and bowls express the maker’s artistic sensibilities and reflect concepts and values that the Mesquakie consider important.”¹⁰⁰ Would it be fair to say that the move to create sustainable architecture and art reflects a concern to reassert our inextricable connection with nature, revealing an awakening to the fact that culture and consciousness cannot be divorced from nature? Clearly, contemporary art spaces, habitat, cultural and commercial structures, all contribute to the “story”

⁹⁵ <http://www.muzeultaranului.ro>.

⁹⁶ The Ironbridge Gorge Museum Trust, 1996.

⁹⁷ For example, among the buildings displayed at the museum site there is: a relocated Brahmin house from an agricultural village of Ambur, in Tirunelveli district in the south of Tamil Nadu; an agriculturalist’s house from Mayavaram (c.1847) typical of houses from Thanjavur and Mayavaram districts; a potter’s house (from the turn of the 20th-century in the village of Tiruvallur); a mud house; a basket weaver’s house; a weaver’s house; a Christian house; and a Hindu house. Some of these buildings were initially oriented in a specific direction such as the agriculturalist’s house, which faced north.

⁹⁸ See the exhibition catalogue: *Sites of Recurrence: A Workshop in Contemporary Art*, Madras Craft Foundation, DakshinaChitra & Borås Konstmuseum, 2003.

⁹⁹ Madras Craft Foundation, 2001.

¹⁰⁰ University of Iowa Museum of Art, 1989, p. 1, (Exhibition brochure: *Art of the Red Earth People: The Mesquakie of Iowa*).

of people who make, use, and enjoy them and all draw from, and impact, the environment.

Certainly, the plethora of groundbreaking developments across architecture and art often includes a conscious, socially responsible approach to sustainable design. In Australia, traditional theories of architecture such as Feng Shui¹⁰¹ and the growing concerns regarding limited water and energy resources in an era of global warming have prompted architects to consider environmentally appropriate solutions and the well being of their clients and the environment. Companies such as Zen Architects¹⁰² and development projects like the Eco Village, Currumbin,¹⁰³ employ passive solar technology, rainwater collection and grey water recycling in home design, while even local councils encourage builders to incorporate water and energy saving devices and sustainable, hi-tech designs like *Innovation House 2*.¹⁰⁴

However, despite these inroads, the issue of the relationship of consciousness (as cosmic intelligence) to the built environment, to human life and the natural world, has only begun to be fully explored in recent architectural structures. Lipman claims that architects are, in fact, creating environments that submit their clients and the public to experiments with potentially undesirable consequences:

In spite of our good intentions, we architects of the 20th-century have made some colossal errors. This is because our discipline has never had the tools to see deeply into the laws of nature that govern living in a building or city. This makes our clients the subjects of a very expensive ongoing experiment. From the ancient discipline of Maharishi Sthapatya Veda architecture, we have access to a set of profound guidelines that permit us to design buildings and cities in harmony with the laws of nature, putting to an end our bumbling experimentation with the lives of our clients.¹⁰⁵

¹⁰¹ As with other buildings drawing from Asian sources, incorporating guidelines of Feng Shui (such as Crystal Tower in Broadbeach, Queensland, Australia) new building concepts aim to promote an influence of harmony and balance. <http://www.crystaltower.com.au>.

¹⁰² <http://www.zenarchitects.com/projects/woodhead/index.htm>.

¹⁰³ <http://www.theecovillage.com.au/index3.htm>.

¹⁰⁴ *Innovation House 2* is a high-tech sustainable home designed by Heritage Pacific in response to Gold Coast City Council's call for more efficient, environmentally friendly developments. *Innovation House 2* uses natural, recycled or recyclable, low toxic materials and hi-tech design. <http://www.ih2.com.au>.

¹⁰⁵ Lipman, J., in *Maharishi Global Construction*, 1997, p. 4.

Lipman sees the future of architecture in Maharishi Sthapatya Veda design, which incorporates all aspects of the environment, all cosmic influences on the individual and the domain of consciousness. In this context, while Maharishi Sthapatya Veda draws from ancient Vedic knowledge, it is in advance of any other apparently related architectural approach.

Maharishi Sthapatya Veda: Holistic Architecture

The truth is that the individual is Cosmic on both levels—on the level of intelligence, or consciousness, and also on the level of his body, which is the expression of his consciousness, or intelligence. Because of this cosmic status of the individual, in order for the individual to be in peace and harmony with himself, everything about him should be in harmony with the universe; it is necessary that everything with which he is concerned, or anything that is in his environment, is in full alliance and harmony with the Cosmic Structure and its basis in Cosmic Intelligence. Sthapatya Veda is that aspect of cosmic knowledge of Natural Law which maintains the buildings in which the individual lives and works, and the environment in which he moves, well set in cosmic harmony.¹⁰⁶

—Maharishi Mahesh Yogi

Sthapatya Veda comes from the Sanskrit word *Sthapan* meaning “establish” and (as noted earlier) *Veda* meaning “knowledge”. Maharishi Sthapatya Veda is the knowledge of how to establish and construct the built environment in accord with Natural Law; this involves taking into consideration the solar, lunar and planetary influences on the earth with reference to the north and south poles and the equator—connecting individual life with cosmic life. It could be said that, unlike Lab Architecture’s approach with Federation Square, which relies on “a patterned order” rather than being “established”, the idea of establishment, here, goes beyond just geometry. It relates to the establishment of cosmic creative intelligence in form and space. Using

¹⁰⁶ Maharishi Mahesh Yogi, 1998, pp. 168-169. Numerous examples of Maharishi Sthapatya Veda architecture can be seen at: <http://vedicarchitecture.org/>, <http://maharishivediccity.net/attractions/homes.html>, and <http://www.sthapatyaveda.com/introduction/frameset.html>.

ancient Vedic mathematical formulas, revived by Maharishi, *Sthapatya Veda* architecture establishes the built environment in accord with Nature. *Sthapatya Veda*, Nader points out, is the science of structure at the individual and cosmic levels.¹⁰⁷

The idea of “establishment” specifically relates to consciousness. For any structure to be established in the holistic value of self-referral consciousness or Veda, it has to conform to certain principles and criteria. When consciousness is established in the built structure, it can then be called Vedic Architecture. In the previous chapter in the discussion of the *Ram Yantra*, a Vedic structure was defined as a structure where “specificity is in terms of generality—Totality—the non-specific level of WHOLENESS”.¹⁰⁸ A Vedic structure embodies wholeness—the totality of consciousness—while having a specific value. In this way it contains both specificity and unity.

Additionally, for Vedic Architecture to embody complete knowledge it must: 1) be supported by the theories of modern science, 2) take into account the consciousness of the architect and builder, and, 3) conform to the principles, procedures and formulas according to which the eternal structure of the universe itself has been laid out.¹⁰⁹ Accordingly, Maharishi Sthapatya Veda design, involves: 1) proportion and location of all buildings and amenities in conformity with *Vastu Vidya*, 2) correct orientation, placement, and proportion, 3) city and village planning with all roads aligned north/south and east/west, 4) appropriate site—incorporating parameters such as proper slope of the land, location of bodies of water, unobstructed sunrise, etc., 5) a central square with gardens, 6) low-density housing, 7) natural, non-toxic building materials and energy-efficient construction, 8) adequate flow of fresh air, 9) generous green space, 10) the use of solar, wind, and other cost-effective, sustainable, non-polluting energies¹¹⁰

As introduced above, one aspect of Maharishi Sthapatya Veda is the employment of the mathematical formulas of *Vastu Vidya*. The term *Vastu* refers to the site in which consciousness or intelligence resides (encompassing all the required elements to promote support of Nature). *Vastu Vidya* is the knowledge of how to establish the site

¹⁰⁷ Nader, 2000, p. 185.

¹⁰⁸ Maharishi Mahesh Yogi, 1998, p. 167.

¹⁰⁹ Maharishi Mahesh Yogi, 1998, p. 165.

¹¹⁰ Maharishi Global Construction, 1997.

according to Natural Law and how to maximize the value of intelligence. Referring to the precision of *Vastu Vidya*, Maharishi states that the field of Vedic Architecture is the field of Vedic Mathematics. As discussed in Chapter Two, with respect to *Darshana*, the *Brahm-Rishi*, Vasishtha was fully awake on the level of Vedic Mathematics and understood the ultimate level of reality, the *Samhita* level of consciousness, as the reality of the “Absolute Number”. He was the unshakable authority on the *Samhita* level of reality,¹¹¹ the level of wholeness or unity. It is this level of *Samhita*, of Vedic Mathematics, that contains all values of relationship within it. In this context, the science of Maharishi Sthapatya Veda considers the harmonious interrelationship of all the different structures of man-made design and how these can be aligned with the cycles of Nature. It considers the principle of how, from fullness, fullness emerges in a perfect, evolutionary progression that maintains the quality of wholeness at each step in that progression so that *Samhita*, fullness or unity, is never lost. This is the field of Vedic Mathematics. As Maharishi explains

In the process of transformation, or evolution, it is the Totality that is reborn again and again.... This means that in the sequential flow of Natural Law, all its expressions, at every step of evolution, are sustained in the quality of WHOLENESS.¹¹²

The sequential flow of Natural Law is expressed as the precise mechanics of self-referral consciousness unfolding as the Veda and Vedic Literature. These are described by Maharishi as the “fundamentals of creation”.¹¹³ Thus, a Vedic structure embodies these mechanics and enlivens wholeness.

The first step of Vedic design necessarily represents the principle of fullness emerging from fullness. The first step of design occurs in the establishment of the central point of the structure. The central point or *Brahmasthan* is the seat of wholeness¹¹⁴ from where wholeness expands throughout the structure. Having a predominantly *Chhandas* quality, Nader points out that *Sthapatya Veda* establishes wholeness through the parts. The specific formulas of *Sthapatya Veda*, Maharishi explains, ensure that:

¹¹¹ Maharishi Mahesh Yogi, 1996a, pp. 612-613.

¹¹² Maharishi Mahesh Yogi, 1998, p. 166.

¹¹³ *Ibid.*

¹¹⁴ “*Brahma*”, represents wholeness; “*Sthan*”, is the seat or establishment.

structures, or buildings, built according to Sthapatya Veda, being in tune with the structuring dynamics of the ever-expanding universe, create the effect of harmony and stability in the life of the individual and society.¹¹⁵



*Central Brahmasthan area of a Maharishi Sthapatya Veda home*¹¹⁶

Having reviewed the relationship of Vedic Mathematics and Vedic architecture, the question arises: Practically speaking, how do the key areas of Maharishi Sthapatya Veda directly utilize cosmic intelligence and the influence of the celestial bodies?

The Effects of Appropriate and Inappropriate Orientation

Maharishi states that the strongest influence on the earth comes from the sun; as it continues on its path throughout the day from east to

¹¹⁵ Maharishi Mahesh Yogi, 1998, p. 170.

¹¹⁶ Image printed with permission of Anthony Lawlor.

west it generates different qualities of energy.¹¹⁷ The movements of the planets affect our lives, creating cycles that promote our continued existence. The movements of the planets can also create subtle effects of imbalance in the individual physiology—encouraging qualities that are not conducive to realizing one’s full potential. As noted in the previous chapter, *Yantras* such as the *Misra Yantra*, *Jai Prakas Yantra* and *Nadivalaya Yantra*, specifically balance effects on the individual due to these influences. The ideal situation is for the built structure to take into account the influences from the planets and celestial bodies, to create alignment with Natural Law through appropriate orientation, placement, proportion, open central spaces, and a boundary fence or enclosure, along with considerations introduced above.



*Comprehensive Blood and Cancer Center, Bakersfield, California, U.S.A.*¹¹⁸

In Maharishi Sthapatya Veda the advise on the effects of varying orientations is unequivocal. Buildings should be aligned with the earth’s magnetic field (north/south) and the movement of the sun (east/west).¹¹⁹ Therefore, entrance to the building, and its general orientation for an auspicious influence, is always only one of two

¹¹⁷ Maharishi Vedic University, 1998, p. 3-4.

¹¹⁸ An example of a Maharishi Sthapatya Veda designed building. Image printed with permission of Jonathan Lipman.

¹¹⁹ Orientation is governed by the cycles of the planets—the rotation of earth around its axis, and the relationship of the earth to the sun.

directions: true east or true north. An east orientation is most desirable. Influences from the east and north directions and are predicted to create, respectively, increased 1) enlightenment, affluence and fulfillment, and 2) prosperity and happiness.¹²⁰ An east entrance and orientation brings optimum results “because the energy from the sun is greatest and most vital when rising”.¹²¹

Nader states that the principle of the influence due to orientation and to placement operates on the level the brain. He explains that our sense of orientation is based on an internal nervous system compass that has the ability to reset itself on the basis of external reference systems.¹²² Nader emphasizes that in every aspect of any activity, in whatever direction one faces, one activates the nervous system in a specific manner that may or may not be appropriate for that activity.¹²³ Since our cosmic counterparts—the sun, moon, and the planets—have a one-to-one correspondence to different parts of the brain (such as the basal ganglia, the thalamus and hypothalamus) the tendency of the brain to align itself with these cosmic influences is taken into account in Maharishi Sthapatya Veda. This is one reason why any *Sthapatya Veda* building must have appropriate orientation.

Accepting the principle that only the east and north orientation create a positive influence and all other directions create life-damaging influences, in an average city built on a grid with roads running in all directions, barely 25% of the buildings would be auspiciously aligned; that means that, on average, 75% would have inauspicious orientation potentially contributing to ill health and problems in society. However, most cities are, in fact, not laid out on a grid; roads weave in multiple directions. Therefore, it could be argued that not even 25% of buildings are oriented appropriately.

Furthermore, it seems even during sleep orientation of the head has predicted effects: east is ideal, while sleeping with the head to the north is held to create negatives influences, such as: anger, aggression, constant fear, poverty, lack of vitality and success, and chronic diseases.¹²⁴ Preliminary research on the effects of orientation seems to

¹²⁰ Maharishi Vedic University, 1998, p. 13.

¹²¹ Maharishi Global Construction, 1997.

¹²² Nader, 2000, p. 187.

¹²³ *Ibid.*

¹²⁴ Travis, Bonshek, Butler, Rainforth, Alexander, Khare & Lipman, 2005, p. 555.

indicate that sleeping orientation and house orientation may have a profound effect on quality of life.¹²⁵

Placement and Proportion

As noted above, the changing qualities of energy generated by the sun as it moves across the sky produce varying influences on the different parts of the house or commercial structure. For optimum living and work environments, buildings have to be designed to take this into account. In terms of the layout of the dwelling, for any residence there is a universal “footprint” that gives a snapshot of ideal room placement. While each building is designed according to the needs of the owner/occupants the basic location of rooms/activities is precisely laid out.



*Argiro Student Center, Fairfield, Iowa, U.S.A.*¹²⁶

¹²⁵ *Ibid.*, pp. 553-564.

¹²⁶ Image (rendering) printed with permission of Jonathan Lipman, AIA architect.

Right placement, along with right direction, is a critical element of *Sthapatya Veda* design. The building is designed so that different qualities of the sun's energy correspond to the function of any room. The dining room, for example, is placed where digestion will be enhanced; the study is located where the intellect will be alert. When the activity associated with a particular room occurs in the proper place, the individual doesn't become sleepy in the dining room, for instance, or hungry in the study. Wrong placement of a room causes imbalance. For example, inappropriate placement of a bedroom may contribute to insomnia or chronic fatigue, and wrong placement of a kitchen can lead to weakness and imbalance of the digestive system.

Similarly, according to *Sthapatya Veda*, just as everything in Nature including the body is proportioned to promote optimal functioning, there is an ideal proportion for every room in the home or office. As Hagelin asserts these principles are not at odds with modern science:

Modern science is in a position today to verify that different qualities of light, for example, and different environmental electromagnetic influences, have different physiological effects. So it's logical to assume that different areas within the home with south facing light, others with northern light, will have different physiological effects. Some of these effects will be conducive to sleep, others to digestion, some to focus and efficiency and work. But whereas it might take decades or a generation for modern science to tabulate all of these beneficial and negative effects, this homework has already been done with this ancient science of building in accord with natural law, Maharishi Sthapatya Veda.¹²⁷

Indeed, Maharishi Sthapatya Veda architecture “takes advantage of the Cosmic proportions with reference to the individual proportions of the human physiology.”¹²⁸ As Maharishi explains

Because the individual is cosmic, everything about individual life should be in harmony with Cosmic Life. Maharishi Sthapatya Veda design gives dimensions, formulas, and orientations to the buildings that will provide cosmic harmony and support to the individual for his

¹²⁷ Hagelin, in Hughes, 2000.

¹²⁸ Maharishi Global Construction, 1997.

peace, prosperity, and good health—daily life in accord with Natural Law, daily life in the evolutionary direction.¹²⁹

With respect to proportion, when a house is being planned for an individual, the placement and dimensions of the rooms, the dimensions of the windows and doors, the length, width and elevation of the building are all individually calculated using precise formulas. These formulas take into account the relationship of the owner, house, and the planets.

Building for Fulfillment

The aspiration to create built structures that inspire the individual and the populace at large is evident in Christian and Islamic architecture,¹³⁰ and other sacred forms and sites. Many of traditional churches, mosques and temples, have been designed to evoke devotion and awe. As de Botton states, “Muslim artisans covered the walls of houses and mosques with repeating sequences of delicate and complicated geometries, through which the infinite wisdom of God might be intimated.”¹³¹

Historically, traditional approaches to architecture use symmetry, geometry and “ideal” proportions. However, even a cursory glance at historic sites throughout the globe, as presented in classic texts such as *A History of Architecture on the Comparative Method* by Sir Banister Fletcher,¹³² reveals that culturally significant structures such as palaces, temples, mosques, synagogues and churches, were not, in the main, oriented true north or east.¹³³ Therefore, although geometry and proportion were often important to traditional architecture, historic buildings do not necessarily conform to principles identified by *Shatapatha Veda* as effective and appropriate orientation, placement, and site requirements. The question arises: If architects’ visions for

¹²⁹ Maharishi Mahesh Yogi, quoted in Maharishi Global Construction, 1997.

¹³⁰ De Botton, in *The Age*, 2006, p. 31; (from Alain de Botton’s *The Architecture of Happiness* published by Penguin).

¹³¹ *Ibid.* p. 31.

¹³² Fletcher, 1946. Fletcher’s treatise was first published in 1896 and was used in architectural training for at least fifty years.

¹³³ Except for some historic structures, such as Angkor Wat, which seem to employ principles of Vedic design and were oriented to the rising sun.

ideal structures and social environments have not borne the anticipated fruit, then why would architects continue to adhere to earlier principles? Wouldn't ideas about proportion etc., increasingly be viewed as governed by vagaries of aesthetics and taste?



*View of the Town Hall in Zamosc town square, Poland*¹³⁴

While tremendous creativity, ingenuity, skill, effort, and finance, may have allowed the construction of impressive cultural buildings, sacred or otherwise, there is less evidence of builders and architects going to the same lengths to create what could be called ideal dwellings for the average person. More importantly, ideal cities conceived of, built, and lived in—from the well-known capital of Brazil, Brasilia, to the lesser-known 16th-century Polish town of

¹³⁴ Photograph, Lee Fergusson.

Zamosc¹³⁵, and present day feats of architectural prowess in places like Dubai—do not take into account consciousness or the cosmic dimension.

In contrast, Maharishi Sthapatya Veda aims to create an entire built environment that holistically integrates the individual with the cosmic. Already located worldwide Maharishi Sthapatya Veda homes and office buildings are situated across the U.S.A., in Fairfield and Maharishi Vedic City, Iowa,¹³⁶ Kentucky, Florida and North Carolina, in the Republic of Tatarstan, in Holland and Australia, and in the U.K.¹³⁷ Britain's first *Sthapatya Veda* building is a sports and arts centre built in Skelmersdale.



*Maharishi Sthapatya Veda dwelling*¹³⁸

Recently, a plan for the largest commercial application of *Sthapatya Veda* design—a Vedic “green” office called *Tower II*—was presented to the *National Conference on Vedic Architecture* at the

¹³⁵ Zamosc is a world cultural heritage city built in the late 16th-century as the Zamoyski family's seat by its founder Jan Zamoyski. It became a centre of trade, culture and learning and a powerful fortress of the Republic of Poland. Conceived of as an ideal Renaissance town, Zamosc was designed by Bernardo Morando and supported a multicultural population.

¹³⁶ See: <http://maharishivediccitcity.net/index.html>, and, <http://www.mandalaone.com/index.html>.

¹³⁷ Hughes, 2000. http://www.buildingforafuture.co.uk/winter00/holistic_building.php.

¹³⁸ Image printed with permission of Anthony Lawler.

National Building Museum, Washington D.C.¹³⁹ *Tower II*, to be developed by Tower Companies, is slated for an 11-acre site in Rockville, Maryland. Jeffrey Abramson of Tower Companies claims that this building will create increased success and well-being for its users; he observes that we spend 90% of time indoors, and therefore, feels that it is vital that the built environment helps the individual to succeed in life.¹⁴⁰



*Design for 2000 Tower Oaks Boulevard,
Developed by the Tower Companies, Bethesda, Maryland, U.S.A.*¹⁴¹

¹³⁹ The *National Conference on Vedic Architecture: A Holistic Approach to Sustainability* was held at the National Building Museum, in Washington D.C., June 13, 2005.

¹⁴⁰ Chediak, 2005.

¹⁴¹ Image (rendering) printed with permission of Tower Companies.

All interior and exterior measurements of the *Tower II* are proportionally designed “to mirror the geometry of the universe”. It will have a surrounding boundary or terrace defining a distinct parameter around the site and a *Brahmasthan*, the silent, central core or nucleus of any *Sthapatya Veda* building—the seat or point of wholeness from where wholeness expands. Despite this, *Tower II* stylistically resembles a Modernist structure. While all Maharishi Sthapatya Veda structures follow specific formulas and principles, each one is designed according to client’s tastes, cultural context, and the needs of the site.



*Alternate view, 2000 Tower Oaks Boulevard,
Developed by the Tower Companies, Bethesda, Maryland, U.S.A.*¹⁴²

Maharishi Sthapatya Veda brings a raft of additional criteria through which any building can embody consciousness and effectively

¹⁴² Image printed with permission of Tower Companies.

become “ideal”. Its parameters and formulas have immense practical value: the improvement of individual life, promotion of happiness, health, prosperity, and even spiritual development.

Beauty or aesthetics of a structure, in this case, are directly linked to its ability to provide profound use-value for the individual and society. Indeed, Alain de Botton re-visits the idea that “beautiful buildings” have “the power to improve us morally and spiritually”¹⁴³ stating that:

The challenge facing ordinary home-builders is no different from that which faced the architects of Chartres and the mosque of Masjid-I Imam in Isfahan, even if their budgets are closer to those of the painters of the Roman catacombs. In a secular context, too, our aim is to identify objects and decorative features which will correlate with certain salutary inner states and encourage us to foster them within ourselves.¹⁴⁴



*Interior, 2000 Tower Oaks Boulevard*¹⁴⁵

¹⁴³ De Botton, in *The Age*, 2006, p. 33.

¹⁴⁴ *Ibid.*

¹⁴⁵ Image printed with permission of Tower Companies.

The mathematical proportions, measurements, orientation, placement, etc., that are part of Maharishi Sthapatya Veda all profoundly serve the purpose of creating a structure that connects the individual and the cosmic; and, in so doing, brings support of Nature to the individual. One predicted social aspect of this influence, the increase in coherence generated by the *Sthapatya Veda* structure/s or *Vastu*, referred to as the *Maharishi Vastu Effect*, has been explained in relation to an effect identified in physics.



*Maharishi Sthapatya Veda office building, Fairfield, Iowa, U.S.A.*¹⁴⁶

The *Vastu* Effect

A built environment designed and constructed according to *Sthapatya Veda* is said to have the effect of creating coherence and order in society and the environment. This effect, known as the *Maharishi Vastu Effect*, is analogous to the *Meissner Effect* identified by quantum physics. The *Meissner Effect* shows the ability to resist disorder is based on the coherent collective functioning of a system. For example, in an ordinary electrical conductor, incoherent, disorderly electrons allow penetration by an external magnetic field. In contrast,

¹⁴⁶ Image printed with permission of Anthony Lawlor.

in a super conductor, the coherent collective functioning of electrons spontaneously excludes an external magnetic field, maintaining the impenetrable status of the super conductor.¹⁴⁷ Likewise, an ordinary city with its roads running in all directions, necessarily creates the chaotic orientation of houses, and governmental, commercial, and recreational buildings. This leads to problems and the inability to live in accord with Natural Law. As considered in earlier chapters, the full value of consciousness is not lived by the people when there is a lack of coherence in society.

In a Maharishi Sthapatya Veda designed village, town or city, where all roads line up around a central square, automatically order and coherence bring support of Natural Law.¹⁴⁸ The *Maharishi Vastu Effect* is predicted to prevent negative influences by creating an invincible village, town or city. By applying this knowledge to city and town planning and architecture, ideally life can be improved on all levels: physical, emotional, social, spiritual, environmental and financial. Maharishi states that in conjunction with the coherent effect of proper *Vastu*, the group practice of the Transcendental Meditation technique, the TM-Sidhi Programme and Yogic Flying, creates an invincible armour for the nation.¹⁴⁹

Clearly, from the Vedic perspective, all aspects of life are intimately interconnected. “Nature” and “culture” are not opposing or incompatible forces. The cosmic intelligence that structures and maintains the universe is the same intelligence that structures, governs, and cultures the human physiology and all of life. The individual can culture the physiology, refine life, and realize the full potential of consciousness, by aligning him or herself to the cosmic intelligence of Nature. Thus, from the perspective of the built structures in which we live and work, we can further enjoy the benefits of life in accord with cosmic intelligence.

Cities of Consciousness

In his *Invisible Cities*, Italo Calvino seems to present the city as a metaphor for various relative consciousness states as sites of memory

¹⁴⁷ Maharishi Vedic University, 1998, p. 32.

¹⁴⁸ *Ibid.*, p. 34.

¹⁴⁹ *Ibid.*, p. 36.

and desire where along with the many facets of experience, “it is easy to get lost”. However, Calvino gives a picture of a possible blue print (celestial or cosmic) in the example of the orderly carpet or map of Eudoxia and its referent, the city. In addition, Marco Polo, it seems, always finds himself present in a silent mental space, while simultaneously, at any time, traveling to or within one of the various cities. Apparently both having and witnessing his experience, Marco Polo recounts his adventures to Kublai Khan who remains in the silent garden. Parallels can be drawn between this account and different worlds experienced in various states of consciousness—such as the ego or self, traversing through life’s journey, and the cosmic Self witnessing this ever-changing flow of experience on the ground of unchanging, pure consciousness or inner silence. In this way, *Invisible Cities* invites myriad possible readings and the idea of multiple consciousness states.

While writers such as Calvino present us with a vehicle for contemplating aspects of paradoxical experience through concepts of inhabited spaces, Nader reveals that the Vedic text the *Shrimad Devi Bhagavatam* actually describes a series of enclosures that correspond to the brain physiology itself. As an expression of the Vedic Literature, this text can be understood as frequencies of self-referral consciousness expressed as sound and form, and, ultimately as the human physiology. The enclosures or architectural structures and spaces described therein furnish an account of the structure of the brain—the “abode” of consciousness or infinite creative intelligence, *Devi Gayatri*. The beautiful descriptions of the 19 enclosures (the “ocean of nectar”; “thousands of houses adorned with trees of gems and jewels”; “halls built of 1,000...pillars”; “all inhabitants of this place are full of youth and look like 1,000 suns”) describe aspects or functions of the various brain layers. These represent the dynamics of consciousness as inward and outward values of the eight *Prakritis* and the three values of *Rishi*, *Devata*, and *Chhandas*—from the outer skin layer, to the skull, through to inner layers of the cell and DNA.

Revisiting the discussion in Chapter One about where to find “unified field consciousness”, from the perspective of Maharishi Vedic Science unified field consciousness is the self-referral basis of life that, as we have seen, can be found operating in the DNA, tissues, organs, indeed, everywhere in the physiology; it is the underlying functioning intelligence of the body. However, Nader does identify specific

qualities of self-referral consciousness or intelligence as corresponding to specific aspects and functions of the physiology. Therefore, while Searle suggests looking to the thalamus to find “unified field consciousness”, Nader finds that the thalamocortical fibres of the brain correspond to the *unmanifesting the parts but manifesting the whole* quality of intelligence contained in the *Sama Veda Pratishakhya (Pushpa Sutram)*. Nader also states that the brain and the cosmic counterparts embody qualities associated with the *Vedic Devatas*. The thalamus, he observes, creates balance between inner and outer, relative and Absolute, and is associated with the sun or *Surya*. Not surprisingly, Maharishi identifies the life-giving force of the sun as the second level of rulership (after the holistic, transcendental level of *Purushottama*) and it is, therefore, vitally important for the optimum functioning of the physiology. Both the level of *Purushottama* and the life-giving force of the sun can be enlivened through technologies of consciousness because they operate from that foundational transcendental level. Located in the center of the brain, the thalamus controls the basal ganglia, mediating their activity and transmitting their information to the cortex. In addition, the group of fibres around the thalamus called the corona radiata form a structure giving the image of a crown, like that of the sun king. Nader reveals that the thalamus acts as the ruler and is involved in setting the overall tone of consciousness in the brain¹⁵⁰ via the diffuse thalamic system, which is connected to key centers on the brainstem. He also explains that the thalamus is further associated with the head of *Buddha* and fulfills the function of *Lamp at the Door* brought out by *Nyaya*—the simultaneous illumination of inside and outside within consciousness (the value of artistic sight or *Darshana*). Indeed, the 16 aspects of *Nyaya* relate to the 16 projections that converge on the thalamus referred to in the *Devi Bhagavatam* as the 16 petals of the lotus. While the thalamus plays a role in balancing inner and outer, setting the overall tone of consciousness, the brainstem is the “the location of *Chakravarti*, the ruler of the universe”¹⁵¹.

Balance and orientation are important to Maharishi Sthapatya Veda, which takes into account these correspondences between the physiology and its cosmic counterparts—the planets, constellations,

¹⁵⁰ Nader, 2000, p. 378.

¹⁵¹ *Ibid.*

celestial phenomena and cycles. As with the Maharishi Vedic Observatory, brain patterns in the individual brain physiology are said to be enlivened in the viewer of the *Yantra* or the inhabitant of the Vedic architecture through correct orientation. In viewing the *Digansha Yantra* and the *Dakshinovritti Yantras*, for example, balance is predicted to increase in individual physiology by the former, and any shadowing influence that inhibits the direct relationship between the thalamus and its cosmic counterpart the sun, is disallowed by the latter. With respect to the built environment, Maharishi Sthapatya Veda positions itself as the penultimate approach to architecture and town-planning where the structures and functions of the individual physiology are seen to be an exact replica of the cosmic physiology and everything with which the individual is concerned, including his or her environment, is designed to be in full alliance with the cosmic structure. As such, each Maharishi Sthapatya Vedic structure is like the inhabitant's own Vedic observatory.

As Maharishi states, the principle of *Sthapatya Veda* “is to establish any building, any village, any city, any country in full alignment with the structuring dynamics of the whole universe, which maintains the connectedness of everything with everything else.”¹⁵² The built environment becomes more than a metaphor, more than an expression of ideas and individual or collaborative design, more than simply sustainable or artistic practice; it is an extension of consciousness expressed as the body (the abode of *Devi Gayatri*), expressed in the celestial world.

The principles of Maharishi Sthapatya Veda design thereby allow the builder, architect, and developer, to effectively construct cities in accord with cosmic intelligence. In such cities, not only is one never lost, but also the entire play of consciousness is embedded within the very design, structure, and purpose of place. *Sthapatya Veda* buildings are built to embody the wholeness of consciousness in its most expansive sense, encompassing the entire range of possibilities inherent within pure consciousness. In this sense, cities constructed according to Maharishi Sthapatya Veda can be defined as cities of consciousness.

¹⁵² Maharishi Mahesh Yogi, 1998, p. 168.

Infinite Mind/Infinite Body

From the discussions in the first six chapters of *The Big Fish: Part One—Infinite Mind/Infinite Body, Awakening and Re-Envisioning Consciousness*, the human physiology has been discussed as a precise expression of self-referral consciousness. When functioning at its optimum potential, human awareness can cognize its own creative mechanics and realize that the body is cosmic. The impact of this understanding on recent debates on the posthuman should be obvious. The body is potentially a perfect instrument for the full experience of consciousness states. It *is* the abode of consciousness. The brain physiology is already a “cosmic computer”.

To unpack the value of *Smriti* or memory as 100% wakefulness, unfold cognition or *Darshana*, reveal the details of *Yagya* as Vedic engineering or offering on the level of consciousness, and experience cosmic instruments and structures, Vedic Science provides complete knowledge of consciousness and its applied technologies. For the artist seeking to draw from a reservoir of infinite creativity, to be an exemplary human being, to operate from the totally sustainable field of Nature’s functioning—the *Big Fish* of self-referral, the multivalent Vedic approach and technologies of consciousness are invaluable. With this understanding the individual, social, and cosmic aspects of life are integrated, as are the environmental, “cultural” and “natural”. The potential for universal action—action in accord with Nature, action that is infinitely life-supporting—can be realized. The Vedic approach provides the key to any truly transformational performance and artistic practice; it also reveals the transcendental foundation for a quantum, paradigm shift in world consciousness.

PART TWO
EXPRESSIONS, VISIONS, PERSPECTIVES

This page intentionally left blank

FOREWORD

As stated in the Introduction, Part Two departs from Part One in that it presents several previously published articles, which generally address ideas about consciousness. The first two chapters acknowledge Maharishi's consciousness-based approach to art in the context of, firstly, a lecture by Agnes Martin and, secondly, a national debate on freedom of expression and censorship that became a burning issue in the arts in the U.S.A. during the late 1980s and early 1990s. Co-authored by Anna Bonshek and Lee Fergusson, these chapters refer to technologies of consciousness and their role in enhancing creativity, the expression and perception of beauty, and the art student's ability to create art with both a personal, and moral and social voice—echoing some of the themes discussed in Part One. Apart from this, *Agnes Martin on Beauty and Perfection in Art* provides a unique insight into the profound thoughts of one of North America's most renowned artists as she speaks about her personal vision, the Classic, and perfection, and *Unified Field Based Art Education: Toward a Socially Responsible College Art Curriculum* provides a new perspective on freedom of expression versus social and moral responsibility in art.

The next chapter, *Allegories of Consciousness: Perfection in Printmaking from the Renaissance* originally accompanied an exhibition of prints from the 14th- to the 20th- centuries selected by Bonshek and Fergusson for the first in an on-going series of shows. In making a bold assumption about how certain art works can be said to mirror, or be allegories of, an inner vision within the artist's consciousness, Chapter Nine thus explores individual consciousness, creative practice and art. Consciousness is discussed with respect to the concept of the artist having an inner idea or vision of a work. During the process of creative expression, this inner vision and the successful manifestation of it are argued as being perfectly expressed on the basis of three levels of creative practice—ideational, technical and structural. Here perfection relates to the perfect expression of inner processes or vision. Chapters Ten and Eleven, *Signs of Reconciliation:*

Prints by Michael Kane Taylor and An Ocean of Beauty In the Mind of the Beholder—A Suite of Photographs by Mark Paul Petrick, again represent exhibition essays. Chapter Ten discusses the universal and diversity in art, reviewing modernism and postmodernism, before commenting on prints by Australian artist Michael Kane Taylor. This chapter, also by Bonshek and Fergusson, takes into account opposing views of late 20th-century thought and ideas about universality, the absolute, the ability of art to evoke absolute emotions, and, by inference, deeper more intuitive aspects of consciousness.

Following this, Chapter Eleven constitutes a review of photographic work by Mark Paul Petrick that draws from the Vedic text, the *Saundarya-Lahari*. Neither Chapters Ten or Eleven attempt to make connections between material covered in Part One and the featured artist's work or methods. From the authors' point of view, the work stands somewhat outside or beyond the predominant discourse of the time. However, an interpretation from a more expanded sense of consciousness seems appropriate. Chapter Twelve, *Deleuzian Sensation and Unbounded Consciousness in Reverie I*, by Corrina Bonshek, examines art and unbounded awareness as articulated in Robert Forman's notion of a pure consciousness event and in Vedic theory. Despite this, the main thrust of the chapter is a reading of the dual-screen DVD installation work, *Reverie I*, in terms of the concept of sensation—as intensity or affect—defined by Gilles Deleuze. Chapter Thirteen, *Reverie II: Revelation, Consciousness and Peace* looks at the idea of peace and the making of the multi-arts work *Reverie II*—inspired by the Vedic description of consciousness. Finally, a short piece entitled *I Stands Out* brings this volume to a close.

7

AGNES MARTIN ON BEAUTY AND PERFECTION IN ART¹

Anna Bonshek and Lee Fergusson

There is a Beautiful Necessity which rules the world, which is a law of nature and equally a law of art, for art is idealized creation: nature carried to a higher power by reason of its passage through a human consciousness. Thought and emotion tend to crystallize into forms of beauty as inevitably as does the frost on a window pane. Art, therefore, in one of its aspects is the weaving of a pattern, the communication of an order and a method to the material or medium employed.²

—Claude Bragdon

Agnes Martin is considered by many critics to be the most important woman artist in America. Over the last 30 years, Martin's work has undergone several critical readings and she has enjoyed the status of elder stateswoman among younger artists whose postmodern leanings find solace in her cool, homogenous paintings. It has been

¹ First published as: Agnes Martin on Beauty and Perfection in Art, in *Modern Science Vedic Science Journal*, 1988, Volume 2, pp. 298-306, in response to a lecture by Agnes Martin (1912-2004) hosted by the Department of Art, Maharishi University of Management, Iowa in 1988.

² Bragdon, 1978, p.30.

said that Agnes Martin can “fill the house with a whisper”³ and the critic Thomas McEvelley has noted, “Martin’s art expresses by its reductiveness the idea of loss of habit, and by its quietness and unassumingness, the quality of humility.”⁴ Since 1960, Agnes Martin has focused her attention on the oft-neglected region of artistic practice that lies somewhere between the universal and particular modes of human expression, between absolute meaning and relative manifestation. While the work of her modern contemporaries—Barnett Newman, Mark Rothko, and Clifford Still—centered on uncovering universal truths and sublime experience, Martin’s work concerns itself with what she refers to as “inexhaustibles” and “exhaustibles,” or the unchanging and changing values of life. This dichotomous relationship sets up what McEvelley calls a “constant swinging back and forth between ontological and epistemological terms, between pure being and pure consciousness.”⁵ By concentrating on this point of elasticity and tension, Martin’s work elicits what she calls an “abstract response,” a reaction to art that is “infinite, dimensionless, without form and void. But it is not nothing because when we give our minds to it we are blissfully aware.”⁶

Martin is particular to point out the range and character of this response. In a 1972 note concerning *The Still and the Silent in Art*, she has said, “My interest is in experience that is wordless and silent, and in the fact that this experience can be expressed for me in art work which is also wordless and silent”.⁷ Elsewhere, in lecture notes from 1973 entitled *On the Perfection Underlying Life*, Martin has stated that “the function of art work is the renewal of memories of moments of perfection.”⁸ This statement parallels the remarks of her contemporary, Barnett Newman, who wrote that works of art should call forth a “memory of the emotion of an experienced moment of total reality.”⁹

With its attendant power to invoke such a vivid response, this view of art is unusual in the world today. Recent art, while referring to the underlying but hidden qualities of perfection, rests largely on the particular aspects of human existence, focusing on the changing,

³ Alloway, 1973, p. 140.

⁴ McEvelley, 1987, p. 99.

⁵ *Ibid.*

⁶ Cited in McEvelley, 1987, p. 99.

⁷ *Ibid.*

⁸ *Ibid.*, p. 94.

⁹ *Ibid.*

relativistic, or material values or, as Martin puts it, the “exhaustibles” of life. However, because of the need to integrate art with fundamental meaning in life, interest within the discipline has returned once more to the role of a universal value. As a result, many artists and historians are reevaluating the writings and art works of Agnes Martin.¹⁰

Nevertheless, a description of Martin’s work is difficult. By placing herself at a level of perceptual concern removed from worldly events and conditions, she has dispensed with many commonly held images of the material world. Her sparse works inevitably draw the viewer’s attention toward abstract layers of meaning and reality, ultimately arriving at the “abstract response.” This reductive approach has culminated in two remaining elements in her work: the field and the grid. The first signifies an “inexhaustible” domain of perfection and the second an ordered system from where creativity can flow; the first represents being, the second becoming. McEvelley tends to emphasize the significance of the grid itself as a “kind of ontological ground, a membrane from which forms emerge into light, a threshold where energy passes from formless-ness to form”.¹¹ However, it is the play of movement between field and grid that is most striking and evocative.

Buddhist Philosophy and the “Classic”

In her notes, Martin refers to three levels of life that are described in Buddhist philosophy. The structure of life, according to this description, is the *Dharmakaya* or unchanging absolute, the *Nirmanakaya* or changing relative world of diverse forms and phenomena, and *Sambhogokaya* or the realm of “transformation” that lies between them, mediating the processes of manifestation as they emerge from the absolute. McEvelley points out:

It is in this middle realm, where change and the unchanging somehow merge, that Martin locates the ‘classic’. In this intermediate realm between absolute and relative, one cannot get away from either the universal or the particular, either the idea of perfection or everyday reality.¹²

¹⁰ *Biennale of Sydney*, 1986; McEvelley, 1987.

¹¹ McEvelley, 1987, p. 96.

¹² *Ibid.*, p.99.

As Martin states: “I hope I have made it clear that the work is *about* perfection as we are aware of it in our minds but that the paintings are very far from being perfect—completely removed in fact—even as we ourselves are.”¹³ Here Martin locates the disjunction between the initial idea and its subsequent articulation into material form. The work of art merely implies perfection but is not, in itself, perfect. In this context, she defines the “classic” as all that is true and good in art. “In works of art,” she states:

Our most joyful, subtle, and tender feelings are represented. These feelings are universal and do not change. It is very serious misrepresentation to say that art represents culture. True art is responded to by people of all cultures in exactly the same way. Consider the pyramids, Ming pottery, German music, Greek architecture.¹⁴

The classic in art, then, according to Martin, is that highly prized dimension of beauty and perfection that underwrites artistic greatness.

Perfection, Beauty and Happiness

In this her second lecture at MUM¹⁵ (the first one was in June 1976), Martin concentrated on her favourite themes in art: perfection, inspiration, happiness, and beauty. Each of these elements is inextricably linked to the others, each a pivotal component of “classic” art practice. She began by stating the relationship between perfection and its subsequent expression as beauty:

When I think of art I think of beauty.
Beauty is the mystery of life.

¹³ Martin cited in McEvelley, *Ibid.*, p. 99.

¹⁴ Martin, 1979. p. 3.

¹⁵ Located in Fairfield, Iowa, USA, Maharishi University of Management (formerly Maharishi International University) has provided consciousness-based education for over thirty years. See: <http://www.mum.edu/>.

The Department of Art and Design has hosted numerous guest speakers from Agnes Martin to Suzi Gablik, Rudolph Arnheim, and Thomas McEvelley during this time. Attracting artists from across the nation to its unique community, Fairfield supports a vibrant and concentrated art community. The acronym MUM and name Maharishi University of Management will be used in this chapter and in the following chapter, where Maharishi International University and MIU appeared in the original printing.

It is not in the eye, it is in the mind.
In our minds there is awareness of perfection...
All art work is about beauty.
All positive work represents it and celebrates it.
All negative art protests the lack of beauty in our experience...
Beauty is an awareness in the mind.

Immediately, the uniqueness of her vision becomes apparent. In the contemporary setting, beauty is not considered a fundamental criterion for making or responding to art. However, for Agnes Martin, all art objects are concerned with beauty, an elusive yet cherished goal of many cultures and people. As Michael Cain,¹⁶ founding Chairman of MUM's Department of Art, states, "great art captures the divine, the sacred and the eternal. Touched by art, the stuff of the world is transformed into beauty, truth and infinity."

Martin places beauty not in the domain of sensory perception but in awareness, in consciousness. "When a beautiful rose dies," she explains, "beauty does not die because it is not really in the rose;" it predates and is independent of passing material change. Beauty is that which endures in art; it is externalized perfection. According to Martin, the source of all positive values in art is the realm of perfection, and perfection is a function or quality of human awareness. And while it seems that perfection and beauty are virtually indistinguishable, the former suggests an underlying state out of which beauty in art emerges. Indeed, perfection is *the* principal characteristic of the mind, and it is the awareness of this value in life that the artist must experience in order to create positive, original, and truly significant works of art.

The way to expressing beauty in art, according to Martin, is through inspiration.

Concepts, relationships, categories, classifications and all deductions are distractions of the mind that we wish to hold free for inspiration.

There are two parts of the mind: the outer mind that records facts and the inner mind that says "yes" and "no."

We can think of something that we should do, the inner mind says "yes" and you feel elated and we call this inspiration.

For an artist, this is the only way...¹⁷

¹⁶ Cain, 1985, p. 1.

¹⁷ Quoted from Martin's June 1976 lecture.

Here, Martin makes the distinction between the active, thinking mind and its deeper, innate ability to discriminate, to discern finer values of thought. Inspiration in art, then comes from opening the awareness to this “inner mind.” She emphasized in this most recent talk that the way of the artist is “surrender,” to go beyond the level of awareness which is concerned with everyday thoughts, “to penetrate these and hear what your mind is telling you to do.”

According to Agnes Martin, inspiration gives rise to happiness. When the artist penetrates the surface values of the mind and enlivens thinking from this level of inspiration, when he or she surrenders to the finer values of experience, happiness and joy well up in the life of the artist. To refine sensibility, the artist must remain open to experiences of happiness. As Martin emphatically stated in this lecture: “Make happiness your goal.” She continued by pointing out that:

Beauty illustrates happiness.

The wind in the grass, the glistening waves following each other, the flight of birds all speak of happiness.

The clear blue sky illustrates a different kind of happiness and the soft dark night a different kind.

There are an infinite number of different kinds of happiness.

The response is the same for the observer as it is for the artist.

The response to art is the real art field.

Thus, beauty is the expressed quality of happiness. Indeed, for Martin, it is this axiom of experience that separates the “classic” or positive in art from the unacceptable and uncreative. According to this view, true creativity only emerges from a response to happiness: “It is in this way that positive work enters reality and lasts forever.”¹⁸ As she stated in this lecture:

All other work made from ideas is not inspired and it is not art work.

Art work is responded to with an infinite variety of happy emotions.

Work about ideas is responded to with other ideas.

Martin’s conception of the relationship between perfection, inspiration, happiness, and beauty can therefore be summarized in the following way: Perfection is a state of awareness, which the artist, by

¹⁸ Martin, 1979, p. 3.

penetrating everyday thoughts, can experience. This level of experience promotes inspiration and is accompanied by moments of happiness—abstract or non-objective feelings that are associated with the inner mind. From here, true creativity springs forth giving rise to positive art—works of beauty and truth that can be appreciated by all cultures throughout time. For Agnes Martin, this is the only type of art worth producing.

The goal of life is happiness, and to respond to life as though it were perfect is the way to happiness...

Happiness is being on the beam of life.

You feel the pull of life.

This theme finds great resonance in the contemporary world of art and was received with enthusiasm by the MUM audience. Agnes Martin's approach to art and theory is not dissimilar to the established teachings about art that have underscored the promotion of ideas about beauty, truth, and cultural integrity across cultures. In many ways, her views closely parallel the explanation of the creative process in human life and nature found in ancient Vedic science. It is this aspect of tradition that Maharishi Mahesh Yogi, the founder of MUM, has revived and which has been integrated into the art curriculum.

Ancient Vedic Knowledge, Contemporary Art Practice and Education

After working closely for many years with Maharishi formulating art courses to be taught at the university, Professor Cain has pointed out that:

The highest art results when human awareness flows in integration with the evolutionary stream of natural law. This art has enabled human life to assimilate the limitless dignity, grace and perfection of both vast and minute self-expressions of creative intelligence in nature. Art achieves this exalted role through its unique function, for art is humankind's special means for articulating and enlivening the highest values of life on the very surface of the external world. The essential theme of art is always the finest values of consciousness itself. In it's ever more

refined expressions of subtle qualities of awareness, art radiates a supreme value, the full development of consciousness.¹⁹

By nurturing artists, educators, and students of art through consciousness-based education, Maharishi University of Management plays a central role in achieving this goal for art. It provides contemporary pedagogic practice with knowledge and organizing power—from the level of the unified field of pure consciousness located in the simplest form of awareness. Maharishi has explained that the unified field is the unmanifest basis of creation; through its own self-referral dynamics of consciousness, it is the creator and governor of the whole universe.²⁰ As described by modern physics, the unified field is the domain of perfect orderliness, infinite dynamism, and all possibilities.²¹

Individual awareness can, through the Transcendental Meditation technique, open to the unified field of pure consciousness—the home of all the laws of nature, where consciousness is self-referral, fully awake within itself. In this way, the TM technique establishes a stable, inexhaustible field of creativity at the basis of thinking and action. “As we gain more and more familiarity with that self-referral performance,” Maharishi explains, “our thoughts and actions spontaneously begin to be as orderly and evolutionary as all the activity of nature.”²² Maharishi has pointed out, in fact, that the unified field of pure consciousness generates its own energy and creativity from within itself. By functioning on the level where nature’s own creativity is organized and managed, the individual is revitalized and the artist rejoices in creativity. Creative expenditure from the level of limitless creative intelligence thereby systematically promotes the evolutionary qualities of infinite dynamism and, indeed, bliss in the life of the artist.

Maharishi has further explained that the unified field is not only the home of infinite creativity and intelligence, but also a field of all possibilities, a fountainhead of all the divergent streams of activity in nature. Activity performed from this level of nature’s functioning guarantees support of all the laws of nature, and because activity from this state is self-referral, self-promotional, and self-evolving, all

¹⁹ Cain, 1985, p. 1.

²⁰ Maharishi Mahesh Yogi, 1986.

²¹ Hagelin, 1985, pp. 44-45.

²² Maharishi Mahesh Yogi, 1986, p. 97.

creative expressions performed from the level of the unified field carry with them the intelligence of nature itself. This type of action ensures the success and fulfillment of any artistic endeavour. Thus, as Maharishi has stated:

The entirety of life must be lived by the artist and this should be the result of the study of art. An artist, as a creator, has to be conversant with every aspect of life, with every phase of existence, with every fabric that constitutes existence. Only then will he be able to put this fabric here and that fabric there, and make it all more colourful. Then his art—his creation—will speak the story of life. It is vital for the study of art, much more than for the study of any other field, that the artist spontaneously lives the completeness of life. Only then will his strokes spontaneously be the impulse of life.²³

This situation can be contrasted with the common experience of art that is projected from the level of conceptual thought alone—through the various avenues of mental preparation such as experimentation, imagination, and excogitation. Not only does such an approach to art draw from a creative base that many artists fear is finite and short-lived, but it is also a personalized expression whose content may not embody the totality of truth, the totality of natural law. Art of this kind is considered valuable in context only and has a relatively short lifespan, appealing as it may do to the senses or more surface levels of life.

In Martin's words, this type of art is exhaustible and non-classic. Accordingly, she recommended that students of art visit New York's Metropolitan Museum of Art and institutions of reputation and long-standing to study what has been considered "worth preserving all these thousands of years." This insight, in principle, is one of several that share profound resonance with the principles of Maharishi Vedic Science.

The Grid and Field as a Transformational Realm

Martin's use of the field and grid is another such example. In discussing her work, the critic Lawrence Alloway has stated that the

²³ Maharishi Mahesh Yogi, 1970, p. vii.

unbounded space, suggested by the all-over monotone field and the grid which contains a large number of reductive elements, "...implies infinity; [and] that is why the internal area of a Martin painting can seem so highly expansive."²⁴ This relationship between one unbroken field and an ordered system of component parts—both of which are present throughout Martin's oeuvre and both of which advance the notion of infinity—it could be argued, correspond to Maharishi's description of the internal structure of the unified field of pure consciousness. Maharishi explains that the unified field is at once an unbounded, transcendental field and a self-interacting field of dynamic parts (which are themselves unbounded and transcendental)—in the language of Maharishi Vedic Science, the unified field is the *Samhita* (togetherness) of *Rishi*, *Devata*, and *Chhandas*, its unmanifest constituents. The interactions and combinations of these constituents within the unified field subsequently express themselves as laws of nature and finally as matter.²⁵

Agnes Martin's paintings could be said to act as a visual metaphor of the unified field. Her paintings imply the dynamical relationship between silent field and its self-interacting components, the interdependence of amorphism and the point where form begins to emerge. However, her emphasis continually returns to the fullness, or wholeness of experience. As Alloway states:

It is clear that in her paintings the parts are submitted to the larger whole. Thus the painting is an image of wholeness and this is not merely a demonstration of formal completeness but a symbolic value as well. The unitary system of the picture becomes expressive of stability, fullness, and completeness as subject matter.²⁶

As well, Martin's proposed seeking of "perfection in the mind" as a means to artistic inspiration and the creation of classic art apparently parallel Maharishi's explanation of an art that promotes the fullness of life and inspires subsequent generations to evolve to higher levels of consciousness.

The artist pushes the ever-changing structure of the lifeless piece onto the range of eternity, and he does this on the basis of how much of

²⁴ Alloway, 1973, p.139.

²⁵ Maharishi Mahesh Yogi, 1986; Chandler, 1987.

²⁶ Alloway, 1973, p. 139.

himself he is able to put into that, of how much life he is able to instill into the lifeless. This depends on how much of life the artist himself is living, how much he is living the unbounded eternity. If the artist is really living Being, Infinity, his piece of art will speak of maximum value of life. Most enlivened will be that piece of art, and as such, it will last longer in time.²⁷

Similarly, Martin's description of the means for and nature of gaining the experience of true inspiration as the source of positive and beautiful art is striking. Her analysis of the mind and the need for "penetrating" its surface level also resonates with experience through practice of the Transcendental Meditation technique which, Maharishi explains, allows the conscious mind to identify itself with the unified field of pure consciousness. This is why Maharishi asserts that it is "vital for an artist to meditate morning and evening and [then to] come out with some tender strokes of love and happiness."²⁸

Furthermore, Maharishi has noted that the unified field of pure consciousness is a field of infinite bliss. In fact, as he explains, it is because of this inherent quality of pure consciousness that the mind is drawn effortlessly and naturally toward it during the practice of meditation. Maharishi's Vedic Psychology describes how regular practice of the Transcendental Meditation technique promotes the development of higher states of consciousness in which pure consciousness comes to be permanently experienced along with waking, dreaming, and sleep states of consciousness.²⁹ Then the artist's thought and action spontaneously draws from the perfect order, infinite intelligence, and bliss of self-referral consciousness. In this way, all works of art can be inspired by the fullness of life and radiate beauty in the environment.

Maharishi Vedic Science and its technologies of consciousness provide artists with a tool for developing creativity and promoting "ideal" or "classic" art. More importantly, as Maharishi has pointed out, this need is a professional as well as a personal one: Artists depend on their useful and creative thoughts for success. Through the Transcendental Meditation and the TM-Sidhi Programme every artist has the opportunity to systematically develop the skill of performing

²⁷ Maharishi Mahesh Yogi, 1970, p. vi.

²⁸ Maharishi Mahesh Yogi, 1970, p. viii.

²⁹ Alexander et al, 1987.

action from the level of pure consciousness and to draw from the limitless reservoir of creativity lying at the source of human consciousness.

Indeed, every creative individual can, as Martin declared in her lecture, “Take advantage of the awareness of perfection in your mind [and] see perfection in everything around you.” By presenting the timeless ideals of life and providing a glimpse of the unified structure of nature through her unique approach to art, Agnes Martin continues to significantly influence contemporary thought.

UNIFIED FIELD BASED ART EDUCATION:
TOWARD A SOCIALLY RESPONSIBLE COLLEGE ART
CURRICULUM¹

Anna Bonshek and Lee Fergusson

For the disciplines of art and art education, 1989 represented something of a junction point. The moral and sociological implications of art-making in the postmodern era were, perhaps for the first time, argued seriously by museum directors, curators, artists, educators and even senators on the floor of Congress. While many artists and art educators have as yet not made the necessary adjustments for actually resolving these issues, the present moment suggests that society is as if waking up to the remarkable impact and power that even a single work of art can have on shaping the future of our world. This chapter introduces unified field based art education and considers its contributions to the issue of social responsibility in college art education. Unified field based art training suggests that not only can a student develop in ways that allow individualistic intentions to flourish but, and more importantly, that the relationship between these

¹ First published in *Social Science Perspectives Journal*, 1990, Volume 4, Number 5, Proceedings of the 1990 Louisville Conference, pp. 39-45, U.S.A.

intentions and the needs of society can be strengthened and harmonized. In this way, a global purpose to art might be realized.

Three incidents in 1989 simultaneously sparked an uproar. The first involved a student at the School of the Art Institute of Chicago whose work entitled *What is the Proper Way to Display the U.S. Flag?* caused citizens to protest what they considered a flagrant desecration of one of the country's most honoured and beloved symbols.² In this work, Tyler laid an American flag on the floor of the gallery; above it, the title of the work invited viewers to write their opinions in a book provided. The only difficulty of course was that one had to stand on the flag in order to write in the book thereby completing the intended statement. Tyler's point was a powerful one. He simultaneously asked if there was a correct way of displaying the flag while denying that the flag had, at least for him, any important meaning at all. This doubling of meaning acted as the ideal postmodern statement. Locked inside the artistic act, Tyler had effectively challenged and disturbed tradition while presenting an alternative point of view to it; a marginal voice was legitimated and given force in a work of art that, in itself, was almost non-existent. Needless to say, the response to Tyler's work was swift and predictable. President Bush called the work "disgraceful" and Senator Robert Dole from Kansas states, "I don't know much about art but I know desecration when I see it."³ Civil liberties groups rallied in support of freedom of expression while Veterans protested inside and outside the gallery, banning access to the work and engaging all who tried.

The second incident related to a federally assisted exhibition, which included the work of New York artist Andres Serrano. Late in 1988, the Southeastern Center for Contemporary Art (SECCA) in Winston-Salem, North Carolina, with the help of funds from the National Endowment for the Arts (NEA), hosted an exhibition that toured three galleries before closing in Richmond, Virginia. The trouble began when church and community leaders deemed a Serrano photograph degrading, even reviling. As in the work of Tyler, Serrano juxtaposed an image of reverence (in this case religious reverence not democratic reverence) with an act designed to disturb and deconstruct it. Serrano apparently aimed to call into question the relationship between man and God or, at the very least, the relationship between the

² Fulton & Seaman, 1989; Hochfield, 1989.

³ Hochfield, 1989, p. 43.

common and the divine. Serrano has reportedly said that his work was “not meant to be an attack on Christ but simply designed to question organized religion and the commercialization of Christ”.⁴ As the Director of SECCA said at the time, Serrano was “successful in a way far beyond his wildest dreams”.⁵

The deeper point, if one existed in the work, was lost on the majority of viewers. What church leaders saw was sacrilege and, if that were not enough, the fact that the federal government, through the NEA, had funded the project was cause for even greater concern.⁶ As a result, North Carolina Senator Jesse Helms suggested cutting off funds to the NEA and New York Senator Alfonse D’Amato expressed his outrage by referring to the work as anti-Christian and a “deplorable, despicable display of vulgarity”.⁷ Approximately 100 members of Congress signed letters condemning Serrano’s work and called for a re-evaluation of the funding procedures employed by the NEA. Issues related to control and suppression of artistic freedom began to surface.⁸

The third and most decisive incident came when the director of the prestigious Corcoran Gallery in Washington D.C., Christina Orr-Cahill, decided to cancel the opening of a retrospective exhibition of photographs by artist Robert Mapplethorpe fearing that some of the work might offend.⁹ This exhibition too had been partly funded by the NEA. In canceling the exhibition, Orr-Cahill apparently expressed the hope that her decision would stimulate serious reflection about what is and is not art. As if to underline the severity of the problem Orr-Cahill and the curator of the Mapplethorpe show Jane Livingston have since resigned their positions while the new chairman of the NEA, John Frohnmayer, has inherited a similar controversy.¹⁰

What resulted from these events was a public outcry of two kinds. One demanded that the NEA immediately halt funding to art works that were degrading or offensive. This view was championed by Senator Helms and written formally as an amendment to the American Constitution stating simply that any work of art, which denigrates or debases a person, group or class of citizens on the basis of race, creed,

⁴ Serrano in, Potter, 1989, p. 3.

⁵ Cited in Fox, 1989a, p. 18.

⁶ Fox, 1989a, 1989b.

⁷ Cited in Fox, 1989a, p. 19.

⁸ Cone, 1989; Indiana, 1989.

⁹ Madoff, 1989.

¹⁰ Loughery, 1990; Madoff, 1990.

gender, disability, age or national origin, must not be supported by federal funding.¹¹ The second came from citizens concerned with individual rights and free expression;¹² they asked: Who has the right to decide whether or not a work of art denigrates and what in a work of art constitutes debasement?

While the issue seems largely related to what responsibility, if any, the government has toward funding provocative and challenging art, according to some observers the real issue centres on the place of censorship in a free and democratic country simply because money is the ultimate form of censorship in a capitalist society.¹³ The argument against such intrusive measures can be summarized in the following way. In a free and open society, an artist, like any other citizen, has the right to freedom of thought, speech and expression. In fact, many of the most critical issues in history have been explored and confronted through provocative works of art. Thus, by hampering or censoring unpopular art, are we not inadvertently also hampering an important avenue of self-criticism and reflection? On the other hand, do artists have any responsibility to uphold the traditional values of society—values such as country and religion—or is the value of freedom of expression more important? According to a large number of individuals in western, pluralist societies, many of whom form minority groups and have historically been denied freedom by being forced to live on the fringes of society, the problem is tradition itself; these individuals simply do not hold dearly those values which the majority of people consider the core and fabric of civilization.

Thus the method employed by some artists to challenge and overturn tradition constitutes a “negative aesthetic,” an aesthetic contrived to upset, shock, or revile, an aesthetic of the opposite. The idea of the negative aesthetic is not entirely new. One has only to recall Dada. However, it must be stated that while art of this kind has an impact on the status quo, the question: “Does such art truly alter or constructively transform human life?” lingers. The basic premise here is that so long as the desires of the individual and interests of society are not reconciled with the intelligence of nature’s functioning, the negative aesthetic found operating in contemporary art certainly confronts but never actually solves the problems it addresses. In fact,

¹¹ Fox, 1989b; Hockfield, 1990.

¹² Arts Management, 1989; Levi Strauss, 1990; Sekula 1990.

¹³ Fox, 1989b; Loughery, 1990, p. 20.

when dismantling tradition *in toto*, the negative aesthetic can upset the inherent balance of life.

As we have stated elsewhere, in order to bridge the gap between individual and social, some artists have begun to re-evaluate the role of art in shaping and guiding human life.¹⁴ In her influential writings, Suzi Gablik has also suggested that by going beyond the limitations of a narrow, western definition of art, it should be possible to create meaningful and socially relevant statements.¹⁵ She calls for an environmentally and socially conscious art whose emphasis is not the object of art but the usefulness of its application. Gablik has however been challenged to produce a methodology that would create such a change.¹⁶ Similarly, noted educator Maurice Seigny¹⁷ maintains that college art education must focus on developing the “total individual” in a way that allows for freedom of expression while culturing a vision of society and the environment in which we live. He emphasizes the need for interdisciplinarity in art, for exposing the student to many divergent influences and ideas in order to enhance awareness of the totality.

In this context, the curriculum of Maharishi University of Management is unique.¹⁸ Offering accredited degrees in the natural and social sciences, business, humanities and the arts, this university has incorporated two important breakthroughs for education in the areas of knowledge and student development. The first is the theoretical explanation of the home of all the laws of nature and how it unfolds into manifest creation.¹⁹ The application of this knowledge completes any comprehension of life, filling in gaps in human understanding related to the origin of the universe and the individual’s relation to it. Furthermore, theoretical knowledge is supported by practical procedures to enhance student development. By directly expanding the awareness of the student through the Transcendental Meditation and TM-Sidhi Programme, a simple, natural technology designed to promote intelligence and orderliness in life, MUM’s curriculum develops evolutionary thought, speech and action. Evolutionary action means action in accord with those progressive forces of nature that guide life to greater achievement and fulfillment. Behaviour of this

¹⁴ Bonshek & Fergusson, 1988.

¹⁵ Gablik, 1989a, 1989b.

¹⁶ Wilcox, 1990.

¹⁷ Seigny, 1989.

¹⁸ Dillbeck & Dillbeck, 1987.

¹⁹ Maharishi Mahesh Yogi, 1985; 1986.

kind simultaneously upholds individual interests while not disturbing the delicate balance of society or the environment.²⁰ To elaborate further, two fundamental principles of Maharishi Vedic Science bear directly upon the issue of responsibility in art. The first is referred to as “alliance with nature’s government” and concerns the process through which individual and social life are aligned to or linked with the intelligence of nature’s functioning. The second, “spontaneous right action,” considers the consequences of aligning life to nature’s government particularly as they relate to art and art education.

Perhaps the single most vital concept of Vedic Science relates to aligning individual thought and action with nature’s intelligence. This principle is predicated on the existence of a “unified field” of all the laws of nature, a field which silently creates and maintains existence, a field of infinite orderliness and intelligence posited by physics,²¹ applied in various disciplines,²² explained by Maharishi Vedic Science,²³ recorded in the Vedic Literature,²⁴ and directly experienced by more than three million people throughout the world. Maharishi has referred to this level of life as “nature’s government”;²⁵ one silent field of intelligence where all the laws of nature seen operating at larger time and distance scales have their origin. This unified field can be described as the unseen hand of nature—guiding, promoting and regenerating life from within. It can be thought of as the “most powerful ‘computer’, responsible for computing the functioning of natural law everywhere in the universe.”²⁶

A principal aim of unified field based education is to harness the infinite potential of nature’s computing power and align thought and action to the unified field. In order to directly achieve this, Vedic Science offers contemporary education technologies of consciousness—allowing the conscious mind to contact the simplest form of awareness, pure consciousness. Indeed, through the advanced TM-Sidhi Programme, “human awareness identifies itself with that wide and most powerful level of nature’s functioning and starts to

²⁰ Maharishi Mahesh Yogi, 1986, pp. 45-46.

²¹ Hagelin, 1987.

²² Lester, 1987.

²³ Maharishi Mahesh Yogi, 1966, pp. 25-40; 1977, pp. 21-27; 1986, pp. 24-49.

²⁴ Maharishi Mahesh Yogi, 1967, pp. 126-132.

²⁵ Maharishi Mahesh Yogi, 1986, p. 88.

²⁶ Lester, 1987, p. 318.

function from there.”²⁷ According to Maharishi,²⁸ the purpose of this programme is:

to consciously create activity from that level where nature performs. Nature’s performance handles the infinite variety in creation with infinite speed. Everything in nature...goes on with perfect orderliness. When the fundamental level of functioning of nature is imbibed by individuals, they begin to be more and more embodiments of natural law.²⁹

In this way, individual life can be effortlessly aligned to nature’s government promoting the same evolutionary and intelligent behaviour seen in nature itself. Activity of this kind is referred to as spontaneous right action.³⁰ The art of performing what is called right action, then, rests solely on one’s ability to harness nature’s intelligence and thereby guide individual action; thought, speech and action is always useful, effective, yielding of maximum results with minimum expenditure of time and energy.³¹ Maharishi also points out that because of the vast complexity of life, it is impossible to intellectually deduce which course of action will be most effective; for thought and action to be evolutionary, fulfilling to individual and nourishing to the environment, it is vital that the intelligence of nature is operating continuously in one’s awareness. “Evolution will be assured,” Maharishi explains, “only when loose thinking is replaced by [this] art of thinking. Thinking will then be in harmony with the cosmic law, the laws of nature and the purpose of evolution.”³² In fact, research has shown that MUM students, as compared to controls, display higher moral reasoning, greater altruism, a greater sense of social responsibility, greater trust, and greater commitment to personal growth.³³

Application of this knowledge to the art curriculum facilitates unified field based art education; rather than based on localized concerns, curricula of this kind culture a vision of the totality of knowledge in the awareness of the student fostering increased respect

²⁷ Maharishi Mahesh Yogi, 1986, p. 74.

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ Maharishi Mahesh Yogi, 1967, p. 192.

³¹ Maharishi Mahesh Yogi, 1966, pp. 144-181.

³² *Ibid.*, p. 144.

³³ Brown, 1989; Nidich & Nidich, 1989; Nidich, 1975.

and sensitivity for everything in the universe. In such a milieu, one would expect the student's art to increasingly reflect the dignity, range and creativity of the "unified field". Thus, while wide latitude of individual creative expression is possible, each creative expression is more and more projected from the unified field or pure awareness and naturally uplifts and furthers the evolutionary tendency of life. In this way, individual desire and social need can both be realized. Maharishi has consistently pointed out that "the study of art must necessarily be the study of life accompanied by a technique that will enable the artist to live the fullness of life".³⁴

The social responsibility of contemporary art education lies in this realm. Clearly, the need to uphold artistic freedom is fundamental to art. However, the need for culturing spontaneous right action in art students (and their mentors, professional artists) is crucial if such freedom does not inadvertently lead to action that is not in accord with the laws of nature. For, according to Maharishi, any such action necessarily leads to imbalance, turbulence, and suffering; once the evolutionary force of nature has been disturbed in this way, the need for alignment with nature's government once more becomes paramount. We suggest that unified field based art education provides knowledge and experience necessary to promote dignity and positivity in art and culture. Indeed, the art students at MUM are not only engaged in culturing unified field based awareness in their own lives—thereby developing a profound moral and social sense—but are contributing directly to the growth of coherence in North America and the world, through their group practice of technologies of consciousness.³⁵ This programme has been found to create coherence in collective consciousness of society by enlivening the intelligence of the unified field in the population as a whole. This "action-at-distance" effect has been explained on the basis of the field characteristics of consciousness,³⁶ and represents a powerful and radically new approach to resolving any conflict between the artist and the society or environment within which they work.

While unified field based art education strengthens and promotes individual autonomy through growth of consciousness,³⁷ it also creates

³⁴ Maharishi Mahesh Yogi, 1970.

³⁵ Orme-Johnson & Dillbeck, 1987; Gelderloos & van den Berg, 1989.

³⁶ Hagelin, 1987.

³⁷ Alexander & Boyer, 1989; Fergusson, 1989.

a conducive environment of receptivity in which the meaningful aspects of art can be more fully appreciated. By enlivening the unified field on the individual and environmental levels, unified field based art education thus satisfies the demand for fostering artistic freedom on the one hand and promoting cultural integrity and respect for human life on the other.

This page intentionally left blank

ALLEGORIES OF CONSCIOUSNESS:
PERFECTION IN PRINTMAKING FROM THE RENAISSANCE¹

Anna Bonshek and Lee Fergusson

*The word Truth, as applied to art, signifies the faithful statement, either to the mind or senses, of any fact of nature. We receive an idea of truth, then, when we perceive the faithfulness of such a statement.... Imitation can only be of something material, but truth has reference to statements both of the qualities of material things, and of emotions, impressions, and thoughts.... Truth may be stated by any signs or symbols which have a definite signification in the minds of those to whom they are addressed, although such signs be themselves no image or likeness of anything.*²

—John Ruskin

¹ Edited essay originally published in the exhibition catalogue, *Allegories of Consciousness: Perfection in Printmaking Since the Renaissance—From the Permanent Collection of the Des Moines Art Center*, July 1-August 27, 1989 curated by Anna Bonshek and Lee Fergusson. Bonshek and Fergusson were at the time Visiting Faculty of Maharishi International University Art Department. The catalogue accompanied the first exhibition in a series by guest curators showcasing selections from the extensive print collection of the state art gallery and museum at The Des Moines Art Center, Des Moines, Iowa, U.S.A. (www.desmoinesartcenter.org), then under the directorship of Julia Brown Turrell.

Writing in *The Des Moines Register*, Elliot Nusbaum comments: “What a remarkable idea for an exhibition. It demands an intuitive response that most exhibitions don’t even address. It says, We sense what the artist had in mind, and in this instance he has accomplished that very thing.... I accept their selections willingly. This is an outstanding collection of works that cuts across 500 years of printmaking to bring together some of the great names in the field.... You can’t ask much more of an exhibition than to entertain, inform and incite, all of which this exhibition manages to do—while, not incidentally, introducing the public to an important part of the museum’s holdings,” D.M. show focuses on ‘perfection’ in printmaking, *The Des Moines Register*, 1989, July 16, 9F.

² Ruskin in: Harrison, Wood & Gaiger, 1998, p. 200.

Allegory in literature and art is associated with a symbolic story or image that serves as a disguised representation for meanings other than those superficially indicated. In the context of this exhibition the term is being used specifically to describe the process through which the artist's consciousness is inscribed in, and matched to, the final printed image. Here the premise is: all enduring works of art embody perfection and when the concrete, material expression of art corresponds most exactly to the artist's inner vision, the resultant work becomes an allegory of consciousness.

Derived from the Greek *allos* or other, and *agoreuein* meaning to speak, allegorical expressions speak of a hidden "other," in this instance, the authors suggest, the silent but infinitely dynamic level of the artist's awareness. The greater the ability to match outer image with inner vision, the greater the likelihood of creating lasting and meaningful art. Hence, a "perfect" work of art would be defined as one in which the most ideal vision of the artist is fully realized in material form without loss or distortion of the original conception.

Contemporary critical theorists deconstruct the notion of perfection by arguing that the word denotes an essentially unattainable quality of experience but, even within this discourse, it is still possible to delineate and analyze three relative levels of the artwork—ideational, technical and structural—that, in and of themselves, can embody perfection. The prints selected for this exhibition, we argue, satisfy this criterion on one or more of these levels.

The 19th-century English poet and engraver William Blake defined the perfect work of art in the following way:

The great and golden rule of art, as well as of life, is this: That the more distinct, sharp, and wiry the bounding line, the more perfect the work of art, and the less keen and sharp, the greater is the evidence of weak imitation, plagiarism, and bungling... The want of this determinate and bounding form evidences the want of idea in the artist's mind, the pretence of plagiary in all its branches.

Here, Blake explains that if there is a lack of "idea in the artist's mind," a lack of clarity on the ideational level, then the technical aspect of the work must necessarily be imprecise. In this way, the ideational forms the foundation for the technical. Without a precise and well-formed idea, technique becomes mere imitation.



When the Almighty was yet with me, (Plate 21 from Illustrations for the Book of Job) 1825, Engraving on paper, 8 x 6 5/8" William Blake³

*From the Des Moines Art Center permanent collection
Purchased with funds from Rose F. Rosenfield, 1964.51.*

³ Image printed with permission of the Des Moines Art Center.

Once achieved, ideational perfection ensures that the work has lasting meaning; its content most appropriately conveys the artist's initial inspiration. The *Annunciation* of Matthaus Greuter seems to demonstrate this principle. In this image the archangel Gabriel descends from heaven to announce the incarnation of Christ; the haloed figure of the Virgin Mary is portrayed receiving the injunction through rays of heavenly light symbolic of the Holy Spirit descending from God. Greuter's conception of the event is perfectly realized; the meaning of the work is clear. The whiteness of the angel's robes (representing purity) and the open book before the Virgin (symbolizing the prophecy of divine birth) leave little doubt about the inherent meaning of the image.

Ideational success comes in many guises. The contemporary artist Arakawa shifts the viewer's attention away from the palpable levels of meaning and locates it in an abstract realm somewhere between the physical work and the subjective experience of it. As the American critic Danto has said: "Arakawa's (works) require viewers if they are to be fully realized, for their truth exists in the space between them and us." In the lithograph *That in Which* Arakawa obscures meaning within a broader, more complex field of images and phrases in order to uncover expanded nuances of signification.

Historically, printmakers have been concerned with gaining and expressing technical competence. In fact, technical mastery is germane to the art; the term "perfectionist" is often applied to the printmaker because the nature of the process demands extensive planning, precision of execution, and vigilance at every step. Unlike the painter or draftsman, the printmaker must follow a set sequence of procedures. For example, when engraving a metal plate the printmaker incises the image in reverse (itself a painstaking endeavour), inks and wipes clean the plate, transfers it to paper with the aid of a printing press, makes corrections to the plate and, finally, prints the edition. Despite this, as Blake and others have pointed out, mastery over these techniques does not guarantee a perfect work of art. Although the antecedents of the relief print (the process of transferring a design or picture from a raised ink surface to paper by pressure) can be found in ancient times, the art evolved to a particularly high degree in the Western world during the 15th-century. By the 16th- and late 18th-centuries, artists were increasingly called upon to develop ways in which knowledge could be disseminated through simple reproduction

and new processes of transference, such as etching and lithography, were developed.



Melencolia I, 1514

Engraving on paper, 9 x 7"

Albrecht Dürer⁴

From the Des Moines Art Center permanent collection

Gift of Mr. And Mrs. F.O. Thompson, Jr., 1959.27.

⁴ Image printed with permission of The Des Moines Art Center.

In the beautiful, bold woodcut *John the Constant*, the 15th-century German artist Lukas Cranach displays complete mastery of the medium. His chiaroscuro print captures the vitality of a process, which is at once immediate and refined. Albrecht Dürer, a contemporary of Cranach, also demonstrates unqualified technical proficiency in his hauntingly dramatic engraving *Melencolia I*. The theme melancholia relates to one of the four humors, which it was said determined an individual's temperament and physiology and corresponded to a specific planetary influence. According to ancient philosophy, melancholia is associated with the introspective, artistic personality who spends a great deal of time reflecting on the nature and importance of knowledge.

The pensive mood of Dürer's print is realized by an overall stylistic treatment and linear uniformity; its theme of self-reflection reiterated by the presence of a dog (representative of Saturn, the personification of time), ruler and compass (symbolizing geometry which is also presided over by Saturn), and the hourglass. And while it has been suggested that Dürer intended to address the insufficiency of man's knowledge and inability to penetrate the hidden values of nature's perfection, the print reveals Dürer's abiding interest in the relationship between the artistic temperament and the divine order of the cosmos. Dürer's work is proficient on the first two levels of artistic accomplishment; however, it also achieves perfection on the third, the final level—the structural.

Structural perfection can be said to encompass composition, appropriateness of form and internal coherence, each of which affects the physiognomy of the work. Prints such as Rembrandt's *The Angel Departing the Family of Tobias*, Edward Hopper's *Night Shadows*, and Peter Milton's *Daylilies*, forcefully communicate their themes through well-organized pictorial configurations. In the work of American artist Jasper Johns, compositional features generally function together to form an integrated statement. But the main structural elements of the lithograph *Decoy*—the horizontal band of sculptural images, the dark tonal area with text and photographic reproduction of two cans—are anything but continuous; each draws from a different stylistic period in the artist's life combining to create a visual statement whose meaning, while not immediately clear, is stylistically and aesthetically resolved. Johns states that what interests him most is the "technical innovation possible in printmaking."

While the prints here have been selected for their accomplishment on at least one level of artistic perfection—ideational, technical, or structural—some synthesize all three in a way which is too perfect to be accidental. Artists like Dürer, Blake and Matisse seem effortlessly able to unify inner vision with outer expression and create perfect allegories of consciousness.⁵

⁵ Check list of works:

1. Albrecht Dürer, *The Sea Monster*, c.1498.
2. Albrecht Dürer, *Melencolia I*, 1514.
3. Lukas Cranach [the Elder], *John the Constant, Elector of Saxony*, n.d.
4. Mattheus Greuter, *Annunciation*, 1579.
5. Agostino Carracci, *St. Jerome*, c. 1595.
6. Annibale Carracci (?), *St. John Presents a Bird*, n.d.
7. Rembrandt van Rijn, *Christ and the Woman of Samaria*, 1634.
8. Rembrandt van Rijn, *The Angel Departing the Family of Tobias*, 1641.
9. Rembrandt van Rijn, *Landscape with a Cow Drinking*, c. 1650.
10. Anthony van Dyck, *Portrait of Franz Snyders*, n.d.
11. Anthony van Dyck, *Jan Breughel (the Elder)*, n.d.
12. Canaletto [Giovanni Antonio Canale], *Santa Giustina in Pra della Valle*, c. 1740.
13. Canaletto, *Pra della Valle*, c. 1740.
14. Giovanni Battista Piranesi, *Trajan's Column*, 1756.
15. William Blake, *When the Almighty was yet with me*, 1825.
16. William Blake, *And I only am escaped alone to tell thee*, 1825.
17. William Blake, *So the Lord blessed the latter end of Job*, 1825.
18. Henri Fantin-Latour, *Bouquet of Roses*, 1879.
19. Käthe Kollwitz, *Self Portrait (Selbstbildnis)*, 1912.
20. Edward Hopper, *Night Shadows*, 1921.
21. Giorgio Morandi, *Grande Natura Morta con la Caffettiera*, 1933.
22. Grant Wood, *Tree Planting Group*, 1937.
23. Gerald Leslie Brockhurst, *Una*, n.d.
24. Pablo Picasso, *Model and Sculptor*, c. 1933.
25. Ferdinand Leger, *Composition (Blue)*, n.d.
26. Javier Vilato, *Couple*, n.d.
27. Henri Matisse, *Cirque*, from "Jazz", 1947.
28. Henri Matisse, *The Knife Thrower*, from "Jazz", 1947.
29. Marc Chagall, Lithograph VIII from the suite "Sur la Terre des Dieux", 1967.
30. Jasper Johns, *Decoy*, 1971.
31. Joseph Cornell, *Untitled (Dürer Boy)*, 1972.
32. Peter Milton, *Daylilies*, 1975.
33. Shusaku Arakawa, *That in Which*, 1978.

This page intentionally left blank

SIGNS OF RECONCILIATION
PRINTS BY MICHAEL KANE TAYLOR¹

Anna Bonshek and Lee Fergusson

Indeed, organisms should be understood in more dynamic terms as open systems that undergo continual flux; the organism has to 'become' its environment (as the eye has to 'become' light). Deleuze encouraged us to approach nature as a plane of immanence that distributes affects. In its modes of becoming nature cannot be understood in terms of an arbitrary distinction between nature and artifice (or technics). On this model an animal can never be separated from its relations with the world since 'the interior is only a selected exterior, and the exterior a projected interior'.²

—Keith Ansell Pearson

¹ First published in 1988, this chapter is an edited version of a catalogue essay for the exhibition: *Signs of Reconciliation: The Recent Work of Michael Kane Taylor*, at the *Institute for the Creative Arts*, Iowa, June 19-July 9, 1988. The show, curated by Bonshek and Fergusson was made possible through the support of the *Iowa Arts Council* and was part of a larger programme of film, art, and lectures on Australian culture and creative practice, also organized by the authors. Images published here with permission of the artist. Michael Taylor's work can be viewed at <http://web.mac.com/mkanetaylor/iWeb/Michael%20Kane%20Taylor/Welcome.html>.

² Pearson, 1997, p. 228.

The work of Australian artist, Michael Kane Taylor brings together divergent themes—signaling a move away from the limited dichotomy of the Modernist/postmodernist dilemma, toward a unifying and complex interplay of values.³ Acknowledged as one of the fathers of Modernism, Piet Mondrian wrote that universal consciousness (which he identified as intuition) is the origin of, and can be expressed directly in, art. He saw the goal of art as drawing attention toward the universal, toward unity and thought that, if unity were “contemplated in a precise and definite way, attention will be directed solely toward the universal and as a consequence, the particular will disappear from art”. Mondrian here gives an insight into one of the main tenets of Modernism: to uncover the universal. He suggested painting had already achieved this end, asserting, “the universal cannot be expressed purely so long as the particular obstructs the path. Only when this is no longer the case can the universal consciousness (intuition, that is), which is the origin of all art, be rendered directly, giving birth to a purified art expression.”⁴ In addition to this, critic Clement Greenberg and artist Suzi Gablik both saw Modernism as the logical result of a progression that began in the Renaissance. This progression marked the move from an art apparently informed by perception to art increasingly preoccupied with conceptual concerns. In her book *Progress in Art*, Gablik analyses this historical “evolution” using Piaget’s model of psychological development in childhood. She concludes that:

Despite radical changes in both form and content, I wish to assert that there is a logical continuity between classical and contemporary art. There is something stable within the flux that maintains historical continuity—an internal transformation which ascends to higher levels of complexity, revealing ever new comprehensive features, the study of which requires ever new powers of understanding.⁵

Needless to say, artists were, and still are, inspired and motivated by such ideas. Greenberg supported the “progressive” theory but

³ In art theory, the term Modernism is often used to refer to the period from 1860 to 1970 but here it will be employed in reference to American High Modernism—exemplified in the work of abstract expressionism and field painting, which influenced the art world during the 1940s and 1950s.

⁴ Mondrian, 1919, p. 144.

⁵ Gablik, 1976, p. 46.

emphasized the unique, intrinsic flatness of painting, through which the “emptying out” of content and subsequent focus on the formal values of the medium—line, colour, form—could be realized.

This approach posited that a “pure aesthetic” could be located and represented in art; an aesthetic divorced from and independent of content, through which a universal property to art could be appreciated and revealed cross-culturally. Mondrian, again, had previously alluded to these ideas in 1932 when he stated that, “All painting—painting of the past as well as of the present—shows us that the essential plastic means are only line and color...the new art has continued and culminated the art of the past in such a way that the new painting, by employing ‘neutral’ or universal forms, expresses itself only through the relationships of line and color.”⁶ In spite of what was to become known as Greenbergian Formalism, abstract painters such as Mark Rothko were driven by a passion to capture human emotion and an underlying absolute, transcendental realm of human experience.

Invocation of the Transcendent

Rothko wanted the viewer to react in a specific way when encountering his work. Having first exhibited Rothko’s art in 1955, Sidney Janis’ description of an experience of Rothko’s paintings would have, no doubt, pleased the artist: “The pictures he hung in the smallest gallery were his largest; each extending from wall to wall. The effect was stunning. To enter one seemed to float, basking in the reflected luminosity amplified by the canvases of great size.”⁷ While critics highlighted a fracture in art, which led to the idea of separation between form and content and where form became paramount, artists did not see their work as radically different in intention from art of the past. Their aim was to capture and evoke the transcendent, an absolute, and a deep emotional response in the viewer. Barnett Newman stated as much in 1948: “We are reasserting man’s natural desire for the exalted, for a concern with our relationship to absolute emotions. The image we produce is the self-evident one of revelation, real and

⁶ Mondrian: in Goldwater & Treves, 1945, pp. 426-427.

⁷ Janis, 1985, p. 102.

concrete, that can be understood by anyone who will look at it without the nostalgic glasses of history.”⁸

In wanting to represent an absolute (which, by definition, should be inexpressible) or evoke absolute emotions, Modernists made an appeal to deeper levels of feeling. Many felt that this constituted what amounted to a quasi-religious experience. Rothko reinforced this sentiment when he said:

The fact that lots of people break down and cry when confronted with my pictures shows that I *communicate* with those basic human emotions. The people who weep before my pictures are having the same religious experience I had when I painted them. And if you, as you say, are moved only by their color relationships, then you have missed the point.⁹

Ironically, Formalist critics denied historical and cultural content but supported this notion of art as a quasi-religious artifact promoting a transcendental experience in the viewer. Indeed, form was not completely devoid of content; it was full of emotion. Articulating the advent of a new avant-garde, Greenberg emphasized that the contemporary artist, by raising art to the level of an absolute, had emptied content out into feeling:

The avant-garde poet or artist sought to maintain a high level of art by both narrowing and raising it to the expression of an absolute... “art for art’s sake” and “pure poetry” appeared, and subject matter or content became something to be avoided like the plague... Content must become strictly optical and be dissolved completely into form. Content is, in fact, therefore present, but emptied out into a quality of feeling—which is expressed purely by form.¹⁰

In Greenberg’s analysis, it was as if form had become pure content. It could be that this tendency of artists to seek to express the absolute represented a deeper collective desire to experience more fundamental levels of existence. However, the realization that art alone could not prompt a significant “spiritual” response that could alter the highly politicized post-war world and that form and content were

⁸ Newman, 1948, p. 53.

⁹ Rothko, in Honour & Fleming, 1982, p. 637.

¹⁰ Greenberg, 1961, p. 5.

“indivisible” caused critics and artists alike to reconsider Formalism and the role of art.

The Demise of Modernism

Symptomatic of the denouement of Modernism, by 1985 even Gablik came to reexamine her earlier thesis (*Progress in Art*) in her book *Has Modernism Failed?*. Indeed, the historian Hans Belting provided a cogent critique of *Progress in Art*, highlighting the difficulties with Gablik’s original assumptions. He pointed out how the concept that: “Art has evolved to its highest and most authentic form only in our own century... (and that) mankind has supposed to have undergone a mental development from figurative thought toward abstraction and operational thought, just as it occurs in childhood,”¹¹ was highly problematic. In contrast, Belting argued that art historians were now searching for different models for art history involving: “Not the history of an unchallenged evolution but the history of ever new solutions for the ever new problem of what makes an ‘image’ and what makes it a convincing vision of ‘truth’ at a given moment”.¹² Modernism had allowed artists and critics to present (Eurocentric) art history as linear and to collapse “histories” into one “History”—filtering out specific facts or events (for example the existence and influence of women artists). Figurative art of the past had been totally eclipsed by a break with representation—the culmination of art increasingly based on conception. The process of art making came to be viewed as a spiritual act where the spectator could re-experience the artist’s initial emotion thereby establishing a special relationship between artist and viewer via the artwork. These and other factors led to the Modernist conclusion that the art object had an intrinsic power to invoke the ‘Transcendent’. This idea was undermined by the advent of postmodernism. Indeed, in his essay *Heads it’s Form, Tails it’s not Content*, the American critic Thomas McEvilley asserts that formalism was just a “superstitious passion”:

Let’s admit that formalism became for a while a ‘secular religion,’ and we can understand better the passionate appeal it has exerted. In the 50s

¹¹ Belting, 1987, pp. 46-47.

¹² *Ibid.*, Preface.

and 60s, when the classic formalist texts were written, we all wanted to believe that form in art was a kind of absolute, a Platonic hyper-real beyond conceptual analysis. Ultimately the worship of form as an absolute is a distant resonance of the Pythagorean/Platonic doctrine of the Music of the Spheres—the belief that art vibrations pass constantly through the universe and in fact constitute its inner ordering principles. And if we, then, appreciate the ‘feeling’ of a Noland or Olitski, doesn’t this mean that we are, as it were, in the inner circle of the Spheres?... Formalism made us feel good for a while. It was like a superstitious passion. It ran its course.¹³

The idea of art creating an absolute emotion, McEvelley states, had more to do with the reemergence of ancient views of reality and the Modernist aspiration to feel good. This may not have been completely unwarranted, given that the generation in question was of the post-war years.

Cultural Diversity and Postmodernism

Beginning in the 1970s, it seemed that artists throughout the world were working in a more pluralistic climate. The realization that abstract art alone could not (and did not) provide the experience of a transcendent, coupled with the influence of deconstruction and language theory defining difference and relative meaning derived through relationships, heralded the rise of postmodernism.

The term postmodernism, already coined by Australian historian Bernard Smith in the 1950s, came to be re-employed and variously defined. This fact alone gives some insight into the relativity of postmodernism and postmodernist art. However, some broad-brush characterizations of postmodernism include the idea of cultural relativism and the end of the notion of a linear, progressive trend to history. McEvelley presented his view of the Modern/postmodern axis in his paper *Progress in Art* at the 1986 Sydney Biennale. He explained that today’s artist is faced with a continuum of style from which he or she can make any stylistic cut, by virtue of the fact that this continuum is infinite and co-incidental with a non-linear view of history. All past, present and future styles exist on this continuum and are, therefore,

¹³ McEvelley, 1984, p. 263.

available to the artist. Any stylistic cut (or combination of cuts) made on the continuum automatically sets up relationships between styles and ever new meanings are created. History is full and cyclical. A second major difference between the two approaches is that postmodernism does not support the notion of an absolute. These ideas, along with art practice, have been influenced, in part, by French philosophy, including Jacques Derrida who deconstructs the notion of an absolute by asserting that meaning is arrived at through “différance”, a constant differing and deferral of meaning. As William Haney states:

What Derrida and other post-structuralists try to deconstruct is the absolute truth-value of any relative manifestation of an absolute center, of which we generally have no direct, shareable experience and therefore cannot legitimate. Textualists argue that there is no absolute in the relative, and from this they infer that there is no absolute, that everything is language or difference—a belief not shared by a growing number of scientists.¹⁴

One important aspect of this approach apart from the acknowledgement of difference is that everything is subject to cultural contextualization; everything is to be taken into account: content, local history, cultural specificity, and relative values. This re-focuses the artist, allowing the development of cultural expression over and above universal style.

In its march towards an internationally accepted, universal approach to style, Modernism tended to exclude, or render invisible, the influence, innovation, greatness and contribution of those cultures that did not conform to its vision on its terms. Apparently as a consequence of postmodernist thought, artists from other than so-called “First World” countries or the colonizing nations, are able to reinvest in their own culture, customs and artistic language.

In this light, the issue of regionalism takes on a new character; many artists have turned away from “internationalism” and there is a growing interest in indigenous art. Artists look to embrace traditions, focus on their individual stories, and work cross-culturally. In Australia this trend is reflected in the increasing output and popularity of Australian Aboriginal performance and painting, as in the work of

¹⁴ Haney, 1985.

Michael Nelson Tjakamarra, and the inclusion of work by indigenous artists in major international events, like the Sydney Biennale.

Geographic Uniqueness: The Australian Context

While (white) Australia largely derives its cultural heritage from the Western world, Australia is an island set apart. It is a continent geographically situated within “Asia/Oceania”, but Australia continues to look to the West for cultural references; it has in its national collection, the obligatory examples of American abstract expressionism and field painting. However, Internationalism and its impact has been an ongoing debate in Australian art circles as was addressed by Peter Fuller in his paper: *Post-Industrialization and the Visual Arts*. Fuller emphasizes that Bernard Smith argued that the pioneering figures of Australian landscape painting refused a wholesale adoption of Modernism out of a desire to maintain traditional aspects of European and Australian painting that “had been shaped and formed not so much by isolation and ignorance—the negative aspect of ‘provincial’ vision—as by a conscious and explicit aesthetic conservatism.”¹⁵

Regardless of the obvious links with Western art movements, Australian artists never really experienced the upheaval of Impressionism and Modernism to the same degree as America and Europe. Indeed, in the 1950s, Australian artist Clifton Pugh said, “art must be indigenous”; he qualified what he meant by this statement saying that art must arise:

Out of the environment and background of a particular place and time. This could be nationalistic but I prefer to call it geographical art. For instance, Chinese and Mexican art reflect the background and the ‘soul’ of the country but are also universal... I therefore believe very much in the development of an Australian art—it is the only truth for us to express to the rest of the world.¹⁶

Despite this sentiment, McEvilley asserts that Western (and by inference, Australian) art history is constructed out of acts of

¹⁵ Fuller, 1985, p. 28.

¹⁶ Clifton Pugh, in Smith, 1959, p. 6.

appropriation. The rediscovery of Greco-Roman art in the Renaissance and the infusion of “Primitive art” at the beginning of the 20th-century are two examples. The impact of these two breaks in Western art history is minimized by their inclusion in the linear account of history.

In this context, many artists see the recent development of postmodernism as more universally descriptive of the overall Australian art experience and that appropriation has always been part of creative practice. Historian Memory Holloway points out that:

Sticking bits together, improvising, making do, has its own history in Australia.... It is a collaged culture, built in response to a partial exposure to Western tradition. Australian artists have responded accordingly, borrowing, cribbing, from what they could see in State galleries and reproductions, sticking it all together into an uneven fabric that is stamped “Made in Australia”.¹⁷

This idea of Australia being a “collaged culture” is particularly insightful. Australia can be seen as inherently appropriative and critical of dominant cultural style. Artists are constantly and consciously picking and choosing out of cultural and geographic necessity witnessing their own position and creative process within a broader context of art production. Furthermore, the Australian artist, when wishing to refer to European or American art, would traditionally—more often than not—study these through reproduction. International magazines and art texts together present a panoply of styles that are viewed without exposure to the original works.

The Australian artist Lindy Lee uses appropriation to directly quote from or cite art of the past and, ironically, feels that when we view a reproduction the aura of the original work of art is transcribed through the reproductive process. The immutable is encapsulated within the mutable. She points out that what is important is to capture the quality in the work that escapes time. She speaks of her desire to frame or evoke meaning, which transcends the art object at the moment of reproduction. Curiously, what we see in this approach is the value of absolute or universal feeling being implied through reference or citing. The American Philip Taaffe, who showed his work in the 1986 Sydney

¹⁷ Holloway, 1984, p. 11.

Biennale, also writes, “the sublime, surely we must all recognize, is an experience essential to the preservation of our humanity.”¹⁸

While postmodernism denies an absolute or the sublime, we cannot, it seems, understand incessant change and the relative without at least a concept of a universal absolute. Postmodern art cannot exist without historical reference. Nor can it be considered without Modernism. The ‘post’ in postmodernism encloses or prefixes Modernism and only has meaning in relation to it. While postmodern art takes on cultural specificity, content, and political and critical orientations requiring the attention of the viewer to furnish the artwork with meaning, its diversity is understood on the ground of modernist ideas and a desire to evoke the immutable necessary for our humanity.

A Figure in Isolation

Michael Kane Taylor’s working life spans the Modern and postmodern years. It is therefore not surprising to find elements of both in his work. However, despite the obvious allusions to 50’s Abstraction coupled with deep convictions regarding cultural integrity and independence, Taylor’s work leads naturally to more subtle concerns. Born in England in 1934, Taylor

Went to Africa in 1962 to teach painting at a university in Nigeria. It was in the largely Moslem, sub-Saharan north where there is a tradition of fairly austere non-figurative art, which is at variance with the familiar and exuberant art of the rest of black Africa.¹⁹

Taylor mentions that his interest in Hausa mud architecture and afro-Islamic decorative motifs influenced and in fact caused him to re-evaluate his work at the time. His desire to make prints came after completing a fellowship in Reading, England and following a period teaching painting and printmaking in Perth, Australia, he gravitated toward a more Modernist approach. By the time he returned to South Africa in the 1970s, his work had taken on a critical dimension. In the “face of the realities of South Africa” Taylor created a series entitled *African Picture Company*, a largely narrative, autobiographical series

¹⁸ Taaffe, 1986, in *Origins, Originality + Beyond: The Biennale of Sydney*, p. 266.

¹⁹ Taylor, 1985.

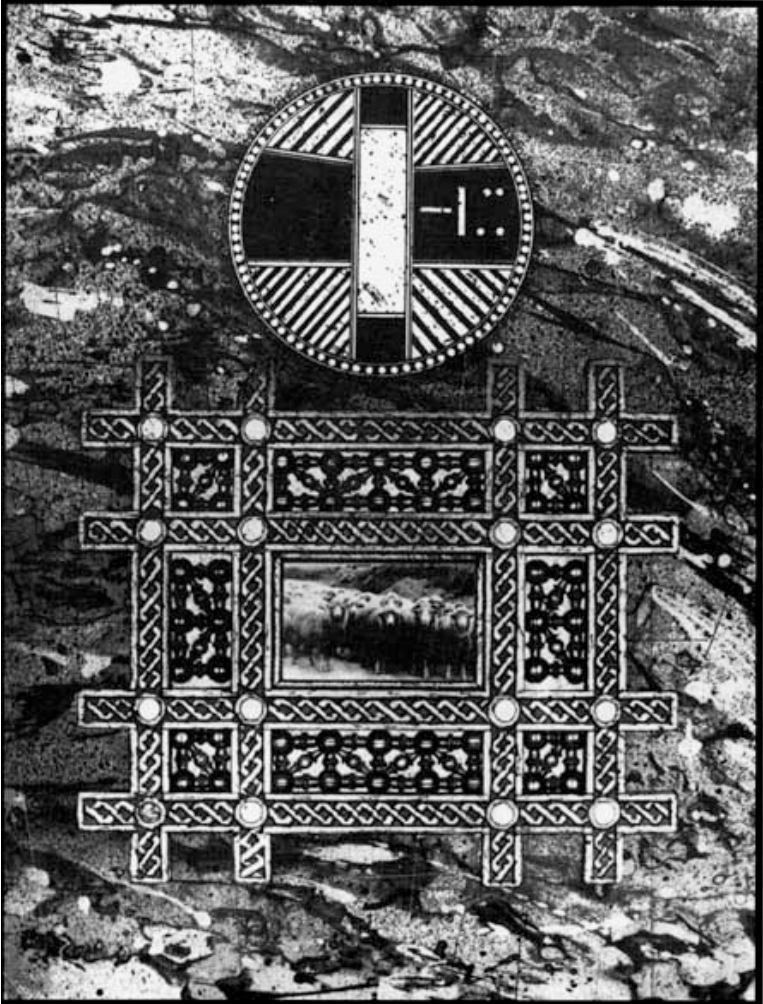
dealing with the various aspects of his life there. This work represents the first, and perhaps most powerfully direct, use of juxtaposed photographic imagery to convey a ‘feeling’ for the African social landscape as he saw it. The influence of the African experience is present in several of the prints shown in this exhibition.

A recurring symbol in his work is found in ...*When We Remembered Zion* (a line from a song by Boney M taken from Psalms 171:1) and *They Shall Ask the Way to Zion* with its ancient metaphor of the “faithful flock” anticipating union with God in the heavenly city of Zion. A circular symbol, representing a horse, appears on a chart of astrological predictions written in Arabic script.

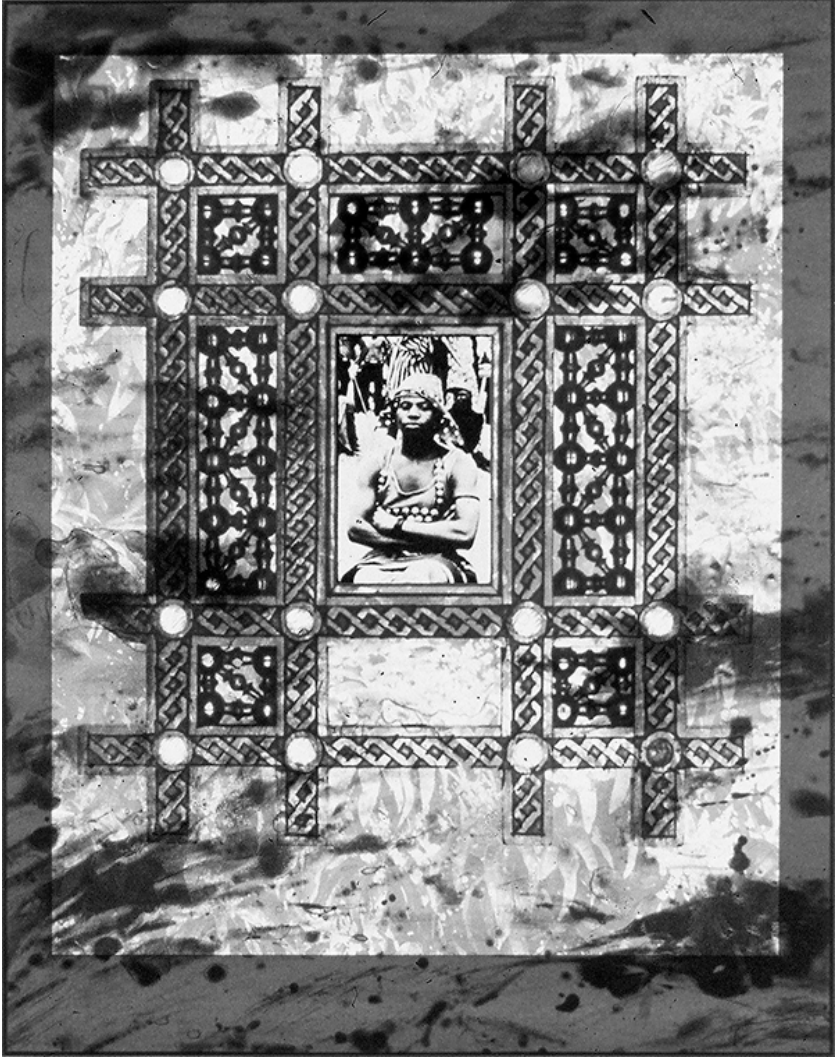
This chart was found by the artist in Joss market, West Africa. Before the British arrived and introduced Roman script, Arabic was used. However, the tribal language commonly spoken there is Hausa. This language, interestingly, is a lingua franca of West Africa. Encoded within the symbol is reference to both West African history and spirituality and communication between people of different mother tongues. Taylor continues to refer to these symbols in a subliminal way. The viewer’s attention is drawn not only to the strong formal shape of the circle, but also to its deeper symbolic meaning; in the religion and art of many cultures the circle frequently signifies heaven, eternity of the universe. Below this symbol is a drawn/photographed rectangular frame found by the artist and his wife in a curiosity shop when they first arrived in Australia. The frame was made in Kenya, on the island of Lanu where they were married. Coincidences such as this are significant for Taylor and inform his work. The juxtaposition of the circle and square refers to the relationship between the eternal and man-made world.

In the centre of the frame in ...*When We Remember Zion* is a reproduced still frame from the Soweto video by musician, Malcolm McLaren. By using this image, the artist further comments on the dynamic between black African and British popular culture. This regard for the cultural, political, and artistic context of his environment and his place within it reveals Taylor’s position as both insider and outsider. The gravity of this situation is further appraised in the challenging *Sunday in the Park* where a native dancer in Pietermaritzburg poses for the artist. While not overtly political, his work makes wry reference to a complex cultural reality hard to imagine from the outside, in ‘*n Wapen te Besit* (License to Own a

Weapon) and *Sertifikaat* (Certificate) which records the artist's departure from South Africa.



They Shall Ask the Way to Zion, Screenprint, 1987, 30 x 22"
Michael Kane Taylor



Sunday in the Park, Screenprint, 1987, 30 x 22"
Michael Kane Taylor

After moving to Brisbane, Queensland, Taylor's first observations were with regard to the natural environment: the luscious subtropical climate; the way plants grow rapidly and buildings crumble. His award-winning *Paddling Pool, Wynnum, July 1982*, uses the effect of vegetation surrounding a framed photographic vision of a seascape. Here, the "sea is much brighter than the sky" notes the artist. This same observation has preoccupied many Australian artists. As one American historian asserts, the unique character of the Australia landscape: "provided a subject that defined and demarcated specific Australian experience. The bush, the harsh blinding light, the endless and monotonous spaces..."²⁰ However, throughout the two hundred years of white Australian history, artists have tended to interpret the landscape according to the major ideas of the day: from the Enlightenment of the early settlers to mid-nineteenth century Romanticism.

Later, artists such as Sidney Nolan (who said there is a certain innocence about being Australian), Arthur Boyd, and Fred Williams treated this landscape of heat and light expressively and in relation to cultural myths and local heroes. Contemporary artists like Susan Norrie and Mandy Martin offer critical interpretations of the Australian citizen's relationship to the surroundings; theirs is a psychologically gripping, stark industrialized space. In contrast, Taylor's reference to the natural world always takes into account cultural difference and the anthropomorphization of nature. In *Botanical Gardens, Brisbane, 1983*, we again see the circular motif and frame. A small group of indigenous Australians stand and sit in the bushes separate from the main event, revealing the existence of two separate worlds. Significantly, the techniques Taylor employs in the majority of his work act as metaphor for the co-existence of difference.

Technique as Metaphor

As with many printmakers, Taylor speaks of the process of printmaking in precise and definite terms:

²⁰ Waldman, 1984, p. 13.

It is very important to make precise, masterful prints, especially with screenprinting, not to be sloppy... one could make the sort of prints where that doesn't matter, but I want it to be close to drawing. I like to put images together proficiently—even the splashes and washes are done over and over again until I feel they're correct. I arrive at this intuitively, however, they are not spontaneous.²¹

This fascination with the medium and devices of printmaking is another resolution of the deception of appearances. Taylor not only attempts to uncover varying levels of meaning within the subject but through the process of printmaking itself. Most of the work in this exhibition utilizes the process of serigraphy (screenprinting). This ancient technique was revived during the height of American Modernism and is commonly used in Pop, Op and Colour-Field art in the work of artists like Ellsworth Kelly and Roy Lichtenstein.

Taylor's application of the medium takes an interesting turn. Virtually every intrinsic quality we associate with the medium—flatness, hard-edge, colour—is negated; the flat, clearly defined printed shape has become a gestural mark; colour is subservient to the weathered, somber sepia and grey tones. Yet the apparent spontaneity of the work is itself misleading. The process of serigraphy is an exacting one, demanding the greatest attention to detail and precision of method. Taylor couples this precision of technique with a preponderance for gesture to create prints whose fluidity belie their sophistication and innovation. When we consider that every mark has been filtered and reproduced through the photo-process, any likeness the work may have to lyrical abstraction disappears.

The integration of opposite values in the approach he employs, precision/spontaneity, hand drawn/photographic, original/copy, tradition/innovation—allows the artist to use the medium itself as a vehicle for broader, more fundamental meaning. If we were to assign, in a simplistic way, values to the artist's experiences and subsequent articulation, they might fall basically into two distinct categories. But what is so refreshing in this work is the ease with which Taylor draws from both to create a third, integrated wholeness of meaning where neither category can be understood without its diametrical partner: old world and new world, tradition and progress, nature and civilization, isolation and urbanization, modern and postmodern; both merely

²¹ Taylor, Personal interview, 1988.

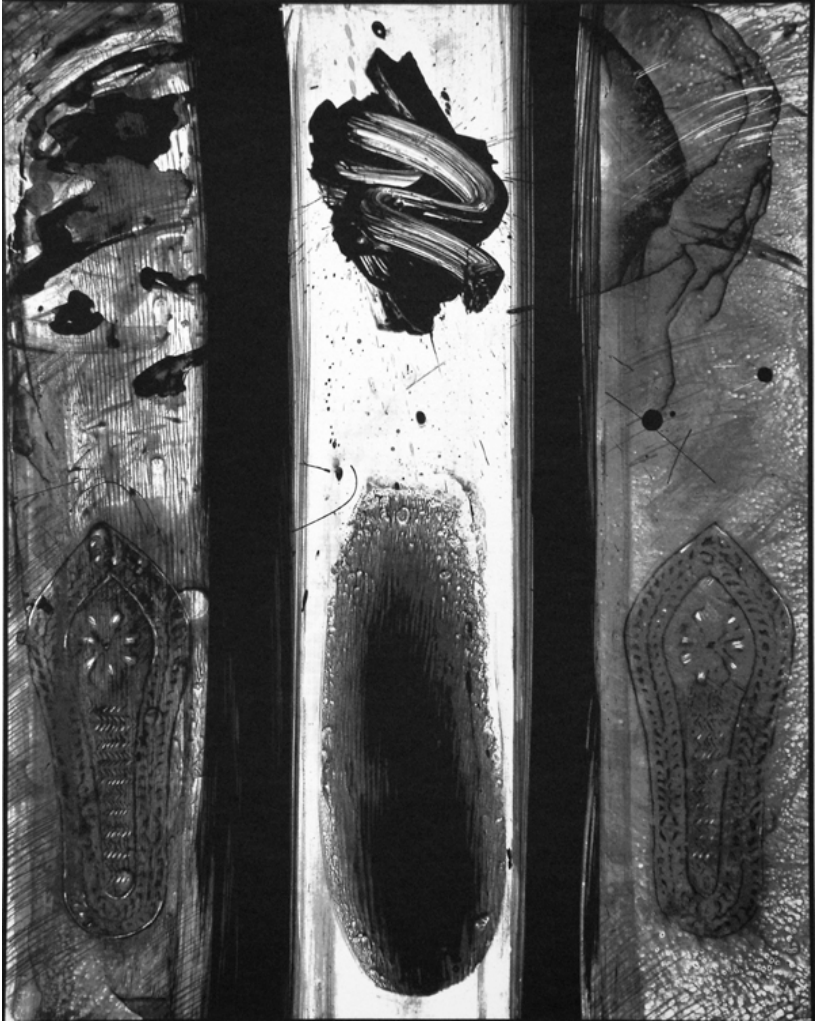
contribute to, and are subsumed by, the birth of provocative substance. Technique has become a metaphor for meaning and meaning, in turn, signifies structure in the artist's method. This play with process allows the work to comment upon the artist's means of production and the history of his medium.

A Sense of Lyricism

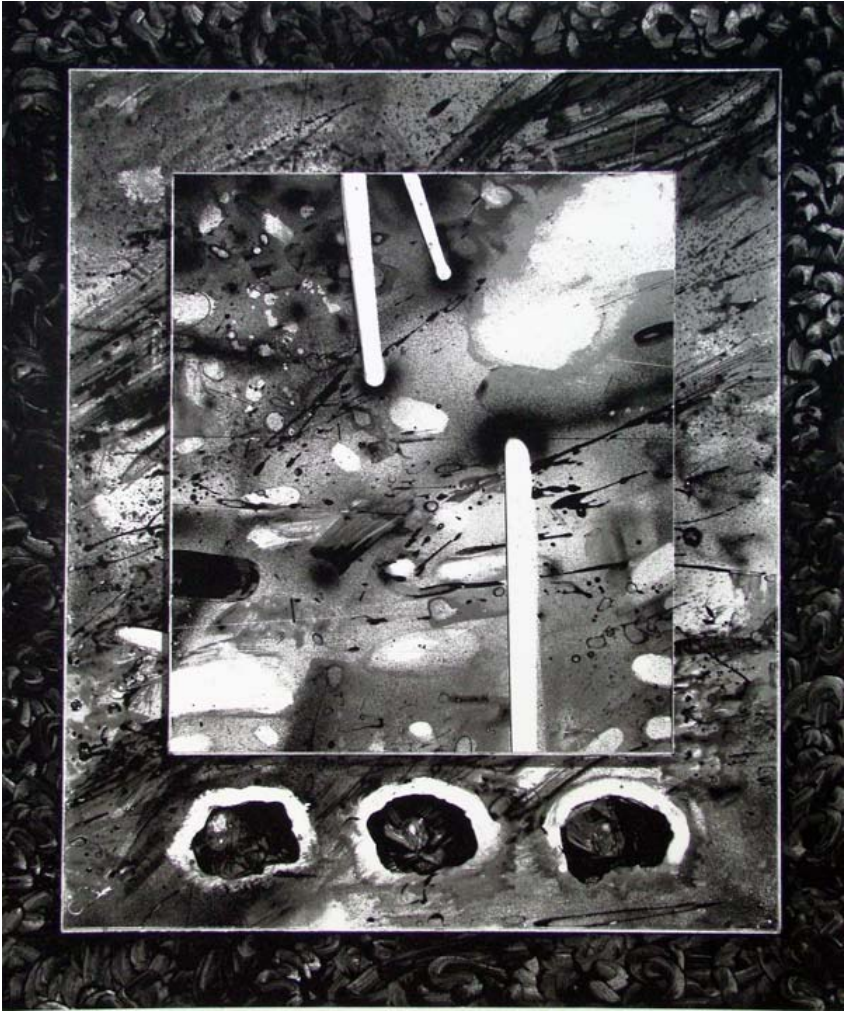
Some of Taylor's prints refer to the work of writers, poets, music and musicians. For example, *The Readiness is All* was inspired by Shakespeare's Hamlet: "There's a special providence in the fall of a sparrow" and concerns the fugitive nature of existence, and *Indigo Days*, taking its title from a book by Julian Trevalyan, refers to the story of a person sent to work in the Kano indigo pits of Nigeria. These works, and the later pieces that have music as their theme, introduce explicit references to Modernism and Formalism. However, keeping in mind the exacting process employed, the work prompts an ambiguous and stimulating response as the marks appear at first fluid and gestural—in the Modern style—yet, as we know, were taken through countless stages of production and reproduction.

Blue Monk—for Thelonius, *Synchro System*, the title of a composition by Nigerian musician Sunny Ade and also a conjectural landscape in which bodies move through the sky in synchronous orbit, and *For Buddy Rich* serve as tributes to great jazz musicians. In *Shroud*, the background of illusory folded paper sets up a visual relationship of rectangular grids. Again, this musical piece consists of two underlying elements: the folded image (paper handled and manipulated) represents the mundane, and the spontaneous marks (handwriting of the artist) represent expressive internationality. The latter appear like the fluid strokes of a Japanese brush painting or the huge gestural explosions of Franz Kline, both metaphors for an esoteric dimension to existence. In this sense, *Shroud* again sets up a dynamic between opposing values.

In *Tari Lepas*, we see the gaps and intervals between mark and surface mimic the cadence of dance. These Indonesian words, meaning dancing free/dancing away, personify the lyricism of Taylor's singular craftsmanship and vision.



Indigo Days, Screenprint, 1987, 30 x 22"
Michael Kane Taylor



For Buddy Rich, Screenprint, 1987, 30 x 22"
Michael Kane Taylor

Exterior/Interior

It is artists like Michael Kane Taylor who strive, it seems, to capture the full range of art, embracing the more universal values sought by Modernists and the particular or local aspects exposed by postmodernism. These two have seemed irreconcilable to the majority of critics. Modernists in their desire to express the Sublime, apparently empty art of cultural difference and historical context. Postmodernists, on the other hand, taking a critical view, only hint at the universal through the play of difference. Similar dialectical or opposing forces have been discussed and probed by philosophers throughout time, revealing the ultimate paradox. Any move toward a reconciliation of the two, as perhaps demonstrated in the work of Michael Kane Taylor, signals a shift away from contradiction and opposition toward coexistence.

Art, as with other disciplines, can be said to reflect the collective consciousness of society. Today, critics and artists, as those before them, are reinvesting art with its most important role—that of promoting criticality while also glorifying the universal aspect of humanity. This does not mean adopting a quasi-religious attitude toward the art object or the artist, as if he or she were divinely gifted, but recognizing that art can provide a window onto the dynamics of creation—the interplay between the universal absolute, if you will, and relative difference.

Contemporary art, as an indicator of the collective mind or consciousness, embodies the human desire to proceed toward harmonious, balanced and constructively interactive relationships with each other and with the environment. This aspiration has been central to various cultures throughout time. Drawing from one indigenous Australian source—an Australian Aboriginal Dreamtime account of the birth of creation, man's relationship to it and to ancestral beings, and the intimate balance between individual and universal life—the following description states:

Long, long ago, before the Dreamtime, before time could be counted, the world had no shape; it was soft and wobbly. Then, at the beginning of the Dreamtime, Warramurrungundji came out of the sea. A female being in human form, she created the land and gave birth to the people. She gave them their languages. Other creator beings came—Ginga, the

giant ancestral crocodile, made the rock country; Marrawuti, the sea eagle, brought water lilies in his claws and planted them on the floodplain. Once the great spirit ancestors had completed their creative acts, they put themselves into the landscape, where they remain to this day.

Warramurrungundji is a white rock in the woodland, Ginga is a rock outcrop textured like a crocodile's back. These places are called Dreaming sites and still contain the power and energy of the Dreamtime. In all these things, Neidjie stressed, all things are as one. He said, "earth our mother, eagle our cousin. Tree, he is pumping our blood. Grass is growing. And water. We are all one." He added that when the ancestral beings had completed their creation, they told the people: "Now we have done these things, you make sure they remain like this for all time. You must not change anything."²²

The diverse aspects of the land, animals, people, water, plants and nature emerge as a consequence of the first act of creation, before time and space. The ancestral beings live in their creation and the role of humankind is to maintain the order of nature as it is, for everything is interrelated.

This beautiful account seems to advocate a necessary balance for life: all the varying elements need to be considered on the ground of unity. Nature is one family. While this account resonates with those whose tradition it upholds, in principle, it is and should be universally applicable.

It is some sense of this value of a kind of order and balance among diverse elements, we propose, that surfaces in Taylor's prints.²³ Along

²² in Breeden, 1988, pp. 276-278.

²³ Check list of works:

1. *Ex Africa Semper Aliquid Novi*, Etching, 1983, 30" x 22", Edition: 5/10.
2. *Paddling Pool, Wynnum, July 1982*, Etching, 1983, 30" x 22", Edition: 9/10.
3. *Botanical Gardens, Brisbane, 1983*, Colour Aquatint, 1985, 30" x 22", Edition: 5/6.
4. *The Readiness is All*, Screenprint, 1986, 30" x 22", Edition: 3/15.
5. *...When We Remember Zion*, Screenprint, 1986, 30" x 22", Edition: 3/15.
6. *They Shall Ask the Way to Zion*, Screenprint, 1987, 30" x 22", Edition: 3/16.
7. *For Buddy Rich*, Screenprint, 1987, 30" x 22", Edition: 3/16.
8. *Synchro System*, Screenprint, 1987, 30" x 22", Edition: 3/16.
9. *Meeting on Termini's Corner*, Screenprint, 1987, 30" x 22", Edition: 3/12.
10. *Blue Monk—For Thelonius*, Screenprint, 1987, 30" x 22", Edition: 3/16.
11. *Tari Lepas*, Screenprint, 1987, 30" x 22", Edition: 3/12.
12. *Sertifikaat*, Screenprint, 1987, 30" x 22", Edition: 3/16.
13. *'n Wapen te Besit*, Screenprint, 1987, 30" x 22", Edition: 3/14.
14. *Shroud*, Screenprint, 1987, 30" x 22", Edition: 3/14.

with others, his work signals a fundamental shift in contemporary art. The direction is clearly set: integrate the full range of life from universal to relative; reconcile difference. As Jorge Luis Borges' *Pierre Menard* said "every man should be capable of all ideas and I understand that in the future this will be the case".²⁴

15. *Indigo Days*, Screenprint, 1987, 30" x 22", Edition: 3/17.

16. *Sunday in the Park* Screenprint, 1987, 30" x 22", Edition: 3/22.

²⁴ Borges, 1962, p. 44.

This page intentionally left blank

OCEAN OF BEAUTY
IN THE MIND OF THE BEHOLDER
—A SUITE OF PHOTOGRAPHS BY MARK PAUL PETRICK¹

Anna Bonshek

*A Zen koan observes how viewing an apple orchard from different angles can be revealing. “From one direction no order is apparent, but from special angles, beautiful regularity emerges. You’ve reordered the same information by changing your way of looking at it.”*²

—Steven Holtzman

You enter a room, a typical oblong, gallery space—parquet floor tiles, three white walls, one glass. Thirteen small photographic panels, each a triptych, project from the walls. The first thought that comes to mind is the pristine nature of the exhibit, the quiet atmosphere in the

¹ First published in *Tractor* in 1996 under the title: *In the Mind of the Beholder*. Petrick’s photographs can be viewed at: <http://www.markpetrick.com/>. Images published here with permission of the artist.

² Holtzman, 1996, p. 269.

room. It's hard not to notice how these artworks are made before actually looking at them. Separated from the wall, mounted over six feet high on metal brackets, they force the viewer to look up. From the center of the room you can't see the brackets. That's obviously how viewing is intended.

The images are modest, intriguing. With their "panoramic" central photographs made in India, the triptychs form the recent series *The Ocean of Beauty* (1996) by Mark Paul Petrick.³ His work takes the form of black and white photographic suites manipulated in computer or printing processes. The artist explains that this particular project began with combining images generated over a number of years, creating several possible readings of the work. He states that meaning is the product of relationships and in bringing together two or three images, a new feeling or awareness can be created. The process, he states, allows these works to possess the quality of poetry or haiku. While *The Ocean of Beauty* itself is poetic, it does not willingly disclose its meaning. What exactly is this ocean of beauty?

As Petrick explains, *The Ocean of Beauty* is the (translated) title of a devotional poem, *The Saundarya-Lahari*, an Indian text from which he selects *Yantras* and symbolic diagrams made up of Sanskrit syllables that are featured in his triptychs. The text, among other things, is about the experience of bliss. It is not surprising then that Petrick combines photographs taken in India, photographs of individuals meditating, and diagrammatic notation in the triptychs.

The ancient quality of India's land and culture is indicted through reference to architectural fragments and isolated landscapes. Nonetheless, Petrick maintains that the images are neither about India, nor about *Yantras* or meditation; they are about areas in his life where these and other subjects converge and evolve. He explains that the associations between images are primarily formal. It's just a question of resonance and pattern. Looking more closely at the triptychs, pattern and rhythm are evident. But what are the associations?

In one instance, a diagram of a heart (printed in reverse), an old stone wall with three sculpted bulls—*Nandis*—and a *Yantra* with a Sanskrit inscription, create an unusual trio. The heart is the central organ of the body—the muscle that pumps the blood through the veins.

³ Petrick, a graduate of the Art Institute of Chicago, moved to Fairfield in 1983. Since then, as a practicing artist, lecturer, writer and publisher of *The Source*, he has been involved in promoting the arts in Iowa.



The Ocean of Beauty: Verse 26
 Photographic print laminated to MDF with stainless steel armature,
 plexiglass and gold leaf (36" x 9" x 7")
 Mark Paul Petrick

Through the heart, love is said to flow. Here a line drawing shows a clinical rendering of the heart as if presenting information for medical purposes. Next, a bell shape overlaps the heart and the photograph of the wall, connecting them in some mysterious fashion. The three *Nandis* sit on top of the stone wall as if surveying the horizon and observing the onlooker. And the right hand side of the panel is a *Yantra* from the 26th verse of *The Saundarya-Lahari*.

While the text of the verse is not part of the image, by inference it contributes to its meaning: “*O Queen of chastity! Virinci goes back to the five elements; Hari ceases to exist; Kinasha meets with destruction; Kubera perishes; the array of the ever wakeful eyes of Mahendra is closed; in this great deluge, the Lord has His diversion.*” Commentaries explain the verse as extolling the chastity of the goddess Devi, whose husband survives the general holocaust of the gods and remains unconcerned. Similarly, the *Nandis* seem to survey change—the birth and decay of worldly, natural cycles—and yet remain unperturbed.

None of the people pictured in the triptychs are Indians. In this respect Petrick’s work does seem to expose itself as “not about India”. There are no crowded Bombay streets here.

Another panel pictures a young woman with eyes closed, an open truck transporting a sculpture of a deity, and a triangular *Yantra* with its corresponding sound.



The Ocean of Beauty: Verse 2
 Photographic print laminated to MDF with stainless steel armature,
 plexiglass and gold leaf (36" x 9" x 7")
 Mark Paul Petrick

An American woman meditates. A *Yantra* from the 2nd verse of *The Ocean of Beauty*—where the subject becomes enlightened and tastes bliss—implies the juxtaposition of something more than just simple formal relationships. Is the woman tasting bliss? And what of the deity? Does it signify the inner beauty of the mind?



The Ocean of Beauty: Verse 32
 Photographic print laminated to MDF with stainless steel armature,
 plexiglass and gold leaf (36" x 9" x 7")
 Mark Paul Petrick

In another panel, the fanning fronds of numerous palm leaves create a dense pattern of rich, organic shapes. Flanking this are another *Yantra* and a backlit stencil pattern from an earlier series of Petrick's work. The whole piece seems to celebrate the vitality of nature. Similarly, another trio displays man-made patterns, natural forms and primordial diagrams: on the left a *Yantra* composed of two interlocking triangles and a circle; in the center, a diagram inscribed on the earth with repeated diamond forms radiating outward; on the right, a daffodil.



The Ocean of Beauty: Verse 11
Photographic print laminated to MDF with stainless steel armature,
plexiglass and gold leaf (36" x 9" x 7")
Mark Paul Petrick

Whether involving an architectural form, a human face, a sculpture or a landscape, a carved emblem on a rock or animals resting by water—whether the image is accompanied by a diagram of the world or a human body part, a basic geometric form, symbol, or deity—each triptych presents a provocative yet silent combination of impressions that invite the viewer to ponder their meaning. Due to their modest size and monotone character, these images are not so much enigmatic as contemplative. They require time.

In the end, what is curious is the mounting device. Instead of traditional framing, the images are set on wooden boards with white beveled edges and gilded backs. Due to these bracketed mounts, the triptychs project out from the wall. Perspex covers the total image, bolted on—the pieces feel distant, removed, suspended, unheroic, intimate yet dispassionate. An almost imperceptible, faint glow,

reflecting the gold, hovers around the edges. It seems the artist wants the images to be suspended like thoughts in the mind.



The Ocean of Beauty: Verse 52
Photographic print laminated to MDF with stainless steel armature,
plexiglass and gold leaf (36" x 9" x 7")
Mark Paul Petrick

DELEUZIAN SENSATION AND UNBOUNDED
CONSCIOUSNESS IN *REVERIE I*¹

Corrina Bonshek

The work *Reverie I* (2002) has a special significance when considered against the philosophy of Gilles Deleuze in which he proposes the idea that art is experienced as “sensation”.² This way of thinking about art departs from a traditional Kantian view in which art is a transcendental experience occasioned through the contemplation of form. In his writings with Felix Guattari, Deleuze maintains a view that art by necessity exposes the viewer/listener to an impersonal, differential flow of life that is felt rather than understood or comprehended. He contends that this aspect of art is potentially revolutionary. By exposing the viewer/listener to sensations that go beyond everyday perceptions and opinions, art is able to open up new ways of thinking about and/or engaging with the world. Incorporating the notion of Deleuzian “sensation”, this essay analyses *Reverie I*, an audio-visual installation that evokes a sense of unbounded

¹ This article was originally published in *Body, Space and Technology*, 2003, 3 (3), and then in *Project Reverie* (Exhibition Catalogue, The Visual Arts Gallery, India Habitat Centre, Delhi, India), Akshara Productions, 2004.

² Deleuze, 1981; 1997; Deleuze & Guattari, 1994.

consciousness by abstracting the voice and face from the spatio-temporal co-ordinates of the body.

Reverie I is a dual-screen, quadraphonic (four-speaker), audio-visual installation created by digital media artist Anna Bonshek and myself. This work aims to create a sense of unbounded consciousness in which one's usual sense of self is elided. It draws on the idea of transcendental consciousness in which subject and object, or knower and known, become shades or aspects of an infinite field of awareness.³ This idea of transcendental consciousness is located in Vedic theory, which draws on Maharishi Mahesh Yogi's reading of the ancient Indian texts, the Vedas.⁴ In Vedic theory, consciousness is not the property of a subject. Rather it is an unmanifest field of pure awareness or wakefulness that can be spontaneously accessed through art or meditation.⁵ This view of consciousness resonates with Robert Forman's description of a Pure Consciousness Event as a state of wakeful but non-intentional awareness.⁶ *Reverie I's* evocation of unbounded consciousness necessitates a framework in which unmediated experience, or an experience of pure consciousness can be theorised. Deleuze's view of art as "sensation"—as a force that ruptures everyday opinions and perceptions—provides a means of theorising ineffable experiences. In this article, Deleuze's concepts of "intensity", "affect" and the "affection-image"—which he applies to perception, art and cinematic images—will be used to analyse the way *Reverie I's* creates a sense of the infinite.⁷

Intensities as Pure Differences

Deleuze's philosophy is not limited to what can be seen, heard, understood or comprehended. Indeed, Deleuze regards human perception as a subtraction or contraction of the "real".⁸ Pearson suggests that Deleuze's philosophy can be regarded as a response to the "insufficiency of the faculties of perception", a means to address reality or things which "do not explicitly strike our sense or

³ A. Bonshek, 2001, p. 57.

⁴ Meyer-Dinkgräfe, 1996; Haney, 1989; Orme-Johnson, 1987.

⁵ Orme-Johnson, 1987, pp. 333-336.

⁶ Forman, 1990, p. 7.

⁷ Deleuze, 1994; 1986; Deleuze & Guattari, 1994.

⁸ Pearson, 2001, p. 417.

consciousness”.⁹ Deleuze uses the concept of intensity to describe elements at the limits of perception.¹⁰ He describes intensities as pure differences, a form of ontological difference that gives rise to actual or perceived entities.¹¹ As qualities of pure difference, intensities are virtual, though nonetheless real. They cannot be directly perceived. Rather, as Deleuze suggests, they can only be felt, sensed or perceived in the quality they give rise to.¹² Claire Colebrook uses the example of the white light to illustrate this.¹³ She suggests that we experience the pure difference of white light (which creates the colour spectrum), only through the intensity of a single colour, such as a shade of red.¹⁴ She writes, our eyes do not perceive “the difference of each vibration of light”, but “contracts complex data into a single shade or object”.¹⁵ Intensities are imperceptible, she notes, because ‘a perceived difference’ is a difference that has “already been identified, reduced, or contracted”.¹⁶ For this reason, intensities are outside of, but implicated in, our experience of them. Deleuze uses the term “extensity” or “extensive” difference to describe the way intensities are homogenised in everyday perception.¹⁷ Colebrook suggests that, in extensive or everyday perception, the world is organised “into distributed blocks”, “extended objects” that are “mapped on to a common space”.¹⁸ She writes:

Everyday vision takes this extensive form. I do not see a world of colours, tones and textures fluctuating from moment to moment. I see objects set apart from each other, stable through time and within a single and uniform extended space. Extension maps or synthesises the world in terms of presupposed purposes and intentions. (I go into my office and see the books that are there for me to read, the chair I will sit on, and so on. I ‘see’ the world as a world of distinct functions continuous through time).¹⁹

⁹ *Ibid.*, p. 418.

¹⁰ Deleuze, 1994, p. 144.

¹¹ *Ibid.*, p. 246

¹² *Ibid.*, p. 144.

¹³ Colebrook, 2002b, p. 83.

¹⁴ *Ibid.*

¹⁵ *Ibid.*, p. 28.

¹⁶ *Ibid.*, p. 27.

¹⁷ Deleuze, 1994, p. 230.

¹⁸ Colebrook, 2002a, p. 38.

¹⁹ *Ibid.*, pp. 38-39.

In Deleuze's view, art ruptures extensive or everyday perception because it draws attention to singular intensities (such as the vibrancy of a colour). Daniel Smith suggests that Deleuze understands sensation to be the sensory experience of intensities or pure differences.²⁰ Importantly, sensation is realised in the materials of art.²¹ Like perception, Deleuze does not regard sensation as the property of a subject. Deleuze is interested in the virtual flow of intensities that give rise to actual or perceptible objects. Hence art, like any "thing by itself", is virtual in so far as it is only through the activity of perception that the perceived object is actualised.²²

New Possibilities for Perception

In Deleuze's view art draws attention to this virtual flux. It transforms recognisable feelings (affects) and perceptions into impersonal affects and percepts: forces of sensation that are unrecognisable or a-signifying.²³ Colebrook suggests that Deleuze regards this aspect of art as political in so far as it decomposes everyday meanings and opinions. It moves away from "fixed and moral" notions of what art means or represents.²⁴ In his writings with Guattari, Deleuze suggests that the aim of art is to invent new affects and, therefore, to create new possibilities for perception and experience.²⁵

In *Reverie I*, two large projected images face one another, trailing light across a blackened space. To the right, a woman's head and shoulders are suffused in gold. Eyes closed, her only movement is the rise and fall of her chest, her body breathing. To the left is a second image, a silver, negative double of the first. The woman faces herself in silver and gold. Her eyes remain closed. At regular intervals a pulse of light glows behind her head then fades. As the piece progresses this glow becomes more intense. Flecks of gold appear across her silver cheeks, a silver wash momentarily submerges the gold screen. She is

²⁰ Deleuze, 1996, p. 37.

²¹ Deleuze & Guattari, 1994, p. 167, p. 193.

²² Bogue, 2003, p. 34.

²³ Deleuze & Guattari, 1994, p. 164.

²⁴ Deleuze, 2002a, p. 48.

²⁵ Deleuze, 1994, p. 175.

both subject and object: subject, a transparent, silvery double; object, a gold concrete form.

Image and Space

The images of *Reverie I* comprise two close-ups of a woman's face and shoulders, African-American dancer, Vershawn Sanders. In his writings on cinema, Deleuze describes the close-up as an affection-image.²⁶ He suggests that the face, in film, is usually associated with three roles. It is individuating (it allows us to recognise or distinguish a person), socialising (it manifests a social role), or it is relational (it ensures not only communication between two people, but also, in a single person, the internal agreement between his character and his role).²⁷ However, in the close-up, all three of these roles are elided. As Deleuze argues, the close-up treats the face as if it were no longer part of the body. This process of abstraction, the divorcing of the face from "all spatio-temporal co-ordinates", turns the face into "pure affect".²⁸ Deleuze cites Béla Balázs, who writes:

The expression of an isolated face is a whole, which is intelligible by itself. We have nothing to add to it by thought, nor have we anything to add to that which is of space or time. When a face that we have just seen in the middle of a crowd is detached from its surroundings, put into relief, it is as if we were suddenly face to face with it. Or furthermore if we have seen it before in a large room, we will no longer think of this when we scrutinise the face in close-up. For the expression of a face and the signification of this expression have no relation or connection with space. Faced with an isolated face, we do not perceive space. Our sensation of space is abolished. A dimension of another order is opened to us.²⁹

Deleuzian affect may be regarded as akin to intensity in that it is not recognisable, like emotion, but is felt physiologically. Ronald Bogue suggests that, for Deleuze, the face in close-up "allows an affect

²⁶ Deleuze, 1986, p. 87.

²⁷ *Ibid.*, p. 99.

²⁸ *Ibid.*, p. 96.

²⁹ Balázs, in Deleuze, 1986, p. 57.

(quality/power) to appear in itself".³⁰ Nevertheless, affects are not completely divorced from its social-historical context. Deleuze suggests that the affection-image can be considered as an "expression of a space or a time" in so far as every close-up occurs in a particular milieu.³¹ In *Reverie I*, the affection-images of Vershawn Sanders create an expression, an affect of tranquility. The affection-image of this face, with its quality of serenity, can be linked to other affection-images: the face of a Cambodian Buddha carved in stone, Nam June Paik's *T.V. Buddha* (1974) the face of the 'Other' as a sign for non-Western spiritual practices.

Colour is a vital component of the images in *Reverie I*. Gold or silver fill each screen, subsuming the woman's face. In gold, the woman's face is more concrete, more manifest. It conveys the object aspect within 'transcendental consciousness'. In silver, the woman's face is translucent, insubstantial. This luminous image suggests a witnessing value of the subject within transcendental consciousness.

The colours of these images might also be viewed in Deleuzian terms as intensities that aid the abstraction of the woman's face. The placement of these images face-to-face, or opposite and parallel, creates a dynamic between them. Pulses of gold light appear on the gold object image at regular intervals. In counterpoint, the silver subject image begins to pulsate. These pulsations create a rhythm. Their interaction might be said to create a sensation of "forced movement".³² Barbara Kennedy describes Deleuze's concept of forced movement as a sensation that activates a space.³³ She notes that, in the sensation of forced movement, space becomes "a molecular element" in the connection between images.³⁴ For the viewer, situated in the gap between images, this sensation is enacted through, across and around the body. The interaction of these intensities (silver and gold) reconfigures consciousness. Rather than being the property of a subject who directs her awareness like "flashlight illuminating a dark world"³⁵, consciousness is presented as an impulse, a vibration, a play of light within matter.

³⁰ Bogue, 2003, p. 78.

³¹ Deleuze, 1986, p. 99.

³² Deleuze, 1981, pp. 48-49; Deleuze & Guattari, 1994, pp. 167-168.

³³ Kennedy, 2000, p. 113.

³⁴ *Ibid.*, p. 114.

³⁵ Bogue, 2003, p. 34.



*Still Frames: Reverie I—Subject (top) & Object (below)
Performer: Vershawn Sanders
Anna & Corrina Bonshek³⁶*

³⁶ Images used with permission.

Sound and Space

Sound in *Reverie I* is spatial. It embodies the liminal space between two video projections, placed opposite and parallel. Four speakers, each pair placed on either side of an image, create a border, a territory. Moving from one side of the space to the other, fluctuating timbres (guitar and marimba) can be heard, not as single instruments, but as textures of sound, conglomerates of intensities or affect (mellow, pulsed, plucked, incessant). Each sound colour is multiplied. Multiple iterations of guitar and marimba refrains (recorded and overlaid) can be heard. They swell outwards, expanding then contracting in instrumental register, volume and time. Guitar sounds congregate at the subject (silver) image, while marimba sounds fluctuate around with the object (gold) image.

Each group moves across the space, merging, dissolving, and disrupting their distinctive forms. Aden Evens suggests that sound as intensity encompasses all the vibrations of an instrument, its resonating body, a performer's body, and the performance space including the vibrations of air in that room at that particular moment in time.³⁷ For this reason, sound as intensity is necessarily imperceptible. It can only be heard in the quality, timbre or "tone-colour" of a sound or note. *Reverie I* emphasises timbre or the unconscious or imperceptible qualities of sound by obscuring individual notes or tones. Guitar and marimba are no longer heard as single entities. Delay has been used to smear tones, while reverberation transforms them into clouds of colour extended in duration. Within these diffuse entities individual tones come to the foreground then dissipate.

These sounds play at the threshold of conscious perception. Following Deleuze's description of Leibniz's passage on the murmuring of the sea, these sounds might be regarded as obscure, in so far as they are not individuated, yet distinct in their status as imperceptible intensities or singularities.³⁸ Because, for Deleuze, intensity is ontological—intensity gives rise to objects or extended forms recognisable in everyday perception—*Reverie I* might be said to draw attention to the unbounded or intensive qualities of perception that precede conscious awareness. In *Reverie I*, spoken voice can also be heard (text written by Anna Bonshek, spoken by Vershawn

³⁷ Evens, 2002, pp. 171-172.

³⁸ Deleuze, 1994, p. 213.

Sanders). Fragmented, and digitally manipulated, the syllables within words are separated and heard across four speakers. Equalisation attenuates high or low frequencies, rendering words indistinguishable. Words shatter on the edge of meaning, then reverberate into space. In *Reverie I*, the voice is experienced as affect. Like the face, it is abstracted from its the spatio-temporal co-ordinates of the body. We do not see the woman's lips move, her voice is not heard from a fixed position. In a quadraphonic (four-) speaker arrangement, her voice can be heard from every corner of the room. Digital processing transforms textual meaning into sensation. Words are rendered sensuous, not just by their content ("a dropless sea within a continuum"), but by digital processing that stretches syllables and creates rhythms out of sibilants.

In *Reverie I*, voice and face are less an image of a person than affects, abstracted from the spatio-temporal co-ordinates of Sanders' body. Their abstraction creates a hiatus in space-time, a sense of unboundedness. Colour subsumes the face, making it imperceptible as a subject with a name, identity, or role. The pulsating colour of the images creates intensities that suggest impulses of consciousness unbounded by specific forms. Voice is similarly abstracted from the body. Fragmented and digitally manipulated, the voice is rendered sensuous through the stretching, distorting, and repetition of syllables. Instrumental sounds also play at the threshold of perceptibility. Moving between obscure and distinct, imperceptible and perceptible, the instrumental composition, in *Reverie I*, might be correlated with Deleuze's notion of a vital, differential flow of life that gives rise to recognisable or bounded entities. *Reverie I* evokes a particular view of consciousness as unbounded. Consciousness is less the attribute of a subject who perceives an object, than a movement, an impulse, an imperceptible component of light or sound. This view resonates with Deleuze's description of Henri Bergson's notion of consciousness as located in matter rather than bodies.³⁹ As such, Deleuzian sensation—as intensity or affect—provides a means of examining the way *Reverie I* creates a sense of unbounded awareness.

³⁹ Bogue, 2003, p. 34.

This page intentionally left blank

REVERIE II: REVELATION,
CONSCIOUSNESS AND PEACE¹

Anna Bonshek

What I want to show in my work is the idea which hides itself behind so-called reality. I am seeking for the bridge which leads from the visible to the invisible, like the famous cabalist who once said: "If you wish to get hold of the invisible you must penetrate as deeply as possible into the visible." My aim is always to get hold of the magic of reality and to transfer this reality into painting—to make the invisible visible through reality. It may sound paradoxical, but it is, in fact, reality which forms the mystery of our existence.... One of my problems is to find the self, which has only one form and is immortal.... Space, and space again, is the infinite deity which surrounds us and in which we are ourselves contained.²

—Max Beckmann

¹ This essay is an edited and rewritten form of the article first published in *Consciousness, Literature and the Arts*, UK, April 2004, and then in *Project Reverie* (Exhibition Catalogue, The Visual Arts Gallery, India Habitat Centre, Delhi, India), Akshara Productions, 2004. *Project Reverie* (2002) is a three-part installation work including *Reverie I*, *Reverie*, and *Reverie II: Images and Trajectory*—an 8-minute, dual screen, surround sound DVD projection, a 22-minute, single screen DVD projection, and a 3 metre floor installation and 64 inkjet prints (21 x 30 cm). The work and exhibitions of *Project Reverie* were made possible through the support of: Mahendra Inc, The Visual Arts Gallery, The DakshinaChitra Museum, India, and QPIX, and Cheese Multimedia, Australia. The *Reverie II* team involved principal collaborators Anna and Corrina Bonshek, plus: Roland Wells, Lee Fergusson; dancers, Catherine Wells and Vershawn Sanders; instrumentalists: Christine Mitchell, Linda Jelacic and Eleanor Lewis; sound engineer, Emma Stacker; lighting engineer, Kevin Rechner; and in DVD post-production, Simon Ward.

² Beckmann in, Chipp, 1968, pp. 187-188.

In an effort to identify the dynamics of cultural change as “intercultural” or “multicultural” practice and to expose the problems of globalism in an ever more theoreticised cultural space, film, artworks, installations and performances seek to undermine, elide, challenge and put forward strategies for analysing the complex, writing and reading of art, material culture, cultural production and history.

Increasingly, at this time, artists and filmmakers focus on war. Despite this, Wim Wenders calls for filmmakers to make films about peace.³ Concurrently, in Western film and television, as reflected in recent programming, there is an accelerated interest in “Reality TV”. SBS’s⁴ Marie Thomas states that in Australia networks look for documentaries that deal with “real life” as opposed to the boring BBC⁵ style but it seems that the trend toward “real” content is motivated as much by ratings as by any move to promote diversity or new ways of story telling.⁶ Drama and even documentary created in one cultural context will not necessarily translate to another.

In India during the late 1980s, 80 million people watched the serial the *Ramayana*. In some locations entire villages joined together to rent a television set. The serial became, as Lutgendorf states, the “most popular program ever shown on Indian television... Never before had such a large percentage of South Asia’s population been united in a single activity.”⁷ The huge popularity of this series remained a fairly unknown statistic for English-speaking film and television aficionados in spite of interculturalism and a wider appreciation outside of India for Indian culture, including Bollywood productions.⁸

Meanwhile, in the West, as Wenders’ put it, in an age of consumerism, big films deny knowledge that we need. The question remains, in the move to show ever more “reality-based” material, whose or what reality are we speaking about anyway? What are the dynamics of cultural intervention or intercultural processes? Whose theoretical framework is more accurate, descriptive, or provides a workable analysis of cultural mapping? Writing a few kilometers from the home of Australian reality TV show *Big Brother*, a principle of physics comes to mind: the observer affects the observed. Complex

³ Wenders, 2003.

⁴ *Special Broadcasting Service*, Australia.

⁵ *British Broadcasting Corporation*, UK.

⁶ Thomas, 2003, July 15.

⁷ Lutgendorf, 1990, p. 128.

⁸ Perry, 2003, pp. 40-47

interactions, on individual, social, cultural, and global levels, and the search for a cause or origin to action (artistic or otherwise) are impossible to chart or map. The observer participates in the perpetuation of further iterations of the observed-observer relationship and continuously expanding transformations and possibilities.

In this milieu, a group of artists set out on a journey to create a work that started from the premise that knowledge in its basic form is “the structure of consciousness”⁹. Described as inherently peaceful, the structure of pure knowledge within consciousness is the foundation of peace within the mind, within society, within environment.¹⁰ This perspective was inspired by the description of consciousness provided by Maharishi Vedic Science and maintained via the ancient Vedic tradition in India.

Reverie Revealed

The term “reverie” conveys the sense of fathoming uncharted aspects of the mind, or an abstract preoccupation with levels of thought. It can suggest revelation, insight, a progression toward limitlessness or an expanded sense of self.¹¹ Here, the phenomenon of revelation is considered as an inner state or an opening up of the mind to multiple possibilities on the screen or backdrop of consciousness—where consciousness structures Reality, the basis of realities.

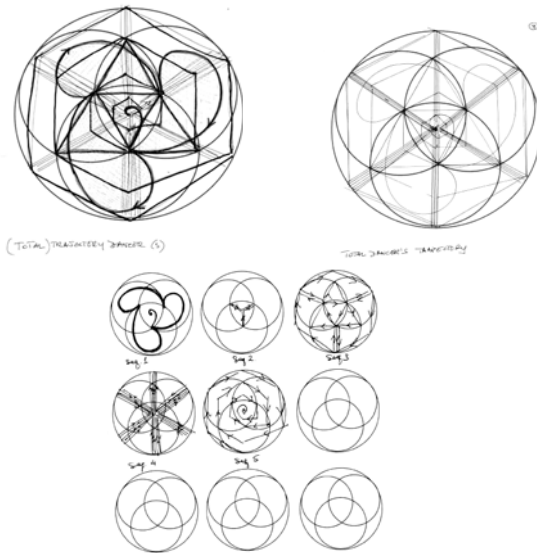
Reverie II (2002) a 22-minute, single screen DVD/audio installation by Anna and Corrina Bonshek, is divided temporarily and conceptually into four main sections called: a) M0, b) M1, M2, and M3, c) Triangles, and, d) M0’. These are influenced, respectively, by ideas about: a) awareness and the four directions in space; b) three phases of expansion and contraction related to subject, object and their relationship; c) eight dynamic phases of perception; and, d) wholeness and the dissolution of the four directions in space.

⁹ The structure of consciousness is found in the structure of pure knowledge, the self-referral basis of life, as explained in Maharishi Vedic Science. The work *Project Reverie* (including *Reverie I* and *Reverie II*) is inspired by these ideas but is not meant to be representative of them.

¹⁰ The artists’ mandate was not to make a work that claimed to create peace. However, the initial concept started with the idea of a reality that sustains peace and is unifying while diverse, self-referral, and inherently coherent.

¹¹ Bonshek, A., 2001b.

Evolving out through exchange on the ideational level between collaborators and exploration across disciplines, a performance trajectory was discussed resulting in several visual notations. Through this and additional choreographed explorations, a diagram emerged representing a single, complete performance. With its various subsets, the diagram informed all aspects of the work from: conceptualization and communication, spatial mapping in choreography and performance, audio organizational structures and *Flash* animations. The diagram and the performance sequence, around and across it, thus, served as an organizing principle for the audio and video composition—feeding into the temporal and spatial divisions of the audio/video work. First a spiral was drawn from a central point traced out into a circle; then, a more expanded trajectory necessitated the generation of additional circles. In this way, in the move from point to circle, to a new point and circle, the template or map for the performance trajectory became evident.



Diagrams used in the conception, planning & performance of Reverie II

This overarching template was drawn onto various performance and exhibition surfaces including the installations of *Project Reverie* at The Visual Arts Gallery, India Habitat Centre, New Delhi, and at the DakshinaChitra Centre, Madras Craft Foundation, Chennai, in 2004.



Project Reverie, 2002. Installation at the Visual Arts Gallery, 2004
Showing Reverie II, a 22 minute single screen audio-visual DVD projection,
and Reverie II: Image and Trajectory 2002, Floor installation—rose &
marigold petals, Diameter: 3 metres.
Wall installation, 64 ink jet prints (30 x 21 cm each)
Anna and Corrina Bonshek¹²

In each case, this circular device, inscribed on a dance floor, a sandy beach, a rocky outcrop, constructed digitally, drawn with chalk, sand, or demarcated by flowers, acts not only as a trace of the performance but as a conceptual map.

¹² At the Visual Arts Gallery, for the opening of the exhibit, a lamp placed in the centre of the floor installation was lit by the Director of the Visual Arts Gallery, Dr. Alka Pande, the Australian High Commissioner, Dr. Penny Wensley, and the artists. At the gallery the entire project was shown: *Reverie I, Reverie II, and Reverie II: Images and Trajectory*.



Sand Circles 2001, Queensland, Australia, (Two views)
 White sand on grass, Diameter: 3 metres
 Anna Bonshek¹³

Grid as Liminal Realm

Suggesting multiple iterations of one underlying dynamic and referencing print media, the *Reverie II* also employs symmetry, colour and repetition in a number of important ways. In the first section a nine-fold grid highlights divisions of three. According to Vedic knowledge of *Vastu* or *Sthapatya Veda*, the grid is vital to architecture, town and city planning, and relates to the four cardinal points and direction in space. In the *Vastusutra Upanishad*, the grid is traditionally used as the compositional structure for sculptural work.¹⁴ For Modernists, the grid acts as a referent for the origin of art itself. Indeed, as Krauss notes, the grid scored surface serves as “the image of an absolute beginning.”¹⁵ Although Krauss finds this idea untenable, she observes that the grid as a figure is “impervious both to time and incident, [it] will not permit the projection of language onto the domain of the visual, and the result is silence.”¹⁶ While the grid can thus denote silence, Thomas McEvelley suggests that it also signifies a Buddhist, transformational realm somewhere between the universal and the particular.¹⁷ Such readings provide a platform for *Reverie II*—in which

¹³ Circle diagrams were also explored in a land artwork in Queensland, Australia

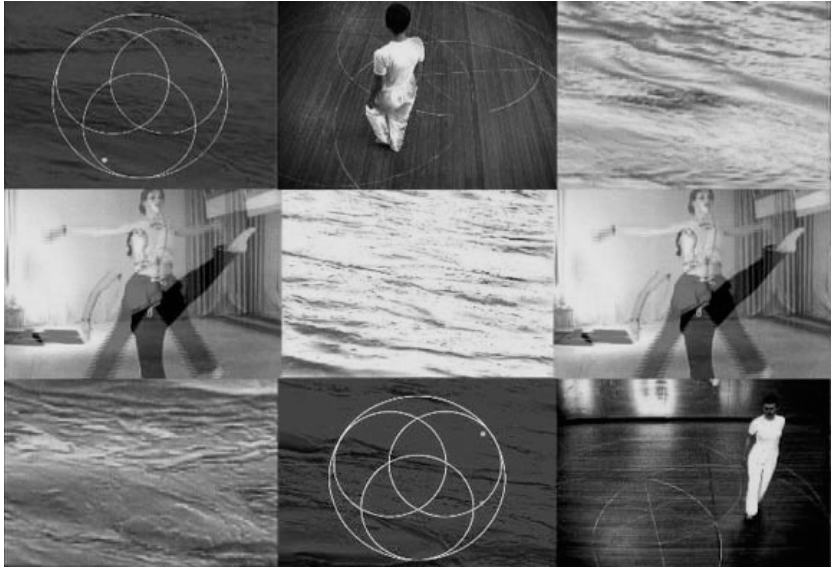
¹⁴ Boner, Sharma, & Bäumer, 1986.

¹⁵ Krauss, 1984, pp. 18-19.

¹⁶ *Ibid.*

¹⁷ McEvelley, 1987, pp. 94-99.

the grid denotes a liminal realm between awareness as unlimited, and, in it's more expressed value, as structure.



Still frame from M2 showing the nine-fold grid and performance trajectory/directional diagram
Performers: Corrina Bonshek and Catherine Wells
Reverie II, 2002, Anna and Corrina Bonshek

As a compositional device, the grid can be read as a *Mandala*, projected on the flat plane of the video screen. In several instances throughout the video, occupying the extremities of the grid, the circular diagrams signify east, north, west and south. In other instances they reference the performer's position in space and the performance trajectory.¹⁸ The nine-fold grid also allows (from M1 to M3) for an interlocking triangular format, and becomes increasingly layered, self-

¹⁸ The sense of direction and orientation in space was also addressed in the performing figure's relationship to the actual cardinal directions while videotaped. M0 starts with a stance directed eastward and, in the outdoor locations, was videotaped at sunrise. The landscape itself is incorporated into the work through references to water, ocean, beaches, and rocky surfaces and the inscription of these either literally or metaphorically through the creative process.

referral and repetitive. Overall, *Reverie II* uses strong symmetries (with sub-sets of incidental asymmetries) to define its feeling and logic.

Sound as *Mandala Mosaic*

Musically, *Reverie II* was originally conceived as a score for three viols for a choreographed live performance work. However, the approach shifted from a live context to the DVD/installation outcome that more effectively dealt with the theme of the trace (derived from sound and light processes). For this reason, recorded improvised samples that could be layered, manipulated, and digitally processed, were employed. This approach gave increased flexibility in terms of altering the lengths of sections and allowed for a ‘mosaic’ effect—the layering of short samples of instrumental sound to create textures and melodies.

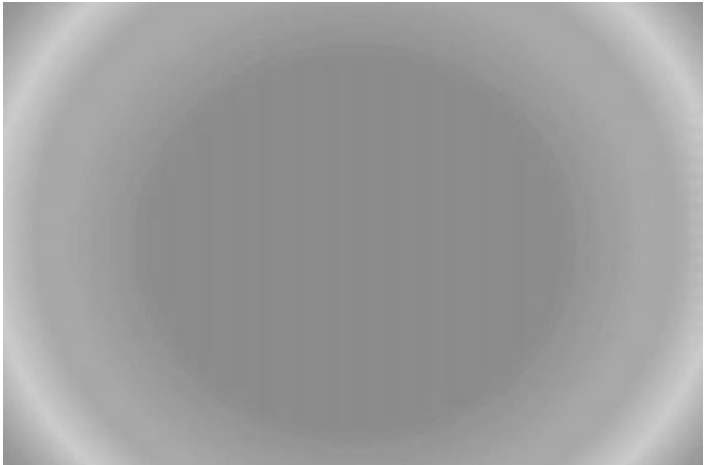
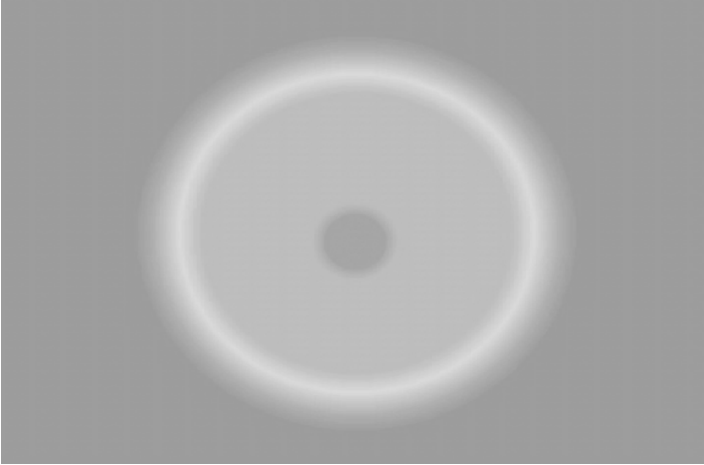
Movement ‘Zero’

Section one (M0, or “movement zero”) representing pure potentiality, explores the idea of differentiation within wholeness. With respect to the theme of silence and sound in this section, and how to deal with this musically, Corrina notes:

Perhaps this silence could be represented musically not by digital silence but either by a constant drone that emerges out of the end of the first sound or by emphasizing the natural decay of a sound by extending the end of a sound as when you pluck a harp string.... [For Theme One (M0)] I am thinking of a block of sound which might represent silence, consisting of sounds entering and leaving the texture so that there is an interesting sense of motion in this big block, like its vibrating...the music should be subtle, not big and symphonic, though it could be quite rich in sections.¹⁹

Both sonically and visually, M0 is slow, rhythmic, and sequential. It initiates the theme of cyclical movement that continues throughout the piece.

¹⁹ Anna and Corrina Bonshek, 2000, Email exchange, 25 April.

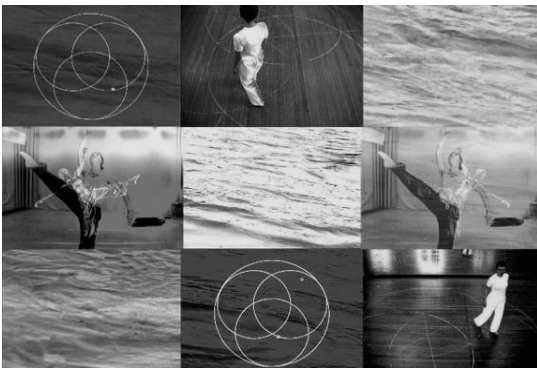
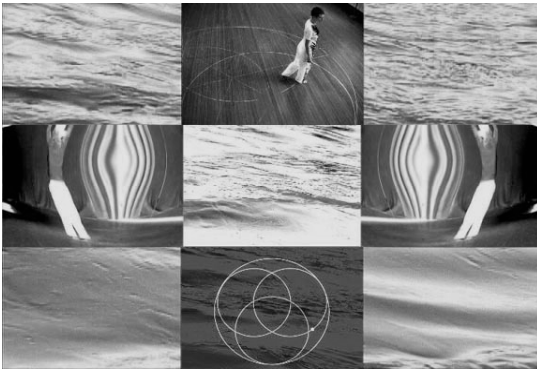


*Still frames from M0
Reverie II, 2002, Anna and Corrina Bonshek*



*Still frames from sections M0 (top) and M1 (below)
Performer: Corrina Bonshek
Reverie II, 2002, Anna and Corrina Bonshek*

Repeated versions of the circular diagram mentioned earlier, collectively reference M0, the core performance trajectory. Following M0, the M1 sequence signals the emergence of individuation as subject. In notation, it appears as a new trajectory on the circle diagram. Indeed, the three overlapping circles (within one larger circle) stand for the three emergent aspects of awareness—subject, the relationship between subject and object, and object—addressed in M1, M2, and M3.



*Still frames from M1 (top) and M2 (below)
Performers: Corrina Bonshek and Catherine Wells
Reverie II, 2002, Anna and Corrina Bonshek*

Subject/Object Dynamic

Following M0, the second section of *Reverie II* visually progresses clockwise through M1, M2, and M3. These relate to subject, object and the dynamic between the two. Across the horizontal in the center of the grid, section M1 also uses six sub-sections that represent expansion and contraction indicated by the notation: M1(m1), M1(m2), M1(m3), M1(m3)', M1(m2)', M1(m1)'.²⁰ While also containing six subdivisions, M2 is more dynamic; it is not entirely symmetrical and involves increased layering. Demarcated as: M2(m1), M2(m2), M2(m3), M2(m3)', M2(m2)', M2(m1)', these subsections still maintain an outward and return journey, but M2(m2)' is composed of 96 superimposed, still frames. These effectively create 48 different combinations creating a sense of rapidity. M3 as a complete sequence is shorter than M2; again, the tempo shifts. The M3 performance emerges in the lower left corner of the grid with the complimentary M3 diagram/trajectory in the upper right. The grid is now fully active around the unchanging central image, the gold, slow, somewhat monotonous but rhythmic water.

M1-M3's Audio Texture

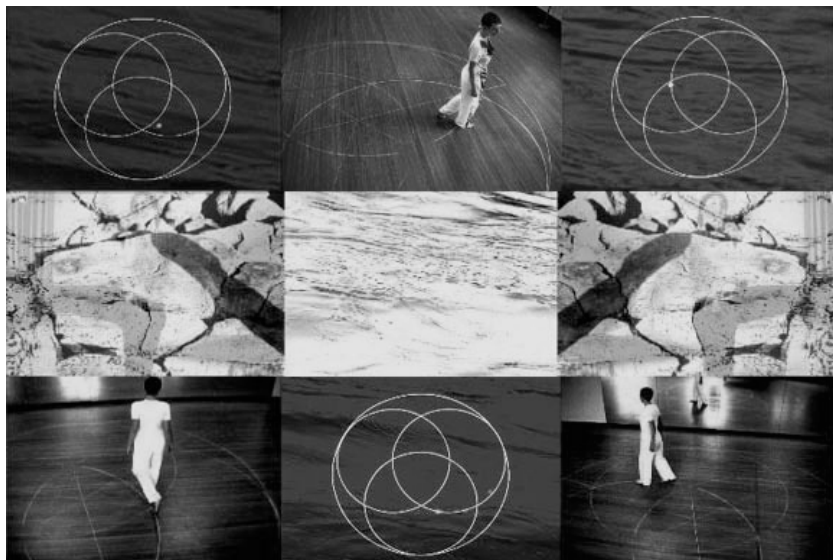
The above sections were carefully considered for their sonic/visual relationship. Initially, for the musical transition from M0 to M1 through M3, Corrina articulated the idea of a layering of sound:

I am thinking about the percolating texture we discussed ages ago, at a low volume, so it sounds quiet distant. The texture will be made up of motives used in the third section (18 permutations of 3 shades of consciousness) but played in many different keys and registers so that the sound is full and busy. I am thinking of an undulating, organic texture that is constantly moving and changing. This texture will then slowly begin to thin out, eventually leaving only motives in the key of M1, which will become longer notes rather than dynamic motives full of activity.²¹

²⁰ Across the vertical are continuous shots of Corrina's performance of M1 and the diagram of the trajectory of M1. (This pattern repeats for M2 and M3).

²¹ Bonshek, C., 2001, Email exchange with Anna Bonshek, 25 March.

In the section called M1, Corrina initially conceived of “diffuse, high-pitched, light, ethereal” qualities. “Light like air; a moving texture which consists of slowly rearticulating sounds which have lots of resonance. M1 has a definite pitch area, key or chord.”²² M2 was more “transitional” where the emphasis is on its status as the link between M1 and M3: “M2 contains shorter notes and motives that develop the material of M1 into the material of M3—movement, activity, and energy. It has no definite pitch area, key or chord. It is the transition between two more solid pitch areas.”²³ Musically M3 was “heavier, static, concealing with a tone quality heavier and more present—solid but not strident or loud and with a definite pitch area, key or chord.”



Still frame from M3
Performer: Corrina Bonshek
Reverie II, 2002, Anna and Corrina Bonshek

²² *Ibid.*

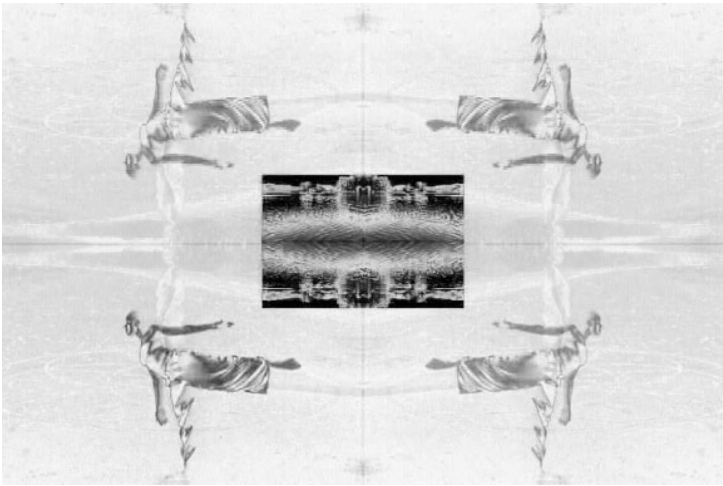
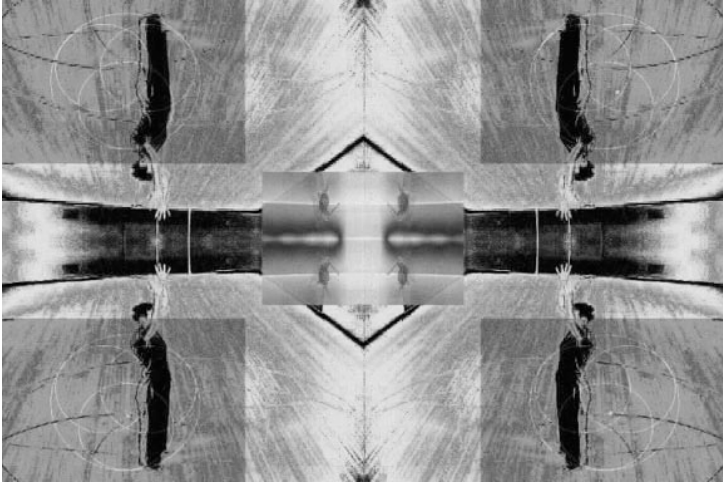
²³ *Ibid.*

Symmetries and Colour Fields

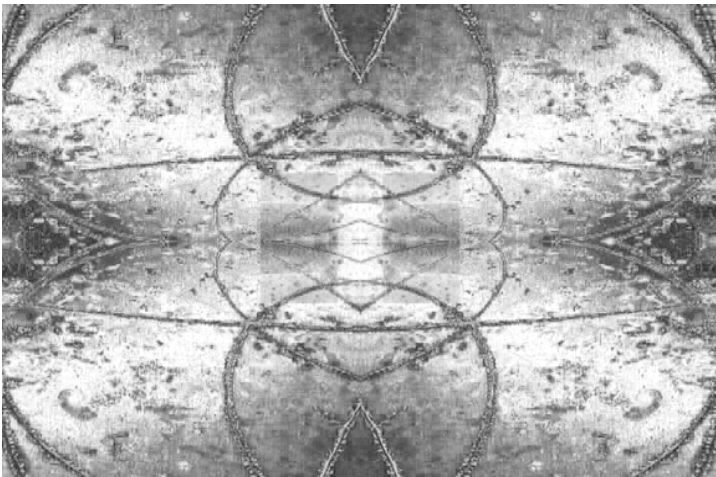
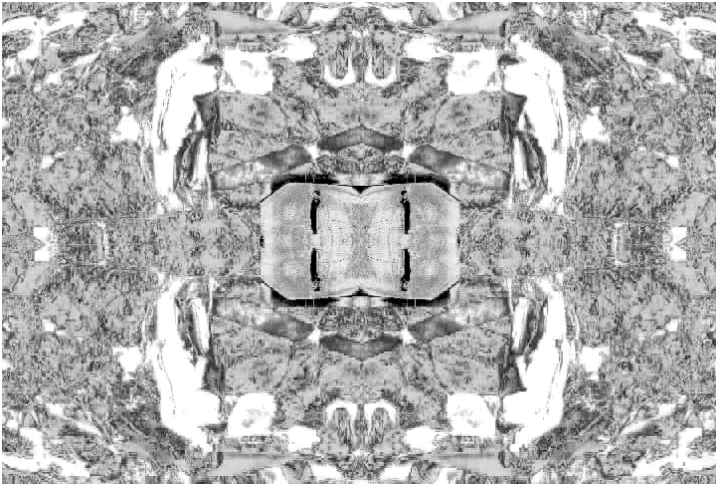
The next section, termed “Triangles”, takes on a quite different flavour and feel. Deliberate symmetries were used and reference was made to eight subdivisions—five objective and three subjective elements. Visual images dissolve into intensified fields of contrasting colours. The music at this point also undergoes a subtle shift. While in the first section, visually there is always an unchanging element (the constant, central image of water moving slowly), in Triangles constancy is found in four-fold patterns. The color and digital filters used in *Final Cut Pro* make it even harder to read figure and ground. The visual field is a seething play of contrasting hues creating a collapsed depth and space, a field of hybrid colour relationships moving inward and outward.

Sonic Depth and Extension

Clearly, *Reverie II* is visually and sonically rich in its multi-layered references and repetitions. Indeed, due to the fact that *Reverie II* had to be expanded (to incorporate elaborate video sequences referencing themselves) musically, elements had to be extended. Corrina decided to use granular synthesis (a technique that divides a sound into millisecond grains then redistributes them over a time length determined by the composer) to transform sound. This technique allows for the creation of new worlds/textures/timbres out of a single sound event and was used extensively in concert with the collapse of the figure-ground distinction in the visual images in section three. The frequency spectrum of the piece was also expanded, through pitch shifting sound events up, so they become high and ethereal. Whole sections of the work were digitally processed, previously used, elements. In this way, wholeness and multiplicity are reflected in the continual repetition, alteration and manipulation of a fixed palate of sound events.



*Still frames from the section 'Triangles'
Performers: Corrina Bonshek and Vershawn Sanders
Reverie II, 2002, Anna and Corrina Bonshek*



*Still frames from the section 'Triangles'
Performer: Corrina Bonshek
Reverie II, 2002, Anna and Corrina Bonshek*

Cyclical Return

In the last section, M0', M0 repeats but in a new iteration. As such, *Reverie II* starts and finishes with wholeness. While the move of wholeness could be conveyed in numerous ways, *Reverie II* exhibits a slow, repetitive visual pace. In order to appreciate the rhythm and transformations within the piece the mind has to be quieter, less expectant, less apprehensive of rapid change. In this sense, it has more in common with traditional art forms. As Nancy Adajania writes on digital, technological, net based art and cultural production:

We have to...understand that telematics, a product of globalisation, is no longer just an option; it is a condition.... Fast-lane art has yet a few things to learn from old-fashioned slow-lane art: the image in the slow-lane, by reason of its slowness, can develop in substance, assert ethical weight and determinacy. Being a physical entity, to be approached in space and time, it provides within itself a pause for reflection, revelation and contemplative attention to the art-object. What it lacks in terms of reflecting the accelerated momentum and dizzying transformations of the telematic age, it makes up for in these ways.²⁴

Reverie II uses the medium of “fast-lane” art but, due to its deliberate pace, allows for reflection, revelation, and contemplative attention to its theme. It may not have the sense of a physical entity like 3-dimensional sculptural form but it has a bearing on the physical. Through its refusal to get swept up in a “dizzying momentum” it anticipates and resists the expectancy of speed associated with screen media. Providing an emotional trajectory, the music of *Reverie II* gives a sense of climax, tension and release against the highly structured, repetitive and cyclic iterations of the images. Constructed as a “Mandala mosaic”—layering small samples over time on the computer—digital manipulations of improvised instrumental sounds (flute, violin, viol de gamba) and granular synthesis create new textures of sound.

In the process of creating *Reverie II* world events have further alerted musicians, artists, filmmakers and creative producers in all fields not only to the concerns and responsibility of working in our “age of consumerism” but an age of conflict. While films may seem to

²⁴ Adajania, 2002, p. 35.

deny the knowledge that we need and television produces multiple iterations of 'reality', Australian artists and composers²⁵ continue to confront the issue of creativity in turbulent times.²⁶ However, if, as Wenders' suggests, there is a need to create film (and art) that articulates the reality of peace, then *Reverie II* may contribute, in some way, to this end. *Reverie II* is a 'reverie' of the mind and hopefully adds to a phase of creative endeavour that is able to constructively address interculturalism while articulating a sense of peace.

²⁵ See: Anne Boyd, Andrew Ford, and Martin Wesley-Smith in: *War, Creativity and Communication: An Australian Perspective on East Timor*, 2003, A Symposium, University of Western Sydney (Nepean), Australia, August 28.

²⁶ Meyer-Dinkgräfe, 2003.

1 STANDS OUT¹

From Resonance come numbers
 Divisors of unity, segments of 1.
 “One” resonates beyond thought
 in the deepest recesses of mind,
 a transparent, celestial ocean
 with golden waters churning,
 where experience embraces potential vacancy.
 Incessantly quiet, incessantly pulsating,
 the generator of interstellar systems
 and luminous universes,
 breathes intelligently, in chords of laughter.

In Resonance light takes place:
 vowels are drowned.
 Vowels, open full and then collapsing
 immediately summon forth alphabets,
 the finest conception of all worlds
 the delicate sinews of being as light.

Light tremors and portends sound—
 opening and closing,
 opening and closing,
 opening and closing,
 almost.

¹ Written by Anna Bonshek, *1 Stands Out* was first published in *Project Reverie*, Exhibition Catalogue, 2004, pp. 15-16; It also references Pablo Neruda’s poem *One Day Stands Out*. Italicized text from Neruda, 1973, pp. 97-101.

*A wind of sounds crashes like a wave
And fishes dwell within it.*

the wind shines in a transparent arc
curving into its own resplendent body.
Symptomatic of an inherently diversifying tendency,
this ocean moving within its own omnipresence,
within its own reverberating, tumultuous domain,
begets a wave appearing distinct but non-particulate.

Here dwells the great fish of 1,
the Subject, as One,
and as object of its own gaze.
Starting billions of fishes in a whirling infinitude,
aggregates of multiple infinities,
numerous and infinitesimal,
ecstatically retreat into 1.

One endless whirlpool breathing,
constructing life by numbers through sound,
here in the Fish of 1.

*Fishes in sound, slow, sharp, moist,
arched masses of gold with drops on their tails,
Tails in mouths, full circle
spinning, spiraling, fishes continue and contain,
contain, embrace and weave threads,
of the soul, the small 1.*

the divisible, the multipliable.

Within the "I" commences the sense/sensation of something—
intensities—moving, flowing, rolling, here and there.

To Resonance the soul rolls

To Resonance the soul rushes

through the sound of "I", drawing divine laughter.

Golden "I", silver "I", transparent "I".

percolating in the speech of 1000's of deities,
comes back to its own Resonance.

Husks of silence, of turbid blue, stop.

silence is 1.

It is a limitless ocean

not yet gold.

Conceptualizing colour within its all-seeing gaze,
intention spawns a notion of blue, a notion of gold,
a notion of silver, almost white light,
pure transparency, in togetherness,
like sheets of glass layered, discrete,
but indistinguishable from the “I”.

Light is the residue of the soul rising
sound falling, rolling, expanding.

*From silence the soul rises
and in the morning of the day it collapses
and plummets into the sounding light.*

*From Resonance comes the day
of increase and degree*

and cycles of time in segments,
minute, unseeming, shaping a divine quality
in tune with the nature of time divided.

Dividing each moment of every being,
every thing, every creature’s day,
a segment coalesces to earth, water, heat, air, space—
via drops spreading in circles, bursting forth
in straight lines, forever progressing beyond
the demarcation of east, west, north and south.

*Drops that from the heart of heaven
fall like celestial blood,*

transport particles of celestial breath,
resounding in chords of laughter,
weaving a fabric of energy registered endlessly
as sensation, will, desire, matter,
the here and there, past and future,
ever present,
in Resonance.

This page intentionally left blank

BIBLIOGRAPHY

Introduction

- Bonshek, A., 1996, *Art—A Mirror of Consciousness: Applying Universal Principles in Art and Theory on the Basis of the Description of Pure Consciousness, the Universal Source of Individual Consciousness, History, Culture, Language and Art, According to Maharishi's Vedic Science—With an Analysis of the Vastusutra Upanisad*, Dissertation Abstracts International, Ann Arbor, Michigan, 9701127.
- 2001, *Mirror of Consciousness: Art, Creativity and Veda*, Motilal Banarsidass, Delhi, India
- Fergusson, L., 1991, *Maharishi's Vedic Science and Post-Secondary Art Education*, Dissertation Abstracts International, 52(9), Ann Arbor, Michigan.
- Kuspit, D., 1987, "Conflicting Logics: Twentieth-century Studies at the Crossroads," *The Art Bulletin*, LXIX, pp. 117-132.
- 1990, "The Problem of Art in the Age of Glamor," *Art Criticism*, 6(1), pp. 32-42.

Part One: Infinite Mind/Infinite Body

—Awakening & Re-Envisioning Consciousness

- Alexander, C., Boyer, R., & Alexander, V., 1987, "Higher States of Consciousness in the Vedic Psychology of Maharishi Mahesh Yogi: A Theoretical Introduction and Research Review", *Modern Science and Vedic Science*, 1(1), pp 88-126.
- Arnason, H., (Ed.), 1971, *Calder*, Thames and Hudson, London.
- Arnheim, R., 1969, *Visual Thinking*, University of California Press.
- Arthur, M., Brett, G., de Zegher, C., 1997, *Mona Hatoum*, Phaidon, London.
- Ascott, R., (Ed.) 1999, *Reframing Consciousness*, Intellect, UK.
- Avedon, J., (Ed.), 1998, *The Buddha's Art of Healing: Tibetan Paintings Rediscovered*, Rizzoli, New York.

- Balakier, J., 1991, "Thomas Traherne's Concept of Felicity, the "Highest Bliss", and the Higher States of Consciousness of Maharishi Mahesh Yogi's Vedic Science and Technology", *Modern Science and Vedic Science*, 4(2), pp. 136-175.
- Bang Larsen, L., 2002, "Shirin Neshat", *Art Now: 137 Artists at the Rise of the New Millennium*, (Grosenick, U., & Riemschneider, B., Eds.), Taschen, Cologne, pp. 332-333.
- Banquet, J.P., 1973, "Spectral Analysis of the EEG in Meditation", *Electroencephalography and Clinical Neurophysiology*, 35, pp. 143-151.
- Banquet, J.P., & Sailhan, M., 1976, *Qualified EEG Spectral Analysis of Sleep and Transcendental Meditation*, in *Scientific Research on the Transcendental Meditation Program: Collected Papers*, Volume 1, Maharishi European Research University Press, pp. 182-186.
- Bonshek, A., 1989, *The Mechanics of Desire and the Role of Memory in the Growth to Higher States of Consciousness*, paper submitted to the Department of the Science of Creative Intelligence, Maharishi International University, Iowa.
- 1996a, *Art—A Mirror of Consciousness*, Dissertation Abstracts International, Ann Arbor, Michigan, 9701127.
- 1996b, "In the Mind of the Beholder," *Tractor*, 3(4), pp. 47-49.
- 1997, "Travels in Virtual Reality", *The Iowa Source*, November, p. 11.
- 1998, "The Art of Flight," *Tractor*, 6(1), pp. 19-24.
- 2000, "Transformations within the Gap: Liminality and Principles of Vedic Language Theory in Performance", *Body, Space and Technology*, 1(1).
- 2001a, *Mirror of Consciousness: Art, Creativity and Veda*, Motilal Banarsidass, Delhi, India.
- 2001b, *Reverie II—Exploring the Spiritual in Terms of the Mathematical Unfoldment of Creation within Consciousness: A Collaborative Video Installation*, Paper presented at *The Arts and the Spiritual*, School of Visual Arts Fifteenth Annual National Conference on Liberal Arts and the Education of Artists, New York.
- 2004, "Reverie II—Revelation, Consciousness and Peace", *Consciousness, Literature and the Arts*, April.
- Bonshek, C., 2003, "Deleuzian Sensation and Unbounded Consciousness in Reverie I", *Body, Space and Technology*, 3(3).
- Borges, J. L., 1964, *Labyrinths*, New Directions, New York.

- Brett, G., 2000, *The Century of Kinesthesia*, in *Force Fields: Phases of the Kinetic*, [Exhibition Catalogue], Museu d'Art Contemporani de Barcelona (& Hayward Gallery, London), pp. 9-68.
- Brown, B., 1999, "Memory Maps and the Nazca", in *Reframing Consciousness*, (Ascott, R., Ed.), Intellect Books, Exeter, UK, pp. 47-51.
- Cain, M., 1988, "Art and the Unified Field", *Modern Science and Vedic Science*, 2(3), pp. 280-297.
- Calvino, I., 1972, *Invisible Cities*, Harcourt Brace Jovanovich, New York.
- Chediak, M., 2005, "Tower II Planned with the Maharishi in Mind," *The Washington Post*, Monday, June 20.
- Chipp, H., 1968, *Theories of Modern Art*, University of California Press.
- Chung, T., 2004, *Social and Political Order in Chinese Tradition and Future Development*, in *Rta: The Cosmic Order*, (Ed., Khanna, M.), Indira Gandhi National Centre for the Arts, New Delhi, pp. 153-174.
- Clermont, L., 1998, *Jainism and the Temples of Mount Abu and Ranakpur*, Prakash Books, New Delhi.
- Comp, T. Allan, 1997, "The Regeneration Project," *Public Art Review: Regarding Land*, 8(2), issue 16, pp. 15-18.
- Coomaraswamy, A., 1997, *The Dance of Shiva: Essays 3-4*, in *Aesthetics: The Classic Readings*, (Cooper, D., Ed.), Blackwell, Oxford, pp. 193-207.
- Coward, H., 1990, *Derrida and Indian Philosophy*, State University of New York Press, New York.
- Coldwell, P. 2000, "The First Hundred Days," *Concerning Memory*, The London Institute, pp. 6-7.
- 2002, *Case Studies*, [Exhibition Catalogue], London Print Studio and The British Council, London.
- Craven, R., 1997, *Indian Art*, Thames and Hudson, New York.
- Critchlow, K., 1978, "Notes on the Geometry of Stonehenge with Comments on the Ming Tang," *Glastonbury and Britain: A Study in Patterns*, R.I.L.K.O, London, pp. 51-65.
- Davies, C., 1999, *Ephemere: Landscape, Earth, Body and Time in Immersive Virtual Space*, in *Reframing Consciousness*, (Ascott, R., Ed.), Intellect Books, Exeter, UK, pp. 196-201.
- Davies, J., & Alexander, C., 2005, "Alleviating Political Violence through Reducing Collective Tension: Impact Assessment Analyses

- of the Lebanon War”, *Applications of Maharishi Vedic Science, Journal of Social Behavior and Personality*, Special Issue, 17(1), pp. 285-338.
- De Botton, A., 2006, “Feeling Beauty, *The Age Magazine*, April 29, pp. 27-33.
- Dehejia, V., 1997, *Indian Art*, Phaidon, London.
- Deleuze, G., & Guattari, F., 1987, *A Thousand Plateaus: Capitalism and Schizophrenia*, University of Minnesota Press, Minneapolis.
- Dillbeck, M., 1989, “Experience of the Ved, Realization of the Cosmic Psyche by Direct Perception: Opening Individual Awareness to the Self-Interacting Dynamics of Consciousness,” *Modern Science and Vedic Science*, 3(2), pp.117-154.
- 1991, “The Bhagavad-Gita: A Case Study in Vedic Psychology,” *Modern Science and Vedic Science*, 4(2), pp.96.
- Eagleton, T., 2000, *The Idea of Culture*, Blackwell, Oxford.
- Egenes. L., 2005, *High Marks for Meditation*, *L.A. Yoga*, 4(8) November/December.
- Elliott, P., (Ed.) 1995a, “Shirazeh Houshiary, Round Dance”, in *Contemporary British Art in Print*, Scottish National Gallery of Art, Paragon Press, London, pp. 116-119.
- 1995b, “Hamish Fulton: Fourteen Works 1982-89, A Twelve Day Walk and Eighty Four Paces, Ten Toes Towards the Rainbow,” in *Contemporary British Art in Print*, Scottish National Gallery of Art, Paragon Press, London, pp. 86-103.
- English Heritage, 1995, *Stonehenge and Neighbouring Monuments*, English Heritage, London.
- Fairchild, J., 1998, “The Digital Revolution”, *The Iowa Source*, November, 1998, p. F4.
- Fergusson, L., 1991, *Maharishi’s Vedic Science and Post-Secondary Art Education*, Dissertation Abstracts International, 52(9), Ann Arbor, Michigan.
- 1992, “Field Independence and Art Achievement in Meditating and Non-Meditating College Students,” *Perceptual and Motor Skills*, 75, pp. 1171-1175.
- 1993, “Field Independence, Transcendental Meditation, and Achievement in College Art: A Re-examination,” *Perceptual and Motor Skills*, 77, pp. 1104-1106.
- Fergusson, L., & Bonshek, A., 1992, “Bill Witherspoon”, *New Art Examiner*, February/March, p. 46.

- 1996, "Health and Postsecondary Art Achievement: A Study of Four Universities in Iowa," *College Student Journal*, 30(1), pp. 105-111.
- Fletcher, B., 1946, *A History of Architecture on the Comparative Method*, Batsford, London.
- Fuller, P., 1983, *Art and Psychoanalysis*, Writers and Readers, London.
- Gablik, S., 1992, *The Reenchantment of Art*, Thames and Hudson, New York.
- 1998, "The Nature of Beauty in Contemporary Art," *New Renaissance* 8(1). Renaissance Universal.
- 2005, *Sacred Wild: Opening to Shakti*, [Exhibition Essay] Apexart, New York.
- Gardner, H., 1991, *Art Through the Ages*, Harcourt, Brace & Jovanovich, Florida.
- Gibson, R., 2002-2003, "Innovation Squared", *POL Oxygen*, 1, pp. 102-113.
- Gómez-Peña. G., 1996, *The New World Border: Prophecies, Poems and Loqueras for the End of the Century*, City Lights Books, San Francisco.
- Graham, W., 2003-2004, "Up the Garden Path", *POL Oxygen*, 6, pp. 135-143.
- Green, K., 1993, "Brain Writing and Derrida," *Australian Journal of Philosophy*, 71(3) pp. 238-255.
- Green, M., 1993, "The Sun Gods of Ancient Europe," in *The Sun: Symbol of Power and Life*, (Ed. Singh, M.), Abrams, New York, pp. 294-309.
- Guy, J., 1997, "Indian Dance in the Temple Context," in *Dancing to the Flute: Music and Dance in Indian Art*, Art Gallery of New South Wales, Sydney.
- Hagelin, J., 1989, "Restructuring Physics from Its Foundation in the Light of Maharishi's Vedic Science", *Modern Science and Vedic Science*, 3(1), pp. 2-72.
- Hagelin, J., & Herriott, S., 1991, "Unified Field Based Economics", *Modern Science and Vedic Science*, 4(2), pp. 72-134.
- Hancock, G., & Faiia, S., 1999, *Heaven's Mirror: Quest for the Lost Civilization*, Penguin, London.

- Haney, W., 1989, "The Theory of Deconstruction and Maharishi's Vedic Science", *Modern Science and Vedic Science*, 2(4), pp. 414-441.
- 2000, "A Vedic Science Based Poetics: Toward a New Theory of Literature", *Modern Science and Vedic Science*, 10(1), pp. 3-18.
- 2006, *Cyberculture, Cyborgs and Science Fiction: Consciousness and the Posthuman*, in *Consciousness, Literature and the Arts*, [Ed. D. Meyer-Dinkgräfe], Amsterdam, Rodopi.
- Hanson, D. T., 1997, *Waste Land: Meditations on a Ravaged Landscape*, Aperture, New York.
- 2005, "The Cloud of Unknowing", *Namarupa*, 4, pp. 9-15.
- Hayward Gallery, 2000, *Sonic Boom: The Art of Sound*, [Exhibition Catalogue], The South Bank Center, London.
- Heim, M., 1998, *Virtual Realism*, Oxford University Press, Oxford.
- Honour, H., & Fleming, J., 1995, *The Visual Arts: A History*, Prentice Hall, New Jersey.
- Hughes, D., 2000, "Holistic Building", *Building for a Future*, Green Building Press, 10 (3).
- Huyler, S., 1992, "Respecting Material Spirit," *Asian Art*, v(3), pp. 2-7.
- Institute of Science, Technology and Public Policy, 1994, *Results of the National Demonstration Project to Reduce Violent Crime and Improve Governmental Effectiveness in Washington D.C., June 7 to July 30, 1993*, Institute of Science, Technology and Public Policy Technical Report, September, ITR-94: 1.
- Ione, A., 2005, *Innovation and Visualization: Trajectories, Strategies, and Myths*, in *Consciousness, Literature and the Arts*, [Ed. D. Meyer-Dinkgräfe], Amsterdam, Rodopi.
- Ironbridge Gorge Museum Trust, 1996, *Ironbridge: A World Heritage Site*, Jarrold Publishing.
- Isaacs, J., 2004, *Spirit Country: Contemporary Australian Aboriginal Art*, Hardie Grant Books, Fine Arts Museum of San Francisco, California.
- Jana, R., 2004, "Anish Kapoor: Between Poetry and Prose", *Art AsiaPacific*, 40, pp. 24-25.
- Jansen, G., 2002, "Mariko Mori," *Art Now*, [Grosenick, U., & Riemschneider, B., Eds.], Taschen, Cologne, pp. 304-305.

- Jitmananda, S., 2004, "Rta Satyam—Modern Relevance," *Rta: The Cosmic Order*, (Khanna, M., Ed.), Indira Gandhi National Centre for the Arts, New Delhi, pp. 13-34.
- Jones, D., 1978, "Surface, Pattern, and Light," in *Architecture of the Islamic World*, [Ed., G. Michell], Thames and Hudson, London.
- Kaul, A., & Chattopadhyay, S., (Eds.), 1999, "Manifestation of Nature: Srsti Vistara", in *Kalatattvakosa: A Lexicon of Fundamental Concepts of the Indian Arts*, [Ed., K. Vatsyayan], Volume IV, Indira Gandhi National Centre for the Arts & Motilal Banarsidass, Delhi, India.
- Khanna, M., 1979, *Yantra: The Tantric Symbol of Cosmic Unity*, Thames and Hudson, London.
- (Ed.), 2004, *Rta: the Cosmic Order*, Indira Gandhi National Centre for the Arts, New Delhi.
- King, N., 1999, "Psychology of Retrieval: Personal and Fictional Archives", in *Artlink*, 19(1), pp. 49-51.
- Kirker, A., 1999, "Prawat Laucharoen, Phatyos Buddhacharoen and Bundith Phunsombatert", *Art Asia Pacific*, 24, pp. 60-65.
- Kissick, J., 1993, *Art: Context and Criticism*, Brown and Benchmark, Hong Kong.
- Kuspit, D., 1990, "A Psychoanalytic Understanding of Aesthetic Disinterestedness," *Art Criticism*, 6(2), pp. 72-80.
- Langton, M., 2000, "Sacred Geography: Western Desert Traditions of Landscape Art," in *Papunya Tula: Genesis and Genius*, (Eds., H. Perkins & H. Fink), Art Gallery of New South Wales, Sydney, pp. 258-267.
- Lee, W. C., 1999, "Lee Wen," in *Beyond the Future: The Third Asia-Pacific Triennial of Contemporary Art*, Queensland Art Gallery, Brisbane, pp. 130-131.
- Lipman, J., 1986, *Frank Lloyd Wright and the Johnson Wax Buildings*, Rizzoli, New York.
- Lippard, L., 1983, *Overlay: Contemporary Art and the Art of Prehistory*, Pantheon Books, New York.
- Livingstone, M., 2000, "Bill Viola," *Encounters: New art From Old*, [Exhibition Catalogue], The National Gallery, London, pp. 309-323.
- Lovejoy, M., & Jacob, P., 1999, "Negotiating New Systems of Perception: Darshan, Diegesis and Beyond", in *Reframing Consciousness*, (Ascott, R., Ed.), Intellect Books, Exeter, UK, pp. 61-66.

- Lynton, N., 1990, *David Nash: Sculpture 1971-90*, Serpentine Gallery, London.
- Madras Craft Foundation, 2001, *DakshinaChitra: A Glimpse of South India*, Madras Craft Foundation, Chennai.
- Madras Craft Foundation, DakshinaChitra, & Borås Konstmuseum, 2003, *Sites of Recurrence: A Workshop in Contemporary Art*, Madras Crafts Foundation, Chennai.
- Maharishi Mahesh Yogi, 1966, *The Science of Being and Art of Living*, Age of Enlightenment Press, Washington, DC.
- 1967, *Maharishi Mahesh Yogi on the Bhagavad-Gita: A New Translation and Commentary: Chapters 1-6*, International SRM Publications, London.
- 1969, *Maharishi Mahesh Yogi on the Bhagavad-Gita: A New Translation and Commentary: Chapters 1-6*, Penguin, London.
- 1970, *Art and the Artist*, [Lecture given at Kössen, West Germany]. In M.Cain (Ed.) *Art and the Science of Creative Intelligence: Interdependence of Parts and Whole—Boundaries Capturing the Boundless*, pp. v-viii. Fairfield, IA: Maharishi International University.
- 1977, *Creating an Ideal Society*, Maharishi European University Press, Rheinweiler, W. Germany.
- 1978, *Enlightenment to Every Individual and Invincibility to Every Nation*, Maharishi European Research University Press, West Germany.
- 1980, *Science Consciousness and Ageing: Proceedings of the International Conference*, Maharishi European Research University Press, Rheinweiler, West Germany.
- 1985, “Inaugural Address of His Holiness Maharishi Mahesh Yogi”, in *Maharishi Mahesh Yogi: Maharishi Vedic University Inauguration*, Washington DC.
- 1986, *Life Supported by Natural Law: Lectures by His Holiness Maharishi Mahesh Yogi to the World Assembly on Vedic Science July 9-17, 1985*, Washington D.C., Age of Enlightenment Press.
- 1993, *Maharishi’s Absolute Theory of Government: Automation in Administration*, Maharishi Vedic University Press, Holland.
- 1994, *Maharishi Vedic University: Introduction*, Maharishi Vedic University Press, Holland.

- 1995a, *Maharishi's Absolute Theory of Government: Automation in Administration*, Maharishi Ved Vigyan Vishwa Vidya Peetham, India.
- 1995b, *Maharishi University of Management: Wholeness on the Move*, Maharishi Vedic University Press, Holland.
- 1995c, *Maharishi University of Management: Wholeness on the Move*, [2nd Edition], Maharishi Ved Vigyan Vishwa Vidya Peetham, India.
- 1996a, *Maharishi's Absolute Theory of Defence: Sovereignty in Invincibility*, Maharishi Vedic University, India.
- 1996b, *Maharishi Forum of Natural Law and National Law for Doctors*, Maharishi Vedic University, India.
- 1997a, *Constitution of India Fulfilled through Maharishi's Transcendental Meditation*. Maharishi Mahesh Yogi Vedic Vishwavidyalaya, India.
- 1997b, *Celebrating Perfection in Education*, Maharishi Vedic University Press, India.
- 1997c, *Maharishi Vedic Astrology and Maharishi Yagya Programs*, Maharishi Vedic Foundation, New Hampshire.
- 1998, *Celebrating Perfection in Administration: Creating Invincible India*, Maharishi Vedic University, India.
- Maharishi Global Construction, 1997, *Design According to Maharishi Sthapatya Veda: Promoting Health, Happiness, and Good Fortune*, Maharishi Global Construction, Iowa.
- Maharishi Global Vedic Observatories Corporation, 1996, *Maharishi Vedic Observatory*. Maharishi Global Vedic Observatories Corporation, Iowa.
- Maharishi Vedic University, 1987, *Maharishi's Programme to Create World Peace: Global Inauguration*, Maharishi Vedic University Press, The Netherlands.
- 1994, *Maharishi Vedic University: Introduction*, Maharishi Vedic University Press, Holland.
- 1998, *Building for the Health and Happiness of Everyone: Creating Ideal Housing in Harmony with Natural Law*, Maharishi Vedic University, The Netherlands.
- Mannikka, E., 1997, *Angkor Wat: Time, Space, and Kingship*, Allen & Unwin, Australia.
- McEvilley, T., 1992, *Art and Otherness: Crisis in Cultural Identity*, McPherson, New York.

- Meyer-Dinkgräfe, D., (Ed.), 1996, "Consciousness and the Actor", *Theatre, Film and Television Series XXX*, Peter Lang, Berlin.
- 1999, "Consciousness and the Concept of Rasa," *Performance and Consciousness, Performing Arts International*, 1(4), pp. 103-115.
- 2003, "Consciousness, Theatre and Terrorism," *Consciousness, Literature and the Arts*, 4(3).
- 2005, *Theatre and Consciousness: Explanatory Scope and Future Potential*, Intellect, UK.
- 2006, "Cold, Dark, Soft Matter: Research & Atmosphere in the Theatre," *Body, Space & Technology*, 6.
- Mitchell, W., 1999, *e-topia: "urban life Jim—but not as we know it"*, MIT Press, Cambridge, MA.
- Monier-Williams, M., 1993, *Sanskrit-English Dictionary*, Motilal Banarsidass, Delhi, India.
- Mookerjee, A., & Khanna, M., 1977, *The Tantric Way: Art, Science, Ritual*, Thames and Hudson, London.
- Morley, S., 1999, "Art of Darkness," *Tate*, 18, pp. 37-39.
- Muehlman, J., 1993, *Maharishi's Vedic Mathematics at the Elementary Level: Improving Achievement, Affect, and Mental Mathematics through Vedic Sutra Based Computation*, Dissertation Abstracts International, Ann Arbor, Michigan.
- Nader, 2000, *Human Physiology: Expression of Veda and the Vedic Literature*, Maharishi Vedic University, The Netherlands.
- Nath, A., 1996, *Jaipur: The Last Destination*, Tauris Parke Books, London.
- Neich, R., & Pendergrast, 2004, *Pacific Tapa*, David Bateman, New Zealand.
- Neruda, P., 1973, *Residence on Earth*, (Trans. Walsh, D.) New Directions, New York.
- Olson, T., & Sorflaten, J., 2005, "Empirical Investigation of the Effects of Maharishi Gandharva Veda Music During Live Concerts", *Applications of Maharishi Vedic Science, Journal of Social Behavior and Personality*, Special Issue, 17(1), pp. 571-588.
- Orme-Johnson, D., 1988, *The Cosmic Psyche, An Introduction to Maharishi's Vedic Psychology: The Fulfillment of Modern Psychology*, *Modern Science and Vedic Science*, 2(2), pp. 113-164.
- 1988, "The Cosmic Psyche as the Unified Source of Creation: Verification through Scientific Principles, Direct Experience and

- Scientific Research*", *Modern Science and Vedic Science*, 2(2), pp. 164-221.
- 1992, "Proceedings of Approaches to Creating a Stable World Peace", *Modern Science and Vedic Science*, 5(1-2).
- 2005, "Applications of Maharishi Vedic Science to Collective Consciousness and Peace Studies", *Applications of Maharishi Vedic Science, Journal of Social Behavior and Personality*, Special Issue, 17 (1), pp. 277-283.
- Orme-Johnson, R., 1987, "A Unified Field Theory of Literature", *Modern Science and Vedic Science*, 1(3), pp. 322-373.
- Pande, A., 2002, "The Crossing Project: A Living Document on Benaras", *The India Habitat Centre's Journal*, 2, pp. 73-76.
- Paterson, T., 2002, "Gold Star Chart Points Way to German 'Stonehenge'", *Telegraph*, 17 March.
- Pearson, C., 2000, *The Complete Book of Yogic Flying*, Maharishi University of Management Press, Iowa.
- Pellman, R., & Pellman, K., 1984, *The World of Amish Quilts*, Good Books, Pennsylvania.
- Petherbridge, D., 1984, *Tess Jaray: Prints and Drawings 1964-84*, [Exhibition Catalogue], The Ashmolean Museum, Oxford.
- Polli, A., 1999, *Virtual Space and the Construction of Memory*, in *Reframing Consciousness*, (Ascott, R., Ed.), Intellect Books, Exeter, UK, pp. 42-47.
- POL Oxygen, 2003-2004, "Next/Future Architecture", *POL Oxygen*, 6, pp. 49-62.
- Porter, V., 2006, *Word into Art: Artists of the Modern Middle East*, [Exhibition Catalogue], British Museum, London.
- Pule, J., & Thomas, N., 2005, *Hiapo: Past and Present in Niuean Barkcloth*, University of Otago Press, New Zealand.
- Punt, M., 1999, *Casablanca and Men in Black: Consciousness, Remembering and Forgetting*, in *Reframing Consciousness*, (Ascott, R., Ed.), Intellect Books, Exeter, UK, pp. 38-42.
- Rajah, N., & Srinivasan, R., 1999. *Sacred Art in a Digital Era or The Internet and the Immanent Place in the Heart*, in *Reframing Consciousness*, (Ascott, R., Ed.), Intellect Books, Exeter, UK, pp. 56-61.
- Rajan, C., 2004, "Rta: The Ordering Principle in the Cosmos and in Art," in *Rta: the Cosmic Order*, (Ed., Khanna, M.), Indira Gandhi National Centre for the Arts, New Delhi, pp. 267-288.

- Rawson, P., 1973, *Tantra: The Indian Cult of Ecstasy*, Thames and Hudson, London.
- Rossi, B., 1998, *From the Ocean of Painting: India's Popular Paintings 1589 to The Present*, Oxford University Press, Oxford.
- Rothenberg, J., 1999, "Remembering How to Fly: An Exploration of Eugene Ionesco's *A Stroll in the Air* as Understood through the Transcendental Meditation-Sidhi Program and Yogic Flying", *Modern Science and Vedic Science*, 9(1), pp. 103-116.
- Routt, T., 2005, *Quantum Computing: The Vedic Fabric of the Digital Universe*, Ist World Publishing, Iowa, USA.
- Rugoff, R., 1999, "Lost Horizons," *Tate*, 18, pp. 22-28.
- Sands, W., 1994, *Maharishi's Absolute Theory of Government in the Valmiki Ramayana*, Dissertation Abstracts International, 55, 6.
- 1998, "Natural Law in the Valmiki Ramayan in the Light of Maharishi Vedic Science and Technology", *Modern Science and Vedic Science*, 8(1), pp. 2-35.
- Searle, J., 2002, *Consciousness and Language*, Cambridge University Press.
- Seth, P., 1992, "A Dialogue with Serpents: A Snake Ritual of Kerala," *Asian Art*, v(3), pp. 53-79.
- Sharma, V. N., 1995, *Sawai Jai Singh and His Astronomy*, Motilal Banarsidass, India.
- Singh, M., 1993a, (Ed.) *The Sun: Symbol and Power of Life*, Abrams, New York.
- 1993b, "Solar Universality of South Asian Cultures," *The Sun: Symbol and Power of Life*, New York, Abrams, pp. 177-190.
- Sinha, A., 1999, "Ravinder Reddy: The Heterogeneous Aesthetics of Ravinder Reddy's Sculptures," in *Beyond the Future: The Third Asia-Pacific Triennial of Contemporary Art*, Queensland Art Gallery, Brisbane, Australia, pp. 56-57.
- Stelarc, 1997, "From Psycho to Cyber Strategies: Prosthetics, Robotics and Remote Existence", *Cultural Values*, 1(2), p. 241.
- Stungo, N., 2000, *Charles and Ray Eames*, Carlton Books, London.
- Tao, H., 1993, "The Sun in Chinese Culture," *The Sun: Symbol and Power of Life*, (Ed. Singh, M.), Abrams, New York, pp. 153-166.
- Thompson, R., 2004, *Vedic Cosmography and Astronomy*, Motilal Banarsidass, Delhi.
- Travis, F., Bonshek, A., Butler, V., Rainforth, M., Alexander, C., Khare, R., & Lipman, J., 2005, "Can a Building's Orientation Affect

- the Quality of Life of the People Within? Testing Principles of Maharishi Sthapatya Veda*", *Applications of Maharishi Vedic Science, Journal of Social Behavior and Personality*, Special Issue, 17(1), pp. 553-564.
- Travis, F., Munly, K., Olson, T., & Sorflaten, J., 2005, "Maharishi Vedic Science Addresses the "Hard" problem of Consciousness", *Applications of Maharishi Vedic Science, Journal of Social Behavior and Personality*, Special Issue, 17(1), pp. 123-135.
- Tripathi, K.D., 2004, *Order and Plenitude: Creativity and Experience*, in *Rta: the Cosmic Order*, (Ed., Khanna, M.), Indira Gandhi National Centre for the Arts, New Delhi, pp. 211-219.
- Turkle, S., 1997, *Life on the Screen*. Keynote Address. The Eighth International Symposium on Electronic Art (ISEA'97), Chicago.
- Turner, C., & Clark, C., 1999, *Dadang Christanto: Speaking for Humanity: Art and Social Injustice*, in *Beyond the Future: The Third Asia-Pacific Triennial of Contemporary Art*, Queensland Art Gallery, Brisbane, pp. 200-201.
- University of Iowa Museum of Art, 1989, *Art of the Red Earth People: The Mesquakie of Iowa*, [Exhibition Brochure], January 14-February 26.
- Verdet, J-P., 1992, *The Sky: Order and Chaos*, New Horizons, Thames and Hudson, London.
- Waghorne, J., "Dressing the Body of God: South Indian Bronze Sculpture in its Temple Setting," *Asian Art*, v(3), pp. 9-34.
- Wallace, R., K., 1970, "Physiological Effects of Transcendental Meditation", *Science*, 167, pp. 1751-1754.
- 1988, "Vedic Physiology", *Modern Science and Vedic Science*, 2(1), pp. 3-59.
- Wallace, R., K. & Benson, H., 1972, "The Physiology of Meditation", *Scientific American*, 226(2), pp. 84-90.
- Wallace, R.K., Benson, H., & Wilson, A.F., 1971, "A Wakeful Hypometabolic Physiological State", *American Journal of Physiology*, 221(3), pp. 795-799.
- Walton, K., Cavanaugh, K., & Pugh, N., 2005, "Effect of Group Practice of the Transcendental Meditation Program on Biochemical Indicators of Stress in Non-Meditators: A Prospective Time Series Study", *Applications of Maharishi Vedic Science, Journal of Social Behavior and Personality*, Special Issue, 17(1), pp. 339-373.

- Wees, W., 2000, *James Whitney*, in *Force Fields: Phases of the Kinetic*, [Exhibition Catalogue], Museu d'Art Contemporani de Barcelona (& Hayward Gallery, London), pp. 278-281.
- Wells, G., & Boothby, S., 1995, "Absolute Principles of Society in Maharishi's Commentary on the Bhagavad-Gita," *Modern Science and Vedic Science*, 6(1), pp. 2-31.
- Zalesskaya, V., & Piatnitsky, Y., 1993, "The Sun in Byzantine and Russian Art," in *The Sun: Symbol and Power of Life*, New York, Abrams, pp. 251-266.

Part Two: Expressions, Visions, Perspectives

7 Agnes Martin on Beauty and Perfection in Art

Alexander, C., Boyer, R., & Alexander, V., 1987, "*Higher States of Consciousness in the Vedic Psychology of Maharishi Mahesh Yogi: A Theoretical Introduction and Research Review*," *Modern Science and Vedic Science*, 1, pp. 88-126.

Alloway, L., 1973, "Agnes Martin," *Artforum*, XI(8), pp. 136-140.

Biennale of Sydney, 1986, *Origins, Originality and Beyond*, (Catalogue of the Sixth Biennale of Sydney), Author: Sydney, Australia.

Bragdon, C., 1978, *The Beautiful Necessity: Architecture as Frozen Music*, Quest, U.S.A.

Cain, M., 1985, *Art and Consciousness*, Paper presented at the *World Assembly on Vedic Science*, Washington D.C., July.

Chandler, K., 1987, "*Modern Science and Vedic Science: An Introduction*," *Modern Science and Vedic Science*, 1, pp. 5-26.

Hagelin, J., 1985, Lecture at Nanjing University, China, in *Maharishi International University: Scholarly Exchange with the Universities of China*, Age of Enlightenment Press, Washington DC., April.

Maharishi Mahesh Yogi, 1970, *Art and the Artist*, [Lecture given at Kössen, West Germany]. In M.Cain (Ed.) *Art and the Science of Creative Intelligence: Interdependence of Parts and Whole—Boundaries Capturing the Boundless*, pp. v-viii. Fairfield, IA: Maharishi International University.

———1986, *Life Supported by Natural Law*. Age of Enlightenment Press, Washington DC.

Martin, A., 1979, Untitled paper presented at the *College Art Association Caucus on Art and Consciousness*, Washington D.C., February.

McEvilley, T., 1987, "Grey Geese Descending": The Art of Agnes Martin, *Artforum*, 25(10), pp. 94-99.

8 Unified Field Based Art Education:

Toward a Socially Responsible College Art Curriculum

Alexander, C.N., & Boyer, R.W., 1989, "*Seven States of Consciousness: Unfolding the Full Potential of the Cosmic Psyche in Individual Life through Maharishi's Vedic Psychology*," *Modern Science and Vedic Science*, 2, pp. 325-371.

- Arts Management, 1989, "Arts Community Meets a Congressional Threat," *Arts Management*, 162, September-October, p. 1.
- Bonshek, A., & Fergusson, L., 1988, *Signs of Reconciliation: The Recent Work of Michael Kane Taylor*, Institute for the Creative Arts, Fairfield, Iowa.
- Brown, M., 1989, "Higher Education for Higher Consciousness: A Study at Maharishi International University". In R.A. Chalmers, G. Clements, H. Schenkluhn, & M. Weinless [Eds.], *Scientific Research on the Transcendental Meditation and TM-Sidhi Programme: Collected Papers (Volume 2)*, Maharishi Vedic University Press, Vlodrop, The Netherlands, pp. 985-999.
- Cone, T., 1989, "Art and the Law," *Arts Magazine*, 64(3), November, pp. 13-14.
- Dillbeck, S.L., & Dillbeck, M.C., 1987, "The Maharishi Technology of the Unified Field in Education: Principles, Practice, and Research", *Modern Science and Vedic Science*, 1, pp. 383-431.
- Fergusson, L., 1989, "Field-Independence, Synaesthesia and their Relationship to Success in a College Art program: Empirical Research at Maharishi International University", Paper presented to the Third National Conference on the Liberal Arts and the Education of Artists, The School of Visual Arts, New York, November 9-11.
- Fox, N., 1989a, "NEA under Siege: Artwork Sparks Congressional Challenge to Agency's Reauthorization," *New Art Examiner*, 16(1), Summer, pp. 18-23.
- 1989b, "Helms Ups the Ante", *New Art Examiner*, 17(2), October, pp. 20-23.
- Fulton, J., & Seaman, B., 1989, "The Flag Fracas," *New Art Examiner*, 16(9), May, pp. 30-32.
- Gablik, S., 1989a, "Deconstructing Aesthetics: Towards A Responsible Art", *New Art Examiner*, 16(5), January, pp. 32-35.
- 1989b, "Art Beyond the Rectangle: A Call for "Useful" Art," *New Art Examiner*, 17(4), December, pp. 20-24.
- Gelderloos, P., & van den Berg, W.P., 1989, "Maharishi's TM-Sidhi Program: Participating in the Infinite Creativity of Nature to Enliven the Totality of the Cosmic Psyche in all Aspects of Life," *Modern Science and Vedic Science*, 2, pp. 373-412.
- Hagelin, J., 1987, "Is Consciousness the Unified Field: A field Theorist's Perspective," *Modern Science and Vedic Science*, 1, pp. 28-87.

- Hochfield, S., 1989, "Nation: Flag Furor," *ARTnews*, 88(6), Summer, pp. 42-47.
- 1990, "Caught in the Crossfire: Art and the NEA," *ARTnews*, 89(1), January, pp. 146-149.
- Indiana, G., 1989, "Democracy, Inc." *Artforum*, September, pp. 11-12.
- Lester, B.P., 1987, "Unified Field Based Computer Science: Towards a Universal Science of Computation", *Modern Science and Vedic Science*, 1, pp. 267-321.
- Levi Strauss, D., 1990, "Chains of Silver", *Artscribe*, 79, January-February, pp. 12-13.
- Loughery, J., 1990, "Frohnmayr's Folly," *New Art Examiner*, 17(6), February, pp. 20-25.
- Madoff, S.H., 1989, "Shadowboxing with the Arts," *ARTnews*, 88(7), September, p. 204.
- 1990, "The Kinder, gentler NEA", *ARTnews*, 89(1), January, p. 198.
- Maharishi Mahesh Yogi, 1966, *The Science of Being and Art of Living*, Maharishi International University Press, Livingston Manor, NY.
- 1967, *Maharishi Mahesh Yogi on the Bhagavad-Gita: A new Translation and Commentary with Sanskrit Text*, Penguin, Harmondsworth, GB.
- 1970, *Art and the Artist*, [Lecture given at Kössen, W. Germany]. In M. Cain, *Art and the Science of Creative Intelligence: Interdependence of Part and Whole*, pp. v-viii. Maharishi International University Press, Fairfield, Iowa.
- 1977, *First World Assembly on Law, Justice and Rehabilitation*, Maharishi European University Press, Rheinweiler, West Germany.
- 1985, *Inaugural Address: Maharishi Vedic University Inauguration*. Age of Enlightenment Press, Livingston Manor, New York.
- 1986, *Life Supported by Natural Law: Lectures by His Holiness Maharishi Mahesh Yogi*, Age of Enlightenment Press, Washington D.C.
- Nidich, S, 1975, "A Study of the Relationship of the Transcendental Meditation Program to Kohlberg's Stages of Moral Reasoning", *Dissertation Abstracts International*, 36, 4361A-4362A.
- Nidich, S., & Nidich, R., 1989, "The Transcendental Meditation and TM-Sidhi Program and Moral Development", In R.A. Chalmers, G.

- Clements, H. Schenkluhn, & M. Weinless [Eds.], *Scientific Research on the Transcendental Meditation and TM-Sidhi Programme: Collected Papers (Volume 3)*, Maharishi Vedic University Press, Vlodrop, The Netherlands, pp. 2034-2037.
- Orme-Johnson, D.W., & Dillbeck, M.C., 1987, "Maharishi's Program to Create World Peace: Theory and Research", *Modern Science and Vedic Science*, 1, pp. 207-259.
- Potter, T., 1989, "Letters to the Editor: In Support of Serrano", *New Art Examiner*, 17(4), December, pp. 2-3.
- Sekula, A., 1990, "Some American Notes", *Art in America*, 78(2), February, pp. 39-45.
- Sevigny, M., 1989, "Newer Media and Alternative Curriculum: Changing Perspectives on the Education of Artists", Paper presented to the Third National Conference on the Liberal Arts and the Education of Artists, The School of Visual Arts, New York, November 9-11.
- Wilcox, C, 1990, "Lectures: Suzi Gablik", *New Art Examiner*, 17(5), p. 58.

9 Allegories of Consciousness:

Perfection in Printmaking from the Renaissance

- Harrison, C., Wood, P., & Gaiger, J., 1998, *Art in Theory, 1815-1900: An Anthology of Changing Ideas*, Blackwell, Oxford.

10 Signs of Reconciliation—Prints by Michael Kane Taylor

- Belting, H., 1987, *The End of the History of Art*, University of Chicago Press, Chicago, Illinois.
- Borges, J., L., 1962, *Labyrinths*, New Directions, New York.
- Breeden, S., 1988, "The First Australians," *National Geographic*, 173, 2.
- Fuller, P., 1985, "Post-industrialization and the Visual Arts," *Praxis M: The Western Australian Journal of Contemporary Art*, 8.
- Goldwater, R & Treves, M., (Eds.), 1945, *Artists on Art*, Pantheon, New York.
- Greenberg, C., 1961, *Art and Culture*, Beacon, Boston, Massachusetts.
- Haney, W., 1985, *The Self and the Referent in Critical Theory*, Presented at the 13th Annual Twentieth Century Literature Conference, University of Louisville, February 1985.

- Holloway, M., 1984, *Australian Visions*, Solomon R. Guggenheim Foundation, New York.
- Honour, H., & Fleming, J., 1982, *The Visual Arts: A History*, Prentice-Hall, Englewood Cliffs, New Jersey.
- Janis, S., 1985, *Artnews*, 84(9), New York.
- McEvelley, T., 1984, *Looking Critically: 21 Years of Artforum Magazine*, UNI Press, Ann Arbor, Michigan.
- Mondrian, P., 1919, *Piet Mondrian: Life and Work*, (Trans., Michael Seuphor) Abrams, New York.
- Newman, B., 1948, "The Ides of Art: Six Opinions on What is Sublime in Art," *Tiger's Eye*, 6(53), New York.
- Pearson, K. A., 1997, "Life Becoming Body: On the 'Meaning' of Post Human Evolution", *Cultural Values: Journal of the Institute for Cultural Research*, Lancaster University, 1(2), pp. 219-240, Blackwell, Oxford.
- Smith, B., 1959, "The Truth about Antipodeans," *Praxis M: The Western Australian Journal of Contemporary Art*, 8.
- Taaffe, P., 1986, *Origins, Originality + Beyond: The Biennale of Sydney*, Biennale of Sydney Limited, New South Wales.
- Taylor, M., 1985, *Africa and Beyond*, [Exhibition Catalogue], Queensland College of Art, Brisbane.
- 1988, Personal interview, Brisbane, Australia.
- Waldman, D., 1984, *Australian Visions*, Solomon R. Guggenheim Foundation, New York.

11 Ocean of Beauty: In the Mind of the Beholder

—A Suite of Photographs by Mark Paul Petrick

- Holtzman, S., 1996, *Digital Mantras: The Languages of Abstract and Virtual Worlds*, MIT Press, Cambridge, Massachusetts.

12 Deleuzian Sensation

and Unbounded Consciousness in *Reverie I*

- Bonshek, A., 2001. *Mirror of Consciousness: Art, Creativity and Veda*, Motilal Banarsidass, Delhi.
- Bogue, R., 2003, *Deleuze on Cinema*, Routledge, New York & London.
- Colebrook, C., 2002a, *Gilles Deleuze*, Routledge, New York & London.

- 2002b, *Understanding Deleuze*, Allen & Unwin, St Leonards, Australia.
- Deleuze, G., 1981, *Francis Bacon: Logique de la Sensation*, Editions de la Différence, Paris.
- 1986, *Cinema I*. (Trans. H. Tomlinson & B. Habberjam). The Athlone Press, London.
- 1994, *Difference and Repetition*, (Trans. P. Patton). Columbia University Press, New York.
- 1997, *Essays: Critical and Clinical*, (Trans. D. Smith & M. Greco), University of Minnesota Press, Minneapolis.
- Deleuze, G., & Guattari, F., 1987, *A Thousand Plateaus: Capitalism and Schizophrenia*. (Trans. B. Massumi), University of Minnesota Press, Minneapolis.
- 1994, *What is Philosophy?*, (Trans. H. Tomlinson & G. Burchell), Columbia University Press, New York.
- Evens, A., 2002, 'Sound Ideas', *A Shock to Thought: Expression After Deleuze and Guattari*. (B. Massumi, Ed.), Routledge, London and New York, pp. 171-187.
- Forman, R., 1990, *The Problem of Pure Consciousness: Mysticism and Philosophy*, Oxford University Press, New York and Oxford.
- Haney, W., 1989, "The Theory of Deconstruction and Maharishi's Vedic Science," *Modern Science and Vedic Science*, 2(4), pp. 414-441.
- Kennedy, B., 2000, *Deleuze and Cinema: The Aesthetics of Sensation*, Edinburgh University Press, Edinburgh.
- Meyer-Dinkgräfe, D., 1996, *Consciousness and the Actor: A Reassessment of Western and Indian Approaches to the Actor's Emotional Involvement from the Perspective of Vedic Psychology*, Peter Lang, Berlin, New York, Paris.
- Olkowski, D., 1999, *Gilles Deleuze and the Ruin of Representation*, University of California Press, Berkeley, Los Angeles, London.
- Orme-Johnson, R., 1987, "A Unified Field Theory of Literature", *Modern Science and Vedic Science* 1(3), pp. 322-373.
- Pearson, K., 2001, *Thinking Immanence: On the event of Deleuze's Bergsonism*, in *Deleuze and Guattari: Critical Assessments of Leading Philosophers*, (G. Genosko, Ed.), Routledge, London and New York, pp. 412-441.

- Polan, D., 1996, *Francis Bacon: The Logic of Sensation*, in *Gilles Deleuze and the Theater of Philosophy*, (C. Boundas and D. Olkowski Eds.), Routledge, New York and London, pp. 229-261.
- Smith, D., 1996, *Deleuze's Theory of Sensation: Overcoming Kantian Duality*, in *Deleuze: A Critical Reader*, (P. Patton, Ed.), Blackwell, Oxford, UK; Cambridge, Massachusetts, pp. 29-56.

13 *Reverie II: Revelation, Consciousness and Peace*

- Adajania, N., 2002, "Net Culture: Between the Fast Lane and the Slow," *Art India*, 7(1), pp. 26-35.
- Bharucha, R., 1999, "Interculturalism and Its Discriminations: Shifting the Agendas of the National, Multicultural and the Global", *Third Text*, 46.
- Boner, A., Sharma, S.R., & Bäumer, B., 1986, *Vastusutra Upanishad: The Essence of Form in Sacred Art*, Motilal Banarsidass, Delhi.
- Bonshek, A., 2000, "Transformations Within the Gap," *Body, Space and Technology*, 1(1), England
- 2001a, *Mirror of Consciousness: Art, Creativity and Veda*, Motilal Banarsidass.
- 2001b "Reverie—Exploring the Spiritual in Terms of the Mathematical Unfoldment of Creation Within Consciousness: A Collaborative Video Installation", Paper presented at the Fifteenth Annual National Conference on the Liberal Arts and the Education of Artists, School of the Visual Arts, New York, U.S.A.
- Bonshek, C., 2002, "Between Subject and Object: Multiplicity in Anna and Corrina Bonshek's Reverie I," Paper presented at the School of Contemporary Arts Postgraduate Seminar, University of Western Sydney (Nepean), Australia, August 23.
- Chipp, H., 1968, *Theories of Modern Art*, University of California Press.
- Krauss, R., 1984, *The Originality of the Avant-Garde and Other Modernist Myths*, Cambridge Press.
- Lutgendorf, P., 1990, "Ramayana: The Video", *The Drama Review* 34(2).
- McEvelley, T., 1987, "Grey Geese Descending", *The Art of Agnes Martin*, *Artforum*, XXIV(10), pp. 94-99.
- Meyer-Dinkgräfe, D., 1996, *Consciousness and the Actor: A Reassessment of Western and Indian Approaches to the Actor's*

- Emotional Involvement from the Perspective of Vedic Psychology*, European University Studies, Series XXX, 67, Peter Lang.
- 2003, “Consciousness, Theatre and Terrorism,” *Consciousness, Literature and the Arts*, 4(3).
- Perry, A, 2003, “*Queen of Bollywood*”, *Time*, 162(16), pp. 40-47.
- Richman, P., (Ed.), 1991, *Many Ramayanas: The Diversity of a Narrative Tradition in South Asia*, University of California Press.
- Thomas, M., 2003, “SBS—*Inside Australia Initiative*,” *Pacific Film and Television Seminar*, Brisbane, Australia, July 15.
- Wenders, W., 2003, Keynote Address, *Australian International Documentary Conference*, Byron Bay, Australia, February 17-20.
- University of Western Sydney, 2003, *War, Creativity and Communication: An Australian Perspective on East Timor*, Symposium, University of Western Sydney, Australia, August 28.

14 1 Stands Out

- Bonshek, A., & Bonshek, C., 2003, *Project Reverie*, Exhibition Catalogue, *The Visual Arts Gallery, India Habitat Centre*, Akshara Productions, Gold Coast, Australia.
- Neruda, P., 1973, *Residence on Earth*, (Trans. Walsh, D.), New Directions, New York.

GLOSSARY OF SANSKRIT TERMS

A

- Adhidaivik*, aspect of defense related to the influence of the planets, houses, and constellations (strategy of defense with reference to *Devata*)
- Adhibhutik*, aspect of defense available in *Dhanur Veda* and *Sthapatya Veda* (strategy of defense with reference to *Chhandas*)
- Adhyatmik*, *Yogic* aspect of defense (strategy of defense with reference to *Rishi*)
- Akasha*, space; one of the eight *Prakritis*
- Akshara*, the collapse of infinity to its point value; “A” = fullness or infinity, “K” = point of infinity, “*Kshara*” = collapse (collapse of infinity onto its own point)
- Agni*, fire; one of the eight *Prakritis*, first word of *Rk Veda*
- Ahamkara*, ego; one of the eight *Prakritis*
- Apaurusheya Bhasya*, uncreated commentary
- Apurva*, that which did not exist before; unmanifest basis of the constituents of *Yagya*
- Aranyak*, second aspect (*Devata*) of the six-fold self-referral loop of the *Brahmana*; stirring quality of intelligence; fasciculi proprii in the physiology
- Atharva Veda*, last of the four Veda; reverberating wholeness value of intelligence; motor systems in the physiology
- Atma*, pure consciousness; pure wakefulness; the Self
- Avayava*, parts of a logical argument; seventh of 16 categories of *Nyaya*
- Ayur-Veda*, knowledge of life span; fourth six-fold self-referral loop of the Vedic Literature

B

- Bhadram*, finest or divine value
- Baikari*, mental level of speech
- Bhagavad Chetana*, God Consciousness or Refined Cosmic Consciousness

Bhagavad Gita, a Vedic text from the *Itihasa*—specifically the *Mahabharata*; contains the teaching of eternal Truth as given by *Lord Krishna* to *Arjuna*.

Bhava, being, as in quality of existence; houses in *Jyotish*

Bhava Prakash Samhita, sixth aspect (*Chhandas*) of the six-fold self-referral loop of *Ayur-Veda*; enlightening quality of intelligence; ectodermal tissues in the physiology

Bhel Samhita, fifth aspect (*Devata*) of the six-fold self-referral loop of *Ayur-Veda*; differentiating quality of intelligence; lymphatic system and glial cells in the physiology

Brahman, universal Being; wholeness; unity; *Brahman Consciousness* (unity consciousness, seventh state of consciousness)

Brahmana, gaps; the fifth six-fold self-referral loop of the Vedic Literature

Brahmi Chetana, Unity Consciousness or Brahman Consciousness

Buddha, Vedic *Devata*; visualized in the brain as the diencephalons and brainstem areas

Buddhi, intellect; one of the eight *Prakritis*

Budh, Mercury

C

Chakravarti, ruler of the universe; in the physiology—corresponds to the brainstem; related to *Surya* and the thalamus

Chandra, Moon

Charak Samhita, first aspect (*Rishi*) of the six-fold self-referral loop of *Ayur-Veda*; balancing, holding together and supporting quality of intelligence; cell nucleus in the physiology

Chaturyugi, a period or era of 4,320,000 years

Chhala, equivocation; fourteenth of 16 categories of *Nyaya*

Chhandas, known, known or object value on the level of self-referral consciousness

Chhand, the fifth aspect (*Devata*) in the six-fold self-referral loop of the *Vedanga*; measuring and quantifying quality of intelligence; neurotransmitters and neurohormones in the physiology

D

Darshana, Vedic cognition; Vedic mathematics; artistic sight; in the Vedic literature comprises six aspects—*Nyaya*, *Vaisheshik*,

Samkhya, Yoga, Karma Mimansa, and Vedanta; Vedanga, the second six-fold self-referral loop of the Vedic Literature

Devata, law of nature; process of knowing; process of knowing or relationship between subject and object values, on the level of self-referral consciousness

Dhanu, Sagittarius

Dhanur-Veda, second aspect (Devata) of the six-fold self-referral loop of Upa-Veda; invincible and progressive quality of intelligence; immune system and biochemistry in the physiology

Dharma, Natural Law

Dipavali, Indian festival celebrated to enliven national consciousness with reference to function and structure of Natural Law in terms of Maha Lakshmi; festival of light

Drishtanta, example; fifth of 16 categories of Nyaya

Durga, Vedic Devata; represents power or Shakti in the Vedic Literature; the lower tip of the spinal cord, the source of energy, and sacral bone in the vertebral column in the physiology

Dwapara Yuga, second longest of Vedic ages; life lived 75% according to Natural Law or Dharma

G

Gandharva Veda, branch of the Vedic Literature devoted to music; first aspect (Rishi) of the six-fold self-referral loop of Upa-Veda; integrating and harmonizing quality of intelligence; cycles and rhythms and pacemaker cells in the physiology

Ganesh, Vedic Devata; one of sons of Shiva and Parvati; sits at entrance to Shiva's cave; in the physiology—the pons, medulla and cerebellum

Graha, planet

Gyan, knowledge

Gyana Kanda, knowledge chapter

H

Harita Samhita, fourth aspect (Chhandas) of the six-fold self-referral loop of Upa-Veda; nourishing quality of intelligence; venous and biliary systems in the physiology

Hetvabhasa, fallacies; thirteenth of 16 categories of Nyaya

I
Ithas, comprises the *Mahabharat* and *Ramayan*; illustrates the full range of human experience through living examples; fourth aspect (*Chhandas*) of the six-fold self-referral loop of *Brahmana*; blossoming of totality quality of intelligence; voluntary sensory and motor projections in the physiology

J
Jagrat Chetana, waking consciousness
Jala, water; one of the eight *Prakritis*
Jalpa, polemics; eleventh of 16 categories of *Nyaya*
Jati, futile argument; fifteenth of 16 categories of *Nyaya*
Jyotish, all-directional awareness; Vedic astrology; sixth aspect (*Rishi*) of the first six-fold self-referral loop of *Vedanga*; all-knowing quality of intelligence; basal ganglia, cerebral cortex, cranial nerves and brainstem in the physiology
Jyotish Mati Pragya, light-filled awareness

K
Kaivalya, singularity
Kali Yuga, shortest of the Vedic ages; life lived according to 25% Natural Law or *Dharma*
Kalpa, an epoch of creation; one day of *Brahma*
Kalp, the second aspect (*Devata*) in the six-fold self-referral loop of the *Vedanga*; the transforming quality of intelligence; the limbic system in the physiology
Kanya, Virgo
Kark, Cancer
Karma Kanda, action chapter
Karma Mimansa, the fifth aspect (*Devata*) in the six-fold self-referral loop of the *Upanga* or *Darshana*; the analyzing quality of intelligence; central nervous system in the physiology
Kashyap Samhita, the sixth aspect (*Rishi*) in the six-fold self-referral loop of the *Upa-Veda*; the equivalency quality of intelligence; arterial system in the physiology
Ketu, descending node of the Moon
Krishn, teaches transcendence of action as basis of mastery over the field of action in the *Bhagvad Gita*; eighth incarnation of *Vishnu*;

located in the ventricular system and central canal of the spinal cord and brain in the physiology

Krishna Janmashtami, Indian festival celebrated to enliven national consciousness with reference to function and structure of Natural Law in terms of *Krishna*

Krita Yuga, see: *Sat Yuga*

Kumbh, Aquarius

L

Lakshmi, Vedic *Devata*; represents wealth, health and nourishing power of Mother Divine; consort of *Vishnu*; resides in the chest and heart in the physiology and, on molecular level, the four chains of haemoglobin molecule

M

Madhav Nidan Samhita, fourth aspect (*Chhandas*) of the six-fold self-referral loop of *Ayur-Veda*; diagnosing quality of intelligence; mesodermal tissues in the physiology

Madhyama, expressed or spoken level of speech

Mahabharat, one of the *Itihas*; one of the great Vedic epics; the story of diversity

Mahashivaratri, Indian festival celebrated to enliven national consciousness with reference to function and structure of Natural Law in terms of *Shiva*

Makara, Capricorn

Manas, mind; one of the eight *Prakritis*

Mandala, circle; self-referral loop of consciousness; Rk Veda is made up of ten *Mandalas*

Mangal, Mars

Mantra, word; Vedic sound or syllable

Manu, a measure of time; one *Kalpa* is comprised of 1 four *Manus*; see *Kalpa*

Manvantara, 1 four *Manus* equal one *Manvantara*

Maya, relationship; a conceptual reality; source of creation

Mesha, Aries

Mina, Pisces

Mithuna, Gemini

Moksha, enlightenment

N

Nadi Vigyan, pulse diagnosis

Nama, name; sound

Nakshatra, lunar constellation (of which there are 27)

Natyashastra, Vedic treatise on theatre

Navaratri, Indian festival celebrated to enliven national consciousness with reference to function and structure of Natural Law in terms of *Maha Durga*; nine days of Mother Divine

Nigrahasthana, disagreement on first principles; last of 16 categories of *Nyaya*

Nirnaya, art of drawing conclusion; ninth of 16 categories of *Nyaya*

Nirukt, the fourth aspect (*Chhandas*) in the six-fold self-referral loop of the *Vedanga*; the quality of self-referral direction; the pituitary gland in the physiology

Nyaya, bi-directional awareness; *Lamp-at-the-Door*; the first aspect (*Rishi*) in the six-fold self-referral loop of *Upanga*; the distinguishing and deciding quality of intelligence; thalamus in the physiology; justice; one of the six *Darshana*

P

Pada, line

Panchang, Indian calendar

Para, Transcendental (level of speech)

Parame vyoman, Transcendental Consciousness

Pashyanti, subtle level of speech

Prakriti, Nature; eight fundamental elements

Pragya-Aparadha, mistake of the intellect

Prama, consciousness; non-physical intelligence; authenticity

Pramana, means of valid knowledge; first of 16 categories of *Nyaya*

Prameya, object of valid knowledge; second of 16 categories of *Nyaya*

Prana, life; life breath

Pratishakhya, last (sixth) of the six-fold self-referral loops of the Vedic Literature

Prayojana, purpose; fourth of 16 categories of *Nyaya*

Prithivi, earth; one of the eight *Prakritis*

Purana, fifth aspect (*Devata*) of the six-fold self-referral loop of *Brahmana*; ancient and eternal quality of intelligence; great intermediate net in the physiology

Purushottama, holistic rulership; the witnessing of both the dynamic (*Prakriti*) and silent (*Purush*) values of consciousness

R

Rahu, ascending node of the Moon

Ramayan, presentation of knowledge of Veda in behavioural form through the actions of the hero, *Ram*

Ram Navmi, Indian festival celebrated to enliven national consciousness with reference to function and structure of Natural Law in terms of *Ram*, the administering intelligence of Natural Law

Rashi, zodiac sign

Richa, hymn

Rishi, knower; knower or subject value on the level of self-referral consciousness

Rk, collapse of infinite dynamism to a point value; name of the Veda; syllable that contains all values of silence and dynamism

Rk Veda, first of the four Vedas; expression of wholeness or totality of knowledge; holistic physiology

Ritam Bhara Pragyā, almost absolute consciousness; that level of almost no differences from where all differences arise; that level which only knows truth; that quality of consciousness which comprehends the total reality of Natural Law in its absolute silence and infinite dynamism

Rta, immutable and eternal law; cosmic order

Rupa, form

S

Samadhi, pure consciousness; Being; Self-awareness

Sama Veda, second of the four Veda; flowing wakefulness quality of intelligence; represents the totality of *Rishi*; information and flow systems—sensory systems—in the physiology

Samhita, unity; togetherness (togetherness of *Rishi*, *Devata* and *Chhandas*)

Samkhya, third aspect (*Chhandas*) of the six-fold self-referral loop of the *Vedanga*; enumerating quality of intelligence; cells, tissues, organs—types and categories—in the physiology

Samshaya, doubt; third of 16 categories of *Nyaya*

Sani (also written as *Shani*), Saturn

Sankalp, resolution

Saraswati, Vedic *Devata*; consort of *Brahma*; power of knowledge; in the physiology located in the head and brain, corresponds to a) four lobes of the lobes of the brain, b) plasma—carrying all information and knowledge in the form of hormones and neurotransmitters

Sat Yuga, longest of Vedic ages—life lived ten0% in accord with Natural Law or *Dharma*

Shaka, branch (of the Vedic Literature)

Sharngdhar Samhita, fifth aspect (*Devata*) in the six-fold self-referral loop of *Ayur Veda*; synthesizing quality of intelligence; endodermal tissues in the physiology

Shiksha, first aspect (*Rishi*) of the first six-fold self-referral loop of *Vedanga*; expression quality of intelligence; physiological parts associated with the autonomic ganglia

Shiva, Vedic *Devata*; administers silence in the brain

Shruti, sound of the Veda; that which is heard by self-referral consciousness

Shukra, Venus

Siddhanta, established principal; sixth of 16 categories of *Nyaya*

Sidha, one who has gained perfection; practitioner of the *Sidhi* techniques

Sidhi, perfection; mental formula

Simha, Leo

Smriti, memory, pure awareness

Sthapatya Veda, Vedic architecture; third aspect (*Chhandas*) of the six-fold self-referral loop of *Upa-Veda*; establishing quality of intelligence; anatomy in the physiology

Surya, Sun

Sushrut Samhita, second aspect (*Devata*) of the six-fold self-referral loop of *Ayur Veda*; separating quality of intelligence; cytoplasm and cell organelles in the physiology

Sushupti Chetana, dreaming consciousness

Sutra, frequency of consciousness; structure of Natural Law available in the Vedic Literature

Swapn Chetana, sleeping consciousness

T

Tarka, process of reasoning; eighth of 16 categories of *Nyaya*

Tharva, frequency; reverberating wholeness

Tirtha, knowledge

Treta Yuga, third longest of Vedic ages; life lived 50% in accord with Natural Law or *Dharma*

Tula, Libra

Turiya Chetana, Transcendental Consciousness

Turiyatit Chetana, Cosmic Consciousness

U

Upanga, second six-fold self-referral loop of the Vedic Literature; “subordinate limbs” of the Veda; six systems of Indian philosophy; *Darshana*

Upanishad, literally “sit near the teacher”; “sit near to the Self”; “sit near the Veda”; first aspect (*Rishi*) of the six-fold self-referral loop of the *Brahmana*; transcending quality of consciousness; ascending tracts of the central nervous system in the physiology

Upasana Kanda, chapter of worship

Upa-Veda, “subordinate” Veda; third six-fold self-referral loop of the Vedic Literature

V

Vada, discussion; tenth of 16 categories of *Nyaya*

Vaman, incarnation of *Vishnu*; three-steps of *Vaman* are equivalent to the three-step move of *Brahm* described in the *Puran*—the three-step move of wholeness, *Rishi*, *Devata*, *Chhandas*, within *Samhita* and the division of the zygote in primary stages of embryonic development

Vaisheshik, second aspect (*Devata*) in the six-fold self-referral loop of the *Vedanga*; specifying quality of intelligence; cerebellum in the physiology

Vagbhatt Samhita, third aspect (*Chhandas*) in the six-fold self-referral loop of *Ayur Veda*; communication and eloquence quality of intelligence; cytoskeleton and cell membrane in the physiology

Vastu Vidya, knowledge of *Vastu* or Vedic architecture

Vayu, air; one of the eight *Prakritis*

Vedanga, “limbs” of the Veda; comprise six aspects—*Shiksha*, *Kalp*, *Vyakaran*, *Nirukt*, *Chhand*, and *Jyotish*; *Darshana*; first six-fold self-referral loop of the Vedic Literature

Vedanta, “end of the Veda”; lively absolute quality of intelligence; last of the six *Darshana*; expression of unity; sixth aspect (*Rishi*) of the

six-fold self-referral loop of *Upanga*; lively absolute (living Wholeness, I-ness or Being) quality of intelligence; integrated functioning of the central nervous system in the physiology

Vitanda, cavil; twelfth of 16 categories of *Nyaya*

Vrischik, Scorpio

Vrishabh, Taurus

Vritti, frequency of intelligence

Vyakaran, third aspect (*Chhandas*) of the six-fold self-referral loop of the *Vedanga*; expanding quality of intelligence; hypothalamus in the physiology

Y

Yagya, Vedic performance; offering; offering at the self-referral level

Yajan, spontaneous all-time absolute reality at the basis of creation; mobilizes the process of evolution; offering—dynamism offering itself to silence and silence offering itself to dynamism; *Yagya*

Yajur Veda, third of the four Veda; *Yajur*—dynamics of flow within self-referral consciousness; processing systems in the physiology

Yantra, instrument; instrument in the Vedic observatory

Yoga, union; the fourth aspect (*Chhandas*) in the six-fold self-referral loop of the *Upanga*; the unifying quality of intelligence; association fibres of the cerebral cortex in the physiology

Yoga Sutra, verses of Patanjali's *Yoga* (see *Yoga*)

Yuga, era or epoch of which there are four: *Sat Yuga*, *Treta Yuga*, *Dwapara Yuga*, and *Kali Yuga*