



3. *The Occult*

The worldview embraced by the Platonists dominated the thinking of Western Europe for two thousand years. Over this long period, inevitably there developed philosophical and theological theories and practices which were on the fringe of the orthodox or which combined elements of Platonism with other ancient beliefs. Among these vital elements of the culture of the age were magic, astrology, alchemy, kabbala, gnosticism and hermetism. Within these traditions were fertile sources of symbolism and of continuing debate as to the nature of God. Magic, astrology and alchemy were the seeds of the natural sciences as we know them today and thus paradoxically they contained within themselves the seeds of decay of the symbolic mode of thinking.

We saw that in early times, philosophy, theology and primitive science were all barely distinguishable facets of the same system. They were in the words of Nicholas of Cusa infolded into one and only very gradually over our period were they unfolded into their separate disciplines. It is simplistic to treat these areas of knowledge separately; during the period many of them overlapped and the reductionist distinctions

that we make now were not made then. Moreover, Greek and Latin words which have recognizable modern equivalents often had subtly different meanings in the past. For example, Roman and medieval astrologers were usually called *mathematici*. Astronomers were often called *astrologi*. A magic trick was an *experimentum*. The Latin word *ars* meant discipline in the sense of a subject of study. The word occult had the implication of mysterious but without the pejorative associations it has today.

• Magic •

Magic is a special instance of this difficulty of definition. It became a catchall word applicable to any activity which lay beyond the poorly defined limits of orthodoxy in many different fields. It included the elements of pagan worship from pre-Christian days; primitive scientific observation and experiment; divination and astrology which contradicted the orthodox view of individual moral responsibility; charms, amulets and other medical remedies which lay beyond accepted practice; sorcery and necromancy which were contrary to civil law. This association of magic both with activities which were unorthodox or illicit and with those which were benign and/or experimental in our modern scientific sense, had the side effect of impeding serious pursuit of the latter. It was obviously dangerous to be associated with activities which were condemned by both Church and state but the frequent reference made to them throughout our period by every writer of note up to and including those of the Renaissance, reflected a widespread practical and theoretical interest. Magic in its many forms was a universal feature of society. According to one of the Hermetic books quoted by Stobaeus (page 143) ‘magic and philosophy nourish the soul’¹ and although the Christian fathers from St. Augustine to Thomas Aquinas disapproved of astrology and magic, they acknowledged their existence and to an extent their efficacy.

According to the celebrated natural philosopher, Roger Bacon, in his *Opus Major* written in 1266, in his time, philosophy or knowledge, as we would now say, had 30 divisions, of which the five most important were mathematics, optics, experimental science which included magic and alchemy, languages and moral philosophy. Like Cusanus a century later, Bacon stressed the importance of mathematics as the most certain of the sciences, but he was careful to reconcile his rationalism with orthodoxy

¹Thorndike, I, 290

by insisting that all knowledge was ultimately revealed by God through the Scriptures.

A distinction was generally made particularly in the later Middle Ages between natural and occult magic. Natural magic, according to William of Auvergne writing in the 13th century, described, ‘the occult virtues hidden in natural objects’¹ or, as we would put it now, those phenomena of nature the causes of which we do not understand. Pico della Mirandola confirmed late in the 15th Century that natural magic was an aspect of natural philosophy and he characterized it in the colorful phrase as the “marriage of heaven and earth.”²

Natural magic also included astrology³ and divination, herbals and cures by incantations and other remedies not practiced by orthodox medicine. Rudimentary physics, such as it was, was treated as natural magic. Hero of Alexandria who lived around the 3rd Century AD, wrote books on Geometry, Mechanics and Pneumatics and in the latter he described an experiment originally proposed by the preSocratic philosopher Empedocles and often referred to during the following centuries. He held a vessel of water and prevented the water escaping from a hole in the bottom by putting a finger over a hole in the top and, by contrast, allowed the water to escape when he released his finger.⁴ Was this magic, he asked, rhetorically?

However, particularly in early times, natural magic describing the unknown forces of nature was often not distinguished from occult magic and the *magi*,⁵ or wise men, from which the word magic derived, were sometimes but not always distinguished from the *malefici* or sorcerers. Some writers did not maintain the distinction and regarded all magicians as charlatans. Thus Pliny, the authoritative Roman historian, writing in the 1st century AD, held magic in disregard. “The most fraudulent of the arts [magic] has held complete sway throughout the world for many ages”⁶ and this is confirmed from the vast number of tablets unearthed in the Near East from Babylonian and Assyrian times which describe magi-

¹Thorndike II, 342

²Pico della Mirandola *Conclusiones Magicae* #5 quoted Wind 110. This is one of Pico’s 900 theses which are referred to below (page 224).

³Thus for instance in his *On the Occult Works of Nature*, Thomas Aquinas proposed that natural objects derived their power from the movement of the stars.

⁴Thorndike, I, 190 For a picture of the experiment see <http://www.history.rochester.edu/steam/hero>

⁵As was noted at an early date by Apuleius, the author of the *Golden Ass* written in the 2nd Century AD, the word magus comes from the Persian for priest.

⁶Fowden 80, Thorndike 60

cal formulae or experiments. Pliny went on to confirm that magic owed its influence by embracing medicine, religion and astrology. But Lucian (c120-c200 AD) said, “to reject magic was tantamount to atheism.”¹

Since magic, in the sense of sorcery, was a criminal act under Roman and later civil and medieval church law and subject to extreme penalties, writers had to be cautious about their handling of the subject. Roger Bacon said that he knew about wonderful properties of the magnetic needle but he dared not disclose it out of fear of being accused of magic. Prosecutions under these laws against sorcery were generally only brought if personal injury had resulted and hard as they professed to avoid it, all the ancient writers referred to magic to one degree or another even if they did not advocate it. Towards the close of the Middle Ages, the zealotry of church reactionaries brought about the epidemic of witchcraft trials and executions but even this did not dampen the general enthusiasm for magic in its various forms. Apparently even at the beginning of the 17th Century hundreds of occult magicians were being burned every year in France² and at the same time the word Magic as an alternative for Science, as we understand now it, was still used, for instance, in the English editions of 1658 and 1669 of J.B. Porta’s *Natural magick... in which are set forth all the Riches and Delights of the Natural Sciences*. Of course, the practice of divination and astrology has continued until our own day.

The popularity of magic, then as now, need not surprise us since people have always been willing to consider and embrace quick solutions and extraordinary remedies when the crises or discomforts of life threaten to overwhelm them. One of the most enduring and widespread features of the age of magic was the use of amulets, decorative devices worn to protect against disease, evil spirits or just plain bad luck. Thousands of types of amulet are known and their use has persisted throughout all western history going right back to the fourth millennium BC in early Egypt. One of the most common symbols on an amulet in the late Middle Ages was the Greek letter T or tau. This had a complex ancestry being featured in the typology of the *Biblia Pauperum*, the Bible of the Poor, which was commonly used in the late Middle Ages as a guide to the symbolism of the scriptures. God had commanded Moses to hang a brazen serpent on a tree so that anyone who looked at it would be saved from the bite of real serpents.³ This was used as the type for the crucifixion

¹ Fowden 81

² Lenoble 7

³ *Numbers* xxi, 9

itself: anyone who looked for Jesus at the moment of His ultimate sacrifice would be saved from that serpent, the Devil.

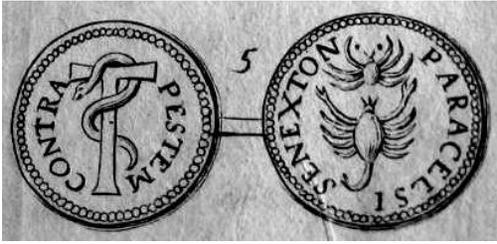


Figure 9 A pest-thaler. An illustration from C-F. Menestrier's *Images Enigmatiques* of 1694.

The tau symbolized the tree of Moses and this amulet was particularly believed effective at that moment of ultimate need, in times of plague. In the late middle ages, German coins called pest-thalers, inscribed with the tau, were issued and used as necklaces for personal protection. The brazen serpent was adopted by Melancthon, the Prot-

estant theologian, as a personal symbol. Medals with the names and images of saints were commonly worn (and still are); St. Benedict was proof against fevers, St. Valentine against epilepsy and St. George was a comfort and protection for travelers as was St. Christopher.¹

• Astrology and divination •

Astrology had been practiced since the earliest times and, as we know it in the West, was possibly a synthesis of Greek and Babylonian and other near Eastern beliefs dating from after Alexander's conquest of these countries. We have seen that the connection between the activities of the heavenly bodies, the sun, the moon, the planets and the stars, and human behavior was fundamental to Greek cosmology. The planets, stars and the Earth were thought in some sense to be a living whole and each element of this whole was believed to influence one another in complex ways. Plato had said "the Creator .. made this world a complete whole..... that was to contain within itself all living beings."² Each of the heavenly spheres and each of the signs of the zodiac had their corresponding animals, plants, colors, scents and other earthly attributes, specialized reflections of the divine Forms, and the associations between each heavenly body and its material reflection assisted with the interpretation of the symbolic meaning of the latter.

Ptolemy whom we have already met as the originator of the geocentric theory which remained the accepted cosmological truth until the

¹ See Chaucer *The Canterbury Tales* Prologue 115 where the Yeoman is described as wearing a silver St. Christopher medal.

² *Timaeus* 33

work of Copernicus, wrote in the first half of the second century AD. Two of the most widely read of his books were *The Almagest* and the *Geography* but he also wrote a treatise on Optics and another on Astrology the *Tetrabiblos*, or Four Books. He certainly believed in the efficacy of astrology and if the predictions of astrologers occasionally proved incorrect, he excused them with a happy analogy to the predictions of navigation: “just because there are shipwrecks does not mean that one should abandon the science of navigation.”

Astrology, astronomy and theology were believed to be closely linked. Synesius of Cyrene (c370-c430) a Christian Bishop writing about 400 AD said that “astronomy besides being itself a noble science, prepares men for theology,”¹ which was understandable when, as we have seen, God was to be found in the highest sphere of the heavens above the sphere of the stars. To many writers throughout the period, astronomy and astrology were barely distinguishable. Isidore of Seville (c560-636) in his classic and much quoted *Etymologies*² which was, in effect, an encyclopaedia of all knowledge of his time, said that he believed there was a difference between astronomy and astrology but he did not know what it was. In the West, the subject was reintroduced in the 12th century from Arabic sources along with alchemical texts. Ptolemy’s *Tetrabiblos* was translated in 1138. The greatest astrological treatises of the Middle Ages both written in the 13th Century were called the *Speculum Astronomiae*, the Mirror of Astronomy and the *Liber Astronomium*, the Book of Astronomy and in practice the distinction between astronomy and astrology remained very close right through the end of the 17th Century. It was recognized that “if the public did not believe in astrology, books on astronomy would not sell.”³

Even Thomas Aquinas accepted the close influence of the heavens upon events on Earth. In his book, *On the Occult Works of Nature*, he proposes a simple general explanation for the causes of natural phenomena: the generation and decay of living things was initiated by the passage of the heavenly bodies through the sky.⁴ Indeed this perception of this close relationship of macrocosm and microcosm persisted to the very end of the age of symbolism. In the work of Ficino, the relationship between the stars and man is mediated by the *spiritus* a delicate and invisible substance

¹ Thorndike, I, 543

² The *Etymologies* became the accepted reference book for the whole Middle Ages. It followed the classic rhetorical path by examining the meaning of things by reference to the words which described them and the origins of the meaning of these words.

³ Delambre 1821, 2 603 cited Heilbron 334

⁴ Kieckhefer 130

which permeates the universe, which was related to the quintessence of Aristotle and is described by Virgil when he says,

Know, first, that heav'n, and earth's compacted frame,
And flowing waters, and the starry flame,
And both the radiant lights, one common soul
Inspires and feeds, and animates the whole.
This active mind, infus'd thro' all the space,
Unites and mingles with the mighty mass.
Hence men and beasts the breath of life obtain,
And birds of air, and monsters of the main.¹

We shall also see this same view of the nature of the life-giving force, perhaps surprisingly, in the work of Isaac Newton whose work symbolized the climacteric, the moment of change from the age of symbolism to the modern era of the natural sciences. In addition to his masterworks on mechanics, gravity, optics and the trajectory of the planets, Newton was profoundly interested in the nature of God and in the meaning of human life (page 337). The *spiritus* or active mind of the universe was, he believed, engendered by what he called the vegetative principle, a subtle force akin in some way to the force of gravity both of which were products of the interaction of the heavenly bodies.

The most common function of astrologers, in the Middle Ages as now, was to cast horoscopes for individuals or for political leaders so as to foretell the future or the likely outcome of their decisions or propose the most propitious moment for action. Astrology was also widely used during the Middle Ages as an aid to medical practice. It was important that the stars be in an appropriate conjunction before cures were attempted or operations were performed. Thorndike describes how this could be done with the help of a Wheel of Fortune.

Having calculated the value of a person's name by adding together the Greek numerals represented by its component letters, and having further added in the day of the moon, one divides the sum by some given divisor and looks for the quotient in the compartments [of the Wheel].²

There was much debate as to whether a distinction could be made between the predictions derived from astrology and from the deterministic effect of the stars, that is in the belief that the position of the stars actually influenced future events. Many writers including, for instance, St.

¹ *Aeneid* VI 726 cited in Yates 1991 69

² Thorndike I 683 where he quotes from a Leyden papyrus. Greek letters doubled up as numbers.

Augustine who otherwise acknowledged the practice of astrology, denied that the latter effect existed but the possibility clearly disturbed the early Christian fathers. Tertullian, writing at the beginning of the 3rd Century said that “men are led to think that they need not call on God on the assumption that we are driven by the immutable will of the stars.”¹ Plotinus had already seen the fallacy. How could the stars guide the countless number of living things that existed? “What kind of a life is that for the stars? How could they possibly handle a task so huge?”² He went on to explain that since the whole cosmos was sympathetically joined as one being it was possible to foretell the actions of one part of that whole by observing another part. One part of the cosmos, he says, will symbolize another: “all teems with symbol; the wise man is the one who in any one thing can read another.”³

Boethius following the lead of Augustine reconciled the problem of divination, in effect the ancient paradox between free will and determinism, by proposing that although man retained freedom of choice, God had foreseen the choices that would be made. This was, he explained, because Time was part of God’s Creation. Before the Creation, Time did not exist and God was able to comprehend the history of the universe through to the end of time in one instant.⁴ This idea became the accepted orthodoxy through the medieval period. Thus, Meister Eckhart: “nothing is as opposed to God as time .. there is no process of becoming in God but only a present moment”⁵ and Chaucer summarized it succinctly:

.....then there’s Boethius, showing
Whether the fact of God’s divine foreknowing
Constrains me to perform a certain act
- And by ‘constraint’ I mean the simple fact
Of mere compulsion by necessity –
Or whether a free choice is granted me
To do a given act or not to do it,
Though, ere it was accomplished, God foreknew it,
Or whether Providence is not so stringent
And merely makes necessity contingent.⁶

On a popular level, astrology and many other methods of divination flourished in the Middle Ages. Michael Scot in the 13th Century listed

¹ Tertullian *On Idolatry* sec. 9 cited in Fletcher 46

² Plotinus II, iii , vi trans McKenna 80

³ Plotinus II, iii , vii trans McKenna 80

⁴ Boethius trans. V.E. Watts 164

⁵ Meister Eckhart *Sermon DW50* trans. Oliver Davies.

⁶ Chaucer 1387 271: *The Nun’s Priest’s Tale*

twenty-eight types of divination of which perhaps the most common form was by the interpretation of dreams. Plato acknowledges that dreams can be prophetic and that this capacity (as well as the capacity of those who have the gift of prophecy) was given by the gods to man so that he might have 'some apprehension of truth'.¹ There was general agreement that the function of dreams was to give insight into the future. Aristotle acknowledged that "the thing is not incredible but rather reasonable."² And before we dismiss the whole subject as hocus-pocus we only have to substitute for divination and prophecy the words prediction and forecast to see that we still do much the same in the modern era. Furthermore, prediction is tied in with the theory of the natural sign which as we shall see originated with the ancients remarking that natural events such as lightning strikes always preceded or were a sign of thunder. This in turn led on to discussion and development of causality and the scientific method.

'Dream books' flourished throughout the period including those of Philo of Alexandria with his *De Somniis* and of Galen the physician (b. c129AD)³ in the first century, Artemidorus⁴ in the third Century, the *Dream Book of Daniel* and the *Dream Book of Joseph* both from the 12th Century⁵ and those of many others who attempted to diagnose or divine from reports of dreams. It is no coincidence that Freud's masterwork *The Interpretation of Dreams* had the same title as the work of Artemidorus. Freud was happy to acknowledge his debt to Artemidorus and it is not difficult to see the link between Freud's symbolic explanation of dreams and both Aristotle's theory of metaphor and the Platonic Forms. Schopenhauer also said, "it is from old Artemidorus that we can really learn how to interpret dreamsin his books in which he explains ...the universal knowledge which we possess while dreaming."⁶ Artemidorus had categorized dreams into two main classes: the general and the allegorical,

Allegorical dreams ... are those which signify one thing by means of another: that is, through them, the soul is conveying something obscurely by physical means. The allegorical dream is a .. condition of the mind that ...signifies good or bad things that will occur in the future.... The mind

¹ *Timaeus* 71d trans. Lee

² Aristotle *On prophecy in Sleep* cited Steiner 1996 213

³ Galen was one of the most prolific writers of ancient times. Many of his books have been lost but a total of 20,000 pages have survived.

⁴ In his *Oneirocriticon* first published in the West in 1518.

⁵ Thorndike II, 290.

⁶ From *Parerga and Paralipomena* cited in R.J.White 297

predicts ... by means of images of its own, called elements, that are natural products.¹

Regrettably, he does not tell us any more about the nature of these ‘elements’ so we are not much more enlightened as to his understanding of the mechanism of divination.

In ancient times, dreams and nightmares, shadowy and frightening, took on greater significance than they do today. Again, Plato describes existence in the sensible, material world as a dream and it is for this reason that it is so difficult to grasp the reality of the Ideas.² We see dreams emphasized continually in contemporary literature, in the *De Planctu Naturae*, On the Complaint of Nature, of Alain de Lille which takes place in a dream of the narrator, in the *Roman de la Rose*, in several of the works of Chaucer, particularly the *Parliament of Fowls*, in the dreams within a dream of the *Hypnerotomachia Poliphili* (page 242), in the *Songe de Descartes*, the Dream of Descartes, which as recounted by Baillet describes the epiphany in which the great philosopher chooses the path of self-knowledge and in the *Pilgrim’s Progress* where the narrator begins the story by falling asleep and dreaming. It is not surprising that it was a popular device with the allegorists. The shadowy, unrestrained and fanciful ambiance of the dream was a perfect setting for the idealized and unreal characters of the allegory and yet another reminder that the inexpressible and ineffable mysteries of God and heaven must be approached in ways other than by logic and reason.

Another more playful technique of divination used throughout classical and medieval times was called the *Sortes Virgilianae*, the Virgilian Fates, which consisted simply of opening the pages of Virgil’s *Aeneid* and reading the first thing that came to the eye. There were many anecdotes as to the unexpected success of this method³ although we probably do not hear of the many other occasions where the exercise was fruitless. Alternatively, the same thing could be done with the Bible.

The second and more sinister branch of magic was occult magic. This included sorcery and necromancy which latter had originally meant divination by means of the raising of the dead but it came to be used for any type of sorcery especially that used to summon demons to control the will or actions of another, to create illusions or to detect objects or ac-

¹ *Artemidorus* I, 2. trans. R. J. White

² *Timaeanus* 52b “We look at [the Forms] in a kind of dream andbecause of this dream state we are not awake to the distinctions we have made.”

³ Several examples of the success of the Virgilian Fates are given in Rabelais 314.

tions hidden in the present or the future. Sorcery was often performed by means of incantations and symbolic pictures particularly magic circles.

These many different applications associated with magic, shared a common theme, derived again from Platonism, the idea that the goodness of God overflows from the One, down through the heavenly spheres, creating and uniting the phenomena of nature. Every element in nature is joined in and by its relationship to God, a unity called in Greek, *sympatheia*. As Plotinus said,¹ “this One-all, therefore, is a sympathetic total and stands as one living being.” This unity is kept in place by the forces or energies of nature which are no more than the continuous radiation or emanation of the goodness of God. This force of nature, moreover, directs the fate of man. In some contexts, this force was called by the Aristotelian term, the quintessence, the fifth element, which was contrasted with the original four elements, earth, water, fire and air, the elemental building blocks of nature. Under most circumstances, the fate of man thus ordered could not be avoided although it was possible with the right understanding or by a supreme exercise of will to manipulate and control the force of nature thus influencing fate, and this was the task of magic. Plotinus said, “the magician, too, draws on these patterns of power, and by ranging himself also into the pattern is able tranquilly to possess himself of these forces whose nature and purpose he has become identified.”² And Synesius of Cyrene (c370-c430): “this whole, so joined in sympathy and in agreement, the parts are closely connected as if members of a single body.....the wise man is he who knows the relationships of the parts of the universe, for he draws one object under his control by means of another object.”³ Late into the Renaissance these beliefs were still held. Pico della Mirandola writing in the late 15th Century, described how “there is no latent force in heaven or Earth which the magician cannot release by proper inducements.”⁴

• Miracles •

There was a fine line between the activities of the practitioners of magic, in their spells and incantations, in their attempts to control fate by manipulation of the divine powers and the Christian practice of attempting to

¹ Plotinus *Ennead* IV, iv, 32 trans. McKenna

² Plotinus *Ennead* IV, iv, 40 trans. McKenna

³ Synesius of Cyrene *On dreams* ch. 3, quoted in Thorndike, I, 542

⁴ Pico della Mirandola *Conclusiones Magicae* #5 quoted in Wind 110

influence the will of God by prayer and by praise. Frazer¹ in his famous book on myth distinguishes magic from religion by characterizing the former as the ability of one individual to influence the life of another through supernatural manipulation and control whereas the efficacy of religious practice relies entirely on the will of the supernatural being although this may be influenced by prayer, sacrifice, good behavior or worship.

Indeed to Christian laymen, magic could barely be separated from the miraculous. In an early treatise called the *Recognitions* wrongly ascribed to Clement of Alexandria, St Peter is asked the difference between magic and miracle. He declares that there is a difference but only in their effects: magic does not benefit anyone but Christian miracles are performed for the good of humanity.² Similarly, St. Augustine noted and condemned the existence of magic. He ascribed magic to the participation of demons whereas by contrast miracles could only have a beneficial outcome. He recognised the relationship between magic and science and condemned the latter. He also condemned astrology. Augustine was also the first to formulate the doctrine of Predestination which was subsequently rejected by the Catholic church³ but he did not accept the idea of control by the stars of the fate of man since he saw that this would suborn the freewill of the individual. It is difficult to understand how this argument would not also apply to the control exercised by the forces of predestination although many subsequent medieval thinkers who accepted astrology proposed that man could break free from the fate decreed in the stars by an exercise of the individual will similarly to the practices of the magician. Aquinas also accepted alchemy and the existence of witches; he believed that demons were responsible for magic. Miracles, however, he said, were performed by God alone.

Medieval theory provided at least three explanations for miracles. First, they could be infrequent natural phenomena which were as inexplicable as most others. Then, according to many medieval writers, such as William of Auvergne in the 13th century, in a more sophisticated analysis, miracles were exceptional manifestations of the will of God.⁴ According to this view, in the normal course, God allows the laws of nature, which He had in any event initiated, to unfold undisturbed, but since He is all-powerful, He can suspend or redirect those laws, so as to perform a

¹ Frazer 1890

² Thorndike, I, 417

³ The doctrine of predestination was resurrected in the Reformation by the Calvinists and Lutherans.

⁴ Thorndike, II, 342

miracle. Both these interpretations went back to Augustine although he was not particularly precise in the distinction. According to him, God's laws "by providing for the ordinary development ...in appropriate periods of time, or by providing for the rare occurrence of a miraculous production..., in accordance with what God wills as proper for the occasion."¹ As we shall see, Newton himself was fully within the metaphysical traditions of his age and he also commented on the unfettered nature of the will of God, characteristically carrying the thought through to its remarkably modern logical conclusion. "It may also be allowed that God is able to create particles of matter of several sizes and figures ... and thereby to vary the laws of Nature, and make worlds of several sorts in several parts of the Universe."²

Finally, the miraculous was thought to be a glimpse of the Divine world which in the Middle Ages, as we have seen, was perceived as being close to the natural world. In our contemporary and practical age, we see history as a lineal succession of events but the people of the Middle Ages saw nature as a reflection of the divine world of heaven which was ahistorical, timeless and unchanging. With little knowledge of events beyond the geographical boundaries of their region, with almost no knowledge of what had happened in the past and without time pieces to estimate when things might happen in the future, it is not surprising that for most people time meant very little.³ There was no expectation of social progress nor of the possibility of improvement in ones personal circumstances except for a dim hope of life after death. Aquinas typified the medieval view; God was not constricted by time but saw the past and future simultaneously. According to Gurevich, "works of medieval literature....do not permit time and space to be painlessly distinguished as conceptual categories, so deeply rooted are they in a single whole and unbroken vision of the world and future and present were combined in one mythological plane."⁴

In classical and later times, the belief in the proximity of other worlds, of spirits, demons and angels, was so strong that it was advised that if you were to meet a stranger in a remote area, you should immediately question him in a subtle fashion so as to confirm whether he was

¹ Augustine *The Literal Meaning of Genesis* (3, n.19), VI 13-14 cited in Dobbs 232

² Newton *Optics* Book III Part 1 cited in Barrow 83

³ The first mechanical clocks were not used in Europe until the 13th century. The first of these just rang an hourly bell; later versions had one hand for the hours and the minute hand was added even later.

⁴ Gurevich 144

a man or demon. Both Pliny and Tacitus,¹ the Roman writers, tell the story of how a man strolling of an evening met a spirit, a woman dressed as a goddess, who foretold his future. Dreams, visions, miracles, angels, demons and spirits all had a greater reality than they do today. They represented a point of connection, a wormhole, between the two worlds, heaven and earth.

Magic and miracles and the saints who were responsible for miracles were thus a large part of everyday medieval reality at every level of society. To the ordinary people, the saint was the equivalent of the magician from their pagan, pre-Christian, days. In the early Middle Ages, the authorities were only too aware of the pagan origins of their flock. Gregory the Great, (Pope from 590-604) being a practical man, advised that the ties to paganism of those converted to Christianity should be broken only gradually. Charlemagne, 200 years later, took a much harder line. He legislated that those who practiced sorcery or divination should be sold as slaves and those who worshipped pagan Gods should be executed.

Much of the pagan 'magic' condemned by the Church was derived from the tribal cults, rituals and medicine of the Germanic and Celtic peoples converted to Christianity in the dark ages. Christian ceremonial absorbed some of these rituals, and others persisted secretly outside the church. The gods of the German and earlier Roman peoples were the origin of the belief in the demons which peopled and constantly plagued medieval life. In the continual and strident references to the hellish prospects of the afterlife in the sermons of the time, one detects an understandable note of desperation and panic. Threats from earlier pagan days existed just beneath the surface; if the Church and its ministers relaxed for a moment, it was possible that the pagan demons might take control.

For the illiterate layman, the saints were an immediate and material representation of the divine world. Their relics could be venerated despite the Second Commandment and pilgrimages brought substantial economic benefit to their final resting places. There are numerous stories illustrating the economic or spiritual importance attached by contemporaries to the remains of a saint, many of them decidedly gruesome. When St. Cyprian was martyred in 253, the last thing he supposedly saw was a pile of cloths thrown by the crowd "to catch the martyr's blood and become relics for the faithful".² Charles VI of France at a feast gave some ribs of St. Louis, his ancestor, to three of his family and a leg bone to a

¹ Pliny *Epistolae* VII, 27 and Tacitus *Annals* XI, 21 cited in Curtius 102

² Lane-Fox 16

group of bishops who promptly fought over it and tore it to pieces.¹ Relics of saints are still venerated despite the passing of the millennia. The remains of the three Magi who attested the birth of Christ are enshrined and still worshipped at the high altar of Cologne cathedral in Germany. The remains of St. T  r  se of Lisieux have recently (1999) toured the United States and requests for presentation of the sacred remains were received from over one thousand Catholic communities.²

The saints were a fertile source of Christian symbolism. Almost every saint in the Christian calendar³ has his or her own defining symbol deriving from aspects of their life or martyrdom. St. Catherine of Alexandria is usually depicted with a wheel upon which she was martyred or a crown since she was taken to be the spiritual bride of Christ. St. John is represented by an eagle, St. Thomas by a builder's square, St. Peter by crossed keys, St. Paul by a long Roman sword and St. George of course by the rose or the dragon. The lion was the symbol of St. Jerome commemorating the animal he befriended. St. Jerome had translated the Greek Bible into Latin and this version, known as the Vulgate became the standard version used throughout Western Christendom. The symbol of Gregory the Great was the dove to symbolize his great learning which could only have come from the Holy Spirit.

The *Legenda Aurea* or Golden Legend by Jacques de Voragine⁴ (1229-1291) was a compilation of the lives of some 180 of the most important saints. Such was the popularity of the subject and so frequently was it copied even before the start of the printing press that some 900 copies of it survive in manuscript and it has the reputation of being the most widely printed book before 1530. Apart from its content, its success was due to the fact both that it had no pictures and therefore could be sold cheaply and also because it was translated and published in the vernacular languages making it available to a wider audience. Caxton printed it in 1483 in his own English translation.

¹ Huizinga 192

² New York Times October 6th 1999

³ The list of Saints Days, one for each day of the year, given in the *Kalendar and Compost of Shepherds* (page 224) testifies to their importance to every day life in Renaissance times.

⁴ Voragine wrote another influential book, *Mariale de Laudibus Deipare Virginis*, on the symbols of the Virgin Mary which is known to be the immediate source of the English emblem book, *Partheneia Sacra* by Henry Hawkins published in 1633.

· Secrecy ·

An absolute necessity of the practice of magic was that it should be accompanied by secrecy. This is readily understandable when as we have seen magic or at least sorcery was illegal under ecclesiastical and civil law. It is clear from continual references in ancient, medieval and Renaissance literature that involvement in and knowledge of religious and philosophical rites, symbols and works was regarded not just as serious but as dangerous to the uninitiated. Magical forces were so potent that in the hands of the neophyte they could be very dangerous. It only required for one word in an incantation to be out of place for the experiment to rebound on the magician. We only need to think of the fate of Lucius, the hero of Apuleius' famous novel, whose amateur fumbling with magic ointments metamorphosed him into the book's eponym.¹ It was accepted without question from the earliest times that magic had been and was extremely powerful and dangerous. Magic had been a feature of the most primitive societies where death itself was thought to be caused by magic. Early man, in common with primitive tribes today, apparently could not grasp the idea of death by natural causes. A natural death according to many early peoples could only be attributed to the magical action and influence of enemies.

But the habit of secrecy went far beyond magic. It was a deep concern of almost every writer involved in the exploration or exposition of any kind of knowledge. It was strongly believed by the educated that knowledge should be confined to the educated. We see this even in contexts where the opposite would be expected, for instance, in the teaching of St. Paul in the New Testament. "But the natural man receiveth not the things of the spirit of God for they are foolishness unto him: neither can he know them, because they are spiritually discerned."² In this St. Paul was following the words of Jesus himself who, when asked by his disciples why he always preached to the multitude in parables, said, "because it is given unto you to know the mysteries of the kingdom of God, but to them it is not given."³

Eisenstein⁴ refers to one reason for this continual secrecy: the necessity to transmit orally the traditions of the sect or cult, at a time when most people were illiterate. After the collapse of the Roman Empire, the

¹ *The Golden Ass* by Apuleius written in the 2nd Century AD is the only complete Latin novel which survives.

² I *Corinthians* 2, 14

³ *Mathew* 13, 11

⁴ See Eisenstein 140-142

church had a monopoly on the educators, the copyists and scribes and to an extent the educated. It had no interest in publicizing or perpetuating the operations of secret sects or societies; on the contrary, all its energies were involved in spreading the Gospel and the works of the church fathers and in the practical problems of running the Church. Thus even respectable crafts and guilds, all of which had the same problem - how to retain the techniques of the trade within the craft and pass them on un-sullied to future generations when there was so little writing capability, had to ensure that all members went through a long training and remained free from outside influence.

Festugière, who published in 1954 a critical edition of the Hermetic texts, had a simple and more cynical explanation of the phenomenon. "This idea of mystery, of obscurity, is a complement of that of authority. The more a truth is hidden, the more it is secret, the more it has power."¹ But this universally expressed sentiment of secrecy, apparently basic to the medieval and Renaissance psyche and reflecting an elitist outlook wholly contrary to modern liberal sensibility, requires explanation. It is difficult for us in an age of universal primary education, at least in the developed countries of the West to comprehend what it was like to be a well-educated individual in a society where the great majority of the population was completely illiterate. Those who could read and write were well aware of their advantage and no doubt had difficulty restraining their disdain for the rest of the populace. According to an anonymous 13th Century tract, *On the Clergy*, "he who is educated is a natural Lord over the ignorant."²

Erasmus tells a story which gives us a glimpse of this attitude. Apparently he tried to borrow a copy of a rare classical text from a friend who despite numerous entreaties refused to release it. Eventually, on being pressed, his friend told Erasmus that he was afraid that if the text was copied or circulated, he would lose the prestige of being the guardian of the knowledge contained in the text.³ The fact remains that almost every writer of note during the period maintained the same attitude. According to Cicero (106-43BC)

it is difficult to discover the parent of this universe; and when once you have discovered him, it is sinful to reveal him to the vulgar.⁴

and Synesius of Cyrene,

¹ Festugière *Revue des Etudes grecques* LII 1939 236 quoted in Wind 10

² Gurevich 3

³ Mann Philips 15

⁴ Cicero *On the nature of the Gods* iii trans. Donald Frame

the mysteries and marvels of magic should be confined to the few fitted to receive them and that they should be expressed in language incomprehensible to the vulgar crowd,¹

John of Salisbury (1115-1180) thought it not only sinful but actually illegal to pass on the mysteries to the illiterate.

Truths lie hidden veiled under the various forms of things, for common law forbids sacred things to the vulgar.²

In introducing the first edition of the *Hypnerotomachia Poliphili*,³ Leonardo Crasso the patron of the book described how the author

devised his work so that only the wise may penetrate the sanctuary.

The opening words of Copernicus' great work, *De revolutionibus orbium celestionis*, were,

Let noone untrained in geometry enter here.⁴

Roger Bacon in his *Opus Majus* in the 14th Century said

the wise have been always been divided from the multitude and they have veiled the secrets of wisdom.⁵

Boccaccio was accused by a rival of having revealed the secrets of poetry to the uninitiated. He defended himself in four sonnets at the end of which he confessed perhaps with tongue in cheek that he had done it deliberately to lead the vulgar astray.⁶ Paracelsus in his discussion of alchemy said, "we ask you to handle and preserve this divine mystery with the utmost secrecy."⁷ Dante advised that the ignorant should give up reading altogether⁸ and there are countless other similar references in the literature of the time, some of which are summarized by Pico della Mirandola in his *Oration on the Dignity of Man*⁹ where he refers to Plato, Pythagoras, Aristotle, the Egyptians, Origen, Pseudo-Dionysius and St. Paul

¹ Thorndike, I, 543

² John of Salisbury *Entheticus* 183 trans. and cited by Curtius 206

³ Lefaiivre 80.

⁴ These words had been written at the entrance to Plato's Academy in Athens.

⁵ See //130.18.194.9/PR/holt/papers/digges.html (2/4/2004)

⁶ Curtius 374

⁷ Eisenstein 143

⁸ Dante *Paradiso* II, 1-6 The above is the interpretation of this passage by Curtius 362 but it could as easily be interpreted as a warning of the difficulty of the Second Canto where Dante describes both the physical and metaphorical nature of the Universe.

⁹ Chapter 34, trans. Cassirer 1948 250

citing instances where they insist on the secrecy that their teachings required.

As we have seen, secrecy was not confined to magic and in the wider context the origin of this universal literary phenomenon can again be traced back to Plato. I referred earlier to the Orphic mystery rites, the origin of which predated both Plato and Pythagoras. In these rites, the adherent was required to undergo rigorous initiation ceremonies and swear to secrecy. Any publication of the ritual secrets either then or later could only be done in riddles, ciphers, signs or hieroglyphs. Many of Plato's contemporaries regarded the mystery rites with disdain but he, on the contrary, did not. He viewed philosophy as much more than just an intellectual exercise. In the tradition of Pythagoras, he saw it as an all-embracing system which involved ritual as well as learning. Initiation into the mysteries of philosophy for his followers was the equivalent of the initiation of ordinary people into the Orphic rites. As Wind puts it,

The cleansing of the soul, the welcoming of death, the power to enter into communion with the Beyond, the ability to 'rage correctly', these benefits which Plato recognized were commonly provided by the mystical initiations were to be obtained through his philosophy by rational exercise, by a training in the art of dialectic, whose aim it was to purge the soul of error.¹

Plato's comprehensive cultlike approach to learning was systematized by Plotinus but became debased in the hands of the latter's disciples principally Porphyry and Iamblichus. They resorted to hymns, incantations, ceremonies, 'mysteries' as part of the process of learning and these practices passed into the culture. According to them, knowledge was a precious mystery and only those properly prepared could comprehend it and benefit from it and the practice of secrecy as part of the cult of learning became a factor in perpetuating the use of symbolism and the medieval love of puzzle, enigma and allegory that we shall see in the literature of the age.

St. Clement, the early Church father, had stated it with his usual clarity, acknowledging that the practice started with the Greek philosophers who "have veiled the first principles of things, delivering the truth in enigmas, symbols, allegories, metaphors and such kinds of tropes."² Much later, another Clement, a well-known composer of devices, writing in France in the second half of the seventeenth century, is even more than usually arrogant. He says that the meaning of the device "should be hidden from the '*le menu-peuple*', the little people, who are usually ignorant,

¹ Wind 3

² Clement *Stromateis* V. 8. 44-55 trans. and cited Allen 10

but understandable by those who have the wit to conceive these beautiful ideas.”¹ And at the same time Fortunius Licetus in his book *Hieroglyphica* from 1653 which illustrated moral, spiritual, political and other ‘more subliminal truths’ by way of etchings on gemstones explained that this medium had been chosen to save these truths from vulgarization. Presumably the thought was that the vulgar could not afford to acquire the stones and thus enjoy their symbolism.

But by this time, such an attitude was becoming uncommon. Times were changing and we shall see that the later emblem writers took on a didactic role which of course could only be served by addressing the uneducated. Several of the emblem books were explicitly intended to be for the benefit of Everyman. In the introduction to his *Emblemas Morales* of 1591, the Spanish author Horozco y Covarruvias stated that he had written for the ‘common benefit of all’. Pierio Giovio in his classic definition of the device from the *Dialogo dell’Imprese* stated ambiguously that the device “be not obscure that it need not a Sibylla to interpret it, nor so apparent that every rustic may understand it.”² We shall see that the end of the age of symbolism was catalyzed by the invention of printing, one of the consequences of which was the rapid spread of education. In such circumstances, there was no question that knowledge could remain the perquisite of the privileged few. The mystery and secrecy of knowledge gradually faded away with the other elements of symbolism.

· Alchemy ·

Magic was a continuous element in the culture of the West during the age of symbolism and there were other mystical themes which were pervasive amongst the thinking and the literature of the time and which touched on the fringes of Platonism. Amongst these were alchemy, hermetism and the Kabbala. Typically, the boundaries between these subjects were not strictly maintained, there was cross-fertilization between them and numerous variants developed over the centuries. There is a certain artificiality in trying to characterize each of them separately and we shall see that far from trying to distinguish them one from another, Renaissance philosophy attempted to unify these doctrines with other Christian and classical themes into one comprehensive system. Certainly alchemy,

¹ Cited in D. Russell *Emblematica* 1, 1, 1986 89

² In the English translation of Samuel Daniel of 1585 cited in Victor Skretkowitz *Emblematica* 1, 2, 1986 268

hermetism and Kabbalism all shared the mystical goal of investigating the nature of God and of solving the problem that the evils and disasters of the world did not easily accord with a belief in a beneficent God. Needless to say, these practices were also rich sources of symbolism.

The common view of alchemy is that it was and is concerned with attempts to convert base metals to gold and silver. But it was more than this. Behind the practice of alchemy was a religious or philosophical system in the Platonic tradition. Not for nothing did the alchemists like to call themselves philosophers or their grail the philosopher's stone. The effort to purify base metals into gold was both a symbol for the purification of the soul from the material influences of the body and the Earth as the soul ascended into heaven and also a step in the process of achieving this spiritual goal. What hope had you for achieving the purification of the soul if you could not at least achieve the much simpler task of purifying the common elements of this world? Of course, in spite of this theoretical background, many alchemists and commentators over the centuries completely lost sight of the mystical aspects of the Art in their zeal to achieve this first step and attain the earthly riches that would result. As J.B della Porta said describing alchemical experiments in his 16th century treatise *On Natural Magic*, "not only a great part of the world is conversant, but also everyone is very desirous to be a practitioner in them and does thirst after them with an unquenchable lust."¹

The earliest known alchemical text is usually taken to be *Physika kai Mystika* or 'Of natural and hidden things' dating from the 1st century BC by a disciple of Democritus (470 - 380BC) who had first proposed the idea of the microcosm and suggested that matter might be composed of separate particles which he had called atoms. Other Greek philosophers who contributed to these ideas were Empedocles who proposed the four elements of matter: earth, water, fire and air, Hippocrates who applied them to the humors of the body and Aristotle who derived these four elements from the *prima materia* or common matter from which all things were made. This common matter could be combined with either dryness, coldness, moisture or heat to form the four elements. In theory, it was possible to manipulate the mixtures of these qualities to change the nature of the elements. In addition, according to Aristotle, there was the fifth or divine essence, the quintessence.

The alchemists had also absorbed another strand of ancient thinking, that of Gnosticism. The origins of this doctrine which was widespread in the ancient world even in the pre-Christian era, are controversial. Some

¹ Porta 1658

say that Gnosticism found its origins in alchemical thought and others, vice versa. It had, as its basis, a fundamental pessimism regarding the nature of the evil of the material world and it attempted to solve the dilemma of this evil by proposing that the God we know, God the Father, Jehovah, the God of the Jews, was the Demiurge, the Creator of the Universe and thus the Creator of the evil materiality of nature. But there was for the Gnostic, a second God, a higher divinity who was pure transcendent spirituality and it was the duty and function of man during his lifetime to overcome the material evil and, after death, ascend through the spheres to unity with the transcendent being. The male and female characteristics of the transcendent being of the Gnostics are an indication that the root of Gnosticism was not Semitic since the Jewish and Christian Gods are both wholly male figures and furthermore this stark duality of good and evil is particularly characteristic of the gods of early Persian religion. The Gnostics also believed that the original *anthropos* or figure of humanity issued out of the transcendent being thus explaining how mankind, although made from physical materiality, still retains an element of divinity, that divine spark, the stimulation of which will enable it to achieve unity with the transcendent spirit in the after-life. Two final elements of Gnosticism bear on its relationship with Christianity: the struggle to achieve salvation was assisted by a Savior although this Savior, unlike Christ, was an incorporeal spirit. Secondly, Gnosticism was a highly personal belief. *Gnosis*,¹ Greek for knowledge, could only be obtained by the extensive practice of magic and astrology and through individual inspiration and realization.

Obviously there were close relationships between neoPlatonism and Gnosticism and between Christianity and Gnosticism. Plotinus, however, was against the Gnostics. He viewed them with contempt as mere magicians.

They say that these powers are led by a mere word, by whoever among us is better skilled in the art of saying just the right thing in the right way, songs and cries and spirated and hissing sound and everything else which their treatises say has magic power in the higher world.²

Despite this disdain, Plotinus was ambivalent about Gnostic theory and the alchemists were happy to use a passage from the *Enneads* as an au-

¹ The word which has come down to us in the English language is agnosticism which signifies the belief that nothing about the spiritual or metaphysical world can be known to rational beings.

² Fowden 79

thority in their efforts to legitimize the spiritualization of matter. In this passage, Plotinus certainly appears to lend authority to Gnostic dualism.

The ordering principle is twofold; there is the principle known to us as the Demiurge and there is the Soul of the All; we apply the appellation Zeus sometimes to the Demiurge and sometimes to the principle conducting the universe.¹

In the first centuries of the Christian era when Christian theory and practice was still in flux, the Christian Gnostics were a formidable challenge to the orthodox dogma of the church. This has been confirmed from the discovery in 1945 of some forty Gnostic treatises together with some Hermetic discourses buried at Nag Hammadi in Egypt and these indicate how attractive Gnosticism could be in a Christian context. At this stage in the development of its theology Christianity had no theoretical explanation for the problem of evil. Marcion, an early Christian Gnostic who was quickly denounced as heretic, had characterized the Gnostic duality of good and evil by contrasting the Old Testament God, Jehovah, the Demiurge and Creator with God the Father of the New Testament whose association with the Holy Spirit, the second member of the Trinity seemed to equate to the transcendent being. Remember that it was not until the work of St. Augustine that Christian theology was provided with a solution to the problem of evil, namely the doctrine of Original Sin. Elaine Pagels² in her review of the Nag Hammadi discovery demonstrates that the element of Christian Gnosticism which was particularly objectionable to the mainline Christian authorities was the individualism of the Gnostic enlightenment which in effect challenged the need for the church hierarchy and the direct line of authority from Jesus to his bishops and priests.

The details of the Gnostic teaching have obvious relevance to alchemy. Each of the heavenly spheres was made of a different metal and each represented a higher degree of purity up to and including the perfection symbolized by gold. Communication with the higher realms was possible through the so-called astral body an aura which surrounds man and through which the divine spark remaining within the human body could be stimulated to catalyze the return of the body to heaven. Indeed, the Gnostics regarded man with his divine spark as superior to all other elements of the universe and approaching God himself in their shared divinity and omnipotence and this idea was reflected in the alchemical writings. Thus, Thomas Browne in the 16th Century: “the philosopher’s

¹ Plotinus *Ennead* IV, 4, 10 trans. MacKenna

² Pagels 1981

stone has instructed my belief, how that immortal spirit and incorruptible substance of my soul may lie obscure and sleep awhile within this house of flesh".¹ Gnosticism was eventually suppressed as part of Christian orthodoxy and disappeared altogether as a worldwide phenomenon by the 5th century AD. Origen, the Church father, had revived the Platonic belief of a God whose creation was perfection itself. But the Gnostic concept of the divine spark in man was attractive to many thinkers. It seemed to be identical to the Aristotelian quintessence and it was natural for the alchemists to try to harness this spiritual element in humanity and to attempt to rekindle or regain that divinity.

Like much of Greek literature and thought, the ancient traditions of alchemy reached Europe in the 12 and 13th Centuries by means of the culture and traditions of the Spanish Moors. The first alchemical treatise from these sources available in the West was translated from the Arabic by Robert of Chester in 1144² although the first Byzantine alchemical text is earlier, from the 10th or 11th Century.³ The Arabs originated and developed many of the codes, maxims and allegories of alchemy and it is from the Arabic that we derive chemical and alchemical terms such as alkali, alcohol, naphtha and the word alchemy itself. In the late Middle Ages it was believed that the prototypical alchemical text had been written on what was called the Emerald Tablet by the ancient Egyptian sage Hermes Trismegistus although this text is now believed to date back only to the 6th - 8th Centuries AD. Here are the cryptic opening phrases of the Emerald Tablet, setting the scene for the subtleties of alchemy. With its references to the Oneness of God, it should be familiar to us.

True, true. Without doubt. Certain. The below is as the above and the above as the below, to perfect the wonders of the One. And as all things came from the One, from the meditation of the One, so all things are born from this One by adaptation...

The first Arabic work on alchemy, a poem, *The Paradise of Wisdom*, by Prince Jazid of Alexandria (635-704) also cites Hermes Trismegistus as the original author. Indeed, the literature of alchemy and magic up to and through the Renaissance quotes Hermes continuously, giving him equally authority with Plato, Aristotle, Ptolemy and Pliny and the Hermetic tradition which I refer to in more detail below was also a powerful influence on medieval secular and Christian thought. The works of St. Bonaventure and Meister Eckhart in the 13th century perhaps best exemplify the latter.

¹ Sir Thomas Browne *Religio medici* I, xxxix quoted in Wind 215

² Kieckhefer 133

³ Fowden 3

Bonaventure's *The Soul's Journey into God* with its multiple stages of ascent by the soul to mystical union with the divine fire is almost indistinguishable from an alchemical tract.

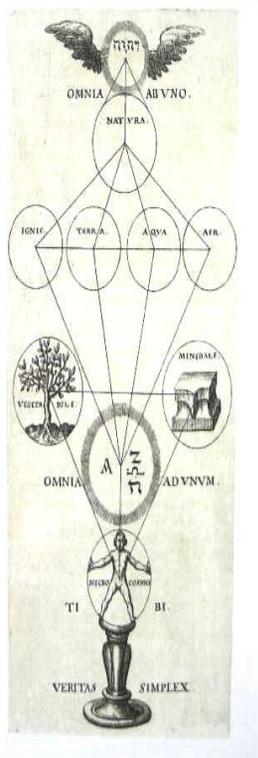


Figure 10 The Tree of Pansophia from the *Speculum Sophicum Rhodostauroticum* (1604) by Theosophilus Schweighart.

By the time of the Renaissance, all the elements making up modern alchemy had come together. The *Opus Magnum* or Great Work as it was called, after the masterwork of God Himself, the creation of the universe, was necessarily a complex and difficult process and there were many possible variations. Every step of the physical process was mirrored by a symbolic reference to the spiritual progress of body and soul. The multiple operations of the art can be summarized from the *Elementae Chemicæ* of Barchusen published in 1718, a typical alchemical tract, which describes seventy-eight separate processes which must be undertaken to achieve the alchemical goal. These involved in turn the creation of the four Aristotelian elements out of the primal chaos, the extraction from these elements of the seven metals symbolized by the seven heavenly bodies and the purification of these metals by successive mixing with different chemicals and the subsequent distillation of these mixtures. The purified metals were then to be mixed and entered a state of putrefaction or dissociation of the constituent elements. Any liquid was distilled off and the final substance was the Philosophers Stone. After many further steps of heating, distillation and mixing with additional chemicals including the vital step of *conjunctio*, the conjunction of opposites followed by spiritual rebirth, the Stone became pure and transcendent. At this final stage the soul itself could evaporate out of the Stone

and the Great Work was complete. Here we see, as the essence of alchemy, the Platonic idea that the universe was moved by love and the closeness of love and death is here reflected in the stages of dissociation and rebirth.

The Renaissance saw a vast outpouring of alchemical literature from all over Europe. A number of English works were collected and published in 1622 by Elias Ashmole in his *Theatrum Chemicum Britonum*, the Theater of British Chemistry. Ashmole was an English polymath who had a deep interest in the natural and occult sciences; he was the founder of the Ashmolean Museum in Oxford, one of the earliest members of the

Royal Society and reputedly the first English Freemason. His book included the first printing of the *Ordinall of Alchemy* by Thomas Norton written in 1477 and perhaps the earliest treatise on the subject by an Englishman. The original was in Latin but John Dee whom we shall see as perhaps the greatest English mathematician of the 16th Century and responsible for a revival of Platonism in England had translated it into English verse in 1577 and this was the version used by Ashmole.

Another example of the powerful cultural influence of alchemy was the notoriety of the secret society of the Rosicrucians which apparently was founded as a prank in 1614 by a group of students from Tübingen in Germany. I say apparently since very little is known for certain about them. According to their manifesto, the *Fama Fraternitas*, they had been founded one hundred years earlier but this comment is believed to be fictitious. They either kept their secrets well or as many contemporary and later commentators believed, they did not exist at all but such was the receptivity and gullibility of the thinking public that people from every part of Europe, including Robert Fludd¹ and that acme of practicality René Descartes, tried to join what became known as “the invisible college.”² The name of



Figure 11 The *pictura* from emblem 38 from Daniel Cramer's *Sacred Emblems* of 1617.

the Society, the Rosy Cross, was taken from Luther's coat of arms which indicates its Protestant leanings and the *Fama Fraternitas*, which, in a century when obscure texts were the norm, is distinguished by being almost incomprehensible and refers to magic, to the Cabala, to Hermetism and the practice of alchemy. A later tract, the *Chymische Hochzeit Christiani Rosencreutz*, the Chemical Wedding of Christian Rosycross of 1616, has

¹ In 1617, the same year that he published his masterwork *Utrius Cosmi*, Of both Worlds, Fludd wrote an admiring pamphlet, *Tractatus Apologeticus* addressed to the Rosicrucians which ended with a request to be allowed into their society.

² According to Robert Boyle in a letter dated October 1646, this name was also given to the Royal Society in London in its earliest days. Presumably, Boyle obtained the reference from the Rosicrucians.

been traced to a Lutheran pastor Johann Andreae and it is possible that he founded the whole movement. The ideas of the society were soon to be expressed in the emblem format by the protestant theologian Daniel Cramer with his *Sacred Emblems*¹ of 1617. This book was a combination of a Christian meditative progression and an alchemical manual.

The Rosicrucian works of the 17th and 18th centuries employed the jargon of Kabbalism, hermetism and alchemy but slowly became marginalized as the mainstream of medieval symbolism became increasingly irrelevant. It survived in writers such as Georg Von Welling (1655-1725) who tried to syncretize the Cabala with Christian theology in his *Opus Mago-cabalisticum* of 1719 and Altona with his *Gebeime Figuren der Rosenkreuzer*, Secret figures of the Rosycross of 1785. Von Welling was important if only because Goethe derived his knowledge of alchemy from him and based his own work *Promethens* on Von Welling's ideas. The mysteries of the Rosicrucians survived also in the works of Blake² and James Joyce but as the years passed the word became merely a synonym for hermetic or cabalistic with the meaning mysterious or magical. It survives now in the rites of the Freemasons, the secret society which also dates from the 17th century and combines a mixture of Pythagorean and Christian mysticism taking their text from *1 Corinthians* 3, 9-11: "according to the grace of God which is given unto me, as a wise master builder, I have laid the foundation and another buildeth thereon."

As we have seen, the first recorded English Freemason was Elias Ashmole³ in 1646 and interestingly the first English translation of the *Fama Fraternitas* of the Rosicrucians which is dated 1656 is dedicated to him. This translation also states that the original was written by Michael Maier (1568 –1622), one of the great authorities of the Art on the Continent and a physician in the court of King Rudolf II in Prague. One of his earliest books, *Arcana Arcanissima* describing Egyptian hieroglyphs, was studied by Newton as part of his research into alchemy (page 338) and subsequently by Goethe whose poetic works reflect his interest in mysticism. Maier also wrote the *Themis Aurea, the Laws of the Fraternity of the Rosie Cross* of 1619, a treatise for the Rosicrucians. His most celebrated work, the emblem book, *Atalanta Fugiens* of 1617 was subtitled *Emblemata Nova de Secretis naturae chymicae*, New Emblems on the Secrets of the natural chemicals, and was exceptional in several ways. Each emblem described a

¹ Sometimes called *Rosicrucian Emblems*.

² Holtgen, K.J. in *Emblematica* 10, 1, 1996 133

³ Ashmole was the founder of the Ashmolean Museum in Oxford and a Fellow of the Royal Society in 1661.

step in the progress of the alchemical work and also included a multipart musical composition by Maier himself. As an additional level of complexity, there was a single theme which unified all the emblems: the myth of Atalanta and Hippomenes from Ovid's *Metamorphoses*.¹ You will remember that Atalanta was the nubile athlete whose suitors were put to death if they lost against her in a quick sprint. Hippomenes recognized that he needed divine assistance in the race and he persuaded Aphrodite to lend him the Golden Apples of the Hesperides with which he succeeded in distracting Atalanta so that he won the race and her hand. But disaster quickly followed. The couple were so intent on consummating their love that they did not notice that they were doing so in a shrine of Cybele, the mother of the Gods, and she was so incensed by this sacrilege that she metamorphosed the lovers into a pair of lions. The two lions remained an essential feature of the alchemical process where they symbolize the marriage of Nature and Art just as the lovers did in Ovid's work and in the *Atalanta Fugiens*.

Another emblem book devoted to alchemy was the *Philosophia reformatata* of 1622, the chef d'oeuvre of Jean Daniel Mylius, in which the emblems describe each step of the Art. The book proved popular and the emblems were copied by another alchemist, Daniel Stolcius with his *Viridarum Chemicum* (1624) which was also published in German as *Chimisches Lustgartlein*, the Chemical Garden of Delights.

Perhaps the famous figure in Renaissance alchemy was Theophrastus Bombastus von Hohenheim (c1490 – 1541) a Swiss who perhaps wisely went by the self-styled name Paracelsus. He aroused violent emotions both amongst his supporters and those who opposed him but his life's work and belief was simple: "the true study of chemistry is not to make gold but to prepare medicine."² Although or perhaps because he was self-taught, he violently opposed traditional medical methods and thus naturally enjoyed the enmity of the existing medical establishment.³ Nevertheless he was the first to abandon the conventional medical theories relying on the four humors of the body, he placed stress on empirical observations of the course of disease in both man and animal and he had a glimpse of modern methods when he described disease as the disturbance of the equilibrium of the chemicals in the body. He proposed the term vegetative alchemy as reflecting the true aim of alchemy and as an aid in the healing process but his tools were traditional and his works

¹ *Metamorphoses* x. 560

² Cited in Carter 66

³ His masterwork was the 11 volumes of the *Opera Medico-chemico Chirurgica* of 1603-05

were expressed in the terminology of the *Logos*, the works of Hermes and of the Kabbala. In this he can be compared with a later pioneer Andreas Libavius whose *Alchymia* of 1606 represents the cusp of the divide between the ages of symbolism and of science. This book has been described as the forerunner of modern textbooks of chemistry and is an attempt at a systematic introduction to the subject. But to the modern reader it is almost indistinguishable from other treatises on alchemy of the time.

Finally, we can highlight the works of Jakob Boehme, a German religious mystic much influenced by Paracelsus, in which he attempts to unify many of the aspects of Platonism. In his *De signatura rerum*, the Signature of Things, and *Mysterium magnum*, the Great Mystery, Boehme returns to the problem with which we began, the problem of evil. He describes God as the abyss, the nothing and the all, the primordial depths from which man struggles forth to find his manifestation and self-consciousness. Boehme suggests that the nature of God is basically evil, this unusual view resulting from the inherent and inevitable contradictions required of a Being who controls all things that have ever been and ever will be. According to him, God is the supreme alchemist, He combines male and female characteristics in the Gnostic tradition and can be approached only through the Kabbalistic symbols of the divine names. Boehme is viewed as the founder of the modern school of Theosophy which practices the mystical appreciation of God without affiliation to any religious denomination.

• Hermetism •

The ancient Egyptian sage Hermes Trismegistus is cited continuously throughout the age of symbolism by writers on mysticism and the natural sciences up to and including the emblematisers and even by Newton himself. Who was this influential Egyptian and how did his influence come down to the West?

The Greeks had always acknowledged their respect for and debt to Egyptian culture and there are many references in ancient times and in Arabic and Renaissance sources to the fact that Plato, Pythagoras and other Greek thinkers journeyed to Egypt and learned from Egyptian sages including Hermes.¹ It appears that the tradition of Plato's visit to

¹ See, for instance, Plutarch, *de Genio Socratis* 578, Cicero *De Finibus* V. 25, Diogenes Laertius III, 6, Brant *Das Narren Schyff* Poem 66 and Agrippa *Occult Magic*, I, 2. The *Timaeus* however only suggests that Solon, the Athenian legislator, went to Egypt and

Egypt was started by Speusippos his nephew and his successor as head of the Academy¹ but the question of any Egyptian influence over early Greek thought has long been controversial. It is clear however that by the Ptolemaic period, the Hellenic Egyptians had come into their own as leaders in the Western literary and philosophic community.

Alexandria in Egypt was founded by Alexander the Great in 331BC although he never lived to see the construction of his city completed. After Alexander's death in 323BC, his Empire was divided among his chief advisers and Ptolemy, a Macedonian prince, became King of Egypt with its new capital. Under the Ptolemaic dynasty and after, stimulated by the interaction between Greek and Egyptian cultures, Alexandria became the intellectual center of the Mediterranean world and a cultural focus for Egyptians, Romans, Greeks and Jews. As a result of this process of Hellenization, Greek names were grafted on to the ancient Egyptian Gods, a phenomenon called syncretism, which occurred also when Rome absorbed Greek culture and many of the Greek Gods were found to have their counterparts in the Roman pantheon.

If anything demonstrates the benefits of having a good library at hand, it is the output of the Alexandrines during the early years of the current era. Founded by the first king Ptolemy, the great library at Alexandria, containing at its peak some 530,000 rolls,² was the intellectual center of the city. It survived at least until 270 AD when the Romans sacked the palace of which the Library formed part and possibly longer in some form until the Arab invasions in the 7th century.³ Euclid had already written in Alexandria his *Elements* (of geometry) and his *Optics* in the 3rd Century BC and as well as Ptolemy, Plotinus and his disciples and Pseudo-Dionysius already referred to, there were the contributions of Philo the Jewish philosopher,⁴ St Clement the church father, Diophantus the mathematician; the anonymous author of the *Physiologus* (page 179); Ho-

passed on his learning to his successors. Arabic references can be found in Rosenthal 1975.

¹ See the Review of Mary Lefkowitz' *'Not out of Africa...'* by Martin Bernal in the *Bryn Mawr Classical Review* 96.04.05.

² Casson 36

³ Egypt was conquered by the forces of Islam in 642.

⁴ Philo (c30BC - c45 AD) attempted to combine Platonism with Jewish thought. He stressed the separation of the essence of the Jewish God and the 'energies' by which He is manifest thus paving the way for Kabbalism. Like many of his contemporaries he accepted the practice of astrology, number mysticism and divination by the interpretation of dreams. He wrote frequently of the Logos as the overall rational design behind the workings of the universe and even characterized the Logos as the firstborn son of God.

rapollo, who wrote the immensely influential though largely fictitious *Hieroglyphica*, an exposition of Egyptian hieroglyphics; the Christian Gnostics including Claudio Ptolemy, Basilides and Valentinus; and Zosimus who was one of the earliest figures in the history of alchemy. All these thinkers and writers and many others worked in Alexandria.

Perhaps the most influential of the Greek-Egyptian hybrid deities was Hermes-Thoth, subsequently entitled *Hermes Trismegistus*, Hermes 'Thrice Great'¹ or Mercury in the Roman pantheon. Thoth was the Egyptian moon god and as such was the regulator of time and the guide of individual destiny. Such was the importance of the moon in Egyptian religion, that Thoth was responsible also for the sacred texts and rites of the Egyptian priesthood and temples and by extension for magic and the occult. He was called 'the mysterious' or the 'unknown'.² Hermes was also the God of the moon and of magic in the Greek pantheon so his was a natural association with Thoth. Both were regarded as the messenger of the Gods and the interpreters of the divine will on earth. One of the myths about Hermes was that he had discovered the secrets of heaven, inscribed them in sacred books and these had been deposited on Earth to await sufficiently learned and worthy interpreters.³

Hermes-Thoth was supposedly the inventor of writing and in particular the hieroglyphic script which we shall see later was itself regarded as sacred and the embodiment of the *logos*. Thus from Hermes comes the word hermeneutics which is the living science of interpretation of texts which in turn goes back at least as far as Aristotle's treatise *Peri Hermeneias*, On Hermeneutics.⁴ Plato in the *Phaedrus*⁵ recounts the story how Thoth suggested to the Egyptian king, Thamus, that to teach his subjects to write would be welcome and beneficial since it would make memorization easier. But the king took the opposite view, rejecting Thoth's proposal on the grounds that it would weaken his subjects' memory and produce false wisdom, wisdom in appearance only, since it would be possible to read the authorities without receiving proper instruction on

¹ Many were the explanations for Hermes' title: in a 13th Century treatise it was because he was 'king, philosopher and prophet.' According to Newton, Hermes was thrice great because he held dominion over the three Kingdoms, Animal, Vegetable and Mineral. Possibly *Tris* is an example of the ancient use of three meaning many. A primitive number system would just consist of one, two and many. For further discussion, see Hopper 4.

² Fowden 23

³ Fowden 33 - the reference is to the Kore Kosmu. *Stobaeus Hermetica* xxiii. See page 142

⁴ Several authors wrote similar treatises including Apuleius, the author of the *Golden Ass*.

⁵ *Phaedrus* 274C

their meaning. One of the symbols of Thoth was the sacred eye, an amalgam of the eye of the moon and the eye of the sun and we shall see later that the eye was a widely used symbol in the Renaissance. Hermes-Thoth was also responsible for deciding the fate of souls at the entrance to Hell and is often depicted holding a pair of scales, weighing their fate in the balance.¹ This task was taken over in the Christian pantheon by St. Michael.

Hermes was associated with two groups of texts: the philosophical texts and what has been called the technical texts, those associated with alchemy, astrology and magic. The body of the philosophical texts, called the *Corpus Hermeticum*, first came to light in the Renaissance after they had been brought from Macedonia to Cosimo de Medici and translated into Latin by Marsiglio Ficino in 1463. The discovery and publication of these writings reinforced and gave authority to the revival of neoPlatonism. In view of the references in the *Corpus Hermeticum* to Platonism and the belief that Trismegistus, being the namesake of Thoth, was writing some time before 1000 BC, it was assumed that Plato must have obtained his inspiration from this ancient and authoritative

source. The *Corpus Hermeticum* also gave alchemy added authority in view of the biblical background to the writings. Early Christian fathers, particularly Lactantius writing about 300AD spoke of Hermes, in a sort of pagan typology, as prophesying the coming of Christ with his mention of the 'Son of God'. St. Augustine condemned Hermes for his approval of the idolatry of the Egyptian priests but did confirm his ancient authority which, according to him, was equal to that of Moses. Ficino, the translator of the *Corpus Hermeticum* and the leader of the neoPlatonist revival in Florence, was naturally enthusiastic about the influence of Hermes and



Figure 12 St. Michael busily weighing souls and killing the dragon. From a 13th century manuscript.

¹ The etymology of the word essay is from the Latin *exagere* to weigh. Montaigne consciously used the word as the title of his great opus, the *Essais*, to illustrate his theme which was to weigh the words and ideas of the human soul. Martin 19

saw him, with Zoroaster,¹ as the founder of the original ancient theology, the *prisca theologia*, which had been handed down from Hermes through Pythagoras and Plato.

At the beginning of the 17th Century, however, the scholar Casaubon conclusively proved that the Hermetic texts were written in the 2nd or 3rd Century AD and thus derived their teaching from Plato rather than the other way round. The texts combine Platonic and some later Greek, particularly Stoic ideas, with elements from Genesis and from Egyptian religious mysticism. They were probably written by Egyptian teachers in Alexandria for their pupils in the manner of the Platonic dialogues using Hermes as the teacher much as Plato had used the name of Socrates in his dialogues.

Many of the texts have presumably now been lost² but, of those that have survived, the importance for us is that they represent the work of a serious school of Platonism in Egypt which was regarded with great reverence in late classical times and subsequently, up to and throughout the Renaissance. The story goes that the texts survived because they supposedly became the scripture of a persecuted Syrian group, the leaders of which eventually fled to Constantinople taking the texts with them.

As in Gnosticism, the Hermetist philosophy emphasized the divine nature of man. In spite of the 'fall' of man, he had retained an element of his divinity although of this personal divinity, man is generally unaware and the Hermetists believed it their mission to overcome this ignorance. They saw '*gnosis*' or knowledge of God through faith or mystery as the ultimate goal although this goal could only be reached after knowledge of this world, mediated by reason, had already been achieved.³

The second group of writings attributed to Trismegistus, called technical Hermetism, dealt with alchemy, magic and astrology. The reputation of Hermes Trismegistus and his status as the God of the occult, added to the authority of these works but in this case it is almost impossible to establish the true origin of the literature. The earliest magical papyri attributed to Hermes date from the reign of the Emperor Augustus⁴ that is from about the time of Christ. The Roman name for Hermes was Mercury and the metal of this name was an essential and powerful element in the practice of alchemy. Clement of Alexandria in his *Stromata* mentions

¹ It is now believed that the Chaldean Oracles, supposedly the source of the sayings of Zoroaster, were also written in the 2nd Century AD.

² Part of the Corpus Hermeticum is also preserved in the Anthology of Stobaeus: see page 142.

³ Corpus Hermeticum ix quoted in Fowden 101

⁴ Fowden 9

forty-two books by Hermes which were ‘indispensable’¹ and it is easy to see that anyone who was writing on these subjects might be tempted to add the name of Hermes as author or source and thus guarantee the orthodoxy and appeal of his work. Indeed Iamblichus (d c330) in his *De Mysteriis* says: “our ancestors.... inscribed all their own writings with the name of Hermes.”



Figure 13 Hermes Trismegistus urges silence since divine understanding cannot be achieved through language alone. From Achille Bocchi’s *Symbolicarum Quaestionum* of 1555.

The tradition of Hermetism survived the Renaissance. Copernicus had acknowledged the authority of Trismegistus in the introduction to his masterwork *De Revolutionibus orbium celestium*. Ficino in his list of the archetypal philosophers who had been the inspiration of Plato and Platonism began with Hermes. During the 16th Century, the ideas of Hermes almost became accepted orthodoxy particularly in France. Thus, Pontus de Tyard, bishop of Chalons, wrote

¹ Thorndike, I, 289

From the holy Egyptian school... has descended to us the secret doctrine and salutary knowledge of the ternary number, so greatly revered that the essence of the world is entirely attributed to its disposition of number, weight and measure.....and that the divine substance, spreading its power amongst all nations, has left no people in the world without some odor of the divinity.¹

The Englishman Robert Fludd, who had been a student of John Dee, in his *Utrius Cosmi*, Of both Worlds, published in 1617 only three years after Casaubon, completely ignored the latter's exposé of Hermes. Similarly Athanasius Kircher in his great work on hieroglyphs, *Oedipus Aegyptiacus* pretended ignorance of Casaubon and dated Hermes at the time of Moses. As we shall see, Newton wrote commentaries on Hermes' works and Leibniz (1646-1716) in his invention of binary notation also acknowledged Hermes' influence. This calculus was in part derived from the I Ching which Leibniz believed had been invented by Hermes Trismegistus. In our own day, the word hermetic has settled into the language with the general meaning 'mysterious'.

Attempts have been made to show that both the philosophical and technical Hermetic works together form a homogenous and self-contained system of belief but this has proved a forced undertaking and an unnecessary one since alchemy, magic and hermetism coexist within the general framework of Platonism.

• Kabbala •

Yet another movement influencing both alchemists and Renaissance philosophers was the mystical doctrine of the Jewish Kabbala. The beginnings of Jewish mysticism were inspired by the Arabic philosophers of the 9th Century,² in the writings of Saadia ibn Joseph (882-942), Solomon ibn Gabirol (c1022-c1070) and Maimonides (1135-1204) but it was not until the Kabbalists,³ a sect founded in Spain in the 13th Century, which also embraced Platonism and the number theory of Pythagoras, that it took a definitive form. The Kabbalists again derived their knowledge of Hellenism from the Moors before both Jews and Arabs were finally driven out of Spain at the end of the 15th Century.⁴ The greatest text of

¹ de Tyard 1578 cited in Yates 1991 174

² Earlier Jewish mystics thrived in the East about the 5th Century AD in a group called Throne Mystics.

³ The word Kabbala comes from the Hebrew QBL meaning to receive.

⁴ See Ariel 1988

Kabbalism was the *Zohar* or the Book of Splendor now known to have been written by Moshe de Leon from 1280 to 1286 but since it was then believed to have been much more ancient, possibly deriving from Moses himself, it was acknowledged by the Renaissance humanists to have great authority.

Jewish mystics believed that a void had arisen between God and Man since the pastoral times of Abraham whose people had at that time seen God as a helpful and personal being. By the time of Moses, things had changed and God had become transcendent, majestic and impersonal. According to the Kabbalists, it was impossible to approach Him directly and, as the Old Testament has it,¹ mankind could only experience the earthly emanations of His 'glory', glory being to Kabbalists a technical word for the material manifestation of God's majesty. As Psalm 19 says, "the heavens declare the glory of God."

Kabbalists believed that as a result of this impenetrable distance between Man and God, it was impossible to reach Him other than through the symbols of His existence which He had left throughout the universe. The Jewish language and the letters and numbers of that language and especially of the Scriptures are the symbols of God which must be interpreted to reveal their meaning. The Kabbalists believed that it was impossible to reach God himself but the emanations of God, divided into 10 principal *sephirot* and symbolised by letters, could at least be attained. They had various Arts to examine the mysteries of letters including the *Notaricon* in which phrases were constructed from the letters of which the first letter of other words can be formed. A typical example is the name Hiram which can be written

H(omo)
I(esus)
R(edemptor)
A(ni)
M(arum)

The Man Jesus, the Redeemer, born of Mary.²

Another Kabbalistic Art, the *Gemantria*, was the use of numbers to represent words and yet another called *Thematura* was to make anagrams. The aim of all these was to investigate the nature of the divine. Indeed, the Kabbalists believed that the world itself had been created out of the divine language. There was the authority of Genesis for the fact that in

¹ Armstrong 63

² Bayley 52

the beginning “God spoke” to create the world and spoke in the Hebrew language. The Sephiroth were the ten names of God which together formed His great Name. In Hebrew, vowels did not exist until late in the first millennium and this heightened the authority of letters since the written language had something of a mysterious, puzzling nature which could be the subject of multiple interpretations.

The Kabbalists were not the first to investigate the nature and origins of language and its importance for metaphysical investigations. We shall see when we examine the Greek myths how the moment of the origin of language was in effect the beginning of society and culture since nothing which existed before that epochal event could have been passed on to future generations. The *Logos*, the word, was the defining element of human culture and identity and the Name, the descriptive noun, the first word, was the easiest and earliest concept to be intuited by man.¹ It should therefore not be surprising that a name was viewed as a sacred object by early cultures. Needless to say Plato had something to say on the matter; in his dialogue *Cratylus* he also explained how language was an expression of the common wisdom of all men and how the *logos* was revealed in this manifold expression of diverse human language. Plato was also careful to say however that the ultimate reality could only be achieved by contemplation.

The Christian Platonists developed the theory of the divinity of language, letters and names which they shared with the Kabbala. Augustine had promoted the idea of the Names of God as symbols of His essence and this was extended by Pseudo-Dionysius in his book *De divinis nominibus*, On the divine names. Hermes Trismegistus had also written of the significance of the Names of God in much the same terms as Pseudo-Dionysius. “God has no names or rather he has all names since he is at once One and All, so that one must either designate all things by his name, or give him the name of all things.”² The story is told of St. Francis of Assisi that he would pick up every piece of parchment he found upon which there was writing even if this was from a classical text. The saint’s explanation was “my son, the most glorious name of God is composed of these letters.”³

¹ See Cassirer 1976 132 for examples of how language handicapped children pass a critical threshold of understanding when they realize that every object has a name.

² *Asclepius* 30

³ Related by Thomas of Cleano and cited in Curtius 319

arte cabalistica, *On the Cabalistic Art*, (1517). He stated that Kabbala dealt only with good while, by contrast, magic was only for evil but he was fully in the Renaissance eclectic tradition of unifying Christian theology with Platonism and other derivative philosophies. He specifically states that the Kabbala was designed to teach the doctrines of Pythagoras.¹ Reuchlin's study influenced Cornelius Agrippa whose masterpiece *Natural Magic* appeared shortly after in 1533 and he summed up the relationship of Kabbala with Christianity.

For Scripture consists of single letters, visible signs, which stand in a certain relation with the angels, as celestial and spiritual emanations from God. By the pronunciation of the one, the others are affected; but with a true Kabbalist, who penetrates the whole connection of the earthly with the heavenly, these signs, rightly placed in connection with each, are a way of putting him into immediate union with the spirits, who through that are bound to satisfy his wishes.

¹ See the discussion in Laurens 2000 83