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FABIO VENZI (Grand Master Regular Grand Lodge of Italy)

Between Scientific Rationalism and Noetic Intelligence The perception of the Sacred in scientific

inquiry: A Holistic Vision.

"The intuitive mind is a sacred gift and the rational mind a faithful servant. We have created a society that honours the servant and has forgotten the gift" Albert Einstein

Freemasonry and Science: The Great Illuministic Mystification

When we inquire into the nature of the relationship between science and Freemasonry and the influence of one on the other, we reach the inevitable conclusion that Illuminism, along with the principals that inspired it, is a common ground for both. Furthermore, the fact that eminent personalities of the scientific world – an expression of Illuministic culture – have for centuries been members of Freemasonry, has helped create the myth of a

parallelism between Freemasonry and Illuminism. But such common factor had no actual influence of consequence on either side. Masonic ritual, with its symbolic-allegoric meanings, passed through the climate of Illuminism practically intact in both essence and conception. Thus, despite the fact that many scientists have also been Freemasons, I believe that there has never been an organic relationship nor an ideological influence or link between modern science and Freemasonry other than the fact that both are inspired by a spirit of search and knowledge.

The supposed ideological contiguousness between Freemasonry and Illuminism—and the modern science it gave rise to—is not something that should be taken for granted. Indeed, as I recently wrote¹, I believe that Freemasonry did not develop as an expression of Illuministic thought and philosophy. It sprang, rather, from Neo-Platonic thought and is therefore quite far from 18th century empiricism and rationalism, which are clearly incompatible with the transcendent and metaphysical beliefs of Freemasonry. Nonetheless, the question remains as to whether the fact that Freemasonry is extraneous to Illuminism and its methods of studying reality also means that it is extraneous to science in general. Perhaps there is a common ground on which the principles of traditional science, derived 18th century thought, and the philosophical principles from of Freemasonry, inspired by Neo-Platonism, can be integrated and harmonized in a new vision. A vision that transcends the contrast between reason and enlightenment and the dualism between spirit and matter.

As we will see, there is certainly an ideological link between Freemasonry and Alchemy, the so-called pre-science. After centuries of domination of Illuministic reasoning, this link can be re-connected by a New or Postmodern Science, which increasingly pushes against the contradictions of the old approach of experimental scientific inquiry, based on the specialization of knowledge and the use of strict rationality and logicaldeductive cognitive processes.

The title of this Conference includes a quotation from the ritual, the passing to the second degree, stating that the Freemason have to study the

¹ Fabio Venzi, *The Influence of Neoplatonic thought on Freemasonry*, Book Guild Publishing, Sussex, England, 2007.

Liberal Arts and Sciences. In the second degree ceremony, the ritual – still referring to science – states:

"you are now permitted to extend your researches into hidden mysteries of Nature and Science."²

The exhortation in the third degree, instructs the candidate that:

"still guiding your progress by the principles of moral truth, you were led in the Second Degree to contemplate the intellectual faculty and to trace it from development, through the paths of heavenly science, even to the throne of God Himself."³

At first sight, the two latter quotes would seem to be in contradiction with the former one, but that is not so. In fact, the *Science* to which the ritual refers is not the science in the modern sense of the word—a rational and empirical science, founded on the method of experimentation. This science, born of Illuministic thought, considers all esoteric phenomena and studies of the metaphysical to be ridiculous manifestations of the past. It considers Freemasonry to be, among these phenomena and an object of derision.

The science to which the ritual refers is what we would today call "metascience", named Alchemy, which was still flourishing when the ritual first came into being, albeit in a manner somewhat different from its origins. As we will see, eminent figures of the scientific revolution which was to come were somewhere inbetween Alchemy and the new science, inbetween the figure of the magician and that of the modern scientist. Alchemy was the borderline between a magical-metaphysical method of inquiry and scientific-rationalist-empirical methodology. If there is no compatibility between Freemasonry and the modern scientific methods based on experimentation, there are still points of contact between the methodologies of Alchemy and Freemasonry.

² Emulation Ritual, pag.137

³ Emulation Ritual, pag.175

Freemasonry and Alchemy

It is important to bear in mind that when Freemasonry developed in England at the end of the 17th century, the principles of modern science and the empirical-rationalist method had not yet spread through the society of the period. The previous magical-alchemic vision and the new scientific interpretation still coexisted and overlapped. We are convinced that Masonic ritual, when stating:

...the "hidden mysteries" of nature and science, knowledge that must reach as far as the "throne of God" and Nature as an object of contemplation and the source of knowledge.

refers more to an alchemic concept than to that of modern science.

Alchemy is a "form of knowledge" that tends toward the psychological and spiritual transformation of the individual through domination of the spiritual and creative energies which pervade nature and the human mind. The *Lapis Philosophorum*, or *Philosopher's Stone*, is a metaphor for the Initiate reaching knowledge and understanding of the hermetic tradition. Thus, like Freemasonry, Alchemy proposes a pathway of spiritual elevation, a system for the perfection of man. It consists of a practical part, requiring a deep-rooted knowledge of matter and its elements, and an initiatory path, metaphorically expressed in the myth of the transmutation of base metals to gold.

As we well know, Freemasonry's initiatory path uses allegories reliant on the tools used to build medieval cathedrals as well as the metaphor of King Solomon's Temple. Both Alchemy and Freemasonry teach how to transmute consciousness, accelerating its evolution, and both are based on principles of hermetic thought, with a metaphysical aim of the union of the individual and the Universal.

While Masonic symbolism involves giving form to a rough ashlar, Alchemy also considers that, from imperfect and impure material, a perfect substance can be achieved, capable of transferring its perfection to other substances, just as a Freemason can transmit his knowledge to others. Both the performance of Alchemy and the accomplishment of the Masonic ritual take place in the presence of the transcendent. The alchemical and Masonic pathways to knowledge are not the fruit of theoretic or experimental knowledge, but the result of a task, the *opus* where the spirit consciously returns to the matter transmuting it.

Before beginning his work, the Alchemist—like the Freemason—must be absolutely pure and spiritually elevated. This is because the revelation of the mysteries of Alchemy and Freemasonry descends from above and may only be perceived by those who are spiritually elevated.

The esoteric affinities of both Alchemy and Freemasonry, the similarity of their symbolism and the way to perfection that is proposed by both allow us to identify both of them as expressions of Tradition. Mircea Eliade explains this concept by the following enlightening words from his essay *The Forge and the Crucible: The Origins and Structures of Alchemy*:

"Being the Universe a hierophany and human life sacralised, work involved a liturgical value which still obscurely survives among rural population of present-day Europe. It is however above all our intention to underline the chance offered by archaic societies to man: the chance to become part of the Sacred by his own work as an homo faber, an author and manipulator of tools. Those primeval experiences were preserved and transferred through numerous generations thanks to the "secrets of the trade"; when global experience of the world was modified as a consequence of technic and cultural innovations following the establishment of urban civilization [i. e. following civilization itself, ethimologically speaking] and what we agreed to call History in the strong sense of this word, primeval experiences related to a sacralised universe were periodically revived through initiations and trade rituals".⁴

Thus considered, the aim of the "Mysteries" represented both by Masonic ritual and alchemic practices was mostly a transmutation of man who – through the experience of death and resurrection in the initiation process – changed his *status* from a profane into one of an initiate.

There are numerous analogies between the symbolism of Alchemy and Freemasonry. The contrast between "light" and "dark", the gradual passage from the darkness of night into the light of the sun, bearer of invigorating energy in alchemy and knowledge in Freemasonry, a sign of liberation from the impurities of the body and one's own personality. The metaphor of the "journey" is also one of the fundamental elements in both the alchemical and Masonic pathways. In alchemy it is seen in the search for the Philosopher's Stone and the journey of the soul through the planetary spheres. In Masonic rituals, the Wardens take a journey in search

⁴ Mircea Eliade, *Forgerons et Alchimistes*, Flammarion, Paris, 1977, pag.128

of the "hidden mysteries" after the murder of the architect Hiram Abif, and, in the context of Templar Freemasonry, it is found in the search for the Holy Grail.

However, it is the common allegory of the "ladder" which is most frequently encountered in Alchemy, Freemasonry, and Renaissance Neo-Platonism. In Alchemy, the ladder indicates the gradual conquest of philosophical, mystical and esoteric elevation and acts as a link between the various levels of the "real" and as a metaphor for the Great Work. This theme – which is of Gnostic and Neo-Platonic origin – corresponds to the rise of the soul through the planetary spheres, an initiatory journey aimed at purifying the divine hidden within man from all contact with matter.⁵ The ultimate end is to reunite with and contemplate the One, as Raimondo Lullo underlines in the treatise on the Fifth Essence. In this same way, Masonic ritual states that the end of man's pathway of knowledge is "the throne of God."

After centuries of derision, Alchemy is today considered a sort of "protochemistry" and a part of the history of science. Alchemy is, however, much more than that. In its laboratory work, its theoretical thought and its symbolism, Alchemy contains the same view of perfection as the Masonic "method" does. As opposed to modern science, which is not concerned by spiritual matters, Alchemy and Freemasonry inquire into both the material and spiritual worlds. They both use a symbolic language which expresses this merging of the spiritual and the material, an "esoteric" language that differs from philosophical and scientific language inasmuch as it communicates through images that are meant to raise consciousness intuitively rather than rationally.

Alchemy is the expression of that communion between mind and nature, subject and object, without which efficacious knowledge cannot be found. Here nature is not the only external reality perceived by our senses, or studied by the classic approach of mechanistic physics. Alchemy sees nature as the custodian of a divine spirit that animates and governs the elements, the structuring force of all reality, but invisible to the senses. It can, however, be rediscovered through "work", the *opus*.

⁵ Matilde Battistini, *Astrologia, magia, alchimia*, Electa, pag.368.

We find this same vision in the Masonic ritual where, in the third degree exhortation, the Master Mason - to whom the secrets of Nature and the principle of intellectual truth have been revealed - is invited to contemplate Nature:

"To your mind, thus modelled by virtue and science, Nature, however, presents one great and useful lesson more. She prepares you, by contemplation for the closing hour of existence; and when by means of that contemplation she has conducted you through the intricate windings of this mortal life, she finally instructs you how to die."⁶

It is clear that this is not the mechanical concept of Nature typical of modern science, but a vision that places the universal intelligent spirit, revealed to man by inspiration-intuition-enlightenment, within Nature.

It is interesting to note that Alchemy, like Freemasonry, proposes a distinction between the operative and the speculative and that there is a discussion as to whether one form descends directly from the other. Roger Bacon was the first scholar to note such a distinction, stating that Alchemy had two faces: the speculative aspect which involved inanimate objects and the generating of everything elemental, and the operative and practical aspect, turning base metal to precious metal.⁷

Still, the point was reached where the complete loss of the material dimension reduced the symbolic value of transmutation to an allegory of the process of moral education. Here, the analogy with Freemasonry "a peculiar system of morality veiled by allegories and illustrated by symbols" is complete. The theory of the spiritual or speculative character of perfection in Alchemy was developed by Herbert Silberer, a student of Sigmund Freud and a Freemason. Silberer identified the raw material of the *opus* with that of the conscience, giving a very interesting psychoanalytic interpretation.

It must be added that if several important authors in the field of esotericism, such as René Guénon, believe that the work of Alchemy is exclusively concerned with the inner part of the subject, for others (e.g. Fulcanelli, Eugéne Cansieliet and Mary Ann Atwood), quite contrarily, the transformation of matter remains fundamental to the alchemical process.

⁶ Emulation Ritual, pag.175.

⁷ Roger Bacon, *Opus tertium in Opera quaedam hactebus*, Unpublished , London, 1859, pag.40.

We can speculate as to who may have been the men who inspired the inclusion of principles of Alchemy in the Masonic ritual. They certainly were not empirical scientists who, with their mechanical vision of the world and their experimental methodology, could hardly have produced a ritual infused with esoteric symbols and allusions to Alchemy. They were scientists, halfway between the world of Alchemy and that of science. A few of them can be named: Michael Maier, Robert Fludd, Elias Ashmole and Isaac Newton.

Michael Maier, a Rosicrucian born in Germany in 1566, defined himself as a physician-philosopher. He was an academic and, for many years, a doctor to the Emperor Rudolf II. He believed that the Alchemists, through their symbolic images, wanted to "reach the spirit through the senses", using the special capability of man to grasp the "essential" things at an "intuitive" level, leaving the ability for dialectics aside. His work "*Atalanta Fugiens*", published in 1618, contains a magnificent collection of emblems and symbols from Alchemy. The symbols are seen as vehicles of knowledge, less through a logical-analytical process typical of modern science, than through a process of analogy and synthesis, intuition and imagination, where meaning is not objective and unchangeable but depends instead on the interpretation of the subject.

The Tracing Board in the Masonic ritual is used with the same intent. It contains a symbolic synthesis of the degree in which the Freemason works. *Atalanta Fugiens* also contained an esoteric text on the combination of Alchemy, rationality and religions that provided an important ethical model for the Royal Society.

Robert Fludd, physician and scientist, shared the theories of Maier, his friend and colleague. Fludd's monumental work in several volumes is entitled Utriusque Cosmi where he – a follower of Paracelsus – studied man and his relations with the macrocosm. The work argues at length with the practice of medicine of its time which gave health a magical interpretation assuming illness to be caused by devils and cured by angels. Fludd represented both the figure of the esoteric scientist, capable of scientific problems resolvable dealing with with systematic experimentation, and that of the alchemist, with his magic-religious vision of the world.

The figure of Elias Ashmole, alchemist, writer and Freemason, is of fundamental importance. He worked to make the proper distinction

between "serious" alchemy, whose representatives were often academics who became involved not for profit, but for real philosophical interest, and the alchemy of charlatans. In his *Theatrum chemicum britannicum* he wrote:

"It is not less absurd and strange to see that some men ... cannot help but count authentic magicians in with conjurors, necromancers and witches..., who with arrogance violate the principles of magic, in the manner of pigs which burst into a lovely garden...and, after making a pact with the devil, take advantage of his help in their works, to counterfeit and corrupt the admirable knowledge of magicians, with whom there is a difference as large as that as between angels and demons"⁸

But the real watershed between the two visions came undoubtedly with Isaac Newton, who, along with the scientist Robert Boyle, (both members of the Royal Society), fell under the spell of alchemy, even as Illuminism was about to enter the stage.

Newton studied Alchemy not only theoretically but also operationally to understand the "ways of divine action in the world." He searched for an original truth to include in the theories of the new physics in the attempt to avoid – as the Neo-Platonists of Cambridge also wished to avoid – the risk of an atheistic degradation in mechanism. In his numerous works dedicated to Alchemy, he wrote more on that concern than on problems of physics, convinced that he was bringing to light knowledge that the ancient Egyptians possessed. As in a typically hermetic vision, this knowledge was revealed by God Himself in ancient times and now rediscovered.

John Maynard Keynes held a conference in 1942 at the Royal Society after studying Newton's secret papers for years. It was a historic event. Keynes presented a remarkably different image of Newton from that which scientific historians had offered for three centuries. According to Keynes:

"Newton was not the first of the age of reason. He was the last of the magicians, the last of the Babylonians and Sumerians, the last great mind which looked out on the visible and intellectual world with the same eyes as those who began to build our intellectual inheritance rather less than 10,000 years ago."⁹

⁸ Elias Ashmole, *Theatrum chemicum britannicum*, London, 1652, pag.443.

⁹ J.M.Keines, *Newton the Man*, in Royal Society, Newton Tercentenary Celebration, Cambridge University press, Cambridge, 1947, pagg.27-34.

Thus one of humanity's greatest scientists walked the line between rational thought and creative intuition, between logic and imagination. And in doing so, he became – in the vision offered here – a forerunner of the New Science.

The scientists Elia Ashmole, Henry More, Robert Boyle and Isaac Newton all belonged to the Royal Society and continued practicing Alchemy, alongside the modern scientific methods of experimentation. The inspiration for Masonic ritual and thought comes from these men and their vision.

Unfortunately, however, the theory that Masonic thought had its origins in Illuminism is hard to uproot and is often based on convictions that are given as certainties but are actually completely unfounded. One such conviction is the following: because some Royal Society members were undoubtedly part of the group of Illuminist thinkers it must follow that the Royal Society was the best possible laboratory for that particular philosophy. However, it is important to consider that the Royal Society also included two of the most important exponents of Cambridge Neo-Platonism, Ralph Cudworth and Henry More, in addition to the previously mentioned scholars. It is therefore clear that pure empiricism was not the only profession within the Royal Society.

It was Henry More himself who emphasized the distinction between *experimental* and *mechanical* philosophy, believing that confusing the two was an act of ignorance. He stated that experimental philosophy, also professed in the Royal Society, led to results that were useful not only for everyday life, but also in the discovery of more sublime and truly metaphysical philosophies. Cudworth and More, concerned by the possible materialistic and atheistic consequences of science, were opposed to the reigning "mechanism" philosophy. A philosophy that contrasted with the spirit of nature, an immaterial substance that

"pervades the entire material universe, exercising a creative power, a vital principle responsible for the movement and cohesion of matter."

If we consider how distant modern science is from the philosophy of nature of the Renaissance, we cannot deny that the creative concept formulated by Ralph Cudworth in the second half of the 17th century is still the expression of a philosophy of nature based on pre-modern theologicalmetaphysical suppositions, in contrast with the mechanical rationalism of Cartesian physics and Hobbesian materialism. We are speaking here of a "Philosophy of creative nature" with its organistic and vitalistic connotations and its subordination to a spiritualistic theology connected to the interpretation of nature drawn up by Renaissance thinkers, particularly by the religiously inspired philosophies such as Neo-Platonism.

When, therefore, the Masonic ritual of the second degree ceremony stetes:

"You are now permitted to extend your researches into hidden mysteries of Nature and Science,"

it does not refer to the method of experimentation of modern science but to the alchemist's method of "mystical chemistry" which allows us to understand the unity of the material principle of the world. That material principle has within it the vital spirit which operates as divine emanation. It is not the material substances that perform wonders in Alchemy, but the alchemist's ability to manipulate nature in its most intimate essence using those substances. In other words, man – by studying the material – is able to grasp and understand the spirit.

As we have seen, the exhortation of the third degree affirms that the development of the intellectual faculty in the second degree takes place "through the paths of heavenly science even to the throne of God Himself." Consequently, this science which studies matter has, as its objective, the discovery of the God who inhabits matter and structures it into geometric perfection. In the process of discovery, matter and spirit are seen as complementary and indissoluble.

The holistic vision of knowledge that has always inspired alchemists and Freemasons is based on the need to surmount any kind of contrast or dichotomy. This dualism is symbolized in the Masonic lodge by the black and white flooring and in alchemy by the formula "solve et coagula" to find the Philosopher's Stone, where the division of the elements must be followed by their harmonic union.

This feeling of comprehensive understanding seems to be at the base of

that which could be defined as a new Post-modern science. After pushing against the limitations of modern science and its fragmentary, analytical knowledge, Post-modern science is attempting to emerge on a new foundation, which, as we shall see, is unexpectedly close to that of Alchemy and esoteric tradition.

Freemasonry and Modern Science

The Modern scientific paradigm, the offspring of Illuminism, uses instrumental-empirical methods for intellectual speculation where everything around us becomes a simple projection of the human intellect and not a process in and of itself. The outside world becomes a field where all the inventions of reason are realised, thus losing its natural connotation and its role as a vehicle of knowledge bestowed on man for the harmonic and empathic understanding of life.

In contrast to Illuminism philosophy, Neo-Platonism – and particularly Cambridge Neoplatonists – neither desires nor attempts to dominate nature, but tries to understand it from within. As Cassirer has pointed out, Neo-Platonic thought does not divide nature into individual elements nor does it set forms to be studied separately. Instead of this analytical method, there is a search and a need for universal synthesis. He adds that their philosophy of nature returns to the dynamic Pantheism of the Renaissance. It proposes a creative rather than a mechanic observation of Nature.¹⁰

Our ritual affirms that the occult mysteries of Nature and Science are taught in the second degree. Nature, as the Exhortation of the Third Degree states:"...*prepares you, by contemplation, for the closing hour of existence*". It therefore teaches us to accept the natural cycle of life and death and the re-unification with God. Time, in the Masonic vision, is not linear but rather cyclical, according to the theory of the eternal return and not according to a scheme of indefinite progress, as the Illuminists proposed.

Further on, the ritual exhorts us to "Continue to listen to the voice of Nature, which bears witness that even in this perishable frame resides a

¹⁰ Ernst Cassirer, *Die Platoniche Renaissance in England und die Schule von Cambridge*, Studien der Bibliothek Warburg, XXIV Leipzig-Berlin, Teubner, 1932, pag.54.

vital and immortal principle"¹¹. Therefore, the relationship with Nature is conceived as an "intimate" relationship, one with the "elementary" where the subject interacts with the object, and this is not only a manifestation of a cause and effect relationship, but also an immanent expression of the Divine. Through the contemplation of Nature and the Divine revealed in Nature, after having acquired Virtue (as counselled in the first degree) and intellectual knowledge through the study of the liberal arts (in the second degree), man comes closer to the mystery.

The Intellect is conceived as a preliminary instrument of knowledge and therefore lower than real knowledge, which can be achieved only by inspiration, through contemplation of Nature and by intuition-illumination. In addition, the "hidden mysteries," to which the ritual refers, reveal the Mason's belief in something that exists beyond the field of the senses—the object of rational scientific inquiry. We can unquestionably affirm, along with Elémire Zolla, that whoever enters an initiatory society already grasps the idea that all cannot be explained and understood through mere logic; he knows that there is a mystery and believes it can be understood with intuitive knowledge, which – in its greatest form of expression – is enlightenment.

The *Science* of which the ritual speaks is therefore a science related to noetic, intuitive intelligence. That is to say, one that also allows man to understand the dimension of the sacred through Nature and therefore reach the spirit through matter. This is the Spinozan vision of the existence of a sole essence that permeate everything, the Divine Spirit which is immanent in Nature and constitutes its geometric-structural order. It can be only understood through intuitive knowledge, not through simple reasoning, which is understood as the ability to grasp the connection between objects and ideas.

There is an increasingly compelling need today to transcend rationalism and the Illuministic interpretation of science generated by the Cartesian vision in which nature is a lifeless, inert machine which can be explained apart from man, having no divine or spiritual essence, no vitality nor intrinsic harmony. This removal of the Divine from the world, this distinction between spirit and matter was born of the modern cult of

¹¹ Emulation Ritual, pag.183.

science, based on the conviction that technical progress will always lead to the interior evolution of man. Max Weber demonstrates how scientific rationalization produced an irreversible "disenchantment" (Entzauberung), secularizing the old mythological-religious view of the world and replacing it with an "objective" view.

Masonic thought goes even beyond Spinoza's vision of a God immanent in nature, and recognizes the existence of the Transcendent. In other words, the Freemason acknowledges a divine principle that pervades nature but reaches beyond it and beyond the terrestrial dimension, beyond man and human concerns. It is the beginning and end of every search. Contemplation of nature, reflection of the Divine, of which the second degree speaks, is none other than a means to reach the Truth that resides *elsewhere*—in the transcendent dimension reached only by learning to die to terrestrial concerns and those related to one's own humanity, as taught in the third degree.

The pathway of the Freemason begins in the first degree with the practice of Virtue, which limits the sphere of action of every man and tempers his soul. It continues in the second degree with the study of the liberal arts and sciences, forging the intellect and exploring the limits of the mind which can lead to doubt and scepticism. When the human *opus* is completed, in the third degree, we have the regenerating nothingness of contemplation before a living, speaking Nature, permeated with the divine spirit, that teaching man to die to himself, joins him to the divine and makes him God.

The ancients did no doubt the superiority of contemplation over every other human faculty. As Aristotle affirms in the pages of Nicomachean Ethics:

"If true happiness is an activity in accordance with virtue, it must be in accordance with the highest virtue, which is philosophical contemplation."

Plato in his Thymeo noted how, alongside the contemplation of external things, experimental science may coexist, as long as it is used judiciously and moderately.

The present cult of science, however, with its aversion to contemplation in favour of action, of active involvement in social dynamics and love for the

evaluation and measurement of phenomena, was born in the Renaissance, culminated in the 17th century and is in today's forefront.

More and Cudworth, in the line of Neo-Platonic thought, believed that the macrocosm reflected the microcosm. They therefore drew up a cosmological theory that takes into account the primacy of man over the world because of his freedom. In Cudworth's "The True Intellectual System of the Universe," we find the foundational intuition of the "freedom of man" which Giovanni Pico della Mirandola first set forth in his "De Hominis Dignitate." Man is not the victim of a remote, extraneous mechanism. He is rather the maker of his own life and responsible for it. The world thus becomes a mirror of man, which is to say, a reflection of a higher spiritual reality and is not, as Hobbes stated, a blind mechanism. I believe that in the concept of the relationship between macrocosm and microcosm of the philosophers of Cambridge, there is yet another bond with Alchemy and Freemasonry.

Freemasonry and the New Science

If we want to define, in modern terms, the Neoplatonic and Spinozan vision of the man-nature relationship, such as the search for a unified knowledge which permeates Masonic thought, we could speak of a "holistic vision", that of a reality in which man and nature are seen as part of the same harmonic, living and sentient organism, an expression of the spirit, rather than separate and independent parts.

There is increasing criticism of traditional science, of Cartesian and Illuministic derivation, as its limits become apparent. The undeniable merit of Illuminism was to free the researcher from the chains of theology and religious dogma, but over the centuries it has degraded into a dry materialism, insufficient both in methodology and results to explain many aspects of our existence. Today there is a new frontier of science, represented by scientists often outside the ortodox scientific community, (the same community which condemned Galileo and Copernicus) which proposes a new knowledge, no longer fragmentary, but united. This knowledge is often confirmed by scientific discoveries that challenge the certainties of orthodox scholars. In the field of cognitive psychology, for example, there are many experiments which seem to confirm that which corresponds to an ancient shared wisdom: the rational knowledge is a by-product of intuition which is a form of innate knowledge. The Tracing Boards in Freemasonry with their symbolic images are intended to convey knowledge through intuition and imagination.

In the field of medicine, there is no longer any doubt regarding the interdependence of the mind and the body and the influence of the former in the development of illness, even serious illnesses such as tumours. The human organism is increasingly seen as an inseparable mind-bodyconsciousness unit, surmounting once and for all the Cartesian division in res cogitans and rex extensa. The hermetic principle of the "as above so below" reproduced in Masonic Lodges by two globes representing the heavens and the earth is today represented in the so-called principle of isomorphism which has at its base a similarity between microcosm and macrocosm. Man is seen as holographic unit containing the matrix of the total information of the system of which he is a part and with which there is a continuous exchange of information and energy. The same relationship seems to exist between organs, cells, and atoms. Every part of creation seems to contain information of the whole. This remind us of that platonic knowledge, that is an innate knowledge, needing only to be brought to light.

This revolution may be said to have begun with Albert Einstein who confirmed that

"the cosmic religious sentiment is the strongest and noblest motivation of scientific research."

He was the first to research all his life, without success, a theory of the *whole*, that is to say, a theory that unifies all laws of nature.

The indivisibility of science and conscience is accepted even by contemporary scientists. In fact, Nobel Prize winner, Eugene Wigner, stated that

"consciousness is the primary reality...In the future physics will explain not only the phenomena observed, but also the process of observation."

Another Nobel winner, Francis Crick, who discovered DNA, affirmed that

"consciousness is the legitimate field of science."

In the same field of investigation, the matter observed and the consciousness of the scientist who observes reality are joined and influence each other. Thus the subject is deeply connected to the object.

In all the spiritual traditions, including Freemasonry, unity resides in the consciousness that constitutes the essence of the Divine. The question that scientists ask more and more often, (and which only appears to be a philosophical question), is whether or not the Universe would continue to exist if no one was there to observe it. The answer seems to be 'no'. This is because, with the discovery of quantum physics and the laboratory results of the early 1980s, it became apparent that in order to exist, the Universe required a being to observe it. Without an observer, the Universe would exist only in power, therefore it seems that consciousness creates matter. The act of observation creates a connection with the object being observed and modifies the object. This importance of the subjectivity of the observer was anticipated by the alchemists who saw in natural phenomena a continual exchange between the internal and the external.

Such a discovery necessarily brings a change in the scientific paradigm: from the materialistic in which all is matter, thus elemental particles which interact according to a cause and effect relationship in which man is completely extraneous, to a paradigm which can be called idealistic and in which awareness is the foundation of existence and matter responds to spirit.

In alchemy, the feminine mercurial principle explains the proteomorphism of natural phenomenon, their fluid mutations. Today, science affirms, on the basis of Niels Bohr's "Principle of Complementarity," that the elementary particles, the quantum, can be seen both as particles and waves according to the way the phenomenon is observed. The Universe might not be that Newtonian, materialistic one made of determined objects, visible and in motion along a defined trajectory, substantially static, but a dynamic universe made of "waves of possibility" or mere potentiality which becomes actuality and therefore material according to the awareness of the observer. In this vision—now of great interest to science—man is at the centre and is the sense of the Universe, just as Pico della Mirandola theorized.

Another important experiment which created the "Principle of Nonlocality" of Nobel prize winner Wolfgang Pauli, revealed that the elemental particles inside the atom are in constant contact with each other, each in its own position in relation to the position of the others and of the universe—all without any exchange of signals. This demonstrates, according to scientists, that every particle is connected to the entire system and, therefore, each part of the universe is interconnected by electromagnetic fields as if they were linked by a single intelligent energy. For the first time, science had to theorize the existence of a dimension that transcends the one we live. Science therefore has had to resort to the Transcendent to explain phenomena that it observes because the transcendent dimension, up to now excluded from scientific research, seems to influence the behaviour of matter.

The connection between the heavens and the earth, between immanent and transcendent, seen as a continuum, is one of the fundamental themes of Masonic thought. The symbol of the triangle represents the totality of the manifestation: it is heaven and earth, essence and substance. The starry vault is the ceiling of the Masonic Lodge and the spiritual ladder extends from earth to the heavens joining them. As mentioned above, it is necessary to transcend the materialistic separatism of traditional science. Science today, in its attempt to understand the world, can no longer exclude from consideration human consciousness and the transcendent dimension of an intelligent energy, or mind of God, from which the world, which can be recognized by the senses, was born.

This new science takes up an ancient tradition of knowledge that existed in Greek philosophy, in Neo-Platonism, in mystic-religious tradition, and in initiatic societies. The all-seeing eye, inside the illuminated delta in the form of a triangle is a frontal eye, neither right nor left. It is the third eye which is that of the heart, and of spontaneous, innate knowledge: the divine consciousness. This frontal eye, sees all and discerns the unity in multiplicity. This is the eye of the Great Architect of the Universe, but as quantum physics tells us, this could well represent the eye of the aware observer who, in the act of observation, consciously creates the world. If the observer is a creator of worlds who in the observation of his creation continuously recreates it, then he is God. The Freemason, at the end of his initiatic path, learns to die, learning to rise above his own humanity, and, finally elevating himself to contemplate the principles and divine force, he sees himself reflected in it.

In conclusion, there is little in common between Freemasonry and Illuminism, and Freemasonry itself had no direct influence on science and scientific progress, despite the fact that many scientists have also been Freemasons. The methods, the presuppositions and the ends of research are different. The only common ground between science and Freemasonry is that of the research itself. The Freemason does not look externally for a demonstrable and universal truth, but pursues knowledge of himself, through a unique and personal path towards that truth that resides in divine principle. However, this represents no conflict. There is a possible integration in the vision of a "new science" which places in its centre not the reign of matter, but that of consciousness.

The dichotomy and contrast between spirit and material, between subject and object, between Self and All, between Man and God, that has characterised modern science must be transcended. The great contrast represents an elementary phase of learning in which the differences are necessary to define and understand the world perceived with the senses. But as we have seen, research cannot be complete in the sphere of the material dimension and with only strict rationalism as a tool, as if the spirit, creativity, imagination and intuition were not equally present in human experience.

The fall from Eden was determined by the knowledge of good and evil, that is to say, the distinction, the separation, the duality in the uniting consciousness of the spirit.

The "*coincidentia oppositorum*" is a Divine requisite and perhaps, buried in the ancient knowledge of initiatic societies, we can find that truth which new science can rediscover as an attribute and which is innate and primary in the human soul.