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MYSTERY, MAGIC AND TRUTH:

Faith and Reason Explored in Renaissance Art

Might philosophy and religion be used as a vehicle for better art history teaching and learning?

A thesis submitted to Massey University in partial fulfilment of the requirements for the degree of

Master of Education (Adult Education)

PATRICK TYMAN 2007

Research Question

Might philosophy and religion be used as a vehicle for better art history teaching and learning?

Chapter Organisation

1. Introduction

What are faith and reason?

Purpose of thesis. Justification of choice of topic. Research questions to be answered. My own interest in the topic.

2. Philosophy and religion in context

Faith and reason in context with the Renaissance. Description and analysis of key themes and examples of key works from ancient Greece and the Middle Ages. (Faith and reason applied to key works).

- 3. How philosophy and religion influenced the Renaissance's art.
- 4. How do selected works illustrate the influence of philosophy and religion in Renaissance art?

An in-depth analysis of major art works from eight key artists, explaining how examining faith and reason in Renaissance art can act as inspiration for teaching and learning.

Chosen artists and art works:

Giotto	Lamentation	1305
Masaccio	Trinity	1425
Piero della Francesca	Baptism of Christ	1450
Botticelli	Birth of Venus	1485
	Primavera	1480
Leonardo da Vinci	Empirical studies	1511
Michelangelo	Sistine Chapel Ceiling	1508 - 12
	David	1501 - 4
	Last Judgement	1536 - 41
Raphael	School of Athens	1510
Holbein	The Ambassadors	1533

5. How can philosophy and religion be used as a vehicle for better art history teaching and learning?

How can I teach about philosophy and religion in selected Renaissance art works?

Effective approaches to teach and learn about philosophy and religion in Renaissance Art.

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How can philosophy and religion be used as a vehicle for better art history teaching and learning?

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ABSTRACT

Consisting of two parts, an epistemic and pedagogic, this thesis is designed for teaching and learning about philosophy and religion using art history. By studying philosophy and religion in art works a student might be led to gaining a better understanding about faith and reason and by studying the philosophical and religious componants a teacher might gain a better focus on art history teaching and learning in general.

CHAPTER ONE

INTRODUCTION

The purpose of this thesis is to investigate the ideologies of faith and reason in Renaissance art works with the purpose of teaching adults: Might philosophy and religion be used as a vehicle for better art history teaching and learning?

The first aspect is to define what is meant by faith and reason.

Faith - by definition has changed over the millennia which has led to ambiguities. Today the word can be applied to a deep belief in almost anything, "faith within a marriage", "have faith in a boat as you navigate a difficult patch of water", "signing a letter: Yours faithfully". Freeman (2005) says faith is a trust in something which cannot be seen, or a belief in promises made by God, or a declaration of loyalty. Whatever the definition, continues Freeman (2005), faith usually means a belief in something which cannot be proved by rational thought. Collins Dictionary (1987) defines 'faith' as a: "strong or unshakeable belief in something, esp. without proof", and it is in these contexts the word is applied throughout this thesis. The definition is supported by the Enlightenment's thinker Voltaire's (1694-1778) famous quote: "Faith consists of believing what our reason cannot comprehend."

Reason - Descartes (1596-1650), another influential Enlightenment thinker, said: "Cogito ergo sum" ("I think therefore I am") confirming his confidence in mankind's ability to think and reason to solve its problems and discover nature's secrets. Collins Dictionary (1987) interprets the word 'reason': "an intellectual pursuit of rational thought and truth through empirical enquiry and logic".

Hodges (1993) terms 'faith' as 'theism': the belief in an omnipotent God on whom all things depend; and 'reason' as 'secularism': a predictable pattern in life that human reason, aided by the tools of science and maths, can unravel. Theism and faith comprises the "magic and mystery" component of this thesis' title, and secularism

and reason the "truth" part.

Faith and reason are, therefore, opposite ideologies and one of the aims of this thesis is to make adult learners aware that the two have existed at the heart of culture the world over from the dawn of civilization and that the acquiescence a society implements to faith and reason may decide the outcome of its culture. To the Greeks, for example, reason was an important componant in solving problems. Their culture was very different from European Middle Ages culture whose exponants tried to find answers to their problems through religion.

For millions of people faith in God is their raison de etre. Through their faith they hope to unravel the transcendentalism of existence. There is much that cannot be comprehended in the cosmos, for example the complexity of the macrocosm and microcosm, the creation of the universe and life on earth, or the existence of an after life. From the cradle of civilization people have had a yearning to explain the unexplained and to come to terms with these enigmas. Many people before and during the Renaissance, and today, placed and continue to place their faith in God for hope, others aligned themselves with reason and science believing that eventually research and empirical investigation would provide the answers.

The topic, therefore, is important because many of the ideas about faith and reason discussed in it are relevant today. Discussions on religion and science are never far away from media attention and through analysing this polemic there are to be found many contemporary parallels with faith and reason.

By looking closely at the Renaissance's art, Holbein's Ambassadors (1533), for example, art history teachers might begin to understand that although science and reason do play a significant part in the understanding of the enigmas of existence they do not hold all the answers, faith plays a vital role too. This is one example where art works might prove an invaluable medium for teachers to investigate the opposition and compatibility of faith and reason. Similarly, Giotto's Lamentation (1305) is a useful painting to explain the effects faith and reason had on Renaissance art. Likewise, Masaccio's Trinity (1425) may be used to explain the mutual relationship of faith and reason, where reason played an important role in the discovery of the mathematical system called perspective, (which showed three dimensional space on a flat surface) through a devout subject.

Piero della Francesca's Baptism of Christ (1450) serves as a unique example to teach how some Renaissance artists investigated ancient Greece's reasoning, philosophy, mathematics and geometry and combined it with a religious theme. Botticelli's Primavera (1480) and Birth of Venus (1485) can be used to demonstrate how ancient Greek literature and artistic styles were investigated and integrated into Renaissance art in a Christian context bringing faith and reason closer together in harmony. Michelangelo's Sistine Chapel Ceiling (1508 - 12) is ideal to teach adults how Plato's philosophies were combined with Christian teaching to produce a balance between faith and reason, and Raphael's School of Athens (1510) introduces the Greek intellectual pursuits rediscovered during the Renaissance.

Art, therefore, has the capacity to unfold with clarity the implications faith and reason had and still have on society and by studying past cultures' art, adult students can investigate and understand the part played by the two ideologies throughout the Renaissance.

These two ideologies have existed and complemented each other since the beginnings of Western civilization, forming its society and culture. Throughout history, says Johnson (1992), societies have adhered to reason and faith to suit their purposes for a stable, utilitarian and happy existence acknowledging Rousseau's (1712 - 1778) dictum: "the greatest happiness for the greatest number". Many ideas which buttress western civilization find their roots in ancient Greece which is why this thesis starts with that era. Elements of reason evident in Greek culture still remain with us today, democracy for example, and in his play Hellas, Shelley (1792-1822), says: "We are all Greeks. Our laws, our literature, our religion, our arts, have their roots in Greece". (Fleming, 1991).

"The blessings of civilization" quotes Charles Beard in his 'The Rise of American Civilization' (1927) are "health, security, material goods, knowledge, leisure and aesthetic appreciation." Aesthetic appreciation as one of Beard's components to a blessed civilization, reiterates what the great Victorian 'dictator of the arts', Ruskin (1819-1900) said: "The art of any country is the exponent of its social and political virtues. The art or general productive and formative energy of any country is an exact exponent of its ethical life." Quoted from Copplestone (1987). Whether those virtues and ethics align themselves with faith or reason will invariably effect a culture's art. Marx touches on the same ground with his famous quote: "The ideas of the ruling party are in every

epoch the ruling ideas." Eisenman, (2002).

Ruskin also wrote: "Great nations write their autobiographies in three manuscripts - the book of their deeds, the book of their words, and the book of their art. Not one of these books can be understood unless we read the two others; but of the three, the only quite trustworthy one is the last ... art is always instinctive and we can understand it at a glance when we have learned to read." (Copplestone, 1987).

Lynton (1981) mentions that: "art is the human race talking to itself, across all possible frontiers of time and place and ideology."

To enable teachers to understand complex issues such as the analysis of faith and reason and its links to Renaissance culture, art might prove to be an indispensable guide. For example, analysing and comparing the differences in style of art works in Chapter Two might lead to an understanding of the predominant role reason played during the ancient Greek world and how after the Roman Empire fell in the fourth century AD faith in the form of Christianity gained precedence over reason. (Freeman, 1996). When the Renaissance combined reason with faith the style changed again. By analysing and comparing art in this manner teachers can draw their own conclusions to what extent the role of faith and reason play in their own culture. This may prompt them to undergo further study and investigate the relationships between contemporary art and faith and reason, an area outside the limited scope of this thesis.

The thesis also holds a personal place for me.

I attended the missionary boarding school in South India, 'Hebron', from 1967 - 79 from age four until 17. The experience showed me how to look at life from the angle of the Christian faith. Every single aspect of day to day living seemed to have a religious perspective. Normal aspects of modern life now taken for granted - gambling, going to the movies, drinking alcohol, even holding hands with a partner - were frowned upon. Therefore, the thesis' analysis of faith and reason in past cultures using art works enabled me to look at past experiences and analyse them in a different context to the ones I would have used had I not researched this topic.

In 1979 I attended Dover College, a public school in England which had a much more balanced, and now I would say healthier, attitude towards faith. Although chapel was enforced every day it was done so for an educational purpose to learn to be individually morally responsible by learning the Christian code of conduct. These experiences perpetuated within me the interest to analyse the differences between a theist way of life and a secular one.

In 1996 after completing a Bachelor of Arts (BA Painting), and Post Graduate Certificate in Education (PGCE, Art and Design), and gaining experience teaching in schools in England, I emigrated to New Zealand where I was given the opportunity to teach art history under Havelock North High School's, Adult Community Education Programme. Specialising in the art of the Renaissance period, I noticed many adults' fascination in the role faith and reason played during the era's art. Most had read 'The Da Vinci Code' by Dan Brown, a novel which uses art works to clarify meaning and ideas, and were eager to find out more about art and education, therefore, I developed this topic 'Magic, Mystery and Truth, Faith and Reason analysed through Art Works''.

After researching art works with the purpose of finding suitable links with faith and reason, the next challenge was to find the most appropriate transmission methods and strategies on how to teach philosophy and religion by using art works. After further research it became apparent there was a diverse cross-section of adults interested in this topic for various reasons, therefore, varying methods of stimulating learning were needed to match this cross-section of learners. The fact this thesis combines adult education teaching methods and ideas linked to the main theme of faith and reason explored through Renaissance Art also makes it unique perhaps, as an educational approach suited to adult students.

To give adults a comprehensive understanding how faith and reason influenced art and society during the Renaissance and continue to do so today, the era needed to be brought into context with ancient Greece and Rome (called Greco/Roman) because ideas formed then played a pivotal role during the Renaissance. To understand why Cumming (1995) refers to the Renaissance as the birth of the Western world adults need to understand why the Middle Ages is looked on as an era of darkness where the powers of reason formed by the Greco/Roman empire were stifled. (Freeman, 2005)

Once this section titled: "Faith and reason in context with the ancient Greece and the Middle Ages" was formulated in Chapter Two, the next obligation was to explain how selected art works illustrate the influence of faith and reason during

the Renaissance and analyse appropriate methods to teach the unit to make it relevant to an audience today and answer the important question: *Might philosophy and religion* be used as a vehicle for better art history teaching and learning?

To answer this effectively several further questions were vital. First: Which particular adult learners are interested today in studying faith and reason in Renaissance art works? Experience from teaching Art History at the Adult Community Education Programme and further research identified the particulars of a group of adult students, teachers intending to use this topic could expect to attend their classes. Second: Which methods are there for stimulating learning in this audience? Within the vast range of literature available on adult education methods, strategies and techniques, appropriate models was selected from the rest, as most suitable to teach about faith and reason explored through Renaissance art. Third: How would I teach faith and reason in Renaissance art, now that I have learnt about alternative methods in adult education?

Before moving on to the main body of the thesis, a little information on the nature of art as an effective educational tool may be purposeful.

Inherent in every person is the potential to love art says Beckett (1996). Not everyone, however, has the opportunity to realise this potential, and it is topics like the one covered in this thesis which can provide the knowledge and background to make art more accessible. Often people are nervous of looking and talking about art because they are ignorant of the facts. Learners can begin to gain the necessary knowledge to overcome their intellectual inabilities and inadequacies, and gain an understanding of art through reading, listening and looking - areas which form the main focus throughout the thesis. After all, as Lynton (1981) says: "art is mankind's most wonderful and also most basic invention." It is, therefore, my intention to explore the relevant means, through teaching, of elucidating to an adult audience the relevance art holds for education. Teaching students to use art as a learning tool might encourage them to change the way they understand the world around them. Ramsden, (1992) claims students make sense of their learning only when they see its relevance and that the content has meaning in the real world. Perhaps links can be made between the ideas discussed through looking at faith and reason explored in Renaissance art, and students' own lives during the twenty first century.

A teacher who wishes to embark on a programme on Renaissance art will not find generalised descriptions of artists nor their work. What will be found are succinct details of how philosophy and religion may be used as a vehicle for better art history teaching and learning.

CHAPTER TWO

PHILOSOPHY AND RELIGION IN CONTEXT WITH GREECE AND THE MIDDLE AGES

Faith and reason in context with ancient Greece and the Middle Ages.

Introduction:

An analysis of the aspects of philosophy and religion in ancient Greek art and an investigation into how they influenced the art of the era that followed, called the Middle Ages', serves as a vital link for teachers who intend to teach the impact faith and reason had on Renaissance art. It sets a platform on which they can learn about changes in art brought about by the shifting parameters of faith and reason during the Greek era and the Middle Ages and on which they can compare them to the era of the Renaissance analysed in Chapter Three and Four. Adult learners will find that many of the philosophies and ideas on faith and reason discussed in this chapter were rediscovered during the Renaissance and they affected the era's art profoundly. Leonardo da Vinci's empirical drawings, for instance, could be linked to Aristotle's philosophy on direct observation as the essence of finding truth, and Piero della Francesco and Michelangelo's art could be used to link Plato's philosophy that an underlying geometrical structure exists in the universe. (Fleming, 1991). By examining ancient Greece's and the Middle Ages' art in context, teachers may learn about the opposition and compatibility which existed between faith and reason during the eras and gain a better understanding of faith and reason's influence on Renaissance art. The fact that many of these erstwhile ideas on faith and reason are still with us today, for example, in the form of religion and science, could make this a relevant topic for teachers to study.

Ancient Greek art, analysed against a predominant backdrop of reason in the

form of idealism and realism, can set a platform from which the Middle Ages' art of predominantly faith orientated inspiration may be analysed. In this respect it could be helpful to teachers, when they teach Renaissance art because they could already have formed an understanding how the earlier eras' acquiescence to faith and reason in art intermingled during the Renaissance with a spectacular impact on the culture and art works of the era.

Reason in Greek Art

The Greeks' solutions to problems in art through reason and intellectualising form a convenient contrast to the faith orientated methods of the Christians during the Middle Ages. Christians tended to put emphasis on faith for inspiration in art, a fact which finds a parallel in St. Paul's (ca. AD. 3 - ca. 62) quote: "The Greeks ask for reason, the Jews look for a sign". (Freeman, 1996). Both these ambivalent approaches, which Hodges (1993) describes as secular and theist, are immediately apparent in their respective styles in art - realism and idealism in Greek art and symbolism in Christian art.

Theism sustained in Christians a regard for life as a tribulation and a trial which foreshadowed and determined the afterlife, says Freeman (1996), in a quite different manner from Greek secularism which encouraged them to take advantage of all life had to offer. That the Greek spiritual kingdom was on this side of the grave is reflected in the absence of any great religious writings and religious personalities - there was nothing similar to the Bible, Koran or Gita written in Greek civilization, nor religious personalities like Mohammed or Jesus, says Johnson, (2003).

Most Greek art shows their acquiescence to secularism in the form of reason and realism. Greeks, for example, placed emphasis on artists blessed with genius and they believed that an artist's creative powers should benefit the good of humanity. The Greek philosopher Socrates (470-399 BC) who sought reason as a guiding force confirmed this when he said that truth, goodness and beauty were ideals, and they inspired artists to seek realistic perfection in art as an ideal beauty.

Pythagoras' (580-500 BC) philosophical link between logic and nature provides a clear illustration how Greek reasoning led to the understanding of the world through observation. To demonstrate the principle that the structures of things are linked to numbers, Pythagoras stretched a string across a box, plucked it, and recorded the

note, when he halved the string and repeated the procedure, the note was exactly one octave higher. Thus, claims Johnson (2003), he proposed that behind the chaos of the universe there existed a rational order which could be identified through reason. Freeman (1996) uses Socrates demonstration of the area of a square - when the sides of the square are doubled its area quadruples - to show how logic and reason can be used as proof that a rational order exists in nature.

This reasoning finds a parallel in Greek art in the form of mathematical ratios, for example, in the Greek sculptor Polykleitos' 'Canon' (book of laws and principles in art), he reasons that the 'perfect' human body can be calculated mathematically. Also, in the Roman architect Vitruvius' De Architecture (treatise on architecture), he sought for a means of logic in art says Fleming, (1991). Thus, the Greek philosopher Protagoras (490-421 BC) was inspired to say "man is the measure of all things". This reasoning that mathematics lies at the core of reality was rekindled during the Renaissance and is evident in the era's art, particularly in the invention of the mathematical system of perspective, foreshortening and geometric compositional structure of paintings, which are analysed in Chapter Three.

Also important to gain appreciation of Renaissance art, are the influences and ideas of other Greek philosophers, for example Plato (428-347 BC) and Aristotle (384-322 BC), who exerted an influence on the development of realism and idealism in Greek art. Plato's philosophy that all phenomena existent on earth were imperfect, approximate versions of an archetypal and perfect universal 'idea' residing in 'heaven' had implications for art in the form of *idealism*, which Collins Dictionary (1987) describes as: 'The doctrine that thought or the mind is the only reality and that external objects consist merely of ideas.' Idealism's influences may be seen clearly in the chosen two examples of Greek art following this introduction.

While Plato's philosophy on idealism was concerned with what lay beyond physical reality, Aristotle stressed the need to study phenomena to gain an understanding of the world, a philosophy termed *empirical*, (knowledge gained from first-hand experience rather than theory), (Collins Dictionary, 1987) which is demonstrated by Pythagoras' and Socrates' logic mentioned above. Aristotle's reasoning, continues Freeman (1996), which was concerned with the real world, especially things analysed from observation, had an effect on Greek art in the form of *realism* which Collins Dictionary (1987) describes as: "an awareness of physical things as they are and not as an

abstract idea." Aristotle said "Nature always produces the best," and Greek artists took him literally and became masters of mimicking reality. These ideas may be useful to demonstrate the implications reason played on Greek art.

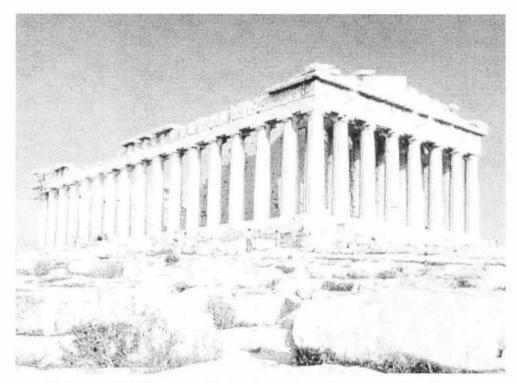
During the Renaissance both idealism and realism were appropriated from Plato's and Aristotle's philosophies and with Christianity became integral players in art under the term Neoplatonism, which is why it is important to have some background knowledge in these philosophies. In the art work *The School of Athens* painted by the Renaissance artist Raphael, for instance, is symbolic clarification of Plato's and Aristotle's contrasting philosophies - Plato points heavenward to the ideal and Aristotle focuses on the ground at the empirical.

Hollister (1994) mentions how Aristotle's and Plato's two ideas which contributed to humanity's search for truth: Aristotle's empirical and Plato's ideal, were threaded together to form ancient Greece's unique art based on idealism and realism. A combination of Plato's mystic (supernatural) explanation for our existence with Aristotle's empirical (observation) has endured through the centuries, arriving in our own time as religion and science, faith and reason, says Freeman (2005). Plato's and Aristotle's ideas on faith and reason may be seen clearly in Renaissance art which combined a deep divinity (faith) with a realistic style (reason), and it is in this context, throughout this thesis, the two ideologies can be analysed in art. Once again, Raphael's School of Athens makes many references to idealism and realism and therefore may form an excellent source of study on how these philosophies influenced Renaissance art. Holbein's Ambassadors also shows in graphic detail how the two forces of faith and reason were integral in the time's culture. In this way art works form an integral tool to help explain complicated ideas, like idealism and realism, philosophy and religion, faith and reason.

An analysis of two art works from ancient Greece can help clarify how instrumental art works can be to explain this.

Iktinos and Callicrates The Parthenon 447 - 432 BC

The Greeks' use of idealism and realism to solve problems in art led to unprecedented innovation through experimentation and discovery. Even today, as a ruin, the *Parthenon* dazzles from atop the Acropolis as an embodiment of Greek concepts in art - beauty, order and harmony formed through reason. It seems to be saying what



Iktinos and Callicrates The Parthenon, Acropolis, Athens, 447 - 432 BC

Plato and Aristotle believed all along, that the essence of beauty is a combination of realism and idealism, discernible through human intellect. (Fleming, 1991).

Realism and idealism seem to infiltrate every inch of the *Parthenon*. Virtuoso artistic displays of skill, sublime beauty and intricate design in its pediments and friezes have perhaps never been surpassed. That money, genius and prodigious amounts of labour were lavished in this way is testament to the awe the Greeks held in their gods. Tens of thousands of devotees would have worshipped the *Parthenon's* resident god, Athena, and the other idols carved by the legendary sculptor, Pheidias, sacrificed in front of them, and they would have wondered if the statues were the gods themselves says Gombrich (1995). Reason was integral to the design of the Parthenon but faith in the gods inspired it.

Countless scholars have tried to penetrate the extent reason played in the Parthenon's construction by deciphering a hidden code, a discreet geometric proportion governed by a mathematical ratio, apparently used by Iktinos and Callicrates. No formula has yet come to light but Fleming (1991) says there is a

recurring ratio of nine to four. The building is 228 feet long and 104 feet wide for instance, and the distance between the columns (about 14 feet) compared to the diameter of the column at its base meets the specifications of that ratio. Corner columns are about two inches wider than the others because they are set against outside light and space and the viewer's eye needs to be compensated with more bulk. All the columns lean inwards by three inches so that if the two sides were followed they would converge at a vanishing point about one mile above. The floor (stylobat) is a convex curve (2^{3/4} inches higher in the middle on the shorter side and 4 inches higher in the middle on the longer side), moreover, the entablature (cornice, frieze and architrave) echoes this curve. The columns appear to swell slightly and the way they taper at their tops creates a curved effect called *entasis*, designed to make them appear to bulge under load. Iktinos and Callicrates purposefully exploited the natural grace and charm of the curve and with the guiding force of reason they created a great work of art. (Fleming, 1991).

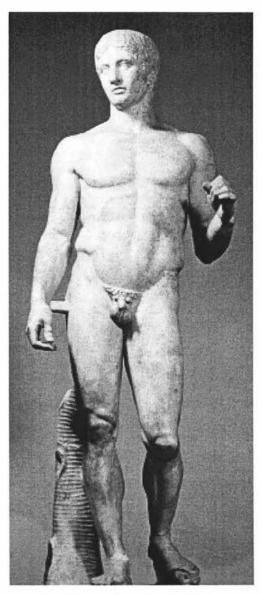
The *Parthenon* is a wonderful example to teach about the effects reason had on Greek art because it encapsulates Plato's philosophy of the ideal in the form of a perfect model, Aristotle's philosophy of realism in the form of empirical observation, and Pythagoras' theory that there is a mathematical structure behind physical forms says Fleming (1991).

The next is also a worthy art work to demonstrate how idealism and realism influenced Greek sculpture and later on influenced the Renaissance's own art.

Polykleitos (Doryphorus) The Spear-Bearer 450 - 440 BC

"Many are the wonders of the world, and none so wonderful as man," said the Greek philosopher, Sophocles (496-406 BC). Abiding by his reasoning, and Plato's philosophy of the ideal and perfect model, lifelike Greek sculptures were carved as ideal versions and personifications of gods and goddesses. Almost two thousand years later, during the Renaissance, artists also strove to express this same concept of beauty in the human body and the power of the human mind. In so doing, realism manifested itself in art as a perfection in skill and verisimilitude (an allegiance to the truth), qualities which became the goal of ancient Greece's and the Renaissance's most distinguished artists claims Fleming, (1991).

Since Greek carvings of gods in human form were designed to personify the



Polykleitos (Doryphorus) The Spear-Bearer 450 - 440 BC

ideal they deserved the greatest attention to detail. They, therefore, needed to transcend reality and represent a perfect rational order, as archetypes of human beings where everything was complete. Johnson (2003) explains that because they represented the ideal, Greek sculptures from fourth and fifth century BC represent youth and not old age or infancy, in their ideal state nothing should be remotely accidental or arbitrary, as demonstrated by the Parthenon's design - everything had to be planned through reason and have a succinct purpose for being there. Which is why Fleming (1991) says Greek art highlighted reason over emotion, form over content, and reality over appearances.

These ideas are perhaps best encapsulated in Polykleitos' masterpiece: *Doryphorus* (The Spear-Bearer). Polykleitos found the solution which Renaissance artists later strove to emulate - how to make a perfect, rational work of art. His was the Classic solution, copied for aeons by generation

upon generation of artists, right up to the present day says Woodford (1982).

Contrapposto (counterpoise) is Polykleitos' innovative idea arrived from realism and idealism to convey beauty. Harmony is created by alternating tensioned and relaxed limbs, a gracious tilt of the head and by a gentle 'S' shaped rhythm flowing through the body. The empirical attention to anatomical detail is emphatic, the

statue stands completely at ease, the body slightly twisted, and its weight is carried principally on the right or 'engaged' leg. Polykleitos has created a perfect work of art. It is this aspect of reason in art which resurfaced during the Renaissance.

How did Polykleitos manage to create such a perfect blend of realism and idealism? Caught in mid-step, the *Spear Bearer* creates an almost impossible contradiction and ambiguity of harmonious stability and fluid animation, the net result of which is vitality. Thus, every muscle is either relaxed or tensioned. His left hand holds the spear so his left





right side viewpoint

lest side viewpoint

shoulder is tense and slightly raised, contradicting his relaxed left leg (which bears no weight), and the drooping left hip. His right side has a contracted torso, his left is relaxed, and his right leg bears the full load of his body; the right arm is relaxed contrasting with the tension in his right leg. Everything rests on ambivalences, of slack/tensioned, straight/bent. The viewer is greeted with tranquillity from the right side viewpoint where the weight bearing tensioned leg compliments the relaxed arm, and on the left, the angular, jerky and sharply bent elbow and knee creates haphazardness. This is so rationally worked out, so marvellously coordinated and wonderfully harmonious, a supreme equilibrium has been reached through idealism and realism says Woodford, (1982).

Polykleitos' contrapposto prototype which illustrates the *Spear Bearer* as he appears (realist), together with an abstract idea and concept illustrating things how they ought to be (idealist) was copied relentlessly by Renaissance artists. The great Renaissance intellectual Alberti, promoted the philosophy of idealism and realism seen here in the Polykleitos' art work, to produce a formula which was stringently adhered to by the Renaissance artists. To them *Spear Bearer* represented the very embodiment of beauty and reason in art. Both *The Birth of Venus* and *Primavera*, by Botticelli, demonstrate contrapposto's dramatic effect, so do many figures in Raphael's

School of Athens. We would not have the masterpieces of sublime skill from Massachio, Piero della Francesca, Leonardo da Vinci, nor Michelangelo, for example, if it were not for these ideas on idealism and realism.

Fleming (1991) indicates that idealism and realism in art were symptoms of a society which dedicated itself to reason. In the era which followed, called the Middle Ages (as it slotted in between the Greco/Roman and Renaissance eras) when faith predominated reason, symbolism became the norm in art. The next part of the chapter analyses how realism, and idealism were lost in art, replaced with symbolism until they were reborn during the Renaissance roughly one thousand years later.

Faith and Reason in Middle Ages Art

"Plato and Socrates may often contend,
And all the breath within their bodies spend,
Engaged in disputations without end.
What's that to me?
For only with a pure and simple mind
Can one the narrow path to heaven find,
And greet the King; while linger far behind,
Philosophy."

Jacophene da Todi

This poem, quoted from Hollister (1994), demonstrates how during the Middle Ages cherished ideas formulated by the Greeks through reason declined, supplemented by an influence of faith. This section analyses how reason and faith became incompatible during the Middle Ages only to be reconciled almost a thousand years later during the Renaissance. When the rebirth of Greek idealism and realism in art and philosophy re-emerged after a thousand year hiatus during the Middle Ages, the humanist Petrarch named the era 'Renaissance', a French term, which derives from the Latin *renascere*, to be reborn, (*rinascita* in Italian). Renaissance artists and scholars saw how faith had overwhelmed reason during the Middle Ages so they labelled the era the 'Dark Ages'.

Hollister (1994) use eponyms like 'middling', 'lay dreaming' 'half awake' or

'condemned as a thousand years without a bath' to describe the 'Dark Ages', because to him the emergence of Christianity signalled the destruction of reason and knowledge gleaned from Greco/Roman artists, philosophers, mathematicians and scientists and replaced them with an acquiescence to faith. Hollister (1994) clarifies the Middle Ages acquiescence to faith over reason by quoting the following: "I believe so that I may know," said Anselm, a follower of the early Christian father, Augustine, "faith comes first, reason second; faith rules reason, but reason can perform the useful service of illuminating faith. Indeed, faith and reason are separate avenues to a single body of truth ... truth is one ... reason cannot err, but our use of it can ...". Obviously a disparate manner of thinking to Greek philosophical intellectualising, and the implications this switch from reason to faith held profound implications for art during the Middle Ages.

Freeman (2005) says the watershed of the great era of Classical reason and the new one of Christianity's faith, is marked by the last Greek astronomical observation made by Proclus in 475 AD, after which the book of reason closed, to be reopened only when Copernicus rediscovered the Roman scientist Ptolemy in the sixteenth century during the Renaissance.

Marauding barbarians, economic turmoil, illiteracy, warlords, famine, plague and war, Johnson (2003) continues, enveloped the once mighty Greco/Roman dynasty which had dedicated itself to reason for almost a thousand years. Within this cultural wilderness where reason had lost its boundaries, faith in Christianity gradually expanded. But there was not total annihilation and remnants of Greco/Roman learning managed to survive. Plato's philosophy of idealism, for example, underpinned the Judeo/Christian concept of 'faith' according to Freeman (2005). "If those who are called philosophers, and especially the Platonists, have said anything that is true and in harmony with our faith, we must not only not shrink from it, but claim it for our own use from those who have unlawful possession of it." Augustine (c. 400 AD).

Hollister (1994) tells us the flame of Greco/Roman reason was kept alight by the Muslims (Aristotle's *Physics*, Ptolemy's *Almagest* and *Geography*, and Euclid's *Elements* and many others on algebra, astronomy, and medicine were all preserved by the Muslims) and in the *scriptoria* (writing rooms) of monasteries like Lindisfarne and Iona, monks, bound by poverty, chastity and obedience, translated ancient manuscripts, saving them from destruction. There was also a brief return to reason

in the eighth century under Charlemagne's Carolingian Renaissance, but his frail empire was not forged on reason to the same extent as Greece's or Rome's and collapsed during the ninth century. (Hodges, 1993). It is important to be aware of these facts as the Renaissance may possibly never have occurred if it was not for the preservation of these vital manuscripts.

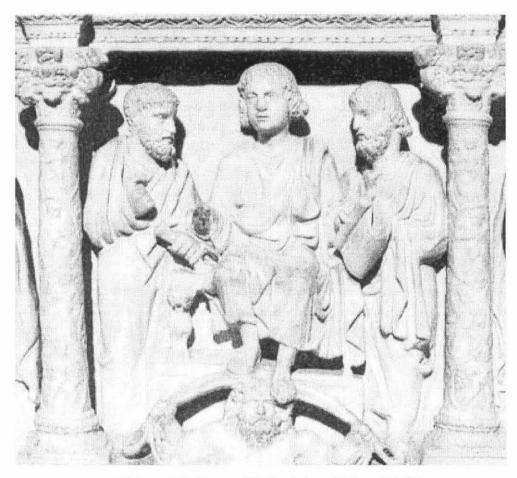
The extent faith submerged reason, continues Hollister (1994), is demonstrated by the early Christian iconoclasts (idol destroyers) whose destruction of art represented irrationality in its highest capacity according to Gombrich (1995). As a point of reference on the scale of the destruction is Vasari (1511 - 74), who wrote in his book on Renaissance artists, Lives of the Painters, that in the fourth century AD there were 3785 public statues listed in Rome, by 1400 there were only four left. (Johnson, 2003). Iconoclasts believed they were justified to destroy idealistic and realistic works of art through faith for their God: "Ye shall destroy the altars, break down the images, and cut down the groves ... for the Lord, whose name is Jealous, is a Jealous God", (Exodus: 34:13). Christians took this literally and iconoclasm spread with vigour. So successful were they, very little Greek art has survived. Since Greek art



The Tetrarchy from 300 AD

was persecuted during the Middle Ages by Christians, because to them it was tantamount to idol worship, Christian art tended to distance itself from all elements of idealism and realism and became symbolic. (Gombrich, 1995).

Johnson (2003) says when the Greek realistic and idealistic tradition in art was replaced with symbolism and clumsy craftsmanship, (a style better suited to political-religious totalitarianism, he says), it signified all that had been lost of a thousand-year heritage based on reason. Johnson uses the famous sculpture of *The Tetrarchy* from 300 AD to show how artists lost



Christ with St. Peter and St. Paul from 359 or 389 AD

the skill to create lifelike sculptures demonstrating realism and idealism. Gombrich (1995) uses *Christ with St. Peter and St. Paul* from 359 or 389 AD a marble relief from the sarcophagus of Junius Bassus in the crypt of St. Peter's Rome. It is the earliest representation of Christ and once again shows clearly the loss of idealism and realism.

Freeman (2005) agrees that reason was lost to faith and adds that philosophy was considered by the Christians a pagan activity, so it too was persecuted, (as the poem which opens this section testifies) and Plato's Academy, operational for nine hundred years, was closed in 529 AD and its teachers fled to Persia. St. Paul's infamous onslaughts condemning philosophy: "I will destroy the wisdom and the wise" and "... empty logic of the philosophers. The more they call them philosophers the more stupid they grew ... they made nonsense out of logic and their empty minds were darkened ..." (Romans

21-22), ample evidence of the precedence faith had gained over reason says
 Freeman (2005).

"The ignorant are closer to the truth than the educated". "The foolishness of God is greater than the wisdom of the wise", said St. Paul. "The wisdom of the world is foolishness to God" Corinthians 1: 25. This is further evidence of how theology affected reason and rational thought and art in the Middle Ages says Freeman (2005).

It was to onslaughts such as these of St. Paul's to which artists and humanists reacted with horror during the Renaissance. They saw the need for a balance between faith and reason to find truth, an equilibrium they understood had become lost during the Middle Ages. In Galatians and Romans, for instance, St. Paul makes it clear that faith itself is sufficient to define truth: 'Instification by faith alone" and: 'The just shall live by faith," also: 'Man is justified not by works but by faith".

Christians' adherence to faith drew critical comments from Greco/Roman intellectuals who abided by reason: "... convince only the foolish, dishonourable and stupid and only slaves, women and little children," wrote Celsus (2nd century), "Undemonstrated laws" wrote the Roman scholar Galen. What would happen to those who clung on to the belief in Greek philosophy and reason and refused to acknowledge faith? 'They will be condemned for all time with Christ's second coming", says St. Paul in his letter to Thessalonians (1:9). (Freeman, 2005)

The meaning of 'faith', adds Freeman (2005) had shifted from a matter of 'belief' to an obligation of accepting as fact, unproven assumptions. It was a way of thinking which dissolved rational thought, and since the essence of rational thought is progress, no progress will be made if an authority stipulates what can and what cannot be believed says Johnson (1992). Hence the labelling of the Dark Ages as 'Middling' (mediocre). Polytheistic religion (many gods) encouraged freedom in art, Johnson (2003) continues, but monotheism (one god) stifled this freedom: one god to obey, worship and portray encouraged dogmatic regulations which were enforced severely. Christianity became a state religion and central to government and its influence was complete, the population had to conform whether they liked it or not and art's purpose was to portray God. The reversal of Greco/Roman theories in art can be partially explained by the Mosaic Law says Johnson (2003), which forbade any rendition of God or creatures He created.

The influences faith and reason exerted on Greek, the Middle Ages and the Renaissance societies may be analysed and compared to the impact the ideologies had on their art.

Comparing Reason in Renaissance Art with Faith in Middle Ages' Art

Greek artists depicted their deities in human form, and Greek philosophers referred to the human body as a microcosm which epitomised the harmony of the universe. (Fleming, 1991). Both acknowledged the unlimited potential of the human being. Renaissance artists rekindled this philosophy which had lain moribund for a thousand years through the Middle Ages, they adopted the Greek philosophy that mankind's unreleased potential should be exploited to the utmost. The Greek belief that the divine was embodied in material form, rendered visible in the beauty of the human body became the model for Renaissance's artists. (Hale, 1966).

It was this realignment of reason which made Renaissance art fundamentally different from Middle Ages' art, particularly in the shift from symbolism back to idealism and realism. This change in art may be interpreted as symptomatic of the dramatic transformation of the era when faith and reason were re-analysed in a new light says Cumming (1995).

Zaczek (2003) claims Middle Ages' art found its antecedents in the Byzantine Empire (330-1453). Its capital Constantinople was an oasis for civilization amid the wasteland of Europe controlled by warlords and feuding rival factions. Constantinople had developed a unique style in art, governed by stringent canons (rules) which her artists were required to adhere to strictly. Rarely were they allowed to compromise on the prescribed devout religious symbolism, nor deviate from its dogmatic tenets. Every iconographical detail had to relay a prescribed and precise spiritual meaning designed specifically to edify and maintain orthodoxy, enlighten the viewer spiritually and promote faith. Individuality of artistic expression was harshly discouraged as heresy, so the style remained the same for hundreds of years. Since Byzantine artists were censored in expressing opinions of individuality, there was no incentive to experiment and find out about the mathematical system of showing depth on a flat surface, (called perspective), modelling or realistic portrayal, because artists were committed to deciphering a spiritual world of faith and not the empirical world of idealism and realism, the art of which, by many, was now seen as tantamount to idolatry.

By analysing the two works illustrated next, evidence of the differences between



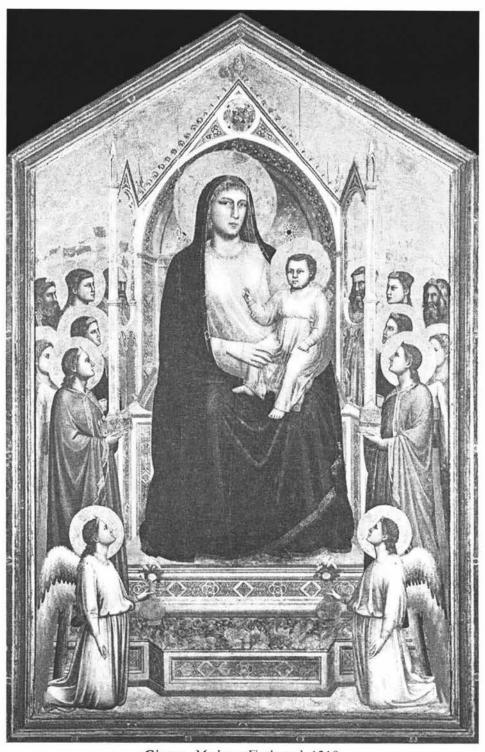
Duccio Madonna Enthroned 1308

Byzantine art and the new style permeating the Renaissance may become clearer. The first painting, Duccio's *Madonna Enthroned*, is in the Byzantium tradition, painted in the Medieval style as a high altar. The six ascending angels flanking the sides represent what Johnson (2005) refers to as clumsy craftsmanship, they resemble wooden puppets and Christ looks decidedly mature for His years. Johnson (2003) says this style of art is inanimate, supine and static where canonism (Christian regulations) asserts itself and social perspective is dominant (the Madonna is enormous and the saints tiny.

In the second *Madonna Enthroned* 1310, by Giotto and painted two years after Duccio's, Janson (1972) says we can see the transition which is taking place with the fast-approaching Renaissance. The two kneeling angels in the foreground and others congregating the sides are painted one in front of the other, adding realism and convincing space missing in Duccio's work. Space regresses back into the picture toward the six serious looking saints adding to the realism. Also revolutionary is the way the Madonna's gaze meets our own, inviting physiognomical evaluation, and the rendering of anatomy beneath her clothes is more pronounced and lifelike because Giotto has used chiaroscuro (light and dark tone), and modelling (subtle blending from one tone to the next) to delineate form. Little wonder the chronicler Boccaccio proclaimed after seeing Giotto that art had "been in the grave" for centuries. (Janson, 1972).

By abandoning the flat Medieval background and static wooden figures, and by replacing them with a convincing apparition of form through realistic modelling, and credible space through overlapping, Giotto's idealism and realism in art may be read as symptomatic of the return of reason. In this instance reason and realism (in the technique), and idealism and faith (in the subject), set the matrix of art for the Renaissance says Cumming (1995).

Since Medieval artists had lost the skill to achieve Greco/Roman standards of realism and idealism in art and since naturalism had no place in the Christian world of faith (as the immaterial cannot be shown with the material), signs and symbols became the favoured means of representing mystical things in Middle Ages' art. Renaissance artists turned this around, they thought less of mysticism, magic and symbolism and more of Greco/Roman skills and techniques and rediscovered reason, realism and idealism in art. Since Renaissance artists were no longer compelled to



Giotto Madonna Enthroned 1310

follow a symbolic interpretation, nor to grade figures by size in hierarchy of importance, they freed themselves to explore other areas in art, for example, rational problems of aesthetics, philosophy, scientific discovery and mathematical structure maintains Thuillier (2002).

The acquiescence to reason by Renaissance artists meant they became free from constraint, more independent and individual. They were influenced by knowledge, virtue and faith, which was very different from Middle Ages' artists who were usually anonymous, communal, cooperative, controlled and governed by ecclesiastical jurisdiction. Moreover, Renaissance scholars had an insatiable appetite for empirical enquiry and this is mirrored in the arts' switch from symbolism back to realism and idealism claim Rice and Grafton (1994).

To help explain to adult learners the differences between faith orientated Middle Ages' art, and reason inspired Renaissance art are the three illustrated paintings of *The Three Graces*, from Greek mythology, written about by the Greek writer Hesiod whose works were rediscovered during the Renaissance. The first detail from Pompeii may be useful to demonstrate Greek art's acquiescence to reason, and the divine represented in human form.

The second detail, from the Middle Ages, could be used to show how Christian faith overshadowed reason.



Detail 1



Detail 2



Detail 3

Christians saw the body as dirty and only the soul as worthy, therefore, they painted the Three Graces' bodies hidden under draping garments to acknowledge the inferior status of the body to the soul. Realism and idealism have vanished, replaced with the crude, flat, symbolic style typical of Middle Ages' art.

The third detail, from Botticelli's *Primavera* (1480) painted during the Renaissance may be used as evidence of the rediscovery of the potential of reason and the human body's powers, (which should be harnessed and used for the prosperity of mankind), and symbolised in art with a return to idealism and realism.

Thuillier (2002) says further clarification to aid understanding of how Greek art rested firmly on reason, and how Christians' saw the world from within is the following quotation. "How do you paint the soul?" asked the Greek philosopher Socrates of an artist. "How can it be imitated?" came the reply, "since it has neither shape nor colour ... and is not visible at all." This problem of how to represent the immaterial in a material form was solved with the use of symbols. To the Christians, spiritual mysticism could only hope to be represented through symbols - Freeman (2005) says bird motifs, for example, became symbols for the Holy Spirit, the lyre with its strings stretched over a frame became the symbol of the crucifixion, peacocks stood for paradise and the fish was the divine symbol for Jesus making his followers 'fishers of men'.

Thuillier (2002) suggests taking a look at the next two paintings, for clarification on the two disparate styles, one influenced by faith the other by reason. The first picture from the *Paris Psalter* shows a large figure holding a blue shawl - she symbolises the night suggesting the scene is nocturnal. Meanwhile, a scantly dressed child enters, letting us know the scene lasts until dawn. To ensure no mistakes are made in the identification of the figures, Greek lettering labels 'night', 'Isaiah' and 'dawn'. Now



The Prayer of Isaiah (from the Paris Psalter) Tenth Century (Byzantine Miniature)



Limbourg brothers, Ego Sum, Les Tres Riches Heures du duc de Berry 1416

compare the difference around five hundred years later. The picture depicting the arrest of Christ comes from the famous book *Les Tres Riches Heures du duc de Berry (The Book of Hours)* by the Limbourg brothers. Here reality is presented not symbolically but realistically, showing a return to reason through the formal values of art adapted from Greece and Rome says Thuillier (2002).

Conclusion

Chapter Two investigated how the Greeks achieved tremendous feats in the field of philosophy, science and mathematics with their acquiescence to the faculty of reason and how their learning influenced their art through idealism and realism. It analysed how this confidence with reason petered out during the thousand-year Middle Ages when, what Johnson (2003) refers to as religious and political totalitarian forces, overshadowed Europeans with what Hollister (1994) terms 'otherworldliness'. It also analysed why the Middle Ages was regarded by Renaissance artists and scholars as an era when reason, which relies on proof, was held back by many unproven

assumptions made by faith in religion and how Christian leaders felt threatened by reason and made it their moral duty to suppress people's natural curiosity to find out and challenge faith's unproven assumptions. 'There is another form of temptation, even more fraught with danger. This is the disease of curiosity... It is this which drives us to try to discover the secrets of nature, those secrets which are beyond our understanding, which can avail us nothing and which man should not wish to learn'. (Augustine, late fourth - early fifth century AD), cited from Freeman (2005).

To help understand what Augustine was implying in his quotation, and to demonstrate how works of art may be used to clarify important philosophical and



A Scene from the Histories of St. Thomas Filippino Lippi

religious issues, is the following work of art A Scene from the Histories of St. Thomas by the Renaissance artist Filippino Lippi (1406 - 69).

This painting shows a monk, dressed in black and white, as the focal point for the composition. On either side of him are *fasces* (rods and an axe bound together) which are a symbol of authority dating from ancient Rome. The monk is crushing a terrified looking man under his feet and the unfortunate man holds a banner which reads "Wisdom Conquers Evil". The monk is Thomas Aquinas (1225 - 74), the Dominican theologian, and in his left hand he holds open a book, written by St. Paul, the text of which reads; "SAPIENTIAM SAPIENTUM PERDAM" "I will destroy the wisdom of the wise." (Freeman, 2005).

Thomas Aquinas is the authority here, hence the *fasces*, and surrounding him are four Personifications of (from left to right) Philosophy, Theology, Grammar, and Dialectic - parts of the curriculum of the Liberal Arts (mentioned in context with humanism during the next chapter). The importance of faith over reason, continues Freeman (2005) is clearly labelled through Theology's crown and hand raised to heaven.

In front of Thomas and the Personifications are two groups of men, between whom a jumble of books and manuscripts infer some sort of disputation has occurred. Freeman (2005) says this indicates the argument during the fifth century, when Christianity was in its infancy, over the nature of Jesus and his relationship with God. On the left in a yellow robe is the hydra heretic Arius who propositioned that Jesus was mortal and not the son of God. Opposite Arius is another heretic Sabellius, a Roman cleric, who claimed that Jesus was only the temporary manifestation of God. Arius' thesis "there was a time when the Son was not" lies condemned at his feet, and at Sabellius' feet lies his own heretical thesis. Thomas Aquinas wrote his great work Summa Theologiae as the solution to the argument which has taken place in front of him over the doctrine of the Trinity - in it Aquinas said God the Father, Jesus the Son, and the Holy Spirit were all contained within a single God. He also wrote in his work that the concept of the Trinity cannot be proved through reason, but only through faith. (Freeman, 2005).

This painting may act as a satisfactorily conclusion in demonstrating how useful works of art are for teaching and learning about complicated doctrines involving, in this instance, faith and reason and the Trinity.

By contrasting the rationality in art during the Greek era which gave impetus to the growth of idealism and realism, with the Middle Ages art where Greek learning was lost, replaced with magic, mystery, mysticism and symbolism, teachers and learners may have more of an idea how to discuss and appreciate how the two ideologies, faith and reason, influenced Renaissance art.

During the Renaissance faith and reason coexisted and complemented each other in art; it was an era when philosophy, mathematics and religion went hand in hand and this amalgam of faith and reason allowed civilization to flourish and create what Cumming ((1995) refers to as the start of the modern world - the Renaissance.

CHAPTER THREE

HOW PHILOSOPHY AND RELIGION INFLUENCED THE RENAISSANCE'S ART

Introduction

During Chapter Two faith and reason were analysed in context with Greek and Middle Ages' art and philosophies to underpin the main body of the thesis containing Renaissance art. Chapter Three analyses the Church during the Renaissance making a convenient link with the previous chapters' investigation into the Christian acquiescence to faith during Middle Ages. Most of Renaissance art was commissioned by the Church, says Johnson (2003), so it is necessary for adult students to grasp an understanding of the Church's influences on art and society in general.

Following on is a brief account of reason's influence on the Renaissance, the purpose of which clarifies how faith and reason influenced Renaissance art.

The magnitude reason had on Renaissance art is suggested by Hollister (1994) who says science severed the bonds between revelation (God's disclosure of His own purpose for mankind) and reason, which led to the modern world. Faith and reason were regarded as incompatible by William of Ockham (1300-1349): "Faith uninhabited by logic, and 'natural philosophy' (science) uninhabited by faith," he said. Rice and Grafton (1994) mention the revolution of modern science during the Renaissance is exemplified by Copernicus' publication of On the Revolutions of the Celestial Spheres in 1543 and this was ramified by Galileo when he said Copernicus was: "...able to make reason so conquer sense that, in defiance of the latter, the former became the mistress of their belief."

An analysis of reason in the form of science, mathematics, humanism and Neoplatonism may benefit an understanding how its effects permeated Renaissance art and architecture. These ideas are brought together by investigating Renaissance art by subject and analysing reason in the form of Neoplatonism, humanism and Alberti's doctrines, which might serve as useful links, aiding understanding in the

main discussion of Renaissance Art under the title 'The Art of Faith and Reason' in Chapter Four where eight artist's works are investigated in context with their allegiance to faith and reason.

Faith and the Church During the Renaissance

In the context of this thesis the Church can be regarded as an institution which personifies faith. During the Middle Ages and the Renaissance, Johnson (2003) says the Church wielded great political-religious absolutist power over European society and culture, influencing people's acquiescence to faith and reason, art, education, literacy and law, therefore, it may be appropriate to look at the institution in a little depth. The Church and its teaching effected every aspect of society and gave it a uniform moral overtone says Johnson (2003). The consequences for art was a stifling of liberty and diversity and it soon became an instrument for the state with an exclusive Christian subject matter and vocabulary adds Johnson (2003).

Simon (1967) says it is hard for a modern person to understand and identify with Middle Ages Christians' obsessions and fixations with faith. During this time it was almost impossible for a person to escape the Church's authority. Its power, thought to be ordained by God, was seen as an extension of a natural law of the universe. The very act of living was coordinated by the Church, priests baptised people, married them, christened their babies and administered the last sacraments on their deathbed - in short, continues Simon (1967), the Church cared for every individual's soul in this life and in the afterlife too.

The Church was the heart and soul of society in Europe and its majesty was personified by the most splendid edifice, towering high above an otherwise drab Medieval townscape. Its organisation was so complete and its autocracy so established, it demanded unfaltering obedience as prerequisite from Christians. The Church gave a choice between hope of salvation in heaven in exchange for obedience, or the fear of eternal damnation in hell in exchange for decadence. Since Christians vehemently believed this temporal life was a pretext or trial which determined the consequences of the afterlife, they must have lived in perpetual fear of their actions, which would have made it easier for the Church to exert its control. Ruskin's saying, quoted in the Introduction: 'The art of any country is the exponent of its social and political virtues', and Marx's quote: 'The ideas of the ruling party are in every epoch the

ruling ideas." can be used to highlight the importance the Church had on Renaissance culture and art. The Church's influence is conspicuously present in all of the art works discussed in Chapter Four and Johnson (2003) clarifies this when he says two thirds of all artworks made in Europe with us today were made for the Church.

The Church was a law unto itself continues Simon (1967). Even though it possessed no territory, it was hardly different from a State. It had as its monarch the Pope, its princes in the prelates, and its subjects in Christendom. It fought its own wars and paid for them through the collection of taxes and indulgences. But during the Renaissance its authority was challenged and undermined by reason in the guise of humanist thinkers like Erasmus and the devout faithful led by religious leaders like Luther.

This clash of opinion over the importance of faith and reason may be discussed through art, for example, *The Ambassadors* by Holbein, which serves as a guide into the context of the times when changes to Renaissance Europe's opinions about the Church were highlighted by constant war, the uncompromising urge for secular power and material wealth by the popes, and the fact humanist thought was becoming more prevalent. Fuelling the average Christian's grievance of the Church's inadequacies, was the veiling of the true meaning of Christianity behind dogma. To them Christ's original message had evolved into a series of magical rituals and ceremonies where confidence trickster priests claimed relics held supernatural powers over whoever touched them says Freeman (2005). To make matters worse, adds Elton (1963), the Bible was written in Latin and therefore inaccessible to the believers of illiterate Europe, until Luther translated the Bible into German, its central message remained lost to most Christians.

But despite the public's outcry over the Church's deficiencies, Renaissance Christians remained pious and profoundly religious, believing in God and the Devil and worrying about hell and salvation in the after life says Simon (1967). In a time when war, famine and plague killed most people well before their prime, believers craved a God with compassion and the devout thirsted for truth and dreamt of a purified Church. Christians were beginning to expect higher standards of behaviour from religious leaders, especially for their abuses in gathering indulgences to release sinners from torment in Purgatory. It seemed sinners could acquire salvation, not through avoiding sin, but through the pardon of a priest who supposedly had supernatural

powers which were in no way impaired through his own sinful life continues Simon (1967). Michelangelo's *Last Judgement*, discussed in Chapter Four, may form a useful link to these ideas about the consequences of the inadequacies of the Church.

The Renaissance was, therefore, a time of great upheaval in the Church and society in general. People were seeking change, augmented by the rediscovery of Greek and Roman manuscripts which were analysed in a new light, and their ideas were rethought, a situation which had a direct bearing on the era being called the Renaissance (rebirth). These ideas, claims Fleming (1991), based on Classical learning which resurfaced during the Renaissance influenced the era's art, for example in the return to idealism and realism.

Symptoms of Reason in Renaissance Art

Hollister (1994) says the recovery of Classical learning in mathematics and scientific laws, (for instance Plato's, Aristotle's and Pythagoras' philosophies), during the Renaissance and the emergence of humanism, replaced Medieval standards of faith, common sense and experience, with reason and understanding, says. Through intense study of Classical sculpture, architecture, philosophy and literature Renaissance artists slowly absorbed an understanding of the Classical world. The best examples of Greco/Roman ideals were assimilated into individual styles, showing nobility and restraint, dignity, simplicity, ease, contrapposto and gravity (the solemn qualities) adds (Fleming, 1991).

This cohesion of ideas forms a central focus in the art works discussed in Chapter Four, but, before studying this synopsis on Renaissance art, perhaps a grounding in Neoplatonism and humanism is apt because, as Hollister (1994) maintains, these methods of thinking came about as a result of the re-evaluation of the relationship between faith with reason. There are elements of Neoplatonism in Michelangelo's Sistine Chapel Ceiling, for example, and Piero della Francesca's Baptism of Christ, and elements appear in Leonardo da Vinci's art, for instance his Proportions of the Human Figure. Reason's influence may be seen in compositional structure, Cole (1993) says, which was guided by Classical models of geometry and mathematics. Piero della Francesca's meticulously structured paintings, for example, may be attributed to his adherence to Plato's philosophy that a perfect geometric structure lay behind all God's creation, so his art was commensurate with measurement demonstrating the

re emergence of reason in Renaissance art says Fleming (1991).

Above all, says Hollister (1994), achievements influenced by reason in Renaissance art owed their discovery to intellectuals' studying Greek and Latin. Without their linguistic fluency ancient mathematical and scientific manuscripts which up until then had remained inaccessible through language barriers, would not have had such an impact. Ptolemy's celebrated book on astronomy, the *Almagest*, was translated into Latin during the Renaissance and through it Copernicus learned planetary theory. Other illuminary works by ancient mathematicians, Pappus, Apollonius and Diophantus, for instance, were studied avidly. But the greatest of all mathematical manuscripts revitalised and translated into Latin at this time were undoubtedly the works of Archimedes. There would have been no breakthrough theories by Copernicus, Kepler or Galileo if it were not for Archimedes say Rice and Grafton (1994).

The return to reason can perhaps be best understood through studying Neoplatonism and humanism and then analysing their impact on art by evaluating Alberti's principles.

Neoplatonism and the Return of Reason

When Cosimo de'Medici, the great Renaissance humanist and patron of the arts, commissioned the young Florentine sculptor and humanist Marsilio Ficino to translate Plato's writings into Latin - a task which took him 18 years to complete - the finished result was termed *Platonic Theology*. Thanks to Ficino's efforts, manuscripts which had previously been indecipherable, were now pored over by countless humanists and similarities between Plato's philosophy and Christianity (examined in Chapter Two) were recognised. From this evolved the movement termed Neoplatonism which was concerned with synthesising Plato's teachings, pagan worship, and the world of reason with the teachings of Christ, Christian worship and the world of faith, sparking a partial fusion of faith and reason. (Dillon and Gerson, 2004).

Since Augustine and other early Christian fathers pronounced Greek philosophers' reason and logic "empty" they turned instead to the faith of Christianity. Plato had said education, reason and knowledge and wisdom were the driving forces behind the ideal state, Fleming (1991) maintains, and justice, temperance, and courage

were the qualities extolled by the Greeks in an ideal man, says but this was refuted by Augustine and other early Christian leaders as a hindrance to the passage of finding God. Because early Christians, like Augustine and Aquinas, regarded curiosity, logic and philosophy anathema, and because of the wealth, power and influence of the Church theocracy, Renaissance humanists rightly saw the reformation of reason an impossibility. To allow reason, therefore, to have an impact they needed to collaborate with the Church, and this was the beginning of Renaissance Neoplatonism - a balance between the two - faith and reason. (Gerson, 1996). These thoughts which merge Platonic philosophy with a devout subject were integrated into Renaissance art, and can be analysed in, for example, Botticelli's Birth of Venus and Primavera which combine pagan and Christian ideas, as too does Michelangelo's Sistine Chapel Ceiling, and Piero della Francesca's Baptism of Christ. Neoplatonism's influence to the Renaissance successfully brought together faith and reason and is perhaps best symbolised in art with a return to idealism and realism combined with devotional subjects.

Neoplatonist's desire was to free participants from the deficiency of knowledge found in the faith based society of the Middle Ages. Augustine had proclaimed that mankind should not wish to learn and Neoplatonism rejected this, stating: "to man only is given the desire to learn ... learning and training in virtue are peculiar to man" (Anonymous Renaissance humanist). Humans were therefore considered to be the divine species which led Neoplatonic thinkers like Ficino to conclude that they were the mediators between two opposites of faith and reason and once a balance had been achieved many great things could be accomplished. A thought, conspicuously present in the era's art, and one which led to the myriad inventions and discoveries which occurred during the Renaissance. This achievement can be seen graphically in Leonardo da Vinci's countless drawings of devices and gadgets says Hollister (1994).

Adding to this philosophy, Marsilio Ficino explained, one God created the world and that man had the power to create as God had created, which was to have obvious consequences for art. Man was the highest of all God's creations, according to Ficino, and anything was possible for him - leading to the revival of Protagoras' famous phrase: "man the measure of all things" claims Fleming (1991).

In some of the art works discussed in Chapter Four Neoplatonic thought can be

seen to bring together Plato and Aristotle's attitude of mind - scientific, acquiring knowledge with an interest in mathematics, logic, morality, and adhering to Greek philosophical ideas of truth, goodness and beauty, continues Fleming (1991). These all gave great dignity to man and changed artists' attitude towards the human body which was now, once again, represented ideally and realistically.

Neoplatonic philosophy allowed Renaissance scholars to rethink Christianity's tradition which stated man was born free but this freedom was lost after Adam and Eve committed the Original Sin and disobeyed God. Giovanni Pico della Mirandola, a distinguished Renaissance humanist, and author of the 'Humanist Manifesto', the 'Oration on the Dignity of Man', argued that human beings always had been and ever will be free to be what ever they want and to express God's divinity in what ever way they choose. Hooker (1996) says this spirit of free enquiry formed the basis of the modern world view point of a 'free will'. Freeman (2005) adds to this by saying that man's possession of a rational mind gives him the possibility of choice, which ensures free will.

Cicero, the distinguished Roman intellectual and gifted orator, said that man is born of two things: to know and act, and in this he is almost a mortal god. After reading Cicero, Giovanni Pico della Mirandola claimed humans are the only part of creation that has the capability to 'will its own changes' and it is this claim which forms the starting point of all modern philosophies. This philosophy had unprecedented implications for art, not least because during the Renaissance artists expressed the individual's free creative power. In this respect painters, sculptors, writers ceased to be mere artisans and became *artists* in the modern term, that is, they functioned primarily on their creativity and freedom unrestricted by the hegemony of the Church. (Hooker, 1996).

The Renaissance artists Michelangelo, Raphael and Leonardo da Vinci, for instance, were greatly influenced by Neoplatonism as the movement enabled them access to a far wider range of knowledge than before hand. Ancient guidelines, for example Polykleitos' Canon, and the proportions in the Parthenon, and in poses, nudity, symmetry, beauty and proportion were re applied in their work and when they combined these elements with Alberti's laws on perspective, form, composition, figure combinations and appropriate gestures from his book 'Della Pictura' (1435) art changed irrevocably. In this way Neoplatonism had a significant impact on art

because artists, then and today, began to express themselves in their work. Freed from the political-religious absolutist limitations imposed by the Church on art, Neoplatonism effectively licensed artists to express far more inspirational themes which are studied in detail during Chapter Four.

Influential in forming Neoplatonism and benefiting understanding of how reason permeated the Renaissance's art was the study of humanism, which was revived from Greco/Roman antiquity. Humanism, like Neoplatonism, re-invigorated the new spirit of reason and learning which occurred during the Renaissance and it allowed mankind to rediscover its dignity.

Humanism and the Return of Reason

Although the term 'humanism' was coined by the German teacher, Niethammer in 1808, it existed in ancient Greek times as humanitas, a three-part curriculum called the trivium (grammar, logic, and rhetoric), and the quadrivium, a four-part curriculum (geometry, arithmetic, astronomy and music). Humanitas was also termed the Liberal Arts, denoting no human was free until they had studied the two curriculums. During the Renaissance humanism was rediscovered and many erudite scholars, Leonardo da Vinci, Michelangelo, Baldassare Castiglione (whose portrait Raphael painted, and which is analysed in Chapter Four) among them, were all versed in the Liberal Arts. (Fletcher 2006).

Rice and Grafton (1994) say Renaissance humanists read newly translated manuscripts of Classical philosophy originally written by Cicero, Plautus, Livy, Tacitus, Thucydides, Quintilian, Vitruvius, Plato, and Aristotle, for example, which made them aware that solutions to many contemporary problems lay in Greco/Roman history. After reading Plato's *Republic*, for instance, the humanist Lorenzo de Medici was inspired by the thought that faith and reason could combine in the form of a new secular government working hand in hand with Church authority; Machiavelli read Thucydides and wrote his masterpiece *The Prince*, a guide to political tactics, still influential to politician's decision making today; Michelangelo read Vitruvius' ten volumed *De Architecture* which inspired him to create a modern day Greek temple for Christian worship - St. Peters in Rome, which he modelled on the Roman temple, *The Pantheon*. Moreover, the Renaissance architect Brunelleschi (1377 - 1446) took into account Vitruvius' laws on proportion and Classical form when he designed

Florence Cathedral, making him the first architect to construct a vast dome over an edifice since Hagia Sophia was built in 532, says Johnson (2003). Further, the nude in painting and sculpture, venerated in Greco/Roman art but moribund during the Middle Ages, was resurrected as a vital component of Renaissance aesthetics. The problem of how to reintegrate realism and idealism back into art also found its solution from Greek humanist thinking which Renaissance artists adapted.

Fleming (1991) says the Renaissance poet and humanist, Petrarch (1304 - 1374), spent a great deal of his life's work rediscovering and elevating Greco/Roman humanist thinkers' ideas which reconciled faith and reason. From Plato and Augustine came Petrarch's ideas about the relationship between humans and the divine (faith), and from Aristotle and Cicero came his ideas of wisdom employed for the public good through empirical observation (reason).

The Greek philosopher Sophocles' famous quote "Many are the wonders of the world, and none so wonderful as man" was rediscovered by Renaissance humanists helping mankind rekindle its dignity, and further enhanced by Giovanni Pico della Mirandola: "... that man is the intermediary between creatures, the intimate of the gods, the king of the lower beings, by the acuteness of his senses, by the discernment of his reason, and by the light of his intelligence the interpreter of nature, the interval between fixed eternity and fleeting time ... but little lower than the angels." (Fleming, 1991).

"Man is a mortal but happy god," said Alberti (1404 - 72), "because he combines capacity for virtuous action with rational understanding." Cicero had also written: "the true praise of virtue lies in doing," prompting Alberti to conclude: "man was born to be useful to man." (Rice and Grafton, 1994).

Adding to this wave of humanist thinking which elevated the dignity of man, Hollister (1994) claims, was Giannozzo Manetti, the Renaissance humanist author of 'On the Dignity and Excellence of Man', who ascertained the world was not created for God, as He had no need for it, but for man, God's most perfect work, which contained within him the orders of the universe. Marsilio Ficino stipulated that because God had given mankind such powerful and wonderfully articulate minds and bodies, and such a beautiful world to live in, they shouldn't rely on Him for everything but ought to rely on themselves a little a bit more.

Humanism, therefore, enabled people to rediscover their dignity in the world by bringing together faith and reason and it helped them realise they occupied a special place in it: "God clearly and especially manifested his wisdom in the creation of man" said an unknown German humanist in 1512, "making man the link between (the sensible and intellectual worlds), he endowed him with magnificent gifts, attributing to him reason and free will, a most excellent gift and noble vestige of that supreme liberty with which God created all things." (Rice and Grafton, 1994).

Elton (1963) mentions that since humanists regarded their bodies as gifts from God and not as a worthless pieces of flesh whose only function was to serve as a receptacle to contain the soul during the intermittent period of birth and everlasting life in heaven, and since to humanists it was a crime not to utilise the body and mind to their maximum potential, their thinking did not sit comfortably with the Church theocracy. The humanist method of thinking promised enlightenment, and rewards in the here and now and not in the afterlife, which was particularly problematic to the Church's central philosophy which maintained that the way humans lived their lives on earth had an inversely proportional effect on their fate beyond the grave. Rice and Grafton (1994) speak of Cardinal Dominici, a highly regarded intellectual writer from the university of Padua who wrote of humanists: "They were the instrument used to corrupt politics, religion, family, education."

Freeman (2005) quotes Psalm 103: "The earth was fixed on its foundation, not to be moved forever," to clarify how Christians denounced reason as a means to finding truth if it conflicted with Christian theology. Augmenting the rift which developed between humanism and the Church was the public denouncement made by humanists on the way Christianity had been mediated throughout the Middle Ages, particularly its clerical code of conduct - to rebel was a vice, to obey a virtue, says Simon (1967). Humanists saw its intention, designed to inspire fear (of eternal damnation in hell) and hope (of an everlasting life) was wrong. Renaissance humanists, therefore, sought the means to combine the Christian faith with their own way of thinking, so that past orders of monastic life and codes of chivalry could be exchanged for the common good and not personal gain and it is this aspect of compatibility which can be seen in Renaissance art. (Simon, 1967).

These differences between Medieval thinking and Renaissance humanist thinking, which manifested themselves in art, lay in the latter's acknowledgement of reason, individualism and intellectual ability, and the former's of faith, superstition and mysticism and divinely ordained feudalism. (During the Middle Ages there existed

three orders of mankind: the monk, the knight and the peasant, which was termed feudalism). Supporting humanism was Pietro Pomponazzi who said that there was a rational explanation for all phenomena in this world, and miracles, angels and demons were but figments of the imagination: "All the effects observed in this lower world, whatever they may be, have a natural cause," he said. (Rice and Grafton, 1994). Which demonstrates the switch of thinking taking place from faith to reason, an intellectual transformation which became so influential a player on Renaissance art.

Consolidating reason and faith, idealism and realism, through Neoplatonic and humanist ideas and merging them into art was Leon Battista Alberti.

The Pursuit of Reason in Art - Leon Battista Alberti 1404 - 72

Alberti serves as a convenient touchstone for analysis of humanist and Neoplatonic ideas in Renaissance art as so much of its style and iconography hinges on his rational and logical theories. "The arts are learnt by reason and method and they are mastered by practice" Alberti advises; and reason must be used if the fundamentals of art are to be understood says Grace (2000). Alberti had the necessary credentials for integrating humanist and Neoplatonist precepts into art. He was educated in classics, mathematics, and Church canon law, and extremely well-read in philosophy, science and the arts. He wrote books on love and satire, religion, law, ethics, mathematics, moral philosophy, science and antiquity, architecture, and sociopolitical conditions, and he formulated extensive theories on beauty, proportion, geometry, and Classical architecture. He, therefore, epitomises the qualities of virtu (virtuosity - where both mind and body were united) and he maintained all artists should have these qualities as a necessity.

In Florence Alberti had the chance to admire the works of the Renaissance architect Brunelleschi, and the artists Masaccio and Donatello, themselves inspired from Classical antiquity. They convinced him that idealism and realism in Greco/Roman art should be studied and revived, so he campaigned for an elimination of all traces of the Gothic symbolic style from Italian art and architecture. He read Cicero ardently, and his references and standards for the Renaissance's art Alberti took from Greek Classical painters, like Parrhasius, for instance, from the late 5th and early 4th Century BC. (Grace, 2000).

In 1435 he published his book, Della Pictura, ('On Painting') a treatise on painting

based on humanist ideas, themselves appropriated from the Roman writer Vitruvius' De Architecture. Written in Della Pictura are Alberti's rational ideals for Renaissance art which he derived from Classical art, namely, mathematical order, dignity, calm, and nobility. These rational exponents he combined with the corrective study from life, and a deep Christian divinity. In this way he integrated faith and reason in Renaissance art. (Greenstein, 1997).

Alberti divided *Della Pictura* into three parts: the first deals with perspective and mathematics, the second and third parts are referred to as the *Historia* and describe his formula for painting and architecture. Within *Historia* were his rational precepts on painting which were to have a huge impact on the Renaissance's art. Such things as form, composition, colour, types of poses, figure combinations and appropriate gestures had such an incredible influence on art, they were to make up the basis of the formula which decided between successful and failed artists for the next four centuries. As well as presentation within art he gave guidance in subject matter artists should be devoted to Classical studies looking for ancient themes, especially allegorical content, because the Greeks had done so. (Grace, 2000).

Akin to ancient Greek artists Alberti acknowledged absolute beauty as a prerequisite to artistic value. He had three major principles of defining absolute beauty in picture making: Circumscription (drawing and line); Composition (putting parts together); Reception (of light). The highest achievement in painting was to create a Historia (a narrative painting, which, similarly to Polykleitos' Canon, gave both intellectual satisfaction and visual stimulation), but the supreme skill was the ability to make objects appear in relief using perspective construction and light, like a real sculpture. Artists were instructed to copy Classical statues to learn about light and shade, and to create contrasts in tone (called chiaroscuro). His aim was to bring back realism and idealism by having artists paint as true to life as possible, as though looking through a glass window or at a mirror, with emphasis on the facility of illusionistic skill. The Renaissance artists Masaccio and Piero della Francesca fulfil this although the latter with more subtlety and expressiveness, Leonardo da Vinci goes further with his sfumato (smoke) where he modulated areas from dark to light with no clear edges. (Fleming (1991).

Alberti recommended a use of colour, rather than the Byzantine tradition of gilding (application of thin layers of beaten gold called 'gold leaf'), where "white

adds cheerfulness, red next to green or blue makes each other more handsome". He advised the bones of the model be drawn first, then muscles, before placing drapery on top - Leonardo da Vinci and Michelangelo took his advice to heart and dissected human bodies so as to find out how it worked as a system says Fleming (1991).

Because the Greeks had stressed the importance of mathematics in training the mind, a mathematical and scientific outlook became an influential component for Renaissance artists educated through Alberti's *Historia*. The philosophy of a mathematical origin of the universe, (as advocated by Plato and Pythagoras' theory that a rational order exists in nature, and Polykleitos' mathematical Canon which stipulated man was the measure of all things), inspired Renaissance artists to idealise form from a mathematical order. Artists like Piero della Francesca (*Baptism of Christ*) and Michelangelo (*The Sistine Chapel Ceiling*) used geometry in their search for ideal beauty and since geometry forms the basis of foreshortening and perspective it was used to achieve realism according to Alberti's formula. (Greenstein, 1997).

In short a good Historia will have:

Variety - colour, ages, sexes, movements, (but without repetition).

Dignity and Restraint - very few figures (9 or 10 at most).

Modesty and Decency - cover obscene or ugly parts, hide disfigurements.

Composition - well ordered, grouped, not scattered, calm.

Gesture and Groupings of figures - ordered groupings, variety of poses; effective gestural and facial expressions evoking a response from the viewer.

Space - perspective; objects need to be as realistic as the original.

Light and Shade - chiaroscuro used to model form.

Colour - used rationally, not indiscriminately

Harmonious Proportions - decided by using geometric and mathematical ratios.

Geometry - the basis of all beauty.

Classical Architecture - Greco/Roman which he separated into five different orders.

Ancient Literature Themes - the most important and noblest of all subject

Education - an artist must be erudite.

Beauty - is decided by: the mind (intellectual ability to understand order,

proportion and harmony; artistic judgement based on reason, not taste). *The Hand* - (techniques);

Nature (reason as opposed to the spiritual and Godly as emphasised in Gothic art).

If a picture has all these it will hold your attention, give pleasure and emotion.

The Use of Figures - Figures were used to attract the attention of the viewer and engage his interest:

The lead in figure - he leads the viewer into the painting.

The gazing figure - establishes eye contact, acknowledging the viewer.

The pointing figure - points to an important part of the painting.

The barrier figure - separates the viewer from the action.

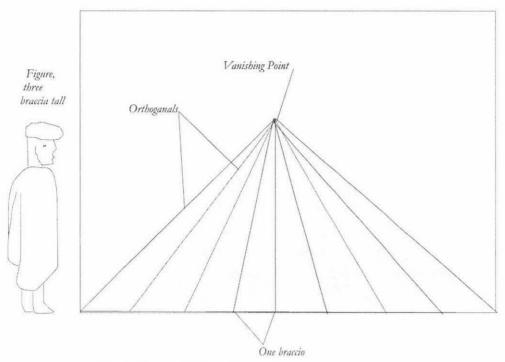
The choric figure - an onlooker.

The becoming figure - indicates through actions and gestures how the viewer should respond. (Grace, 2000).

To gain an appreciation of Alberti's impact on Renaissance art, one need look no further than Raphael's *School of Athens* which makes an excellent course of study.

Alberti's ideas permeated architecture too. His book on architecture, in which he wrote about ideas on drawing, mathematics, materials, and methods of construction, formed a fundamental guide for the next five hundred years and inspired the design of tens of thousands of Classically-inspired buildings the world over. A building's design, he postulated, should be influenced by its function, a key architectural concept still with us today says Johnson (2003).

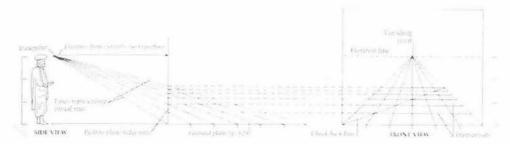
Reason penetrated Renaissance art and architecture through Alberti's rational precepts, and it was an influential catalyst for the change in style and attitude which occurred. Perhaps the most important impact this change had on art is seen in new artistic devices inspired by reason, for example, the mathematical systems of perspective, foreshortening and new ideas in architecture.



Alberti's System of Linear Perspective (sourced from Cole, 1993)

Perspective

Johnson (2003) says if there was one discovery which acknowledged and exemplified the part played by reason during the Renaissance's great revival in art, it must be perspective. So instrumental was the invention of perspective, it had as much effect on humans' perception of the world during the Renaissance as Einstein's theory of Relativity has had on our own time, adds Johnson (2003). With perspective realism in art made a dramatic return. It actually made things, (whether a Madonna, an angel or saint), part of this world and not symbolically in the next, and it included the viewers, making them feel more of a part of the picture by implying it was their viewpoint from which the scene was being observed. Most importantly perhaps, perspective's adherence to a mathematical calculation system meant it was an excellent conceptual device to demonstrate how reason could interpret an illusion of reality. Incidentally, this discovery of implied space has been used by Hart (1977) as a parallel to the gradual expansion into actual space, beginning with Columbus' discovery of America in 1492 and the circumnavigation of the world in 1525, events directly linked with Western Europeans' realisation that reason and mathematics



Alberti's Mathematical System of Perspective (sourced from Cole, 1993)

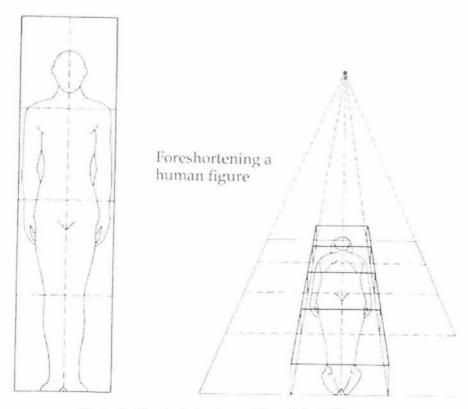
held the key to global expansion and progress. These concepts can be analysed through Holbein's *Ambassadors* in Chapter Four.

Perspective allows the artist to present a three dimensional scene onto a flat surface. It was pioneered by Brunelleschi and Alberti who gave artists the mathematical means in this branch of arithmetic. Alberti thought perspective in painting should help represent: "... an open window through which the subject painted is to be seen."

Perspective approximates the way the human eye actually interprets reality but only from a single view point and only from one eye. Before Brunelleschi's and Alberti's invention artists had discovered many of the concepts of defining space but they lacked the mathematical system which ensured a perfect rendition. Greco/Roman artists, for example, studied optics (the study of the laws of sight) and formulated many theories closely related to perspective's own laws and the classical writer Vitruvius wrote of an optical system for defining three dimensional space where all lines met at a fixed central point.

But it was Alberti who solved the problem. He wrote about the "best method" of perspective in his 1435 treatise *On Painting*. According to Cole (1992) Alberti's system's measurement is based on the height of a man (three 'braccia' or six feet tall). He drew a rectangle and divided its base into units of one 'braccia'. Then he made his vanishing point three braccia high from the centre of the base and joined the braccia divisions on the base line to the vanishing point with 'orthogonal' lines. This he termed 'linear perspective'.

When painting landscapes where there are no straight lines 'linear perspective' cannot work, therefore, artists relied on 'atmospheric perspective' which relies on colour and light to create the illusion of space. Leonardo da Vinci was the first to



Perspective Foreshortening (sourced from Cole, 1993)

use the term 'atmospheric' or 'aerial' perspective and he demonstrates the technique in *Virgin of the Rocks* 1508. The atmosphere's dust and moisture has the ability to reflect and absorb light and this is most pronounced at ground level causing distant objects to fade and become pale. This phenomena has the least effect on blue light, thus, the sky and distant objects appear blue says Cole 1(992).

Foreshortening

Johnson (2003) claims perspective and foreshortening demonstrate the effects of reason penetrating Renaissance art. Foreshortening is another variation of perspective. A long form appears shortened in a picture when using the device. It is created by using geometry, applying perspective, and adding light for tonal modelling, and colour to increase the illusion of projection. It was used to heighten the drama and emotion with impact, it also enhanced realism through giving the illusion of a deeper space and extra relief to forms.

Following Alberti's lead in bringing reason into art through studying human

anatomy, the laws of perspective and foreshortening, and Greco/Roman precepts of art and architecture, (proportion, geometry, mathematics) and by reading ancient literature (Horace, Ovid, Virgil and Homer for example), and by adhering to humanist and Neoplatonist philosophies provided Renaissance artists with inspiration much more lavish and varied than those offered by the Church alone, as a result art during the Renaissance suddenly come alive.

Reason's influence on New Subjects in Art and Architecture

After Alberti's *Historia* no longer was art's purpose solely to convey meaning of the scriptures symbolically as it had done in the Middle Ages, it was now used to show and represent life and the real world. Human desires, gods and goddesses and a panoply of exciting stories of dramatic and heroic events facilitated artistic expression which went beyond the rigid conventions of Byzantine and Medieval symbolic art. (Smith, 1992).

Often specific details and meanings of Bible stories were integrated with ancient philosophy: Michelangelo's Sistine Chapel Ceiling and Piero della Francesca's Baptism of Christ are cases in point. Also, painters like Botticelli adapted pagan myths and legends into his artworks, in for example, The Birth of Venus and Primavera. Classical and pagan iconography was appropriated into religious statues first (Donatello's David was the first) and secondly to paintings and architecture, where classical prototypes were adapted and consolidated into a religious context. (Fleming, 1991).

These new areas in art can be analysed as symptoms of reason coalescing and permeating culture in Renaissance Italy. It is a common misnomer that the emphasis on classical culture, the love of nature and acknowledgement of the dignity of man, diminished religious faith, but this is not true. A humanist's piety, for instance, and acquiescence to reason, may be analysed in Renaissance church architecture say Rice and Grafton (1994). Because a church is the house of God, many Renaissance architects wanted to reflect His perfection in its design and they accomplished this by looking back to ancient Greek aesthetic ideas and integrated them with Alberti's theories on harmony and geometry. To Alberti and the ancient Greeks perfection was synonymous with geometry because geometry can define perfection in harmony and proportion says Fleming (1991). A circle's simplicity, uniformity and equality, for example, was interpreted as the most perfect of all



Donato Bramante The Tempietto (1444 - 1514)

shapes by ancient Greek philosophers, so with Alberti's reconciliation of Greco/Roman ideas it was used as the principal format of design for a church. The *Tempietto* by Donato Bramante is one such adaptation of a pagan temple for Christian use, as is Michelangelo's *St. Peters.* Through *Tempietto's* design - of the utmost simplicity, perfection and proportion - Alberti's theories on serenity, balance and beauty are achieved says Johnson (2003).

Conclusion: The Rebirth of Reason in Art

Artists had campaigned relentlessly to represent the Liberal Arts whose lofty pursuits were deemed suitable and proper only for the erudite elite. Since ancient times this humanist curriculum was rarely associated with the ilk of mere artisans - (stonemasons and woodcarvers and the like), who, had always belonged to the subordinate Mechanical Arts because they relied on their hands and not their minds for a living. Throughout the Middle Ages people had their position in the hierarchy of feudal society and artists had to be content with their place near the bottom, labelled as manual craftsmen. But during the Renaissance artists studied humanism and Neoplatonism and the boundaries shifted. Artists became important members of society, associated with theorists, and intellectuals, and their powers of reason and knowledge were sought after by popes, kings and emperors. Leonardo da Vinci, for example, was employed as a military engineer by the infamous Pope's son, Cesare Borgia, and Botticelli was patronised by the humanist Lorenzo di Pierfrancesco de Medici. (Hartt, 1977). In this respect the return of reason had the capacity to advance an artist's social status.

Donatello's nude bronze, *David*, of 1440, was the first cast bronze, freestanding nude statue since ancient Greece and Rome to show the reconciliation of their



Donatello David 1430



Donatello St. George 1415

ideas in a Christian subject. Donatello appropriated Polykleitos' contrapposto pose and the Greek method of casting called 'lost wax process'. Fleming (1991) writes the technique and style reflect Greek reason in art, especially realism and idealism, and can be read as a symptom of reason penetrating Renaissance culture. Moreover,

Levey (1967) says *David's* self-assuredness mirrors the confidence infiltrating the Renaissance.

Equally exemplary, and just as compelling a symbol of the return to reason in a Christian subject, but this time in stone, was Donatello's St. George. Compared to the static, elongated, sober and solemn Medieval sculptures cluttering dozens of cathedrals around Europe which were symbolic rather than ideal or realistic, St. George is tactile and animated, bristling with energy and vitality, brimming with vigour, expression, emotion and life. His creased eyebrows and furrowed forehead portray nervous tension and energy and he is so fresh with such disconcertingly real human features and feelings. Look at the individual expression of bewilderment, the anxiety and puzzled air, as if he is aware of danger without actually seeing the dragon. Marvel at Donatello's power of observation and eye for detail, and the real sense of a body with bone and muscle underneath that leather and metal armour. All this might be symptomatic to the rekindling of reason. Donatello was able to do this by following Alberti's formula and Greco/Roman canons and he combines them with a religious subject adds Levey (1967).

Donatello's inaugural artworks which demonstrate a return to Greco/Roman precepts of realism and idealism, and his adherence to Alberti's rules and regulations in art, combined with Christian theology set the precedent for other artists to follow. The next chapter will analyse in depth eight Renaissance artists who took their cue from Donatello and Alberti which led to unprecedented innovation and vitality in Renaissance art.

CHAPTER FOUR

RENAISSANCE: THE ART OF FAITH AND REASON

How can selected works illustrate the influence of philosophy and religion in Renaissance art?

An in-depth analysis of art works from eight key artists, which act as a vehicle for better art history teaching and learning.

The first thing a person should ask when looking at an art work, mentions Johnson (2003), is to enquire why it was made. Here, an attempt is made to answer this question through analysing the twin concepts of faith and reason by exploring the Renaissance artists Giotto, Masaccio, Piero della Francesca, Botticelli, Leonardo da Vinci, Michelangelo, Raphael and Holbein. Because many of their works exemplify the shift from faith orientated Middle Ages to the era of reason which infiltrated the Renaissance, they act as a mirror or window into the thought of the time and through them adults can be taught to look below the surface and discover the truth hidden, buried beneath a veneer of symbolism and complicated iconography.

For example, when adults are taught to look, Renaissance art works can show how the influence of antiquity's idealism and realism, philosophy, reason and subjects combined with Alberti's formulae to produce a new kind of art which reflects the merging of the twin axioms of faith and reason. Having realised this, adults can then be in a position to understand that when faith and reason came together the supreme level of genius apparent in many Renaissance art works is the result.

The Renaissance paintings studied in this chapter have a specific *subject* with a meaningful message for adult students to unravel. Faith influenced subjects from the Bible or stories inspired from Greek and Roman mythology are no longer as familiar to contemporary adult audiences as they might have been to Renaissance

allegories within deep and abstract layers of meaning. Having learned to look and not merely see, (there is a profound difference) through studying an adult education programme, such as the one outlined in this thesis, they should be capable of reaching deep levels of learning. Alberti said an ideal picture, a *Historia*, should provide intellectual satisfaction and visual stimulation and adhering to his definition of 'virtu' (uniting both mind and body) by studying the following works of art the adult student will understand what he meant by this. (Cumming 1995).

The art works chosen here stand out from many others because they have the ability to speak beyond just their own era, they continue to communicate relevant facts, like the importance of faith and reason, which transcend the boundaries of time. Take, for example, Giotto, considered by Cumming (1995) as the founder of modern painting and of Renaissance's art in general. Giotto's art, continues Cumming (1995), is symbolic of the turning point of Western civilization. Because he encapsulates the flavour of the zeitgeist so succinctly, he is an ideal artist for adults to study how faith and reason influenced art during the era. He broke away from the Middle Ages' Byzantine style and introduced a new dimension into art.

Giotto di Bonndone 1270 - 1337

With the emergence of humanism and Neoplatonic philosophy during the Renaissance and (later) with the aid of Alberti's ideas on 'virtuosity' there was a move toward making truth and reason more accessible in art, therefore, artists like Giotto began to paint lifelike renditions with greater appeal through a more realistic portrayal introducing a larger degree of modelling, emotion and drama than had been accomplished during the Middle Ages. Giotto shows this through a wide variety in figure groupings and gestures; ordered, geometrical composition; light and shade to depict form; and a balanced colour scheme, all of which, Cumming (1995) says, marks the stamp of Alberti's reason penetrating the Renaissance's art.

In trying to represent on a flat surface the illusion of three-dimensional reality, and by placing an objective analysis of nature (anticipating Alberti's influence of 'virtu' consisting of mental and physical processes) as well as what Alberti termed 'spiritual or Godly' processes (signifying faith), and by treating the picture as a window or mirror, he achieves a realism in his pictures which points to a brand new way of perceiving mankind's place in the world; in this capacity Giotto's art epitomises

this revolutionary time. (Grace, 2000).

Prior to Giotto's innovative interpretation in painting, sculpture had taken precedence, its three dimensionality was exploited many times in countless cathedrals and churches dotting Europe's landscape. A painter naturally has more difficulty in rendering space than a sculptor as the latter need not worry about foreshortening, perspective, light and shade, nor modelling. Later it would become Alberti's quest to transcend the gap between sculpture and painting, but Giotto had already taken the helm. He showed how paint could be used to make the world look real. Thuillier (2002). Giotto's contemporary, Boccaccio, wrote: "...he was able with his brush to depict anything created by nature to the point of deception. He thus recovered that art that had lain buried for centuries because of the errors of some who painted more for the sake of delighting the eyes of the ignorant than of satisfying the judgement of the knowledgeable." (Janson, 1972).

Giotto was able to do these revolutionary feats in art because he built form by modulating light and shade with chiaroscuro, which enabled him to create motifs which looked startlingly real and true to life. His scenes are usually lit from the front and the action presented parallel to the picture frame with each figure engaging the viewer in a variety of ways. He created a deeper penetration of space, augmented through a 'stage-set' and enhanced by a rudimentary perspective scheme which gave viewers the awareness, as they approached the scene, that they could step into it and become part of the picture. Thus, Giotto makes the viewer a participant in the event, identifying with the multifarious emotions evoked through gesture and expression. His lifelike figures show a greater emphasis of observed anatomy and proportion, and combined with their feeling and emotion they evoke a real human presence which replaces Medieval symbolic ideology. No longer is the picture an eternal symbol where everything had its own place in the hierarchy of importance. Now it is a real moment in time. (Corrain, 1995).

The Lamentation 1305

Here is evidence of Giotto's evocation of a persuasive sense of reality brought about through him adhering to Greco/Roman and Alberti's aesthetic ideas. Thus, through a landscape backdrop and overlapping figures he creates a veristic perception of space, and his facial gestures arouse empathy, and chiaroscuro delineates form.



Giotto The Lamentation 1305

His unique compositional device of a stage set, complete with bisecting diagonals, where all components in the picture balance precisely, accompanied by innovative foreshortening add to the realistic effect. This is all so different from the Middle Age's pictures (for example, the illustrated *Entombment*) which, in comparison, appear static, awkward, wooden and rigid, and the protagonist, once again, is the infiltration of reason into art.

Middle Age audiences, for example would probably have laughed at St. John's dramatically foreshortened hand thinking it was glued on to his head, they would not have realised this hand is implicit for the judgement of depth, allowing the viewer to gauge space between the figure and the background. Giotto balances

John's flung back arms with those of the figure on the left which lends an animated balance to the work. He evokes emotion through a variety of expressions, gestures and body postures, all of which are painted with credible conviction. Each of the figures' physiognomy expresses a slightly different representation of sorrow and despair, culminating in the angels' harrowing angst. Every person is a separate individual, distinct in age and unique in personality, with his own role to play in the drama. St. John's wildly flaying arms, for instance, befit his youth and impetuous character as described in the Bible, and his reactions, peculiar only to him, contrast



Anon Entombment 1250 - 1300

with the stoic composure and inner grief of the two older men on the right. All this variety helps make the story a little more plausible, persuasive, real and truthful, and above all *beautiful* in the sense Alberti would later interpret the word. By applying these rational principles into his art Giotto has managed to arouse a strong spiritual presence, neatly bringing together faith and reason. (Janson, 1972).

Look at how Giotto places every participant with discerning precision. The central figures form a circle which keeps the eye active as it moves from one to another, right to left. See how the stark vertical drapery lines and the hunched mourners frozen in misery lend the composition stability, and marvel at the compositional design in the armature of rock which bisects the entire composition neatly into celestial and terrestrial halves, forcing the viewers' line of vision into the most important focus, Christ. To the ancient Greek philosophers geometry was the source of all beauty and here Giotto demonstrates that principle. (Grace, 2000).

Faith's influence is conspicuous in the subject and in the desolate background on to which Giotto painted a leafless tree suggesting that even nature is mourning the death of Christ. In the Scriptures we are told 'The Tree of Knowledge of Good and Evil' withered after Adam and Eve's original sin only to be revived after Christ's



Figures are arranged to fit into a A diagonal splits the composition neatly in two celestial and

The participant's lines of vision force the viewer to focus on Christ,

ultimate sacrifice. On closer inspection leaves sprout from its branches, confirming Christ's resurrection has brought hope for humanity. Cumming (1995) interprets this resurgence of life as a symbol of reason budding and permeating European society after the Dark Ages.

Giotto's return to a similar realistic style of Greco/Roman art, particularly noticeable in his description of drapery, lends the figures underneath solidity, monumentality and weight adding to the three-dimensional effect. No longer are they static, burly and squat Medieval figures, graded in size according to their hierarchical importance, Giotto abandons this for vigour and animated clarity, and by incorporating a landscape he replaces the standard flat gilded background of Byzantium. (Janson, 1972).

Also revolutionary is the picture's size. Abandoning the practice of small-scale manuscript painting, Giotto paints life-size. We don't read this painting like the illustrated Medieval picture, the eye relating one detail to the next, here we cannot help but take it all in at once, the strong grouping of figures and the large simple forms allows this. (Gombrich, 1995).

The Lamentation has come down to us, says Cumming (1995) as a symbol of faith and reason pervading Renaissance Italy - it is an exemplary example of empirical art brought about through returning to Greco/Roman principles of realism and idealism, humanism and Neoplatonism which were guided by reason.

Although Cumming (1995) refers to Giotto as the artist who brought new dimensions into art, his figures lack convincing verisimilitude. For an authentic resemblance of actuality in painting, incorporating idealism and realism to a greater capacity, the Renaissance had to wait for another hundred years, until the arrival of Masaccio.

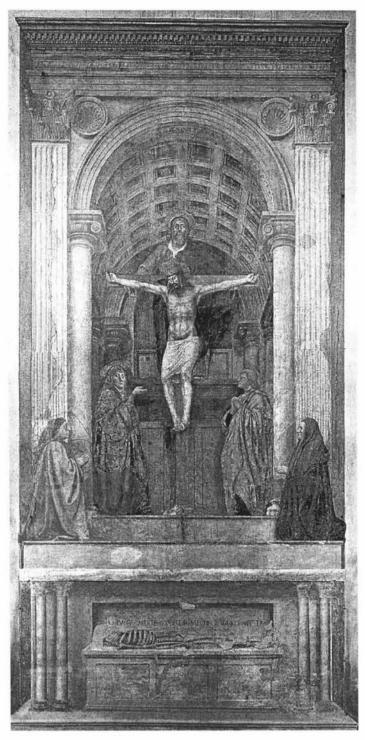
Masaccio 1401 - 1428

Masaccio's harmony, unity and balance of composition, his naturalism and modelling of form in lifelike three dimensions using chiaroscuro, and his use of the device of perspective, (he was the first artist to use perspective convincingly, with scientific accuracy) make him, with Giotto, the vanguard artist who returned reason into art. (Beckett, 1996).

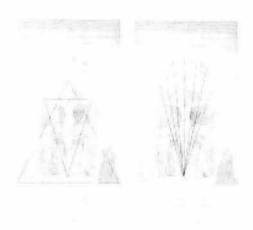
Fleming (1991) says Masaccio was the first to fully realise the possibilities the mathematical system of perspective offered painting, and because of his innovative application of the device, art and perception were revolutionised. So credible is Masaccio's illusion of space when using the technique, Cumming (1995) says Vasari literally thought there was a hole in the wall when he saw his painting, *The Trinity*. That perspective denotes reason is exemplified by its reliance on geometry which in turn requires a sound knowledge of mathematics. Geometry, said Alberti, taking his cue from the ancient theories of Platonic philosophy and humanism, creates the perfect harmony of proportion which is beauty itself. (Rice and Grafton, 1994). Even the nails which pierce Christ's hands, in *The Trinity* are drawn in accurate linear perspective, as too are the halos which adorn the participants' heads - no longer are they reminiscent of saucers, but veristic components which appear to move in unison with the figure says Fleming (1991).

The Trinity 1425

Masaccio's figures seem so tangible and tactile because, Janson (1972) says he wanted to show us exactly how the body is put together, how all the muscles and joints hinge, link and work in unison like a system akin to Polykleitos' Canon. With Masaccio the shape and form of the bodies beneath their clothes can be seen, and this particularly close and exacting scrutiny of realism had not been accomplished with such facility since Greco/Roman days. Following Alberti's lead, he thought of the figures first, then draped cloth over them; he literally started from within and worked his way out, and to do this he had to study how cloth behaved when it was hung over a human body and how the human body behaved when hung from a cross. Adult students can look at the suspended Jesus and observe how convincing



Masaccio The Trinity 1425



Two triangles form the composition

Orthogonal perspective vectors meet their vanishing point

is every bone; how realistically rendered is every muscle; they will be able to notice how everything anatomical is in its right place and marvel at the way all the details click together like clockwork. (Beckett, 1996).

The *Trinity* is probably the last painting Masaccio worked on and is therefore considered by Cumming (1995) as his most mature, successful and rational work. Accompanying Masaccio's rational observation of empirical reality is a profound spiritual presence. Revealed are the Trinity, (Father, the Son and the Holy

Spirit), this last as an incandescent white dove. These figures are geometrically arranged into a pyramid, and they bisect a second inverted pyramid of Christ on the cross. Masaccio's meticulous compositional arrangement follows the ancient standard of mathematical and geometric structure in art revitalised by Alberti.

Orthogonal perspective vectors (still visibly inscribed into the plaster surface) meet their vanishing-point exactly between the two donors at the base of the cross, coinciding with the small mound of earth, a symbolic representation of the hill of Golgotha. Squares of the coffered vault also recede into space creating a convincing illusion helped by the overlapping of form. (Cumming, 1995).

Only after a recent cleaning was Adam's skeleton, which personifies mankind's sins, revealed. Previously it had lain hidden, covered over with layers of paint, varnish and grime. It is, however, an integral part of the composition, which fuses together the theme of reason (evident in the realism, perspective and geometrical structure) and faith (with Christ's crucifixion mankind's redemption is complete). The skeleton is accompanied by a poignant reminder of our own mortality, written in Italian: IO FU GIA QUEL CHE VOI SIETE E QUEL CHIO SON VOI ANCO SARETE, "I was once that which you are, and that which I am you also will be." An apt testimony of faith which implies mankind's ingenuity and reason are worthless in relation to death, the great leveller. (Beckett, 1996).

By clever assimilation the figures form a hierarchy of importance extending not only upward but inward too - starting at ground level and therefore the base of the hierarchy, the skeleton, and finishing at the top, God. On the second level are the kneeling donors, two members of the Lenzi family, Domenico (died 1427) and his wife; it was they who commissioned the work by donating art to the Church to annul the sinful act of trading in money (an incidence of faith holding back reason). Moving up and back, the Virgin and St. John the Evangelist on either side of the cross stand in contrapposto poses. God forms the highest and innermost level demonstrating the importance of faith. He is the only figure worthy of a full frontal pose and connects all five levels together. Moreover, Christ becomes the link between the material (reason) and spiritual (faith) worlds says Levey (1967).

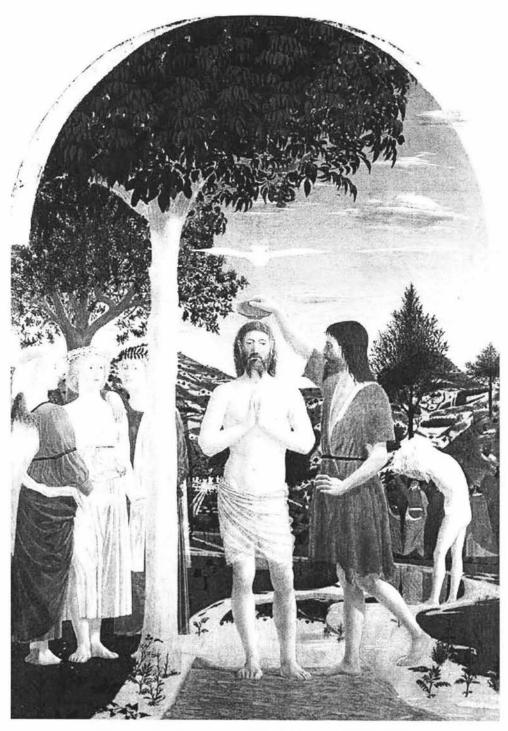
Masaccio epitomises Alberti's concept of 'virtu' through his skill in realism, and his mathematical schemes of perspective and geometric compositional structures abide by Alberti's *Historia*. These are incorporated within a devout subject revealing the extent faith and reason had penetrated art by his time. Taking these elements a step further was Piero della Francesca.

Piero della Francesca 1415 - 1492

The extent to which Piero della Francesca integrated reason into art is revealed by Cumming (1995) who tells us he virtually rewrote Alberti's principles of perspective and composed theories on the geometry of the cube, sphere, cone, cylinder and polyhedron. Johnson (2003) mentions he did more to spread the ancient Greek mathematician Euclid's geometry than any other person, and that he wrote a number of treatises including *De Prospectiva Pingendi* explaining the mathematical rules of perspective.

Mathematics and geometry were paramount in Piero della Francesca's art because his compulsion was to create a beautiful work of art by combining the abstract with the pictorial, the conceptual with the perceptual, a subjective view with an objective one, in a bid to combine faith with reason, all of which Alberti had stipulated in his *Historia*.

Often in his work, large areas of coloured shapes are juxtaposed to create geometrical patterns and a significant proportion is given to white, which, as Johnson (2003) correctly points out, creates a pleasing, uncluttered surface which is deliberately



Piero Della Francesca The Baptism of Christ 1450

conceived. There is no fuss, no unnecessary filler; everything has a succinct reason for being there in his static, rational, utterly logical paintings.

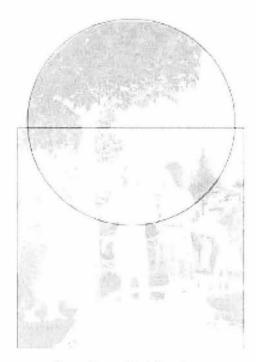
He was infatuated with the Golden Section, which assumes that when a line is divided the smaller part is to the greater as the greater is to the whole at a ratio of approximately 8:13. (Smith, 1992). He understood it as the 'divine proportion' because since ancient times it was presumed to be the key to the harmony of the heavens and a measuring device God had used when He created the world adds Beckett (1996). Thus reason and faith are consolidated into art.

Also in Piero della Francesca's work and symptomatic of the profound change in faith and reason which took place during the Renaissance is the emergence of landscape backgrounds rather than the traditional gilded background. The popularity of landscapes in painting during the fifteenth century is yet another symptom of the shift toward reason: following Alberti, artists' involvement with humanism led them away from symbolism into realism and idealism by examining and investigating the empirical world around them mentions Smith (1992).

The elements mentioned above refer to Piero della Francesca's return of reason during the Renaissance, and his adherence to Neoplatonic philosophy, humanism and Alberti's theories are succinctly encapsulated with faith into the art work *The Baptism of Christ*.

The Baptism of Christ 1450

This picture is useful for adults to study how the reconciliation of faith and reason permeated the Renaissance and affected its art because its spiritual message is designed with intricate mathematical precision in proportion and perspective which evokes an intellectual impact. The Golden Section, for example, is incorporated into the composition, and Beckett (1996) informs us the whole is set against a geometrical grid of three equidistant horizontals and four verticals. Alberti regarded geometry, with its perfect balance and proportion, tantamount to beauty, and here Piero della Francesco supports that claim. The ancient formula of configuration in the circle and square is meticulously worked out in his painting. Platonic philosophy denoted a square represented the earth and reason, and a circle was symbolic of heaven and faith. In this art work a circle slots neatly into the top half and a square in the lower. Rice and Grafton (1994) mention that Neoplatonic philosophers



Composed around the circle and square

regarded the circle as the noblest and most beautiful of all shapes, because its uniformity and equality mirrored God. Renaissance humanists agreed with the ancient Greek assumption that the circle formed the apogee of all shapes, its symmetry and simplicity mirrored God's perfection says Johnson (2003) which is why it features prominently in church architecture.

Part of Plato's idealist philosophy stipulated reality was an imperfect reflection of the 'idea' found in heaven, and that behind reality's disorder lay a perfect world responsible for controlling it; and Aristotle's philosophy on realism stressed the need to study empirical phenomena to gain an understanding of

reality says Hollister (1994). Realism is evident in the details of nature: the sublime vista, the meticulously painted leaves, the anatomically precise figures, and the reflection of the distant mountains in the river Jordan all of which were recorded from direct observational studies and then rendered as fact into the picture. A convincing landscape in all its naturalism, instantly recognisable as the sun-drenched and windswept landscape of the hilly country around the artist's home town of Borgo S Sepolcro (the towers are visible behind Christ) adds to the realism. Here the dexterous Piero della Francesca uses aerial perspective adeptly and he leads the eye far back into the picture space by cleverly contrasting the pale figures and tree trunk against the darker tones of the distant hillside demonstrating chiaroscuro. As in most of his works, a pervading cool light contributes to the perspective as it bleaches out colours in the distance. All this shows how acquainted Piero della Francesco was with Aristotle's philosophy on realism, but he was also an extremely devout man and this is shown by the circle and the religious subject which gives the picture an idealist slant.

Beckett (1996) tells us that Piero della Francesca deliberately intended us to read this painting with reference to finding God. He is everywhere in the picture, in the tree (His body resembles the tree trunk), in the sky and in the dove. Even the division of the picture into three, foreground, middle ground and distance is synonymous with the Trinity. Thus, faith and reason are coalesced into an art work.

Adding to the realistic effect are the angels, Christ, and John the Baptist who stand in contrapposto poses appropriated from Polykleitos' Canon. Of the three angels, the one nearest the tree establishes eye contact with the viewer, following Alberti's idea on the use of 'gazing' figures in painting, the left-hand angel is the 'pointing figure' who leads our eye to the important event, and the middle angel is an onlooker, the 'choric figure'. Their three different hairstyles, three colours and three poses demonstrate Alberti's principle of variety in pose, gesture and colour amiably, and further clarify the concept of the Trinity. (Cumming, 1995).

Depicted is the penultimate moment of Christ's baptism by John the Baptist in the river Jordan, when God's divine spirit, personified as a white dove, is about to enter the body of His son, rendered unconventionally as a rustic Tuscan farmer. The scene is being observed by four Byzantine prelates, identified by their costumes as they stroll solemnly in the background. They make an ominous addition, coincidentally congruent with future events: Constantinople was sacked in 1453 by the Turks (three years after this picture's completion) and her scholars fled to Italy, taking with them rare Classical manuscripts and important ideas, which had a direct bearing on the humanising of the Renaissance. (Cumming, 1995).

Piero della Francesca's painting fuses reason, in the form of Alberti's mathematical, geometric and intellectual ideas, and Neoplatonic and humanist philosophy, with faith in the form of a devout subject. The next artist used to analyse faith and reason in Renaissance art works, Botticelli, is worthwhile for adult students to study because he grafted pagan subject matter and iconography into a religious setting.

Botticelli 1445 - 1516

Amongst Botticelli's patrons were the powerful autocratic Medici dynasty who ruthlessly controlled Florence during his time. But behind the veneer of tyranny they had a genuine appreciation of art, philosophy and humanism. Intellectual, illustrious and extremely powerful, the Medici saw the advantages of adopting and

integrating the philosophies of Plato and Aristotle into contemporary Italy. So influential was the family two members were elected popes (Leo X and Clement VII). They patronised Botticelli in Florence, commissioning him to consolidate ancient philosophies into art and contribute to the fledgling atmosphere of Neoplatonism and humanism which was blanketing the intellectual fraternity in Italy during the Renaissance. (Hartt, 1977).

Where Piero della Francesca used predominantly religious iconography to decipher the harmony of faith and reason, Botticelli integrated secular themes, particularly pagan Greek mythology with Christian iconography, as his Birth of Venus and Primavera testify. The glorification of ancient mythology and philosophy in art was a symptom of the new humanist approach to life infiltrating Renaissance art. Christian iconoclasts persecuted ancient art through the Middle Ages, but during the Renaissance this ceased and there was a blending together of faith and reason, therefore secular and pagan themes worked their way back into art and it became more acceptable to paint stories from ancient myths and legends. (Hagen, 1995). Botticelli exemplified this fusion of ideologies, between faith and reason, pagan and Christian, which formed the Renaissance. Remarkably though, only around thirteen per cent of painting was dedicated to secular themes at the time of the Renaissance, Christian faith remained the principal inspiration in art. (Johnson, 2003).

Primavera 1480

Scholars like Hagen (1995) are still not entirely certain of the meaning behind Primavera, what is known comes from Vasari's account of the picture: "... Venus whom the Graces deck with flowers, denoting Spring...". Venus, whom the Greeks called Aphrodite, who denotes the traits of love and beauty, stands, right hand raised in blessing, in her garden where Spring is an endless season. (Hagen, 1995)

Fleming (1991) affirms that according to Greek mythology, the Graces were the daughters of Mars and Venus. Here they dance their endless round below the blindfolded Cupid (symbolising that love is blind) hovering above his mother. Cupid's arrow of fire is aimed at the central dancer, Castitas (Chastity), and she will leave her sisters, Pulchritudo (Beauty) and Voluptas (Passion), to get married. Ancient legend, Beckett (1996) tells us, stipulated the Graces personified the three phases of love: beauty, desire and fulfilment.



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Botticelli's Graces epitomise the Renaissance ideal in beauty, as written by Alberti in *Historia*. No longer are there large Medieval foreheads set to broad rugged faces, but instead delicate features and slender Greek noses set to slim, idealised bodies. People's perceptions were changing, many no longer thought of the body as a contaminated receptacle for the pure soul, but under humanism's influence, a 'temple', which should be utilised to its fullest potential. Humanists maintained God had blessed mankind with a great mind and body, (which Greek philosophers and Alberti termed 'virtu'), and the faculty of reason, which humans should learn to control and use judiciously, subsequently bringing a deeper faith in God. (Hagen, 1995).

Mercury, the ancient Greek gods' messenger and leader of souls to the other world, uses his wand entwined with snakes (a caduceus) to hold back the clouds from smothering eternal Spring in Venus' garden. The Roman poet Virgil had written, "With his staff he drives the winds and skims the turbid clouds." Cumming (1995) says Botticelli's intention for Mercury's action was to be read as moving the clouds of doubt and unreason of the Dark Ages aside, to make way for the light of intellect and reason to filter into the Renaissance.

Venus, reminiscent of Praxiteles' long lost Cynidian Venus, takes centre stage posed in contrapposto, cleverly set against a delightful filigree pattern of branches and leaves which create an effective and elaborate halo around her head. This is no artistic accident. Christian and pagan iconography are deliberately conflated in this work. Venus is curiously reminiscent of the Virgin Mary and through her Botticelli marries Greek with Christian theology, a marriage which forms the basis of Neoplatonic philosophy. Venus' hand raised in blessing further accentuates this point. According to Freeman (2005) early Christians adapted Venus' attributes to the Virgin Mary and here Botticelli clarifies that appropriation. Fleming (1991) points out that, unable to shake off and break completely with the past, Botticelli lapses back to Medieval iconography where the Madonna was usually shown surrounded by saints and angels. Johnson (2003) says there is nothing incongruent about making Venus interchangeable with the Virgin, as perhaps Botticelli was adhering to Thomas Aquinas' 'Fourth Proof' of God's existence, 'the proof from beauty'. Cumming (1995) clarifies the belief of Christian followers that her beauty could lead them to heaven.

Classical mythology assigned two ambivalent roles for Venus, Hagen (1995) adds: on the one hand she was the irrational - an adulterous goddess and the embodiment of eroticism; on the other she symbolised reason - of harmony, proportion and balance: the civilising forces. To Alberti she personified Classical learning and all the virtues the Greeks and Romans admired most, which were also qualities the Medici extolled.

The painting is narrative and anecdotal but also edifies a moral sermon offering a lesson in virtue and the value of reason. To the Greeks Venus was a link between nature and civilization and on this level the picture becomes an allegory of the harmony of the two potent forces which formed and buttressed the Renaissance: faith and reason. The Roman writer Ovid's and similar Classical texts accounting ancient myths and stories had lain moribund for a thousand years, consigned to oblivion by one God, the saints and the Virgin, but they were now making a timely comeback as humanists like Alberti realised how reason could sit comfortably next to faith in art without upsetting the status quo. (Hagen, 1995)

In a similar way to *Primavera*, Botticelli's celebrated *Birth of Venus* brings together faith and reason through a blend of pagan subject matter and Christian iconography.

The Birth of Venus 1485

This, the first large scale work on a single piece of canvas, Fleming (1991) tells us, represents a version of the long lost ancient masterpiece Venus Anadyomene by Apelles, Alexander the Great's painter. For a thousand years pictures were painted on plaster or panels of wood. For a thousand years also, the nude had been banned from art. The Greeks and Romans celebrated the beauty of the naked human form, likening it to the centre of creation, but to the Medieval mind nakedness in art was anathema, considered a symbol of sinful lust. To them the only acceptable way to depict a nude was as Eve, her nakedness conspicuously revealed to expose her guilt and shame. 'Do you not realise that Eve is you? The curse God pronounced on your sex weighs still on the world ... You are the devil's gateway, you desecrated the fatal tree, you first betrayed the law of God, you who softened up with your cajoling words the man against whom the devil could not prevail by force ... ", (Tertullian c. 200). The nude's reappearance here is symptomatic of the new atmosphere of reason permeating Renaissance society, breaking the grip of faith's hegemony. (Freeman, 2005).

In Botticelli's masterpiece the nude makes a triumphant resurgence, plucked from obscurity, rediscovered from antiquity and thrust on to centre stage for all to see and acknowledge as a symbol of the refurbishment of reason. Attempts were being made by humanists during the Renaissance to unite pagan mythology with Christianity through Neoplatonic philosophy, and this painting with *Primavera* is evidence of this reconciliation. The pagan Venus is thus united with the sacred Eve and the bond can be interpreted as a binding of faith with reason. Hagen (1995) clarifies the adoption of paganism with Christianity when he mentions that Venus' symbolic five-petalled rose, (which to the Greeks stood for the five stages of womanhood birth, menstruation, motherhood, menopause and death), and her shell represented fertility to the early Christians - both are present in the painting.

Further ramifying the union of Christian faith with Classical reason, according to Fleming (1991), is the Medieval religious iconography of Christ's baptism as he stands in the river Jordan, St. John flanking one side and an angel the other. Janson (2001) tells us that Botticelli was a deeply religious man and he believed Aquinas' 'Fourth Proof' of God's existence, that the heavenly beauty of Venus would lead us to the divine love of God. She personifies the 'rebirth of God' and the 'rebirth of mankind' which formed the crux of Renaissance humanism.

Here we have Alberti's principles lucidly revealed through a life-sized female nude as a product of rigorous anatomical studies and reference to Classical models - the manner in which Venus rests on one leg is reminiscent of the ideal proportion of Polykleitos' ancient 'Canon' and contrapposto prototype. A classical legend interpreted by the Greek poet Hesiod, Fleming (1991) tells us, becomes "... an allegory of the birth of beauty through the fertilization of divinity".

The nymph who offers to protect Venus' modesty with an exuberantly embroidered cloth is possibly one of the four Hours from Greek mythology, who personified the seasons and who were the traditional attendants of Venus. Her gorgeous dress and robe are embroidered with red and white daises, yellow primroses and blue cornflowers - flowers of Spring - and therefore apposite to the Renaissance theme of birth and renewal of reason after a long, dark and cold winter. (Hagen, 1995).

This birth and renewal of reason is emphatically revealed in the next artist, Leonardo da Vinci who has been chosen as a model for adult students to study, not through a single painting as is the case in the other models in this thesis, but for his

Botticelli The Birth of Venus 1485

underlying philosophy of reason which penetrated his art and ideas.

Leonardo da Vinci 1452 - 1519

Akin with Alberti, Leonardo da Vinci maintained reason was the essence of art. He wrote: "The good painter must paint principally two things: man and the ideas in man's mind." Leonardo's career coincided with what we refer to today as the High Renaissance, which also includes Michelangelo, Raphael. The quartet were highly individual; they never coalesced into a group but were united by the qualities of reason bound by faith. A perfect coordination of Alberti's basic ideas on 'virtu' which decreed beauty issued from the hand, nature and mind is evident in Leonardo's art. He expressed the possibilities of Alberti's important Renaissance discoveries in perspective, anatomy and optics. Vasari acknowledged that he formed the 'modern style', where the "... boldness of design, the subtlest imitation of all the details of nature, good rule, better order, correct proportions and divine grace, prolific and profound, endowing ... figures with motion and breath." Vasari's characterisation of the paragon Renaissance artist was one who selects and combines knowledge with the best and the most beautiful in nature and Leonardo da Vinci fitted the bill perfectly.

Leonardo's understanding of Alberti's theories was absolute. His painting exemplifies Alberti's axioms of reason in art, and his individualistic artistic vision allowed him to synthesise them with faith adhering to Neoplatonic philosophy. Through a meticulous scrutiny of nature by precise observational drawing with virtuoso attention to detail, Leonardo epitomises Aristotle's philosophy that: "Nature always produces the best." He integrated the landscape into a portrait because he believed, like Plato, that the human and physical worlds were inseparably linked. In this way his vision incorporated Neoplatonic philosophy where faith and reason coalesce says Hartt (1977).

His empirical approach based on like Aristotle's philosophy forged in him an obsession with reason. Through drawing, Hart (1977) says, he analysed the structure of rocks, the behaviour of light, the movement of water, the growth of plants, the flight of birds and the anatomy of insects, horses and humans. He took Alberti's ideas a step further than other artists as he wanted to know how the things he represented worked: bodies, plants, light, and mechanical devices of all sorts were analysed rationally. He dissected more than thirty corpses in order to explore the

secrets of the human body (a capital offence in his day) and he was the first to discover how a child grew in the womb. Rocks, the growth of trees and plants, the harmony of sounds and atmospheric perspective in painting fascinated him.

Anything that could not be proved by empirical research, he discredited: "It seems to me that those sciences are vain and full of error which are not born of experience, mother of all certainty, first-hand experience which in its origins or means or ends has passed through one of the five senses. And if we doubt the certainty of everything that passes through the senses, how much more ought we to doubt things contrary to these senses such as the existence of God or of the soul ..." Leonardo's faith was reason, and his perception of reality consisted of only what could be proved. In this capacity he is perhaps the first great scientist. His faith in reason is neatly summed up with his famous line: "The eye is the window to the soul." (Hartt, 1977). Leonardo discounted thaumaturgy, relic-worshipping, and Church dogma because they were based on unproven assumptions and not reason. He was a true humanist, an archetypal Renaissance man who encapsulated the qualities of 'virtu': a painter, a sculptor, architect, inventor, engineer, an expert in botany and geology, a philosopher, an artist, a musician, anatomist, geographer and scientist. Interestingly, he was not deeply interested in philosophy, Classical scholarship, nor poetry. In a Neoplatonic era where Christian faith was integrated with Classical learning Leonardo shunned both. To him, the eye was the only authority. Throughout thousands of pages of notes, God is seldom mentioned compared to nature's multifarious references.

Leonardo said: "Whatever the painter wants to do, he is Lord and God to do it," which reverses Medieval thought of God as architect, and: "The painter's mind is a copy of the divine mind, since it operates freely in creating ..." This was tantamount to heresy but it shows Leonardo's emphasis on reason over faith.

St. Augustine's words had reverberated down the corridors of time: 'There is another form of temptation, even more fraught with danger. This is the disease of curiosity ... It is this which drives us to try to discover the secrets of nature, those secrets which are beyond our understanding, which can avail us nothing and which man should not wish to learn." Leonardo and other Renaissance humanists showed how reason could bridge the gap between the physical and spiritual worlds. Thus we have the five words: "the sun does not move", anticipating Copernicus' heliocentric theory of 1543. Most of his notes were written laterally inverted and right to left to foil the Church authorities who would



Leonardo da Vinci Embryo in the Womb 1511

more", anticipating Copernicus' heliocentric theory of 1543. Most of his notes were written laterally inverted and right to left to foil the Church authorities who would surely have imprisoned him for his assumptions. The Church vehemently defended Aristotle's geocentric cosmos (Earth at centre) because it assigned unlimited calibre to God's omnipotence. In 1610 Galileo was forced by the Church, (with threats of burning at the stake), to recant his documentation of Copernicus' heliocentric (Sun at centre) theory, which he had proved correct with observations made through a home-made telescope. Little wonder then, Leonardo was so secretive and guarded his observations. Hartt (1977).

Leonardo had every reason to keep quiet about his discoveries. He would have known about Giordano Bruno who in 1600 had refused to recant his heretical views that all stars resemble our own Sun and that the universe is infinite. To silence him, the Church authorities nailed his tongue to his jaw and later burned him at the stake. Leonardo's ground-breaking scientific research and analysis was constantly hampered by Church dogma and superstitious belief. Throughout history faith and ethics have often hindered the progress of reason, here in this case, and in our own day about the many issues surrounding cloning and genetic engineering, for example.

Despite all his research, Leonardo never regarded himself as a scientist and his contemporaries had no idea of this aspect of his genius - the main reason for this lack of recognition was that he never published his findings; all he wanted to do was to gain as much knowledge of the visible world as possible in order to demonstrate the power of reason. Placing art on scientific foundations and integrating Neoplatonic and humanist elements into it was his way of elevating the status of painting from mere craftsmanship in the Mechanical Arts to the integrity of the Liberal Arts. Aristotle had set the standard of rational scholarship underpinned by reason, but such pursuits which involved the use of the hands were deemed 'menial' and 'manual' and thus below the dignity of illustrious gentlemen. (Gombrich, 1995).

By studying Leonardo adult students can be made aware of the power reason has to shape aesthetics, research and perfection in art. Despite his avoidance of Christian faith and classical philosophy his rational approach epitomises the zeitgeist of the Renaissance.

Contemporary to Leonardo was an artist who was deeply spiritual and believed in the power on art of reason, Neoplatonism and humanism too, he was Michelangelo.

Michelangelo 1475 - 1564

Michelangelo studied the art of the recent past masters, Giotto, Masaccio, Donatello and Greek and Roman sculptures from antiquity in the Medici collection through which he penetrated the secrets of the Greek sculptors, for instance Polykleitos, and replenished the beauty of the human body in motion. Like Leonardo he wanted reason to govern every decision in his art, therefore, he also dissected human bodies and drew assiduously from life. (Gombrich, 1995)

Revelling in the creative miracle of removing parts of an inanimate block of stone or adding paint to a blank canvas to reveal an image that seemed to live was to him an echo of God's creation of man. Hartt (1977) states that unlike Leonardo, who was interested in the boundless bounty of nature, Michelangelo was fascinated by one subject: the human body. To him, says Fleming (1991) God was revealed through the beauty of human form; "that mortal veil of divine intention". In this way faith became Michelangelo's guide, prompting him to turn a lifeless lump of inanimate stone into tangible energy and force. Leonardo was agnostic and sceptical of Classical philosophy says Hart (1977) but Michelangelo formed the antithesis - ardently religious, he was not interested in deciphering empirical reality nor the mechanics of nature like Leonardo, it was the human body and God which concerned him the most.

To Michelangelo sculpture embodied the highest principles in art, and he equated a carving with liberating a figure trapped within the stone. He said, "I saw the angel in the marble and carved until I set him free," and with this, he is at one with Neoplatonic philosophy which also spoke of trapped humans freed from the mortal coil at death. (Fleming, 1991). Seldom was artistic genius repeated as it was in the creation of Michelangelo's sculptures and painting. Everything he touched became charged and imbued with great energy and vitality and people of the time even believed that the hand of God directed his own says Beckett (1996).

Artistic creation, the act of making something from where there was once nothing, was tantamount to divinity for Michelangelo, but Johnson (2003) says whereas Leonardo da Vinci regarded the artist as the deity Michelangelo believed the materials and tools were God's instruments.



Michelangelo David 1501 - 04

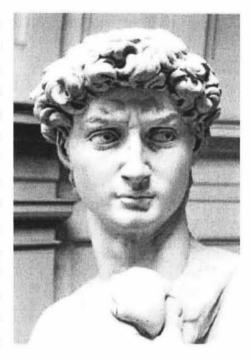
David 1501 - 04

This surely forms the apotheosis of Michelangelo's appropriated Neoplatonic aesthetic of the divine embodied in human form. Here, faith is coalesced with reason through stringent anatomical studies and a deeply religious subject. Reason permeates his every decision: he chose the moment prior to the confrontation - that physically and mentally tense moment before any battle - realising it offered better opportunities to investigate a psychological realism. Sense David's pent up tension and energy, his uneasiness as he shifts his weight nervously on his feet, and observe his vulnerability as he confronts danger. Look at his provocative attitude, glaring stare, defiant gestures and challenging stance; his bulging muscular torso and knotted brow are all a measure of strength, vigour, tenacity and fortitude which Fleming (1991) says symbolise the new era of the High Renaissance. The fact the statue is well over life size at seventeen feet tall also adds to the overwhelming effect.

Michelangelo's faith is exemplified in his choice of design based on the artistic discipline of *disegno* which advocated that sculpture was the highest art form because

it emulated divine creation. So strong were his religious convictions he would have actually believed that the image of *David* already lay inside the block of marble before he started work, just as he believed that a soul existed within every human

And what a wonderful demonstration of Polykleitos' rational contrapposto from his Canon, where the right side's smooth and composed stance complements the left side's open and active stance. It is a true measure of realism and idealism, balance and composure. From his outstretched foot up to his dishevelled hair everything shouts reason. Slightly disconcerting to the inexperienced viewer is the disproportion between head and torso and lower body, but even here, reason is responsible: originally the figure was to be placed high up in a Church facade or pedestal, and the proportions would have seemed correct from a viewpoint down below.

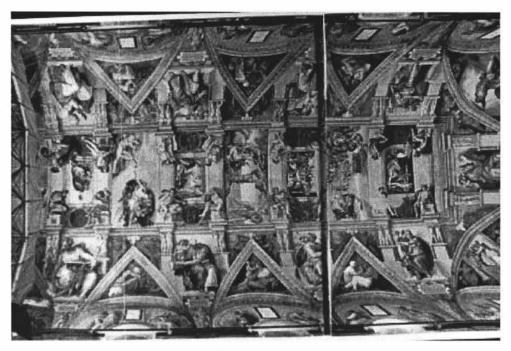


Equally as ebullient, sublime and monumentally expressive as *David* and also encompassing Neoplatonic and humanist ideas, but this time in painting, is the *Sistine Chapel Ceiling*.

The Sistine Chapel Ceiling 1508 - 12

This painting encapsulates the two forces of the Renaissance - faith and reason. Michelangelo presents the viewer with faith in the form of Christian theology, incorporated with the reason of Neoplatonic and humanist philosophy and Alberti's rational aesthetic precepts. The physical performance of more than four year's work is astounding yet pales into insignificance when compared to the artistic merits of ever new inventiveness and unfailing mastery of execution in every single detail. (Hart, 1977).

Portrayed on seven hundred square yards of plaster are the key stories from the book of Genesis accompanying additional embellishments which display Michelangelo's fascination with the reason of Classical antiquity (many of the figures in the painting are inspired by famous examples of Greek and Roman sculpture which he had studied). Following Plato's and Pythagoras' philosophy that geometry



Michelangelo Sistine Chapel Ceiling 1508 - 12

and mathematics could cultivate an awareness of the underlying structure of the universe, Michelangelo divided the surface into the three principal elementary geometric forms - the square, circle and triangle. Above the windows are eight triangles, in each corner are sweeping circles and in the central space nine rectangles, and the three different spaces are consistent to the three Platonic stages - 'the world of matter, the world of becoming, and the world of being' - which ran a thread through Neoplatonic philosophy. (Fleming, 1991).

The eight triangles encapsulate people devoid of faith or reason and who are therefore surrounded by confusion and darkness. Surrounding these triangles are seven Old Testament prophets and five pagan sibyls, (women oracles or prophets from Greco-Roman religion), both symbolising reason; and framing the central panels are *ignudi* (naked youths) whom Fleming (1991) interprets as angels from Christian theology, or the personification of reason and truth from Platonic philosophy, because they link the spiritual with the physical worlds. The central panels are also consistent with both Platonic ideas and Christian theology. For example, in the far right panel: *God Dividing the Light from Darkness*, light symbolises reason, wisdom and knowledge which can free mankind from the darkness of ignorance: "You shall

know the truth and the truth shall make you free." (John 8:32.) "Know thyself," Socrates was instructed by a sibyl. (Fleming, 1991).

If adult students study the Sistine Chapel Ceiling as a demonstration of an amalgam of faith and reason in art, they can equally study The Last Judgement as its opposite because it encapsulates irrationality, with the shattering of faith and reason, and in this context it can be regarded a symptomatic of the forces which brought High Renaissance art to an end.

The Last Judgement 1536 - 1541

This picture, painted above the altar of the Sistine chapel, which according to Letts (1981) signalled the collapse of reason and the end of the High Renaissance. Charles V's marauding mercenaries had sacked Rome in 1527, destroying, pillaging and looting palaces and churches as they advanced through the city. Martin Luther had exposed the Church's corruption by nailing his 95 theses on to the wooden door of the church in Wittenberg during 1517. In so doing he unleashed a blood-bath which seemed to demonstrate the antithesis of reason and adumbrate irrationality in every case. Compounding the collapse of reason were Protestant European nations questioning the Church's hegemony over Europe and Henry VIII asserting his independence from Rome. Society seemed to be crashing down and turning in on itself and the pious devout believed it was divine retribution for mankind's follies. After all many considered Rome as a den of iniquity where prelates, princes and public practised unrestrained promiscuity, gambling, paganism and sodomy. So, to the most Christians Charles V's sack represented the inevitable and imminent collapse of a society which had lost faith and reason as its guide. (Simon, 1967).

In *The Last Judgement* Michelangelo supersedes his own stringent boundaries and standards in art, and in so doing, he put a seal on the Renaissance's assertion to perfection in art and launched the next art movement which today we term Baroque says Johnson (2003).

Perugino, Botticelli, Rosselli and other superb Renaissance artists had adorned the walls of the Sistine chapel with their works which embody faith and reason, but in comparison, Michelangelo's *The Last Judgement* is glaringly incongruent; devoid of space, time, logic, it is the very embodiment of irrationality and unreason in every case, says Fleming (1991). Perspective, that rational device which personified reason



Michelangelo Last Judgement 1536 - 1541

during the Renaissance, Alberti's figure groupings, colour and light have been abandoned and replaced with a cosmic perspective revealed through the blue of infinity, comments Letts (1981).

Instead, humanity's tormented and anguished souls, surge, gesticulate, strain and swoon in a deluge of twisting and turning energy, so different from Alberti's rationality, reason, equilibrium and harmony. Space, instead of regressing proportionately using a mathematical perspective scheme, rushes in a spiralling circle of rhythm and movement. Starting at bottom left, the redeemed faithful emerge from their graves and ascend to heaven, meanwhile, at the right, Michelangelo paints terror and horror as the damned plummet into hell. All this energy culminates in a crescendo at the centre where Christ resides as the pivot and focus for the entire composition. He is the only one who has the means to end the turmoil and irrationality which had replaced the Renaissance era of faith and reason. His authoritative gesture maintains that only through faith in Him can these desperate times of rebellion and conflict be pacified.

The painting seems to be saying that the Renaissance belief in reason and in man as the measure of all things, has been pushed aside and once again humanity turns to faith for help. (Fleming, 1991). Since this picture sums up the Renaissance, as Letts (1981) maintains, man's discovery of himself, with all its accompanying trials and tribulations, has ultimately led him to a deeper faith with God.

The next artist adults could study and use as a comparison to Michelangelo's depiction of destruction is Raphael whose art is buttressed by a deep belief in reason.

Raphael 1483 - 1520

Raphael defined and depicted the ancient universal ideal of beauty with absolute truth, precision and perfection through a scrupulous technique and a deep faith in God. Nothing is left to chance in a Raphael composition; every detail originates from a rational decision and profound study of Alberti. All elements have a succinct purpose for being there, worked out through meticulous planning and unequivocal reason. In this way he personifies Neoplatonist ideas which stipulated that there is a perfect form for everything in the mind of God. Plato believed that God's image could be seen in mankind and that a perfect human would be Godlike. Raphael and

other Renaissance artists again and again expressed this Platonic idea through the study of Greco/Roman artistic principles with Alberti's 'virtu' and other ideas of idealised human form, stoic restraint, and symmetrical proportion and beauty.

Baldessare Castiglion 1515

'Renaissance Man' is an effective description of gifted humans endowed with great powers of body and mind, and the four virtues important to the ancient Greeks courage (physical and moral), temperance (or stoicism: pacify excess, self indulgence and extravagance), justice, and wisdom - allowed Renaissance humanists to achieve the many innovative achievements in art, philosophy, science and mathematics which characterised the Renaissance's return to reason. (Fleming, 1991). Leonardo da Vinci and others like him were such men - poets, philosophers, scholars, scientists, artists and courtiers all combined into one rational individual. Fleming (1991) says Baldessare Castiglione (1478-1529), author of The Book of the Courtier, is the ideal humanist prototype: erudite, polyglot, of high ethical standards, a master of physical skill, a connoisseur of the arts, judicious and witty, a poet, dancer, singer and musician. In his painting Baldessare Castiglion Raphael captures some of these qualities of reason through subdued colours of a neutral tonality - umber, ochre and grey which suggest the humanist's stoic, sober and dignified composure. Humility and modesty are suggested as the eyes meet the viewer's, and light falls on the forehead to show intellect. A plain background does little to distract from the subject, ensuring the viewer's attention is maintained. Castiglione is dressed in calming brown and black adding further to his restrained nature.

Highest on the list of humanist achievement was the quality of *virtu* (virtuosity) which Fleming (1991) refers to as a display of tremendous ability and vitality. Castiglione himself served as a courtier to various Italian princes so he had the pedigree and was well versed in correct protocol, making him the ideal teacher in the art of courtiership to gentlemen and princes.

Such qualities and standards, adopted from the ancient Greeks and appropriated from Alberti's *Historia* and integrated with humanist and Neoplatonist philosophy are also evident in *The School of Athens*

The School of Athens 1510



What a wonderful demonstration of reason emanates from Raphael's painting *The School of Athens*! Thorough careful planning, brilliance in execution and immense integrity of expression and artistic wisdom, Raphael has been able to emulate the ancient Greek aesthetic which stipulated that an idea should be abstracted and distilled by means of constant reduction until perfection is achieved. As well as pertaining to Greco/Roman aesthetic principles the picture's style follows closely Alberti's *Della Pittura* on perspective and mathematics, and to his *Historia* in form, composition, colour, types of poses, figure combinations and appropriate gestures says Fleming (1991).

Raphael dissected no corpses and was only slightly interested in anatomy, nevertheless, to him harmony was consonant with perfection and commensurate with reason. In this picture there is a certain simplicity, naturalness and effortlessness, but in fact it is the product of excruciatingly hard work, detailed planning and rational thought. Every element clicks into its proper place in a not dissimilar arrangement to the internal workings of a complex, highly tuned machine. Take one component away and the mechanism ceases to function. In this way it exemplifies reason.

If there is one work which thrusts reason, that driving force of the Renaissance, at us it must be *The School of Athens*. Loaded with intellectual and aesthetic profundity, reason is implied in countless ways as a guide to a stronger faith - through the Albertian composition with its single and central vanishing point, the painting's symmetry, balance and harmony; in the underlying geometry predominated by circles; through the softness of colour and contour; through the choice of subjects of mathematicians, philosophers, and astronomers; and through the setting in the interior of the magnificent St. Peters'. (Cumming, 1995). When studied closely, the groupings based on Alberti's formulae reveal rational thought through their incredible complexity, balance and poise, where a seeming haphazardness is harmonised with very little tension says Grace (2000).

In this magisterial, graceful and elegant composition Raphael places *Plato* and *Aristotle*, those exemplary proponents of Renaissance humanism on centre stage. Plato's philosophy that behind the messy chaos of everyday experience there existed the form of a perfect and beautiful idea sums up this picture. To Plato reason could provide the ideal means of running a state which is why Raphael depicts him holding his book, *Timaeus*, and pointing upwards to indicate his idealistic viewpoint of abstract



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Plato and Aristotle

and theoretical philosophy. Raphael and his circle, like Plato, saw the world through poetic images similar to ones depicted in this picture. (Grace, 2000).

Aristotle, who understood reason through rational analysis and a practical down-to-earth, empirical means of thinking, takes his place next to Plato. Aristotle was arguably the first true scientist, to him research through reason was the best way to understand reality and discover truth. To Aristotle, exploring, discovering and analysing phenomena through a concrete, natural and empirical philosophy, by collecting data, sorting and collating the results and then interpreting them, was the best

means of achieving a true grasp of the enigmas of existence and reality. Plato's and Aristotle's philosophies showed two ambivalent ways of discovering faith through reason, and both theories have stood the test of time right up to the present day, one in the form of science and the other as religion. (Hooker, 1996).

Aristotle was Alexander the Great's official teacher for eight years (Raphael shows the legendary commander to the left) and no doubt his ideas influenced Alexander's utilitarian belief that the many peoples from different cultures would one day live in harmony - a philosophy still sought today. Aristotle's best known work is *Politics* (c. 325 BC) where through rational analysis he defines the state and the importance of education, but Raphael chose to illustrate him holding his other famous book, *Ethics*, and appropriately depicts him gesturing to his immediate surroundings. Purposely Raphael places the composition's vanishing point between these two illustrious thinkers and they are conveniently placed one on each side of the picture's central axis, symbolising their ambiguity of divergent and yet, paradoxically, commensurate philosophical opinions on reason, which were combined with Christianity into Neoplatonism for the sole purpose of discovering faith and reason during the

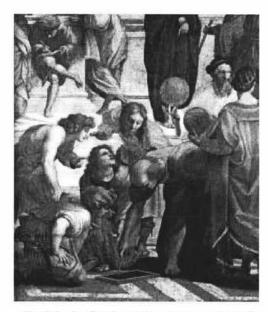
Renaissance. (Freeman, 1996).

The entire painting's theme emanates from these two figures, radiating concentrically outwards like waves of energy expanding from a central focus. The two thinkers' differing philosophical ideas are pondered and argued over by the other participants in the picture. Set in a niche on Plato's side is a statue, of Apollo, the patron of poetry and the god of the sun, who symbolised to the Greeks order and beauty, philosophical enlightenment and the civilizing power of reason. On Aristotle's side also set in its own niche, is Athena (alias Minerva), the Greek goddess of reason, incarnation of wisdom, social order, and the traditional patron to institutions devoted to the pursuit of knowledge and artistic achievement. These two sculpted figures correspond to the two separate schools of thought advocated by Plato and Aristotle and all the figures in the composition align themselves to either philosophy. On the left, Plato's side, are metaphysical philosophers (ideal), while on the right, Aristotle's side, are the physical, concrete and empirical scientists concerned with research (real). (Cumming, 1995).

Cumming (1995) takes us through these ancient thinkers, of whom the most appropriate to this thesis' theme are: on the left the Greek philosopher, *Epicurus* (341-270 BC) endowed with a crown of vine leaves, who taught that happiness lay in the pursuit of pleasures of the mind. *Alexander the Great* (356-323 BC) listens intently to *Socrates* (470-399 BC), who emphasises specific points on his fingers. *Pythagoras* (580-500 BC), whose geometrical propositions are still taught in schools today, and who interpreted reality through numbers, sits at front left. All these intellectual figures are leading proponents of reason being the key to a unified and happy world.

At right foreground, *Euclid*, (third century BC), the Greek mathematician and pupil of Socrates, demonstrates one of his mathematical theories to his pupils gathered around him. Mathematics to the Renaissance humanists was the key to rational, conceptual thought, and a gateway to reason after the hiatus of the Dark Ages. Greek mathematicians like Euclid, Pythagoras and Archimedes worked out many of the basic rules in mathematics which were to become so influential to Alberti's own precepts on aesthetics. (Hodges, 1993).

Raphael's organisational genius, incredible compositional versatility and technical virtuosity sums up Alberti's concept of 'virtu'. This is seen most clearly in Euclid's



Euclid, the Greek mathematician and pupil of Socrates.

group at bottom right, where each figure is linked to its peers through an animated gesture or line of vision, and where multifarious poses, balance, harmony, variety, restraint and dignity combine into beauty as Alberti interpreted the word in Historia. Compositional elegance on this scale did not come easily; it was a result of extensive and detailed planning. Many preliminary sketches made from life were composed to work out the poses and expressions, and only finally was a full scale drawing of 26' by 9' made and transferred to the picture mentions, Cumming (1995). Little was left to

chance, the essence has been distilled through reason.

At far right is the second century astronomer and geographer *Ptolemy* (holding a celestial sphere) who thought that the earth was the centre of the universe. His theories written down in his master-work *Geography* were rediscovered during the Renaissance and aided Columbus in his journey to the New World says Johnson (2003).

Raphael's monumental School of Athens has come down to us as an icon of the Renaissance acquiescence to reason, it immortalised the ancient philosophers, mathematicians and astronomers who were essential catalysts for this great age of faith and reason. Raphael himself is present as an integral proponent to this atmosphere of reason. He is the gazing figure deliberately placed behind Ptolemy to establish eye contact and he attracts our attention as the engaging figure. Including his own image was his way of connecting past with present notes Cumming (1995).

After studying Raphael and learning how his art embodies reason adult student's will probably find Holbein an interesting comparison. His painting *The Ambassadors* personifies the tensions which existed within the Renaissance as humanists tried to establish a balance between both faith and reason.



Ptolemy, the second century geographer and astronomer, with Raphael looking on

Holbein 1497 - 1543

Careful attention to detail, impeccable design, and the meticulous use of oil paint to render with the utmost precision the most minute of objects is a fitting description of Holbein's technique and symbolic of his acquiescence to reason. Holbein lived and worked during the Reformation, a time when the re-orientation of faith and reason held massive implications for Renaissance art. The Church was divided in two, Protestant and Catholic. Protestants, unlike Catholics, objected to art in their churches. Therefore, numerous artists lost their most valued patron and primary source of income. Protestants opposed church dogma and any 'props' which interfered with a personal relationship with God. Therefore, in Protestant regions, worshippers tore out existing Catholic art and whitewashed over murals painted on walls. It was one of the darkest hours for art. Stained glass was smashed, statues decapitated and paintings were ripped out of their frames and destroyed. Sculpture suffered the most because its three-dimensionality was associated with idol worship. (Gombrich, 1995).

Holbein's career coincided with this troubled time. Necessity forced him to travel

to England where he became court painter to Henry VIII who patronised him after recognising good uses for his talent and genius. Henry played a pivotal role in instigating the division of the Church as the split helped to facilitate his divorce from his first wife Catherine of Aragon and it supplemented material wealth in his favour.

The crisis of the bifurcation of the Church, and of religion and secularism, faith and reason, is hinted at in Holbein's monumental painting *The Ambassadors* where enamelled colour, smooth as licked porcelain, and linear accuracy is quite beyond comprehension. Multifarious textures - from the green damask curtain, the white fur and the inlaid marble floor to the ubiquitous oriental rug - are all painted with microscopic precision and hallucinatory clarity which are symptomatic the new way of looking at the world through thinking with reason. (Hagen, 1995).

The Ambassadors 1533

Holbein's masterpiece can be read on both objective and subjective levels in keeping with Alberti's *Historia* which stipulated an intellectual and aesthetic appeal. On the objective surface one can never cease to marvel at the skill in depicting the myriad textures, elegant costumes, rich draperies, and the complex plethora of still-life objects. Underneath this ostentatious display of temporal paraphernalia there is also a profound interplay of subjective signs and symbols which point to the ambivalences between religion and science, Church and State, faith and reason. (Buck, 1999).

At the time this picture was painted during the Reformation, the authority of the Catholic Church was being challenged by Protestants, and old unproven assumptions on faith were being questioned and undermined by new scientific discoveries perpetuated through reason - the picture refers to both. Holbein makes us aware that the two ambassadors are leading thinkers and visionaries in both situations one is a bishop, the other a humanist. The ambassadors brought a letter of persuasion from their king, Francis I, in an attempt to stop Henry VIII splitting from Rome and forming the Church of England. Their mission to try to change Henry's mind failed, which led to a fragmentation of faith and reason and years of conflict and a blood-soaked hatred between Catholics and Protestants, the repercussions and consequences of which are still felt today. (Hagen, 1995).

The picture also refers to the Age of Discovery when reason led to scientific dis-



Holbein The Ambassadors 1533

covery and the manufacturing of technological instruments, (such as those depicted by Holbein), which, when combined with Greco/Roman mathematicians newly discovered calculations, (Ptolmey and Archimedes, for instance), made the circumnavigation of the globe in 1525 and the discovery of new continents a reality - Columbus discovered America in 1492, only forty years before this picture was painted. Hence Holbein shows a globe on the shelf of the table which has been identified as the Johann Schoner globe from Nuremberg, which charts Magellan's epic 1519 voyage around the world.

Holbein presents to us the two larger than life courtiers. The archetypal Renaissance man and humanist Jean de Dinteville on the left (with special tastes in music, painting and science) who commissioned the painting, and who wears a pendant of





(Left) Jean de Dinteville. (Right) George de Selve.

the Order of St. Michael, one of the most coveted orders of chivalry in its day, and one which distinguishes him as a man of scrupulous morals, represents reason in the context of this thesis interpretation of the word. Next to him, the bishop George de Selve can be taken to represent faith.

Holbein was presented with a dilemma: how to portray these two equally important people in a single space when traditionally only one person occupied the centre stage. He solved the problem by separating them with an *etagere* which was a brilliant solution because it also links them together metaphorically, and, of course, in reality, so are faith and reason linked. (Cumming, 1995).

Holbein shows Dinteville square shouldered and puffed up, with his expensive fur coat wide open and dagger in hand. He is obviously an extrovert and outgoing personality. Since Dinteville represents the State and reason, which were gaining a lot more power over the Church at this time, Holbein presents him pushed slightly forward of his friend. De Selve on the other hand seems half the girth of his colleague, his hands clenched with nervous tension clasp a pair of gloves. His rich damask coat is closed, concealing himself within. He is in every sense the opposite to his colleague, introverted and introspective, and no wonder, especially when one considers the position the Church found itself in. (Hagen, 1995)...

Both courtiers stand on an intricately tiled floor, (an accurate copy of the pat-

terned thirteenth century mosaic floor of the Sanctuary at Westminster Abbey laid by Odericus Cosmati and still there to this day). Each has a foot firmly planted in a circle, while their other is placed strategically within the central square which is appropriate to the painting's theme on the ambivalence of faith and reason, theism and secularism. According to Neoplatonic philosophy, and seen in Piero della Francesco's *Baptism of Christ*, the circle symbolised heaven and faith, and the square the earth and reason. (Cumming, 1995).

The analysis of faith and reason is carried further by Holbein with the objects on the etagere arranged on their two respective terrestrial (secular) and celestial (theist) tiers. Reading from the terrestrial level, symbolising reason, we have geographical and musical instruments (the globe, compass, some flutes and a lute). Conspicuously displayed is a book of music, which has been identified as the German, Johann Walther's Book of Hymns (Veni Creator Spiritus) printed in Latin in 1524, translated into German by Martin Luther and reverently open at the page showing The Ten Commandments and Come, Holy Ghost. (Hagen, 1995). This is Holbein's way of ac-



knowledging and emphasising the two theologies of Catholicism and the new Lutheran standpoint of Protestantism, as the passages support doctrines important to both faiths. (Cumming, 1995). Perhaps Holbein is suggesting, almost willing, the Church reform itself according to Luther's demands; but also, like Luther, he does not want a division from Rome and a blood-soaked massacre.

Meanwhile, on the left is another book, between the leaves of which a level has been inserted. It has been identified as a work written by Peter Apian, a university teacher at Ingolstadt and printed in 1527, demonstrating the principles of arithmetic calculation for business, including square roots. (Cumming, 1995). Symbolism inherent in these two books can be read on another level: in order for the early explorers to colonise other cultures, it was necessary to have an equal balance of faith and reason: to convert them to Christianity, (hence the hymn book), and to western civilization, secularism and capitalism, (hence Apian's book).

The analogy of faith and reason is carried through in another way: conspicuous on the lower shelf is a lute with a broken string. A lute was the traditional symbol of harmony, the broken string usually implied some sort of discord. In this case it could suggest the incompatibility between the Protestants and Catholics, maintains Cumming (1995).

All the varied instruments refer to mathematics and reason in one way or another; even music, with its place within the Liberal Arts, was considered a mathematical art at the time. Both Dinteville and De Selve had been to university so were fully accomplished scholars and humanists, and mathematics was considered a most distinguished discipline during the Renaissance. This may be contrasted with the Middle Ages where religion offered the most plausible explanation for the world's mysteries. In Holbein's day, however, mathematics and reason were beginning to offer some of the answers to the world's and the universe's enigmas. Mathematics had ensured early navigators success in negotiating a passage to the New World and beyond, and both Galileo and Copernicus understood the solar system through mathematics appropriated from Ptolemy and Archimedes says Freeman (1996). Even painters like Leonardo da Vinci claimed mathematics was the basic principle behind art and Alberti had celebrated geometry as the true foundation of all painting. (Grace, 2000).

Holbein cleverly juxtaposes astronomical instruments on the top celestial shelf



and navigation instruments on the lower terrestrial shelf. Cumming (1995) takes us through the astronomical instruments on the top shelf: by de Selve's left arm is a sundial showing us that the date is 11th April 1533; further to his left is a cylindrical calendar with two quadrants which allowed the height of the sun, thus latitude, to be calculated; adjacent to them is a ten-sided sun clock and a torquetum, incorporating a square and a circle, (shapes which neatly echo the tiled floor pattern below) and lastly a celestial globe, (possibly with reference to Copernicus' heliocentric theory), showing a map of the skies. It was long thought that the clocks showed a precisely significant time but during the National Gallery's recent cleaning it was discovered that the times were discordant with each other. This may have been Holbein's intention to signify that during these times faith and reason were indeed "out of joint". If this is the case it is backed up by other peculiarities: of the wooden flutes one of which protrudes further than the others, and the arithmetic book is open on a page depicting an example of division: the Lutheran hymn book symbolises the split within the Church because, significantly, it is open on the page Veni

Creator Spiritus which translated means "Come, Holy Ghost." The Holy Ghost was the traditional force which united Christendom and here Holbein may be hoping the two factions of the Church, and faith and reason, will eventually be united.

But there is a darker and more ominous and sombre level to the picture when one notices the startling object in the foreground, the only unrecognisable, irreconcilable feature in the whole composition. It is in fact a distorted death's head. The object is meaningless if viewed from the front, but if viewed from about two metres below and to the right, the skull reveals itself. The technique is called *anamorphoses*, an extreme form of perspective first described in Leonardo's notebooks and very popular at the time.

Holbein could be using the anamorphoses as a sign that this reality is not an enduring one as the shadow of death manifests itself continually and cruelly, and if this is the case the silver crucifix at top left, partially hidden by the green damask curtain, refers to the believed reality and faith in eternal life after this temporal existence. Amid Holbein's meticulous presentation of reality in such intrinsic detail, the dislocated apparition is most disconcertingly incongruous. In a clever reversal of roles, when one views the anamorphosis from the correct angle, the scrupulously painted real objects appear distorted and fabricated. In this way the skull could refer to faith and the objects to reason, and, as history was proving, the two were struggling to be compatible. (Cumming, 1995).

Both lute and skull refer to the common theme of the time vanitas and memento mori (remember you must die). All these marvellous instruments and inventions brought about by mankind's ingenuity and acquiescence to reason are worthless when put into the context of eternity and faith. And wealth and power, conspicuously presented to us by Holbein, are futile when considered in conjunction with the brevity of life and the inevitability of death as the great leveller. Vanitas means vanity or, more commonly, a blindness to the most important things in life and the futility of human endeavour - a vain person forgets that he or she too will one day die, and believes that reason alone can unlock the universe's secrets. A work written by the German Cornelius Agrippa in 1529 (four years before this picture was painted) stated "the uncertainty and vanity of all art and science are nothing but the laws and imaginings of human beings, the truth is so great and free that it cannot be grasped by the musings of science, but by faith alone ..." (Buck, 1999).

So when we look at Holbein's Ambassadors we are reminded by the chilling footnote skull that although the picture seems mercilessly real and forged on reason,
and centred on mathematically-based formula with its many compositional series
of verticals and horizontals; and although it refers to many cutting edge mathematical theories, and state-of-the-art scientific instruments with all the unequivocal certainty and conviction which mankind believes reason in the form of science and
mathematics offers, it is only the ghostly spectre of the anamorphoses which is
arbitrary and accidental and uncertain, revealing the vulnerability of our temporal
existence and reminding us of the importance of faith. Holbein seems to be telling
us that there is much more to the ineffable enigma of existence that can be answered by reason, science and mathematics alone; faith is needed to comprehend
the transcendentalism of existence. This makes Ambassadors an appropriate painting to conclude adult student's examination on faith and reason through Renaissance art.

So why did Holbein disguise the skull? Maybe he is saying that to study reason, science and mathematics is not vain at all but in fact they can answer many of life's problems as long as one does not forget that truth can also be found through faith. (Hagen, 1995).

Conclusion:

Might philosophy and religion be used as a vehicle for better art history teaching and learning?

Chapter three began by analysing some aspects of the Church preceding and during the Renaissance paying particular attention to why and how it mediated faith and reason. Investigated also were the concepts of humanism and Neoplatonism and how they amalgamated faith and reason, and the influences they had on the art of the period. Alberti's theories on art and architecture were considered to show how they influenced the rational mind-set which occurred during the Renaissance. These criteria were then assimilated in Chapter four and their influences on faith and reason in Renaissance art analysed.

It was also worthwhile for adults to study the art of the Renaissance in context with Greek and Middle Age's art in Chapter Two, and analyse it against a backdrop of faith and reason because so many of the ideas born then resurfaced and were rekindled during the Renaissance and are still with us today forming our own culture and society in the civilised world - democracy (a Greek idea), politics, architecture, aesthetics, and science are but a few ideas whose repercussions we still feel today. (Fleming, 1991). Through the investigation of Renaissance art adults' minds may be expanded as they learn to understand art under the guidelines of, for example, subject, technique, symbolism, space and light and historical style. In this way not only the objective ideas (surface details) but also subjective ideas (deep meanings of the surface details) can be penetrated facilitating understanding and development of cognitive perception.

Adults will have seen many of the art works studied in this thesis but often in different contexts, perhaps on greetings cards, or in advertisements, but they may not have had the opportunity to study them in detail in their original contexts. Many adults have been taught to look but they do not necessarily see with understanding, in a similar way to people often hear but do not listen. Looking requires students to merely open their eyes; seeing requires the opening of the mind and using intellect to augment learning and understanding. Studying Renaissance art works takes the viewer on a journey back into time where ideas from a bygone age can be shared. However, as with any journey, a guide can facilitate the understanding of the experience. The purpose of the next part of this thesis is to demonstrate effective means to guide an adult through the experience of learning about faith and reason in Renaissance art works. (Cumming, 1995).

CHAPTER FIVE

HOW CAN PHILOSOPHY AND RELIGION BE USED AS A VEHICLE FOR BETTER ART HISTORY TEACHING AND LEARNING?

How can I teach about philosophy and religion in selected Renaissance art works?

Effective approaches to teach and learn about philosophy and religion

Introduction

This chapter's aim is to answer the question central to this thesis: Might philosophy and religion be used as a vehicle for better art history teaching and learning? To do this a focus on effective methods of teaching adults about faith and reason explored through Renaissance art and an enquiry into learning and adult learners is necessary. Teaching and learning are linked, to learn about one the other is needed as support, as Eble (1998) correctly maintains: "To teach is to make assumptions about how students learn. To teach well means learning about students' learning. One learns by teaching. One cannot teach except by constantly learning. Changing students' understanding of the subject matter is the answer to improving their learning". (Eble, 1998, p.9). The following three issues will be addressed in this chapter.

- Which adult learners are interested in learning about faith and reason in Renaissance art works?
- Which methods are appropriate for stimulating learning in this audience?
- How would I teach faith and reason in Renaissance art now that I have learnt about alternative methods in adult education?

The purpose of this chapter, therefore, is to uncover effective methods of teaching adults and investigate adult learning in general, and reflect my findings to my own teaching practice.

From my own experiences in teaching adults about faith and reason in Renaissance art the captive audience is wide, ranging from professional academics to non-specialist, therefore, feasible methods of teaching drawn from recent research to suit this diversity is imperative. Within the vast field of Art History which covers philosophy, politics, history, social aspects and of course Art itself there are interesting theories and strategies written about by academic teachers on how best to teach such a wide topic of knowledge. From my own experiences teaching the topic I have noticed that too much content is often a barrier to learning itself, therefore, it is important to use the information in this chapter to educate other Art History teachers, guiding them around the pitfalls and highlighting positive aspects.

Before embarking on the most appropriate means to teach this topic a definition of learning, understanding and teaching is apt. Ramsden (1992) defines *learning* as changing the ways adults understand, experience or conceptualise the world around them. *Understanding* he says is the way students apprehend and discern phenomena. And finally, Ramsden says *teaching* is to make student learning possible and alter the student's understanding.

Biggs (1999) maintains that: "teaching is an intervention that is meant to encourage learning". (Biggs, 1999, p. 145). And that the end result should be: "so students think, decide and act in the real world" (Biggs, 1999, p.151). Ramsden (1992 p. 5) says that "the aim of good teaching is simple, it is to make student learning possible".

"The goal of most teachers would be that their students understand what they teach them. Understanding changes students' perceptions of the world and that sector of the world is now brought under their control". (Biggs, 1999, p.33). Teaching, learning and understanding are therefore, linked, so it is important that a teacher of adults knows about the correlations between them if he/she wants to be an effective teacher.

Adults throughout the civilised world seek knowledge to gain wisdom and this thesis' complex topic on faith and reason in Renaissance art provides many avenues and links to other areas which can then be explored in more depth. Much material

evidence of what is left of ancient Greece, the Middle Ages and the Renaissance is in the form of complicated documents written in Latin or Greek, and therefore open to interpretation by only the most erudite scholar versed in these languages, but closed to the average adult student today. Art works, on the other hand, have the capacity to reveal the past's secrets as they are easier to read once adults have been taught to interpret visual iconography. Further, art bypasses boundaries of race, education and class. That great Victorian 'dictator of the arts', Ruskin, spoke about this in his quotes in the introduction to this thesis.

Art education provides adults the opportunity to probe beneath the surface of paintings and sculptures, and they can learn, understand and discover the vital role faith and reason have played during the Renaissance, whereby they themselves will become more visually literate. Through the journey of this thesis adults can, hopefully, learn how faith and reason have inspired artists to create some of the greatest works of art. And by looking, adult students can, hopefully, gain an insight into how faith and reason have influenced culture since the beginning of civilization and still continue to do so today. Furthermore, this final chapter will serve as a useful guide to some of the most appropriate methods on how to teach adults using works of art.

This chapter's intention is also to find out whether what Knowles (1998) says about adult learners is credible. He says that adults are self directing and want to maintain control over their learning and that they bring with them a wealth of previous experience to learning and that they are intrinsically motivated and have a preference to task-centred learning that can be used in their life situations. This is quite a generalisation and like all generalisations prone to exceptions. As I have found out during my own teaching practice using this thesis' topic, it has come to light that adults are in fact a very diverse group of learners and for this reason are difficult to pigeon hole. Further education today is not as culturally or academically selective as it tended to be say twenty five years ago, therefore, it needs to be acknowledged that, given the opportunity (such as the Adult Community Education Programme I am involved with), adult learners can continue learning throughout their lives and become part of what is becoming more of the norm today - lifelong learning.

Which particular learners might be interested in studying philosophy and religion in Renaissance art works?

A relevant place to start would be to describe the five diverse fields which I have found during my teaching practice, which constitutes a typical adult education audience who would be interested in learning about faith and reason in Renaissance art:

Academic: Adults with a great deal of education and knowledge.

Vocational: Adults who want to learn to benefit their career or occupation.

Continuing: Adults who are interested in adding to their existing knowledge.

Personal Development: Learning to satisfy a personal sense of achievement.

Emancipatory: Adults who see education as a means of freeing themselves from the constraints which surround them.

Although this thesis contributes to all five fields, I have found it is particularly suited to *Continuing* and *Personal Development*.

Rogers (1996) says adults come to further education courses (such as the one covered in this thesis) to satisfy a sense of need, to solve a clearly identified problem, or simply as an excuse to get out of the house. They may want to learn about Renaissance art prior to visiting Greece and Italy for a holiday; or acquire a particular skill, or knowledge, to further their career; or to seek reassurance of their own ability. Adults come to learn about faith and reason in Renaissance art because they want to achieve a particular piece of learning related to their present pattern in life, they therefore come for social and/or personal reasons. (Rogers, 1996).

Houle (1961) identifies three groups who may be interested in learning about faith and reason in Renaissance art in his classic *The Inquiring Mind* (1961):

- 1. Goal orientated learners who wish to achieve an external objective like a degree, certificate or promotion. Their objective is often separate from the learning process.
- 2. Activity orientated students have personal objectives, to socialise. They search for satisfaction in the course itself.

3. Learning orientated learners who seek knowledge for its own sake, who pursue the subject out of interest.

I have found the implications for a teacher of adults in identifying these three diverse groups and adapting the teaching strategies accordingly are immense. Does the teacher concentrate on the individual groups or teach the whole as one?

From my own experience in teaching this thesis' topic adult learners typically come from a forty-year-old age group or more. The reason for this is explained by Rogers (1996) who claims that after the first period of school and technical training an adult is pitchforked into practical life - finding and holding a job after marriage and founding a home on small resources. As the adult approaches a more responsible job, education should broaden his/her ideas. Once this broadening process has started, it may well lead on into history, literature and art. If Rogers' generalisation of the typical adult learner is what teachers can expect attending their lessons then there will be a great diversity of male and female learners wanting to learn about faith and reason in Renaissance art. The topic fits with what Rogers' defines as: (leading) into history, literature and art.

Further compounding the diversity amongst adult learners is the sheer amount who go on to study further education today in comparison to a couple decades ago. Twenty years ago 15% of school leavers went on to further education, now more than 40% attend, which has had unprecedented implications to the diversity of adults one teaches mentions, Biggs (1999). Adding to this is the fact that many adults are using their attendance to a class as a stepping stone to further their advancement in their careers (Vocational interest) - they don't necessarily want to be there for the reasons a committed teacher appreciates. This has been a dilemma for specialist teachers in a field such as Art History as they have had to adapt and change their methods to reach a wider audience, now consisting of erudite scholars and perhaps unmotivated individuals with not as much initiative.

No longer, therefore, can an Art History teacher stand at the rostrum for hour after hour and expect to motivate the audience with lectures, as the focus is now to aim at multi-ability levels and since lecturing leads to higher levels of thinking for spontaneous, academic students but not for the majority it is no longer a viable

method to rely on. (Biggs, 1999). From my own experience such problems can be addressed by analysing faith and reason in Renaissance art. The subject's rich visual diversity is an indispensable source of motivation which can be used to attract the audience's attention and maintain it.

Another important consideration to take into account is the amount of female compared to male adult learners who frequent my Community Education classes. In most cases during the past three years of my practice, the ratio of female to male has been around 3:1. Adult women learners are a field which has commanded much research recently. Stereotypes for women learners abound: "collaborative" is one term used to describe them. In science women use skills, resources, and forms of interaction that are different than those used by men say Flannery and Hayes (2001). But in fact women do not want to be treated differently from men; by labelling men as masculine with roles to play in the military, or sports and women as feminine with cultures in fashion or primary schools is doing equality of the sexes a grave injustice. (Harding, 1996).

Women have different opportunities to learn than men, different learning experiences, and different approaches to learning say Flannery and Hayes (2001), but, they continue, this does not mean that women are inferior to men nor superior in their capacity to learn. In the past, for example, it was a widely held assumption that women learned differently to men and conventional syllabuses were prejudiced towards favouring male learners. When teaching this thesis I have found women adult learners have a special place. The very nature of Art History's field provides countless references which are ideal to discuss women's role in past and present society making this topic relevant today. Often in Renaissance art women have rendered in pictures as fallen women (Mary Magdeline) or goddesses (Botticelli's Birth of Venus) and very little in between (there is not a single woman in Raphael's School of Athens). Often they were included for one purpose, as an object for mans' desire. (Smith, 1992). When one looks at contemporary art one notices how much has changed. Now women compete and contribute to the arts on a more equal basis to men as they do in most aspects in society. In this respect Art History is an excellent vehicle through which to explore women's changing position in society.

The diversity of adult students a teacher of Art History can expect to encounter in a typical class is further impacted by race, ethnic and cultural differences. Like art, further education mirrors society, representing its values. Education was, at the turn of the last century thought to be a utilitarian ideal which would unite the population in equality, epitomising Rousseau's "the greatest happiness for the greatest number" leading to an egalitarian society. But this naive optimism has failed to become reality due to barriers of race, class, gender, ethnicity, disability and sexual orientation says Johnson-Bailey (2002). Art History teachers must look for the most effective way to teach amidst such diversity.

What are the most effective approaches to teach philosophy and religion in art history as examined in the Renaissance?

In the past adult education played a secondary role to the compulsory education of children (pedagogy) but, as Hodgson and Kambouri (1999) point out, this has now changed; free education for all, they maintain, underpins democracy but it has come to most governments' notice that due to the pace of economic change a secondary education is by no means adequate to sustain an adult into the twenty first century. Crucial to most governments, therefore, is to implement and support lifelong learning. Teaching students to enjoy learning is more important than teaching them specific knowledge, advocates Claxton (2003). Claxton says that to address the complexities of the modern age, schools need to equip students with the necessary life skills of resilience, resourcefulness, reflectiveness, and relationship building. Those in turn would encourage a lifelong love of learning. Claxton's point is a relevant one because since we do not know what knowledge will be required in the future, it is senseless to try and teach it. More important is teaching students to enjoy learning. Claxton (2003) adds that innovation, team and relationship building, and critical thinking are imperative to encourage and prepare students for lifelong learning.

This thesis' main emphasis on exploring through art, faith and reason in the Renaissance, makes an excellent case to support Claxton's claim that teaching (adult) students to enjoy learning is more important than teaching them specific knowledge because research has concluded that learning through looking and listening is so much more successful than through listening alone. "I hear and I forget, I see and I remember, I do and I understand" says an often quoted anonymous Chinese proverb. Biggs (1999) claims that 10% is learned when reading, 20% from hearing, 30% from seeing, 50% from seeing and hearing, 70% from talking it over with others,

80% from using and doing in a real life situation, ample evidence to support the relevance of teaching with supporting art works from the Renaissance to an adult audience.

To find the most appropriate methods to teach this unit it is advisable to find out how adults learn.

Hodgson and Kambouri (1999) say how adults learn is dependent on how one defines and measures learning. An expert will, for example, perform better in the field of his expertise compared to a novice but the same novice could out-preform the expert in a field new to them both. There are three factors which influence the way an adult learns say Hodgson and Kambouri (1999): their personal characteristics, the context within which they find themselves, and their motivation for learning. All three are directly linked to the adult's life experiences.

The essential differences in the way children and adults learn as Merriam and Caffarella (1999) point out is adults are learners who are more self-directed than teacher directed. Hodgson and Kambouri (1999) acknowledge that adults' extensive life experiences, differences in backgrounds and education, and their age, influence their ways of learning. There is likely, therefore, to be enormous diversity in intelligence, competence, motivation within a single adult class.

Confirming what Knowles (1998) maintained (p. 112) is Rogers (1996) who says that since adults are self directing and educate themselves on a voluntary basis, and since they are not dependant on their teacher to the same extent as children and they essentially want to be in control of their lives, a teacher should try not to treat an adult as a child as it could lead to major blocks in learning. All aspects of teaching Art History to an adult should therefore reflect this self directing attitude. Ironically though, and this is a situation I have encountered frequently within the experience of my own teaching practice of this thesis' topic, some adults do expect to be 'taught' in the same way that they were taught at school. But Rogers (1996) says it is advisable to discourage this, as once again it will hinder learning and these passive learners will rebel against their teachers when the time is right.

The pedagogical model which almost every institution followed until fairly recently was based on medieval models from the seventh and twelfth centuries and nineteenth century English public schools, and adult education followed the same model with adults being taught as if they were children. They were told about what they had to learn, how to learn it, when to learn, a teacher driven model where the learner only needed to know that he or she must learn in order to be promoted. Teachers using this outdated model didn't seem to care for self directed study and experience in learning. (Knowles, 1998).

Part of the problem seems to have been in defining when a child reaches adult-hood. There are many differing definitions but the critical one for teaching adults is the psychological definition which is when a child becomes individually responsible for his/her own life. Once this was understood a special model for teaching adults called the andragogical model was invented for adult education, separate from the pedagogical model for children. The main difference between the two is that pedagogical teachers insist that the learners remain dependent on the teacher. On the other hand, the andragog teacher will do everything possible to help the learners take increasing responsibility for their own learning says Knowles (1998). This finds an interesting parallel in Renaissance humanism where individual moral responsibility was highlighted against a collective responsibility prevalent in Medieval feudal Europe says Johnson (1992).

Also necessary to take into account when investigating the most appropriate methods of teaching adults is the fact they do not undergo major age-related changes within a few years like children do. Adults change with experience, therefore, teaching methods have to be designed to accommodate this fact. (Rogers, 1996). Experience seems to be the key to adult learning. "The resource of highest value in adult education is the learner's experience." Knowles maintains (1990, p. 44) and continues: (adults) "accumulate an increasing reservoir of experience that becomes an increasingly rich resource for learning." Learning from experience is a cyclic affair as it requires the student to make connections between present learning experiences with past ones and ones in the future which is why Art History suits this purpose so well. If we once again turn to Ruskin's quote in the introduction it is fair to say that everyone has some experience in art as it is bound in the social fabric of all cultures.

For children, experience is something that happens to them. For adults experience determines who they are says Rogers (1996). Horn and Cattell (1968) investigated the differences between 'fluid' intelligence of our natural genetic make-up which deteriorates with age and 'crystalised' intelligence which is linked with expe-

rience and ability and which increases with age, which leaves the adult balanced in intelligence throughout life. But when all is said and done there is no single theory on adult learning as there are too many variables which make up each learner's psyche. Pratt (1998) concludes "....there is no single, universal, perspective on teaching adults". (p.11).

Knowles (1998) maintains adults are self-directed learners who want to control their learning, who define their own learning experiences, diagnose their own needs, locate their own resources and evaluate their learning. But the extent of the learners' control is governed by their personal characteristics of organisation, processing information, making judgements. In order to teach adults successfully we should, therefore, take Brookfield's (1986) advice and take ".....more time to find out the conditions under which each person can learn best". (pp.9-11).

Pratt (1998, p. 11) is helpful in this and gives five perspectives on teaching adults:

- 1) transmission effective delivery of content.
- 2) apprenticeship modelling ways of being.
- 3) developmental cultivating ways of thinking.
- 4) nurturing facilitating self efficacy.
- 5) social reform seeking a better society.

Ramsden's (1992) formula for successful teaching and therefore good learning is:

Aims of the curriculum

Methods of transmitting knowledge
Assessment of students

Evaluation of teaching procedures

Broad range of teaching skills

Prime goals = student learning

Listen to and learn from students

Constantly evaluate own performance

In an area like Art History which has rich appeal to a diversity of learners from different backgrounds like science, history, sociology, philosophy, psychology, the problem of how to teach is compounded. Add to this the reasons for adults' participation in further education, the wider sociopolitical and economic context within which education and learning takes place, as well as the physical and social environment and one sees how broad the context actually is. (Pratt et al., 1998).

What makes studying faith and reason explored through Renaissance art so compelling a field for adult education is that looking at works of art is similar to reading in that both are an abstract way of interpreting the world, the adult learner looks at the iconography (images) as symbols and converts them into abstract thought in a similar way that he or she looks at words (after all words are themselves related to pictorial symbols). "Making sense of abstracting meaning. Relating parts of the subject matter to each other and to the real world" is how Ramsden (1992, p.20) identifies adult learning. I have found through my teaching practice analysing faith and reason in Renaissance art this occurs consistently. "Interpreting and understanding reality in a different way. Comprehending the world by reinterpreting knowledge" continues Ramsden (1992, p.26) adding more support to Art History's capacity to educate and inspire adults. Other definitions which add to the worth of learning by looking at art works from the Renaissance and analysing faith and reason are offered by Ramsden (1992) who says it is: "a conception of an aspect of subject matter.... a sort of relation between a person and a phenomena." (Ramsden, 1995, p.40). "A change in one's perceptions and conceptions - a change in one's understanding of something". (Ramsden, 1992 p.110). "Education is about changes in students' thinking and knowledge" continues Ramsden (1992, p.131).

In this context Art History education can be regarded as a humanising force, bringing people together: "On the one hand education is about understanding, thinking, challenging, enquiring, questioning, decision-making, participation, personal growth, liberation, creativity, acquiring democratic ideals, becoming social and cooperative; at the same time, it is about conformity, getting a job, gathering information, being regulated, obedient, becoming competitive ..." (Rata, 2001, p. 157).

Dahlgren (1984) acknowledges that adult students attach most importance to the acquisition of skills, values and attitudes but problem solving, logical thinking, information gathering, self-confidence, independence are also high on their list. Studying Art History during the Renaissance covers most of these factors.

Let us look into this a little further by discussing the two types of learning identified by Biggs (1999) and see their compatibility with teaching faith and reason using art

works from the Renaissance:

Shallow or Surface Learning

There is a well known anonymous ancient saying: "The greatest fool may ask more than the wisest man can answer".

Surface or shallow learning exemplifies the fool. It is about memorising isolated facts which are treated independently from one another without links or connections. There is little meaning or structure and learning becomes a bore ceasing to be enjoyable, promoting negative feelings, anxiety, cynicism and boredom. This form of learning is encouraged by the teacher using lists, short answer tests and multiple choice answers. It emphasises quantity and not quality. Students are good at learning factual information but forget how to apply it, they are unable to tie things together. (Ramsden, 1997).

A surface approach encourages the teacher to know the content of the subject not the students and their differences. The teacher sorts the good from the bad by assessment, and learning becomes a matter of "correct" or "not correct" which is then converted into a percentage. The students listen to the expert then report back their learning. Most emphasis by the teacher is channelled to crowd control: establishing eye contact, signals for silence, the clarity and projection of voice, things which do not necessarily facilitate good teaching. It is teacher not student driven and the teacher maintains incredible control. Surface teaching blames the student for failure. (Ramsden, 1997).

In teaching this thesis to adult learners I placed the emphasis on what the student does, ensuring that teaching supports learning. Questioning and presenting problems, using adults' experiences, and instilling curiosity awe and wonder is an appropriate strategy which comes naturally when analysing Renaissance art works bypassing surface approaches and integrating deep learning. Ultimately, I strove to involve the students and address their apprehensions.

Deep Learning

Deep learning is very important for teaching this thesis' topic. Imperative for an adult students' understanding of the effects faith and reason had on Renaissance art is a focus on the underlying meanings, the main ideas and themes behind art works

which is why adult students were required to look back to ancient Greece and the Middle Ages and analyse their acquiescence to faith and reason before studying the thesis main area on the Renaissance. Deep learning in this highly structured thesis' field requires a strong knowledge base by both teacher and student, only then will adult learners have the ability to apply concepts, master relevant details, and relate their learned evidence to conclusions. Once this has been achieved students will also have the capability to integrate their knowledge and apply their newly learned ideas to new situations. To encourage deep learning the contextual background of the topic needs addressing because it should not be taken for granted the students already know the material. For a clarity of understanding adult students are encouraged to concentrate on the structure of the topic, not independent facts, which creates a positive working atmosphere. The students learn from their mistakes, take risks and acknowledge that failure leads to success. This requires a depth of learning not breadth of coverage and all components of the topic need to align and balance. (Ramsden, 1997).

Ramsden (1992) provides the following list as a means of comparing the benefits offered by deep learning as opposed to surface learning.

Deep

Understanding subject
Applying concepts
Mastery of relevant detail
Relating evidence to conclusions
High structure
Strong knowledge base
Apply ideas to new situations
Integrate knowledge
Clearly stated expectations
Responsible decision making

Surface

Quantitative not quality
Lists unrelated, unstructured
Disparate knowledge
Recapitulation of lectures
Narration in essays
Aimless accumulation of knowledge
Nothing to do with wisdom
Pass the exam replaces understanding
Paralysis of thought
Learned but soon forgotten
Not student's interpretation of reality

(Ramsden, 1992, p.60-61).

The teacher needs to be aware that both surface and deep approaches vary accord-

ing to the task at hand and the subject areas, and there is often a need to call on surface approaches in learning but each method should be appropriate to the task at hand.

Studying faith and reason in Renaissance art encourages deep learning approaches, because it helps adult students to change the way they understand the world around them. "Adults make sense of their learning only when they see the relevance the content's meaning has to the real world", says Ramsden (1992, p.75). The fact faith and reason are still very relevant today in a number of ways, for example, in the form of science and religion, or the differences between capitalism and Islam, supports Ramsden's claim. Students can learn about faith and reason during the Renaissance and then ponder on their place in their (the students") world today. To do this efficiently the teacher needs to help adults make sense of their learning through encouraging deep learning by using a range of explanatory skills, interacting, becoming involved by generating commitment and interest. Teachers need to respect the students and offer individual guidance and above all create a climate of trust and seek a balance between structure and freedom. And conscientious, frequent and extensive evaluation is vital concludes Ramsden (1992, p.75).

Going back to p. 110 and analysing the quote: "Changing students' understanding of the subject matter is the answer to improving their learning" (Eble, 1998) raises the question: What changes in understanding do Art History teachers want to see in students? To answer this question teachers need to ask what will the students be able to do after learning about faith and reason explored through Renaissance art that they couldn't before? Aims and Objectives are crucial if teachers are to reflect on their teaching and thus improve student learning.

Aims are defined by Ramsden (1992) as key elements of competence a student should acquire during the course, and general statements of educational intent, seen from the student's point of view. These could include acquiring appropriate skills; developing ability to pose purposeful questions and answer them imaginatively; develop the capacity to think creatively and independently.

Objectives are defined by Ramsden (1992) as concepts a student will have under-

stood after completing the course, and specific and concrete examples on what the student is expected to learn. These could include the ability to: Recognise; explain; appreciate; understand; and comprehend. (Ramsden, 1992).

Faith and reason explored through Renaissance art is a specially designed adult education topic which fulfils Ramsden's (1992) criteria of relevant aims and objectives and formula for successful teaching and therefore good learning. The traditional means of meeting Ramsden's aims and objectives in Art History has been through a lecture but this method of transmission, as an effective delivery of content, has come under close scrutiny recently.

The Art History Lecture

No wonder lecturing features as the favoured method of transmitting knowledge because it accommodates large numbers of students and as budgets are constrained it is definitely economical for large class teaching. But, Biggs (1999) explains, it is about teaching information and therefore not practical for deep learning, there is very little problem-solving, creativity or decision making involved on the students' part. Moreover, human concentration is limited at the best of times and lecturing requires high levels of concentrated effort and the concentration span of the average student is only 5-10 minutes mentions Biggs (1999). Lecturing is, however, better than a text book if teachers are on the cutting-edge of their subject, because text books are soon out of date.

Biggs (1999) says that to use the lecture effectively requires a huge amount of preparation and prodigious oratory talent and eloquence. From experience gained during my own teaching practice using faith and reason explored through Renaissance art I have found that if one is prepared to dedicate time in planning the lecture, it is a successful means of transmission. My own secret to success is to limit the duration of the lecture to 5-10 minutes as "a brief period of consolidation greatly enhances retention"; (Biggs, 1999, p.100), and explain the purpose of the lecture and its structure well in advance to the audience. I maintain eye contact, clarity of voice and focus on the students. I use clear visual aids, notes and handouts (experience has taught me to give these at the start or end, not the middle of the lesson to avoid distracting the students), and I tape the lecture for the students to access later on which also allows me to constantly evaluate my own perform-

ance.

I have found it helpful to personalise the class, so I walk up and down and make myself accessible. I refer to the students by name and arrive early so that I can talk to them informally. Above all I use a sense of humour. I always remind myself that to the lecturer's one task of delivering the session, the student has two: to listen and to write so I move ahead slowly and pause for consolidation. Last but not least I ask questions and get the audience involved by reflecting on the issues. (Biggs, 1999).

"Becoming skilled at teaching requires the ability to deploy a complex theory of teaching in different contexts relevant to the teaching and learning of the subject matter" says Ramsden (1992 p.110). Listed above are some of the key techniques I have learned through experience for stimulating learning while teaching this thesis to an adult audience. Learning and practising these methods have made me an effective adult educator through my role as an innovative Art History teacher and the experience has transformed my teaching. I want to demonstrate, for collegial purposes, how these methods have augmented successful teaching and learning to adult students.

How would I teach philosophy and religion in Renaissance art now that I have learnt about alternative methods in education?

A vital question encountered during my teaching adults this topic which remains to be answered conclusively is: What is good teaching and how can it be recognised and rewarded? Any teacher will know that there is no right and wrong way of teaching but there will always be one method which is better than others. My own key to success is 'flexibility', to acquire the skill to be able to select the most appropriate method for the task and apply it to the type of students one has to teach. Following on from this research into appropriate methods on how to teach about faith and reason in Renaissance art I have brought together some relevant ideas from Pratt (1979), Ramsden (1992) and Entwistle (2000) about teaching and learning to enable adult students' a better understanding of what they learn:

My own key to successful teaching comes from:

1) Clear goals and realistic aims and objectives.

- 2) Adequate preparation and an understanding of the field: 'Faith and Reason in Renaissance Art' coupled with necessary skills and adequate resources digital images, data projector and white board for example.
- Appropriate methods and their modification to suit the purpose and changing circumstances.
- Effective presentation with a suitable style, organisation, communication, clear, concise and succinct.
- 5) Reflective critique where evaluation aids future work.
- 6) Feedback and evaluation of one's own teaching and of students' work.
- 7) Transmission is well planned with a specific definition of content. Learning as a means of converting information into knowledge teacher centred and content driven. Learning as a development of understanding student centred and learning driven.

Biggs (1999) questions the emphasis placed on motivation as in today's environment motivation is not a prerequisite but a *product* of good teaching. My aim is to motivate through the ability to express and inspire and to do this I need to be flexible in my approach to teaching. By being informal, I aim to stimulate individualism.

Teaching is a democratic process and as Brookfield (1995) suggests: teach to change the world, teach people to be civil toward each other and toward the environment, and to have compassion and understanding, love, fairness and justice.

"No one can be certain that teaching will cause students to learn" and "Excellence in teaching cannot guarantee that students will understand", (Ramsden, 1992, p.80) emphasising that teachers above all need to be flexible in their approach.

My own key to successful teaching and learning comes from:

Interest and explanation - I create interest to make learning pleasurable
and to create ownership on the students' behalf which makes them want
to work hard. I acknowledge complex topics need clear explanations so I uti
lise visual coupled with verbal stimulation because the two facilitate interest
as explained previously.

- 2) I always try to show concern, generosity, honesty, modesty, interest, and respect for students as this makes them feel secure.
- 3) Experience has taught me that versatility, improvisation and enjoyment of the unpredictable are the best assets a teacher possesses.
- Freedom and discipline are ambivalences that underpin teaching and I have tried to find a balance.
- 5) I always endeavour to provide clear goals and stimulate intellectual challenge because experience has taught me that high academic expectations are associated with high levels of teaching performance.
- 6) Students will learn best in their own way, no students think or learn in the same way - all need individual treatment. I, therefore, aim to arouse the imagination through active engagement and imaginative enquiry, for example, problem solving and cooperative learning. Correct learning tasks should always be set to the appropriate level of the students' current understanding.
- 7) I learn from students, and never take it for granted that my teaching is having an effect. I realise that all teaching is problematic, uncertain and relative, therefore, I talk to students about their learning.
- 8) Through teaching this topic I acknowledge that the greatest barrier to understanding is too much detail and complexity.
- 9) I am aware of (Biggs, 1999, p.73) three levels of student understanding and plan my teaching accordingly:
 - i) Hypothesise, theorise, generalise, reflect, generate, conceptualise.
 - ii) Apply, integrate, analyse, explain. Fact, theory, action and purpose.
 - iii) Classify, describe, list, memorise, identify, recognise.

9) I use the lecture but am careful to talk well, link ideas, and retain freshness and spontaneity, and improvise. Only then will I will inspire high levels of learning. I prepare my lectures because this method of transmission requires an extensive knowledge base, and experience.

The above strategies of teaching have been gleaned from teaching this thesis' topic to an adult audience at the Ministry of Education Adult Education Programme at Havelock North High School and the experience has enabled me to answer the statement presented at the outset of this chapter; "How can philosophy and religion be used as a vehicle for better art history teaching and learning?" Teaching this thesis' topic has ensured I learn about student learning and I have learned a great deal about teaching adults and above all I now acknowledge that I cannot teach without constantly learning.

Conclusion

In conclusion I address the opening statement of this chapter made by Knowles (1998). As a reflection of teaching about faith and reason in Renaissance art this statement is general and rather vague. Although many adults are self directing, many are not and many are incapable of structuring their learning, they need assistance. A few will be intrinsically motivated but many will be extrinsically motivated seeing the education they are engaging in as a meal ticket to a reward such as promotion in a job, after all this is, as Rata (2001) says, a knowledge economy. Adult experience is an advantage in teaching, a privilege, and teachers can use the learner's experience to enrich and make relevant to them their lessons. But an adults experience should be questioned and not taken for granted.

As a reflection of my own teaching practice I have devised the above nine points resulting from this research and will conclude with the following: Good teaching is not about what is taught but how it is taught, not teacher led but student centred, where the teacher is regarded as not the expert but a fellow learner. It is not about competition and working alone but cooperative learning in groups; active and generative teaching as opposed to a passive recounting of facts, it is about the teacher being spontaneous and flexible avoiding a programmed, sterile performance, where mistakes can be made as they can be learnt from and where the student's personal

experience is the basis for creative and inspirational work.

This thesis presents a unique approach to teaching adults about art history and many new ideas I have learned in the course of this research and teaching practice can be successfully implemented into a teaching programme, enriching the learning experience. Using philosophy and religion as a vehicle for better art history teaching and learning encourages resource based and active learning where self directed study is also encouraged. The theme acknowledges social, cultural and historical contexts and encourages learning about perception and expression, about formulating opinions and conceptual ideas and above all fostering in the adult learner a sense of wonder and curiosity about contemporary and past times. In these ways the thesis' theme stimulates successful teaching with the means of changing students' ideas and understanding, and their perceptions of the world. Through it students can realise that the acquisition of knowledge is not as important as how they use it - an occurrence termed conceptual change by Biggs (1999).

By using this theses' topic: "philosophy and religion as a vehicle for better art history teaching and learning," an adult student's scope in life outside the classroom may increase and lifelong learning might be encouraged; it should potentially promote the students' awareness of aesthetics in the every day environment and above all could change their understanding of the connections between art, religion and philosophy. Its aim is to draw the students' awareness to intrinsic motivation and not only extrinsic patterns, and take into account race, class and cultural issues.

Considering the evidence presented, the thesis theme: Faith and Reason explored through Renaissance Art, is a worthwhile discussion in adult education and one which holds the potential to make an effective adult educator.

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