VOLUME 2

The Greening of Pharmaceutical Engineering

Theories and Solutions

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Preface

About a century ago, Nobel laureate (1913) Rabindranath Tagore summed up with ingenuity and flippant take the 'unintended' consequences of imperial desire in his poem "The Invention of Shoes". With rollicking rhymes and galloping rhythm, he described the solution offered by the stooges of Imperialism thus:

"Then they said, "Let us call a cobbler
Let him cover the earth with leather
If all the dust could be kept in a bag
It would be a great achievement of the king."
It was thus agreed,
"This could well be done
If a suitable cobbler could be found."

Of course, the anecdotal tale ends with the invention of shoes and the shoes were invented, but not until the inventor-cobbler was threatened with decapitation for first having the courage to dismiss imperial agenda and then for somehow finding out what the King's counsel had been contemplating all along.

Volume 2 of this series of volumes about what we call "the greening of pharmaceutical engineering" is entitled: Theories and solutions.

The theories presented here are not about adding yet another fudge factor to rescue the resort to Newtonian mechanism within the broader Einsteinian models of quantum mechanics. Far from it: here they are rather an attempt to bring nature and its solutions to the problems that have been created entirely due to the departure of our lifestyle from nature.

Once deliberated, these solutions are as simple as … the 'invention of shoes'.

In Volume 1 ("Practice, Analysis, and Methodology") of this series, we laid out the problem, showing how none of the current theories offered any chance to offer objective analysis, let alone any comprehensive solution to the health crisis that currently incapacitates modern civilization. This included demonstrating:

a. the hopelessness of mainstream chemical solutions, each of which is bound to make matters worse in every ailment case; and
b. the hopelessness of 'human drones' that replace empathy for mankind with Hollywood dramas and cheap political rhetoric. This development also embraces what has become a plague unleashed by a self-serving elite of dominant corporate interests — e.g., the so-called Big Pharma cartel.[1] — on everyone everywhere. In this volume, we give recipes for changing a system that was churning in human drones to something that would humanize the environment. We do that with the antidote from nature.

Unless already familiar either with Volume 1 in particular, or our nature science approach in general, the reader is bound to encounter this volume with rolling eyes and a shaking head, wondering 'what does this have to do with pharmaceutical engineering'? However, soon the reader will find out, the discussions of tangible-intangible conundrum, prisoner's dilemma, cognition with conscience, personae of successful world leaders and leading scientists, famine of Bengal, and hordes of others have as much to do as a seed has to do with the color of a flower or sweetness of a fruit. The inescapable fact remains that the source of all matters is intangible. This source is thereby not subject to most tangible inspection, and that makes it mandatory to investigate the role of *intangible* factors. Not surprisingly, New Science, which is obsessed with tangibles, short-term and myopic self-centeredness, has not limited itself to merely ignoring intangibles. It has actively sought to replace them with an artificial version that purportedly mimics the best features of its intangible cohort. The aim remains constant: to maximize profit in the shortest possible term.

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[1] This can be verified by observing pharmaceutical advertising any time of day and any day of the week across every US television network. Since the 1990s some American consumer protection lobbies have compelled the corporate giants of the Big Pharma cartel to list in their advertising what are euphemistically known in the field as the "contra-indications" that come with using their products at normal dosages. These "contra-indications" frequently include… death. As we write this — in March 2016 — one particularly classic example of this is to be observed in an advertisement carried on many networks that happens to employ celebrity product testimonials from, among others, the world-famous U.S. champion golfer Arnold Palmer, for a blood thinner named Xarelto. In less than an hour after that endorsement appears, another ad pops up — this time from a group of consumer litigation lawyers offering to win compensation for any victim of the Xarelto's aforementioned "contraindications".

This volume considers all major illnesses and unearths the root cause of the ailment. Once the cause is identified, real scientific investigation (what we call 'delinearized history') is employed to excavate a meaningful and real solution. Not all diseases are covered, but the science established allows one to tackle any ailment, be it physical or mental. It is done in such a way that anyone that is not obsessed with dogmatic cognition or new science will see it so clearly that he would be wondering why no one else came up with such analysis. Of course, detractors will continue to rant, "if it is that simple, why didn't the experts come up with it for last few centuries?" To them, we say: don't merely cite your objection to the science and vibrate on your false assumptions. Try finding out one phrase that is not logical and fundamentally correct. Until then, stop squirming and let others of good conscience benefit from the book so they can escape the collective addiction to falsehood that has been promoted as Civilization's last and only solution and hope.

If the readership takes away one thing from reading and studying the materials put forward in these volumes, it should be truth and falsehood, real and artificial work as pairs of opposites. One benefits humanity, the other harms it, no matter how much spinning the profiteers and their flacks attempt. We all know: you cannot fight Nature. In nature, there is no disease that doesn't have a cure. Why then have we wasted so much effort chasing chemical "alternatives" to natural living, i.e., to living in Nature and with Nature?

We have already known for some time that

- tobacco stimulates a male hormone that can cause impotence when packaged with artificial nicotine;
- that there are pregnancy "contraindications" associated with long-term use of birth control pills;
- that there are carcinogenic risks associated with artificial vitamin C (as opposed to natural vitamin C, which can prevent cancer);
- that artificial carbonate can make bones brittle while natural one can strengthen it;
- that natural sweeteners can increase immunity while an artificial one can destroy it.

It seems unlikely that the contents of this set of phenomena is either exceptional or complete, confined to just these few isolated examples. Clearly, the common factor that links them is the *natural* source of whatever alleviates or directly cures the apparent sign(s) of dis-ease. The pattern

initiated by the earliest recorded great investigators of the secrets of human health and disease — in ancient Egypt, in ancient Greece, ancient China and the ancient India subcontinent, and in the Muslim world late in the first and early in the second millennium AD — has been largely discounted by "New Science" of the modern era and its misguided focus on the artificial. If the examples brought forward in this volume contribute to advancing the process of settling scores with that modern conceit, the authors can consider the quest to have become crowned with success.

1

Introduction

1.1 Opening Statement

If the Information age has given us anything, it is access to facts, information, misinformation, disinformation, and most importantly conclusions of the "pundits". As long as these pundits are not motivated by 'finding the truth', which would require them to be open to changing their first premise (including intention) to avoid dogmatic thinking, no guidance is provided by these conclusions. Similarly, information has no meaning as long as the readership has already decided which conclusion he desires. This volume 2 of a 4-volume book is a guide for those that wish to make up their minds only after going through the process of cognition. Open mind is a pre-requisite.

1.2 The Way Out: How Do We Make Use of Existing Knowledge?

Everyday, we have breaking news in all aspects of health and environment. What can be learned from them? Take for instance, those incessant streams

of DNA articles. Case in point being in an article by Reynolds (2015), who wrote: "Identical twins in Finland who shared the same sports and other physical activities as youngsters but different exercise habits as adults soon developed quite different bodies and brains, according to a fascinating new study that highlights the extent to which exercise shapes our health, even in people who have identical genes and nurturing." This study shows that our environment and our physical activity is what shape our development, not that we are born that way. Can this also be the answer to those that say our sexual preference is innate? The facts of this paper are:

1. Twins with identical DNA will have different physique depending on physical regimen followed;
2. They will have different brain structure depending on physical regimen followed.

If the first premise is DNA is the controller of behavior or DNA is the fundamental 'particle' that defines humanity, then this paper creates dogmatic contradiction and certainly people on both sides of the debate will argue for ever just like Christian vs Atheist debates. They are both wrong, because of their first premises. On the other hand, if the first premise is: Brain (psyche) and physique (body) work like yin yang and both are controlled by the heart, which has the freedom of intention, this article makes perfect sense and there is no contradiction in interpretation of facts presented here.

Every year scientists come up with contradicting reports/studies. Any conclusion that comes out matches precisely the first premise that was carefully selected in order to deduce the desired outcome. The moment such conclusion is made, others become busy preparing their counter argument to support their own conclusion that comes from another premise. It is no surprise that such nonsense as God gene, Selfish gene, Poverty gene, Gay gene were allowed to enter modern-day science and one can only expect new studies proposing 'incest gene', 'pedophilia gene', and others with equal 'scientific' merit. In the mean time, the work of lowering the legal age of consent to legalize the predatory behavior against minors is already in the works. Of course, this is lowering the legal age of consent and not for marriage purposes, just for sex. A 50 year old man can have sex with a 11 year old boy because he has given his consent! In the meantime, a 'scholarly' presents announces, "Paedophilic interest is natural and normal for human males … At least a sizeable minority of normal males would like to have sex with children … Normal males are aroused by children." (Gilligan, 2014)

If Volume 1 has taught us anything, it is: you cannot trust anything that comes from someone that has an agenda other than disseminating the truth. In fact, if we have to describe the reason behind the current dismal state of the world, we have to point finger at all the dogmas that we have believed in. So, how do we know whom to trust? How about not trusting those that are addicted to Trinity (the old one or the new one: Money, Sex, and Control). Information age makes it easy for us to find out the background of the world leaders today and with the correct attitude we can sort out prophets from profiteers. Table 1.1 shows the list of some of world leaders of modern era and how they got their inspirations. Of course, this list is not comprehensive and serves only as a guideline.

Chapter 2 describes what constitutes natural mass and energy, as well as natural cognition in terms of human thought material (HTM). The model used is yin yang that shows the balance of tangible and intangible at all levels. At the end, the readership is empowered with the process that distinguishes between natural and unnatural, between truth and falsehood, between cure and insult. Picture 1.1 Shows fungus and charcoal on organic lemon and handmade bread, respectively. It shows anecdotally how the pathway followed can determine effect of such chemicals. New science doesn't have a criterion to distinguish between the two pathways. Chapter 2 shows how pathway analysis can lead to determining the final state of all matter, including mass, energy and thought material. This discussion is of paramount importance for determining causes of any disease as well as the remediation of environmental health. Once we understand how natural mass and energy are produced and how to detect natural processes one must have a natural cognition tool, it becomes easy to characterize matters and rank them in terms of beneficial and harmful. Once characterized, the way to determining cause of a disease is paved.

1.3 The Driver of the Knowledge Model

Albert Einstein famously said, "A new type of thinking is essential if mankind is to survive and move to higher levels." The previous chapters of this book have established that the 'new type' doesn't guarantee anything other than yet another conclusion unless there is a fundamental change, involving paradigm shift. Each paradigm emerges from a thought process that in itself has a picture attached to it.[1] This constant interaction between

[1] The soul never thinks without a picture – Aristotle.

Table 1.1 Creative genius and their inspiration providers.

Creative genius	The person	The persona
Steve Jobs	Steve Jobs is a visionary known around the world for his contributions to Apple.	Jobs credits a lot of his innovation to experimenting with LSD at a younger age. According to sources, Jobs believed that experimenting with LSD in the 1960s was "one of the two or three most important things he had done in his life."
Sigmund Freud	Known as world's greatest psychoanalyst. The man that introduced Sex as the sole motivator of human cognition.	He is also known for his admiration of cocaine and his frequent use of the drug. He spoke publicly about the benefits of moderate cocaine usage. In a letter to his fiancée, Martha, Freud wrote that "if all goes well, I will write an essay [on cocaine] and I expect it will win its place in therapeutics by the side of morphine and superior to it... I take very small doses of it regularly against depression and with the most brilliant of success."
Bill Gates	World's richest man ($80 billion asset in 2014) and the most famous college dropout.	Was experimenting with LSD. In an interview with Playboy, Gates touched on his experimentation with the drug, saying that "there were things I did under the age of 25 that I ended up not doing subsequently."
Carl Sagan	Renowned astrophysicist and cosmologist, the guy that wrote the introduction of the book: A Brief History of Time by Stephen Hawking.	He openly discussed his marijuana habits in addition to advocating for its recreational use to stimulate intellectual endeavors. He wrote a 1971 essay called "Marijuana Reconsidered," in which he talked about the benefits of the drug.

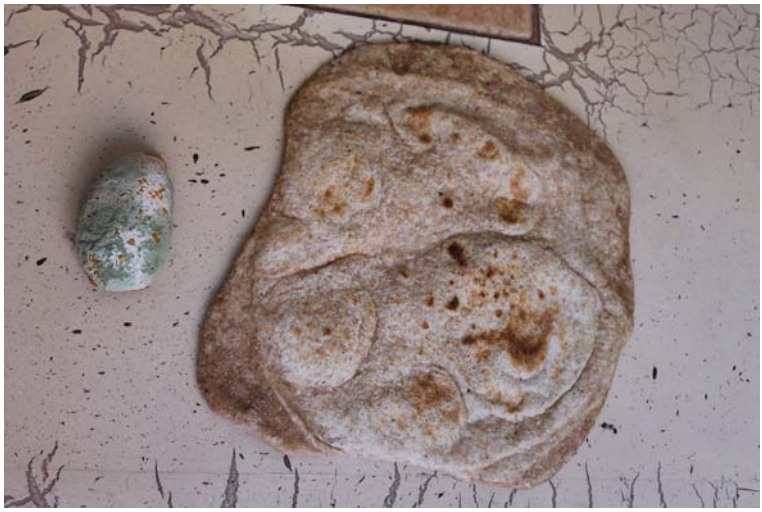
Table 1.1 Cont.

Creative genius	**The person**	**The persona**
Richard Feynman	Feynman was a celebrated physicist known for his groundbreaking work in quantum mechanics. He is a Nobel Laureate in Physics.	He dabbled in LSD, marijuana and ketamine. He stopped, however, when he worried he might become addicted. He once wrote that he got "such fun out of thinking that I don't want to destroy this most pleasant machine that makes life such a big kick."
Francis Crick	Crick was part of the team Watson, Crick and Franklin, who together discovered the all-important DNA-structure.	LSD was his motivator. Crick told many people about his LSD experimentation and how he used the drug while working on the molecular structure experiments.
Thomas Edison	The iconic American inventor, who 'invented' the light bulb.	Regularly consumed a cocaine-laced drink of a Bordeaux wine treated with coca leaves (the main ingredient of which is cocaine). In some recipes, the ethanol in the wine would extract cocaine from the coca leaves in concentrations exceeding 7 mg per fluid ounce.
John C. Lilly	Lilly is remembered for his groundbreaking work in the area of electronic brain stimulation. He was the first person to ever map pain and pleasure pathways in the brain.	He toyed around with mind-altering drugs such as LSD and ketamine.

(*Continued*)

Table 1.1 Cont.

Creative genius	The person	The persona
Paul Erdos	Erdos was a Hungarian mathematician, remembered for his eccentric lifestyle and his influential contributions to 20th century academia. He was one of the most prolific mathematicians who ever lived.	Largely motivated by amphetamines. In fact, he once entered a bet with a friend that he could live without amphetamines for an entire month. He won the bet, but reported that he couldn't do any math during that month-long period. He resumed popping pills and math was forever changed.
Friedrich Nietzsche	Nietzsche is synonymous with brilliance today, but he was 'crazy' that needed to keep his brain under control with drugs.	He was addicted to opium, taking huge doses at times where his work would have definitely be influenced. He reportedly wrote "The Genealogy of Morals" in just two weeks during an opium binge.
Pablo Picasso	Some call Picasso the most important artist of the 20th century, citing his innovative techniques such as Cubism as evidence.	Cubism could have been a result of the artist's drug use, as Picasso dabbled in psychotropic drugs during his lifetime. His use of opium, morphine and hashish leads some historians to believe that a movement as influential as Cubism was created under the influence of something else entirely.
Dr. William Stewart Halsted	Halsted is credited as inventing the mastectomy, a groundbreaking surgical procedure.	Halsted not only used cocaine as an anesthetic for patients, but he experimented with it himself!
Howard Hughes	Hughes was a businessman turned engineer billionaire.	He would pop everything from codeine to Valium pills.



Picture 1.1 Fungus (left) and carbon (dark spots on the right) can be beneficial or harmful depending on the origin (organic lemon, or organic whole wheat bread) and process (atmosphere, or clay stove) involved. New science doesn't have a criterion to distinguish between the two pathways.

tangible and intangible is in the essence of nature. So for a paradigm shift to take place, a new cognition tool, different from anything that modern Europe has seen must be implemented. This is done in Chapter 3. Such model is necessary for both mental health and diagnosis and subsequent cure of diseases and environmental insults that are ubiquitous today. This chapter provides one with truly dogma-free cognition tool. This theory explains phenomena, such as mental illness, dogma, depression, arrogance, addiction, and others as cognitive disorders and deviation from natural and balanced usage of HTM. This cognition model, combined with the mass and energy model described in Chapter 2, is capable of explaining both physical and mental disorders in humans and general disorder in the environment. It is discovered that perception-based short-term models lead to mental disorder, while the long-term approach leads to remedy and cognitive balance. This is analogous to yin yang balance in nature.

1.4 The Proof of the Pudding is in the Eating!

Results don't justify the means, but a sound scientific process must be able to explain everything – without resorting to dogma. Modern era teaches us how to accept dissenting opinions and agree to disagree. This pragmatic

approach has helped scientists of all genres receive funding for whatever study they wish to conduct, but this has zero value in real science. This book is about real science and Chapter 4 describes in details how real science can explain all paradoxes. Because the new theory offers standards for mass, energy, and thought processes, the same theory can be used to track the root causes of both physiological and cognitive disorders, ranging from cancer to addiction. This chapter explains both physiological and psychiatric disorder as a departure from natural mass/energy and thought material, respectively. In absence of such theory, medicines (artificial chemicals) and psychotherapy (artificial thought material) are applied to cure diseases that are caused by aberration from the natural process of chemical and cognition, creating paradoxes. It also explains why every medical drug has failed and will fail and why every therapy has made the ailment worse.

It is also important to explain why all previous models created paradoxes and what could remove those paradoxes. Chapter 4 does so for all major paradoxes in medical science. At the end, it also deconstructs game theory that has produced some 11 Nobel laureates in Economics.[2] This is no ordinary task, as economics is the driver of the modern era and Nobel prizes encapsulate the very best our society has to offer. It is, however, fashionable to criticize and critique Nobel laureates of peace and, frankly, there is little defense for that skepticism in a world that has seen Obama as Nobel peace prize winner and Hitler as a nominee. However, for economics, it's rare to challenge a theory at the root, let alone dismissing it as spurious.

1.5 The Proof is in the Pudding

In volume 1 of this book series, we started off with an anecdote involving two professors of medicine telling us there is no cure to any disease – at least a cure that is available at the pharmacy self. We discussed the hopeless of diagnostic tools and the fact that we don't know the cause of all 'incurable diseases'. We also discussed the prophets of doom – the kind that have been scaring people with fears – ranging from being pushed off the edge of the flat earth to heat death à la Lord Kelvin. They are the smartest investors, politicians, industrialists, economists, scientists sand and mathematicians and they all made the same prediction. Anyone countering arguments of one corner would face the wrath of the other corner and

[2] Game theory is also of great importance in medical science for both preventive and curative applications.

they would call each other 'flat earth theorists' and if someone criticizes all of them, he certainly would become 'conspiracy theorist', 'pure lunatic', or worse 'terrorists'. This book series set out to establish scientific discourse that discredits and dismisses each and every theory of modern era and replaces all of them a truly scientific dogma free process that answers all questions involving human and environmental health. Chapter 5 presents the summary and conclusions of this volume and explains how it is possible to deconstruct hundreds of years of work in all fields of New science and offer an alternative.

If this book teaches any lesson, it is: solutions to all ailments is in nature, in natural thinking and in natural mass and energy. This conclusion is complemented with an appendix (Appendix-A) that lists many abstracts from contemporary work on cancer and highlights the cause and possible curative measures that would avert and indeed reverse cancer.

1.6 Summary of Introduction

In this volume, the authors

- clarify in Chapter 2 their key conception of what constitutes something they have dubbed "the nature-science approach";
- differentiate in Chapter 3 the key processes and decisive importance of what the authors call "knowledge-based cognition" for correct scientific understanding of all varieties of phenomena in the human organism. These are critically distinguished from the simpler—but actually derivative and therefore misleading—notion that such understanding is entirely a function of raw, tangible perception of observed physical events and relationships; and
- embark in Chapter 4 upon elaborating the requisites of a mass-balance equation that would be up to the task of establishing and distinguishing the true causes, chains of causation and any other sources of disease in the human organism from mere cataloguing of perceived changes of state or condition in this or that organ or normal process of the human body.

With this, the authors complete construction of the theoretical edifice needed by the reader fully to grasp the selection and significance of the topics to be taken up in the final two volumes.

2

The Nature-Science Approach: Some Further Consequences

2.1 Cognitive Dissonance

2.1.1 Summary Remarks about Theories that Disconnect Conscience from Humanity

Back in Chapter 3 (Volume 1), we elaborated how the human family became conscious of the role of intangible sources of knowledge. We discussed how the battle of ideas was waged—mostly by proponents of the Church of Rome—against the very idea of the primacy of intangibles in human **cognition** generally, in favor of the primacy of tangible phenomena in all fields of human **perception**. A spirited defence of this idea, on the other hand—especially in its Islamic form—was mounted on the firm foundations of this conception's origins in the philosophies and outlook of ancient Chinese, ancient Indian and even ancient Greek civilizations.

In Chapter 5 (Volume I), we elaborated the line of march in the development of social theory from Malthus to Keynes. There it was noted, with some emphasis, how the contradictions entrenched since the Golden Age

of ancient Greece in the discussion of the physical sciences of tangibles came to be recapitulated in the formulation of the social sciences.

In this chapter, we launch the discussion of how this epic battle for human conscience has found a new major field for action, in which the back-and-forth between the proponents of organic approaches to human illness and the proponents of tangibles-only investigations of medical phenomena is increasingly fractious.

2.2 Foods for Thought

After food is eaten, enzymes break proteins down into amino acids, fats into fatty acids, and carbohydrates into simple sugars (for example, glucose). In addition to sugar, both amino acids and fatty acids can be used as energy sources by the body when needed. These compounds are absorbed into the blood, which transports them to the cells. Blood, therefore remains in a highly reactive state that can be severely distorted in presence of inorganic environment such as natural oxidation in the atmosphere. Blood is known to degrade very fast, causing bacteremia to trigger inoculation of pathogene, causing immeasurable damage to the organism. Blood can also cause protein toxicity, particularly triggering onset of cancer.

2.2.1 Artificial Food Addiction

This one covers all artificial food products, additives, smokes, artificial intoxicants, hard drugs, all of which are addictive and inherently harmful. The harmfulness of artificial food is well known. What is debated, however, is which components are addictive and what renders the process inherently addictive. This transition starts with sugar. By merely invoking chemical processing to natural sugar cane, we manage to turn sugar as addictive as cocaine (Hutchinson *et al.*, 1983). Similarly, cigarettes contain a artificial chemical, nicotine that not only harms your lungs, but also gets absorbed in the bloodstream and is carried throughout the human body. It damages the thin lining of blood vessels making them more prone to accumulation of fatty deposits such as LDL cholesterol. This results in buildup of fatty plaque that can harden and narrow the arteries. Further smoking can spark off these plaques to burst, which blocks the artery and finally results in heart attack. All these processes are highly addictive and inherently harmful to the human body. This process is farther deteriorated through introduction of e-cigarettes. This seemingly 'smoke-free' substance has ben proven to be far worse than cigarettes. Japanese

scientists recently announced that e-cigarettes contain 10 times the level of cancer-causing carcinogens than its counterpart in the tobacco world. At one time, e-cigarettes were touted as the answer to smoking without the complication of so many dangers. The electronic nicotine products have increased in popularity with many believing that they are receiving a hit of nicotine without the health damage of a normal cigarette, laden with chemicals. However, the research commissioned by the Japanese Ministry of Health found formaldehyde and acetaldehyde carcinogens in the liquid produced by a number of e-cigarette products, a health ministry official stated.

Earlier this year, the World Health Organisation (WHO) urged governments to ban the sale of e-cigarettes to minors because of the "serious threat" posed to them.

The UN health agency said that despite the lack of evidence on the damage caused by e-cigarettes, there was enough "to caution children and adolescents, pregnant women, and women of reproductive age" about their use, adding that they should be outlawed from indoor public spaces.

According to the US Center for Disease Control and Prevention (CDC): "More than a quarter of a million youth who had never smoked a cigarette used electronic cigarettes in 2013, according to a CDC study published in the journal Nicotine and Tobacco Research. This number reflects a threefold increase, from about 79,000 in 2011, to more than 263,000 in 2013."

2.2.2 Organic and Mechanical Frequencies

In order for a system to have a balance, there must be two components that have complimentary properties. Often, this duality is confused with 'good' and 'bad' as fundamental difference. From that point on, all dualities are considered to emerge from the same good and bad concepts. This type of consideration is new and is not supported by science. However, if such duality is considered as part of the universal balance, there is a consistent model that emerges (Islam *et al*., 2014). This duality is recognized throughout the ancient époque as late as Islamic era. This aspect has been discussed in earlier chapters. It suffices here to state that such duality is inherent to nature both in external and internal entities.

The idea is to harmonize intention with pure light that controls the universal order. That would define what is real intention (Khan and Islam, 2012; Islam *et al*., 2013). An entire chapter on this topic is written by Islam *et al*. (2013) and further expanded by Islam *et al*. (2014) that takes up the role of intention in the social and personal lives of contemporary peoples, and discusses the challenges posed thereby for elaborating and sustaining

systems and processes of educational development that best serve the general aim of further humanizing the social, political, economic and natural environment. The over-riding intention seeming to dictate contemporary economic and social existence is the Establishment plan to control, contain, and sell off the whole world, while attempting again and again to obliterate the natural world by transforming everything in it into products. At the level of both individuals and their social collectives, this has its ongoing impacts on social development and growth.

Considered in its most general aspect, the universe comprising all phenomena can be comprehended as comprising two broad categories: the mechanical and the organic. Many mechanical phenomena can be found within the organic category. Certain aspects of many organically-based phenomena can be defined or accounted for entirely within the category that comprises all forms of mechanism. Frequency, and its measurement, often appears to bridge this mechanical-organic divide. Organically-based frequencies have an operating range which itself varies, e.g., the length of the lunar year. On the one hand, purely mechanical frequencies also have an operating range, and this range can be set or otherwise manipulated up to a point, e.g., the resonant frequency at which a bridge structure may collapse in a sustained high wind. On the other hand, although organically-based frequencies can be detected and measured, there is usually little or nothing, beyond a very definite window that must be determined by trial-and-error, that can be done to manipulate such frequencies.

Since Galileo's brilliant and successful deployment of an elaborate water-clock as an organic-frequency device for measuring with some precision the differential rates of descent to earth of freely-falling masses of different weights, all kinds of apparently natural clocks have been deployed to calibrate many things. This includes even universal standards of the metric system, e.g., the cesium atom clock at a Paris laboratory used for setting the standard length of the meter.

Problems arise when such frequency-based devices are treated as the generator of values for a variable that is treated as being independent in the sense that we take Newton's fictional time-variable t to be varying "independently" of whatever phenomenon it is supposed to measuring/calibrating/counting. Outside of a tiny instantaneous range, e.g., the period in which Δt approaches 0, naturally-sourced frequencies cannot be assumed to be independent in that way. This is a false assumption whose uncritical acceptance vitiates much of the eventual output of the measuring/calibration effort.

Such problem arises the moment one makes the phenomenal assumption that frequency is fixed. That's the idea behind the unit of 'second' for

time (solar orbit to cesium radiation frequency). New science fixed the frequency (it's like fixing speed of light), then back calculated time. No wonder, later on, time was made into a function of perception (relativity) thereby making the unique functionality schizophrenic. Not only is it the case that "such a problem arises the moment you make the phenomenal assumption that frequency is fixed." Even if you allow that t is not fixed and undergoes changes in value, i.e., that its frequency is not necessarily fixed, this problem persists if the subtler but still toxic assumption is accepted that the rate at which the variable t changes—Δt—is constant in some "continuous" interval over which the derivative $df(t)/dt$ may be taken. Here is where we uncover the truly toxic power of Newton's Laws of Motion over conscience-based consciousness. That is when they invoke some 'known' function, which itself is aphenomenal. The only function that is valid is with infinite order of periodicity (i.e., beyond chaotic).

In order to conform to Nature, one must align the intention with the long-term direction of Nature. This is done by successively asking questions:

All questions having dynamic intentions, I(t), aligned with the original intention, I_o (original intention).

In Arabic, the original (source) intention (before an action has commenced) has the root *niya*. On the other hand, The root word of this time-function intention is *qsd*. This root has to at least two meanings, 1) intention after an action has began; 2) economize (more akin to optimizing, not to confuse with saving).[1] Scientifically, a source intention is equivalent to saying, "my intention is to go to the airport"". However, as the driving continues and the driver comes across a red light or a traffic jam or a detour, he says, "my *qsd* (dynamic intention) to turn is to avoid delay" (See Figure 2.1).

Scientifically, intangibles are continuous time functions, ranging from 0, extending to infinity. Zero here refers to source and infinity refers to end. In a yin yang process, this forms a duality and balance. The source of an human act is the intention, I_o. The source of each of the subsequent bifurcation points is the dynamic intention, I_d. Correct intentions at each decision point lead to de-linearized optimization of time, coinciding with total conformance with Nature and universal order.

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[1] The word economics in Arabic indeed is based on the root word, *qsd*. In the Western canon, Karl Marx was the first to identify a role for intention in socio-economic development—specifically the dynamic intentions of different and especially opposing social classes. However, in post-Renaissance discourse, his usage of the word 'intention' sands out for its recognition of intention built into the actual arrangements—implicit and explicit—within and between the different social classes.

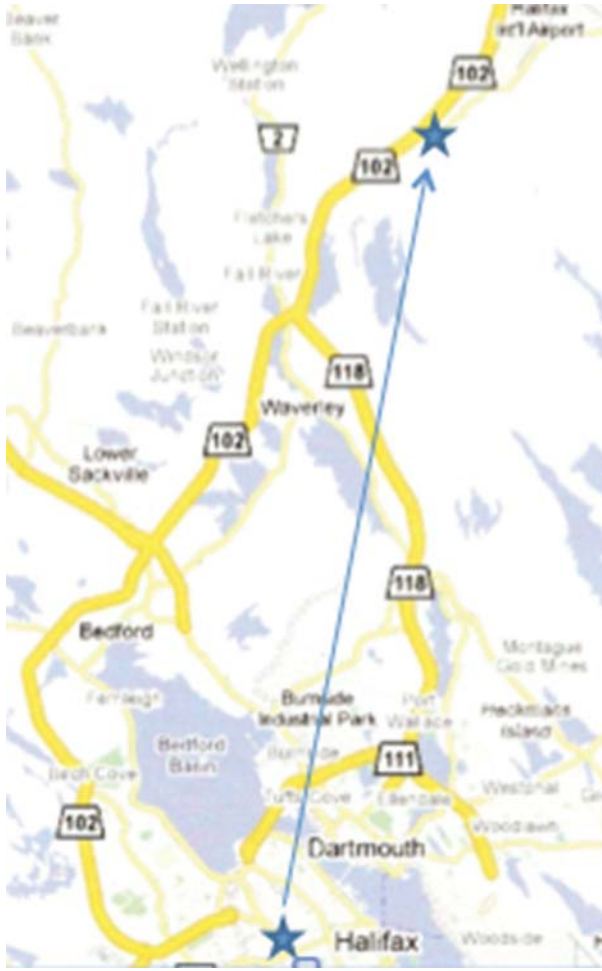

Figure 2.1 Niyah is original intention, whereas *qsd* is dynamic intention.

Because time is the dependent variable, this optimization also corresponds to both matter and energy, representing maximum economization, forming the basis for economic development, using the science of intangibles. If productivity is work/time, minimizing time required maximizes productivity. That's why nature science approach is the most productive.

There will be no paradox if the first premise is correct and it is followed by continuous logical pursuit, in line with the overall broad phenomenal intention. If the first premise is false, either because of 'belief' in a theory with aphenomenal assumptions or an intention that