Anthroposophical Society in New Hampshire
Michaelmas 2018

Michael Fighting the Dragon by Albrecht Dürer

Soul Calendar Verses by Rudolf Steiner

Verse for September 22-28

I can belong now to myself
And shining spread my inner light
Into the dark of space and time.
Toward sleep is urging all creation;
But inmost soul must stay awake
And carry wakefully sun's glowing
Into the winter's icy flowing.

Verse for Michaelmas

O Nature, your maternal life
I bear within the essence of my will.
And my will's fiery energy,
Shall steel my spirit striving,
That sense of Self springs forth from it
To hold me in myself.

Verse for Autumn

When to my being's depths I penetrate,
Expectant yearning wakes and stirs me
To find myself, Self contemplating,
As gift of summer sun, a seed
That warming lives in autumn mood
As germination force of soul.

From the book Michael Legends, collected by Nora Stein von Baditz:

Extracts from "A Gothic Verse of Michael," translated from the Greek

Michael! Exalted, powerful Prince of the Heavens!
Who carriest aloft the golden shimmer
Of Christ, the King,
Holy is thy name, O Michael
Who art like unto God.

As companion of the Thrones
Thou art of the foundation stone
Of the heavenly Firmament.
Thou standest in the castle of the Kyriototes
And risest high amongst the Dynamis.

Amidst the Exusiai and Archai
As a radiant light thou appearest.
Into the Cherubim's sacred chorus
The cleansing fire thou carriest.
By thy holy spear supported,
Over the Seraphim thou rulest.

Thou, as the eldest, art the rightful leader
Of all the hosts of Heaven.
Thou appearest gleaming, in the course of the ages,
In the fourfold row of the Elders.
In the fourth globe, thou art the Priest
Of the guiding spirits
Whose number is twice times four.
Thou abidest close to the Creator's Throne,
Where thou rightfully dwellest.

Thou art the countenance
Of the ninefold ordered
Ranks of the angels,
And of the noble structure
Of the myriad heavenly hosts
Ever sounding the praise
Of the thrice holy Trinity.
Eternally thou coverest
The Highest Deity's countenance and feet
And ever inclinest thyself
Before Its three aspects.

..Therefore we pray thee
Exalted warrior
And glorious victor:
Do unto us who have been reborn through baptism
What thou hast once bestowed
On the Mystery Schools:

Ward thou off the arrows
And the demons; pernicious ire,
Destroy the sores, drive out the plague,
From disaster protect us.
Place in every soul
Salvation, peace, and flowing faith.

…Michael, Prince of angels,
Of fire is fashioned thy form,
And wondrous thy beauty.
Without bodily sheaths
Through the expanse of the world thou wanderest
To fulfil the All-Creator's commands.
In thy strength thou showest thyself mighty,
And erectest in thy Temple a source of healing
Which is honored in the Name of thy Glory.

O Lord! Who, it is written,
Makest thy angels to winds
And thy servants to flames of fire:
Thou hast appointed as foremost leader
Amidst thy hosts
The Archangel Michael.
He follows thy beckoning, O Logos,
And sounds in reverence
The threefold holy song of praise
Exulting the revelation of Thy glory.

St. Michael on the Crescent of the Moon – from Michael Legends -- Nora Stein von Baditz

Hast thou seen gleam up, in clear and exalted autumn nights, the sparkling stars on the sky? They rise like hope in a human soul; they dive down in radiant force, like a human heart's resolve. Then they are called falling stars by men. But whoever loves his angel and, from childhood on, knows no fear, recognizes their true being. He sees in the clear autumn nights amidst the stars the great warrior who is called St. George on earth, but St. Michael in the Heavens. And he sees his countenance shining in golden wisdom which, unconscious of itself, reflects the heart of the highest Godhead. And he sees his arm with the shimmering weapon which, strong and pure, seems to be hardened by Divine Justice.

And with his valiant hand, St. Michael strikes the sword, which will destroy the crawling, the desirous, the wallowing, the corroding impurity. And when St. Michael strikes his sword, the stars tremble and diamantine sparks fly through the air.

Hast thou seen glide in dark winter nights, the delicate moon crescent above the gossamer white clouds? There is around them something like a rustling of distant grass growing on the wide and fair meadows of Heaven. The hearts of men

looking at the crescent in wintry nights are seized by a longing to be far, far away. But whoever loves his angel and from childhood on, has harbored purity in his heart, sees something else. He sees the Heavenly Virgin Maria standing on the narrow silver crescent. And he knows that she is a Queen. For she smiles at those who are longing and hungering on earth. And she bestows on them heavenly wheat-corns which fall down from her rosy hands and bring blessings to earth. She prays that the depths may become filled and may become good and may become penetrated with the miracle harbored in the heights. She bestows blessings with hands that are folded in prayer.

And one day it will happen that the birch-tree, when its leaves are falling in autumn, will not weep because of its bereavement. Then the leaves will joyously fall down to earth. And one day a stairway, whose steps resemble milk-white stone, will appear above the moon. And Maria, waving her hands in a promise of redemption, will walk up the white steps unto the golden table spread in Heaven with the thanksgiving of men on whom the harvest has been bestowed. And it seems as if her foot was treading on fluttering doves' wings.

Henceforth the moon's crescent will not be forsaken. A song will resound from it, such as has never been heard in Heaven and on earth. St. Michael will stand on the crescent. As a heavenly smith, he has forged his sword into the frame of a lyre whose strings are fashioned from men's valiant thoughts. The dragon-slayer will play and sing. He will perform his office as heavenly lutist. Strength is alive in his song. He will sing of consolation and fulfilment of old promises. He will sing of the outflowing of the highest light encompassing the smile of Maria.

And the birch tree will tremble down to its very pith in its joyfulness, whenever this song is sounded. And autumn will be the same to it as spring. Many a man will not see it, many a man not hear it. But whoever loves his angel and harbors faithfulness in his heart: such a one knows the song full well and will want to be better. (After a Polish Legend)

****

In honor of Michaelmas, here are two of the Letters to Members from the <u>Anthroposophical Leading Thoughts</u>. These thoughts indeed require a great deal of effort on our part to understand, contrary to all the 'easy-access information' that we are mostly fed in our daily lives. This 'will to understand' such thoughts is part of our Michaelic striving, appropriate especially at this time of year.

<u>Where is Man as a Being Who Thinks and Remembers?</u>

published March 1st, 1925

With his power to form ideas (thinking) and his experience of memories, man finds himself within the physical world. But wherever he may turn his gaze in this physical world, he will nowhere find with his senses anything that could give him the power to form ideas and to remember.

Self-consciousness appears in the act of forming ideas. This is, in accordance with our former studies, an acquisition man possesses from the forces of the Earth. But these earthly forces are such as remain concealed from the vision of the senses. During earthly life man thinks only that which his senses impart to him, but the power to think is not given him by anything of all that he thus thinks.

Where do we find this force which forms ideas (thought) and the pictures of memory out of that which belongs to the Earth?

We find it when the spiritual vision is directed to that which man brings with him from the previous Earth-lives. The ordinary consciousness knows nothing of this. It lives in man unconsciously at first; but when, after his spiritual life, man enters into earthly existence, it immediately shows itself to be related to those earthly forces which do not come into the sphere of sense-observation and sense-thought.

Man is not in this sphere with his ideas (thought), but with his Will, which works in accordance with destiny.

When we consider that the Earth contains forces outside the sphere of the senses we may speak of the "spiritual Earth" as the opposite pole of the physical. It then follows that as a Willing being man lives in and with the "spiritual Earth", while as a Thinking being he is indeed within the physical Earth, but as such he does not live *with* it.

Man as a thinking being carries forces from the Spirit-world into the physical, but with these forces he remains a Spirit-being who only appears in the physical world, but does not form a union with it.

The thinking human being forms a mutual relationship during earthly existence with the 'spiritual Earth' only; and out of this mutual relationship his self-consciousness develops. We therefore owe the development of self-consciousness to *spiritual* processes which take place in man during earthly life.

If with spiritual vision we grasp that which is here described, we have before us the 'human ego'.

With the experiences of memory we come into the sphere of the human astral body. In the act of remembering there stream into the present ego not merely the results of former Earth-lives, as is the case in thinking, but into his inner being stream the forces of the Spirit-world, which man experiences between death and new birth. This in-streaming takes place in the astral body.

Again there is no sphere within the physical Earth for the immediate reception of the forces which thus stream in. As a being who remembers, man cannot unite with the objects and processes perceived by his senses, any more than he can unite with them as a being who forms ideas.

But he forms a mutual relationship with that which is not indeed physical, but which transposes the physical into processes, into events. These are the rhythmical processes in Nature and in human life. In Nature, day and night alternate rhythmically, the seasons of the year follow in rhythmic succession, etc. In man, the processes respiration and the circulation of the blood take place rhythmically; so do the alternating states of waking and sleeping, etc.

Rhythmical processes are nothing physical, either in Nature or in man. They might be called half spiritual. The physical as object vanishes in the rhythmic process. In the act of remembering, man's being is transposed into his own rhythm as well as into that of Nature. His lives in his astral body.

Indian Yoga wishes to submerge itself entirely in the experience of rhythm. It wishes to leave the sphere of thought, the sphere of the ego, and in an inward experience similar to memory look into the world that lies behind the one which it is possible for the ordinary consciousness to know.

It is not permissible for the spiritual life of the West to suppress the ego in order to 'know'. It must bring the ego ('I') to the perception of the Spiritual.

This cannot take place if we penetrate from the world of the senses to the world of rhythm, and so experience in the rhythm only the process in which the physical becomes half spiritual. Rather we must find that sphere of the Spirit-world which reveals itself in rhythm.

Two things are therefore possible. Firstly, the experience of the physical in the rhythmical element as the physical become half spiritual. This is an older path, one not to be followed any longer at the present time. Secondly, the experience of the Spirit-world, which possesses as its sphere the cosmic rhythm within man and without him, just as man's sphere is the earthly world with its physical beings and processes.

Now to this Spirit-world belongs everything that takes place at the present cosmic moment through Michael. A Spirit such as Michael brings that which otherwise would lie in the Luciferic sphere into the purely human evolution—which is not influenced by Lucifer—by choosing the world of rhythm for his dwelling-place.

All this can be seen when man enters into Imagination. For with Imagination the soul lives in rhythm, and Michael's world is the one which reveals itself in rhythm.

Memory stands already in this world, but not very deeply. The ordinary consciousness experiences nothing of it. But if we enter into Imagination there emerges first of all, out of the world of rhythm, the world of subjective memories; and this passes over at once into the archetypal pictures for the physical world which are created by the Divine-Spiritual world and which live in the etheric. We experience the ether which lights up in cosmic pictures and conceals within it the creative activity of the Universe. And the Sun-forces weaving in this ether are there not merely radiant, they conjure up the archetypal world-pictures out of the light. The Sun appears as the cosmic world-painter. It is the cosmic counterpart of the impulses which in man paint the pictures of thought.

Further Leading Thoughts issued from the Goetheanum for the Anthroposophical Society in connection with the foregoing study: Where is Man as a Being Who Thinks and Remembers?)

165. Man as a thinking being, though he lives in the realm of the physical Earth, does not enter into communion with it. He lives, a spiritual being, in such a way as to perceive the physical; but the forces for his Thinking, he receives from the 'spiritual Earth', in the same way in which he receives his Destiny---the outcome of his former lives on Earth.

166. What he experiences in Memory is already within that world where in rhythm the physical becomes half spiritual, and where such Spirit-processes take place as are being brought about in the present cosmic moment by Michael.

167. He who learns to know Thinking and Memory in their true nature, will also begin to understand how man as an earthly being, though he lives within the earthly realm, does not become submerged in it with his full being. For as a being from beyond the Earth, he is seeking by communion with the spiritual Earth for his Self-consciousness—for the fulfilment of this Ego.

From Nature to Sub-Nature

Published April 12th, 1925 (posthumously, as Rudolf Steiner died on March 30th, 1925))

The Age of Philosophy is often said to have been superseded, about the middle of the nineteenth century, by the rising Age of *Natural Science*. And it is said that the Age of Natural Science still continues in our day, although many people are at pains to emphasize at the same time that we have found our way once more to certain philosophic tendencies.

All this is true of the paths of knowledge which the modern age has taken, but not of its *paths of life*. With his conceptions and ideas, man still lives in Nature, even if he carries the mechanical habit of thought into his Nature-theories.

But with his life of Will he lives in the mechanical processes of technical science and industry to so far-reaching an extent, that it has long imbued this Age of Science with an entirely new quality.

To understand human life we must consider it to begin with from two distinct aspects. From his former lives on Earth, man brings with him the faculty to conceive the Cosmic—the Cosmic that works inward from the Earth's encircling spheres, and that which works within the Earth-domain itself. Through his senses he perceives the Cosmic that is at work upon the Earth; through his thinking organization he conceives and thinks the Cosmic influences that work downward to the Earth from the encircling spheres.

Thus man lives, through his physical body in Perception, through his etheric body in Thought.

That which takes place in his astral body and his ego holds sway in the more hidden regions of the soul. It holds sway, for example, in his destiny. We must, however, look for it, to begin with, not in the complicated relationships of destiny, but in the simple and elementary processes of life.

Many connects himself with certain earthly forces, in that he gives his body its right orientation within them. He learns to stand and walk upright; he learns to place himself with arms and hands into the equilibrium of earthly forces.

Now these are *not* forces working inward from the Cosmos. They are forces of a *purely* earthly nature.

In reality, nothing that man experiences is an abstraction. He only fails to perceive whence it is that an experience comes to him; and thus he turns ideas about realities into abstractions. He speaks of the laws of mechanics. He thinks he has abstracted them from the connections and relationships of Nature. But this is not the case. All that man experiences in his soul by way of purely mechanical laws, has been discovered inwardly through his relationship of orientation to the earthly world (in standing, walking etc.).

The Mechanical is thus characterized as that which is of a purely earthly nature. For the laws and processes of Nature as they hold sway in color, sound, etc., have entered into the earthly realm from the Cosmos. It is only within the earthly realm that they too become imbued with the mechanical element, just as is the case with man himself, who does not confront the mechanical in his conscious experience until he comes within the earthly realm.

By far the greater part of that which works in modern civilization through technical Science and Industry—wherein the life of man is so intensely interwoven—is *not Nature at all, but Sub-Nature.* It is a world which emancipates itself from Nature—emancipates itself in a downward direction.

Look how the Oriental, when he strives towards the Spirit, seeks to get out of the conditions of equilibrium whose origin is merely in the earthly realm. He assumes an attitude of meditation which brings him again into the purely Cosmic balance. In this attitude the Earth no longer influences the inner orientation of his body. (I am not recommending this for imitation; it is mentioned merely to make our present subject clear. Anyone familiar with my writings will know how different is the Eastern from the Western spiritual life in this direction.)

Man needed this relation to the purely earthly for the unfolding of his Spiritual Soul. Thus in the most recent times there has arisen a strong tendency to realize in all things, and even in the life of action, this element into which man must enter for his evolution. Entering the purely earthly element, he strikes upon the Ahrimanic realm. With his own being he must now acquire a right relation to the Ahrimanic.

But in the age of Technical Science hitherto, the possibility of finding a true relationship to the Ahrimanic civilization has escaped man. He must find the strength, the inner force of knowledge, in order not to be overcome by Ahriman in this technical civilization. He must understand Sub-Nature for what it really is. This he can only do if he rises, in spiritual knowledge, at least as far into extra-earthly Super-Nature as he has descended, in technical Sciences, into Sub-Nature. The age requires a knowledge transcending Nature, because in its inner life it must come to grips with a life-content which has sunk far beneath Nature—a life-content whose influence is perilous. Needless to say, there can be no question here of advocating a return to earlier states of civilization. The point is that man shall find the way to bring the conditions of modern civilization into their true relationship—to himself and to the Cosmos.

There are very few as yet who even feel the greatness of the spiritual tasks approaching man in this direction. Electricity, for instance, celebrated since its discovery as the very soul of Nature's existence, must be recognized in its true character—in its peculiar power of leading down from Nature to Sub-Nature. Only man himself must beware lest he slide downward with it.

In the age when there was not yet a technical industry independent of true Nature, man found the Spirit *within* his view of Nature. But the technical processes, emancipating themselves from Nature, caused him to stare more and more fixedly at the mechanical-material, which now became for him the really scientific realm. In this mechanical-material domain, all the Divine-Spiritual Being connected with the origin of human evolutions, is completely absent. The purely Ahrimanic dominates this sphere.

In the Science of the Spirit, we now create another sphere in which there is no Ahrimanic element. It is just by receiving in Knowledge this spirituality to which the Ahrimanic powers have no access, that man is strengthened to confront Ahriman *within the world.*

Further Leading Thoughts issued from the Goetheanum for the Anthroposophical Society (with reference to the foregoing study: From Nature to Sub-Nature)

183. In the age of Natural Science, since about the middle of the nineteenth century, the civilized activities of mankind are gradually sliding downward, not only into the lowest regions of Nature, but even *beneath Nature.* Technical Science and Industry become Sub-Nature.

184. This makes it urgent for man to find in conscious experience a knowledge of the Spirit, wherein he will rise as high above Nature as in his sub-natural technical activities he sinks beneath her. He will thus create within him the inner strength *not to go under.*

185. A past conception of Nature still bore within it the Spirit with which the source of all human evolution is connected. By degrees, this Spirit vanished altogether from man's theory of Nature. The purely Ahrimanic spirit has entered in its place, and passed from theory of Nature into the technical civilization of mankind.

****

The following are extracts from a three-part article by Gopi Krishna Vijaya entitled *Technology and the Laws of Thought* that appeared in the Research Bulletin of the Research Institute for Waldorf Education, **Fall/Winter 2016, Volume 21 #2**, **Spring/Summer, Volume 22 #1**, **Fall/Winter, Volume 22 #2** respectively.

Techne: art, craftsmanship, skill
Logike: reason, rational thought

…what are most needed are an analysis of the way we came to be where we are today in terms of technology and a clear understanding of what the effect of technology is on the human mind. Only this context can show where we are headed.

These two aspects are addressed in this work: how the technology was created and how it is related to the thinking process. Not only is a historical overview provided, but the conceptual developments which came into being along the way are highlighted as well…

(The quotes that follow are mostly taken from the second part of the article, with its emphasis on the conceptual developments leading to the current technological state in which logic=computation. This is an extremely important sequence to follow and understand.)

…The father of pure mathematics, as Bertrand Russell would later refer to George Boole (1815-1864), had not been purely interested in mathematics, nor was his mathematics free of the "impurities" of extra-disciplinary concerns, in particular, religious ones. The symbolic logic that is now the essential tool for secular philosophers and that forms the basis for dispassionate computers began in the mind of a warm-blooded, religiously concerned idealist. (Dan Cohen, *Equations from God,* Ch. 3, 2007)

In other words, the assumption is made that mathematics is "disciplinary" and everything else is necessarily a separate box or an "impurity". This assuming is one of the primary reasons why this aspect of Boole's life and work is hardly known or even realized today, making it a fact worthy of mention.

As already described in Part 1 of this series, Bacon pioneered the use of binary to represent letters and language. Leibiniz developed the use of binary numbers in mathematics and suggested their use in calculating machines; he also suggested that logic might be represented mathematically. Boole took the first steps to accomplish that by trying to represent thought and logic itself in a binary form. Language, Mathematics, and Logic—these were the domains that could now be represented in a binary form, as a work of the Philosophers.

…These laws developed by Boole were complemented and enlarged by Gottlob Frege (1848-1925). Like the Stoics before him, Frege concentrated on creating a system where all logical statements can be expressed symbolically, and also applied Hence, he elaborated propositional logic in a mathematical form, making it possible not only to express equations mathematically, but also to include the application using propositional statements (*if…then, and, or,* etc.) This enabled logic to be expressed as a *mechanism,* an *action.* What Boole did for Aristotle, Frege accomplished for the Stoics, and the works of these two thinkers and their contemporaries (such as CS Peirce) form the basis of what is known as Boolean algebra today.

If <u>all</u> the quantifiers of traditional logic had been included, it would never have been possible to indicate it by a machine, because of the quantifier *ALL*. As hinted earlier, these quantifiers bear a direct resemblance to arithmetic, represented like this:

NONE 0
SOME 1

ALL oo (infinity sign)

giving:

NONE 0
ALL 1

The quantifier SOME is no longer required: It is simply absorbed in the class name itself. Therefore, both the names of cases (subject/predicate) as well as the copula (*is not*) become *quantified*. This conversion of all logical statements into algebraic form is thus seen to remove everything that could not be quantified or mechanized and retain only that which could. It is not an extension, as Boole believed, but a reduction, a filtration.

Reductions of logical statements into mathematical expressions make them well suited to include both calculations and the rules of calculations into the mechanism of a device. Sure enough, this generated the possibility of replacing the Will element of thinking and to outsource it to the machines:

> With earlier sorts of logic, to determine whether the validity of an argument had been proved, we still needed to understand the meanings of words—at least *some* of the words—and this meant we still need to *think*. With symbolic logic, by contrast, we don't need to think at all, or rather the only thing we need to think about is whether the symbols appear in the order specified by the rules that govern them. In consequence, so long as the proof is sufficiently spelled out in a symbolic language, the task of verifying it is strictly clerical. What we look at is simply a matter of form—and *purely* form. …In this respect, then, determining whether an argument's validity has been proved within the system is strictly mechanical, and, in our age, it can certainly be done by machines.
> (Shenefelt and White, *If A then B, How Logic Shaped the World*, p. 252, 2013)

Thus, "formal" logic served to reduce the necessity for thought and to increase the mechanization of concepts.

……While infinity is not accessible to mathematical representation, one can still express it as a concept, as it is done in this very sentence. Hence, the logical domain extends beyond that of finite numbers. It is necessary to see that logic is also not restricted by the use of copulas *is* and *is not*. This opens the door to include non-mathematical ideas (or at least, the non-Euclidian) into logical form and to alters the form of analyzing the possibilities in a situation. Hence, thinking has a range that intrinsically exceeds that of mathematics and mechanics.

This fact is mostly overlooked by most comparisons of the mind and the machine. Consider one of the typical examples used for estimating the power of mind and machine: a game of chess. This game has highlighted the epitome of intellectual capacity for several centuries. It is possibly one of the few games today that is simple and yet represents so well strategy, combinatorics, even elegance and intuition. (*What follows is a listing of the calculations and probabilities inherent in the game and how this lends itself to the possibility, through the eventual sheer computational capacities of a machine, that eventually a machine could beat a human being in this game*. Ed.)

……However, a second look at the game reveals an inherent assumption in this calculation: *that the rules of the game remain fixed*. Because all the rules are geometrical/arithmetic rules (directions and steps of movement) that can be quantified with just an array of integers, the logic used is precisely that which can be mechanized. What if, instead of restricting logic the way it is usually done, the numbers of possible rule-configurations are calculated? If rules are allowed to change, how would it alter the situation?

……..This capacity of the rules to change completely alters the way in which calculations are done and ends up making the calculations irrelevant. As long as the rules for calculations are constant, they can carry some meaning, but what meaning can be obtained when the rules themselves get changed? This explains the difficulty faced by the best of mathematicians when dealing with things like negative numbers and imaginary numbers, because the rules of mathematics are changed.

This possibility of changing rules was missed almost completely by logicians of the 19th century. It is possible that many aspects can now be seen much better in hindsight due to greater familiarity with the nature of technology, while logicians and mathematicians of the 19th were still experiencing the beginning of the Industrial Age. Biology had already reached a high level of development at the end of the 19th century, with the detailed study of cell structures and the nervous system being conducted. With the advent of technology, cells were seen as tiny machines or tiny test tubes with chemical interchanges with the DNA. The brain itself, made up of neurons, was seen in a similar fashion to resemble a gigantic factory-like operations-control center. Biology was explored using the tools of physics and chemistry, where mechanism reigned supreme, and it began to be taken for granted that cell functions determined human behavior.

Removing the restrictions of number gives a much clearer look at the activity of the brain. Just as the piano can be broken or a string of a violin can go missing, it is indeed possible that physical variations in the brain cause intellectual capacities to vary. Snapping a few keys or over-tightening a few strings affects the sort of sounds the piano can produce. Thus, there is definitely a connection to the physical instrument and its expression. But the possible tunes that can be created on the broken piano are once more infinite; hence there can be no calculable difference between the working piano and the broken one, in terms of its music. In addition, the piano works due to the laws of mechanics: vibration, lever action, pushes and pulls, pressing of keys, etc. Everything can be calculated, as to how each key can be pressed and each sound produced. *It is the number of possible tunes that is not calculable.* Modern biology focuses entirely on electrical actions and

cell behavior, just as if a person who wanted to learn music were to take the piano apart piece by piece to determine how the sound is created. This would naturally lead nowhere as far as music is concerned, since music lies in the combinations of sounds, not in their mechanisms. **Similarly, creative thought lies in its capacity to generate fresh ideas, and not in amino acids, neurotransmitters, and network interconnections**. This shows the key difference that takes place in calculating the capacity of human thought and that of machines

It might be argued that the piano has a player who affects it from outside, and there is none who can be observed to act as the "player" for the brain. Here is where internal observation comes into play, the very same observation that enables one to observe one's own thought processes and define notions such as "consistency", "logical" and "internal effort". Ideals of logic and concepts do not occur by peering through a microscope, but directly from an individual's experience of them, which are later confirmed by looking through any instrument. Therefore, there is indeed a player, *the human individual*, whose thoughts leave an impression on the brain via electrical impulses in the same way a piano player leaves his impression on the piano via the keys.

If numbers *have* to be used to get an idea of the difference between musical instruments and the human brain, consider this: Music consists of a few basic notes, and there are new tunes being produced even today. Calculating the number of songs ever sung would literally take forever and is infinite. If a few octaves of notes have been the basis of all the infinite music ever played and will be played on instruments, what indeed could be the capacity of 100 *billion* neurons? That gives the real qualitative comparison of human creative capacity, as a quantitative one is not possible.

The remainder of this second article in the series plus the third and final article goes on to document the historical development of the "digital transition" up until the end of the 20th century, and the undervalued fact that "the effects of irrationals and transcendentals (in mathematics) were neglected and brushed to the side, while the essential problems that plagued Logic itself were not tackled directly, only reformulated." Readers are strongly encouraged to read all three articles in the series for which the PDF formulated links are provided at the beginning of this synopsis. This requires stamina but is well worthwhile. To be able to understand and then articulate the diverted pathway of Logic to Computation seems to me to be a central issue in the thought processes of our time and walking this pathway in full consciousness could therefore be seen as a true Michaelic deed. (Ed.)

****

The Dragon is tamed through the power of conscious self-reflection.
(Perseus and the Medusa is a similar story.

Calendar of Events

This year the Anthroposophical Society in New Hampshire will attempt to support on-going, Anthroposophically-inspired events that are taking place within the daughter movements and institutions in our area. **Please continue to send appropriate event listings to groh.alice@gmail.com for inclusion in our calendar that is published quarterly in the Newsletters**. The Society will also continue to have some events generated out of its own activity. To this end, please see the listings below and please enjoy the enclosed calendar of Public Events at High Mowing School, accessible through the attachment to this email. People who receive paper copies of this Newsletter will also receive paper copies of the Public Events brochure.

Sunday, October 7th	Offering Service in honor of Michaelmas, 10am, Garden Room, Groh Farm
Friday, October 12th	"This War is not Inevitable", a play by Michael Hedley Burton depicting the work of Rudolf Steiner in articulating the ideas of the Threefold Nature of Social Life. Written by Michael Hedley Burton. Performance by Michael Burton and Christian Peterson. Concerning the birth of the idea of the Threefold Social Organism in 1917-1919. Suggested donation $15. Co-sponsored by HMS and the Anthroposophical Society. For mature audiences of all ages. **High Mowing School Big Room, 7pm.**
Thursday, November 1st	Festival for the Dead, Garden Room, Groh Farm, 7:30pm. Program to be announced
Sunday, December 23rd	Offering Service in honor of Christmas, 10am, Garden Room, Groh Farm
Sunday, December 23rd	Reading of the Luke and Matthew Gospels depicting the Annunciation and Birth of the two Jesus children. 4pm, Garden Room, Groh Farm. Families welcome!
Tuesday, February 5th	Christof Wiechert will give a talk on Waldorf Education, High Mowing School Big Room, 7pm "Waldorf Education – Art or Method? Since 1919, Waldorf education inspires curiosity, initiative, and purpose." Join us to find out why. Free. Co-sponsored by High Mowing School and the Anthroposophical Society in New Hampshire.
April 16 to 30,2019	Art History Lectures with David Lowe, Oxford, England. Exact dates and topics to be announced. **Help will be needed with hosting. Please consider volunteering to drive David to Boston or Cape Ann for different events.**
Sunday, April 21st	Offering Service on Easter morning, 10am, Garden Room, Groh Farm
Sunday, June 9th	Offering Service in honor of Whitsun, 10am, Garden Room, Groh Farm

Anthroposophical Society in New Hampshire

Support Contribution Form

All activities sponsored by the Anthroposophical Society in New Hampshire have their practical side: speakers need to be supported, heating bills paid etc. Your awareness of these needs and your corresponding gesture of financial support will enable these activities to continue in our area. As a guideline only, an individual contribution of $25 is suggested. Thank you for taking responsibility for these activities through your conscious and generous support.

Name_____

Address_____

_____

Phone _____

Email address _____

Contribution _____

Please send your check, along with this form, to the Anthroposophical Society in New Hampshire, PO Box 681, Wilton, NH 03086.
For those with a PayPal account, you may also make a contribution via PayPal.com to AnthroposophicalSocietyNH@gmail.com.