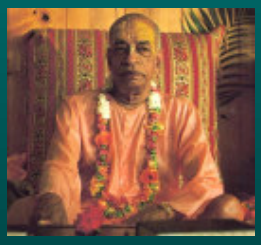
All Glory to Śrī Guru and Śrī Gauräṅga

ŚRĪ MAHĀNET

Since the beginning of the Millennium APRIL 2007



Srila A.C. Bhaktivedanta Swami Prabhupada

"The successive, step-by-step spiritual path is not the same as step-by-step progress in the material world. In the mundane process the rules of progress are strict and cannot be transgressed. If one wants to acquire a doctorate at a university, he has to begin form the elementary school level and gradually work upwards. It is impossible to go directly to the university without prior schooling. In spiritual life, however, although there are strict regulations, by the Supreme Lord's grace one can bypass many intermediary stages and reach the top, or "doctorate" level. One can attain this divine grace by intimate and constant association with the Supreme Lord. And such intimate association with the Lord comes about through confidential exchanges with a pure devotee of the Supreme Lord. Everyone of us is intimately and eternally related to the Supreme Lord, but due to the bad influence of maya we have forgotten our relationship with Him."

ŚRĪ ŚRĪ PRAPANNA-JĪVANĀMṚTAM

"Positive and Progressive Immortality"

by Śrīla Bhakti Rakṣhaka Śrīdhara Deva Goswāmī Mahārāja

Chapter Nine: *Śrī Śrī Bhagavad-vacanāmṛtam* – Words of Nectar from the Supreme Lord

9. 56

sri-lila-purusottamasya svecchakrta-svasraya-vigrahagananugatyamaya-nija-nitya-vraja-vastava-mula-paricaya-prakase priti-tattvasyaiva-maulikatvat, nyayady asya tad asritatvam tad adhinatvan ca, dvijasya hari-bhakta-vasyatvan ca prakasitam -

aham bhakta-paradhino, hy asvatantra iva dvija

sadhubhir-grasta-hrdayo, bhaktair-bhakta jana-priyah

Śrīmad-Bhāgavatam 9.4.63

The Original Supreme Lord of divine pastimes - the son of the King of Vraja - is by nature submissive to his surrendered souls, by His own sweet will. In the manifestation of the Lord's eternal fundamental identity, it is revealed that because love is everything to Him, law is naturally dependent upon and thus subordinate to love, and a *brahmana* is subordinate to the devotee of the Lord -

"O My dear *brahmana*, I am subordinate to My devotee, and therefore I am like one who has no independence. The *sadhu* devotees have captured My heart. And not to speak of My devotees, those who are devoted to My devotees are also dear to Me."

WORDS OF OUR GUARDIANS

Śrīla Bhakti Rakṣhaka Śrīdhara Deva Goswāmī Mahārāja
from *Loving Search for the Lost Servant*

In the *Manu-samhita* it is stated:

vidvadbhih sevitah sadbhir
nityam advesa-ragibhih
hrdayenabhyanujnato
yo dharmas tam nibhodhata

We can feel within our heart whether we are gainers or losers. That tasting machine is within us. As we progress in Krsna consciousness, our karma, our connection with this material world, will evaporate in no time, and spacious knowledge will come to satisfy us. At that time, we shall feel the object of our life everywhere (*mayi drste 'khilatmani*). When we can see that the fulfillment of life has embraced us, we shall see that everything within the environment is helping us, everything is sympathetic to us from all sides. In that spiritual domain, everyone shall take interest in loving us. We may be careless about our own interest, but the environment there is more favorable and affectionate to us than we can even estimate, just as a child cannot estimate the extent of his mother's affection. In this way, friends and home comforts will surround us, and with this realization we shall go back to God, back to home.

"We must try to look deeper and then we will find our friend; if we are liberal in our attitude towards the environment, we cannot but come in connection with the plane which is really liberal. Prahlada saw that Krsna is everywhere. And Krsna consciousness is commanding the whole. So we must not allow ourselves to be discouraged under any circumstances, however acute they may apparently seem to us. Krsna is there. If only we can develop the right vision, the smiling face of the Lord will appear from behind the screen. Krsna is beautiful, and He is eagerly awaiting to accept our services."

Devotion to Krsna means sacrifice - "die to live." By devotion to Krsna, our whole conception of mundane, self-centered, self-interested life will be finished totally.

sarvopadhi-vinirmuktam
tat paratvena nirmalam
hrsikena hrsikesa
sevanam bhaktir ucyate
(Narada Pancaratra)

"Pure devotion is service to the Supreme Lord which is free from all relative conceptions of self-interest."

In his *Bhakti-rasamrta-sindhu*, Srila Rupa Goswami quotes this verse from the ancient Puranas. *Upadhi* means "all relative conceptions of self-interest." We must be totally free of all *upadhis*. And Rupa Goswami also gives us a parallel verse describing bhakti:

anyabhilasita-sunyam
jnana-karmady-anavrtam
anukulyena-krsnanu
silanam bhaktir uttama

"Pure devotional service is the favorable cultivation of Krsna consciousness free from all traces of

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Srila Sridhar Maharaja :

"We must try to look deeper and then we will find our friend; if we are liberal in our attitude towards the environment, we cannot but come in connection with the plane which is really liberal."

ulterior motives, such as *karma*, self-promoting activities, *jnana*, mental achievement, and so on." Bhakti, devotion, must be free from any fleeting desires (*anyabhilasa*), such as *karma* – the organized attempt for self-elevation – and *jnana*, the attempt to depend on our own ability, knowledge, and consciousness to reach the ultimate goal. To attempt to put one's own self as the subject, to become the judge of one's own fate – that is *jnana*. Here *adi* means yoga and other external things. These are all overcoatings (*avrtam*). In the soul proper, however, these elements are not found. The soul is an eternal slave of Krsna (*krsna-nitya-dasa*). Mahaprabhu said: *Jivera 'svarupa' haya – krsnera 'nitya-dasa'*: "Slavery to Krsna is the innate nature of the jiva soul."

In order to realize the absolute, we must come to the standard of slavery; it will take nothing less than that. We must submit ourselves as slaves to the play of His sweet will. Krsna says, *aham hi sarva-yajnanam*: "I am the only enjoyer of every action. You must be fully conscious of this fact." The stern reality is that devotion is not a cheap thing. Pure devotional service, *suddha-bhakti*, is above *mukti*, liberation. Above the negative plane of liberation, in the positive side, He is the only master. He is the Lord of everything in the land of dedication.

We must try to obtain a visa to enter there. There, His sweet will is the only law. It is very easy to pronounce the word "absolute." But if we are to enter into the meaning of the word, then it must be recognized that His sweet will is all in all.

"Above the negative plane of liberation, in the positive side, He is the only master."

This year was the largest Gaura Purnima festival ever at Sri Chaitanya Saraswat Math, Navadwip, India

DIVINE GUIDANCE

Śrīla Bhakti Sundar Govinda Deva Goswāmī Mahārāja
(excerpt from *Divine Guidance*)

It is necessary to stay within the proper line of knowledge. We must have the conviction "We shall follow our Guru blindly." We hear from many places that, 'What our Guru gave is sufficient; it is not necessary to take advice from others.' And it is mainly very true. If I have no big idea, and no big, wide vision, then I must follow my Gurudeva in a very simple way. Sometimes that will work very nicely, but it is not always true—because if a Guru will say one thing, or give one advice, then there is no doubt that if there are five disciples, each will take it in a slightly different way. Each of their minds will play upon that idea in a slightly different manner, so they will understand it in five ways. Maybe in the beginning they were not very different from each other, but whatever small differences exist will become more prominent as it comes down through three or four generations. By that time it may even become completely separate from Sri Gurudeva's conception. *Srimad-Bhagavatam* has mentioned:

Srila Bhakti Sundar Govinda Deva Goswami Maharaja

evam prakrti-vaicitryat, bhidyante matayo-nrnam
paramparyyena kesancit, pasanta-matayo pare

Srila Guru Maharaj has given a very good example of this: thesis, antithesis and synthesis. When Guru gives some knowledge, that is the thesis, but when that knowledge has come out from Gurudeva, an antithesis must also come out from some other quarter. With the thesis, the antithesis will also grow, side by side. And synthesis comes when both will come into harmony. The synthesis then becomes established as the thesis, and again an antithesis will grow to oppose it. In this way, if five disciples hear from one Guru, five kinds of ideas will grow. Their ideas also depend upon their *sukrti*. If they do not go off the track we can say they have good *sukrti*, and that *sukrti* comes through their service. Therefore Srila Guru Maharaj said, "What I shall instruct, you follow that, and what your mind will say, don't follow it!"

It was for this reason that Srila Guru Maharaj did not recommend us to read many things. Srila Bhaktivinoda Thakur also discouraged much reading. Also, especially for those in the Math, there is no excess time for reading. Our time is all service time. There is no excess time in our hand, so how shall we try to learn 'other knowledge' and how can we spend our time for collecting that knowledge?

Someone is studying in Sanskrit, someone in Bengali, someone else is studying in English—and spending time. They are showing a post-dated check, that "After getting that knowledge I shall serve!" But before that it is possible you may die, so why don't you think like that? Therefore Srila Guru Maharaj did not give us the chance to study.

At first Srila Guru Maharaj did give some chance to me because I was unqualified. Srila Guru Maharaj gave me some opportunity to study, but when some proper knowledge came to me, then Srila Guru Maharaj said it was sufficient: "It is not necessary to read more, now you do *seva (service)*."

We tried to do *seva* as much as possible, heart and soul, and we have seen that gradually everything is revealing itself in our heart. We are not trying to collect knowledge from the Scriptures. I read *Sri Brahma-samhita* only a few years ago but I joined over forty-five years ago! It was just during the last days of Srila Guru Maharaj that I read *Brahma-samhita*. One day I put the question to Srila Guru Maharaj: "Maharaj, in which way does the jiva-soul come out from the *Tatastha-sakti*?" I heard the reply many times, but I could not catch it, so I again questioned Srila Guru Maharaj: "The creation of the world, and the creation of the *jivas*—in which way does it happen, Maharaj? Again please explain this to me." Srila Guru Maharaj said, "Oh-oh, have you not read Brahma-samhita?" I replied, "No, Guru Maharaj, I have not read it." I knew many slokas from Brahma-samhita, having heard them from Srila Guru Maharaj, but I had not read the book. Then Srila Guru Maharaj said, "Read it and you will see the answer to your question very clearly explained there in the first section." He also gave a brief explanation.

That question was very difficult. The *jiva*-soul is transcendental, but the *Maya-sakti* produces material things. Her activity is always within the material world but the *jiva* is transcendental, and Krsna is transcendental. So in which way can the transcendental and material combine together to produce the creation? That was the question. But Srila Guru Maharaj replied with this *sloka*: *tal-lingam bhagavan sambhuh*. Krsna throws the vision, and *prakrti* is impregnated—*mayadhaksena prakrtih, suyate sa-caracaram* (Bg. 9.10). And in the middle position, that 'throwing' is done by Sambhu. That is his position.

Srila Guru Maharaj instructed, "Read *Brahma-samhita*, you will be able to see everything explained there." And when I read *Brahma-samhita* I was surprised to see: "Oh, all knowledge is inside this book, but I did not read it before. The whole of the knowledge that Srila Guru Maharaj is giving us—everything is contained here." Then the idea came to me that we must try to publish this *Sri Brahma-samhita* and we shall distribute it to everyone.

VAISNAVA CALENDAR

for Sri Dham Navadwip, India

APRIL 2007

[Not available at time of publication]

check for calendar updates at

http://scsmath.com/events/calendar

Pancha-tattva

Sri Krsna Chaitanya, Prabhu Nityananda,

Sri Advaita, Gadadhara, Srivasa

LINKS TO ONLINE NECTAR

Home page of Sri Chaitanya Saraswat Math, Navadwip Dham
http://www.scsmath.com
Pictorial updates of projects, news, programs
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Audio Index of talks by Srila Govinda Maharaja
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List of SCSMath International Centers
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Credit card contributions to the Math
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California Math Web page in honor of Srila Govinda Maharaja
http://california.scsmath.org

Veranda Views - Topical photos from the Math
http://verandaviews.com
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Sri Guru Vandana
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Sri Chaitanya Shridhara Govinda Mission
http://krsna.cc
Audio Discourses by Srila Govinda Maharaja
from Spd. Madhusudana Prabhu, Hawaii

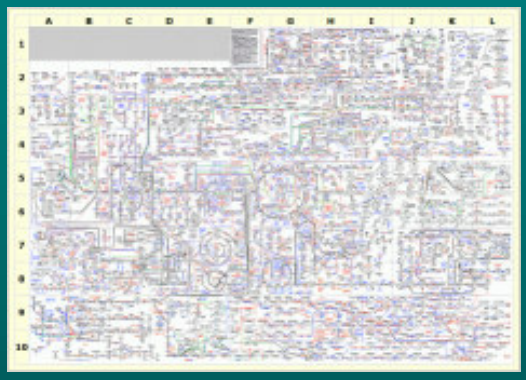
Sri Vaishnava Tosani
http://www.toshani.com
from Spd. Srutasrava Prabhu

Daily Darshan
http://dailydarshan.com
from H.H. Bhakti Sudhir Goswami Maharaja

Weblog of an Itinerant Monk
http://www.imonk.net
from H.H. Bhakti Lalita Akinchan Maharaja

Sacred Cybertemple of The Beautiful Goldenlord
http://www.mahaprabhu.net
from H.H. Bhakti Madhava Puri Maharaja

New Subscribers to Sri Mahanet
http://groups.yahoo.com/group/mahanet/join



Biochemical metabolic pathways

Despite their detailed biochemical knowledge of metabolism, scientists are unable to produce life in the laboratory by a combination of such chemical reactions.

"All religions, arts and sciences are branches of the same tree. All these aspirations are directed toward ennobling man's life, lifting it from the sphere of mere physical existence and leading the individual towards freedom."

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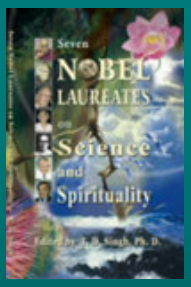
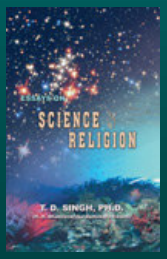
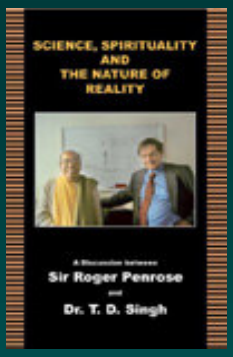
- ***Albert Einstein***
The World as I See It, 1934



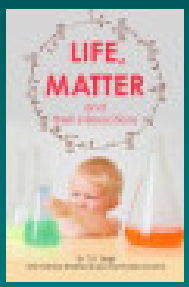
Seven Nobel Laureates on Science and Spirituality



Essays on Science and Religion



Science, Spirituality and the Nature of Reality



Life, Matter and Their Interactions

Bhaktivedanta Institute Publications
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Biological Function and the Genetic Code are Interdependent

Albert Voie

(from Chaos, Solitons and Fractals, 2006, Vol 28(4), 1000-1004.)

Life never ceases to astonish scientists as its secrets are more and more revealed. In particular the origin of life remains a mystery. One wonders how the scientific community could unravel a one-time past-tense event with such low probability. This paper shows that there are logical reasons for this problem. Life expresses both function and sign systems. This parallels the logically necessary symbolic self-referring structure in self-reproducing systems. Due to the abstract realm of function and sign systems, life is not a subsystem of natural laws. This suggests that our reason is limited in respect to solve the problem of the origin of life and that we are left taking life as an axiom.

1. Gödel formulas are subsystems of the mind

Logic (ancient Greek *logos* = sense/think) is in ordinary language the reasoning used to reach a conclusion from a set of assumptions. More formally, logic is the study of inference. Inference is the process whereby new assertions are produced from already established ones [1]. Logic is based on assumptions about the real world that seem obvious or unquestionable like "it should not be possible to exist and not exist at the same time". If something turns out to be logically impossible we automatically loose faith in it. In 1933 Kurt Gödel proved that it was logically impossible to prove all mathematics within mathematics [2]. This theorem has been named Gödel's first incompleteness theorem. Somewhat simplified, the theorem states:

In any consistent formalization of mathematics that is sufficiently strong to axiomatize the natural numbers -- that is, sufficiently strong to define the operations that collectively define the natural numbers -- one can construct a true (!) statement that can be neither proved nor disproved within that system itself [1].

Gödel's statement says: "I am unprovable in this formal system." This turns out to be a difficult statement for a formal system to deal with since whether the statement is true or not the formal system will end up contradicting itself. However, we then know something that the formal system doesn't: that the statement is really true. The trick utilized by Gödel is to make the statement refer to itself (Self-reference). Later , related theorems have been developed such as Turing's "Halting problem" [3] and Chaitin's constant W, which is the halting probability [4]. Turing's halting problem parallels essential incompleteness as formulated by Nagel and Newman [5] "Gödel showed that *Principia*, or any other system within which arithmetic can be developed, is essentially incomplete. In other words, given any consistent set of arithmetical axioms, there are true mathematical statements that cannot be derived from the set...".

What might confuse the readers are the words “there are true mathematical statements”. It sounds like they have some sort of pre-existence in a Platonic realm. A more down to earth formulation is that it is always possible to construct or design such statements. This is why some scientists have called the Gödel formula “artificial” and “synthetic”. The mind is always able to construct a Gödel formula, which is unprovable in any system of question [6].

Gödel formulas are products of the human mind. However it should be mentioned that it is an ongoing discussion whether formal systems are human inventions or just a subset of a larger formality. That the rules of inference, like the laws of motion and the rules of mathematics, are larger than Homo sapiens, and we just progressively discovered them rather than having created them.

Anyway, Gödel formulas are good examples of the fact that given an axiomatic formalized system, the human mind can always construct something that does not follow from the system’s initial conditions. The factor of human creativity in mathematical theories seems to have been overlooked in the history of science. Odd and controversial results might seem less odd when this factor is taken into account.

Another interesting example of “stand-alone formulas” is something called “fixed point” (a function that yields itself). This self-reproducing function cannot copy itself directly (because it cannot read itself), but needs to be given a passive copy of it [7]. Chaitin has demonstrated that Gödel’s proof in the computer language LISP is just to use the fixed-point trick in a slightly more complicated manner. Replication systems and Gödel formulas are thus two of the same kind, since they both require internal symbolism [7]. They are both subsystems of the human mind and not subsystems of the formalized system like theorems flowing from rules of inference.

The ability to choose with intent and the ability to instantiate those choices into dynamically inert, yet physical configurable switches seems to be abilities that make humans creative. This freedom makes us able to add meaning to symbols, create rules of inference and produce formal systems. The human mind can even manipulate a formal system to create true statements that are not formally derivable from the system such as Gödel formulas.

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2. Computer programs and machines are subsystems of the mind

It seems that it is a general acceptance as emphasized by Hoffmeyer and Emmeche [8], that "No natural law restricts the possibility-space of a written (or spoken) text". Yet it is under strict control, following abstract rules. Formal systems are indeed abstract, non-physical, and it is really easy to see that they are subsystems of the human mind, and belong to another category of phenomena than subsystems of the laws of nature, such as a rock, or a pond. Another similar set of subsystems is functional objects. From the Wikipedia encyclopedia we have the following definition:

"In general (not in the mathematical but in the engineering sense), a function is a goal-oriented property of an entity. Function (according to the TOGA meta-theory, [9]is not a physical property of a system, it depends how this system (a distinguished process) is used. The carrier of a function is a process; therefore, the same function is possible to realise using different physical processes, and one process can be a carrier of different functions. For example, clock main function, i.e. a presentation of time, can be realized by different physical processes, such as, atomic, electronic, mechanical or water movement" [1].

The non-physical part of a machine fits into the same category of phenomena as formal systems. This is also reflected by the fact that an algorithm and an analogue computer share the same function. Polanyi writes:

"A machine, for example, cannot be explained in terms of physics and chemistry. Machines can go wrong and break down - something that does not happen to laws of physics and chemistry. In fact, a machine can be smashed and the laws of physics and chemistry will go on operating unfailingly in the parts remaining after the machine ceases to exist. Engineering principles create the structure of the machine which harnesses the laws of physics and chemistry for the purposes the machine is designed to serve. Physics and

chemistry cannot reveal the practical principles of design or co-ordination which are the structure of the machine" [10].

As the logician can manipulate a formal system to create true statements that are not formally derivable from the system, the engineer can manipulate inanimate matter to create the structure of the machine, which harnesses the laws of physics and chemistry for the purposes the machine is designed to serve. The cause to a machine's functionality is found in the mind of the engineer and nowhere else.

3. The interdependency of biological function and sign systems

In life there is interdependency between biological function and sign systems. To secure the transmission of biological function through time, biological function must be stored in a "time-independent" sign system [11]. Only an abstract sign based language can store the abstract information necessary to build functional biomolecules. In the same manner the very definition of the genetic code depends upon biological function. This is the origin of life problem and it penetrates deeper than just the fact that organisms observed today have such a design.

An important implication of Gödel's incompleteness theorem is that it is not possible to have a finite description with itself as the proper part. In other words, it is not possible to read yourself or process yourself as process. We will investigate how this parallels the necessary coexistence of biological function and biological information.

The replication of machines seemed for many years an unsolvable task due to the problem of "self-insight". Von Neumann believed that life was ultimately based on logic, and so there should be a logic construct that should be able to support the reproduction as observed in life. In order to solve the implication of Gödel's incompleteness theorem, von Neumann had to introduce a blueprint of the machine. The trick is to employ representations or names of objects, which code can be smaller than the objects themselves and can indeed be contained in that object. Von Neumann's abstract machine consisted of two central elements: a Universal Computer and a Universal Constructor [12]. The Universal Constructor builds another Universal Constructor based on the directions contained in the Universal Computer. When finished, the Universal Constructor copies the Universal Computer and hands the copy to its descendant. As a model of a self-replicating system it has its counterpart in life where the Universal Computer is represented by the instructions contained in the genes, while the Universal Constructor is represented by the cell and its machinery. In order to replicate, the necessity of a symbolic self-reference is a general premise in logic.

Can we really apply logical terms such as "paradox" and "consistent" to biological systems in the same manner as we do to formal systems? Even though we must admit that biological systems sometimes are more "fuzzy" than the strict world of formal systems, there are constrains on how it is possible to organize them. A hypothetical biological system trying to reproduce without a symbolic self-reference, but by self-inspection will run into related problems as within a formal system. Presupposing an unchanged original, problems will occur due to disruptive effects. The function of biological bodies is determined by their three-dimensional structure and how this structure relates to a whole. However, in order to copy them one should access their internal sequence of amino acids (or nucleic acids if the body is a ribozyme), which would then interfere with their structure and function. For instance, for an enzyme to replicate itself, it would need to have the intrinsic property of self-replication "by default". Otherwise, it would have to be able to assemble itself from a pool of existing parts, but for this, it would have to "unfold" so that its internal parts could be reconstituted for the copy to be produced [13]. Thus, instead of using terms such as "paradox" and "consistent," it is more relevant to speak of what is physically and practically possible when it comes to physical constructions. These constraints require the categorical distinction between the machine that reads the instructions and the description of the machine [13]. Von Neumann observes that there is a parallel to this logically necessary distinction between symbol and dynamics in measurement processes in physics. Here the function of measurement is necessarily irreducible to the dynamics of the measuring device. This logic is closely related to the separation of symbols and dynamics for control of self-replication since measurement and control are inverse processes. In other words measurement transforms physical states to symbols in memory, while memory-stored controls transform symbols to physical states [14]. Von Neumann made no suggestion as to how these symbolic and material functions in life could have originated. He felt, "That they should occur in the world at all is a miracle of the first magnitude." [13].

[to be continued]