

HIERARCHICAL CONSCIENT EVOLUTION

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ABSTRACT

To come closer to conscience on the way to simulate intelligence by intelligent simulation, we approach simultaneously bottom-up and top-down *faith* and *intelligence*, and their intersection *conscience*. Intelligence = Consciousness × Adaptability × Intention and Faith = Intuition × Inspiration × Imagination, are the complementary parts of the human mind. *Conscience* = Consciousness × Inspiration is the link between. Simulation is the relation between function and structure. Simulation of *conscience* demands transcending from computability to simulability following philosophical goals, by integrating essential mathematical and physical knowledge. A way to begin is hierarchical simulation. *Philosophy is not a specialty but a human right*.

Keywords: Conscience, Faith, Intelligence, Simulation

1. HIERARCHIC INTELLIGENT APPROACH

Algorithms, designs, artificial systems can be computer simulated so they represent computability, top-down - construction, design, plan or bottom-up - understanding, verification, learning. The algorithmic approach is equivalent to the formal one. Knowledge and construction hierarchies can cooperate to integrate design and verification into simulation: structural object-oriented concepts handle data and operations symbolically. Hierarchy types open the way to simulate intelligence as intentioned adaptable consciousness by extending the present limits of computability. We enrich the template concept to structures and create a theoretical kernel, for self-organizing systems, based on a hierarchical formalism. This permits theoretical development as well as efficient application to different cosimulation ways of reconfigurable systems. Coexistent interdependent hierarchies structure the universe of models for complex systems, e.g., hard-soft ones. They belong to different hierarchy types, defined by simulation or knowledge abstraction levels, modules, symbols, and classes. Hierarchies correspond to the abstraction they reflect. Knowledge and construction have correspondent hierarchy types: their syntax relies on classes, their meaning on symbols and their use/action on modules. The hierarchy types can be formalized in the theory of categories.

The hierarchical types are objects of equivalent categories (functorial isomorphic) that formally represent hierarchy types. The consciousness hierarchy type communicates to the other hierarchy types by countervariant functors, while the others intercommunicate by covariant ones. Constructive type theory permits formal simulation by generating an object satisfying the specification. Applying similar abstraction kinds to hard and soft representations and operations based on object-orientation, symbolization and structural abstraction can be extended from soft to hard. A generic type has the ability to parameterize with types a hard/ soft element. Recurrence is confined to discrete worlds while abstraction is not. All this suggests searching for understanding following mathematical structures that order algebra into topology. The alternative ways followed to extend the computability concept concentrate respectively on the mental world of the good managed by engineering, the physical world of the truth researched by science, and Plato's world of the beautiful abstractions discovered by mathematics (Penrose 1989). Knowledge bases on morphisms between real system and simulator.

Mathematics contains appropriate structures for self-referent models. The richest domain is functional analysis that integrates algebra, topology and order, e.g., contractions and fixed points in metric spaces, reflexive normed vector spaces, inductive limits of locally convex spaces, self-adjoint operators of Hilbert spaces, invertible operators in Banach algebra.

Simulability = Computability^{Continuum}

Natural transformations on the functors of different hierarchy types solve the correspondence problem, i.e., the association of a knowledge hierarchy to the simulation one. Intention results by human-system dialog, and completes the simulation of the intelligence. Further than modeling consciousness to simulate intelligence is the search to comprehend inspiration. A first idea is to use Lebesgue measure on differentiable manifolds and/or non-separable Hilbert spaces. Even mathematics will have to develop more philosophy-oriented to approach intuition. Evolution needs separation of faith and intelligence, understanding and using consciously more of faith's domain, and integrating them to human wisdom to be divided further to get more human.

2. FAITH AND INTELLIGENCE

Neither Intuition nor Reason arrives alone to a mathematically elementary result. As any other true art or beautiful science of the ideas or the phenomena, mathematics does not limit itself to either Intuition or Reason: these quasi-complementarities have to collaborate, and their main link is Conscience. We dare use mathematics as metaphor for relating Nature to Reality, but it is only a correct inspiring analogy. IR is an initial step in mathematics for algebra, topology, order, or their collaboration. Mathematics is for Reality just one of the favorite ways to get the Human closer.

God's ways are uncountable.

His plans are hopefully hierarchical

Society is conservative – it tries to last forever at any evolution level, using a common measure. Everything can be evaluated, although most of the essential things on that our existence bases its being are not measurable. The so-called pure Reason, i.e., the context-free Reason – most adaptable, conscious only for having, intended by the tactics of the consumption society, and totally unfaithful, gives the necessary force to stagnation or even to choosing a wrong way. Unfaithful means here that the components of the Faith (inspiration, intuition, imagination) are used separately to serve the competition for the Good that makes presently Life credible. However, the irrational of arts, particularly in mathematics, is more than reasonable, whereby the society is less than reasonable; on the contrary, it opens the way to Reality by closure to an essential and radical operation.

To master the New Power of the continuum is beyond Intuition and Reason, if they do not integrate by Conscience and future. The adaptability-based Reason cannot explain or control thoughts, even if sequential is extended to unlimited parallel/ nondeterministic. Anyway, these desired operational properties can be found mainly in the right side of the human mind. Further, the difference between continuous and nondeterministic sequential is positive. Therefore, the Reason has to be Faith-dependent completed to Intelligence. A being needs more than Intuition and Adaptability to surpass the Matter by Spirit; only the integration of Intuition and Adaptability by Conscience can explain the Human being. This inspires the thesis:

Conscience closes itself to (knowledge \circ simulation)⁻¹

// initially Conscience = Consciousness

The idea can be formally sustained in the category theory. The essential limit of discrete computability, inherited by the computational intelligence, is generated by the necessity for self-reference to integrate the level knowledge with metalevel knowledge in Conscience modeling. A hierarchical type expressing reflexive abstraction can represent the conscient knowledge. The aspects of the Reality, and of the human mind reflecting it, have not to be neglected, although they are neither constructive nor intuitive. A way from Reason to Intelligence is to integrate Consciousness and Intention, then to integrate Intelligence and Faith to become Reality-aware.

3. FUNCTION AND STRUCTURE

Faith and Intelligence are ∞ in Life // Way, Truth, Life
We have to surpass the limits imposed by the above dichotomy by a unique Ideal, named *God*, constructive by continuous intelligent reconfiguration. God is in us - as faith is part of our definition, with us - by the others, and for us – spiritual evolution, first conditioned, and then assisted, to be followed by the social one. Against the danger of dichotomy, we concentrate in three different ways on the unique Reality – *Plato*: art for the art, to look for the essential Way, science with God's fear, to search for the existential Truth, engineering, to understand the Being concentrating on the Spirit in our Life.

Human among humans should reflect a strategic equilibrium, without hiding or even violating, as happens nowadays, the principle that the society has to assist unconditioned the individual, with correct continuous education, and assistance by an intelligent faith to search and research the *unknown*.

The unknown can be interpreted as a *unique God*: the absolute freedom by understanding all the necessities, and the absolute unity by closing the entire *Divide et Impera et Intellige* necessary for the Way to look for the Truth along the Life. Further, thinking while advancing, we divide twofold, as we cannot yet *Intellige* the dichotomies: *Spirit-matter* (force-substrate, function-structure, soft-hardware) \Rightarrow reality-nature (continuous-discrete, analog-digital), real-possible, beauty-truth (arts-science, mathematics-physics), form-contents (category-functor, representation-simulation, class-function), perspective-profoundness \Leftarrow *space-time* (evolution). Balance should be not in most of the dichotomies: yin-yang *can represent any dichotomy*.

Arts and sciences are equally noble, even if one appears rather spiritual and the other rather material. Their alliance is vital and shows the insolvability of the nowadays *spirit-matter* dichotomy, and of all resulted secondary dichotomies, actually functionally generated by the *space-time* dichotomy necessary to human evolution. *Reason* is an extension of natural adaptability. *Nature* is not an ephemeral context, but the matter we are built of in order to develop spiritually. The *present society* is extremely materialistic, and tries to destroy every trace of ideal. The integration experiments for the spirit-matter dichotomy failed because of their extremism.

4. HIERARCHIC INTELLIGENT SIMULATION

We extend the reconfigurability to the simulation itself. By a self-aware simulation, we get self-control of the simulation process. Therefore, we build a knowledge hierarchy corresponding to the simulation one. Expressing both simulation and knowledge hierarchies in the reference system of the basic hierarchy types (classes, symbols, modules), we create the context for a self-organized simulation. Hierarchy consists of a net that can represent any type of mathematical structure (algebraic, topological, order). It is the first step to model the Conscience.

The basic hierarchy types correspond to the fundamental partition of the real life (beauty-arts, truth-science, good-engineering), that has to be continuously integrated by philosophy (essence, existence, being). The absolute functionality is symbolized by yin-yang, while the waves suggest hierarchical levels that are increasingly structured for simulation and knowledge (Figure 1). There have to be schools to prepare the teachers of philosophy for the other humans. These schools have to develop respect for those that look for the Way on one of the three alternative paths that correspond to the fundamental partition (arts, science, engineering). As recently the essential *Divide et Impera* do not *Intellige*, the only philosophers are the masters in *arts*, e.g., mathematicians, or those that, aware or not, compose mathematically, *science* – physicists, or those that do not forget their science is a chapter of physics, or *engineering* – mostly those working in domains that attain the limits of the pure Reason. Arts are free.

Mathematics is one of the arts. Music is at least as beautiful and expressive, but mathematics does not demand an extraordinary talent, allows a reasonable dialog about it, and has well-defined reconfigurable limits of that it is aware. Mathematics has to be educated as soon as possible and not to be confounded with its handcraft (Marcus 2000). Music gets more often out of its character. Anyway, they evolved together: *Bach, Vivaldi, Haydn* were both mathematically as musically gifted, but preferred the liberty of the music to the bands of the Reason (Hofstadter 1979). Reason, as initial zone, makes mathematics more sure but less charming than the other arts that can refer directly to the Reality: music and literature. The visual arts are too Nature-dependent as seeing is the most used sense for the human. Mathematics first expressed reasonably that Reality is not completely accessible by Reason - *Pythagoras*. Mathematics school is continuous, whereby the literature and the music can generate sooner higher singular peaks: *Shakespeare, Beethoven*. Mathematics as the most accessible of the arts, science of the abstract ideas, and Beauty engineering, discovers and studies structure types (algebra, topology, order), relative to (construction, orientation, understanding). To science and engineering mathematics is the correct complete integration. *Art for the art* defines itself, creating the Beauty, by thesis-antithesis-synthesis, dialectic principle that governs the *evolution by closure to the inverse*.

Physics is the Science, the other natural/ social sciences are its chapters, even if they are not yet aware of it, or just try to return to their riverbed by intermediary specialties instead of integrative bridges. As any artificial system, the society is structured on natural bases, and it develops by natural laws. During the modern age, these laws were forced towards Reason, and recently they got out of control. Social laws got also less than reasonable.

Physics is essential for the constructive reconfiguration of the Faith

Physics is the paradigmatic science, art to represent the Nature - as exercise to represent the Reality, engineering of the Truth. It has to integrate the fundamental forces in a theory, and all natural/ social sciences as chapters, leading them to a real application of mathematics.

Social sciences study a universe as complex and nondeterministic as the natural one, therefore mathematics is at least as important. Recognizing the physics as the fundamental science, sciences could more directly inspire mathematics (Traub 1999). Science raises the fear of unknown and the research that is inspired by it to zones that are more abstract. It is hierarchically defined, by God's Fear, looking for the Truth; its evolution bases on qualitative leap consequent to consistent convergent quantitative accumulation. As the Reality contains abstract ideas, even if physics could explain everything as being discrete, the power of continuum cannot be forgotten. Consequently, the analog engineering has not to be neglected simulation. Physics permanently uses as alternative solutions the discrete-continuous, while the engineering just adapts intuitively to a consumption-oriented society - characteristic for primitive life.

Engineering is most frequently both art and science, being as important as arts and sciences in the partition of the Reality needed for evolution. However, it is more dangerous than its alternative approaches, of which it has to be strictly bridled: its result, called technology, is defined by its complement – so it is not superior to this; it does not impose spiritual proximity between the creator and the user so it can be applied in a complete different scope than it was generated.

Presently engineering escaped of the control of the inspiring arts, as well as of the consciousness for the science that conditions its existence. Denying the negation is not context-free. Engineering is the homonymous complement of a special science that collaborates with mathematics: this problem is solved if the sciences are integrated into physics and mathematics remains one of the arts (Niculiu 2008). Engineering (art of construction, science of simulation, technology of Good) should develop closer to mathematics: approach, integration of parts, before applying techniques, and to science: courage, multiple perspectives, and not just result-oriented.

The *yin-yang* model (Figure 2) was not randomly selected: each of the nondeterministic separated complementary pairs is functionally structured like (interface, kernel, complement's ambassador). It is formed of three tangent circles emphasizing the centers of the inner ones, retaining the essence of a dichotomy symbol that suggests a complete integration by vicinity and pointing one to another of the parts without loss of autonomy. The Chinese symbol reflects the reminding of creation as love for something else. Three circles, each tangent to the others, models a partition of something to be understood in order to get further, says Europe's center. Circle is *cerc* in our mother tongue, a perfect expression:

Cer (sky) is the infinite; *cerc* is the finite representation of infinite, by the permanent link from (never)begin to (never)end. π is the most famous real number. *Cerc* means perfection, which we permanently desire, therefore there exist integer numbers, having a perfect and beautiful theory, further searching and researching for evolution. The western Europeans attain research/ *rechercher* by recursive search/ *chercher*. Our Romanian language helps us to approach this by *cercetare*.

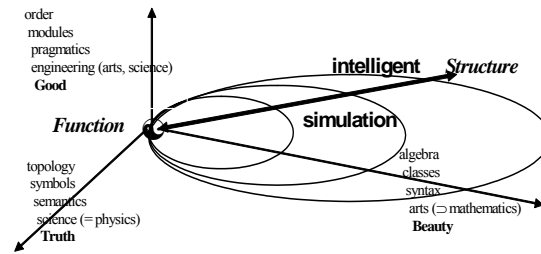


Fig. 1 Extended H-diagram

We have to be to search our essence researching our existence

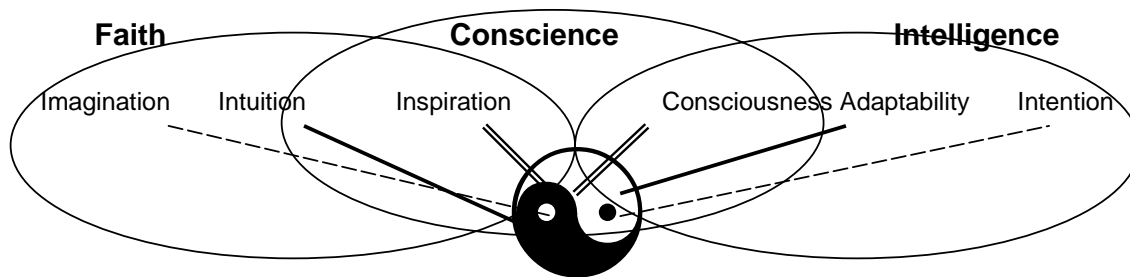


Fig. 2 Human Mind Model

Religion had to learn us about God's existence in our being. Philosophy has to learn us about essence, existence, and being. Our conscience is our representation of the essence of our existence as being.

God is in us, for ourselves, and among ourselves

Divide et Impera et Intellige has three parts as *alle guten Dinge sind drei* of the most philosophic European people. Mathematics develops by three basic structure types, integrating them. We divide our Universe in three worlds: essence, existence, and being. We divide our existence in three interdependent components: arts, science, engineering, corresponding to our beauty-loving ideas, our truth-searching efforts, and our good-oriented constructions - now exaggerated to exclusivity.

For physical or philosophical orientation, we need cardinal points.

To inspire ourselves of the most pure of the arts, we learn about cardinal numbers, although mathematics leads the way to show that nothing is pure so, without leaving anything behind, we follow the Way further. Cardinals are just numbers of elements in a set, but also for infinite sets. Nature demands the least infinity and is defined by (0, successor, induction). Adding is in Nature's definition. However, the inverse operation, subtraction, needs negative numbers. We close mathematically the Nature to an Integer that opens the physics for recognizing the limits of Reason (electrons). Meanwhile, marvelous engineering solutions for different technologies are discovered/ invented. Electronics is among the most advanced engineering sciences: it has to be practiced by the most conscient human beings. Recurrent addition is multiplication, a most important parameter for the Nature.

Mathematics closes the integers to the multiplication inverse, defining the rational numbers. These are not more than the naturals, but we can do many useful things with the Reason, from strategy to computer. *What else do we need?* say too many, forgetting that the limits of the, so-called, pure Reason are caused by the fact that it bounds itself to close the Adaptability to (discrete) sequential operations. Thanks God, neither the mathematicians, nor the physicists do accept the all-happiness (Hawking 1996). They discover in three ways (order, algebra, analysis), which assisted all of them together to think, the power of continuum and that of the patience. In this context, mathematicians and physicists means the theorem, natural laws, or even new approach discoverers, but also the engineers that understand the essential of mathematics and of physics, and bring these further by an engineering model.

A third meaning of cardinal points for an unwise use of *Divide et Impera et Intellige* as a strategy called when two fight, the third wins: intervention comes only when the fighting forces begin to get unbalanced, in favor of the less strong, not for establishing the equilibrium but for conquering all the others; the victory must be completed, so both pseudo-ally and -enemy are firmly assisted, discretely or continuously, to loose control, because of respectively all-(un)happiness. The 20th century is a too convincing example.

Presently, we talk about electronic computers, but the nowadays trend is to copy from the living Nature, emulating the advantages the living beings show, to achieve unconsciously complex duties. Vanguard domains are biotechnology and computational intelligence.

Neither intelligence nor life is well understood; remember *Zauberlehrling*. More important is that emulation is less human than simulation, so they should develop in parallel, permanently exchanging experience.

Reality does not reduce to Nature

// cardinal (IN) < cardinal (IR)

Reality extends beyond Nature and Reason, not just for the quality of the quantity, but also regarding the power of transforming operations (Turner 2009). IR closes \mathbb{Q} to the inverse of power rising – the first noncommutative arithmetic operation resulted by recurrence of the prior one; while power can be pursued by Reason, exponentiation shows its limits, being too complex to be computable. The Reason is the closure of the Nature relative to the primary operations, as \mathbb{Q} is the closure of IN to the inverse operations of + and \times . However, – as $\text{IR} = \{\lim_{n \rightarrow \infty} (q_n) \mid (q_n) \in \text{IN} \rightarrow \mathbb{Q}\}$, the Reason is *dense* in Reality as real numbers are the analytical closure of rationales. The density of Reason into Reality means that every real is the limit of a sequence of rationales. Therefore, we hear nowadays that if we master the Reason, Reality becomes a complexity problem, i.e., speed of convergence. The density of \mathbb{Q} in IR shows that between any two real numbers there is a rational one. We need to imagine that Reality >> Reason accepts that something reasonable exists between any two real objects (*nonintuitive*). Further, closing to the inclusion order, the set of all subsets of IN, \mathbb{Z} , \mathbb{Q} or in general, of countable sets, is the uncountable IR, the power of continuum. To get to complex numbers is a matter of Imagination. Reason closes the Nature to the inverse of natural operations. Reality is the closure of the Reason to the inverse of artificial operations, or to the reasonably deducted infinite, or to an order over the Being itself. We know that if there were no cardinal number between the natural/ integer/ rational discrete and that of the real continuum, then the human logic would include the principle of the excluded tierce, what pure and simple would hurt the Human who is fond of nuances can prove that there is an intermediary level between Reason and Reality (*nonconstructive*).

There are angels between Human and God

said the wise

5. REVOLUTION BY OPENING TO EVOLUTION

The human has to enlarge, not to tear, the bands of the Reason, and to apply them to the society. The Reason has to transform into the consciously recognized limits of the Intelligence in front of the Faith that offers to the human the way to evolve beyond any limits. A reasonable society is hierarchical. Its essential architecture contains three tree-like structures for the same set of humans, therefore, interdependent: arts, science, and engineering-technology. Social hierarchies reflect only a temporary order, generated by humans, to help them concentrate on the spiritual evolution, without neglecting the material problems.

We need Consciousness to return intelligently to Faith

The hierarchical social structure can assure an optimal organization of humans among humans. The interdependence of the three social classes is not only structurally, but also functionally assured. Without giving up anything essentially human: culture, social or natural togetherness, or different approaches, humans have a lot in common: philosophic desire, comprehension of the own hierarchy in the context of the other two, free life based on understanding the necessities, constructive fear of the unknown, and especially the love for creation. Except the three cultural ways, that permanently *Divide et Impera et Intellige*, there is no other. *Intellige* is to link, to understand, and to be aware. In Latin: *intellego* = to understand, to feel, to master, to gather in mind. Artificial has a derogatory sense; however, the root of the word is art. Arts remind of liberty, as *Arts for arts*. Artificial is at first sight the complement of natural. Our ideas transfer us to places that are neither natural nor artificial. Maybe artificial means something natural created by the human being and Nature is an extension of our body. However, we feel to be superior to Nature, as to our body: we can think. Why are only humans creating arts, why do they need to know more, and why do they construct other and other natural things they have not found in the Nature? We learned the arts have to discover the Beauty that science looks for the Truth, and that engineering invents things to help us, caring for the Good. *Goethe* wrote on the theatre in Frankfurt: *Das schöne wahre Gute* because the three wonderful scopes have to be always together. He stretched the Good that is important to all natural beings, whereby for beautiful or true cares only the human being. Arts and science demand a distinct power for both development as understanding, and possibly for usefulness. The power of abstraction distinguishes us among other natural beings. Engineering is to be ingenious, not only designing engines. Any human choice to surpass the Nature by arts, to know it better by science, or to enrich it by ingenious construction, is as noble and legitimate, as to follow any selected way demands intelligence.

Artificial intelligence has an initial sense of enriching natural domains by natural extensions. Reason is an extension of the Nature. The natural language whispers: as the rational numbers are a straight extension of the natural ones, if we neglect the integers, however, you remain in a countable world as the Nature initially is. We should not be ashamed if someone that we only understand by proper preparation and that is at least so powerful as the Nature; let's remember our beautiful mother language. *Cer* (sky) suggests the infinite, and we desire to see it and to link its begin to its end, or better its never begin to its never end, and we find the *cerc* (circle). The language whispers to us again: π is not rational, it is more than this, and it is as if we listen to a symphony of *Beethoven*. We understand that the Reality of our Existence is more than the Nature of our Being, therefore, we should know them better, because only Nature can open us the way to Reality.

We wonder whether any of the alternative ways demands the same kind of intelligence, and if not, which of them should we first research (*cerceta*) in order to simulate it. Arts are free, and even when they return to Reason, as mathematics, they bring results, that could before just be seen by Intuition, to send by Inspiration and Imagination to Intelligence. Physics reaches and gets conscious - not conscient - of Reasons limits, both by the quantum theory and by the too complex phenomena, e.g., society and human. It looks like there is no difference for the intelligence that is useful to one of the ways. Intelligence is more than Reason, to make us feel as beings superior to Nature, what also means that we have to respect Nature more.

We need Conscience to link Faith to Intelligence

6. EVOLUTION CLOSING TO THE INVERSE

Intelligence allows us to consider ourselves humans, human groups, peoples, beings on the Earth, or conscious beings in the physical Universe. We also feel that there is something essential beyond the physical – the metaphysical – *Plato*. More, there is something exterior to the human intelligence, without that we could not fight the Time to evolve. We have to feel complete, even if we need education and permanent work in communication with the other humans, of the past, the present, and the future. You see now why we neglected the integers when we showed that the rational numbers are countable, i.e., they are as much as the naturals. This way, we divided the problem into two others that we do not forget to reintegrate after we have solved them - *Divide et Impera et Intellige*. We count the positive rational numbers x/y along the secondary diagonals in an odd quadrant of the coordinate system ($x0y$); we repeat this counting for the negative ones in an even quadrant. Finally, we count them together by jumping between quadrants for every current number. We come to the idea how to count the \mathbb{Q} s without using *Divide et Impera et Intellige*; we have to keep in mind for harder problems, as Life, Truth, and Way.

We said *complete human* to someone complete in a context, what implicitly supposes the power to go beyond the context. This is the story of the integers (*integer* = perfect, complete): they have a beautiful complete theory, however, do not forget to build the rational numbers to feel as close as needed to any real number. Nevertheless, they realize this is not enough, rewarded by the conscience of the continuous Reality – infinitely more powerful than the discrete/ countable one. To IR, we get by the perfect circle that is beyond the power of Reason. Another way to the same scope is by the boring perfection of the square, when computing its diagonal ($\sqrt{2}$). Again and not fortuitous this alternative is due to *Pythagoras*. The beautiful natural induction tells us that the equilateral triangle and the square are but the pioneers of the regular polygon sequence that converges to the circle. Encouraged, we turn an equilateral Δ or a square about itself, obtaining the area of the circumscribed circle when the number of sides $n \rightarrow \infty$, from the areas of the n -sided polygons.

However ... we wanted to approach π by a sequence of rationales, but the example is not good. Again, we hear like a sweet wind from the sea: *Alle guten Dinge sind drei*, and intuitively sense that we have to know how mathematics masters the infinite. For long time, we knew nothing of sets, but we knew too well to play the role of a calculator. We should not forget what Intuition said to Intelligence, by Imagination: we just had imagined a sequence of *algebraic irrational numbers* converging to the *transcendent* number π . We fear to be further taught what a discrete computer, instead of what an intelligent human, has to know. Perhaps not practice has to push us into evolution, but Gods fear, i.e., the scientific desire for further ascending encountered on any reached level of knowledge. Conscience attaches us to science and unfastens us of the false eternity, arrogated by some level of the evolution to freedom. To be free we have to understand all the necessities in the Reality, to escape God of any fear.

We need intelligent Faith to develop to freedom as humans among humans

7. CONCLUSIONS

We could consider just the simplifying types of hierarchy (classes, symbols, modules) and then express the construction, hoping to aim the absolute liberty, if we considered God as the simplest, totally unconstrained, essence of the Reality. However, we can simulate/ construct/ work/ live, associating knowledge hierarchies to our activities, aiming to constructive understanding of the most complex absolute necessity, by this defining God. Abstraction is the human gift for going beyond natural limits, extending pure reason to real intelligence:

God is the absolute abstraction/ the evolution goal for faith-assisted intelligence

Neither intelligence nor life are well understood, remember *Goethe's Zauberlehrling*. More important is that emulation is less human than simulation, remember *Mozart's Zauberflöte*. They should always develop in parallel, permanently exchanging experience, remember *Thomas Mann's Zauberberg*. We have to close to the inverse of *Freedom is understood Necessity*

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