



Unifying Subjectivity and Objectivity^{*}

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Abstract

The contribution of modern science to the progress of civilization is immeasurable. Even its tendency toward exclusive concentration on the objective world has had salutary effects of great value. Modern science has wiped away much that was merely superstitious or speculative. Its rejection of unfounded opinions and prejudices has helped the thinking mind question conventional beliefs, shed preferences and prejudices, and challenge established authority. But modern systems thinking inherited from natural science is the suppression of the subjective dimension of reality. Many complex systems are an attempt to define and represent all subjective experience in physical terms. The modern man has a bias towards objectivity. The powerful influence of sense impressions on his mind and thinking makes him ignore the subjective experience and consider only objective facts as a valid, legitimate and representation of reality. Observing objective factors that are physical is easier than observing subjective factors that are subtle. The mechanistic view of reality has led to the rejection of the role of the individual in social development as insignificant. The individuals determine the development of society. Their social power has its roots both in subjective factors and objective factors. Economy, politics, society, and culture are inseparable dimensions of a single integrated reality. Subject and object constitute an integrated whole. The mind sees them as separate and independent. Or it views one as completely subordinate to the other. Unbiased approach to the study of all human experiences may prove that subject and object are interdependent dimensions or elements of reality.

Franklin D. Roosevelt became the President of the United States on March 4, 1933. By the evening of March 4th, 32 of the 48 states had closed their banks. The New York Federal Reserve Bank was unable to open on March 5^{th} . It did not have enough money to function, as huge sums had been withdrawn by panicky customers overnight. On that day, the United States was in the midst of the most severe banking crisis she had ever faced.

The Great Crash of 1929 marked the beginning of the Great Depression that devastated the economy of the country for a decade. It was a decade of high unemployment: 25% of the workforce was unemployed; plunging farm incomes: prices fell by 60%; poverty: two million people were homeless; low profits: Industrial production had fallen by 50%; and deflation. The United States was struggling to survive the lowest point in its history.

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Since the beginning of the Great Depression, several thousand US banks had declared bankruptcy. Millions of Americans were lining up at the remaining banks daily to withdraw their savings before their bank failed and was closed. During the years after the Great Crash, every economic policy initiative thought to be relevant had been applied, but failed to stem the collapse of the system.

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Roosevelt had studied the principles of Economics at Harvard. He later remarked, 'I took economics courses in college for four years, and everything I was taught was wrong.' He knew that all those principles of economics he was taught in college were inadequate to stem the crisis. He was under the strong conviction that the collapse of the system was the result of subjective factors. He understood that this issue could not be readily addressed at the institutional or policy level alone. So he addressed the American people on radio through Fireside chats—a series of 30 evening radio conversations he initiated to alleviate the fear.

The President began making informal addresses on radio eight days after his inauguration. He explained to the Americans that all the objective factors that had made America prosperous were still present. The rich natural resources, hardworking people, huge industrial infrastructure and continental market were still present. The real problem was not the absence of any objective factor. It was rather their own loss of self-confidence and faith in their nation. He appealed to their courage and national pride. He told them, 'first of all, let me assert my firm belief that the only thing we have to fear is fear itself.'

During the following days, legislation was passed instituting insurance on bank deposits and other safeguards. On March 6th, the entire American banking system was closed temporarily. On March 9th, Congress passed the Emergency Banking Act. Roosevelt used the Act to effectively create federal deposit insurance when the banks reopened. On the eve of the end of the bank holiday, Roosevelt told a radio audience of more than 60 million people 'what has been done in the last few days, why it was done, and what the next steps are going to be.' He asked the people to redeposit their savings that they had withdrawn earlier.

The result was a remarkable turnaround in the public's confidence. The Americans began to believe that the reopened banks would be safe, as the President explained in his first Fireside Chat. Within two weeks, people returned more than half of the cash they had been hoarding. The first stock-trading day after the bank holiday marked the largest ever one-day percentage price increase.

Over time, the bank crisis subsided.

This famous event teaches us several important lessons.

First, it illustrates that economy, politics, society, and culture are inseparable dimensions of a single integrated reality. The ever present public debate over the role of government in regulating markets is misplaced. There are no markets without government regulation. Without an infrastructure of law to protect property and contract rights, without a judicial system to enforce those rights, without public institutions to prevent collusion and monopoly control, no market can be free and functional. So too, any economy is dependent on the prevailing social norms, values, educational system, and a host of other social factors. Only when economics is viewed as a subset and integral aspect of the larger society of which it is a part, it is possible to develop a real science of economy.

Second, it shows that crises are opportunities. Roosevelt's remedy for the banking crisis of 1933 led to measures which provided for the stable development of the American financial system for more than six decades. Those protective measures were systematically withdrawn in the 1990s which resulted in the 2008 financial crisis. History confirms that virtually every tragic event has had positive consequences. The Black Death in Europe led to the collapse of feudalism, paving the way for the rise of democracy. The world wars led to the founding of the United Nations and the Universal Declaration of Human Rights.

Third, this event illustrates the role of the individual in social development. Mainstream economics and social science deal with broad generalities and statistical averages. The individual is just a number in statistics. But in reality, the individual is the source of all creativity and innovation in society. All creativity and innovation spring forth from subjective factors. Human history documents the fact that a single individual thinker, leader, inventor or entrepreneur has the power to change the world. All significant changes in human history have been the result of actions by small groups of individuals. The social power of these individuals has its roots both in subjective factors and objective factors.

Finally, this event illustrates the equal, or greater, importance of underlying subjective factors in the effective functioning of society. Every economics student is taught that the economic system is founded on trust and confidence. Without trust and confidence, money has no value and financial institutions cannot function. But although it is recognized as a necessity, it rarely figures in the prevailing conceptual framework of economy. It is because our present economic theory is so strongly grounded in objective, material factors. The economic performance is the result of conscious choices of countless conscious individuals. Those choices depend not only on their confidence in the system but also on their theoretical understanding of how it works.

Money is commonly regarded as an objective reality, a thing in itself. In fact, money is merely a convention adopted by human beings as a symbol of social power. Money has no value outside of a social context. What would I do with a million dollars in the lonely Moon? The value of money depends on the overall productive capacity of the society which is founded on the knowledge, skills and values of its individual members.

This brief narrative illustrates that every known fact, event and concept acquires greater significance when viewed from a more comprehensive, integral perspective. This perspective can only be subjective.

The reality of the subjective dimension in economics can clearly be seen in the above case. We are living in a world full of conceptual systems created by mind. Different types of economic systems, political organizations, religions, philosophies, and scientific theories are all examples of conceptual systems, or paradigms created by mind.

A paradigm or a conceptual framework or a conceptual system is a distinct set of mental concepts or thought patterns, including theories, research methods, principles, and standards for what constitutes legitimate contributions to a field. We think in the form of thoughts, ideas, concepts, and facts. Organization and coordination of the facts generate thoughts. Organization and coordination of the thoughts generate ideas. Organization and coordination of the ideas generate a Conceptual System.

A Conceptual System contains both subjective and objective elements. It is founded not only on external, objective facts, but also on subjective factors such as conscious and subconscious values, perspectives, and rules that process the external facts.

In Roosevelt's example, rich natural resources, hardworking people and man-made industrial infrastructure are the objective factors in the Economic system. Faith, trust, confidence and courage are the subjective factors. Both are needed for a successful system. However, in many conceptual systems, only the objective factors are taken into account, as the policy makers did before Roosevelt was elected.

Every conceptual system has the aspiration to construct a system that would put man in touch with perfect reality. But, being a product of mind, the system is limited by its own elements, characteristics, faculties and properties. What happens when the elements of a conceptual system are taken for granted as true?

In many cases, mind mistakes the system or just an aspect or an effect of the system for reality itself. For example, the stock market bull run in 1929 was mistaken for a booming economy. The decision to withdraw deposits from banks was mistaken by American people to be a wise financial decision, which was actually leading the country towards disaster. Economic growth means prosperity, is a good example for a limited truth mistaken for reality. Today we have growth combined with increasing inequality and environmental problems. These factors undermine the current living standards, and future potential standards of millions, or may be billions, of people. Growth resulting from speculation is a formula for future disaster, as witnessed in 1929 and 2008.

Every system we see in the objective material world is a product created in the subjective mental world. The visible outer, objective, conceptual system is a reflection of an invisible, inner, subjective idea. The computer I use to write this essay is a tangible product. It could not have come into the objective external world without someone creating it first in the subjective intangible inner world. In Roosevelt's example, the positive outer outcome had its origin in the President's positive inner conception. The ineffective policy of the earlier administrators produced negative outer results. They too had their origins in the inner conception of those administrators, their conception being negative.

The subjective and objective fields are neutral. The human mind acting in those fields produces results that are viewed as positive or negative to man. The way in which man thinks has so far determined his progress. Further progress can be accelerated if there is a change in the way he thinks.

Division is the origin of the mind's capacity for analytic thinking. The more mind divides, the more it distinguishes, compares, contrasts and separates things from one another. It comes to consider each part as a separate object of reality distinct from all other parts. Division also leads to abstraction of objects from their context. Thus we observe a ripe fruit as something separate and distinct from an unripe fruit, the leaves, branches and trunk of the tree on which it grows, the soil in which the tree is planted, the sunlight and rain by which it is nourished, and the season in which it ripens.

Similarly, mind divides us from one another and from the world around us. It separates the pursuit and dissemination of knowledge through science and education from the life of the community. It even divides our own inner psychological existence, the subjective reality into thoughts, opinions, beliefs, sentiments, emotions, attitudes, feelings, urges, desires, impulses and sensations.

The mind's capacity for division is the origin of foundational concepts of modern science—the Cartesian divide between mind and body, the independence of the observer and object, and the distinction between objective and subjective forms of experiencing reality.

Cartesian dualism sees subject and object as totally independent dimensions of reality. Dualism is an ancient concept that was deeply rooted in human thought. The ancient scriptures taught that soul is different from body. Plato and Aristotle reasoned 2000 years ago that the human mind or soul could not be identified with the physical body. Rene Descartes reinforced dualism. The word 'Cartesius' is the Latin form of the name Descartes. Cartesian dualism is Descartes' concept of dualism.

The central theme of Cartesian dualism is, 'I reflect, therefore I am.' Descartes held that the immaterial mind and the material body were two completely different types of substances that interacted with each other. He said that the body could be divided up by removing a limb, but the mind or soul was indivisible. A modern materialist or a scientist would find it difficult to accept this view. Accepting it means accepting supernaturalism. So, they reject it.

While science is not willing to accept the division of reality as subjective and objective, it divides matter or objective reality as much as it can. This division has played an important role in the development of science.

The rise of modern science altered the course of global civilization, the evolution of the human mind and the development of human conception of knowledge in six fundamental ways:

1. *Physicalism*: Modern science led to the materialization of knowledge. The exclusive focus on knowledge of physical nature eventually led to the implicit premise or explicit belief that the physical is the sole plane of reality. Newton and other early scientists would have vigorously rejected this conclusion. This premise is now pervasive even

in the social sciences, where genetics and neuroscience seek to unveil the mechanisms governing psychology and even conscious mentality. *Observing objective factors that are physical is easier than observing subjective factors that are subtle.*

- 2. Deterministic Mechanism: Modern science led to the conception of knowledge as a set of immutable, universal laws determining the functioning of a static, mechanical universe. Consequently, Knowledge of reality became synonymous with certainty and predictability. It was challenged by the discoveries of quantum mechanics three centuries later. Outside physics this premise remains largely unchallenged. The Newtonian quest for immutable, universal laws of Nature was later extended to identify immutable, universal laws governing polity, economy and society. For the past two centuries social scientists have attempted to reduce human behavior and interaction to external factors and mechanistic processes governed by universal principles. This attempt has obscured the unique role of the individual in social development, innovation, discovery and creativity. The mechanistic view of reality has led to the rejection of human free will as an appearance and neglect of individual uniqueness.
- 3. *Specialization*: The strengths of modern science are Mind's capacity for division and analytic thinking. They led to the creation or emergence of separate disciplines, later to specialization and compartmentalization of knowledge. The consequence is immense. Over the last five centuries, the number of intellectual disciplines has multiplied from five to around 1000 disciplines and sub-disciplines.¹ As the study of reality is divided into smaller and smaller pieces, specialization has led to increasing fragmentation of knowledge. Viewing each field independently has generated precise knowledge of the parts, but has obscured the complex interactions and relationships between parts that are essential for knowledge of the whole.
- 4. Quantification of Knowledge: Modern science led also to the quantification of reality. This resulted in the confusion of data and information with real knowledge, and the misconception that mathematical models and statistical probability are true and accurate representations of the real world. Mathematics is an extremely powerful tool for the discovery and validation of knowledge. But increasingly the valuable tool has come to be regarded as knowledge itself. The awarding of two Nobel Prizes in economics for development of computer algorithms that model the functioning of financial markets is only an extreme example of a widely prevalent phenomenon. Its consequences during the financial crises of 1998 and 2008 underline the extreme danger of mistaking models for reality and mathematical formulas for knowledge.
- 5. Measurement of Uncertainty: An unintended consequence of the Scientific Revolution has been to redefine the notion of chance. The conception of the universe as a giant mechanism subject to universal laws of causation made it possible to also postulate its very opposite, a complete absence of causality, pure randomness. The development of probability theory originally aimed at obtaining knowledge about complex causal processes, but later was applied to situations assumed to be characterized by a total absence of causality. The merger of probability and statistics in the early 20th century

resulted in the new hybrid field of mathematical statistics. The application of a posteriori induction to ascertain the likelihood of future events dramatically broadened the application of mathematics to the human sciences, with profound consequences. Under the influence of positivism, the philosophical dimension of causality was dropped and probability came to be viewed purely in mathematical terms as an expression of randomness. *The concepts of uncertainty and randomness were inadvertently elevated from philosophical questions to the status of objective scientific fact.*

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6. *Dominance of the Objective*: Modern science commenced with an exclusive focus on the study of observable external phenomena in the material world. They alone lent themselves to measurement, verification and experimentation. This led to the rise of the philosophy of positivism, founded on the premise that information derived from sensory experience, interpreted through reason and logic, forms the exclusive basis for all authoritative knowledge. Only knowledge that can be independently verified was considered authentic. Thus, knowledge of the objective world and knowledge acquired by objective methods alone were deemed valid. The study of subjective phenomena and subjective forms of evidence became inadmissible and invalid. Introspective and intuitive knowledge was rejected. Yet, Srinivasan Ramanujan wrote 3000 valid and original mathematical theorems purely through intuition without any objective proof.

The contribution of modern science to the progress of civilization is immeasurable. Even its tendency toward exclusive concentration on the objective world has had salutary effects of great value. Materialism has wiped away much that was merely superstitious or speculative. Its irreverent questioning of truths has unleashed an insatiable curiosity and spirit of adventure. Its ruthless rejection of unfounded opinions and prejudices has helped the thinking mind question conventional beliefs, shed preferences and prejudices, and challenge established authority.

These characteristics have contributed positively to the advance of scientific knowledge. They are partly responsible for its collective achievements over the past five centuries. At the same time, each of these characteristics has imposed arbitrary limits on the development of knowledge. After reigning victorious for four centuries, today we see the weaknesses and insufficiencies of modern science rising to the surface, staring at us with its flaws and inadequacies. An impartial consideration of their role will help us understand both the strengths and weaknesses of science today and reveal opportunities for the further advance of both knowledge and civilization.

The root meaning of Objectivity relates to the perception of objects. Later it was used to refer to perceptions and viewpoints that are impartial and unprejudiced. The root meaning of Subjectivity relates to self-observation and self-experience. Later the word came to be synonymous with 'prejudiced by personal interest and perspective'.

"Our conceptual systems have undergone a continuous process of evolution over the centuries and are always subject to modification by conscious choice."

With the rise of experimental science, the quest for a verifiable external standard to ascertain facts eventually led to a confusion of meanings. Scientists began to believe only that which can be observed with the senses can be fully real and true. The difficulty is, objectively assessing or describing subjective phenomena poses severe limitations on the use of the experimental method for the study of subjective phenomena.

The moment the field moves away from the study of external objects, error, mistake, and superstition begin to rear their heads. Objectivity is a corrective to superstition. Subjectivity offers a clear unhindered field for superstition. This is inevitable. Each level of perception creates superstition appropriate to that level. The field of science needs to be scrutinized from each of these perspectives and cleansed for rationality or logic to step in.

The initial concentration of modern science on physical nature was justified as a practical necessity. The rise of positivism converted practical necessity into philosophical dogma with profound implications for the development of science. The transition was abetted by confusion regarding the ambiguity of the terms objectivity and subjectivity, each of which has a double meaning.

The study of physical nature is the study of inanimate objects and subconscious life forms which can only be observed objectively in the external environment, since we have no access to their subjective intentions or self-experience. Descartes' dualism encouraged the idea of the scientist as an objective, impartial witness standing outside of nature, rather than as an involved participant in the world he observes. Gradually, the notion of objectivity as the study of external objects merged with the very different notion of objectivity as the absence of distorting personal preferences and came to be regarded as one and the same thing. This led eventually to the philosophical premise that reality consists solely of objects that can be studied objectively and by extension that all subjective phenomena are secondary results of objective causes.

The word subjectivity also has two meanings which have gradually become conjoined and confused with one another. Subjectivity is the psychological field of conscious human experience that is not directly accessible to external observation. Only its behavioral expressions can be observed by others. But it is also used to connate subjective factors contributed by the observer, such as preconceived notions and prejudice, traditional beliefs and superstitions prevalent at the time. In its quest for impartial knowledge of physical objects in the world around, modern science naturally placed its emphasis on eliminating this distorting influence. So the idea of subjectivity as the psychological experience of a conscious individual came to be regarded as an unscientific and invalid form of evidence and to some extent an invalid form of experience. Modern science sought to discover ultimate knowledge by the exclusive study of physical factors that could be observed by the physical senses and measured by material instruments. In the process the entire subjective dimension of reality, the dimension which distinguishes human beings from all other species, was subordinated to the objective dimension observable by the senses. Eventually it resulted in philosophical and scientific efforts to reduce all non-physical phenomena solely to physical causes.

The course of science exerted an influence on the development of mental faculties, and concepts of truth and knowledge. It displaced the Greek conception of truth as that which could be known in the form of pure ideas accessible to logical reasoning, but not necessarily to physical observation or measurement. Rationality itself came to be associated only with that which can be perceived and verified physically. The old adage that 'I will believe it when I see it' acquired the status of scientific dogma, even when applied to aspects of reality beyond the reach of the senses.

The fragmentation of knowledge occurs within disciplines. This has led to an increasing divorce between different aspects of our social existence. The financial markets were originally intended to support the economic welfare of people. But the fragmented theoretical conceptions have created a divorce between the financial markets and the economic welfare of people. A similar fragmentation has led to the treatment of a wide range of psychological, subjective problems as if they were simply physical in origin.

The Cartesian divide isolates and insulates social science from society and the social consequences of its theories. Theorists assume no responsibility for the failures arising from application of their flawed conceptions. Scientists in universities resist application of the findings of educational researchers about the most effective pedagogy to promote learning. The list of gaps and short-circuits is endless.

The approach that led to the phenomenal success of the natural sciences inspired early social scientists to imitate and replicate the same approach. The discovery of immutable universal laws governing the physical universe inspired these social scientists' search for similar principles applicable to society. The extension of the concept of immutable universal laws to conscious human behavior, individual and social, has been the source of endless confusion and error. The governance of political systems and the functioning of our economies are the result of conscious choices made by individuals and groups in the past. Our conceptual systems have undergone a continuous process of evolution over the centuries and are always subject to modification by conscious choice. They are not determined by natural law. The resistance posed to any change, whether social or psychological, by established habits, beliefs, self-interests and inertia may be formidable. However, history shows us that no social arrangement is unchanging or inevitable.

In the field of economics, the construction of mathematical models similar to those in physics has fostered a basic misconception regarding the factors that govern economic systems. For nearly two centuries the Newtonian concept of equilibrium in a static universe that dissipates energy and tends toward the lowest possible energy state prevailed almost

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unchallenged in economics. The extension of the principle of scientific laws has fostered passivity and resignation before social injustices, political oppression, economic inequality, and other social ills. The vastly disproportionate distribution of the world's wealth, the political influence of the rich, the displacement of human beings by machines, the subordination of women, and the social exclusion of minorities are the results of human choice. They are not the results of natural law.

Similarly, the Darwinian concept of the evolution of subconscious biological forms narrowly viewed as competition and survival of the fittest was inaptly applied and later rejected with respect to conscious social systems. Society evolves by processes that are conscious and subjective. Aspiration, curiosity, observation, thinking, creativity and imagination are more fundamental than external forces in human social evolution. Competition takes place within a wider and more fundamental framework of cooperation. Human evolution is a complex conscious process involving continuous interaction between the objective and subjective dimensions, physical facts and mental conceptions, natural forces and human aspirations, creative individuals and social groups. Analogies between the natural and human world may provide useful insights into similarities and parallels between the two domains. But the blanket automatic extension of physical principles to conscious living beings conceals more than it reveals, obscures rich complexity by simplistic assumptions, and reduces the creative complexity of human existence to simple mechanical models and quantitative equations.

The consequences of the conflation of objectivity with reality and subjectivity with unreality are most evident in the study of humanity's conscious social and psychological existence. In this domain the confusions regarding impartiality and reality have imposed the most serious obstacles to the progress of knowledge. The identification of knowledge with objective facts has erected a serious barrier to the progress of knowledge. The sciences of society and psychology are concerned with the actions of conscious human beings. Those actions include not only the physical movements of their bodies, but also our mental actions of observation, thought, will, imagination and creativity. They also encompass our vital actions of perceiving, feeling, loving, enjoying, and so forth. The effort to dismiss or delegitimize our subjective experience is to reject all that is most truly human about us, simply because it does not lend itself to observation, quantification and measurement in physical terms.

Self-experience is the most vividly real and tangible experience of which human beings are capable. It seems reasonable that the physical scientist studying matter assumes the position of an observer mind witnessing an independent physical reality. Yet the same premise does not equally apply to a psychologist examining a subject's conscious and unconscious mind. Indeed, we can never experience anything else so directly and intensely. When we examine the

supporting evidence, we realize that the reduction of all subjective experience arises from the initial premise of physical science rather than from either rational or evidential justification.

Nevertheless, the presumption that human intelligence and machine intelligence are the same may serve an evolutionary purpose. It can help us understand the mental and social processes by which both mind and civilization have advanced up to the present stage. Undoubtedly, there are correlations between our mental and physiological processes. An impartial observation of both the similarities and differences between them may generate valuable insights. But this requires that we remain conscious of the hypothesis we are testing.

In regarding reason as an impartial judge and witness of reality, we overlook the implicit biases that color all rational thought. Reason has a pronounced tendency to concentrate on facts and ideas consistent with its premises. It ignores or differently interprets those that contradict it.

Science is itself a subjective discipline for generating knowledge governed and framed by philosophical conceptions. These philosophical conceptions are themselves inherently 'unscientific' because they cannot be validated by scientific methods. The effort to exclude philosophy from science suppresses open discussion, but can never eliminate its subjectivity. In denying the validity of subjective forms of knowledge, science invalidates itself.

A major limitation of modern systems thinking inherited from natural science is the suppression of the subjective dimension of reality. Many complex systems are an attempt to define and represent all subjective experience in physical terms. They attempt to reduce conscious experience to automatic subconscious processes.

The collapse of the subjective into the objective dimension is illustrated by the prevailing economic models of society. The assumption that human beings make rational decisions is only another way of saying that individual decision-making can be modelled in mechanistic terms without recourse to consciousness. The obvious fallacy in this assumption has compelled economists to introduce terms such as irrational exuberance to explain the extreme fluctuations in the behavior of markets under extraordinary circumstances, while leaving intact the underlying premise for normal applications. Economic behavior is influenced by many subjective factors—aspirations, attitudes, preferences, fear, insecurity, curiosity, attraction, ideas, misconceptions, superstitions, prejudices, opinions, beliefs, ideals, values—that vary from person to person, moment to moment. The consequences of the near exclusive emphasis of economics and other social sciences on the objective dimension of human behavior are apparent in the inability to comprehend and manage the complex social world in which we live.

The efficacy of systems thinking is impacted by inherent limitations in the concept of randomness and the measurement of uncertainty as applied to human systems. Randomness and uncertainty are ambiguous concepts. The appearance of randomness may result from the real absence of causation or from a lack of information, effective measurement and valid knowledge. Black swans may surprise us because a phenomenon is truly random or simply because our concepts, models and measures are inadequate to represent what is really going

on. They are likely to become increasingly prevalent, so long as our study of human behavior neglects subjective factors, individual uniqueness and conscious human choice.

The modern man has a bias towards objectivity. His physical senses can only perceive the objective external world. The powerful influence of sense impressions on his mind and thinking makes him ignore the subjective experience and consider only objective facts as a valid, legitimate representation of reality. The methods of experimental science make him believe that the objective external world is the only field that can be directly observed and studied. These are only partial truths.

Subject and object constitute an integrated whole. The mind sees them as separate and independent. Or it views one as completely subordinate to the other. Can we not attempt to establish the objective and subjective domains as two equal dimensions of reality, or at least as two equally valid but incomplete ways of viewing reality, and try to reconcile them?

It is not possible to see, hear, understand anything without our feelings, opinions, prejudices, partialities coloring it. When a tree falls in the forest, does it make any sound? Only if there are the ears of living beings present to convert the percussion pressure waves of air into sound waves.

The mind of each person looks at things from one point of view which strongly depends on the person's own subjective state. We have come across hundreds of points of views on the Great Depression and its causes in the past seven decades.

Each of us is capable of assuming different perspectives, some objective and some subjective. The fact that many patients respond to medicines leads us to believe that disease is purely objective. There are known cases of patients responding to Placebo drugs and faith healing. Psychosomatic disease, Placebo effect and faith healing show us that disease is not purely objective. There is always a subjective contribution in such cases.

Unbiased approach to the study of all human experiences may prove that subject and object are interdependent dimensions or elements of reality.

Everything in this world evolves. What refuses to evolve is left behind by the evolutionary forces. Mind is evolving. Its faculties and powers are evolving. Man is moving from various forms of analytical thinking towards integral thinking. Embracing dualities and reconciling them to arrive at an integral reality is one of the important approaches of Integral thinking. Only if man accepts both objectivity and subjectivity and gives them equal status, further evolution of mind is possible.

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