FREE TRANSLATION FROM ITALIAN AND UPDATED SYNTHESIS FROM "THE TIME AND THE ALL" BY GIORGIO FABRETTI, Rome 2007, cured by the editors of the Foundation "Fondo Fabretti", Rome, Italy (fondazioneraffaelefabretti@hotmail.com) for the 40th anniversary of its foundation (1972-2012). © 2012, all the rights reserved worldwide to the author Giorgio Fabretti (Id. no.: FBRGRG51E18H501B)

CHRONO LOGIC

"Chrono Logic" is a new world for a new concept of the 3rd millennium.

It seems an old world, and indeed it comes from ancient classical greek and roman philosophy.

In contemporary English, it does not exist properly. It is sometimes used as the more correct adjective "chronological", but "chrono logic" is a dual noun, composed of 'chrono' ('time' in Greek) and 'logic' ('logic', 'concept' in Greek). "Chrono Logic" is a type of 'temporal logic', a logic of time, a logic made of time, that could be also written 'chrono-logic' or 'Chronologic', or, better, 'Chrono Logic'.

In such a clear etymological meaning, it seems a familiar commonsensical concept, but it has indeed never used before Prof. Giorgio Fabretti, an Italian philosopher and anthropologist, firstly used it in a theoretical way.

In the American Heritage Dictionary, 'chronologic' is a second option adjective for the first one, namely 'chronological', whose meaning is simply quoted as: "1. Arranged in order of time of occurrence. 2. Relating to or in accordance with chronology".

It is compatible with the meaning of our noun if we make the adjective 'abstract', 'theoretical', 'conceptual', 'matter of logic principle', or just place the article 'the' before the word, and write capital the initial letter 'c'.

"The Chronologic of Fabretti' sounds immediately as theoretical and philosophical as it is, but it could be misunderstood with 'The Cronology of Fabretti', a sort of a biographical list of events, a sort of Curriculum Vitae. So, as a title of a book it would be better written as "The Chrono Logic of Fabretti", that is the customary academic american-anglo-saxon way of giving a theoretical conceptual dimension to a currently used word.

What is currently 'logic in time, 'chronologic' or 'arranged in order of occurrence', becomes an academic subject of study: "The Chrono Logic", that automatically goes in the category of the studies on general, scientific, linguistic or philosophical logics. And that seems more correct. After all these introductory premises, we have not yet given a proper original definition of "Chrono Logic" and what its neologism 'chronologic' means.

The Chrono Logic is the operational attractive abstract logic force that shapes the time conceived as an oriented dimensional field.

To help imagine such a concept, let us imagine a non-paved country muddy street lined with the footprints of animals, people and charts that have stepped into the muddy clay in different times.

We can read in the dried materialized footprints the rhythmic cycles of walking people or wheeling charts. Investigative Police could even find relevant evidence for a Court, in analyzing the dried footprints, just like technological videocamera record the robbers of the night before at the nearby Seven Eleven market shop.

A visionary philosopher of science, Giorgio Fabretti, even conceived the whole material universe as an immense footprint left by Logic in the Memory of Time, that is in the moldable clay of Time, whose Memory consists in its capacity of drying up and keeping witness of what happened.

But why Time would need to materialize in dried footprints?

The answer is "Logic".

In fact, Logic is a "Concept that wants to become Reality". It is a biblical meaning, much more ancient than Greek classical philosophy. Having the creational definition of implementing a design, Logic tends at least to confirm itself by becoming dynamic, and so generating its time dimension.

In the Greek Pagan Olimpus, leading gods had Chronos as a specialized god to serve and implement their divine designs on a mundane scale.

The most advanced experimental physicists, who invented the atomic bomb and the computerized network to defend themselves from its destruction, have not developed a conception of the universe radically different from Biblical or from Greek ancestors.

In contemporary natural sciences, the material reality is still a footprint of Logos on the Memory of Time.

Now that you have heard this concept, it might seem as obvious as the password of your Credit Card. But ask a thief to guess it! How long would him take to guess? You might be waiting as long as your dog needs to typewrite the Divine Comedy on your computer.

It maybe took centuries before a philosopher and a scientist, Giorgio Fabretti, could climb on the shoulder of many scientists, and see the 'ethical theory', theoretically leading to such a password definition of Logic and Time: where Time (Operational Chrono) serves the material purposes (Memory) of an excited logical field (Logic) oriented (Ethics) toward (Dynamic Time) a pristine equilibrium (Design).

It is an elaborated cognitive historical anthropological equivalent, of the 'restored symmetry of the Big Bang' in theoretical physics.

At the same time it is an elaboration of a computational vision of the material universe, as a classroom board working as a flash memory for the teacher to develop algebraic equations for his students till the final result.

After the lesson ends, we had the creative mind of the teacher marking with chalk the blackboard and leaving a material storyboard of the cognitive stages of the equation - a sort of logic world map - that with intrinsical logic energy would lead to the final result, whose design finally implements the pristine creative idea of the teacher, who feels calm, quiet, having been his duty accomplished.

These are very simple metaphors of how Reality's clockwork can be represented in the 3rd millennium.

At the same time those metaphors help a wide non-specialized audience to understand the Chrono Logic' concepts.

The major achievement is the link between Logic and Time, before physical concepts like Energy, Matter, Mass, Space are involved.

Such a privileged position of Logic and Time has consolidated after the limits of the theoretical physics occurred in the 20th century. As an instance: Einstein 'spacetime' theory ended on a dead alley, and could not realistically explain the dimensions and the timing of the universe, letting the door open to all kind of literary physics by well seasoned academics like Stephen Hawking, who became a best-selling story teller, having sold for over 30 years millions of copies of different versions of the Tale of the Universe to housekeepers shopping in the malls of the world.

For sure Hawking should receive an Honorary Degree in Marketing, having sold all kind of hypothetical self-made philosophy, with an elementary knowledge of philosophy, but using the once prestigious brand of his Oxford scientific 'brand', that once had belonged to Isaac Newton, another British genius well versed in marketing himself.

Now that the British Empire has sold his rights to the United States, and it is more on Social Welfare, while both them are on Budget Cliffs, and global technology goes East, old philosophi-

cal ideas go back to where they came from, the Classic Hebrew Greek Roman philosophy of Aristotle, refreshed in the purely Italian still wordly Renaissance.

And the Chrono Logic of Prof. Giorgio Fabretti is an updated philosophy, sprung from a pure genuine cultured renaissance grown mind, maybe more coherent to his philosophical ends, than the fairy scientistic tales of genial Hawking and his dozens minor 'dilettante philosophers' imitators.

If a Sistine Chapel portrait of the universe has no better technique than painting, than it is better to call a complex artist like Michelangelo, while humankind waits for a Galileo Galilei to give a more coherent portrait.

If a new copernican world map was not yet ready, a Christopher Columbus was welcome to tell the 'tale of the western way to the Indies', as long as he could get financed by the Spanish Queen the 'discovery' of the Americas.

History has not changed much since 1500. It is just a past time of 500 years, in a world where many people like Prof. Fabretti live in an eight hundred years old intact apartment in Viterbo, or wakes up in Rome facing a two thousand years old stadium called Colosseum. Those days the would be British and Americans were coming as pilgrims on the Francigena Way from Canterbury to Rome, to learn what philosophy and empirical science could mean.

The nickname 'Coliseum' was first attributed to the Flavian Amphitheater by an erudite English monk of the 8th century, called 'Venerable Bede', who also stated that "world will last until Coliseum will stand". Indeed he had to come to Rome to get a 'worldvision', because Rome was and is the place "where Time happens", and Colosseum still symbolizes today, to millions of tourists, 'The Temple of All Times'.

Not by chance Prof. Fabretti, used, when he was a child, to play 'hide-and-seek' and football inside the Colosseum, wrote an essay entitled "The Chronosseum", to add his 'chronologic' nickname to that of the English monk of the seventh century.

"Time is where space happens. And it is time to shape space, in the history of the universe, whose movie in the 'present' is just a still frame": it is how Fabretti puts it in his 'Chrono Logic vision'.

Some depressed rudimentary physicist tried to say that Time does not exist, being reducible to Space. They do not honor the English monk Bede, who more wisely got a Time vision of the World.

In facts the only realistic logic vision is that Space can be reducible to Time of Logic, that is to the shaping forces of operational sequences.

Here is where Time inherit the logic energy, giving rhythm and cycles to its bits and numbers in stringent sequences that make the correspondence between algebraic algorithms and the physical happening of reality.

The reality flow in time, can be conceived as staged computations, recorded on the memory function of the matter, so to generate - on the pre-material subatomic particles - stochastic fractal procedures. These finally appear as visible waves and then material particles, still obeying the mathematical laws governing the pre-material pure time bits of logic reality.

If logic time is conceived as informational bits, points of a design, numbers or symbols, "we can understand what stands under" the matter and its space.

Logic can proceed logically and become real and material reality, only by converting itself into fragments having the stringent sequential properties of time: that is how mathematic works, and that is how universe and reality works. And that is why mathematic has an extraordinary efficiency in science and technology.

Reality is a clockwork led by time bits or numbers, where the matter is the screen of the watch and the material events are only like lancets marking the passing time on the screen.

The reality of time can only be conceived abstractly, as a matter of logic, a sixth mental sense - a rational, only secondarily sensorial, sense - and that is what intrinsically ties time to the logic dimension of mind and of reality.

Reality is more realistically conceived as logical and abstract, mathematical and temporal, rather than material and spacial: and this is the basic 'neocopernican' Fabretti's insight, as new and cognitively powerful as the Egg of Columbus.

A mathematical universe is much more understandable than an expanding trillions of galaxies in a flash of mere 14 billions years. Constants in physics are crowding theory like in an exotic zoo of Alice Wonderland's fantasies. Than is better to consult a try senior seasoned renaissance multidisciplinary transversal erudite like Giorgio Fabretti, than to listen the Seven Eleven fantasies of Hawking's Fanta or Sprite.

The mystery of Time has finally better been seen, from the panoramic bird eye of someone sitting on the top of Colosseum or of Saint Peter Cathedral in Rome, and looking at the wonders of sciences.

Time is a realistic dimension of a realistic Logic. It better depicts the fresco of reality than Space and Physical Matter, that will remain as a secondary cognitive simplified tool, as we still use Newton and Darwin after Einstein and DNA. The anthropological cognitive dilemma is that our mind is genetically selected to survive on the perception of physical fruits.

It is only in the 3rd millennium that we are helped by computers to imagine time layers of reality through virtual simulations of evolving times.

Simulations work through patterns in physics, biology, medicine, climate, stock markets, etc. Why not in philosophy?

If old philosophy is dead together with the mechanic vision of a material world, a new one is born for the timely vision of a logical world. It is still philosophy by philosophers: a daring enterprise to challenge mind and open new ways to the scientific cognition. It cannot be reduced to a dilettante residual byproduct of aging physicists on rest and recreation.

It is understandable that the technological advancement has left behind the old speculative nominal philosophy, namely the childish semi-literate or semi-cultured epigones of Illuminism, Idealism, Phenomenology, usually little more than ideological journalists. Still the conceptual advancement implicit in new sciences like genetics requires an interdisciplinary scientific framework that only an updated philosophy can elaborate.

New criteria for new interfaces are urgently needed in order to guide the production of all kinds of new vocabularies among cultures and technical languages.

The computer revolution began with the simple translation of some human concepts in a mechanical language by Boole in the mid of 19th century. Over 150 years ago. Today we need mathematicians to produce logical patterns about time as we naturally have them about space.

We would need a new Descartes, who translated geometry and spacetime into algebra on the Cartesian Table in the 17th century, that hints to a framework to translate spacetime into timespace or vice versa.

Algorithms in computers already translate reality through algebras into virtual reality and vice versa. New philosophical views are needed to bridge theoretically from logic time of stochastic algebras to material space of experimental physics.

Mathematics have already entered the experimental laboratories. A new step is needed to realistically unlock them from their physical dead end, and to put them back on the track of the experimental logic. Only a wide-open philosophy can open the way and encourage a new Columbus' theoretical expedition to find the new land of time trough mathematics instead than through physics.

Maybe it is an partial illusion, and maybe a new physical intermediate continent will be discovered in between abstract logic and its material conversion into particles. For sure new philosophies like the Chrono Logic see how limited is the experiment in the physical matter. Nonlinear logics and non-local physics have deeply shaken the building of natural sciences.

Chrono Logic firmly advocates that the conception itself of sciences should be unified with linguistic and human sciences in the new category of "Logical Sciences".

Philosophy only can first perceive the amazing misunderstandings afflicting today the experimental sciences. Nominal 'gestaltic' realities are searched in their material byproducts, with the wasteful experience of discovering hundreds of new particles and constants that are only explainable within a mathematical pattern.

Misunderstandings are so gross, in this transitional era, that even philosophy can perceive them from outside experimental laboratory, just by analyzing the logic frameworks of misconceived concepts and experiments.

Space taken for Time, and Time not taken for Logic are two huge misunderstandings that Chrono Logic is trying to correct.

The empirical reality, the only one that is allowed to experiment, is made of logic metaphysical abstract matter, orderly working like mathematics inside software's applications. But logic matter seen as symbols, it works through informational bit of times. Logic is made of instants. Without instants logic cannot operate, and without logic instants are meaningless.

Most matter is done by useless stuck instants, deprived of their logic in which to flow and operate. Those instants are hold and printed onto a material memory, in order to be recycled later into a black hole, whose function is to absorb stuck matter and energy, to sweep and free the under standing logic field to continue abstract operations.

The human sensorial machinery produces useless vision of stable matter when it only is a temporary suspension of logic operations. It is not logic serving matter, but matter serving logic. It is a typical inversion of logical illusions, so frequent in the mathematical language when it corrects common sense and optical illusions.

The mistake of Platonism is that it did not trust in empiricism, and stayed away too shy of experimentalism. Nowadays, with the assistance of computers, we can experiment time developments of mathematical applicative patterns, and find realistic analogies that sheds new light on material evolutions.

It is time to mentally jump into thinking that mathematics study the 'genetic' codes not only of the life, but of the entire reality, metaphysical and physical.

It is therefore an epistemological jump, peculiar of philosophy, and not of experimental sciences. Philosophical duty is essential but limited to encouragement of sciences. It cannot be a science itself, and seldom hardly new wide insights can come from an experimental physicist or a theoretical mathematician, since both have too narrow or too abstract views, to approach the wide open reality medium, where the infinite cross shades into, and becomes local.

Reality is a 'match', a relational dimension between a general logic and a local time, between a dynamic whole and a relatively static instant.

That is why history explain a place, while observation only exploit the place. There is nothing fixed in the space of a place; just signs of different speeds trying to synchronize. That is why relations of times more efficiently can explain changes in space, if it is possible to move fast forward or fast rewind, like on a video player.

Structural explanations based on spatial peculiarities are less efficient and explicative. That is why structural analysis in sciences of the past century are today obsolete. Space is an expression of non-flowing time. And it has to be taken in account within a logic of time to be meaningful.

The logic of time has to be explained within a logic dynamic design and not a static structural one. The Chrono Logic is the logic fusion of Logic with Time. Two mysteries are solved each other.

Time is finally discovered as a tool of Logic that we all knew from before as the rules of mind and matter. Logic is finally discovered as a mental analogy of the temporal reality, that is not in the space and is not materially out of time.

Time is a compelling dimensional force, more than space, because it is more directly made of real Logic.

Logic is a very efficient force because it is an operational reality using time to implement its results, even by becoming matter.

What we discovered is that what makes the result of a computation 'exact', is the basic energy of the real universe, much before that the material cosmo appears. That is why we can calculate and forecast future events before they will happen.

If in the Relativity of Einstein the Mass is made equivalent to Material Energy, in the Chronologic of Fabretti the Logic is made equivalent to Temporal Energy.

Subatomic applications will come, after it will be understood the mathematical way to the complexity of bosons and other semi virtual particles.

A deeper transition from a material to a more abstract vision of reality is the heritage mission left by the Western Culture coming out of the Renaissance, before it will flow into the global culture. Abstract thinking paved the way to technological progress, and new global material challenges will be solved only by a massive input of abstract thinking into knowledge.

Materialism is as necessary as ever, but it has to understand the role of its ethical logical dynamic in its timely materialization, or it will stay as a dead weight, waiting to ruin down the cliff at the first earthquake.

Men are not stones. Men are made to move logically in time. That is their Reality.

That is a meaning of a Chrono Logic for the 3rd millennium.

Biographical and interdisciplinary links to other works of Giorgio Fabretti on the Web

Let us now explain the common ground and the connections between: 1) The Ethical Materialism, 2) The Time and the All, 3) The Chrono Logic, 4) The Cognitive Historical Anthropology, 5) The Foundation of the Fruitarian Movement.

First of all, these five subjects are fruits of the single mind of Prof. Giorgio Fabretti: a) an 'ancient' Roman of noble origins, in the name and in the facts, b) a doctorate cum laude philosopher of science and anthropologist of history in Italy and Usa, c) a true cosmopolite who had been working in 178 countries for Italian Public TV, Educational Media, Universities, United Nations, etc., d) actually spending over 20 years of his life living in the ethnic environments that he studied, e) always pursuing a balanced style of life, like a monk, self-containing his ego and needs to the minimum essential equilibrium, to help poorer to educate themselves.

The constant focus of Fabretti's studies, since his teen age, has been 'mentalities', also called 'Weltanschauung', that is how the biological and cognitive mind complete itself in adapting to what we call 'reality'.

He was exposed to all kind of scientific influences in the house of his mother's brother, a prominent austere congressman, who had many intellectual visitors. So he was precociously taught Physics & Relativity, Cybernetics, Genetics, History & Philosophy, Economics, by academics and family friends, since as early as he was 13 years old.

He also combined an advanced laical scientifical education with a constant appreciation and practice of his familiar religious background, rich in traditions and centuries of participation to

the Pontifical State, before the Italian State was united in 1861. The family mansions still exist, and they were medieval buildings in Urbino and in the Papal Cities of Viterbo and Rome.

 From this historical and biographical background, Fabretti precociously conceived his original philosophy of Ethical Materialism, morally motivated to respect the life of everyone, solve conflicts and to avoid: the Lagers & the Holocausts of the Second World War and the Cold War,
b) the widespread depression by raised & frustrated expectations in Consumerism.

The theoretical originality of Ethical Materialism is its cognitive logical approach, starting from free ethical adaptive choices, that axiomatically & stochastically 'orientate' the mental logical field, synchronized to an universal analogous dynamicity.

2) From Ethical Materialism derived a philosophy of science which brought Fabretti to work on unifying sciences and general knowledge (including Philosophy and Religion as ethical sciences of fundamental values), according to his Renaissance background, and resulted in his epistemological and cognitive contributions to an interdisciplinary 'Theory of All' based on an original conception of Time and Logic essence of Reality, published under the title "The Time and the All" in 2000, 2005, 2007, with contributions by mathematicians, physicists and biologists.

3) The epistemological effort in "The Time and the All" is the fruit of a Chrono Logic, that is a systematic study of Giorgio Fabretti to build a Weltanschauung coherent and updated with the advancements in sciences and technologies, and namely the theoretical physics, the informational and computer theories, the genetic sciences.

The result is a 'realistic vision of reality', based on Time as a tool of a Logic, operationally dynamic to implement a potential design, implicit in its originary balanced field. That is to restore in time a logic equilibrium.

Therefore the new 'Map of the Universe' has to be 're-evolutionary mathematical', where the energy is Logic and its logic operators are fragments of time, instants; that is symbols, numbers, showing the compelling stringent properties of Time in shaping Reality before its human operators & observers; those can paradoxically seen as parts of a 'computing universe'.

It could be like a Copernican revolution, based on a Logical Gravity on the place of the Newtonian Material Gravity: as simple and daring as the Columbus' Egg and the Discovery of Americas.

Space, Matter, Mass, Energy and other physical properties appear to 5 senses as the survivalist dimension of the 5 senses, after the logical 6th sense has abstractly understood Logic & Time that 'stands under' Material Reality. But Materialism is necessary because our mind and ideas are physiologically fed, and, like overcoats, no ideas hang on themselves. 4) Ethical Materialism, the Time and the All, chronological Time and Logic, have in common the new Culture of Time in the Third Millennium. From it derives the necessity and the foundation by Giorgio Fabretti of the new discipline of Cognitive Historical Anthropology (where Cognitive comes from Logic, Historical from Time, Anthropological from Ethical dimension).

The Cognitive 'Historical Anthropology' is necessary to specialize Cultural Anthropology from geographical areas to historical stages, and in studying the evolution of the 'key' Weltanschauung, working as 'genetic codes' for technological & social developments, as for Eras, Ages, Epochal Civilizations.

A side application of the discipline is the intercultural analysis, often necessary in Conflict Resolution. That is why Prof. Giorgio Fabretti has been consultant to International Institutions like UN, about several Conflicts,n from Vietnam to Cambodia, from Mao to Deng Era in China, from divided Afghanistan, Nicaragua, Timor Est, to North & South Korea, Israel & Gaza, etc.

The new discipline started in 1972 when he was teaching assistant and curator of the Cultural Anthropology Library at the Institute of Sociology in the University of Rome "La Sapienza", and completed at the Kroeber Institute of Anthropology in the University of Berkeley, Ca., Usa.

The writings of Cognitive Historical Anthropology have been printed for the students in several editions by the university presses, and finally published in 2005 by the Franco Angeli Publishing House in Rome and Milano, Italy.

5) Coherently with his belief that no ideas hang on themselves, the Ethical Chrono Logic Materialism of the erudite Giorgio Fabretti - inspired by his familiar Franciscan and Arcadian traditions (he was descendant of Raffaele Fabretti, historian and archeologist of the 17th century, a founder of Arcadia movement) - had to scientifically re-found in 1972, the Fruitarian Movement of Gandhi and others in England, 1891.

The new Fruitarianism is an ethical practice of an at-least-95% frugivorous frugal nutrition, compatible with respect of humans, animals, plants and our planet, since fruits are conceived as all the non-cruel 'synchronic gifts' from the plants (and sometimes from animals or human mothers) capable of helping Homo Sapiens to harmoniously synchronize with the Nature and the Logos, the matter and the ethical foundations of Logic.

Having been a boy-scout and a precocious activist of the Vegetarian Movement, with Armando D'Elia, in Via Collina 48, Rome, Giorgio Fabretti has later devoted himself to the practice and the teachings of his Fruitarian Movement, until in 2012, 40 years later, it was independently and widely diffused to over 30.000 followers in Italy only (according to reliable different Media sources).