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Soul Theory and Dynamic Programming

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Abstract

(A) **Soul theory** says that the entire universe is filled with two kinds of particles: Prakriti and Purush. Both are tiniest, invisible, and eternally existent particles. Everything else of the universe, called objects of nature, is manufactured by one Purush particle and by using some Prakriti particles. All manmade objects are also objects of nature because they are made from the objects of nature. All objects occupy a part of the 3D space. Some objects can be detected by our five knowledge sensors: eyes, ears, nose, touch, and taste. But all objects can be detected only by the third eye vision, also called the divine vision.

(B) **Numbers** are false, because they are not objects of nature. False can never become true, no matter how well you manipulate them; like numbers in mathematics. Therefore any academic subject that uses mathematics, like probability theory, physics, and economics cannot become correct either. Truths cannot be understood, unless you understand the falsehoods also. Brightness cannot be realized unless you know the darkness. All truths are already known and they are all well documented. You must be a seeker to know the truths. Truths cannot be explained.

(C) **Isolated environment** is an assumption. Nothing is, and can be isolated. All objects in the universe are simultaneously and continuously interacting with each other. This makes the whole bigger than the parts. Destiny of the whole therefore is bigger than that of the parts also. You cannot build the whole by observing the parts. Dynamic Programming (DP) is designed for use in Sequential Multistage Systems (SMS). But SMS cannot exist in nature and not even in engineering. This is so, because they use the assumption of isolated environment. Therefore the foundation of DP, the optimality principle, cannot exist in nature; and therefore must be false too.

(D) **Time** is a very important factor of the universe. Destiny creates periodic activities over a long time called the Yuga periods. There are short periods like our heart rates. Then there are long periods like days and nights; and even longer periods of seasons, like summer, winters, etc. The longest period is when the entire

universe becomes dark and then reappears, every 8.6 billions of years. All these True-False things happened because we did not try to understand the Soul Theory (ST), or we forgot about it, and therefore we do not realize that soul theory is the foundation of the universe. Matter only as objects, are nonexistent in the universe. Humanity has experienced, learnt, developed, and presented this ancient theory of Vedas in many different ways before. In this article we present another popular and powerful tool, the Dynamic Programming (DP), and establish its problems or falsity over this periodic context.

(E) **Glaring examples** of the failure of our modern science and engineering is the death of nine million people in our earth, in every year, because of poverty alone. Our houses burn down completely within two hours because of the wide spread devastating wild fire all over the earth, in every year. We should blame this to Kali Yuga, because we are living in an environment of only 25% truth. This feature of Yuga theory, a part of destiny, which is a part of the soul theory, is discussed in this article. Destiny is the highest level law of the universe. When you understand little bit of soul theory, you will realize that there is heaven and hell difference between the reality and the material only inert universe.

(F) **Eternal recurrence** always takes over. More than 300 years back Newton assumed isolated environment and created his first law of motion. These are like aperiodic events. And again, more than 100 years back from now, Einstein also assumed isolated environment and postulated the existence of inertial reference frame, which is nothing but Newton's first law. Thus the optimality principle of Bellman, could not also avoid isolated environment, more than 60 years ago, as the foundation of DP. Like a straight line, no planned trajectory can be drawn in the universe against the destiny. A Nobel Laureate poet from India said, 'you should not think that you have the power to control the destiny' [Tagore, Bidhir bidhan]. This article is an attempt to clarify that idea of destiny.

Keywords: Dynamic Programming, Destiny Law, Measurements, Measure Theory, Optimization Theory, Periodicity, Soul Theory, Samkhya Karika, Vedas, Yogic Power, Yuga Theory

Introduction

We forgot: All of us have gone through everything, many times in the past, over many lives, and in many incarnations, including passing through Sattya Yugas, when we experienced 100% truths. But we do not remember them. The universe has a unified theory and is completely described in the Vedas. Our entire earth also has the complete knowledge of Vedas, even

today, in many corners of the earth. There are still some modern yogis who can demonstrate many such features of yogic power. In Gita Krishna says to Arjun the following verse:

[G.4.5] The Personality of Godhead said: Many, many births both you and I have passed. I can remember all of them, but you cannot, O subduer of the enemy.

Multidisciplinary: This article does not talk about religions. It distinguishes between religions and the books of corresponding religions. This is a multidisciplinary research article. The objective of this article is to show that the truth cannot be found without going through a multidisciplinary approach. It also shows all researches will be always wrong when it uses only a single discipline. The ideas of dynamic programming will be used to illustrate the inadequacy of single disciplinary research. Dynamic Programming is a subject in the field of mathematics.

Already planned: The dynamic programming (DP) algorithms are based on the principle of optimality. This principle essentially says – ‘any part of the optimal trajectory is optimal’. On the other hand the soul theory (ST) says – ‘You are always guided by the destiny, that is, at any space time point of the universe every activity of every soul is predefined. You perform only that which is predefined; and you cannot do anything else. You do not have any freewill. Destiny never repeats for any soul and in all life incarnations. It is hoped that this article will show how we should plan our education system. The article is long, because it deals with multiple disciplines, and it tries to remain self contained.

Control systems: Nature is not controlled by any theory of feedback control systems, which DP can generate. There is no feedback, past cannot be accessed, and therefore past cannot be controlled. Everything is for one time only. Although everything is periodic; very broadly periodic; that is, two events are never exactly and precisely periodic. You say something now, after sometime you repeat that statement, and you will find that the second version is never the same as the first time. The words may not be the same, emotions may be different, facial expressions may not be the same; you may say something and think of something else, etc. The universe changes all the time and continuously. You age and I also age every moment; and with that everything changes; the past is lost immediately and forever.

Measure Theory: Finally we ask the question – Is the optimality concept meaningful. Can we measure anything? Numbers are not objects of nature. Can we justify that this apple is \$5 and that apple is \$10. No, we cannot measure anything. We investigate the definition of the numbers. If we cannot define a measure then we cannot define optimality. The fact that nine million people are dying every year on our earth [Poverty] because of poverty alone, should convince us that the measure theory does not have any truth. If somebody hurts then everybody hurts. We are all connected by the consciousness property of the soul discussed in the soul theory.

Search for Truths: So, what will happen when we try to implement DP? Nature is precisely predictable. Both DP and ST will work as planned by destiny. You will not even know that you are being guided as a robot. The truth is unique, universal, and eternal. There are no contradictions in nature. This article tries to establish these answers. Nobel Laureate

poet Rabindranath said – “Let me not advertise my work, allow Your wishes get expressions in my life” [Tagore, matha nato].

Questions: We ask, is the optimization meaningful in the context of the activities of the universe. Knowing the facts that: the universe is completely deterministic, we do not have any freewill, all our activities are predetermined, we will die, we will reincarnate, etc., can we then do something to better our living conditions in the present life and in the next life? Is Dynamic Programming (DP) the answer?

Can the promises of yogic powers, soul theory, Samkhya karika etc., help us achieve our objectives in one life? Can we acquire the third eye vision to measure our progress? Will more money help us to improve our lives? Can the richest man or woman show us how to achieve optimal objectives? Are there yogis that can define the objectives of life in the context of the universe, solar system, or planet earth? Is it possible that mathematics, science, engineering, and technology can define our life-objectives? Is there any answer in the optimality principle of dynamic programming, or in the promises of knowledge of all truths?

Sources

All truths must come from seer Yogis. Nobody else can generate any truths. The following books have been known to be written by seer yogis. Samkhya Karika by Kapil Dev; Gita spoken by Sri Krishna; Ramayan by Valmiki; and Mahabharat by Byas Dev. Only these books must be trusted. All other books have been written by or modified by non-seer yogis.

Two of the most important books on Soul Theory are Samkhya Karika and Bhagbat Gita. Both are parts of Vedas. About sixty percent of Gita is taken from the Samkhya Karika. Thus any subject that contradicts Samkhya is not considered as authentic, and is not a part of Soul Theory. Unfortunately, Gita has been modified by Kali Yuga authors for various reasons. This author recommends that Samkhya should be read first and then read Gita. However this article is not written to rectify that notion. Samkhya is a small book; has only about 70 two-line verses.

Not myths: Are these ancient books realistic or myths? Yes, they are the only real things. Books written by seer yogis are always correct books. The following four books, as mentioned before, are known to be written by very high level seer yogis: Ramayan written by Valmiki; Mahabharat written by Byasdev; Gita spoken by Sri Krishna; and Samkhya Karika written by Kapildev. All other books, particularly Upanishads, Vedanta, Purans, should be avoided. They are most likely not written by any seer yogis. Ramayan and Mahabharat are not myths because whatever they have described as happened then, are happening even now in our earth. As an example, in Ramayan a married woman, wife of Sri Ram, named Sita, was kidnapped by the king Ravan, which eventually lead to a war. Such kidnapping is happening all the time now in every year in every nation of our earth.

Modern books: The book, [Sniedovich, 2010] ^[48], says - “This somewhat unsettled state of affairs with regard to the fundamentals of dynamic programming is also manifested in the lively debates in dynamic programming sessions at conferences and workshops where one often hears totally conflicting views on these matters.” - This is not only the problem of DP, this is essentially misunderstanding of mathematics and its feasibility for nature and engineering.

The purpose of this article is to point out this disturbing and unauthenticated foundation of mathematics. Truths cannot be understood unless you know the lies also.

The book [Sniedovich, 2010] ^[48] also says: “But I soon discovered that dynamic programming actually invites a certain amount of disagreement with respect to its definition because, by its very nature, it can be approached from a variety of angles depending on one’s approach to modeling, analysis and problem solving.”

Truth is: Clearly this book [Sniedovich, 2010] ^[48] does not say that the truth is unique, universal, and eternal. This leads to Galileo phenomenon: you have your own truth, and I have my own truth; and Galileo remains in jail forever. We discuss the definitions of truth. Unfortunately Kali Yuga people do not want to know about the truths; even though most of them lived in the Sattya Yugas; when everybody knew all truths. Actually, this is how the destiny is defined and planned.

Problems with languages: At one time all humans on earth used only one language, called telepathy. There were no confusions with that language. We could use telepathy with every human, at any distance, with any nationality. We could even talk with animals, birds, etc., using the same scheme. Even now, we still have some yogis, who can use telepathy to communicate [Das, 2014b] ^[14]. It is well known that UFO-ETs use telepathy to communicate with their human abductees [Das, 2023a] ^[21]. But we forgot that language. Now we have many languages and everybody is shouting with their own languages and still cannot understand each other. The very fact that we have so many languages shows that we have major problems of communication. Let me illustrate with an example from [Russell]:

“CHAPTER XII. TRUTH AND FALSEHOOD

Our knowledge of truths, unlike our knowledge of things, has an opposite, namely error. So far as things are concerned, we may know them or not know them, but there is no positive state of mind which can be described as erroneous knowledge of things, so long, at any rate, as we confine ourselves to knowledge by acquaintance. Whatever we are acquainted with must be something; we may draw wrong inferences from our acquaintance, but the acquaintance itself cannot be deceptive.”

Why use truth and falsehood? Why not true and false? In electrical engineering we use true and false. In computer programming language also we use true and false. Why XII and why not 12? If we cannot express in simple way then we cannot solve the problems. Consider the first sentence – “Our knowledge of truths, unlike our knowledge of things, has an opposite, namely error.” We have not discussed truths, how can we discuss knowledge of truths? What are things? It seems the universe has only things and truths. Are there differences among them? Why opposite is error and not falsehoods? The error refers to truth or thing? I will stop here. This present author is also not free from this language problem in this article. Our computer languages are also not free from these language problems. A simple C language is presented to eliminate confusions and reduce errors [Das, 2024a] ^[23].

TRUE and FALSE

You cannot know the truths if you do not understand the falsehoods. The gap is just like darkness and light. It also depends on how long we are in one mode. It is something like: if you have never heard of reincarnation then you will be absolutely and totally lost in your mind; in the same way that you will be totally lost when you hear that humans can also fly. There are many such catastrophic opposites of true and false concepts that can blow our mind completely. There are many living creatures that have never seen daylight.

Math cannot help in Engineering

Bounded Variables: $3+4 = 5$; a very common example and is known as the bounded variable systems. Every engineering system has many variables like: voltage, current, speed, etc.; all these variables have upper and lower bounds. All operations must satisfy these bounds otherwise the electronic components will burn out. Such resetting of variables will violate all equations and their properties. If you add two values and if that becomes 7 then you must reduce that to 5 to keep it bounded. But this action will destroy all algorithms.

e^{2t} will eventually explode to infinity; Many systems use solutions of differential equations containing such exponential terms. These terms will explode and make the software to crash. It is beyond the comprehension of the mathematicians to understand such engineering problems. The result can explode even when t is finite; called the accumulation and/or truncation errors.

There are many wide varieties of such complex problems: interrupt handling, multitasking operating systems’ interfacing and task switching, etc., that break the algorithms and make the system to crash, in many different ways. For many details take a look at the article on rethinking embedded system design [Das, 2012a]. In this respect mathematics and algorithm structures are 100 years behind real time embedded engineering. Such crashes may cause catastrophic and undetectable failures.

Sequential design can become suboptimal

Multitasking design of software can enhance information exchange among multiple stages simultaneously. Sequential design can prevent such interaction, causing distortion of optimality. Thus optimal policy and sequential stage design can reduce successful optimization.

Here is one example of sequential plan to recover its limitations: a grandfather was telling his son that I will be born to you as my grandson. I give this wrist watch to you now, which the grandson will recognize to remind you that I gave it to you. Similar things can happen in several five-year-plans of the nation building efforts. Mahabharat stories had one such multigenerational exchange of promises.

Contents

This entire article is organized using the following highlights, (press alt + left arrow to come back): Abstract, Introduction, Definition of truth, what is a proof? Dynamic programming: discrete time case, continuous time case, forward and backward solutions. Soul theory: sources, destiny law. Problems with mathematics. No privacy, soul controls, no god, compelled, Yogic Power. Differences

between Gita and Samkhya; DP and freewill; Experiencing sequential mind; Simple C language, Universe is finite; Universe is periodic; Single vs Multidisciplinary research; all souls are interconnected; Vedic science; the third law of motion; special relativity; quantum mechanics is wrong; The Principle of Optimality; All examples.

Searching for a Definition of Truth

This section is mainly copied from [Das, 2024a] ^[23]. It is a large section. We thought, without knowing the truth we cannot understand anything. So we investigate the truth in little details. We are not finding the truths in this section; we are searching for the proper definition of truth. If we do not understand the definition of truth then we cannot even know what DP (Dynamic Programming) and ST (Soul Theory) are.

People say truths cannot be taught. One must have an internal urge to know the truth, thus truth must be searched by that person who is interested about the true knowledge. A time will come in your life, when you will start such an endeavor, if that has not happened already. This is a part of destiny. Unfortunately, in Kali Yuga people do not want to or hear about the truths. It is therefore important to teach such a course in a high school class.

An Example - Periodicity: Earth has four Yugas, ages, or time periods. These Yugas are called: sattya, treta, dwapar, and kali. They repeat in that sequence continuously, one after the other. We are now in Kali Yuga. After Kali Yuga, again Sattya Yuga will start. Sattya Yuga has about 1.73 million years and has 100% truths. Total of all four ages is 4.3 million years long; and it is called one Maha Yuga (long ages). After a thousand of such maha yugas, universe goes to a night or dead time for 4.3 billion years. Universe remains dark during the night time; before stars, planets, and earth begin to reappear again one by one during its day time. This periodicity is a very high level truth. Of course destiny law, as described later, is at the highest level.

This periodicity can be explained or justified using Fourier series; which we have all studied in our undergraduate classes; and probably we understand, barring the infinity requirements of the Fourier series, since there is no infinity in the universe, as explained elsewhere in this article. Finite Fourier transform has a different mindset [Das, 2013a] ^[10]. Replacing infinity by any finite number drastically changes the final result, meaning, interpretation etc. Infinity is not just same as a very large number; no matter how big the large number is. Infinity cannot be replaced by a large number.

Laws of Nature: Is optimization a law of nature? What is optimization? Do we have numbers in nature? Can we compare two things in nature? Killing nine million people in our earth, per year by [Poverty] - is that a part of optimization? Is death a part of optimization policy? Killing must be a part of destiny also; since nothing happens outside destiny. Who creates destiny? Who creates the project schedule of your corporation? Destiny is like a project schedule of a corporation.

We are in the age of Kali Yuga now, and this Yuga has only 25% truth, says Mahabharat [Roy, Vol.3]. After the end of Kali Yuga which is about 400,000 years long, the age of Sattya Yuga will start with 100% truth and then the periodicity will continue and we will go through four ages in

cycles, again and again. Every Yuga has a dawn and an eve period also. Yugas, periodicity, destiny are all laws of nature. [Das, 2025] ^[25].

The Risk - Galileo phenomenon: Thus searching for truth and talking about truth in this Kali Yuga has severe consequences. Most people will not like you; and you might be jailed for speaking about the truth. This is what happened to Galileo and so we call it the Galileo phenomenon. Nobody likes the truth in Kali Yuga. Even though, Kali Yuga experience is very valuable and necessary in every life. Everybody must experience all shades of darkness; and the darkness is spreading gradually, and will take over completely.

Vedic Definition of Truth

The following describes the Vedic definition of Truths (VT). This will help us to understand the differences between the VT with the Modern definitions of Truths, (MT). This Vedic Truth, VT, can be found embedded in the verses, stories, and pages of both the Vedas and the Bible [Das, 2024b] ^[24].

(VT) “(1) The laws of nature are the only truths. (2) These laws are created by the objects of nature and their characteristics. (3) Nature always demonstrates its all truths.”

Properties of VT

From the definition of the VT we see that the truths and the laws of nature are synonyms. Therefore, such truths are unique, universal, and eternal. Unique means that one law will not contradict another law. Uniqueness also means everybody will understand the truth only in one way. Universal means if a truth is valid in USA it will be valid in China also. Similarly, if a truth is valid on earth it will be valid in any other planet in any galaxy of the universe. Eternal means if a law is valid now it will remain valid million years from now, and it was also valid million years in the past. Item three of VT guarantees that it will always be possible to observe every truth, just like Galileo did. This demonstration will be given by the nature only. No engineering experiment will be able to create a law of nature. For, every science and engineering theories has many assumptions, and all assumptions are false, that is, they violate the VT. There are differences between assumptions and approximations [Das, 2014b] ^[14].

Mathematics: This concept of uniqueness, universal, and eternal can be found in mathematics also. In every vector space there is a set of minimal independent number of vectors that span the entire vector space. This concept should be extended in the requirements analysis of all designs. If the requirements do not satisfy this property they will contradict activities resulting in redundancies, contradictions, duplications in the software modules and in performances. Thus we can see that the laws of nature have influenced mathematics.

Truth Sources: All truths must come from seer Yogis. Nobody else can generate any truths. The following books have been known to be written by seer yogis. Samkhya Karika by Kapil Dev; Gita spoken by Sri Krishna; Ramayan by Valmiki; and Mahabharat by Byas Dev. Only these books must be trusted. All other books have been written by or modified by non-seer yogis.

Examples of VT

As an example of VT, death is such a truth. We all die; astronomers have found out that the planets, stars, and galaxies also die. Since death is such a law, birth also must be a VT. Since the population of earth is neither exploding nor vanishing, humans must be recycling. Thus rebirth or reincarnation [Das, 2013a] ^[10] is also a law of nature, that is, a VT.

Science cannot obey VT

Science violates the VT definition of truth; because it does not deal with objects of nature. As an example numbers are not objects of nature; therefore numbers are false. Since physics uses mathematics therefore physics also violates the VT definition of truth. But chemistry uses objects of nature therefore everything in chemistry obeys VT. We can say the same thing about economics [Das, 2011b] ^[6]; economics uses mathematics; and does not use any objects of nature.

It is also shown that modern science does not have any truth, the main reason behind this assertion is that all science theories start with false assumptions [Das, 2023b] ^[22]. Assumptions are not laws of nature. Moreover, science thinks, and falsely, that engineering and technology are based on the modern science. Engineering works does not mean - used science theories are working in engineering and technology. It should be obvious, that false theories cannot work. Engineering partially works because engineering uses objects of nature.

Truth – Modern Definition

The Merriam Webster dictionary says – “Synonyms of truth: an idea that is true or accepted as true”. This definition has two problems – it defines truth in terms of true. It also says “accepted as true.” That is, if you accept it then it is a truth for you; and if I do not accept it, then it is not a truth for me. This essentially means “you have your own truth and I have my own truth”, which we name as MT, modern truth. If this is the situation, then Galileo would still remain in jail; and there will be wars everywhere. This definition is clearly not acceptable and therefore is wrong. The truth cannot depend on humans. Truth must be unique, universal, and eternal. So, we record this dictionary definition and identify it as our modern definition of truth:

(MT): “You have your own truth and I have my own truth”.

The article on Vedic definition of truth [Das, 2024] describes other definitions of modern truths like: Correspondence Theory, Pragmatic theory, and Coherence Theory. We will briefly describe them to satisfy your curiosity. One of them is described by a Nobel Laureate, the well known British philosopher and mathematician, Bertrand Russell.

Truth - Correspondence Theory

The correspondence theory of truth says that there must be a fact in correspondence with or in relation to the subject matter. This fact must be an event that has happened in nature. Bertrand [Russell] writes “Thus a belief is true when there is a corresponding fact, and is false when there is no corresponding fact.”

So, the truth is about the belief and not about the fact. In VT the truth is about the fact, about the nature, about the laws of

nature. In VT we try to understand the universe. In correspondence theory we try to understand your belief or my belief. As an example, in VT we try to understand if reincarnation is true for everybody or not. In correspondence theory we ask if you believe in reincarnation or not. So the premise has changed from the universe to you.

(Paragraph A) In his article “Truth and Falsehood”, Bertrand Russell, a Nobel Laureate in literature (1950) says, [Russell]:

“There are three points to observe in the attempt to discover the nature of truth, three requisites which any theory must fulfill. (1) The theory of truth must be such as to admit of its opposite, falsehood. (2) It seems fairly evident that if there were no beliefs there could be no falsehood and no truth either, in the sense in which truth is correlative to falsehood. (3) But, as against what we have just said, it is to be observed that the truth or falsehood of a belief always depends upon something which lies outside the belief itself.”

Item (3) says - belief depends upon something outside the belief itself. Item (3) is a realization that the material world is not enough to define the truth. It is a yearning for soul theory and therefore VT. Russell suggests that in his comments below in (Paragraph B):

(Paragraph B) “If we imagine a world of mere matter, there would be no room for falsehood in such a world, and although it would contain what may be called 'facts', it would not contain any truths, in the sense in which truths are things of the same kind as falsehoods. In fact, truth and falsehood are properties of beliefs and statements: hence a world of mere matter, since it would contain no beliefs or statements, would also contain no truth or falsehood.”

In Paragraph-A Russell talks about three things: True, False, and Belief. In Paragraph-B he talks about matter and only matter and therefore no truths.

In “The value of philosophy” article Bertrand Russell contradicts item (1) above. And he is correct; there are no opposites in nature. He says - “Philosophic contemplation does not, in its widest survey, divide the universe into two hostile camps--friends and foes, helpful and hostile, good and bad--it views the whole impartially.” Item (2) is equally false; truth cannot be linked to human beliefs. Item (2) thus becomes the same as the Merriam Webster dictionary definition MT. Item (3) contradicts item (2) – “Truth depends on something outside the belief” [Russell].

Thus the correspondence theory of truth seems to collapse. This has happened because this philosophy ignores the soul theory, it ignores that “I am the soul”. Matter cannot think, matter cannot see. That is, the sense organs do not work without the soul. Soul theory says there is no good and bad, everything is destiny, or completely planned.

Humans cannot understand any laws of nature

We give one examples to illustrate the point. Do we know why eclipses happen? Science will say, yes, it knows. Eclipses happen because, objects rotate around themselves. Why do they rotate? Otherwise they will fall on each other, because of gravity. But what is gravity? All objects attract

each other because of gravity. But attract and gravity are the same words. We know that yogis can float in the air. In Bible we have seen Jesus walked over the water. Saint Joseph of Cupertino could float [Grosso]. There are many modern Yogis, including UFO-ETs [Das, 2023a] ^[21], who can also float defying gravity. Thus we do not know what gravity is. We have deceived people by using technical jargon gravity, instead of the more commonly used word attraction. Since we do not know gravity, we do not know eclipses.

This way if we ask questions after questions, in search for truth, we will find that we do not know the meaning of any laws of nature. Check for many other examples like Gravity, Eclipses, medicine, cause and effect laws, etc. The destiny law [G.7.26] says 'No one can know Me'. That is, all answers are hidden inside the soul theory, which no one can know, because we cannot understand our soul, which is not material, it has two properties: intelligence and consciousness. Soul is the creator, and creations cannot know the creator, just like a robot cannot know the humans, because humans have created the robots. Foundation of soul theory is based on Yoga and Yogic power. Yoga is the process of connecting your mind to your soul. See example of Swami Rama on gravity.

No example of Yogic Power [Das, S. 2020b] ^[19] can be explained by material logic. If soul wants matter performs it. Krishna said no one can know me. Here 'me' is the soul, any soul, including your soul. This power can be demonstrated but cannot be explained. These are the characteristics of the Purush and the Prakriti particles. Even Krishna had to demonstrate to Arjun in Gita. Is there anything that humans understand?

Catherine

She picked the winners for every race in the racetrack, to demonstrate her yogic power, to her skeptic father. Dr. Weiss also went with them. Catherine gave away all the money to the first poor man she found on the street on her way out of the track. Dr. Weiss wrote, 'I was both shocked and fascinated by her psychic abilities, especially the episode at the racetrack. This was tangible proof. She had the winning ticket to every race. This was no coincidence' [Weiss].

Quality of the video

As one example, in one session of hypnosis, Catherine describes watching her own birth from her own mother in one previous life. Catherine says her mother's shirt was very rough and it was hurting me when the nurse moved me on her body. This shows that Catherine has acquired very high quality third eye vision. Such high quality of vision made her to predict horse race results so accurately. Such results show that both the vision quality and data quality are very perfect at all levels of details. If the error happens in the prediction, then it cannot be said that content is bad, but it must be blamed to the person predicting the vision. Quality and data in [G.7.26] are protected by the conservation laws of nature [Das, 2020].

Robots will not be able to predict destiny.

Catherine's examples cannot be demonstrated by a robot or AI devices. Matters cannot be changed to a different matter, like water to wine, or meat to sweets etc. Death time cannot be predicted by robots even if we know all the activities of

past and present times for every person on the planet earth. This is so, because death can happen at any time for any reasons. Since one event cannot be predicted therefore all events remain uncertain. Therefore destiny cannot be predicted by robots or any AI machines. Only a yogi can predict all events correctly, because they can 'see' all of them.

Note that those yogis who predicted the past events even fairly accurately, like Nostradamus, have not predicted by knowing all the events and then using some algorithms. They used some kind of third eye vision, which they have acquired by doing yoga meditation or by birth.

High court example

A mathematics professor wrote down the verdict of a high court case, a week before the judgment. He then sealed the paper in an envelope. When the judgment was announced, the envelope was unsealed, and found to contain the exact same statements including the two punctuation errors at the exact same locations [Rama, S. 2007] ^[42]. Thus even the errors are copied; once again, we do not have any freewill. It is clear then that our physical body, including the sense organs, action organs, and the brain do not have any intelligence. This is specifically mentioned by the Samkhya Verse 31, repeated below:

[SK: 31] The organs enter into their respective modifications being incited by mutual impulse. The purpose of the Spirit is the sole motive (for the activity of the organs). By none whatsoever is an organ made to act.

Mind is considered as an organ, because it has the characteristics of both the sense and the action organs. All yogic power examples fall in this category – they cannot be explained. Same thing is true - diseases cannot be cured – like blind cannot get visions; AI cannot perform such miracles. Nonexistent cannot become existent – says Samkhya.

Pat Norris example

On one occasion when Alyce, the Swami, and I were eating lunch at home, Pat Norris telephoned. She asked the Swami if she could talk to him for a few minutes at 1.30 P.M. He said yes. Turning from the phone, he asked me to find a paper and pencil for him. Then he sat on a couch in the corner of the living room and began thinking and writing while Alyce and I cleared away the dishes. I kept wondering what he was doing. Glancing his way, I noticed that he had put the piece of paper face down on a chair.

Just as we were leaving to return to the office, Pat arrived. Later that day, I asked Pat what kind of conversation she had with the Swami, and she said that an odd thing had occurred. The instant she came into the house he said, Ask me a question. She said, what do you mean, ask you a question? And he said, Just ask me a question, something important.

At first she could not think of anything, but finally she asked, Should Peter (her son) go to a private school?. Then he said, Ask me another question. and she said, Should I return to college to get a Ph.D.? And he said, Ask another question. Pat said that he kept asking for questions until she had asked seven questions. When she was through with the last one he grabbed the paper and handed it to her. Most of

her questions (and some suggestions) were written there. One was wrong and one was only partly related to the subject, but the others were correct. She said this was a real surprise [Green, 1977, p.217-218] ^[31].

I tried to copy exactly to understand why the book said – “One was wrong and one was only partly related to the subject.” We are all like robots, according to soul theory. When we talk over cell phones many different layers of translations happen: Human voice to mechanical vibration, to electromagnetic waves, to analog electronic signal, to digital binary code, to the reverse process for human hearing. Where can the error happen? The book is available free on the internet [Green, 1977] ^[31].

This example shows that moment by moment our life is precisely defined. Pat did not have any chances, choices, or freewill to ask a different set of questions. This example also illustrates that the memory is not in our brain, it is in the universe. The birthmarks examples given here [Das, 2013c] ^[12] shows also that memory is not in our brain, but a yogi can read that memory.

Truth - Pragmatic Theory

William James says, in lecture 6, on Pragmatism's Conception of Truth:

“The moment pragmatism asks this question, it sees the answer: True Ideas are those that we can Assimilate, Validate, Corroborate and Verify. False Ideas are those that we cannot. That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known-as” [Williams, p87].

Therefore, we can rewrite the above paragraph as: (1) Any idea has the potentiality to become a pragmatic truth (2) if it can be verified (3) to make a practical difference in our lives.

Pragmatic Theory is not based on facts; it is an idea, created by the humans. It can always be possible to find a human for which the idea can become invalid, against the belief, or not satisfactory. Particular in modern society, based on money and money power, nothing can be good for everybody. A system that generates poverty and distributes poverty can never be pragmatic. At this time we have two billion people on earth under poverty. Statistics says - Nine million people die of poverty every year on earth [Poverty]. This makes the Pragmatic Theory same as dictionary definition of truth MT. Pragmatic theory is a selfish approach; it does not have any global philosophy.

Truths cannot be created

It should be known that the truth cannot be created by humans. Truths are unique, universal, and eternal. Such truths are produced by nature only. Humans must learn to observe such truths and try to understand them. Even death cannot be created by humans. It happens naturally and automatically. It is the moment the soul leaves the body permanently. Even a high level yogi cannot leave the body at his or her own chosen time. We are all guided by the destiny law.

Truths cannot be verified

Also truth cannot be verified. Truth is the consequence of simultaneous action-reaction of all objects over all time over

the entire universe. All souls of the universe are simultaneously connected and always interacting. No humans have any capability to create such an environment for any event of nature. No two events can be identical; there will always be space, time, age, and environmental differences. Therefore practical differences in our lives can never be recreated, reproduced, or offered. Thus once an event is gone it is gone forever. Thus there is no pragmatic way to analyze and test any event. Whatever was valid at one time cannot become valid again at another time. Destiny never repeats for any object. Concepts should be carefully understood. The language appears to be contradicting.

Truths - Coherence Theory

(1) Coherence theory assumes [Young] the existence of a space generated by all true statements. (2) If any statement belongs to that space then that statement will be considered as true. (3) Otherwise, the statement must be false.

Note that this theory is about statements, and not necessarily about facts. The facts however, can be described by statements. Questions will always remain – who can understand the facts. Also who generates these truth spaces, and how, are not described. The entire space can be wrong and yet the candidate can be true. As an example consider the space: (a) the set of {All science theories: which are based on assumptions} as the space and the candidate (b) as all humans reincarnate. In our time of Kali Yuga, the space (a) is considered as true and the candidate (b) is considered false.

The coherence theory does not raise the issue of belief as a determinant factor of truth. But who will decide that the candidate belongs or not in the accepted space. In the Kali Yuga [Gonzalez, 2002] ^[29], it is the money and money power that decides the truth. This culture reverberates inside the households and even between the spouses. This way the coherence theory becomes the same as MT.

Again [Russell, in Truth and Falsehood] says - “Thus coherence as the definition of truth fails because there is no proof that there can be only one coherent system.”

We can see that the Coherence Theory can be the same as VT, if we recognize that the space as the laws of nature. This space, as the collection of all the laws of nature, is clearly a coherent space, and covers all the candidates. The VT does not rely on any belief system, money, or money power. This is so, because VT is not created by the humans.

Benefits of the Truths

We have shown that all modern theories of truths are same as the definition given in the Merriam-Webster dictionary, which essentially becomes the following (MT): “You have your own truth and I have my own truth”.

And under such situation, Galileo will still be in jails. And you and I will be at war. MT also does not show the impacts of Galileo, Reincarnations, etc., can make in our lives. Such truths, like VTs, are unique, universal, and eternal. Knowing VTs can improve your health, make us disease free, bring happiness, and peace of mind. They can even bring global peace on earth [Das, 2020a] ^[18].

What is a Proof?

We have defined truth and we have also shown why we cannot generate truths. Here we show how we can document things. A little detail will show that we cannot even document laws of nature demonstrated by nature.

Grand Canyon

As an example we cannot describe the experience of seeing the Grand Canyon, when we watched it for the first time. A camera picture will not give any feeling. A video also will not be enough. Ask the best author to describe the Grand Canyon in English language; and you will find even that will not match the video. We cannot then definitely describe the camera video by any kind of mathematical language. Thus nature cannot be described.

Can we even describe a human being? Is the temperature or the blood pressure good enough to describe any characteristics of any human or any animal for that matter? Such failure to describe any object is mentioned in the destiny law as – “Me no one knows.” Here Me is the soul inside your body or my body. It has gone through several thousand reincarnations, it cannot be known by making any kind of measurements. Impact of such measurements for our societies is beyond even any meaningful insignificance. The consequence of such mathematical activities is naturally, the deaths of nine million humans per year on our earth due to [Poverty] alone. Our education system has failed us very miserably in all disciplines. No amount of crying out can relieve any pain to any one of us. It reminds me the Bengali song – “Oh Ganga, the holiest river, why you are still flowing so silently, without any sound, seeing the agony of the vast settlements of innumerable and miserable population on the two sides of your long banks” [Hazarika, B].

We copy the definition of truth here again, for quick reference.

(VT) “(1) The laws of nature are the only truths. (2) These laws are created by the objects of nature and their characteristics. (3) Nature always demonstrates its all truths.”

Reading the VT we can understand that the numbers are not objects of nature. Therefore according to VT the numbers are false and fake. Therefore the numbers cannot generate any laws of nature, which are the truths. Therefore the numbers cannot be used to explain the laws of nature. We have shown that we cannot justify that “this apple is \$5”. The definition of truth says that all truths are demonstrated by nature only. Therefore only by observations can we understand the truths. Humans cannot generate truths because our knowledge or our science is based on assumptions; therefore our theories are all false. The following Samkhya [SK, 1995] ^[41] verse says how to establish the truths.

How to Prove:

[SK:4] Perception, Inference, and Valid Testimony are the means; (by these) all other means of right cognition too are established (as they are included in the above three); proof is intended to be of three kinds. It is through the proofs that the provables are established.

For more details take a look at the soul theory chapter in the soul theory book [Das, 2014b] ^[14].

Thus languages cannot give us a proof. Since mathematics is a symbolic language, mathematics cannot give us any proof. Logic also cannot give any proof. Logic is only a language,

carefully arranged words, words are synonyms only; they come from a dictionary. Languages must come from the truth sources (Gita, Samkhya, etc.) mentioned before.

We have five sense organs of knowledge. Only they, when combined, can give us a proof. Each sense has a different meaning; all of them are different, and independent to each other. Thus [SK:4], mentioned above, is the only proof; and in that the perception gives the unique results; other two are languages only, and already documented. Perception is the engineering, and represents tangible things. Our technology has a way to document them, which can be reproduced or manifested to some extent. But as mentioned in many ways in this article, that laws of nature cannot be created, demonstrated, by humans, and documented.

Single Vs Multidisciplinary Research

To know the truth you must acquire multidisciplinary knowledge. Remaining focused on a single discipline will keep you ignorant about life and therefore about the universe. To illustrate the point, suppose you are shown a dice, which has six faces, and each face has a specific number. If you look at only one face, or if you are allowed to see only one face perpendicularly, then you will think that it is only a square plate with a number. But if you look from an angle then you will see three faces with three different numbers in each face. Thus single discipline will keep you blind and narrow minded. There is a very well known kids’ story book – Blind men and the elephant - in this context [Quigley]. Kids should know about this book.

Krishna, the author of Gita which is a book in Vedas, was a perfectly knowledgeable and a seer yogi in all subjects. There are several verses in Gita describing his multidisciplinary qualities. He was responsible to create the war described in Mahabharat story of Vedas and make the transition of the Yuga from Dwapor to Kali. The story of Mahabharat is not a myth; it is real, because what happened in Mahabharat time is happening today even now in our earth. Here is [G.10.26] one of the many verses on his multidisciplinary knowledge. Krishna is telling Arjun:

[G.10.26] Of all trees I am the banyan tree, and of the sages among the demigods I am Narada. Of the Gandharvas I am Citraratha, and among perfected beings I am the sage Kapila.

Such verses can be found in the western literature also. In the above verse [G.10.26] Krishna tells Arjun about his personal capabilities and qualifications. Krishna is considered as God by most people in India. But there is no God in Vedas. All humans are yogis, and Krishna is a highest level yogi. You cannot become properly qualified and understand the universe unless you are a multidisciplinary person. In this verse Krishna said, “among perfected beings I am the sage Kapila”. Kapila is the author of the Samkhya Karika. Thus Samkhya is, according to Krishna the best book of knowledge; and not only that Krishna says that Krishna is also as good as Kapila. Thus if any idea of any author in Vedas contradicts with Samkhya, then that author must be rejected.

There are few other verses like the above [G.10.26] to indicate his multidisciplinary knowledge and skills. There is the following verse [G.18.22] which says that you cannot know even your own subject if you are only a single disciplinary person, like mathematics or physics. Idea of

God violates Samkhya, and makes Gita inconsistent. In Sattya Yuga there was no God. Any Yogi could approach directly to any God like Brahma, Vishnu, and Shiva in the Sattya Yuga.

[G.18.22] And that knowledge by which one is attached to one kind of work as the all in all, without knowledge of the truth, and which is very meager, is said to be in the mode of darkness.

Mind is not an integral part of the human body. When we die our mind does not vanish, it stays with us, inside our subtle body. That is the main reason how Jatiswar Kids remember past life memory. This is the core idea of the Gita verse [G.7.26]. You can acquire this skill by birth and/or by meditation. Physics people should go multidisciplinary to learn the true nature of the universe. The comet 3I-Atlas has given enough examples and data to show how the soul theory works. Many physicists said that their life time of knowledge failed them to understand the comet 3I-Atlas. It seems that the 3I-Atlas has come to teach us the soul theory subject and open our minds from the closed door of ignorance, due to devotion in only a single subject. Humans did not change; souls did not change; only the amount of truth has changed in the allowed access to the destiny memory. It should be noted that 3I-Atlas videos are AI generated; therefore their authenticity may be debatable.

All souls are interconnected

And therefore there is no object that is not conscious. That is so because every object is created by a soul particle and that soul particle remains inside that object. Thus all objects are physically connected by their consciousness property. Two material particles cannot join together by themselves. One human (intelligent) soul will be needed to make them join. Sperm and Egg cannot join to create a baby; one human soul must agree to join the couple. The Ramayan story proves that by showing the example of King Dasarath, the father of Sri Ram. Dasarath had three wives but he still could not get any children. Ultimately he performed a fire ceremony (Yogya) by a renowned seer yogi, who helped to manifest a divine person out of fire, with a bowl of sweet pudding (paess). This paess was served to three wives of the King, and only then the wives could conceive four children. See the article on - Yogic power, the highest power in nature [Das, 2020b] ^[19], and also the article on - Yogic power of UFO-ETs [Das, 2023a] ^[21] for many examples of yogic powers. The Bible also has many examples, but Bible calls them miraculous signs instead of yogic power [Das, 2024b] ^[24]. The Vedas and therefore the universe cannot be understood without understanding yogic power or the Soul Theory (ST). The case of 3I-Atlas is a modern example. The universe is not passive, it is active and communicating with us all the time; and you can know that at any time, by reading the destiny memory.

Engineering Education

All humans should have engineering education. More you know about engineering better you understand the society, life, nature, and the universe. You can see everything around us, including the nature is part of engineering. Any subject that deals with objects of nature is an engineering subject. Thus medical surgery, cooking, games (base ball, soccer, etc., but not video games), are engineering, besides the

standard subjects like electrical, mechanical, civil engineering, etc., humans are probably the most sophisticated engineering products of the universe. The sun is an example to show the enormous power of a soul.

Knowledge and experience

If you do some research on the definition of truth, you will be surprised to learn that the scientists and philosophers did not perform any meaningful and careful research on the definition of truth. Eventually you will be convinced that it is dangerous to perform research in this direction. Yet, nobody, including the physicists and mathematicians do not want to recognize that we need a definition of truth; question the validity of any subject, and find a methodology to verify the truth. Unfortunately, physics and mathematics do not have the responsibility to prove even anything. Engineering always fails, and performs wrongly, and we see that all the time. How often our cars breakdown, how often windows operating system crashes, how often kitchen faucet leaks? This happens because engineering uses wrong science and without understanding them properly [Das, 2023b] ^[22]. Engineering is full of patches and kludges [Das, 2012a]; so naturally they will crash. Whatever good engineering does, is because engineering uses objects of nature.

Consequences of telling the truth must be also known. The societies have a power structure, no matter, where we are in the Yuga structure. Galileo, UFO-ET, Reincarnation, God, etc., are such truths. Science power, math power, money power etc., are also dangerous subjects. Become a yogi and you will get everything you want, but you must be a multidisciplinary and most knowledgeable man like Krishna or Shiva. We are in Kali Yuga, which by design has only 25% truths, according to Mahabharat [Roy, n.d.] ^[45].

Universe is Periodic

We can easily see that everything on earth is periodic. Our heart beats periodically at certain rate. Our days and nights come periodically every twenty four hours. We have a day time for twelve hours, followed by twelve hours of night time. This day and night continue with same period for eternity. Earth goes around the sun periodically in 365 days. As a result we get different seasons, summer, winter etc. These seasons repeat periodically also. We know that the earth's vertical axis is tilted; and that also spins periodically. All of these numbers are approximate only and changes every period; as everything is moving with respect to everything else. There is no precise geometry in the three dimensional space. Because there is a fixed death time, nothing can remain constant.

There is a theory in mathematics that says if you sum periodic waves the result will be periodic also. This theory is very popular in modern science and it is called Fourier series. Humans take birth and die; and we can see that is happening all the time. Thus death is a law of nature. Since death is a law of nature, birth must be also a law of nature, otherwise who will die. If the rates are not same then the humans will vanish from earth or explode in numbers. But we do not see that is happening; which means humans are reincarnating or recycling. Everywhere on earth we see reincarnations are happening [Das, 2013c] ^[12].

Truth is vanishing from the earth. In thermodynamics it is said that things become chaotic. Entropy increases, entropy is a measure of chaos. But chaos is not defined. All these

things happen under the assumption that there is a beginning. Yes, that is true, but beginning comes back again and again, beginning is periodic also. Such events happen so far apart that we forget them, even the earth does not remember. Entire universe vanishes, nothing remains visible. The universe remains in that vanished state for 4.3 billion years. It is called Brahma night. Then one by one all the objects take birth again and the universe becomes full and humming with life for another 4.3 billion years, called Brahma day. Everything repeats this way for every 8.6 billion years called a Kalpa.

There is no infinity, because we always die, after a birth. The universe does not really become empty. The root material causes, called Prakriti particles, and root intelligent cause particles called Purush particles, subtle body, memory in the universe, they all remain. You will be able to see them if you acquire the third eye vision. Thus the yogic power is the foundation of Vedas. In the Bible the yogic power examples are called the miraculous signs [Das, 2024b] ^[24].

Periodicity and Yuga Theory

Destiny and money are two most important factors controlling our lives; destiny being at the higher level than money power.

As evident from the observations on economics that the money and money power is the highest level controller, ruler, or king of the earth. It has very long hands, and its hands reach every person in every home. Everybody is scared of losing money; therefore they will work for money as a most faithful slave. If you do something wrong, your friends, family members will be the first person to take you to jail, and this is called the Galileo Phenomenon; even if you tell the truth.

In the same way destiny is the highest level truth and the law of the universe, which includes our earth and all the UFO-ET lands. Thus money power is also under the control of the destiny law. Nobody can escape destiny, and moment by moment our soul is completely controlled by the destiny commands. But here we obey these commands, without even knowing it. Destiny law is above the economic theory. Destiny has created the economic system in the Kali Yuga. So nobody can be blamed for the misery. There is no good and bad under destiny [Das, 2022] ^[20]. It is mentioned that in the Sattya Yuga there was no money, and no economic system. And that was the longest period on earth with the happiest time. Sattya Yuga comes every 4.3 million years and lasts for 1.73 million years.

Yuga theory is described in the Mahabharat story, which is written by Byasdev, and he is also the author of the Gita. Byasdev is considered as one of the highest level seer yogis and is as good as Krishna. Thus the Yuga Theory must be very authentic and reliable theory. We have given an example of a modern seer yogi, Catherine [Weiss]. We have examined the authenticity of her powerful third eye vision. Only seer yogis can be trusted, and not anyone else.

Yuga theory has some obvious rationality from mathematical thoughts. We are familiar with waves in lakes, ponds, and oceans, etc. You may be able to conceive, that if you add some smaller waves, like 10 cycles and 15 cycles, then you will find that the result will be another periodic cycle with longer period, longer than both 10 and 15 cycles. You can see a graphic example of this concept in [Rogness]. In this same way our reincarnation cycles add up to Yuga cycles of such long periods. Yuga theory says every 4.3

billion years the universe remains dark for 4.3 billion years. Thus one 24 hour period is 8.6 billion years; 12 hours of day and 12 hours of night.

Number of years in Yugas

In Mahabharat, Rishi Markandeya said, "Four thousand years have been said to constitute the Krita (Sattya) Yuga. Its dawn as well as its eve, have been said to comprise four hundred years. The Treta-Yuga is said to comprise three thousand years, and its dawn, as well as its eve, is said to comprise three hundred years. The Yuga that comes next is called Dwapara, and it has been computed to consist of two thousand years. Its dawn, as well as its eve, is said to comprise two hundred years. The next Yuga, called Kali, is said to comprise one thousand years and its dawn, as well as eve, is said to comprise one hundred years. Know, O king, that the duration of the dawn is the same as that of the eve of a Yuga. And after the Kali Yuga is over, the Krita Yuga comes again. A cycle of the Yugas thus comprised a period of twelve thousand years. A full thousand of such cycles would constitute a day of Brahma. The same number is for one night of Brahma [Roy, Vol3: p397]."

Note: one human-year, which is one circle around the sun = one god-day. One god-year is 360 god-days. Krita Yuga is also known as Sattya Yuga.

Characteristics of humans living in different Yugas

We describe only two of the four Yugas below: Sattya Yuga and the Kali Yuga. Sattya Yuga shows that everything was true at that time and Kali Yuga has only 25% truth. We are in the Kali Yuga now. The following description is given by Sri Hanuman of Ramayan story to Bhim of Mahabharat story. Hanuman-Ji, lived in both Treta and Dwapar Yuga, was a highest level seer yogi, and is considered as an Avatar of Shiva.

Life in the Krita (Sattya) Yuga

Ramayan and Mahabharat stories are not myths; they are real and very trustworthy. A simple proof is that whatever happened then are still happening now. As an example one of the most important events in Ramayan, was the kidnapping of the wife of a married man, Sri Ram. Even today the same event is happening in every year, at least somewhere, in some country on our earth.

So, do not think that these stories are myths. There are modern yogis in Kali Yuga who have demonstrated similar capabilities of third eye vision [Das, 2014a] ^[13]. Again, from Mahabharat we find that in the Sattya Yuga: "there were neither gods, nor demons, nor Gandharvas, nor Yakshas, nor Rakshasas, nor Nagas. And there was no buying and selling. And the Sama veda, the Rich veda, and the Yajus veda did not exist. And there was no manual labor. And then the necessities of life were obtained only by being thought of. And the only merit was in renouncing the world. And during that Yuga, there was neither disease, nor decay of the senses. And there was neither malice, nor pride, nor hypocrisy, nor discord, nor ill-will, nor cunning, nor fear, nor misery, nor envy, nor covetousness" [Roy, Vol3: 318]. Covetousness = greed.

We have explored [Das, 2023a] ^[21] the yogic power of the UFO-ET. It is believed that such humanoids must have come from other planets which are now in their Sattya Yuga. It is possible that they have come to help us or

experience our impending catastrophe in our Kali Yuga. Some of the ETs have shown such visions of destruction, to their earth abductees. We can see that there was no money in Sattya Yuga. There were no wars or lies also. It is the destiny that dragged us into the Kali Yuga. So we are all responsible for this situation. Destiny is a very high level global plan. We cannot feel it because such Yugas are very far apart in time scale, so we forget them.

Life in the Kali Yuga

We are in the Kali yuga on earth at the present time. It started at the end of Mahabharat war, and after the death of Sri Krishna. The book on Soul Theory, [Das, 2014b] ^[14], gives some estimates of the time period of the end of Mahabharat based on the modern technology like – ocean water level simulation analysis, under ground radar imaging, archaeological discovery of under ocean structures, and the carbon dating of artifacts found in the west coast of India, etc.

Mahabharat says:

“A quarter only of virtue abides. And in the beginning of this iron-age, Narayan wears a black hue. And the Vedas and the institutes, and virtue, and sacrifices, and religious observances, fall into disuse. And (then) reign of disease, and lassitude, and anger and other deformities, and natural calamities, and anguish, and fear of scarcity. And as the Yugas wane, virtue dwindles. And as virtue dwindles away, creatures degenerate. And as creatures degenerate, their natures undergo deterioration. And the religious acts performed at the waning of the Yugas, produce contrary effects. And even those that live for several Yugas conform to these changes [Roy, Vol3: 319]”.

Thus to make any changes to any system on our earth in this kali Yuga, all you have to do is wait for the time to come. Everything will automatically happen; you do not have any freewill or choices. You keep doing what your soul is telling you to do. “Your soul is always talking to you, listen carefully, and you will be able to hear”. That is the title message of the soul theory book [Das, 2014b] ^[14]. Like in Vedas we see in Genesis [5:5, 6:3] of Bible that in the past some people used to live for 1000 years, whereas now they will live for 125 years only.

We are souls, we do not die

Eventually we will go back to the Sattya Yuga, when Moneyless Economy (MLE) will reappear and therefore truth will also come back [Das, 2012b] ^[8]. In the mean time we must acquire the lessons and gain the experiences. We are not going anywhere; we will be together for eternity also. We were there in the many previous Sattya Yugas and in the many previous Kali Yugas; and our souls know that. Nobody should feel frustrated; this is a part of the lessons of life. We all together created this destiny, by our act of simultaneity. This is the global plan and design for the universe. Thus we all are equally responsible. This is what Gita says, as we have mentioned in the destiny section:

[G.3.5] “Everyone is forced to act helplessly according to the qualities he has acquired from the modes of material nature; therefore no one can refrain from doing something, not even for a moment.”

Thus according to Gita, we are helpless, we are forced to act. Every moment we are guided by our soul. And this is true for both the masters and the slaves on this earth. Time will automatically come when a savior will be born and solve our problems using a major global war on earth, just like it happened in Ramayan period and also in Mahabharat period. Again Gita confirms that:

[G.4.8] “To deliver the pious and to annihilate the miscreants, as well as to reestablish the principles of religion, I Myself appear, millennium after millennium.”

Here in [G.4.8] the word I means a highly powerful seer yogi, like Sri Ram in the Treta Yuga when we had 75% truths, or Sri Krishna in the Dwapar Yuga when truth was 50%. This is how periodicity, reincarnation, and simultaneity work. The word millennium is used for the translation of Yuga. So we must not blame anybody. We are all equally responsible. This is the law of nature. This is the same feature of a single human life extended over Yuga cycles. We are born with new energy, grow to our maturity, sincerity, honesty, according to the Yuga of our time, then our body breaks down slowly and some disease catches on and kills us.

But in Sattya Yuga there are no diseases, we simply cast off our bodies. In sattya Yuga we lived for 1000, 10000, or even 100,000 years. Rishi Markandeya lived for over a million years spanning Sattya and Treta Yugas. This Yuga theory says some powerful yogi appears and then cleans a Yuga to establish the path for the next Yuga. But it also talks about destroying the earth completely into darkness for 4.3 billion years to pave the way for next 1000 cycles of sequences of four Yugas, called Maha Yugas.

Gita - verses on Yuga theory

[G.9.7] O son of Kunti, at the end of the millennium all material manifestations enter into My nature, and at the beginning of another millennium, by My potency, I create them again.

Millennium = Kalpa in the verse [G.9.7] = 4.3 billion years = one day light period = one dark night period; Total is 8.6 billion years. Each Maha Yuga is 4.3 million years.

[G.4.6] Although I am unborn and My transcendental body never deteriorates, and although I am the Lord of all living entities, I still appear in every millennium in My original transcendental form.

[G.4.7] Whenever and wherever there is a decline in religious practice, O descendant of Bharata, and a predominant rise of irreligion—at that time I descend Myself.

Many people say that over time chaos happens [G.4.7], but that is not the case. All events happen as planned by the

destiny. Our small knowledge and ignorance due to analysis over small duration and over small space we cannot see how larger events are responsible for this small perturbation.

[G.4.8] To deliver the pious and to annihilate the miscreants, as well as to reestablish the principles of religion, I Myself appear, millennium after millennium.

[G.9.10] This material nature, which is one of My energies, is working under My direction, O son of Kunti, producing all moving and nonmoving beings. Under its rule this manifestation is created and annihilated again and again.

[G.8.17] By human calculation, a thousand ages taken together form the duration of Brahma's one day. And such also is the duration of his night.

A thousand maha Yugas is one Kalpa, also called, a Brahma day. One Brahma day = one day + one night.

[G.8.18] At the beginning of Brahma's day, all living entities become manifest from the unmanifest state, and thereafter, when the night falls, they are merged into the unmanifest again.

[G.8.19] Again and again, when Brahma's day arrives, all living entities come into being, and with the arrival of Brahma's night they are helplessly annihilated.

Thus there is no beginning or ending. It is always periodic or cyclical for eternity. Thus time starts when an event starts and time ends when the event ends. Every event has a time associated with it. When I take birth, my time begins and when I die my time ends. This is my life time. If you consider waiting time for reincarnation, then that is another type of time; it becomes a periodic time. Same thing is true for the entire universe. All these events are recorded in the memory of the universe, and therefore can be seen by any seer yogi. Thus Yoga is the foundation of the Vedas [Das, 2025] [25].

[G.2.32] O Partha, happy are the khatriyas to whom such fighting opportunities come unsought, opening for them the doors of the heavenly planets.

Thus it is an opportunity to fight for Yuga transition. For calculation details see [Das, 2023a] [21], The Yogic Power of UFO-ETs].

Problems with Mathematics

There are many types of languages; but all are same or equivalent. That is, same thing can be expressed in any one of these languages. Languages can be oral (English, Bengali, etc.); symbolic like mathematical or computer programming code etc. The drawback of these languages is that none of them can give any new information. All perceptions or observations like our experiences from our five sense organs can be expressed equally well in any one of these languages. However there is only one unique language common to all of them and is called telepathy. An example of telepathic experience of a modern yogi is described in the example section [Govinda]. In this chapter we describe the problems

of Computer languages, English languages, and Mathematical languages.

It should be realized that none of these languages can provide any proof or explanation of any effect we observe in nature or the universe. For example we cannot explain, using any one of the above languages, why eclipses happen. Dynamic Programming (DP) is a branch of mathematics. Thus before we talk about DP, we should first observe the problems with mathematics.

Mathematics is a symbolic language

Therefore mathematics cannot generate a proof; mathematics can only translate English textual language to a mathematical symbolic language, like in algebra or calculus. The same is true for a computer programming language, like Visual C++ language, or Simple C language presented in this article. As an example consider the following algebraic expression (3):

1. Cost of this apple is \$5; this is an expression in English
2. Apple = 5; one step towards Mathematics
3. A = 5; this is a Mathematical expression

Thus (3) cannot be a proof for (1); (3) has only a simpler notation for (1). All Sattya Yugas do not have any money, but we have a money system in all Kali Yugas, where we assign numbers to everything. As a result nine million people die every year, in our earth, because of [Poverty] only. This is how mathematics brings catastrophe.

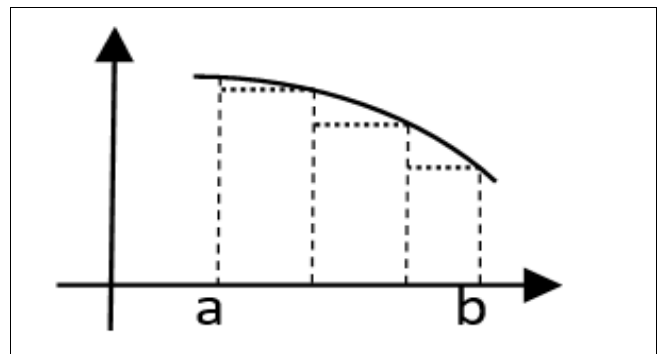


Fig 1: Area under a graph

Similarly calculus also uses symbolic notations, it is a symbolic language too, and it only translates English statements to symbolic statements. Thus calculus also cannot generate any extra information; it only presents the original information using symbols. A differential equation cannot carry any new information from the solution graph of the equation. We know that all of the following are equivalent: Numeric data, a single line graphic representation of the data, algebraic equation of that graphic representation, differential equation, integral equation, operator theoretic representation, functional equation, etc.

Let us take another example: The area under the graph in the annexed Fig 1 is 10 units.

4. Suppose the area under the graph $g(x)$ from point a to point b is 10 units
5. Area = sum of the areas of the rectangles shown by the dashed lines
6. Area = sum of the areas of the rectangles = $A_1 + A_2 + \dots + A_N$
7. $Area = \sum_1^N A_i = \sum_1^N g(x_i)dx = \int_a^b g(x)dx$

Where we have used $g(x_i)$ as the height of the rectangle at point x_i and dx is the same width of all the rectangles at all points. In the last part of (7) we eliminated the subscript i

and moved the understanding of it to the reader. In (7) we used different symbols for the word sum. These symbols are only for simplification. To reduce the space requirements I have avoided many details in the above steps. I also assumed that the reader understands mathematics.

Expression (6) is a reuse of the definition (5), giving no additional information. Looking at any mathematics carefully will show that it is a language, just like software is a language, and therefore they cannot give a proof of any thought expressed in another language like English. Proof is given by the objects of nature and events from nature. We can sense them in one of our five sense organs like ear, nose, eyes, etc.

Why do we need numbers?

It is not necessary to introduce limits and continuity to teach calculus. We show later that the material particles are discrete, but their properties are continuous. But again, it should be realized, and as shown above, that mathematics cannot contribute to any additional knowledge or information. Numbers are not real; they are points on a straight line. A straight line does not exist in the universe. As we have mentioned, you cannot draw a straight line from earth to moon, because both are moving in 3D space. Thus numbers cannot be used in nature and engineering. Our systems and theories can fail catastrophically [Das, 2012a] if we use such numbers; and we will never know how the numbers caused it.

Catastrophic Examples

If you use Fourier Transform to get the frequency spectrum you will get one unique spectrum. But if you use finite duration Fourier Transform then you will get many different spectrums and you may have choices [Das, 2013a]^[10]. Knowing that, nature does not have infinity, you will be using wrong spectrum, causing catastrophic system failure. Same is true for Finite duration Laplace Transform (FLT), which has no stability problem, but infinite duration transforms always come with instability. FLT does not introduce poles and zeros in transfer functions. GPS navigation system computer programs that uses Kalman Filter, has such failure problems, again because of the use of infinity [Das, 2012a]. Dynamic memory allocation (DMA) may cause such failures when memory runs out. Finite memory is a part of the universal laws for embedded systems. All engineering systems obey laws of nature; they cannot be solved using mathematics, windows pc programming techniques, etc. can cause invisible failures. We have provided a simple C language that does not use DMA.

Universe is finite

Math introduces infinity in the system. But there is no infinity in nature. The fact that every object has a finite life time, that is, all objects die after some finite length of time duration, makes every object finite in size. No object can have zero size also. There are no empty objects in nature. Total number of objects must be finite also. To create infinite number of objects all objects must remain alive for infinite time; which is not possible, because an object that has born, must also die in finite time.

Total number of souls must be constant. The root material and the root intelligent particles are eternally existent. They cannot be created or destroyed. They are used to create

objects at birth and released back at death. They are protected by the conservation law of nature. All life plans are controlled by the destiny law and their activities remain documented in details in the memory of the universe. Any high level seer yogi will be able to observe their lives in the 3D videos in the memory of the universe. Our earth has produced many such seer yogis in all nations over all centuries and their visions are well documented in public literature; Nostradamus is one such person.

Mathematics Violates Reality

There is a very common statement in the scientific community that says – “Numbers do not lie”. But I say the opposite, the numbers are fake, and therefore they always lie. Just think, and try to answer the question – why is this apple \$5? You will not be able to justify your reasons. You may say that land cost is \$1; labor cost is \$2; etc. But the question still remains – why the labor cost is \$2?

No straight line

Real numbers are defined as points on a straight line, called real line. But there is no straight line in the universe. You cannot draw a straight line between earth and moon, because both are moving in the 3D space. The paths of motions of all objects are beyond our comprehension. The moon goes round the earth, earth goes round the sun, the sun is moving inside a spiral of our galaxy, the galaxy is moving in space with respect to all other objects. Thus no geometry or pattern, including a straight line, is possible in the universe.

An innocent looking example of $3+4 = 7$ can create catastrophe. If the voltage limit is 5, then the number 7 must be trimmed to 5, to avoid burn out of the electronic components. This is the linearity assumption, which is nonexistent in nature. Any embedded system may have 10 – 100 such limit checks [Das, 2012a], causing complete failure of all algorithms. Nature always uses checks and balances. Nature does not allow freewill, dictatorships etc.

Numbers have Zero measure

The numbers do not have any size. That is, their measure or size is zero. This zero measure automatically creates infinity. We say that number of points in the interval $[0, 1]$ is same as the number of points in the interval $[0, 2]$. That is, we cut the length to half but points do not reduce (cardinality). This never happens in the universe. Therefore numbers are not objects of nature. Thus math is a false subject; it cannot be used for giving any description of any object of nature. This shakes the foundation of the house of mathematics.

Science is not the foundation of Engineering

In recent days we see the comet 3I-Atlas in the sky. Many physicists in their AI-generated YouTube videos said that their 40 years of education failed to explain the astronomical data of the 3I-Atlas. They even think that since engineering works therefore mathematics also works. They never understood that science is not the foundation of engineering. Mathematics is a false subject; straight line is not there in engineering; how can physics, science, engineering work with such mathematics [Das, 2023b]^[22]? They cannot work [Das, 2012a]. Our education should teach all kids engineering subjects, so that they understand the nature, before they finish high school. Engineering is nature, because it uses objects of nature; math and physics do not

use objects of nature. Chemistry uses objects of nature, so does engineering. Cooking is also engineering; because it uses objects of nature. Medical surgery is engineering; but medicine is not. We do not know why placebo medicine works.

Probability uses infinity

Same thing is true with the probability. Probability is based on sigma algebra concept of set theory, which requires infinity. You cannot measure and compare anything with numbers. Wherever there is a number there is measurement, and there is discrimination. Again, how do you justify that this apple is \$5 and that orange is \$10? You cannot. If you introduce infinity in math then it will show up everywhere in your theories. Infinity cannot be suppressed. Infinity has a long hand; it is not just a large number.

Two objects are never equal in nature. That is, no equation of mathematics is meaningful for nature. Since numbers are not objects of nature; because straight lines are nonexistent; therefore mathematics cannot work for nature and engineering. The engineering products may fail catastrophically; and we may never find the real cause of the failure [Das, 2012a].

Examples of failures

Let us take some obvious engineering problems that we face all the time. How many times our computer fails every day? Many times we see it crashes; slows down; and we need to restart. Every company needs an IT group of people to constantly attend our network, etc. How many times our kitchen faucet fails? Our cars need constant repair and maintenance work. We buy a pedestal fan and it lasts only one season. We build houses and they get destroyed by flood, fire, and tornado. We feel frustrated with our engineering products. Because engineering uses false mathematics in all places – in design, manufacturing, in hardware, and in software.

Nine million people are killed every year on earth

Because of poverty nine million people are dying every year in all over the earth [Poverty]. Economics is full of mathematics. Dynamic programming is used in trading of stocks. Mathematics is a very popular tool in economic theory. We use even probability in the design, analysis, and maintenance of our economic system, knowing very well that nature is completely deterministic. The very fact that nine million people are dying, every year, with poverty shows that our economic theory and its use of mathematics is not working to give us a meaningful life and society for so many people [Poverty]. If somebody suffers then everybody suffers. We are all connected by soul theory; entire universe is connected by consciousness and intelligence properties of soul particles. Consciousness and Intelligence are not products of objects of nature; it is the reverse; objects of nature are created by soul particles [SK]. Only soul particles have consciousness and intelligence.

Engineering fails

We talk about optimal control using dynamic programming. We cannot even measure the temperature of a room properly. I am sure you have noticed that in summer time many people in our office buildings are using sweaters to keep them comfortable. Thus we cannot even simply control, then how can we talk about optimal control. This is

an engineering problem. But since engineering uses algorithms, mathematics, numerical representations, etc., it is the problem of mathematics. Thus even on earth our mathematics does not work. How can we then hope that math and physics will work in space, or on moon, solar system, astronomy, etc.; clearly they cannot work. Note that whatever way the engineering works, happens because engineering uses objects of nature. Matter is discrete but destiny is continuous. This is so because the root matter particles are discrete; but they have three properties knowledge, ignorance, and energy which are continuous qualities. Consciousness and intelligence are properties of soul particles; and they are continuous, which makes destiny as continuous. Soul particles are discrete; but cannot change, and are controlled by destiny only.

Change education

Once we have some idea about Yuga theory [Gonzalez], we will understand that this is the plan of the universe and in Kali Yuga this is how the manmade things will work. Infinity is used very casually everywhere hiding disasters. Limits, continuity, derivatives, integrals, are the secret weapons for us. It is hoped that this article will show how we should plan our education system.

Simple C Language

Example of files of source code and executables are given in another article [Das, 2024a] ^[23]. This code and the language are very simple, elegant, easily modifiable and maintainable. This language will be very suitable for scientific and real time embedded systems. It is based on Visual Studio C++. It should be usable without any training. Any high school student should be able to learn provided you create training material for them.

Source code requirements

The guiding principle behind these requirements is - know the laws of nature, and then find the ways to obey them. The laws of nature can never harm us. We are using them for billions and trillions of years. The laws of nature are the only truths. We are floating inside the ocean of these laws. A sample code is given in the article – Simplex method for binary linear programming (BLP), which also shows how the method resolves the P/NP problem; since BLP belongs to this class of problems [Das, 2024a] ^[23].

Dynamic Memory should not be used

The DMA (Dynamic Memory Allocation) is a very common feature of C language [Press], but it should be avoided. The memory should not be dynamically allocated and then de-allocated in the software. In the universe, the memory of every object remains existent for eternity. Thus very high quality seer yogis will see the entire history of the universe for eternity, over billions or trillions of years, depending on their quality or the scale of their yogic power. We can see the proof of that now through the UFO-ETs [Das, 2023a] ^[21]. Such stories are written in Vedas and therefore can be found also in the ancient books of Judaism and Christianity. Thus the DMA is a very harmful mechanism for software based products; it introduces uncertainty in the performance of systems. At one time US Military had a very strong requirement for determinism. The same rule should be used for life critical software like medical devices, airplane flight control software, etc.

Privacy vs. Democracy

Privacy and democracy are opposite concepts. They cannot survive together. You cannot have any secret with your spouse, for example. You will never be able to talk freely and openly if you have some secrets or privacy on some subjects between the two of you. This is true for every object in the universe, including nations, cultures, governments [Das, 2020a] ^[18], etc. Universe has the highest level of democracy. As mentioned before, the entire memory history of all objects, for billions of years, is eternally existent for all times, and is visible to every other object. All souls know this memory, see the destiny law. If you can acquire the skills of the third eye vision, also called the divine vision, then you will be able to watch this memory as a 3D video. This video keeps even the emotions and feelings for every moment of your life. Through this memory history every soul wants to teach their life experiences to us, so that we can be emancipated.

Thus in nature, you cannot hide anything from anybody. Therefore in the software also you should follow that rule. In C++ language the class structure attempts to hide variables and functions from global access. This process introduces complexities and wrong philosophy in our thought process. They violate the definition of truth, a fundamental concept required for every human. Software is nothing but our thoughts. More democratic you make, more honest becomes your life. This will improve the security of our software code. In the BLP source code, global variables, and only the simple features of C language have been used [Das, 2024a] ^[23]. Clearly, the code can still be improved.

No Pointers and Jumping Around

There are no jumps in the laws of nature. Everything is so well planned and so deterministic that you will always obey the rules of straight sequential logic. There is no if-then-else logic in the universe; there is no freewill. Determinism and freewill are contradictory concepts. Compilers can always be changed to eliminate pointers and make designs robust, lives simpler, and reliable. The laws of nature should always be our references; they cannot harm us. The nature has perfected itself over eternity; it is periodic, it dies, and reincarnates. There are two features in every object, one that is visible by natural eyes, which dies; and there are invisible parts, like the subtle bodies, which live for eternity.

OS & Embedded Engineering

Nature does not have any kind of consistency and uniformity. Every soul has complete freedom to create the body it wants. It is correct that, all of us normally have five fingers, but look at them, they are all different; and that never bothered us. Imposing rules on humanity and on our activities cause lot of pain and suffering. The classic story of suffering due to rules in our societies is so painfully painted in the book *Les Miserables* [Hugo]. OS attempts to create such rules. We can avoid OS (Operating System) by creating multiple microprocessors and assigning every task to one such microprocessor. Global universe is designed using such concepts.

Measure of quality of code

The code length must be as small as possible. Longer is the code more will be the difficulty in understanding it. We should try to write the code based on algorithms and not on data. Think, design, review, test, and redesign many times

until it is easily understandable and maintainable. Change the requirements for its clarity, independence, and completeness. Remember the concept of vector space and linear independence.

In nature there is no operating system for all humans, all animals, or all stars, etc. Even though the destiny is the highest level law, but the destiny of every individual object is customized. It is the destiny that creates the physical system, not the other way around. The destinies of any two humans are unique.

Vedic and Modern Science

In this subsection we present the differences between the modern science and the Vedic science. This is a summary of some of the published literature by this author on similar subjects. Foundation of modern science is defined by: (a) the laws of motion given by Newton; (b) Special relativity created by Einstein; and (c) Quantum mechanics defined by Heisenberg's uncertainty principle. Entire modern science is based on assumptions; therefore the modern science results are only assumptions also; and therefore cannot have any truth in it. This logic justifies that we are in Kali Yuga with only 25% truths [Das, 2023a] ^[21].

The third Law of Motion has assumptions

There is a fundamental difference between modern science and Vedic science. Generally speaking, the modern science can be represented by a diagram like in Fig 2 [Das, 2019] ^[16]. In this fig a force F_1 is acting on an object and producing another force F_2 . This diagram may represent the action reaction law of Newton or the cause and effect law. The Vedic science represents the same phenomenon by Fig 3, where the F_1 is replaced by another object, maybe a human being. Physics or modern science does not consider any active, conscious, and intelligent object behind any event, although modern engineering always does. Fig 3 is taken from the website [Blogspot].

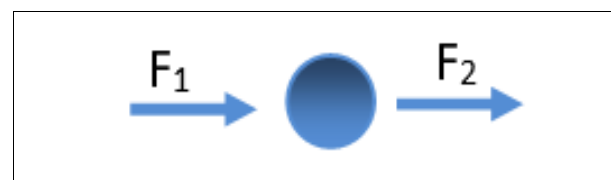


Fig 2: Modern science-Physics



Fig 3: Vedic Science-Universal

In one sense, it is true that the nature has only physical objects, which we sense using our sense organs, like eyes, ears, nose, etc. Such physical objects occupy space; they are continuously moving in space, and changing in

characteristics with time. They take birth, grow to a maturity, then decay to its death, and vanish. However, every physical object has some characteristics, which distinguish them from one another.

There are two key words in the English language: noun and adjective. A noun is a physical object, it occupies space, and we can see them. An adjective is a property, a quality, or a characteristic of a physical object. An adjective therefore cannot exist, it must require a noun. Thus the force F_1 in Fig 2 cannot exist without an object behind it, like in Fig 3. This fundamental difference between the two figures creates a vast separation between the two sciences.

Special Relativity Has two fundamental assumptions [Serway, p 1198] “(a): The principle of relativity: the laws of physics must be the same in all inertial reference frames. (b): The constancy of the speed of light: The speed of light in vacuum has the same value, in all inertial frames, regardless of the velocity of the observer or the velocity of the source emitting the light.”

As mentioned before – existence of inertial reference frame assumes the validation of Newton’s first law. To illustrate the point, and be more specific, let us select Newton’s First Law, which we have studied in our high school science classes. Newton (1643-1727) said [Das, 2022] ^[20] – “(1) In the absence of any unbalanced force (2) an object will continue in motion (3) in a straight line (4) with a constant velocity.”

Have you ever observed any such object on earth or in space? No, of course you have never seen such an object. Item (1) in the law, is the assumption of isolated environment, which is impossible, because gravitational forces are always there. In the deep space and also on earth, the sum total of all gravitational forces from all objects of the universe, at every point in space, is non-zero, and is continuously changing in both magnitude and direction, because all objects in the universe are continuously moving with respect to each other. Since all objects are continuously moving, the item (3) is also not feasible; there is no straight line in the universe. You cannot draw a straight line between the earth and the moon, because both of them are moving with respect to each other. Thus Newton’s first law is completely wrong, false, meaningless, and cannot work in nature. This has happened because Newton did not observe the nature, like Galileo did, and instead started with two assumptions (1) and (3).

The following statements can be found in a physics textbook [Ferraro] about Newton’s first law: “We could hardly sustain that this principle (First law) is a strict experimental result. On the one hand it is not evident how to recognize whether a body is free of forces or not. Even if a unique body in the universe were thought, it is undoubted that its movement could not be rectilinear and uniform in every reference system.”

If you read carefully you will find that all theories of mathematics and physics start with assumptions, and therefore none of them can be correct. All results are thus nothing but manipulations of these assumptions, and therefore all results are also assumptions. Assumptions can never become true no matter what you do with it.

Interestingly, Einstein assumed existence of inertial reference frame, which is a frame that moves with a constant velocity in a straight line. That is, Einstein assumed Newton’s first law was correct. Einstein also made another

major assumption - that the light speed is constant, which has not been proven correct yet [Das, 2014c] ^[15].

Heisenberg’s uncertainty principle similarly assumes that the position and the momentum of a particle are related by Fourier Transform (FT), a completely unrealistic assumption, and he also ignored the fact that the FT uses infinity, which is not there in nature [Das, S. 2013a] ^[10]. A physics textbook confirms the above assumed relation: “Further, since the wave function $\Psi(x, t)$ is a probability amplitude for position, its Fourier transform $\Psi(p, t)$ is the probability amplitude for momentum” [Phillips, p. 44].

Quantum Mechanics Is Wrong

According to Heisenberg - “If there existed experiments which allowed simultaneously a sharper determination of p and q than equation (1) (Uncertainty relation) permits, then quantum mechanics would be impossible [Heisenberg, 1927]” ^[34]. This means if uncertainty principle (UP) is wrong then quantum mechanics (QM) will be wrong also.

It has been found that the UP is indeed wrong [Das, 2013a] ^[10]. Subsequently CalTech institute performed an experiment that has shown [CalTech, 2014] ^[5] that the bound presented by the UP can be defeated and therefore is not any limitation on measurements. Thus we can see that the QM theory cannot be correct. The basic idea is same everywhere, if you start with an assumption, your result will also be an assumption. An assumption will always remain false no matter how well you try to hide it by using sophisticated mathematics. No engineering experiment can prove a theory correct if it has any assumptions.

UP violates a fundamental principle, which humanity has believed for millions of years – and that is called destiny. The destiny means life is predetermined [Das, S. 2013b] ^[11] and perfectly predictable. So nothing can be uncertain in life. No amount of modern science can prove that any of our ancient wisdoms, documented in Vedas and Bible, can be wrong. Ancient results are based on third eye vision, which cannot be wrong, and has many direct and proven observations of nature. We have also given one example, (Catherine), here in this article, in the example section.

Examples

All examples used in this article are listed and briefly described in this section, with references for more details. More details can be found in the soul theory book [Das, S. 2014a] ^[13], which is a free ebook by this author. They are collected and duplicated here for the convenience of the reader.

Telepathy

The book [Govinda, p114], describes telepathic communication skill acquired by yoga meditation that can help to communicate with another person in a different country without any knowledge of the person. While living in Tibet, Lama Govinda wanted to know about his mother’s condition in Germany. A Tibetan yogi within few minutes brought the details about his mother. Two weeks later Govinda received a mail from his mother confirming the exact same information. It is therefore quite logical that we are also connected by our souls all the time with all persons. Our society will completely change if we teach our kids in their high schools how to achieve such yogic power and control our lives.

Catherine

She picked the winners for every race in the racetrack, to demonstrate her yogic power, to her skeptic father. Dr. Weiss also went with them. Catherine gave away all the money to the first poor man she found on the street on her way out of the track. Dr. Weiss wrote, 'I was both shocked and fascinated by her psychic abilities, especially the episode at the racetrack. This was tangible proof. She had the winning ticket to every race. This was no coincidence' [Weiss].

Pat Norris example

"On one occasion when Alyce, the Swami, and I were eating lunch at home, Pat Norris telephoned. She asked the Swami if she could talk to him for a few minutes at 1.30 P.M. He said yes. Turning from the phone, he asked me to find a paper and pencil for him. Then he sat on a couch in the corner of the living room and began thinking and writing while Alyce and I cleared away the dishes. I kept wondering what he was doing. Glancing his way, I noticed that he had put the piece of paper face down on a chair."

Just as we were leaving to return to the office, Pat arrived. Later that day, I asked Pat what kind of conversation she had with the Swami, and she said that an odd thing had occurred. The instant she came into the house he said, Ask me a question. She said, what do you mean, ask you a question? And he said, Just ask me a question, something important.

At first she could not think of anything, but finally she asked, Should Peter (her son) go to a private school? Then he said, Ask me another question and she said, Should I return to college to get a Ph.D.? And he said, Ask another question. Pat said that he kept asking for questions until she had asked seven questions. When she was through with the last one he grabbed the paper and handed it to her. Most of her questions (and some suggestions) were written there. One was wrong and one was only partly related to the subject, but the others were correct. She said this was a real surprise [Green p.217-218].

I, this article author, tried to copy exactly to understand why the book said – "One was wrong and one was only partly related to the subject." We are all like robots, according to the soul theory. When we talk over cell phones many different layers of translations happen: Human voice to mechanical vibration, to electromagnetic waves, to analog electronic signal, to digital binary code, to the reverse process for human hearing. Where can the error happen? The book is available free on the internet [Green].

This example shows that moment by moment our life is precisely defined. Pat did not have any chances, choices, or freewill to ask a different set of questions. This example also illustrates that the memory is not in our brain, it is in the universe. The birthmarks examples given here [Das, 2013c]^[12] shows also that memory is not in our brain, but a yogi can read that memory.

Whole is bigger than the parts

Fourier series can reveal some characteristics that cannot be realized in parts. We can see our life and our living characteristics by observing the parts or single humans. But there are features of the living conditions that cannot be

observed in parts. This will be the consequences of periodic systems. Humans can live for millions of years, using reincarnations; thus a man can live in Sattya Yuga where he used flying, but now living in Kali Yuga, may not know anything about yogic power. There are Yuga systems that cannot be observed even in thousand or million years; there will be humans who will fly as natural species; similarly, there will be humans who predicted to be living for short life, etc.

There are other important laws of nature that gets lost when we look at the parts and fail to see the whole. Such laws are the extensions of Kirchhoff's current and voltage laws: loop and junction variables of interfaces in the circuit concepts [Das, 2020]; circuit concepts are missing in SMS. Circuit equations are more revealing than component models.

High court example

A mathematics professor wrote down the verdict of a high court case, a week before the judgment. He then sealed the paper in an envelope. When the judgment was announced, the envelope was unsealed, and found to contain the exact same statements including the two punctuation errors at the exact same locations [Rama, 2007]^[42]. Thus even the errors are copied; once again, we do not have any freewill. It is clear then that our physical body, including the sense organs, action organs, and the brain do not have any intelligence. This is specifically mentioned by the Samkhya Verse 31, repeated below:

[SK: 31] "The organs enter into their respective modifications being incited by mutual impulse. The purpose of the Spirit is the sole motive (for the activity of the organs). By none whatsoever is an organ made to act."

Mind is considered as an organ, because it has the characteristics of both the sense and the action organs. All yogic power examples fall in this category – they cannot be explained. Same thing is true - diseases cannot be cured – like blind cannot get visions; AI cannot perform such miracles. Nonexistent cannot become existent – says Samkhya.

Monarch butterfly

Monarch butterflies provide an excellent example of eternal recurrence [Bittel 2017]^[3]. They migrate from east coast of Canada to the west coast of Mexico, a 3000 mile journey. They cannot make it in one life, so they die, reincarnate, and continue with the same objective. Scientists have captured a bunch of them, moved them, and released them in different places, but amazingly, they changed their directions to match the original path towards Mexico.

This shows, reincarnation is valid for every object in nature, and we continue with the same objectives in the next life, from where it ended in the previous life. Gita also confirms this phenomenon of continuity of objectives in verse.

"[G.5.23] Before giving up this present body, if one is able to tolerate the urges of the material senses and check the force of desire and anger, he is well situated and is happy in this world."

This is how software engineering is designed also. Killing any human or regime change will not therefore solve any

problem, since that person is a soul, and a soul cannot be killed. That person will reincarnate, will be guided by the destiny, and will continue working from the same state of mind when he died previous time. Thus unless we change the environment to truth and MLE, (moneyless economy) [Das, S. 2012b] ^[8] the history will repeat the same falsehoods, and peace [Das, 2020a] ^[18] will remain unreachable.

Swami Rama on gravity

Swami Rama wrote [Rama, p139]: - Between five and five-thirty we were still talking, when the swami suddenly said, "Now sit in meditation. In five minutes I will leave my body. Its time is over. This instrument which is called body is not capable of giving me more than I have already attained, so I will leave it behind." Five minutes later, he sang out, "Aumm" and then there was silence. I checked his pulse and heartbeat. I thought, "He may have suspended his pulse and heartbeat for some time and might start breathing again." Then I checked his body temperature, his eyes, and all that. My brother disciple said, "Enough of that. We have to immerse his body before the sun rises." I told him, "Don't worry. I will do it myself." But he said, "I want to help."

When we both tried to lift him, we found that we could not budge his body. Then we brought a branch from a pine tree and inserted it under his thighs to pry him loose, but we failed. We tried everything we could think of for over an hour, but could not move him an inch. I often recall what happened next. I shall never forget the experience. A few minutes before sunrise I heard someone say, "Now we will carry him." There was no one around, so I thought, "Perhaps I am imagining it." My brother disciple also looked around. I asked, "Did you hear something?" He said, "Yes, I also heard it." I asked, "Are we hallucinating? What is going on?"

Suddenly the swami's body rose into the air, apparently of its own accord, and slowly moved toward the Ganges. It floated in the air for a few hundred yards, and then lowered and sank into the Ganges. I was shocked, and could not assimilate this experience for a long time.

Passing through barriers (Trailanga Swami)

The new judge asked the Swami, how did you come out of the jail cell? The Swami gave a simple explanation [Ray]: in the morning I wanted to come out, so in a moment I was outside, there was no obstruction. Again, you wish and you get it. Magistrate was very angry, so Swami was again locked inside, this time with double locks. Little later the Judge was surprised, he found the Swami is standing naked again in the corner of the court room. The swami came slowly near the Judge and said – Like all ordinary people, you only understand inert objects and their inert energy. But in this universe there is a great consciousness intimately connected which you do not know. The person who is connected to this consciousness, you cannot stop him, and you cannot block his movement in anyway. There is nothing that can stop the Indian Yogis. Then why you create troubles for me. And you do not have that power also.

The Judge then understood and ordered that the Swami can roam around anywhere he wants. And in future nobody should disturb him. There is some literature where we can see that the UFO-ET abductees have experienced such power of flying and passing through the walls of their houses while holding hands with the ETs [Das, 2023a] ^[21].

Thus, the entire universe is integrated in the same way.

Nobody can explain how laws of nature work. Just like we do not know how gravity works, similarly we do not know how mass works. We know that root material-cause particle has three analogue properties – knowledge, ignorance, and energy. These can be adjusted by any soul and all souls. This will change the characteristics of the mass. They are just like RGB colors of TV pixels. By changing them you can create millions of colors. Same thing can happen to mass properties.

Isolation Example - Newton's First Law

This is copied from the [Das, 2023b] ^[22]. Let us select Newton's First Law, which we still study in our high school science classes. Newton (1643-1727) said: "(1) In the absence of any unbalanced forces (2) an object will continue in motion (3) in a straight line (4) with a constant velocity" [Das, 2012a].

Have you ever observed any such object on earth or in space? No, of course you have never seen such an object. Item (1) in the law, is the assumption of isolated environment, which is impossible, because gravitational forces are always there. In the deep space and also on earth, the sum total of all gravitational forces from all objects of the universe, at every point in space, is non-zero, and is continuously changing in both magnitude and direction, because all objects in the universe are continuously moving. Thus item (4) of constant velocity cannot be true.

Since all objects are continuously moving, the item (3) is also not feasible; there is no straight line in the universe, as we have explained before. Thus Newton's first law is completely wrong, false, meaningless, and cannot work in nature. This has happened because Newton did not observe the nature, like Galileo did, and instead started with two assumptions (1) and (3). The following statements can be found in a physics textbook [Ferraro] about the Newton's first law: "We could hardly sustain that this principle (First law) is a strict experimental result. On the one hand it is not evident how to recognize whether a body is free of forces or not. Even if a unique body in the universe were thought, it is undoubted that its movement could not be rectilinear and uniform in every reference system."

Michelson and Morley experiment

The subtitle shows that experiments created by humans cannot generate, demonstrate, or create a new law of nature [Das, 2014c] ^[15]. The experiment will do something meaningful, because this uses objects of nature. But it will not do what you wanted it to do. You can think of designing a physical experiment and claim that this instrument will prove that – I am God. Clearly such a thing cannot happen. But a high level yogi can perform such miracles and will not need any physical instrument. As an example a yogi can give eyesight to a born blind boy.

Apple Example

Can you measure anything about an apple? What can you measure – color, shape, taste, weight, mass, location of a point on its surface? No, none of these can be measured. We have discussed that gravity and mass are not known correctly. Humans can levitate, and also pass through walls. Can you justify why an apple is \$5? No, you cannot. It is completely arbitrary, because money value is arbitrary. You can say – labor cost is \$1, transportation is \$1, etc., and they

all add up to \$5. But the question still remains. Why the labor cost is \$1 – you do not have an answer to that either. Did you experience that two parts of the same apple tastes different? You will find, when observed carefully that they are indeed different. Cut the apple in some small cubes and taste them separately and carefully. This means every molecule, every atom has different tastes. Thus every electron has also different tastes. This is true, because each atom has grown in a different environment, when the apple was growing on the tree from a smaller to a bigger size. Clearly our physics has neglected all these features of subatomic particles.

Soul theory says every root material cause particle has three properties: Knowledge, Ignorance, and Energy. These properties can be adjusted independently, and also in a collaborative way, by the soul to create different strength of the mass particle. I am sure you realize that knowledge and ignorance is not the same thing. I can have some knowledge in some subject and some ignorance about the same subject. I may have said, when I investigated the subject, I felt I learnt it well. But then later I realized that there was an equation which I did not check carefully, thus some parts of the effort was not adequate. And now I have some doubt about them.

Numbers have zero measure

It is well known in mathematics that the number of points in the interval $[0, 1]$ is same as the number of points in the interval $[0, 2]$. That is we cut the length to half but the number of points still remains the same as before. This cannot happen in nature; therefore numbers are nonexistent in the universe. This also indicates that measure or the size of a number must be zero. This is another contradiction in mathematics with the soul theory. Universe cannot have any object with zero size objects. Such situation can lead to infinity.

Soul Theory

Academic Process

We have two approaches to acquire knowledge: (1) Experience first and then create the theory or (2) First learn the theory and then experience that theory.

Gita has verses in this theory of acquisition of knowledge:

[G.5.4] Only the ignorant speak of devotional service [karma-yoga] as being different from the analytical study of the material world [Samkhya]. Those who are actually learned say that he who applies himself well to one of these paths achieves the results of both.

[G.5.5] One who knows that the position reached by means of analytical study can also be attained by devotional service, and who therefore sees analytical study and devotional service to be on the same level, sees things as they are.

Notes: Devotional service = selfless work. Work for knowledge and not for grade. Analytical study = learning the theory. [G.5.4] may have been added later. You cannot discover calculus from the knowledge of algebra. Newton was a multidisciplinary person: physics, mathematics, and optics (engineering).

Potter and the pot

Let us take the first approach, experience first then the theory: A potter is making a pot of clay. He puts his clay dough on the wheel, turns the wheel, and uses his two hands to give a shape to the clay dough.

Now the theory part: This is the same basic manufacturing process that happens for every object in the universe. It is called the cause and effect law. You ask the potter what is the clay made of – you will find some new materials. Then you repeat the same question for these new materials. Continue the Q&A process, and you will find more and more new materials. After a finite number of steps you will have to stop the process. The last material you stop the answer, will be an invisible material particle. You cannot then ask any more questions. The process will stop after a finite number of steps, because all objects have finite size. This last material is called the root material cause particle, Prakriti, in Sanskrit language. You may call it the matter particle. Matter particles have three properties (gunas): Knowledge, ignorance, and energy.

Obviously there was another activity going on with this potter. You ask the potter who controlled your hands. The potter will say his brain controlled his hands. Who was behind the brain activities? It is the mind of the potter. The mind is outside the brain and we know that already. The mind is invisible. Then ask who controls the mind - that object is called the soul, Purush in Sanskrit. The soul particle is like the matter particle and has various names: spirit, atman, etc. It is also invisible, tiniest, and the root intelligent cause particle. Without such intelligence, clearly the potter cannot make the pot. This Purush particle is also outside the brain. Purush particles have two properties: Intelligence and consciousness.

Soul Theory:

The essential idea of the Soul Theory is that all objects of the universe are like robots. A human body has three parts (1) one soul (2) one subtle body and (3) one gross body. It is the gross body that we see. It is the gross body that dies. Subtle body reincarnates. Soul is not part of anything, but it stays with the subtle body. All objects of the universe are manufactured in that same way and work also in the same way. Each one of them is controlled by the soul that resides inside that object. The soul instructs the mind to read the destiny memory and helps mind to execute that. The soul of each object uses the matter particles to manufacture that object. The soul lives inside the object. When the soul leaves the body then we die. Destiny is for the soul and not for the gross body. Without the gross body we cannot acquire the experience. You are the soul; you are not the mind, nor the gross body, nor the subtle body. The following is copied from Gita, chapter 7, and verse 26:

Destiny Law:

[G.7.26] O Arjuna, as the Supreme Personality of Godhead, I know everything that has happened in the past, all that is happening in the present, and all things that are yet to come. I also know all living entities; but Me no one knows.

The above Gita Verse [G.7.26] says that all activities of

every object are completely and thoroughly recorded in all details as a 3D video in the memory of the universe, called the destiny memory; some say Akashic records. The proof of this high quality nature of this 3D video is demonstrated by Catherine in the book by the author [Weiss].

As one example, in one session of hypnosis, Catherine describes watching her own birth from her own mother in one previous life. Catherine says her mother's shirt was very rough and it was hurting me when the nurse moved me on her body. This shows that Catherine has acquired very high quality third eye vision. Such high quality of vision made her to predict horse race results so accurately. Such results show that both the vision quality and data quality are very perfect at all levels of details. If the error happens in the prediction, then it cannot be said that content is bad, but it must be blamed to the person predicting the vision. Quality and data in [G.7.26] are protected by the conservation laws of nature [Das, 2020]. Note that here the word data does not mean numbers like in DP.

No Privacy:

The verse [G.7.26] also says that there is no privacy. Everything of every object is completely known to everybody. In that verse I, ME, etc., mean any soul which has become a powerful seer yogi. It is not just Krishna but any soul and all souls. Thus privacy should not be implemented in our design and control system. It will hide the truth, spread lies, and corrupt our societies. We give a software language for embedded and also scientific programming that does not require any privacy. The following [SK: 31] is a Samkhya verse.

Soul controls

[SK: 31] The organs enter into their respective modifications being incited by mutual impulse. The purpose of the Spirit is the sole motive (for the activity of the organs). By none whatsoever is an organ made to act.

This concept of [SK:31] is also described completely in the Gita in the following two verses:

No freewill

[G.3.5] Everyone is forced to act helplessly according to the qualities he has acquired from the modes of material nature; therefore no one can refrain from doing something, not even for a moment.

No God

[G.18.61]The Supreme Lord is situated in everyone's heart, O Arjuna, and is directing the wanderings of all living entities, who are seated as on a machine, made of the material energy.

In [G.18.61] the supreme lord is not God. It is the soul inside your body [SK:31]. There is no God in Samkhya and in Sattya Yuga. But many authors have considered this as a God inside, in addition to another God outside like in two-God theory. This two god concept is not necessary to justify the Samkhya theory; it only demeans the universe and its power and laws. Purush and Prakriti are the only two

eternally existing, tiniest, invisible particles.

The following verse shows that the every soul is different and they are not part of any bigger soul. And each soul has a different destiny.

Multiplicity of Souls

[SK:18] The multiplicity of the Sprit is verily established (1) from the individual allotment of birth, death, and the instruments, (2) from non-simultaneity of activities, and (3) from the diverse modifications due to the three gunas.

The verse [G.3.5] also means that you do not have any freewill. However together with verse [G.7.26] it says you know what you will do at what time. Nobody is forcing you to do arbitrary thing, you are not under a dictatorial control. This has advantage that you do not have to worry about your life, you just let your boat float in the ocean and ocean waves and currents will take you to your destination. You do not have to think about any kind optimization, constraints, and control. This is a very carefree life. Freewill and determinism are contradictory concepts.

Compelled

[G.18.60] Under illusion you are now declining to act according to My direction. But, compelled by the work born of your own nature, you will act all the same, O son of Kunti.

Thus [G.18.60] says no matter how Arjun learns the Gita from Krishna, the teachings will not change the prediction given by the verse [G.7.26], which is, the original destiny text written in the memory for eternity.

Yogic power

The soul has the highest power. It is the same particle that makes an electron, or tiniest bacteria, can also make the planet earth, sun, moon, another star, a galaxy, etc. Thus nothing else can have so much power, and intelligence than a soul has. Any human can acquire such power by doing yogic meditation. There are many examples on earth and among UFO-ETs [Das, 2023a] ^[21].

Differences between Gita and Samkhya

Both Gita and Samkhya are parts of soul theory; they are also parts of Vedas. Samkhya is a small book and has only about 70 two-line verses.

The Samkhya does not have the words like Lord, Krishna, or Arjun. Thus all of these words can be replaced by Soul, or any soul, including your soul or my soul. Samkhya is written using modern scientific language. But Samkhya cannot be interpreted, because it is the description of the third eye vision or observation of the Gita verse [G.7.26]. Thus if something cannot be understood in Samkhya, then that thing cannot be explained. Nothing in Vedas can explain Samkhya. Kapildev, the author of the Samkhya, is the highest level seer yogi. Sri Krishna in Gita compares himself as perfect as Kapildev. Of course we have mentioned before, no laws of nature can be explained. All explanations eventually will lead to purush and prakriti, the root particles.

It will be very apparent that Gita has been significantly

modified by Kali Yuga authors. One profound modification is that Gita says that all souls are part of Krishna or Vishnu. This is how the Kali Yuga people have introduced God in Gita, which is not there in Samkhya. So you must be very careful while reading and learning Gita. It is recommended that Samkhya should be understood first and only then Gita should be read.

DP and Freewill

Freewill cannot exist. It is a clear misunderstanding of your own thoughts. Accepting freewill is equivalent to denying the cause and effect law. What you sow is what you reap is a law written in the Bible [Das, 2024b] [24].

You can perform the following experiment to verify the causality. Stop thinking at any time, and ask yourself, what your last thought (LT1) was, when you stopped. Find out next, what caused that last thought in your mind. You will be able to find another thought (LT2) that triggered your last thought (LT1). You can verify that LT2 is always there to trigger LT1. (LT2 → LT1) means the left generates the right. Thus the actions that you will perform in DP will be the same that is written in the memory of the destiny. You cannot write anything new in your algorithm. The nature will automatically change your hardware, software, and application or make your system to fail catastrophically. The design of Michelson and Morley experiment proves that concept of truth.

Before the WW2 it was announced that this war will be the war to end all the wars. The WW2 attempted to remove all the powerful kings and the dictators from the earth. But we can see that was not successful. Seventy five years later the earth has become filled with many dictators again. Not only that, all their followers have also comeback to support them again this time also. It shows that the men cannot change the reincarnation law of nature. Rabindranath, a Nobel Laureate poet, asked the same question “You think you are so powerful that you can break the knot of the destiny. Are you really that powerful?” [Tagore, bidhir bandhan].

Ramayan story produced the biggest and the strongest dictator, named Ravana, who was the king of the entire solar system. But he was eventually killed by Sri Ram to save the earth. In reality Ravana was saved from his own trap. Thus for the same reason DP also will not be able to control the destiny law. There are many examples to prove that not only we do not understand the truth, we cannot even plan to control it. We have pointed out the Gita verse that says we will be compelled to obey the destiny law. DP algorithms cannot thus work. Isolated system cannot be designed and built.

Experiencing sequential mind

You should realize that mind is sequential. Mind cannot think two subjects simultaneously, consequently it cannot perform two activities simultaneously also. You cannot really chew gum and walk, as commonly mentioned in America; you will eventually bump into a stone.

The following experiment will convince you that mind cannot do two things simultaneously. Pull up a text file on your computer screen. Watch any one line of that text file with high level of concentration. Then you change your focus to any one word of that line. The focus should be such that you will not be able to see any other words on that same line. Now increase your concentration even more only to a single alphabet of that word, so that all other alphabets of

that word vanish from your sight.

Now stay focused, on that single alphabet, and start another activity, like tapping your desk with one finger and making a tik-tik sound repeatedly. You will find that you will not be able to do both things simultaneously. Either you will lose focus or lose the continuity of your tik-tik sound. Increase the speed of the sound and also the concentration on the alphabet. When you fail to follow the experiment then stop and repeat the experiment more carefully and observe that you will always fail. And the reason for failure is that your mind cannot do the motor action and vision concentration simultaneously. You have two parameters to control, speed of the sound and concentration of focus. Increase both of them, and check your performance.

Simultaneous Vs Sequential

Two structures: We present two figures to highlight some features between two organizations: Simultaneous and Sequential. DP tries to convert a simultaneous process into a sequential process and then apply the optimality principle to the sequential process to find the optimizing control sequence. Many researchers had a nagging feeling that it will not work. In this section we try to point out that DP cannot be used.

In our societies we have many popular statements confirming that dilemma: (1) Man proposes a plan and God disposes that; (2) Destiny is fake we make things happen by our will force; (3) Eureka, Bellman’s principle of optimality is valid [Sniedovich, 2010, p534] [48], (4) provided that the hypothesis (optimal policy) stated previously is correct [Hsu, 1968, p.596] [35], etc.

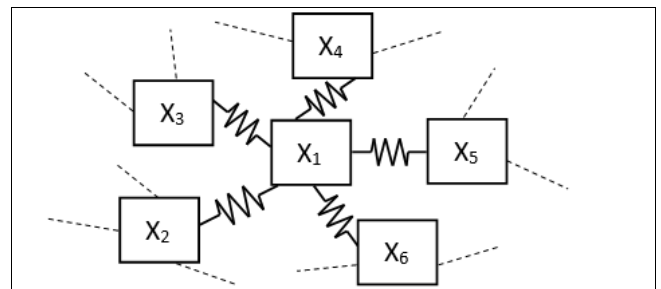


Fig 4: Simultaneous multistage structure

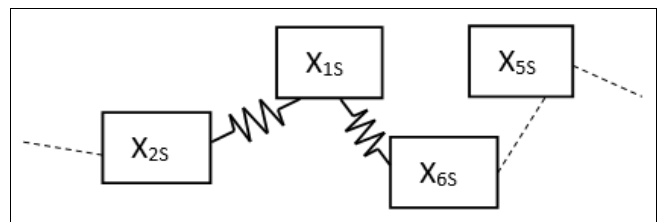


Fig 5: Sequential multistage structure

No isolated systems: From the Fig 4 we can realize that nothing can be isolated or separated as a sequential multistage process as shown in Fig 5. All objects are interconnected by the hidden forces of gravity. There is no place in the universe where there is no gravitational force. This gravitational force is continuously changing both in magnitude and in direction. Newton assumed isolated environment, as a consequence of that assumption his first law becomes wrong. We have not seen any object moving in a straight line [Das, 2023b] [22] in 3D space. We cannot draw a straight line between earth and moon, because both are

moving in the 3D space. We can confirm also that no geometric figures, like circle, ellipse, parabola, can exist in the universe.

Like gravity, all objects are also connected with each other by the consciousness property of the souls. Like gravity, the strengths of all consciousness properties are also different and continuously varying; you can feel that in your individual case, depending on your yogic power at the moment. We are all yogis, at different levels in the yogi scale [Das, 2023a] ^[21]. Yoga means connecting your mind with your soul. Both mind and soul are outside the body; both are eternally existent. Mind is not inside the brain [SK]. **Stages interact:** We have five knowledge sensors: eyes, ears, nose, skin, and tongue. If someone talks then all of us can hear. That means we are all connected simultaneously. Same is true for vision also. Our sense organs work because we have a soul, which is the source of our consciousness property. When the soul leaves the body, then we become senseless. Thus we cannot be isolated from each other; and therefore sequential multistage process, as shown in Fig 5 cannot exist in nature [Das, 2020b] ^[19]. When stage-1S is running, stage-5S must be kept isolated, which will create malfunction for optimality. They are structurally isolated but not functionally isolated. This will break the principle of optimality. You cannot run or execute every stage independently without interfering with other stages. In an electronic circuit board all stages will be activated immediately, within milliseconds or microseconds. Same is the case for economic system of a nation.

No conversion: From Fig 4 we can realize how much significant modifications will be necessary to make the component objects compatible to the sequential structure. All interfaces must be changed independently; in many cases it cannot be physically changed. The system clearly becomes isolated from the universe and we know, from the Newton's example [Das, S. 2023b] ^[22] the consequences of that. You may consider Fig 4 as a multilayer electronic circuit board with multiple processors. It will be impossible to implement the same functionality using Fig 5 architecture. Problems will be same when you use five year economic plans as individual stages. Even in multicity transportation examples, the sequential stages cannot be isolated, without compromising the optimality of the system described by Fig 4.

Tradition of Isolation: Bellman conceived optimality condition during early 1950s. At that time we did not have internet, digital electronics, microprocessors, etc. People, particularly the mathematicians, were all very heavily influenced by Newtonian concept of isolated system. Even Einstein assumed existence of inertial reference system, which is based on Newton's first law [Das, 2023b] ^[22]. Without understanding of multidisciplinary concepts it will be difficult to come out of the concepts related to the isolated and static universe.

MIMO: All objects have multiple inputs and multiple outputs. They are not only different in numbers they have different characteristics also. Thus outputs of one object cannot be directly connected to the input of another. They will not be compatible. Even two same objects will have incompatible interfaces as described by the apple example. No two apples are identical. In reality no two objects are identical. Even twin sisters are never identical. Engineers have tried to create two identical memory chips but failed to do so. All objects have different destinies also. Thus again

sequential multistage systems are not feasible. It will be an engineering nightmare, with kludges, and patches, to interface them. You will not be able to break the laws of nature. SMS will always lead to suboptimal structure and therefore suboptimal solution. As an example, an airplane will have to take some passengers coming to that airport, violating the SMS plan, to pick up some more passengers arriving by another flight from another city. All airports are simultaneously interconnected.

Ramayan story is a Vedic story written by a very high quality seer Yogi called Valmiki. It was written before the story happened in the Treta Yuga. This is a real story, because what happened then is happening in our world even now. As an example, one major event was that the wife of Sri Ram was kidnapped by a King called Ravan. Such an event is always happening even today in all parts of the world: someone is kidnapping some woman married to someone else. This story can be represented by the events in the Fig 4 of interconnected physical objects. Do you think we can reduce this fig in a sequential multistage story suitable for optimality principle? No, we cannot. The story happened over the entire Indian subcontinent, from Iran to Myanmar, from Afghanistan to Sri Lanka, and over several generations. How do you manage the interfaces of type in Fig 5? If you add some objects to transform the interfaces then you have modified the system. More details can be found in the soul theory book [Das, 2014b] ^[14]. Any time we try to isolate a computerized system, like by disabling interrupts, the system will eventually crash. Manmade system is no match for nature made system. Creations cannot know the creator. See the destiny verse that says: "Me no one knows". A robot cannot know a human; because a human is the creator of the robot.

The most important difference between humans and robots is that a human can become a yogi but a robot cannot become a yogi. A yogi can acquire the third eye vision but a robot cannot. In fact, no characteristic of a Yogi described in the two articles [Das, S. 2020b] ^[19] and [Das, S. 2023a] ^[21] can be acquired by a robot. A very interesting characteristic is that a human eye can see a yogi, but a camera cannot see; a human can become transparent to camera photography.

Optimal Policy

The Principle of Optimality [PO]

"[PO] An optimal policy has the property that whatever the initial state and initial decision are, the remaining decisions must constitute an optimal policy with regard to the state resulting from the first decision [Bellman, 1962, pdf35] ^[1]."

Or roughly speaking, which is easier to remember, "Any part of the optimal policy is optimal."

The need: The need for optimality is realized when we know that something is not correct, things are inefficient, or in error. That is, when truth is not known; and this is natural, because we are now in Kali Yuga, when truth is only 25%. If we know that everything is correct, what we are doing is the best, there is nothing better that can be done, etc., and then there will be no need for optimization.

Global plan: Those who are thinking about our life, the larger context of life, societies, nations, or universe, etc., may immediately recognize that the universe or the life is deterministic, completely planned, nothing can be changed,

or controlled, there is no feedback. Once you covered a path that path is gone, and can never be traced again. The environment has changed, age of the universe has changed, and your age also has changed. Therefore, there is no concept of optimality in life. What is valid today may not remain valid tomorrow; same thing may not remain optimal tomorrow. This is the core idea of the soul theory. Nothing can be measured. There are no numbers in the universe. No two objects or no two events in the universe are ever identical. Since parts do not remain isolated when integrated, the whole will not achieve the optimality of the whole. The consciousness of the whole cannot be realized. Effect of simultaneity will be lost when isolated [Das, 2013b] ^[11].

However, there is a more precise definition of determinism in Vedas. In Gita, which is a part of Vedas, the following verse is described.

Destiny Law:

[G.7.26] O Arjuna, as the Supreme Personality of Godhead, I know everything that has happened in the past, all that is happening in the present, and all things that are yet to come. I also know all living entities; but Me no one knows.

In the above verse [G.7.26] I, Me, etc. refer to Krishna, who is a highest level seer Yogi. In Vedas there are no Gods. Brahma, Vishnu, Shiva, etc., if they exist, they are all highest level seer yogis. [G.7.26] clearly says that every moment in life is precisely defined, known, and can be observed also by any seer yogi and at any time. In fact in Gita it is said, in another such a verse, that you will not be able to disobey [G.7.26] no matter how well you are trained. In Gita there are examples of proofs of the above statement, but that will require higher level understanding of soul theory, like Yogic power of human soul. We have given an example of Catherine [Weiss] who predicted the winners of all races in a racecourse for the day when she visited the horse race track. Other examples can be found in the soul theory book [Das, 2014a] ^[13]. Take a look at the example section in this article, for better understanding of the laws of the universe.

We are compelled

[G.18.60] Under illusion you are now declining to act according to My direction. But, compelled by the work born of your own nature, you will act all the same, O son of Kunti.

The above verse [G.18.60] says that you will be compelled to obey [G.7.26] and therefore the principle of optimality will not work for the universe. The universe has its own plan. And no one can overcome that plan. An experiment was carried out [Libet, 1999] ^[37] where it recorded some brain signals to show the sequences of events that happen in the brain, when we decide to do something. This is same as

the cause and effect law or the action reaction law. That is, something must happen, before something else happens. But this law also says that action and reaction are equal and opposite or cause and effect are similar in nature. It appears then that the SMS models cannot be created to represent the actual natural system, just like Michelson Morley model was not successfully created to satisfy special relativity [Das, 2014c] ^[15]. Humans cannot create the laws of nature.

As an example, you can drop a ball and the ball falls on the ground, and you claim this is gravity. But we know that humans can fly, levitate defying gravity. There are many examples of yogic power that contradicts all the laws of physics, chemistry, and medicine. See the example section in this article, and also in [Das, 2020b] ^[19]. DP therefore cannot be an exception. Thus gravity has a different definition; the definition must match the destiny law.

When we will go to the details of the nature we will realize it cannot work. The core reason of failure is that the numbers do not exist in nature; they are not objects of nature, and therefore they are false that is they are not real. False cannot become true, no matter how well you manipulate them. Truth will always come out. All truths are created by the simultaneous interactions of all objects of the universe. All souls know all truths; but all of them are controlled by the destiny. A Sattya Yuga soul, living now in Kali Yuga, may behave according to the Kali Yuga rules. Destiny is unique for every soul at every space and time point in the universe.

No manual labor: In all Sattya Yugas, the complete truth is always known to everybody. And that is why there is no need for any manual labor. Everything will happen only by willing it. A baby can be produced or manifested only by thinking about it. There will not be any need for any physical sex. In Mahabharat all five brothers were produced just by willing it using a mantra given by a seer yogi, when the woman recited the mantra. Mantra could be handed down also to some other woman. We cannot imagine or believe this, because we are living in the Kali Yuga and we know only twenty five percent of the truth now. In Sattya Yugas any ordinary man could go to see the Yogis like Brahma, Vishnu, Shiva at his own will.

Not measurable: The optimal policy also requires that we can numerically measure everything, which is not feasible when there is no money and no numbers, like in Sattya Yugas. Moreover how do you measure qualities like honesty, goodness, etc? Numbers do not exist in nature. Universe does not have any geometry, for example, there is no straight line, because all objects are moving. You cannot draw a straight line between earth and the moon. So, the velocity of an object, i.e. motion on a straight line, cannot also be measured. Thus, as we asked before, how do you justify – why this apple is \$5 and the other one is \$10, etc. No two objects can be compared; everything has different destiny; including the number of incarnations. Everything is continuously changing; thus all plans must also continuously change. Thus the optimality concept is nonexistent in nature. The modeling effort will fail to be successful; just like straight lines cannot be drawn.

Existence of Optimal Policy

An optimal choice of x_N is obviously one which maximizes this function. We thus obtain the basic functional equation

(6)
$$f_N(x) = \max_{0 \leq x_N \leq x} [g_N(x_N) + f_{N-1}(x - x_N)],$$

for $N = 2, 3, \dots$, $x \geq 0$, with $f_1(x)$ determined by (4).

(1)
$$\max_{\substack{x_1 + x_2 + \dots + x_N = x \\ x_i \geq 0}} = \max_{0 \leq x_N \leq x} \left[\max_{\substack{x_1 + x_2 + \dots + x_{N-1} = x - x_N \\ x_i \geq 0}} \right],$$

we can write

(2)
$$f_N(x) = \max_{\substack{x_1 + x_2 + \dots + x_N = x \\ x_i \geq 0}} [g_N(x_N) + g_{N-1}(x_{N-1}) + \dots + g_1(x_1)]$$

$$= \max_{0 \leq x_N \leq x} \left[\max_{\substack{x_1 + x_2 + \dots + x_{N-1} = x - x_N \\ x_i \geq 0}} (g_N(x_N) + g_{N-1}(x_{N-1}) + \dots + g_1(x_1)) \right]$$

$$= \max_{0 \leq x_N \leq x} \left[g_N(x_N) + \max_{\substack{x_1 + x_2 + \dots + x_{N-1} = x - x_N \\ x_i \geq 0}} (g_{N-1}(x_{N-1}) + \dots + g_1(x_1)) \right]$$

$$= \max_{0 \leq x_N \leq x} [g_N(x_N) + f_{N-1}(x - x_N)],$$

Fig 6: Bellman's Proof

We see that our hearts beat periodically; days and nights come periodically; seasons come periodically also. Summation of periodic waves is a periodic wave also. According to Vedas the universe is periodic with a dead time between two living periods. This is obviously true for every human and there are many proofs of this fact. How do we then know that we have an optimal policy in every life? Moreover what happens during the dead time? What is the measure of such optimality, if any? Dead time can be very long, even maybe longer than the living time, depending on destiny, and Yuga period.

Example of optimal path: In some sense there is an optimality of path for the Monarch Butterfly migration [Bittel]. They fly from Canada to Mexico, more than 3000 miles. On the way they die, reincarnate, but still continue on to their same path and to the target place. An experiment was performed by capturing a bunch of them in a helicopter, releasing them a distant place, but this bunch managed to merge the main stream. Thus there is an optimal migration path for the Monarch butter flies. But how do you define the criterion, measure, and control it? And what do you hope to achieve by doing it?

Proof of Optimality Principle

The following proof of optimality principle is copied exactly from the reference [Bellman, 1962. p15] [1], so that there cannot be any chances of misinterpretation and confusion. Later, bellow, we show that this is not a proof; it is only a translation of things from English language to a mathematical symbolic language or like a computer language. I have added formatting and my comments only, and hopefully, for better readability. Bellman has given a simple, proof by contradiction, later in that same book [Bellman, 1962] [1]; and we mention that proof here also.

Bellman says:

“12. A Direct Derivation

For those who may at this stage mistrust the optimality principle, let us present the following derivation of (10.6).”

(10.6 is same as the last line in the graphics box of Fig 6). This not really a proof, Bellman calls it a derivation. It can be called another example of: a translation from English language to a symbolic language.

Notations: Table columns are identified by right justified numbers on the first row. Table numbers are identified by alpha characters in the first column and second row of each table. This formatting was used because pdf image in Fig 6 did not come out clearly.

Observing that

1	2	3	4	5
a	$\max_{x_1 + x_2 + \dots + x_N = x, x_i \geq 0}$	=	$\max_{0 \leq x_N \leq x}$	$\left[\max_{x_1 + x_2 + \dots + x_{N-1} = x - x_N, x_i \geq 0} \right]$

We can continue, the a-row above is nothing but restatement of the optimality principle, that is, optimize over all variables, which is in column two; and break that into two parts in the fourth and fifth columns.

1	2	3	4
b	$f_N(x)$	=	$\max_{x_1 + x_2 + \dots + x_N = x, x_i \geq 0} [g_N(x_N) + g_{N-1}(x_{N-1}) + \dots + g_1(x_1)]$

In the next row, the b-row, optimal policy is used, using functional notation, to separate the objectives in two parts, columns two and four.

1 2	3	4	5
c	= $\max_{0 \leq x_N \leq x}$	$\max_{x_1 + x_2 + \dots + x_{N-1} = x - x_N, x_i \geq 0}$	$[g_N(x_N) + g_{N-1}(x_{N-1}) + \dots + g_1(x_1)]$

In the c-row, we separate the variable x_N from fourth column to third column, again using optimal policy.

1 2	3	4	5	6
d	= $\max_{0 \leq x_N \leq x}$	$[g_N(x_N) +$	$\max_{x_1 + x_2 + \dots + x_{N-1} = x - x_N, x_i \geq 0}$	$]g_{N-1}(x_{N-1}) + \dots + g_1(x_1)]$

In the d-row we take out $g_N(x_N)$ from the sixth column to fourth column

1 2	3	4
e	= $\max_{0 \leq x_N \leq x}$	$[g_N(x_N) + f_{N-1}(x - x_N)]$

Row-e is the desired result, using the functional notation, which is shown in the row b.

Thus we can see that this derivation is nothing but translation to a symbolic notation, which is simpler, in some sense, for viewing and manipulations.

Limitation of Human Activities

We have these two laws of nature controlling our activities, which we have copied here, again for convenience.

Destiny Law:

[G.7.26] O Arjuna, as the Supreme Personality of Godhead, I know everything that has happened in the past, all that is happening in the present, and all things that are yet to come. I also know all living entities; but Me no one knows.

Compulsion Law:

[G.18.60] Under illusion you are now declining to act according to My direction. But, compelled by the work born of your own nature, you will act all the same, O son of Kunti.

The destiny law says all our activities are already planned for eternity. And the compulsion law [G.18.60] says we are forced to obey the destiny law like a compulsion. That is we cannot do anything that we want; we must do what is in our plan. Although the human body is so designed that you will not realize that you are forced to obey. The destiny law is created by active participation of all souls; just like we participate in making the project schedule of your corporation to work. But the destiny is fixed for eternity; there is no need to update it; because all souls know all truths. Thus the concept of freewill is an illusion only.

DSE: As an example, you cannot perform the double slit experiment (DSE) of physics and claim that electrons behave like waves, and then start using mathematics on these waves and derive all kinds of things and say they are the laws of nature. This goes against the destiny law. You must do only that which is allowed. Our theories are based on hundreds of assumptions; they are built on many layers of assumptions. All of them may be invalid and out of scope of the destiny law. It will be very interesting to learn how mathematics, which has no foundation on soul theory, or nature, can create entanglement, multi-verse, consciousness, etc. If we perform research in this direction, we will definitely find wide spread use of the weirdness of mathematics.

Thus a DP plan cannot be implemented on any aspect of social design. You can see how poorly our economic system is working on our earth. As mentioned before, our plans have created deaths of nine million people per year due to [Poverty] alone. Our science cannot explain any example of yogic power.

Problems of Life

The verse [SK: 1] from the Samkhya Karika talks about misery in our life, particularly in the Kali Yuga when the truth is available only for 25 percent.

[SK:1] From the torment caused by the three kinds of pain proceeds a desire for enquiry into the means of terminating them; if it be said that (the enquiry) is superfluous since visible means exist, (we reply), not so; because (in the visible means) there is absence of certainty (in the case of the means) and permanency (of pain).

Humanity is suffering from three kinds of pain [SK: 1]: (1) Internal – Physical and mental; (2) External – from animals, humans, cars, etc; (3) Supernatural – from earthquake, flood, lightning etc. There are common cures like visiting and using – doctors, nurses, medicines, hospitals, various entertainment facilities, etc.

Vedic Plan for Life

But the above cures are temporary; cold and sickness may comeback in the next winter. Most medicines have side effects. Such cures do not have certainty and permanency. So we study Samkhya Karika for permanent and complete cure. Samkhya gives you the truth; once you understand and

practice that in your life you get a transcendental physical body like Sri Krishna of Gita had. There were and are many modern yogis during past five hundred years who achieved a disease free body and lived for more than 100 years [Das, 2023a] ^[21] inside the modern societies. Such a body can be achieved even in one life.

Samkhya talks about the truth, laws of nature, and answers to questions like - who you are, etc. Samkhya says knowing truth can completely cure you from all diseases. More you know about the truth better will be your health. Truth cleans your mind. When your mind is clean your body will be clean. This is so, because our entire body is inside our mind [Das, 2014a] ^[13].

However this plan is not numerical and cannot be computerized. It is a result of lifelong learning and practicing yogic methods, acquiring Vedic knowledge, and also learning and understanding of the falsehoods of the modern knowledge. *Learning truth means understanding the falsehoods* also to cure your body free from ignorance. These must be practiced for all time. Some amount of diplomacy and careful compromise will be necessary for survival. Keeping silence is a major strategy. You must carefully avoid Galileo phenomenon. Note that this plan should be maintained over multiple reincarnations and maybe even during death time in-between. If you understand the destiny law and the truth properly there should not be any social problems. You do not create your destiny; destiny creates you and your legacy.

Proof of Optimality Principle:

Bellman has also proven the principle by the method of contradiction:

Suppose that $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$ is the optimal control sequence and suppose by the application of u_0^* the system state is driven from x_0 to x_1 ; if the principle of optimality is false then starting at x_1 there exists a sequence $\{u_1^*, u_2^*, \dots, u_{N-1}^*\}$ which will yield a lower value of J than the sequence $\{u_0^*, u_2^*, \dots, u_{N-1}^*\}$. This means the sequence $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$ will result in a lower value of J than the sequence $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$, which is impossible. [Hsu, p598].

Implementing Optimality Principle:

Clearly such a policy cannot be implemented on real systems and in real time. It requires the system to be broken into pieces or stages, solving each stage for optimal policies, and then integrating them back again. This algorithm is suitable only for off line simulation environment. Simulation for big projects will be difficult to get funding and will have lot of uncertainties, and result will be not conclusive. The process will be very time consuming and people intensive for social and economic systems.

If there are some critical engineering activities and uncertain concepts, then that can be implemented in a small scale and in several multistage modules to test the system hypothesis using the dynamic programming optimality concept to test the integrated system. This will be used probably only for prototype developmental stages. It will be worthwhile to investigate if any organization is conducting such an effort using DP methodology.

Dynamic Programming

DP - Discrete Time Case

Dynamic Programming is an optimization algorithm, that is,

a minimization or a maximization algorithm, and can be described by the following set of equations. For more details you should refer to the references. DP can be expressed in the following way, see Hsu and Meyer [Hsu, 1968] [35]:

$$J = \min_{(u_n \in U)} \sum_{n=0}^{N-1} L(x_n, u_n)\Delta t, \quad \Delta t = T/N \tag{1}$$

The above (1) represents a multistage sequential description. T is the total time duration; N is the number of stages. U is the constraint on the control variables u_n . And x_n - are the state variables generated by the following expression (2):

$$x_{n+1} = g(x_n, u_n) \tag{2}$$

All the quantities can be scalars or vectors with appropriate compatible dimensions. See also [Sniedovich, p.15, 2010] [48].

Our DP approach will be to use the following functional equations (3) and (4), derived from Bellman's Optimality Principle described below, to solve the optimization problem (1) and (2):

$$J_1(x_0) = \min_{(u \in U)} [L(x_0, u)\Delta t] \tag{3}$$

$$J_N(x_0) = \min_{(u \in U)} [L(x_0, u)\Delta t + J_{N-1}(g(x_0, u))], \quad N=2, 3 \dots \tag{4}$$

Implementing - Simulation

Suppose the interval is so small that one step is sufficient [Hsu, 1968] [35]; then $\Delta t = T$ and $N=1$. Thus by (1) and (2):

$$J = L(x_0, u_0)\Delta t \quad \text{and} \quad x_1 = g(x_0, u_0)$$

Our only latitude for optimization for each x_0 is to choose the control variable u_0 so as to minimize J. This is readily accomplished on a digital computer. Let $J_1^*(x_0)$ be the optimal value of J for this one step control problem, with x_0 as the starting state; we then have:

$$J_1^*(x_0) = \min_{(u_0 \in U)} [L(x_0, u_0)\Delta t]$$

Where the operation $\min_{(u_0 \in U)} [L(x_0, u_0)\Delta t]$ means the finding of the smallest value of the quantity in the bracket over $2P+1$ possible values of u_0 .

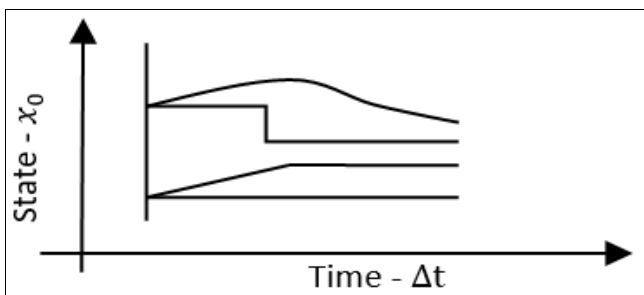


Fig 7: Simulation DP – Stage

The diagram in Fig 7 shows the simulation of a single stage of a sequential multi stage using DP algorithm, when run on a simulation computer. This diagram is just like the mathematical model $x_1 = g(x_0, u_0)$. In this fig we have two values for each state. The system also has two control

variables. Each graph represents the trajectory of each state when one of the controls is applied.

Implementing - Real time

But in real time, the online execution of things will be different. Fig 8 represents a possible implementation. Simultaneous evaluation of all states cannot be performed unless we use four different processors. Each state will take Δt amount of time. Thus each stage will take quite some time to evaluate the values of each option for both state and control resolutions.

We see from the real time graphs that every time the system runs everything changes, in every Δt the environment changes, the system model changes, parameters change, the age of everything changes. Control variables, state variables must be assigned, and the system will change. In many applications, like in economic or chemical systems, it may be impossible to run sequentially, like in the Fig 8. Finding optimality will not be meaningful in such environmental changes. The value of Δt can be milliseconds, days, months or years, and all systems will behave the same way. Time cannot be simulated and therefore it must be tested in real time and that will violate the algorithm assumptions and foundations.

In Fig 8 we have shown that the system behaved in the same way as in the simulation case, for simplification. But this cannot happen in real time. Each graph will be different, because the system has variations in time. Since each graph will be different, therefore results will also be different from the simulation data. In certain cases it may not be even possible to run the individual stages without making fundamental changes in the hardware and software. Simulation of the real time cannot be performed. Any time you execute a stage, the system will memorize all status that cannot be erased and repeated.

First, because of isolation requirements we see that multistage sequential process does not exist in nature and in engineering. Second, at the detail levels, we see it cannot be implemented in real time. Thus only in *static universe*, the dynamic programming will be meaningful. In real time principle of optimality cannot be implemented. Details are hidden in the diagram of real time single stage graphs in the Fig 8. Five year economic plan will reveal all details [Das, 2011b] [6], even in every year. Third, next time you visit this stage none of the above graphs will be meaningful. And a new state cannot be computed. All past history will not be meaningful at present time. Fourth, stage1 cannot use the stage0 results for using optimality policy, the age difference will make them obsolete. The ages of the objects have changed. This is why mathematics cannot work for engineering, nature, or the universe. Fifth, even physical hardware will become non-reusable; technology may change also.

DP – Continuous Time Case

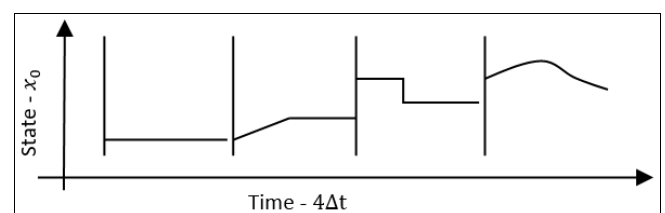


Fig 8: Real time DP – Stage

It is not necessary for the problem to be in the multistage form. A very clever way DP has been applied to the continuous systems also.

In this case the system dynamics is given by (5), a standard differential equation:

$$\frac{d}{dt} x(t) = f(x(t), u(t), t) \quad (5)$$

Where,

$x, u,$ and f are all functions of time t .

As mentioned the variables x, u, f can be considered as vectors also. The variable t is usually assumed to represent the time function. The left hand side of (5) represents the time derivative of $x(t)$; $u(t)$ is considered as the control variable, $x(t)$ as the state variable, or any solution, of the dynamical system (5). For simplicity we ignore terminal conditions; existence, uniqueness requirements, etc. The performance of the system is measured and is generally defined by the integral expression (6), given below, over the fixed time interval.

Note that we can only treat x as n -dimensional small size vector. But the universe is very big, and soul theory says, all objects are continuously and simultaneously interacting with each other. Our mathematics and computers cannot handle that.

Thus the problem is to minimize the objective function (6), by varying the control function $u(t)$, over the given time interval $[t_0, t_f]$, the time for both ends are fixed.

$$J = h(x(t_f), t_f) + \int_{t_0}^{t_f} g(x(t), u(t), t) dt \quad (6)$$

Numbers are everywhere

Note that the above definitions require integral and differential calculus, which in turn require limits and continuity, which are based on the infinity assumption; which are therefore invalid for nature and engineering. We now know, in view of soul theory, that infinity is nonexistent in nature, because everything in nature has a finite death time; and it includes the death time of the entire universe [Das, 2025] [25] also. Thus the entire definition of the continuous time DP is inconsistent with the nature. Here we can see why numbers always lie. Large numbers cannot replace infinity. All characteristics will change dramatically at infinity. As an example, Laplace transform becomes a singular function but when you use finite Laplace transform the complex functions do not exhibit singularity [Das, 2022] [20]. When you use infinity secretly or unknowingly, the infinity will show up in the result, and the result will explode; computers will crash.

Expression (6) indicates the ability to measure all the quantities; but can we really measure anything? We have shown that we cannot justify – why this apple is \$5. Numbers do not exist in nature, they are not in space, underground, or roaming on earth; thus they are not objects of nature. Numbers cannot be perceived by our five sense organs of knowledge like: eyes, ears, etc. Therefore numbers are false and numbers always lie. And it is very important to realize that false can never become true, no matter how well you manipulate them. One catastrophic consequence is - numbers have created poverty – nine million people die on earth every year because of [Poverty] alone. We should not

measure anything using numbers. We did not pay attention to the fundamentals and kept on building house of cards using mathematics.

We have said measure of a number is zero; see the example section on numbers. Quickly speaking, we know that the number of points in the interval $[0, 1]$ is same as in the interval $[0, 2]$. That means we cut the length by half, yet the number of points (cardinality) do not change. This cannot happen to any object of nature and engineering. Therefore size or measure of numbers must be zero. This makes the numbers as falsehoods.

We should point out quickly that the numbers also vanish periodically in every Sattya Yuga, which lasts for 1.73 million years. In Sattya Yuga all humans get 100% truths. There is no money in Sattya Yugas. See the description of Yuga Theory in this article [Gonzalez, 2002] [29].

DP - Applying Optimality Principle

We make the static cost J as a function of time, using invariant imbedding, i.e. by changing the fixed initial time t_0 to the dynamic variable t , and rewrite it as a dynamic expression (7):

$$J(x(t), t) = \min_{\substack{u(s) \in U \\ t \leq s \leq t_f}} [h(x(t_f), t_f) + \int_t^{t_f} g(x(s), u(s), s) ds] \quad (7)$$

How reality happens: The plan (7) cannot be implemented. The actual plan that will be executed is given by the destiny law as defined by [G.7.26]. The expression (7) cannot represent the destiny law or the soul theory. It is a material only expression. As we have mentioned if you use $3+4 = 7$ and if the system allows only 5 volts then 7 should be reduced to 5. This is called in hardware engineering, as automatic gain control or boundedness law [Das, 2013a] [10]. If you do not do that then the electronics will burn. If the planned trajectory is a straight line, then it will be changed to follow the curved path of the sun by the differential equation (5). You cannot violate the laws of nature. Conservation is a law of nature; more rich you become more poverty will be created to balance the conservation [Das, 2020]. You cannot become rich independently in isolation. Action-reaction or the cause and effect law always works, whether you want it or not. Moreover, as mentioned the state variable x in (7) is only a small dimensional vector, it cannot accommodate the destiny law, which uses all objects in the universe. Thus the optimality conditions are in violation of the laws of nature.

There are many natural laws, called destiny laws, no one can violate them. A physics textbook says – “things do not happen, they are there, and we just pass through them [Eddington].”

It is very difficult to distinguish between cause and effect results; because cause and effect are similar in nature. [SK: 9] says that – effect is forever. Only event-times will tell which one happened before. Universe is periodic and any soul can manifest itself on its own. In a circular (periodic) design, all things exist all the time. Babies can be created in five different ways: thought, word, vision, touch, and sex. A couple can try using sex to produce a baby, but a baby will be manifested only when a soul agrees to join the couple. Nothing happens outside the plan of the destiny law. You have observed 3I Atlas doing many apparently unusual events: while in motion it can stop and do anything it wants.

Nobody can predict destiny; and nobody can control destiny either. Every object has a soul, and it obeys the destiny only. Mind does what soul wants; and our body does what the mind tells it to do. One yogi [Das, 2014a] [13] said –“our entire body is inside the mind and no part of mind is inside the body.”

We now subdivide the time integral in (7) and make it sequential, to apply the optimality principle:

$$J(x(t), t) = \min_{\substack{u(s) \in U \\ t \leq s \leq t_f}} \left\{ \int_t^{t+\Delta t} g(x, u, s) ds + h(x(t_f), t_f) + \int_{t+\Delta t}^{t_f} g(x, u, s) ds \right\} \quad (8)$$

The expression (8) assumes existence of an optimal solution, which requires mathematics which does not exist in nature as the concept of straight line and numbers on that line are missing for nature. Nature is sequential, because we reincarnate, but this is for one soul only. On the other hand all souls work together and simultaneously. But we cannot access that destiny information and formulate it using expression (8) over all incarnations. That information is available only to high level seer yogis [Das, 2013c] [12]. Observe that in (8) we introduce sequential and multistage concept, by breaking time into two parts. Two asynchronous systems will always crash unless death separates them; and all systems are asynchronous.

Expression (8) can be rewritten as in (9): by combining the second and the third terms, and using the definition in (7). You should always observe carefully that mathematics does not generate any new information, it only translates concepts from English to a symbolic language; and this author is not trying to deceive the readers, hopefully. Bellman always had this thought: ‘provided the OP is correct’.

$$J(x(t), t) = \min_{\substack{u(s) \in U \\ t \leq s \leq t_f}} \left\{ \int_t^{t+\Delta t} g(x, u, s) ds + J(x(t + \Delta t), t + \Delta t) \right\} \quad (9)$$

We can expand the second term in (9), approximately, by using Taylor series, shown below in (10):

$$J(x(t + \Delta t), t + \Delta t) = J(x(t), t) + \frac{\partial J}{\partial x} \frac{\partial x}{\partial t} \Delta t + \frac{\partial J}{\partial t} \Delta t \quad (10)$$

Using (10) in (9) we can get the following (11):

$$0 = \min_{\substack{u(s) \in U \\ t \leq s \leq t_f}} \left\{ \int_t^{t+\Delta t} g(x, u, s) ds + \frac{\partial J}{\partial x} \frac{\partial x}{\partial t} \Delta t + \frac{\partial J}{\partial t} \Delta t \right\} \quad (11)$$

Using (5) in (11) we can write, assuming that the partial derivatives satisfy the requirements, cancelling the delta times, and after some algebraic manipulations we can get (12):

$$-\frac{\partial J}{\partial t} = \min_{u(t) \in U} \left\{ g(x(t), u(t), t) + \frac{\partial J}{\partial x} f(x(t), u(t), t) \right\} \quad (12)$$

Expression (12) is known as the Bellman’s functional equation. A little thinking will convince you that (12) is nothing but the optimality principle restated in a symbolic language. This equation (12) and this principle (PO) are called equivalent principle. It provides a necessary condition, because we used only the first derivative. The foundation of (12) is the principle of optimality, which requires that we can measure everything; whereas the soul

theory says nothing can be measured. And the truth of this assertion is visible in the wide spread poverty and suffering on earth in this Kali Yuga; destruction of our environment, creation of wildfires, burning down our houses within two hours; all happening because of numbers. It reminds me the Bengali song by Bhupen Hazarika – “oh river Ganga how can you still flow so quietly, without expressing your feelings, after seeing the deaths of innumerable people and settlements on both sides of your banks, stretching all through your length.” The song was originally written in English language for Mississippi river and its civilization [Hazarika, 2024] [33].

We can see that the derivation of both discrete and continuous methods is essentially the same. This is called equivalence principle [Das, 2012c] [9]. Same thing can be represented in many different ways. We have shown that the numerical data can be represented by all of the following equivalent ways: (1) Numerical numbers (2) Graphical plot (3) algebraic expression of the graph (4) differential equation of the algebraic expression etc. None of the representation can produce any new information from the data in (1). They are only translations of one language to another language. They are all copies from the memory of the universe, described in the soul theory. Humans cannot produce anything new other than what nature has already done it. Soul theory says – ‘nonexistent cannot become existent’ [SK, 1995] [41].

DP - Forward & Backward Solutions

The DP algorithm has the notion of forward processing and backward processing. In the forward processing we begin producing results from the start time and stop processing at the end time. Similarly in the backward processing, we start from the end time and stop at the begin time.

For the backward dynamic programming, the relevant version of principle of optimality can be phrased as follows: “The optimal control sequence for N-step process $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$ is such that whatever value the first choice u_0^* and hence the value x_1^* is, the choice of the remaining N-1 values in the sequence $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$ must constitute the optimal control sequence relative to the state x_1^* , (which is now viewed as an initial state).” [Hsu, p598]:

$$J_1^*(x_0) = \min_{u \in \{u_\epsilon\}} [L(x_0, u) \Delta t]$$

$$J_N^*(x_0) = \min_{u \in \{u_\epsilon\}} [L(x_0, u) \Delta t + J_{N-1}^*(g(x_0, u))]$$

In the backward time case you are supposed to start from the end time, which is a future time. Can you access a point in the future on time scale? No, you cannot, nothing in the future is accessible in any real time embedded engineering system. In fact in no case and in no system future is available. Only a high level seer yogi can access all events in all time, as mentioned by the destiny law. Thus in the absence of knowledge of soul theory our activities will remain meaningless; numbers included.

Meaning of backward and forward

The concept is very simple but confusing. For example, back slash is head first or leg first? Or similarly forward slash is for head first or leg first? Let me illustrate with a simple diagram. From the diagram you can see that I am still

confused and do not understand which one should be called forward. Let us define head is more important than legs, and therefore position of the head will define forward. Thus head first will be the forward slash. The situation is illustrated in Fig 9.

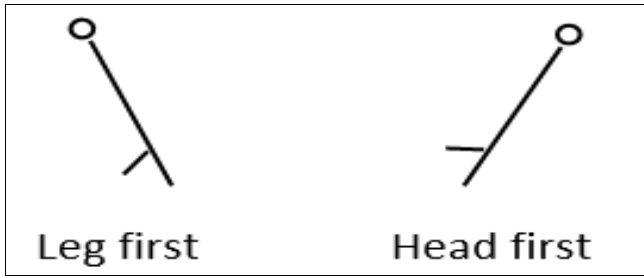


Fig 9: Forward or Backwar

It is obvious, probably, that we cannot run anything in backward in time. Consider the word YES. For backward in time, it will not be SEY. To get the real backward sound we have to tape record the pronunciation of YES, and then flip the cassette, and play in forward. Thus nothing can be run in backward. No system, engineered or natural, can be reversed; there is no reversible process [Das, 2022] [20].

A bird cannot fly backward. It does not know how to swing its wings in a way so that the entire body will move backward, but with its head forward and tail backward, as before. But only a high level yogi can. Who is a high level yogi – a man like Krishna or Shiva. They can do anything you can imagine. That is why most people call them God in this Kali Yuga. But they cannot also change your destiny.

Therefore, backward approach must be related only to every stage of the sequential stages. But for every stage the system must run forward in time inside the stage. Such an organization cannot work, because stages cannot be isolated from each other. Stage-3 may interact, for example, with stage-5 and produce some results that will be useful for many other activities. When stage-5 will be treated for its own sequential order that previous result will be interfering with present states causing disorder or even create suboptimal performance. Thus a sequential system cannot exist in the universe. And multistage simultaneous system cannot be broken into sequential stages to provide same optimal result.

How do you measure a number? In physics basic quantities are mass, length, and time. Mass you cannot capture, we know a yogi and an UFO-ET can pass through a wall [Das, 2023a] [21], an object can float in the air defying gravity [Bible, 1973] [2]. Any material can be converted to any other material [Das, 2020b] [19]. All root material particles have three analog properties: knowledge, ignorance, and energy. All of them can be continuously changed smoothly by the root intelligent particle, called the soul, to any value, beyond the bounds of the periodic table of chemistry. It is just like changing the RGB colors of TV screen pixels. Thus in the world of soul theory anything that you can imagine can happen. Hanumanji can lift a mountain and fly with it from Himalaya to Sri Lanka. Similarly Sri Krishna can lift a mountain on a single finger and protect from heavy rain all the villagers under it as mentioned in the Mahabharat stories. Thus nothing can be measured using numbers.

For the forward dynamic programming, the relevant version of principle of optimality can be phrased as follows:

“The optimal control sequence $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$ for N-step process must be such that whatever value u_{N-1}^* and the state x_{N-1}^* has, the first N values of the sequence $\{u_0^*, u_1^*, \dots, u_{N-1}^*\}$ must still constitute the optimal control sequence relative to the state x_{N-1}^* , viewed as a final state” [Hsu, p599].

$J_1^*(x_1) = \min_{u \in \{u_\epsilon\}} [L(x_0, u) \Delta t]$	Forward	$J_1^*(x_0) = \min_{u \in \{u_\epsilon\}} [L(x_0, u) \Delta t]$	Backward
$J_N^*(x_N) = \min_{u \in \{u_\epsilon\}} [J_{N-1}^*(h(x_{N-1}, u)) + L(x_{N-1}, u) \Delta t]$		$J_N^*(x_0) = \min_{u \in \{u_\epsilon\}} [J_{N-1}^*(g(x_0, u)) + L(x_0, u) \Delta t]$	

In the destiny law we do not have such a notion. The entire life history is already recorded in the memory of the universe for eternity. And any seer yogi has the power to read any part of the memory at any time and all time. And any soul can acquire that power of vision and see everything by doing yoga meditation or by birth [Das, 2014a] [13]. There is nothing new under the sun [Bible, 1973] [2]; nonexistent cannot become existent. Everything must come from the destiny memory.

Conclusions

All objects in the universe are simultaneously and continuously interacting with each other. They are integrated not only by gravity but also by the power of consciousness property of the soul particle living inside every object. Therefore nothing can exist as a sequential multistage system required by dynamic programming theory.

Numbers do not exist in the universe; therefore they are falsehoods. The foundations of mathematics are numbers and straight lines. A straight line cannot exist in the universe, because universe is not static but all objects are continuously moving with respect to each other. You cannot draw a straight line from earth to moon.

All activities in this Kali Yuga use mathematics; therefore all of them must be falsehoods. Such wide spread falsity is causing the death of nine million people on earth, in every year by poverty alone. It is also burning our houses by wildfires within two hours. Therefore the concept of optimality of Dynamic programming will be meaningless under such environment.

Universe has a plan of its own it is called destiny. It is written in the memory of the universe. All activities of the universe are also periodic. Humans cannot read this destiny memory, they cannot even understand them. Therefore we cannot even control them using Dynamic Programming methodology. We do not create our destiny, destiny creates us.

References

1. Bellman RE. Applied Dynamic programming, RE Bellman and SE Dreyfus, Rand Corporation, California, 1962.
2. Bible, Holy Bible. New International Version (NIV). Biblica Inc, 1973.
3. Bittel J. Monarch Butterflies Migrate 3,000 Miles-Here's How. National Geographic, 2017. Available from: <https://www.nationalgeographic.com/news/2017/10/monarch-butterfly-migration/> (Accessed April 2020).
4. Blogspot. Billiards and Pool. Game photo, 2012. <http://downloadfullcracks.blogspot.com/2012/06/billiard>

- ds-and-pool-play-free-online.html.
5. CalTech. Tricking the Uncertainty Principle. Issue of Science Express. 2014; 5. Available: <https://www.caltech.edu/news/tricking-uncertainty-principle-42816>
 6. Das S. Federal Reserve's Plan to Transfer Wealth. Conference proceedings, Northeast business and economic association, Philadelphia, November 2011b, 564-570. Also available free from: https://www.academia.edu/8379906/Federal_Reserve_s_Plan_to_Transfer_Wealth (Accessed June 2026)
 7. Das S. Rethinking embedded system design. International Journal of Engineering (IJE). 2012a; 6(2):70-85.
 8. Das S. Moneyless economy. The business review, Cambridge. 2012b; 20(1):17-25. Awarded Best Paper.
 9. Das S, 2012c. website. <https://wordpress.com/home/uncertaintyprincipleiswrong.wordpress.com>
 10. Das S. Assumptions in Quantum Mechanics. International Journal of Theoretical and Mathematical Physics. 2013a; 3(2):53-68. Available: Assumptions in Quantum Mechanics (sapub.org)
 11. Das S. A scientific theory of destiny. Global Journal of Science Frontier Research, Mathematics and Decision Sciences. 2013b; 13(8). Version 1.0. Available from: <https://globaljournals.org/item/2290-a-scientific-theory-of-destiny> (Accessed 8th March 2020).
 12. Das S. Reincarnation-a Law of Nature. International Journal of Modern Engineering Research, March-April 2013c; 3(2):1192-1211. Available from: http://www.ijmer.com/papers/Vol3_Issue2/DV3211921211.pdf (Accessed 8th March 2020).
 13. Das S. Soul Theory Website. Los Angeles: WordPress, 2014a. Available from: <https://theoryofsouls.wordpress.com/>, A free eBook. (Accessed 9th April 2020).
 14. Das S. Soul Theory. Los Gatos: Smashwords, 2014b. Available: http://www.academia.edu/8587620/Soul_Theory_A_Book, Free E Book, (Accessed 8th March 2020).
 15. Das S. Michelson Morley experiment proves light speed is not constant. Physics essays. 2014c; 27(1). Also available from: https://www.academia.edu/11320387/Michelson_Morley_experiment_proves_light_speed_is_not_constant (Accessed 12th April 2020).
 16. Das S. A comparison of modern science with Vedic science. Research and Science Today. 2019; 1(17). https://www.academia.edu/38590496/A_COMPARISON_OF_MODERN_SCIENCE_WITH_VEDIC_SCIENCE (Accessed 8th April 2020).
 17. Das S. 2020. Conservation laws of nature. Journal of Applied Global Research. 2012a; 5(12). Available: <https://s3-eu-west-1.amazonaws.com/pfigshare-ufiles/1470570/LawsOfPhysicsJAGR.pdf> (Accessed 8th March 2020)
 18. Das S. Truth and MLE - the only way for Eternal Global Peace on Earth. International Journal of Scientific and Research Publications. 2020a; 10(7).
 19. Das S. Yogic Power - the Highest Power in Nature. International Journal of Scientific Research and Engineering Development, Nov-Dec 2020b; 3(6).
 20. Das S. The Cause and Effect Law. International Journal of Social Science Research and Review. 2022; 5(3).
 21. Das S. The Yogic Power of UFO-ETs. International Journal of Scientific Research and Engineering Development. 2023a; 6(2).
 22. Das S. The Majority is Always in the Wrong. International Journal of Social Science Research and Review. 2023b; 6(5):25-55.
 23. Das S. A simplex approach for binary linear programming. World Journal of Advanced Engineering Technology and Sciences. 2024a; 11(2):508-521. Article Doi: <https://doi.org/10.30574/wjaets.2024.11.2.0119>. Also available free at https://www.academia.edu/117953322/A_simplex_approach_for_binary_linear_programming
 24. Das S. Vedas in Bible. Int. J. Adv. Multidisc. Res. Stud. 2024b; 4(4):183-199.
 25. Das S. Vedas, the eternal laws of the universe. International Journal of Science and Research Archive. 2025; 15(3):344-373. Article Doi: <https://doi.org/10.30574/ijrsra.2025.15.3.1636>. Also available free at: https://www.academia.edu/129871194/Vedas_the_eternal_laws_of_the_universe
 26. Eddington AS. SPACE time and gravitation. Cambridge university press, 1920.
 27. Ferraro R. Einstein's Space-time. Springer, 2007, p. 8.
 28. Gita, Prabhupada ACBS. Bhagavad-Gita as it is. USA: Bhaktivedanta book trust, 1994.
 29. Gonzalez RL. The Mahabharata and the Yugas. Peter Lang, New York, 2002.
 30. Govinda L. The way of the white clouds. Boston: Shambhala, 1988.
 31. Green E, Green A. Beyond Biofeedback. USA: Merloyd Lawrence Book, 1977.
 32. Grosso M. The man who could fly: St. Joseph of Cupertino. History's Most Outstanding Case of Levitation, Witnessed by Multitudes, Expert Discusses, 2020. <https://www.theepochtimes.com/historysmost-This-publication-is-licensed-under-Creative-Commons-Attribution-CC-BY,2015>. Doi <http://dx.doi.org/10.29322/IJSRP.10.07.2020.p10359> www.ijrsrp.org/outstanding-case-of-levitation-witnessed-by-multitudes-expert-discusses_1413136.html
 33. Hazarika B. 2024. O Ganga Tumi Boicho Keno / ও গঙ্গা তুমি বইছ কেন / Bhupen Hazarika, <https://www.youtube.com/watch?v=V15YLE5o2F0> Accessed: June 2026.
 34. Heisenberg W. The physical content of quantum kinematics and mechanics. Z. Physik, 43: 172-98. Translated from German by J.A.W. and W.H.Z. 1981. Available in the book Quantum theory and measurement, Wheeler, J.A. and Zurek, W.H. 1983: 62-84. NJ: Princeton university press, 1927.
 35. Hsu JC. Modern control principles and applications. Jay C. Hsu, and Andrew U. Meyer, McGraw-Hill, New York, 1968.
 36. Hugo V, Les Miserables, in English, translated from French by Isabel F.Hapgood. Last Updated: October 30, 2009. Taken from: The Project Gutenberg EBook. Copyright 1887. 1262 pages, The book is available free from: <http://www.gutenberg.org/ebooks/135>

37. Libet B. Do We Have Free Will? *Journal of Consciousness Studies*. 1999; 6(8-9):47-57.
38. Phillips AC. *Introduction to Quantum Mechanics*, Department of Physics and Astronomy, University of Manchester, 2003, John Wiley & Sons Ltd, England.
39. Poverty. The world counts, 2024. <https://www.theworldcounts.com/challenges/peopleand-poverty/hunger-and-obesity/how-many-people-diefrom-hunger-each-year>
40. Press WH, Teukolsky SA, Vetterling WT, Flannery BP. *Numerical Recipes in C, The Art of Scientific Computing*, Second Edition. Cambridge university press, 1992. EBook, 1992.
41. Quigley L, Holland J. *The blind men and the elephant*, 1959. http://www.carrollquigley.net/pdf/The_Blind_Men_and_the_Elephant.pdf
42. Rama S. *Living with the Himalayan Masters*. Himalayan institute press, 2007.
43. Ray S. *Bharater Sadhak*, Volume 1, 8th Edition, Karuna Prakashani, Kolkata 9, Paush 1312, pages 336, in Bengali language, India, 1905.
44. Rogness J. *Sinusoidal waves as sound, Trigonometry in nature*, n.d. <https://www-users.cse.umn.edu/~rogness/math1155/soundwaves/> (Accessed March 2023)
45. Roy PC. *The Mahabharata of Krishna-Dwaipayana Vyasa*. Vols 1-10. Translated into English prose from the original Sanskrit text. Calcutta: Oriental publishing, n.d.
46. SK Virupakshananda S. *Samkhya Karika: of Isvara Krsna, with the Tattva Kaumudi, of Sri Vacaspati Misra*. English translation. Mylapore: Sri Ramakrishna Math, Madras, India, 1995.
47. Serway RA, Jewett JW. *Physics, for scientists and engineers with modern physics*, 6th edition, Thomson, California, 2004.
48. Sniedovich M. *Dynamic Programming: Foundations and Principles*, Second Edition, 2010.
49. Tagore R. *Rabindra rachanabali*. India, Bengali language, 2010. <https://rabindra-rachanabali.nltr.org/node/1>
50. Weiss BL. *Many Lives, Many Masters*. US: Fireside, 1988. Available: http://www.tgot.org/images/1_File-PDFMLMM.pdf (Accessed 9th April 2020).
51. William James. *Pragmatism*. 1907. This edition was created and published by Global Grey ©GlobalGrey 2019, globalgreyebooks.com
52. Young James O. *The Coherence Theory of Truth*", *The Stanford Encyclopedia of Philosophy* (Fall 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2018/entries/truth-coherence/>