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INSIDE THIS ISSUE

EDITORIAL

Our Common Enemies & Our Best Friends
— *I. Šlaus, H. Gurgulino de Souza, W. Nagan & G. Jacobs*

ARTICLES

Unification in Social Sciences: Search for a Science of Society
— *G. Jacobs, W. Nagan & A. Zucconi*

Anticipation: A New Thread for Human & Social Sciences?
— *Roberto Poli*

Society & Social Power
— *Janani Harish*

The Conscious Individual
— *Ashok Natarajan*

Inside this Issue

Part 1 of this issue of *Cadmus* contains discussion documents for the next in the series of World Academy conferences on New Paradigm of Sustainable Human Development, which will be conducted in Almaty, Kazakhstan on November 5-7, 2014. Efforts to date confirm the conclusion that a new paradigm must necessarily be founded on a new theoretical framework based on universal values and a trans-disciplinary perspective of social evolution. "Unification in the Social Sciences: Search for a Science of Society" by **Garry Jacobs, Winston Nagan** & **Alberto Zucconi** provides an overview of perspectives that emerged from two trans-disciplinary courses conducted by WAAS and World University Consortium in Dubrovnik earlier this Fall. Human aspirations and perceptions of the future play a crucial role in determining behavior and outcomes.

"Anticipation: A New Thread for the Human and Social Sciences?" by **Roberto Poli** calls for incorporating the influence of the future in social theory. Society is a complex organization of human relationships with enormous power for accomplishment.

In "Society and Social Power", **Janani Harish** analyzes the origins and role of social power in human development and argues that society possesses all the capacities needed to solve the pressing challenges confronting humanity today.

The individual is the source of all creativity and the catalyst for all social change, yet strangely the role of the individual is largely neglected by the social sciences. **Ashok Natarajan** explores this unique source of creative potential in "The Conscious Individual".

We hope you enjoy this Part.

The Editors

EDITORIAL

Our Common Enemies and Our Best Friends

The re-emergence of dangerous East-West tensions, atrocities in the Middle East, Islamic State of Iraq and the Levant (ISIL), bloodshed in Ukraine, traumas inflicted on many children by war and violence, massive war in Europe becoming imaginable for the first time since the end of the Cold War, violation of current international laws, unfulfilled expectations, missed opportunities offered by the end of the Cold War and in the Middle East, as well as attempts to "solve" them using military threats and economic sanctions, are all manifestations of an old paradigm that perpetuates the very problems it promises to resolve and is incapable of addressing the pressing challenges confronting humanity today.

We need a new paradigm – a human-centered paradigm for global human security based on human dignity, peace and sustainable development, truly democratic governance and dominance of raison d'humanité.

The foundation for human security lies in building a truly inclusive global cooperative security system. The rationale for a cooperative security system is that the more countries are included, the fewer the potential threats that can come from outside and the lower the level of national resources needed to prepare for an increasingly unlikely eventuality. Conversely, nations that are excluded from such a system perceive the threats to their own security heightened by the growing strength of an exclusive club. The end of the Cold War was a missed opportunity to move from a world divided by competing security systems to one that was truly inclusive. Haunted by painful memories of the Cold War, two years ago NATO officials scoffed at the idea of including Russia within NATO. Today, the consequences of that exclusion are evident.

We need immediate cessation of all hostilities and violence, enforced by strong UN action preventing violation of peace, human security and dignity, followed by urgent concrete steps leading to joint economic, ecological, energy and other projects to enlarge and strengthen cooperation between Euro-Atlantic and Euro-Asian associations.

The contemporary world has truly dangerous enemies: destruction of natural, human and social capital − destruction of trust, extremely high unemployment and income inequality − economic and political, and above all, moral crises. Building peace and prosperity is a long slow process and considerable success has already been achieved. But it only takes seconds to destroy that peace. Let us not forget the words of President D.D. Eisenhower, "Every gun that is made, every warship launched, every rocket fired signifies in the final sense a theft from those who hunger and are not fed, those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children." The old approach, "they" and "us", does not solve anything.

It is we human beings, our institutions, sovereign states, the UN system, international organizations, academies and universities who should be collectively establishing a new

paradigm. The founding fathers of the World Academy of Art and Science (as well as of the Nobel Peace Prize recipient Pugwash Movement) Albert Einstein and Bertrand Russell concluded their famous Manifesto writing, "Remember your humanity and forget the rest!" The alternative is sleepwalking into war and the destruction of humankind. As another of our founding fathers (and that of Pugwash) Sir Joseph Rotblat said, not only is a war-free world desirable, it is now necessary, if humankind is to survive. We have to change the mindset that erroneously believes in the doctrine of seeking security for oneself by actions which spell insecurity for others. We know that countries with large stocks of weapons, particularly weapons of mass destruction, have low rankings on the Global Peace Index. We must replace the old dictum "if you wish peace, prepare for war" by a new one that is essential for the Third Millennium, "if you wish peace, prepare for peace by developing and strengthening natural, social and human capital − by developing a new paradigm".

The World Academy of Art and Science calls upon all people, specifically those whose governments and political elites have brought them in conflict – to make their voices heard in the cause of peace and security.

Ivo Šlaus, Heitor Gurgulino de Souza,
Winston Nagan & Garry Jacobs

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Unification in the Social Sciences:
Search for a Science of Society

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Abstract

The social sciences have contributed significantly to humanity's remarkable progress over the past two centuries, but the multidimensional crises confronting the world today reflect the need to rapidly move beyond the limitations imposed by the compartmentalization of social science disciplines and the absence of common unifying principles equivalent to those in the natural sciences. Unification of apparently disparate phenomena is a central characteristic of advancing knowledge. Pressing global challenges compel the search for greater knowledge of the unity underlying the diverse fields of social activity, the objective and subjective dimensions of human experience, the role of the collective and individual in social evolution, the action of conscious and unconscious social processes, and the influence of the future on the present. From August 25 to September 6, 2014, the World Academy of Art & Science and World University Consortium conducted two post-graduate courses at the Inter-University Centre, Dubrovnik entitled "Individuality and Accomplishment" and "Toward a Trans-disciplinary Science of Society." These courses explored the interactions and relationships between different aspects of human accomplishment and social development in search of common underlying principles and processes that can provide a foundation for the evolution of a more comprehensive, inclusive and integrated science of society. This article is an attempt to summarize and synthesize some of the rich insights that arose during the presentations and discussion. While the authors accept responsibility for its contents, we would like to acknowledge other members of the faculty who made important contributions to this endeavor: Zbigniew Bochniarz, Janani Harish, Ian Johnson, Roberto Poli, Mila Popovich, Ivo Šlaus and Karl Wagner.

The greatest scientific discoveries have been those which have revealed the relationship between phenomena that long appeared unrelated to one another, revealing the unity behind the diverse multiplicity of forces and forms. Unification is the ultimate quest of

knowledge. The quest for unification has been the source of its greatest discoveries.* Newton reconciled the contradictions between motion and rest by demonstrating that the same laws govern the movement of celestial bodies and objects on Earth. Maxwell discovered that electricity and magnetism are two forms of electromagnetism. Einstein revealed that matter and energy are two interconvertible forms of a single energy-substance. Today Quantum and Relativity theorists search for the ultimate reconciliation between the laws governing the subatomic microcosm and the intergalactic macrocosm.[1]

"Division and fragmentation of reality are the governing rules & modus operandi in the social sciences."

The sense of unity in diversity pervades all the natural sciences. The same laws are applied consistently in different fields. The chemist, meteorologist, zoologist and geneticist apply the same laws of Physics and Chemistry to inanimate and living phenomena, to the earth's atmosphere and interstellar space, to microscopic bacteria and large mammals. While living beings no doubt exhibit characteristics unknown in inanimate material forms, they consistently adhere to the basic laws of material Nature. In this sense trans-disciplinarity is a fundamental precept in the natural sciences. Moreover, in spite of the compartmentalization of knowledge common to all fields today, the natural sciences are inherently inter-disciplinary. The meteorologist and oceanographer could never dream of excluding the impact of physical, chemical, geological, biological, ecological and astronomical factors from their theories and models.

Yet when we turn to the social sciences, consistency and unification between and across disciplines are a rare exception. The theories governing each discipline exist in airtight compartments, each in its own separate world of principles and phenomena. It is almost as if the political, social, economic and psychological human being were different species, each with its own unique characteristics, rather than multiple roles and fields of expression common to all human beings. With few exceptions, each of the social sciences seeks to understand and describe a particular dimension of social reality with minimum reference to the action or interaction with other dimensions. Micro economic theories assume a set of specific conditions rarely found in the real world and regard all variations as intrusive externalities rather than natural and inevitable facts of the interrelationship between the economic, political, social and psychological dimensions of reality. This tendency reaches its acme in the neoliberal concept of free or unregulated markets, based on the premise that law and regulation are external factors interfering with the normal equilibrium-seeking movement between supply and demand. In reality, few markets – other than the black variety and the underworld – could exist at all in the absence of the legal and regulatory framework that defines and protect property rights and contractual relationships. Moreover, Economics ignores the large non-monetarized part of human activity, all that we people do without exchange of money, the vital core of our existence without which no society or culture could survive and

* Ivo Šlaus, "Need for a New Paradigm in the Social Sciences," lecture delivered during a World University Consortium course entitled "Towards a trans-disciplinary science of society", Inter-university Centre, Dubrovnik, Sep 1, 2014. All lectures for the two courses are available online at www.worldacademy.org.

function, which represented around 80% of value added at the time of Adam Smith. Division and fragmentation of reality are the governing rules and modus operandi in the social sciences. "Disciplinary and conceptual boundaries don't just focus attention; they also inhibit the discovery and study of processes that transcend those boundaries and bias public policy development in certain directions."[2]

"The notion of value-free social science artificially divorces us from the living laboratory in which we live and blinds us to the implicit values that frame our perception of reality."

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1. Objectivity and Values in Science

The natural and social sciences differ markedly in one other important respect. Knowledge of reality, the pursuit of truth, has always been regarded as the primary motive and fundamental goal of the quest for knowledge in the natural sciences. The intimate linkage between science and technological progress we now regard as essential and self-evident is a relatively recent phenomenon. Until early in the 20th century, developments in science and technology occurred largely independent of one another. Most technological advances were made by inventors in pursuit of practical applications, rather than scientists in pursuit of knowledge for its own sake. Even today, while huge scientific research budgets are justified by their technological and social benefits, the essential standard for judging the value of scientific inquiry is proximity to truth, not practical application. The fundamental objective of natural science is to arrive at knowledge which is independent of the observer and value-free.

But when it comes to the social sciences, practical application has always been considered to be of primary importance. What is the value of a perfect theoretical model of economy or decision-making if it does not provide guidance for public policy and private enterprise? Although widely regarded as the father of Economics, Adam Smith described himself as a moral philosopher seeking to enhance the welfare and well-being of people, not a scientist in pursuit of universal laws of economy. Natural science is in quest of the immutable, universal laws governing natural phenomena. But the 'laws' governing human society are neither immutable nor universal. They are framed and formulated by human beings, based on human perceptions and aspirations, and evolving over time with the evolution of human consciousness and society.

The social sciences necessarily and inevitably represent our human construction of the reality of our own existence, individual and collective. As conscious beings, human beings are purposeful. We create social institutions intended to fulfill certain needs, achieve certain objectives and realize certain values. Our quest for knowledge of society is rightly intended to aid our efforts at self-realization. The assumption of impartiality or objectivity disguises the fact that the quest of social science is purposeful and is valued in terms of its capacity to fulfill human aspirations. The notion of value-free social science artificially divorces us from the living laboratory in which we live and blinds us to the implicit values that frame our

perception of reality. As Carl Rogers said, "at the basis of anything that a scientist undertakes is, first of all, an ethical and moral value judgment that he makes."[3] Social science is and should be judged based on the values human beings seek to realize.

Our identities as human beings are based on narratives shaped by the dominant culture from which they originate. Alberto Zucconi stresses the central importance of narrative to our understanding of ourselves and society and to fashioning a more meaningful science of society. "We need to become aware of how we construe our experiences, our narratives of what we call reality: the relationship with ourselves, others, the world. We need to foster at every level of society awareness of our narratives, of our power and responsibilities for the present and future of humankind and the whole planet. We need to promote a new socially compelling, forward-looking vision of evolution that brings together the worlds of science and spirit, evolutionary theory and developmental psychology. We need an updated recipe for resilience, on how to think, feel and act outside the present obsolete mechanistic box, to become aware of the fact that we live in a complex web of relationships; to be blind to the world of relationships will bring dire consequences."*

2. Complexity in the Social Sciences

These observations are not intended as a criticism of social sciences or to impute their inferiority to the natural sciences. On reflection, it is easy to account for their differences. The natural sciences were established much earlier and have had at least three centuries' time to explore the realities of interrelationship and interdependence between fields. Moreover, the complexity of the interactions between particles, atoms and molecules are dwarfed in magnitude by the multi-dimensional complexity governing the behavior of conscious living beings. Human actions and interrelations combine the physical complexity of matter with the intricate mutual interdependencies of all forms of life with one another and their physical environment; the social complexity of myriad interactions and interrelationships between human beings, their institutions and cultures; and the psychological complexity of conscious and subconscious thoughts, feelings, attitudes, needs, desires, sensations, and impulses which confront us with the insoluble mystery of our own personalities and of all those we relate to.

A fair evaluation must acknowledge the role social sciences have played in the remarkable achievements of humanity over the past two hundred years. Since 1800 world population has multiplied 7-fold, but at the same time real world per capita income has risen 12-fold, a result of an 84-fold growth in real world GDP. This remarkable achievement cannot be fully accounted for by technological advances alone. Development of the social sciences have contributed immensely to our understanding of political, economic, social systems and the psychology of human behavior and to our collective ability to establish, manage and develop social institutions and policies conducive to the survival, security, welfare, growth, development and evolution of humanity.

* Alberto Zucconi, "Biological, social, psychological and spiritual dimensions of society and individual life" lecture delivered during a World University Consortium course entitled "Accomplishment, Growth, Social Evolution and the Character of Life in Management, History, Psychology and Literature", August 25th, 2014 Inter-University Centre, Dubrovnik.

3. Need for Trans-disciplinary Social Science

The premise of the World Academy's quest for a New Human-centered Development Paradigm is that the multi-dimensional political, economic, ecological, social and cultural challenges confronting humanity today defy comprehension and resolution based on the prevailing principles and specialized knowledge developed by separate social science disciplines. The persistence and continued aggravation of these challenges are evidence of the need for the evolution of a new paradigm in the social sciences that is more comprehensive, inclusive, integrated, and trans-disciplinary. There is an urgent need to transcend the limitations of separative, compartmentalized knowledge, to build on the knowledge acquired by each discipline by striving to connect and integrate them at a more fundamental level, while preserving the valuable insights each has contributed to social progress. We need to expand the boundaries of each discipline and make them more porous and flexible, while searching for trans-disciplinary principles and processes that unite and unify rather than separate and divide knowledge in each field from that in others.

Transdisciplinarity concerns that which is at once between disciplines, across disciplines, and beyond each individual discipline.[4] The quest for a trans-disciplinary science of society is based on the conviction that human society and individuality cannot be adequately understood in terms of positivism, reductionism, formalism and naturalism. It is founded on the premise that there are fundamental constructs, forces, processes and characteristics that underlie all social phenomena, knowledge of which can generate greater understanding and more effective action in the real world.

This prodigious task might appear too daunting to contemplate were it not for the fact that significant progress has already been made in recent decades in discovering foundational principles applicable to all fields of human activity. The earliest breakthrough came with the emergence of management as a science in its own right. While focused primarily on applications in business, the role and power of organizational structure, systems, specialization, hierarchy, authority, delegation, communication, coordination, integration, goal-setting, values, strategy, decision-making, planning, social research and human resource development evolved by Management Science are principles applicable to the development of organizations of all sizes and types in all fields of human activity. Management is the study of how organizations combine individual acts to form complex chains of activities and systems and to create complex structures based on specialization of function and hierarchical levels of authority. Organizations coordinate the energies and diverse activities of many people and integrate them within a larger whole. All human activity is governed by the fundamental principles and processes of human social organizations.

More recent advances in Network Science, Cybernetics, Complexity and Chaos Theory and the identification of the principles of self-organization, autopoiesis, and emergence mark important further advances in the evolution of trans-disciplinary theory and process – in spite of their common tendency to regard living and conscious systems as if they were simply more complex forms of mechanical material systems, reducing life and mind to purely material processes. The application of these principles to living systems and to the science of

Ecology demonstrates the integrative power of this wider approach, which is still in an early stage of development.

4. Social Power

A half century ago, former WAAS President Harold Lasswell developed a trans-disciplinary framework for understanding the relationship between social, political and legal processes, reuniting three fields of human activity that are commonly treated separately. Their framework provides insight into the means by which social capacity for accomplishment is institutionalized and distributed as political and legal power for effectuation and enforcement. Winston Nagan's presentations focus on their efforts to frame a comprehensive global social process model describing how human beings seek to realize values through institutions and activities.[5] The core of Lasswell's conception is the central role of power in human affairs.

Human behavior is purposeful, even when it is intended simply for relaxation and enjoyment. Security, sustenance, wealth, status, power, knowledge, beauty, love and enjoyment, self-realization and spiritual fulfillment are common human pursuits. Maslow defined a hierarchy of needs. Lasswell groups them under eight categories of values which human beings seek to realize – power, enlightenment, wealth, well-being, skill, affection, respect, and rectitude, to which Nagan adds a ninth, aesthetics.

Regardless of the classification, human beings seek to accomplish and society possesses an amazingly diverse range of powers and capacities for accomplishment at the physical, social, cultural, mental, psychological and spiritual levels – most of which we take for granted like the air we breathe. This social capacity grows exponentially from one generation to the next. One need only imagine the challenges earlier generations faced performing simple tasks that we now carry out effortlessly on a daily basis – communicating instantaneously around the world, traveling between cities and continents in the time it once took to go from the farm to the nearest town. Explorers used to travel the globe for years trying to ascertain what lay beyond the horizon. Healers have spent millennia cataloging the nutritional and medicinal benefits of various foods, flowers, and herbs. Today literally the whole world's knowledge is available at our fingertips. The experience and knowledge of the entire human community accumulated over countless generations are freely offered to each new generation in a concentrated and abridged form through education.

Society's powers for achievement are legion. Society has established law and order and extended freedom and rights to billions of people, doubled the human life span and raised the average standard of living twelve-fold in the last two centuries. Rapidly increasing social capacity is evident in all fields – from science, education, healthcare and entertainment to business, governance and the arts. It extends from the local to national to global level and beyond into outer space. It ranges from the capacity for short term immediate gratification to achievements sustained over many centuries – magnificent structures, living constitutions, immortal works of art and eternal wisdom. It encompasses achievements that are physical, social, mental, artistic, and spiritual – the Partheon and the pyramids, the family, community

and nation-state, democratic forms of governance, banking, measurement, mathematical renderings of Nature's secret formulas, insights of geniuses, timeless literature, exalted works of art, cultural and universal values. It traverses all the stages from mere physical survival to expansive growth and increasingly sophisticated levels of development to the continuous evolution of new ideas, institutions and ways of life.

Do all these achievements have anything in common? They all represent diverse expressions of the collective capacity of society for accomplishment. Moreover, the various forms of social power by which they have been fashioned are largely interchangeable. Throughout history, military power has served as a basis for economic expansion, whether through colonial conquest or by providing a protective atmosphere of peace and security among trading partners. The power for transport and communication is readily convertible into productive power. The power of scientific and technical knowledge is applied to generate economic power. Economic strength translates into political power. Broad-based political power provides the capacity for rule of law founded on universal human rights. The legal power to protect property, uphold human rights and enforce justice creates an expansive social atmosphere that releases the energy of people for peaceful, productive progress.

A closer examination reveals that this power exists in several stages and forms. There is the raw capacity or potential of the society for constructive (or destructive) activity, which is fully harnessed only during times of war and severe national challenges, when society exhibits the capacity to dramatically increase its level of activity, as the USA multiplied its capacity to produce trucks, tanks, ships and aircraft during the early 1940s to support the entire Allied war effort. Within a single year America increased its arms production to equal the combined output of Germany, Italy and Japan, and then doubled it again during the following two years.[6] Through the Green Revolution, India doubled foodgrain production in five years to overcome the imminent threat of famine and achieve food self-sufficiency in the late 1960s. Japan mobilized its institutions and citizenry to deal with the horrendous consequences of the Fukushima nuclear accident. Apart from these exceptional achievements, society performs countless near miraculous actions every day without which modern civilization cannot function – it generates energy, distributes water, educates youth, enforces law and order, produces and distributes goods and services, develops and maintains infrastructure, governs, seeks knowledge, invents, innovates, and creates an endless progression of new ideas, objects, devices, processes, institutions, ideas, artworks, means of entertainment and enjoyment. All these are expressions of society's power for accomplishment.

Not all social capacity expresses in action. Not all of its endowments are equally shared and distributed. Not all social power is made freely available for the betterment of society-at-large. Intervening layers of social authority determine how social capacity is converted into social power and for whose benefit. Once concentrated among a tiny élite aristocracy or military class, today freedom and rights are more widely distributed than ever before. But we still witness extreme inequalities in the distribution of wealth so dramatically documented by Thomas Piketty.[7] Contrary to the principle that all citizens in a democracy have equal rights and voice, the influence of wealth and corporations over political power is ubiquitous. Nagan shows how law and constitutional principles are interpreted to support the inequity.[8]

The exercise of social authority in the form of political power, money power, corporate power, and social status influences the total social capacity that can be harnessed and how that capacity is utilized. As society advances, it organizes a portion of its total power and channels it through various institutions. Economic institutions such as corporations, commercial networks, monopolies, cartels, labor unions and shareholder bodies organize, magnify and govern the distribution of production, wealth creation and distribution of income. Political institutions including executive, legislature and judicial bodies, political parties, lobbyists, media houses and special interest groups mold public opinion, altering the power of different individuals, groups, organizations and classes to determine the uses and abuses of social power. Constitutions, laws and the institutions that enforce and interpret them define what and to what extent social power is converted into rights, rules and procedures that can be applied uniformly and impersonally to all citizens and activities.

"The potential power of society is not subject to any inherent limits."

"The development of the technology for social organization lags centuries behind the development of material technologies."

At any point in time only a tiny portion of the total power of society is converted into political and legal forms. Most of our lives remain unregulated and self-directed and most of the capacities of society remain underutilized. Global unemployment of more than 200 million, levels of underemployment five or ten times greater, technology that is hoarded, markets that are monopolized, public resources that are exploited for private profit are symptomatic of the gross inefficiency of social systems. The very notion of efficiency is narrowly applied at the level of the firm, neglecting the enormous waste and high economic costs to society generated by the misallocation of social power.

Thus the world is confronted by the paradox that vast underutilized social capacities exist side by side with persistent poverty, suppressed rights and unmet needs.[9] Indeed, the potential power of society is not subject to any inherent limits. There is always scope to enhance the development, expression, organization and application of knowledge, skill, organizational know-how, and technology. Human capital and social capital are potentially limitless resources. The more we develop them, the more they grow and the greater their capacity for further development.

5. Energy Conversion

The development of the technology for social organization lags centuries behind the development of material technologies. A comprehensive, integrated unifying science of society can spur rapid development of this unfathomable social potential. There are indeed common principles and processes underlying and governing the multiple expressions of

human creative and productive potential. Newton's laws of motion explain the behavior of material objects. A change in the motion of an object results from the application of material energy as force. So too, all human activity and accomplishment are an expression and result of the release, direction, channeling and application of human energy. That energy may be the physical energy of a laborer or skilled craftsman, the social energy of the dynamic entrepreneur, entertainer, military or political leader, or the mental energy of the thinker, creative artist, planner, or engineer. In *War and Peace,* Tolstoy referred to the 'spirit of the army', an intangible power that enables an inferior military force to overcome great odds, as the English overwhelmingly defeated an immensely superior French army at the Battle of Agincourt, immortalized by Shakespeare in *Henry V.*

"The mental tendency to divide reality into contrary polar opposites results in a continuous clash between mutually exclusive contradictions that resolve into complementarities at a higher level."

5.1. Directed Energy becomes Force

Human energy is released by human aspiration for accomplishment. The greater the aspiration, the greater the energy released. That aspiration can arise in response to a vast new opportunity or a severe problem. The opening up for settlement of the American West released the aspirations of millions of indigent European immigrants to abandon their homelands and risk their lives in the quest for freedom, cheap land and gold. All living beings release and mobilize great bursts of energy in response to life-threatening challenges. That explains why remarkable accomplishments issue from severe catastrophic challenges. The American Civil War was the first mechanized modern war in history with devastating impact on the people and the country, yet it was quickly followed by America's emergence as the pre-eminent economic power in the whole world. Similarly, two horrendous, life and property destroying world wars in the 20th century were followed by the most dramatic surge in prosperity and social welfare in human history.

Human energy is directed through by our knowledge, goals, values and beliefs. The intensity of energy released and the effectiveness with which it is focused depend on the quality of that knowledge, the type of goals and the nature of values we seek to realize. Truth is reality. The human mind does not possess truth. It does not know reality. It possesses ideas, perceptions and conceptions that seek to represent truth. It relies on language, definitions and abstract mental symbols which present images and impressions of reality, not reality itself. Even an exact photographic image is only a two-dimensional image, not the living thing it portrays. Our minds analyze and view these mental constructions through the framework of social constructions and psychological perspectives that determine our particular point of view and interpretation of reality.[10] Thus, the debate between proponents of free markets and regulated markets framed by implicit differences in beliefs and values is presented as logical differences and incompatibilities. In truth, no markets are truly free and none fully regulated.

The mental tendency to divide reality into contrary polar opposites results in a continuous clash between mutually exclusive contradictions that resolve into complementarities at a higher level.[11] Capitalism and Socialism were never the stark contraries they were represented as until the 1930s when the USA, the most capitalist nation in the world, embraced socialist welfare principles during the New Deal. China began introducing elements of capitalistic competition into its Communist economy in the 1970s. Today no market system can survive that does not incorporate a significant degree of socialist policy and vice versa. Freedom and equality are complements, not irreconcilable opposites.

> *"Everything needs its opposite for its existence. The indivisible, whole being that the Individual is, is made complete when he accepts and integrates all aspects of his personality, realizing in the process that contradictions are complements." – Carl Jung*

5.2. Force Organized Acquires Power

The power generated by energy depends on the way in which it is focused and directed. Sufficient solar energy falls on the earth every day to meet all human needs now and in the future, but only a tiny portion of that energy is collected and directed for productive purposes. Raging rivers are storehouses of enormous energy, but only when a river is dammed, the energy channeled through sluice gates into high velocity flows and is transformed into electrical power by turbines is that energy made available for productive purposes. Energy when directed becomes Force. Force organized becomes Power. The technology of a hydroelectric power plant is a mechanical form of organization. Political parties, market places, financial institutions, factories, and educational institutions are social forms of organization that focus and direct human energy and pass it through a variety of processes that transform it into productive power of one form or another. Organization magnifies the Energy it transmits by Integration. It also creates greater opportunities for the growth and development of specialized knowledge and skill among people.

Society can be viewed as a gigantic hydroelectric power project that harnesses a tiny portion of the potential energy of its members, focuses and directs it, channels it through organized structures and activities in pursuit of social goals. What is true of societies is also true of the organizations and institutions of which they are composed and the individuals who are its members. The same principles apply at all three levels. Countries and companies vary enormously in their capacity to release, focus, direct, channel and express the energies of their people for productive purposes. Autocratic forms of organization can compel a minimum level of performance, but have never proven capable of inspiring their individual members for peak levels of sustained accomplishment. Sooner or later internal friction, conflict and suppressed resentments rise to the surface and undermine the organization.

Over time humanity has evolved more and more effective forms of organization more capable of positively motivating and directing human energy. Alberto Zucconi describes a core set of the people-centered strategies which societies and organizations apply to empower their members – democratic relationships, equal rights and opportunities, delegation of

authority to instill a sense of responsibility, transparency, knowledge sharing, and empathy.* For all its limitations and deficiencies, America has excelled in the capacity to generate a social atmosphere that provides a high degree of freedom and encouragement for the development and expression of individual initiative. High energy companies such as Apple, Google and Intel remain perpetually dynamic and creative for the same reason. In spite of its evident shortcomings and inequities, the market economy combining cooperation with competition has so far proven to be the most effective form of organization yet evolved for the production and distribution of goods and services, but ample scope exists for eliminating its distortions and excesses.

Human accomplishment is based on relationships between people. Nature produces on the land. Human beings produce by entering into constructive relationships with one another. Society is an infinitely complex field in which human beings relate to one another in pursuit of security, wealth, well-being, affection, knowledge and other values. Ivo Šlaus reminds us that human beings are the ultimate source of all resources. "Anything becomes a resource only when its potential value is recognized by the human mind."† Further, human capital and social capital are inexhaustible in potential. He describes the self-augmenting character of human capital through a formula relating its development with political, economic, social (education, health) and natural factors. Human capital refers to the unlimited potential to enhance the knowledge, skills, capacities, attitudes and values of the individual for more effective relationship. Social capital encompasses the enormous power of social organization for coordination, specialization, planning, delegation, authority, hierarchy, standardization, integration and value implementation.

Language, money and the Internet are three of the greatest social organizations so far developed to enhance the capacity of human beings to relate, interact and coordinate with one another for mutually beneficial purposes. Language is a networking tool that makes possible exchange of ideas, information, intentions and transactions between people and organizations. Money is a networking tool that facilitates the exchange of products, services, forms of wealth and power. The Internet is the first truly global social system capable of facilitating and coordinating interactions between billions of people instantaneously with a high degree of individual freedom, empowerment, capacity for customization and personalization. It connects horizontally and integrates vertically all nodes, levels and types of social activity within a single global network. These organizations not only channel social energy, but through complex feedback loops continuously increase the total social energy released and directed.

The evolution of the Internet has spurred rapid advances in our understanding of networks, as a highly sophisticated form of social organization. In reality, networks are as old as humanity itself. The market is a social network that brings together buyers, sellers, financiers and transporters. Cities are networks that concentrate the most advanced capabilities of

* Alberto Zucconi, "Power, empowerment and disempowerment", lecture delivered during a World University Consortium course entitled, "Toward a Trans-disciplinary Science of Society", Inter-university Centre, Dubrovnik, Sep 2, 2014.

† Ivo Šlaus, "Human Capital", lecture delivered during a World University Consortium course entitled "Towards a Trans-disciplinary Science of Society", Inter-university Centre, Dubrovnik, Sep 3, 2014.

civilization on a single location to optimize access and interrelationship. Zbigniew Bochniarz cites research on the power of industrial clusters and city networks on climate change to illustrate the important role played by networks in the process of social development.* Banks such as Visa and Mastercard cooperate to compete by providing credit card transfers to billions of people through millions of merchants and tens of thousands of banks. Each bank retains its autonomy and competes for business with other members of the network, yet all benefit from the operation of a shared global information and money transfer system that achieves high speed and efficiency and minimum cost to banks, merchants and customers.

Figure 1: How Energy is Converted into Accomplishment

5.3. Consciousness and Organization

Sri Aurobindo depicts human social evolution as a progressive dance between rising levels of consciousness and rising levels of organization. "Life evolves through growth of consciousness. Consciousness evolves through greater organization and perfection of life: a greater consciousness means a greater life."[12] Human Energy directed becomes Force. Force organized becomes Power. Power expressed through knowledge, skills, positive attitudes and values is converted into productive results.

The enormous investments made by modern society to enhance the knowledge, productive skills, social attitudes and cultural values of its members have contributed as much to the progress of the past two centuries as the development of miraculous new technologies.

* Zbigniew Bochniarz, "Social Development as Network Dynamics: An Economics Perspective", lecture delivered during a World University Consortium course entitled "Towards a trans-disciplinary science of society", Inter-University Centre, Dubrovnik, Sep 5, 2014.

Investment in human capital is the most powerful lever for enhancing the individual and collective capacities of humankind for higher levels of development and further evolutionary advancement in all fields of accomplishment. Skills function like the billions of tiny transistors on a silicon chip that govern how infinitesimal quanta of energy are directed and combined together to perform complex functions at incredible speed. Every human act is composed of innumerable physical, social, perceptual, mental and psychological skills. Each tiny circuit has the power to aid or obstruct accomplishment.

6. Personality – The Psychological Microcosm

The process of energy generation and conversion at the social level has a precise counterpart at the level of the individual as well. The social process depends on the aspirations, knowledge, values, goals, institutions, skills and attitudes of the collective. The individual process depends on their counterparts at the level of individual personality. Society is an infinitely complex macrocosm. Personality is an equally complex microcosm of ideas, concepts, beliefs, attitudes, values, opinions, and skills organized and coordinated by multiple layers and levels of psychological structures – superficial manners, conscious behaviors, subconscious character traits and deeper capacities for creativity, originality and uniqueness. As the modern democratic welfare state is the most successful collective form of social structure thus far created, the formed individual capable of independent thinking, judgment and action on internalized values rather than conformity to the collective represents the most complex, sophisticated organization of human consciousness yet to evolve.

Energy is the driving force for accomplishment at the level of the individual as well. Highly accomplished individuals tend to be those who exhibit a high level of energy and channel that energy into an intense laser beam-like focus to accomplish the goals and values they seek to realize. Their personalities act as coordinating centers to organize their energy, knowledge, values, skills, capacities, actions and relationships to achieve maximum results with minimum expenditure of time and energy. Teddy Roosevelt, Churchill, Mahatma Gandhi, Balzac, Beethoven, Victor Hugo, Tomas Bata, Bill Marriott, Tom Watson and Steve Jobs are among countless legendary examples of personal energy converted into focused intensity for high accomplishment.

Personality is the link between the individual microcosm and the institutions of the social macrocosm. Individuals access social power by identifying with the aspirations and affirming the values of the collective. The failure of the Knickerbocker Trust of New York in 1907 precipitated a severe financial crisis that threatened to destroy banks and securities markets throughout the USA. At the time there was no government banking oversight system with the power or responsibility to control the situation. The government remained a passive and helpless witness to the rapid deterioration of market confidence. Finally it turned to the only man in America who was widely considered capable of effective action – J. P. Morgan. Morgan was a wealthy industrialist and banker like many others, but he was distinguished by a sterling reputation of trustworthiness and reliability which were the most prominent characteristics of his personality. Morgan appealed to the social need for reliability and stability.

When the New York Stock Exchange was on the verge of closure, Morgan managed to cajole the bankers into collective action and the crisis was contained. He appointed six analysts to identify which banks were sufficiently solvent to be saved. He called on other financial institutions to contribute to a voluntary pool of finances to support institutions that could be salvaged. Even the US government contributed $25 million to the private pool. Morgan defused the financial crisis by his remarkable negotiating skills and the immense trust placed in him by bankers and the general public. After the crisis had subsided, the US Government established the Federal Reserve System to institutionalize the powers and role Morgan had played to quell the panic. The personality of an individual was institutionalized as a system that eventually acquired the knowledge and power to maintain high levels of stability and public confidence in the US financial system. Individual personality and social culture are interdependent expressions of a unified reality.

"The search for impartial truth came to be regarded by many as synonymous with the study of objective forms of reality."

7. Reuniting Subjectivity & Objectivity

The further evolution of the social sciences requires efforts to identify unifying concepts and processes that transverse disciplines and function similarly in multiple dimensions. Reunification is especially necessary to restore the proper relationship between three dimensions of reality which were obscured during the triple reign of positivism, reductionism and materialism: the reunification of the subjective and objective dimensions of social reality, the reunification of the individual and collective dimensions, and the reunification of the three dimensions of time within an inclusive vision of human causality.

Social science needs to reunify the objective and subjective aspects of human existence that became increasingly divorced during the hey-days of 20th century scientism. The source of the rift is not difficult to understand. The scientific method evolved during the Enlightenment as an impartial, objective means of validating truths of natural phenomena freed from the distorting influence of the physical senses, personal belief, superstition, religious dogma, preference and prejudice. It proved ideally suited for a study of material objects and processes that lent themselves to external observation and analysis. But over time the focus of early science on the study of external objective manifestations of reality gradually morphed into the notion that only phenomena which can be studied objectively can be approached rationally and scientifically. Eventually many scientists began to speak and act as if the subjective dimension were somehow less real than the objective. Two separate meanings of the word 'objectivity' became confused. The search for impartial truth came to be regarded by many as synonymous with the study of objective forms of reality. The study of subjective forms of reality was confuscated with the distorting and unscientific notion of personal preference and prejudice. That which is not observable as an object came to be regarded as somehow less real than external material things. By a strange alchemy of logic, a mud pie,

plum pudding, chemical reaction or electrical impulse came to be regarded as more 'real' than Plato's *Dialogues,* Lincoln's idealism or Gandhi's belief in non-violence.*

The reality of the subjective permeates all dimensions of human existence and must occupy a central place in all valid social theory. Franklin D. Roosevelt was inaugurated as the 32nd President of the United States on March 1933 in the midst of a financial crisis of unprecedented magnitude. Since the onset of the Great Crash in 1929, more than 6000 American banks had closed and the national economy was in the midst of a panic. All over the country, depositors were lining up at their banks to withdraw their life-time savings before their banks also collapsed. Even the financially strongest bank could not withstand such huge sudden surge in demand for return of deposits, so the panic was self-fulfilling. Long before the nascent Federal Reserve had acquired sufficient knowledge or power to provide unlimited funds to support the banking system in 2008, there was no known economic or political remedy for a panic of such proportions.

The objective situation seemed hopeless. FDR was not an economist, but he had shrewd insight into the underlying social and psychological basis for economic institutions. He understood that the panic was not an objective problem of economic management, but a subjective problem of trust. In his inaugural address, he pronounced his famous dictum "We have nothing to fear but fear itself." Five days later he addressed the nation on radio in the first of his famous fireside chats. He explained in simple language that the rich natural resources, enormous industrial infrastructure, and skilled hardworking labor force, which had made America the world's wealthiest nation, were still in place. The problem resulted from a loss of public confidence in the banking system. He appealed to American native self-confidence, pride, courage and trust and made an outlandish proposition. He called on the people to go back to the banks and redeposit their hard-earned savings. He instituted a host of legislative and administrative measures to restore public confidence in the banking system. When the banks reopened the following Monday, the tide turned and the panic gradually subsided.

Roosevelt intuitively understood what social science often overlooks – that the entire objective edifice of a nation's economic, political and cultural institutions and activities rests on intangible, but all-powerful, subjective social and psychological foundations. FDR's management of the crisis is one of countless events in history that illustrates the singular difference between conscious human behavior and the behavior of inanimate objects and subconscious forms of life. Subjective reality may play a relatively insignificant role in lower forms of life that can be ignored, but in human behavior the subjective and objective dimensions are inseparable aspects of a single reality.

No social science can be complete or effective that partitions the objective and subjective aspects of social reality, as if they are separate realms of existence that exist and can be studied independently from one another. Valid economic and political theory and practice can never be divorced from sociology, anthropology and psychology. The psychology of the

* Dramatic advances in neuroscience and psychopharmacology have recently led to an alternative approach to eliminate the divorce between subjective and objective experience by reducing all psychological phenomena to their chemical and nervous manifestations in the body. The correlation between physiological and psychological factors proves there is an interrelationship but is far from sufficient to establish causality.

individual can never be fully understood without reference to social and cultural context. In his actions as well as his understanding, FDR applied a remarkable combination of subjective powers – superb communication skills and exuberant personal charm – to stop the panic of 1933. The same strategy, the same speech delivered by another president with a different perception and different values may very likely have led to very different consequences.

The true relationship between subjectivity and objectivity in human affairs does not lend itself to this radical approach. *All human accomplishment represents an objectification of the subjective components of reality.* All human creation is founded on subjective truth. The aspiration of the scientist for knowledge, the moralist for integrity, the artist for beauty, the engineer for precision, the craftsman for perfection, the child for love, the entrepreneur for wealth, and the political leader for power are all-powerful forces that have driven the rise of civilization over the millennium. A science bent on explaining away every subjective human experience as the consequence of objective chemical and electrical processes must eventually give way to one which restores the subjective dimension to its rightful place as the ultimate determinate and prime mover in human affairs.

8. Reuniting the Individual and the Collective

The divorce in social sciences between subjective and objective phenomena is closely related to a second disunity between the individual and the collective. The science of material Nature and lower life forms is the science of types. Particles, atoms, molecules, minerals, stars, solar systems, galaxies, unicellular organisms, plants and animals fall into categories and subcategories that can be distinguished by their observable characteristics. In each case science studies the common characteristics of the type. Every diamond may possess some unique attributes, but the atoms and particles of which diamonds are composed are remarkably uniform and indistinguishable. Ascending the scale to complex forms of life, we observe greater differences and disparities between individuals of the same type, as every pet owner knows from personal experience, but science focuses on the similarities and mostly ignores the differences. While ancient history was normally recorded in terms of the lives of outstanding individuals, the modern approach to historical analysis and contemporary events places much greater stress on the action of broad tendencies and statistical trends, than unique individuals and events.

Applied with incredible success with regard to non-human subjects of study, the same approach has been applied by the social sciences to categorize societies, classes, groups, institutions, social processes and activities by generalized type and to apply statistical measures to describe the shared behaviors of groups. In practice, this approach encounters serious methodological and practical problems.

Foremost among these is the problem of the Individual. What would have happened to the banking American crisis in 1933 had Herbert Hoover been re-elected for a second term? Would the Cold War have ended in 1989 if Mikhail Gorbachev had never been elected as President of the Soviet Union? Would the North have won the American Civil War and constitutionally abolished slavery in 1865 if Lincoln had not been the president during this

period? Would Britain have defeated the Nazis in the Battle of Britain had Churchill not been chosen as its leader? Would Apple Computers have ever been founded or would it have recovered from its progressive decline during the 1990s to become the most valuable company in the history of the world had Steve Jobs not lived or had he not returned a decade later to the company from which he had been summarily ejected in 1985?

Attention to the central importance of the individual and his uniqueness has recently reemerged, as Ivo Šlaus points out. Nassim Nicholas Taleb's book *Black Swan: The Impact of the Highly Improbable* emphasizes the inordinate significance of highly improbable, high impact, unpredictable events in human affairs. Taleb observes that statistical measures of normal behavior have been inadequate to anticipate the most important events in human history, such as the onset of World War I, the Great Crash, the End of the Cold War, the invention of the World Wide Web, 9/11, Fukushima, the 2008 financial crisis. He concludes from these observations that human existence is inherently uncertain, like the behavior of subatomic particles, an appealing premise since it implies a sort of unity between the human and material microcosm of quantum particles. Taleb's thesis is a useful reminder that human life cannot be wholly understood in terms of generalizations and statistics, but his interpretation of events does not take fully into account the role of conscious individuality in human affairs.

The human individual is distinguished from every other species of living and non-living life form by the enormous variation and uniqueness of its individual members. Within our species there are wide disparities between the degree of individual or unique characteristics exhibited by different people and the degree of individuality or individuation is increasing over time. Our individuality is evolving. The formed individual – variously described by leading humanistic psychologists such as Goldstein, Maslow, May, Murray and Rogers – is the self-actualized, self-realized person who by a process of individuation assimilates the rich experience of life and internalizes it as a unique organization of aspirations, knowledge, perceptions and values. According to Rogers, the human organism has an inherent "actualizing tendency", which aims to develop all capacities in ways that maintain or enhance the organism and move it toward autonomy. Individuality is that which does not depend on social authority or tend toward social conformity for its own sake; it is the capacity for original inspiration, creativity, and uniqueness of expression. Zucconi cites prominent characteristics that emerge by the process of individuation: self-awareness, authenticity, trust in oneself and others, a sense of purposefulness and direction, creativity, leadership qualities, a deep capacity for affiliation and communication, adaptability, flexibility, self-regulation and maturity.*

No matter how successful the exclusive concentration on shared characteristics may be when applied to other fields of natural science, a science of society cannot ignore the significant differences in knowledge, skill, motivation, aspiration, action and achievement that distinguish members of our species and their influence on the life of the collective. A symbiotic relationship exists between the human individual and social collective. Mila Popovich

* Alberto Zucconi, "Personality and individual accomplishments", lecture delivered during a World University Consortium course entitled "Individuality & Accomplishment", Inter-university Centre, Dubrovnik, August 28, 2014.

calls for a sense of responsible interconnectedness. "Always keep in mind the relational nature of individuality – the correlation between the micro and macro scale – the co-creative relationship among individuals, individuals and their environment as well as the human embodied and embedded system within the greater cosmic system."*

Society is the repository of the accumulated knowledge, skills, values, laws, customs, institutions, activities and behaviors of past generations made accessible to every new member to varying degrees. We acquire our language, ideas, beliefs, attitudes, habits and values from the societies to which we belong. The behaviors, attitudes and values that characterize our personalities are molded by the social institutions with which we relate, as Zbigniew Bochniarz points out.†

At the same time, the individual is the catalyst for all social change. As Margaret Mead observed, "Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has." All social innovation, invention, discovery and creativity can be traced back to one or a few individuals who seek to push beyond society's current boundaries. The explorer, adventurer, entrepreneur, inventor, public leader, original thinker and creative artist are the source of innovations that propel the evolution of society. Progress of organization and society ultimately depends on the development of each of their individual members. The individual develops by raising his consciousness and organizing his personality at a higher level. The highest stage of organization of personality is what we mean by individuality. The formed individual is the catalyst for raising the consciousness and organization of society.

It is evident to most people that Apple Computers would never have invented the Macintosh, iPod, iPhone or iPad had it not been for the work of a single individual, Steve Jobs. But in most cases we do not perceive the relationship between the personalities and actions of individuals and the social institutions that govern the social collective. In fact, all our social institutions can be traced back to the ideas, values and actions of creative individuals. As chief of the Continental Army, George Washington had such a firm belief in the need for subordination of military to civilian authority that he submitted to the authority of the Continental Congress even when Congress left its soldiers without food, clothing, shoes and ammunition to survive the harsh New England winters and wage war against the British. When the war was finally won, most Americans were highly suspicious of central authority and reluctant to empower a federal government to rule over the states. They unanimously elected a reluctant Washington as the first President because he was the one leader who had demonstrated beyond doubt his commitment to civilian democratic rule. So little did he crave for power that he accepted only on condition that he would be relieved of responsibility within two years. When told that Washington wanted to return to his farm after winning independence, his bitter enemy King George III replied incredulously, "If he does that, he

* Mila Popovich, "Restoring order and care: The Role of Human Relationships in Individual and Social Development", lecture delivered during a World University Consortium course entitled "Towards a trans-disciplinary science of society", Inter-University Centre, Dubrovnik, August 28, 2014.

† "Institutions are patterns of social activity that give shape to collective and individual experience.... Institutions form individuals by making possible or impossible certain ways of behaving and relating to others. They shape character by assigning responsibility, demanding accountability, and providing the standards in terms of which each person recognizes the excellence of his or her achievements. Each person's possibilities depend on the opportunities opened up within the institutional contexts to which that person has access." Robert Bellah, et. al., *The Good Society,* 1991, p. 40.

will be the greatest man in the world." For 230 years since then, the US military has subordinated itself to the elected government. Washington's personal values became embodied as the values of the nation.

Social institutions are an objectification of the consciousness of individuals. Individual personality and social culture are interdependent expressions of a unified reality. Our vision of social reality is based on an erroneous separation of consciousness and force. Like Descartes, we view social institutions as impersonal seats of power functioning autonomously and beyond our power to control. We fail to perceive the consciousness of human beings that underpins and supports that exercise of power and therefore feel helpless. This perception is so prevalent that politicians, lawyers and judges act as if law is created by legislatures and interpreted by judges independently of the will of the people. In reality, law is a codification of public conscience founded on what the public endorses and is willing to accept, even when governing power is a colonial or authoritarian government. Mahatma Gandhi demonstrated this truth by a single act of civil disobedience that shook the foundations of the British Empire. In April 1930 he called on Indians to violate law taxing the manufacture of salt by marching to the sea coast and making salt. Tens of thousands rose to his call. More than 60,000 were arrested, but Gandhi had demonstrated to all concerned the obvious fact that no foreign power could rule India if the Indians were unwilling to accept foreign rule. Indian Independence was achieved by altering the attitude of millions of Indians to reject its position as the jewel in the crown of the British Empire.

Twenty-six years after India became free, a middle aged black woman in Montgomery, Alabama refused to obey a local law imposing racial segregation on public buses. Arrested and fined $8 for her crime, Rosa Parks' example inspired thousands of citizens to boycott the public transport system until the law was abolished the following year. A local clergyman named Martin Luther King was inspired by the enormous power of her actions to launch the American Civil Rights Movement. Rosa's role illustrates the bridge between the generation of new law at the micro level and its gradual expression at the macro level. Laws, public policies and social institutions are expressions of the social consciousness, whether by consciously determined intention or reluctant passive submission. The individual who perceives that truth possesses the power to re-establish the connection between the apparently impersonal social system and the personal values and aspirations of its members. Such an individual possesses the knowledge and therefore the power to change the world.

Human beings have a marked propensity for creating marvelous new inventions and then becoming slaves to their own creations. Thus, today we feel helpless before the governments, technology and financial systems created to serve us. The sense of fatalism that pervades public attitudes about unrepresentative political systems, corruption, unfair public policies and unsustainable economies arises from a flawed understanding of the true relationship between individual consciousness and collective power. A science of society for the 21st century can empower humanity to reclaim control of institutions that have gotten out of control, restoring the connections and providing the theoretical and practical support needed to heal the breach.

9. Unification of Time

Causality in the physical sciences moves in only one direction, from past to future. Past actions have future consequences that often appear inevitable, such as the path of the apple as it falls from the tree to the ground. The future in the physical sciences is something that does not exist yet, so it cannot possibly impact on the present. Events in the present depend only on the forces set in motion during a preceding interval of time.

But time behaves somewhat differently for conscious human beings. For us the future already exists in the form of our aspirations, expectations, imaginations, perceptions, hopes and fears. Unlike rolling stones and falling apples that are propelled by the past into a future course, human beings are moved to act in the present according to their anticipation of future outcomes. The expectation that banks would fail motivated millions of Americans to rush to their banks before it was too late, setting in motion a self-fulfilling prophesy. The dream of creating a computer that would empower creative individuals motivated Steve Jobs to invent something that did not previously exist. The aspiration for freedom and self-government motivated the American colonies to revolt and fight for independence. The faith in the power of non-violence espoused by Mahatma Gandhi led Indians to win their freedom without waging war. Modelled after the natural sciences, theories of causality in the social sciences depend inordinately on the consequences of past events and tend to ignore or minimize the role of future expectations, even in instances where it is intuitively obvious that perceptions of the future are a critical determinant of present behavior.

The flaw in this paradigm is made evident by a well-documented history of flawed projections by 'experts' considered to be most qualified to predict the future based on their knowledge of past and present achievements. Among the most notable and amusing, Lord Kelvin's observation in 1883 that "X-rays will prove to be a hoax"; the comment in 1946 by the famous American movie producer, Darryl Zanuck, "Television won't last because people will soon get tired of staring at a plywood box every night"; IBM founder Tom Watson's assessment in 1943 that there would be a world market for about five computers, the advice by famed entrepreneur Michael Dell to Steve Jobs on his return to Apple in 1996 to shut down the company and give the money back to the shareholders; and then Microsoft President Steve Balmer's estimation in 2007 that "There's no chance that the iPhone is going to get any significant market share. No chance." Note that these efforts to project the future based on past experience and present knowledge relate to social and economic trends, not merely technological advances.

Roberto Poli cites recent evidence from psychology, anthropology, sociology, and economics that indicates that the importance of future anticipation in the social sciences is gaining recognition. He and a group of associates are striving to establish a discipline of Anticipation that has potential applications to all fields of social science. "A better and more complete understanding of anticipation and its effects will improve theories and models of individual and collective human behaviour and its consequences. The benefits will thus assist those who are explicitly seeking to understand and design 'the prepared society', to make more effective

and sustainable use of technologies, to create more inclusive democracies and to explore the boundaries of human endeavours."[13]

Human behavior is the product of subconscious and conscious perceptions and forces that are influenced by past events, present perceptions and future possibilities. The reunification of these three dimensions of time into a triple time vision will mark an important contribution to the emergence of a trans-disciplinary science of society.

10. Ways of Knowing

This discussion of the present status and future development of social science returns repeatedly to the central importance of our instruments of knowledge in determining the validity of our quest for truth. In the natural sciences, we rely to a large extent on instruments that extend remarkably the reach of our senses from the microscopic infinitesimal to the macroscopic infinite. But the social sciences cannot take refuge in mechanical and electronic instrumentation, no matter how powerful or impressive. The reality we are striving to comprehend is not material. It is social and psychological. The objects of which it consists are invisible to both the eye and instrumentation. We cannot see our thoughts, feelings, beliefs, values, sentiments. We cannot even see our social institutions and culture, only expressions and symbolic representations of them. The bond between a married couple may be symbolized by a wedding ring, but to the naked eye they are simply man and woman.

The one essential instrument we possess for the study of our individual and collective humanity – indeed for the study of all reality – is the power of the human mind and consciousness. Our capacity to effectively utilize that power of knowledge depends very much on understanding its characteristics, modes of operation and its limitations. As is the consciousness, so is the power. Limited knowledge means limited power for accomplishment.

The future of science requires that we focus much greater effort to understand the workings and limitations of the human mind. Foremost among those characteristics is the tendency of mind to divide reality into parts and relate to each part as if it were an independent whole, which is the basis for reductionism and the division of disciplines that now limit the evolution of social science. This divisive tendency also accounts for our habit of perceiving reality in terms of mutually contradictory opposites such as objective and subjective, individual and collective, overlooking the fact that contradictions can be resolved into complementarities at a higher level. Mind by its very character has the capacity to affirm any perspective as true or false.*

Mind also has an opposite tendency to aggregate assemblies of parts, mistaking the sum of those parts for the whole, as many regard society as simply a sum of its members, rather than a complex living social organism. In addition mind thinks in symbols to represent reality and often mistakes the symbols for the reality itself. Thus, we tend to forget that money is only a symbol for productive capacity and public trust, not a thing in itself of any inherent value. So too, we overlook the common tendency of mind to analyze reality based on

* "All human thought, all mental man's experience moves between a constant affirmation and negation; there is for his mind no truth of idea , no result of experience that cannot be affirmed, none that cannot be negated." -- Sri Aurobindo, *The Life Divine.*

premises that pre-determine the conclusions we come to, such as the current quest for the chemical substances that determine human behavior.

Finally, we should not overlook the evidence that the greatest scientific discoveries have arrived by processes other than the normal rational mental faculty we pride on as the essence and mainstay of science – processes such as insight and intuition which we barely understand and rarely even try study scientifically. The testimony of great thinkers and scientists is irrefutable. As Kant observed, "All human knowledge begins with intuitions, proceeds from thence to concepts, and ends with ideas." Einstein stated it this way: "The intellect has little to do on the road to discovery. There comes a leap in consciousness, call it intuition or what you will, and the solution comes to you and you don't know why or how."[14] We must always keep in mind that the pursuit of science itself is entirely a human activity with its own sociological, cultural, mental, psychological and spiritual dimensions.

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Notes

1. Lee Smolin, *The Trouble with Physics* (Boston : Houghton Mifflin, 2006)
2. Jim Lunday, "Replacing the Concept of Externalities to Analyze Constraints on Global Economic Growth and Move Toward a New Economics Paradigm," *Cadmus* 2, no.3(2014): 66-83.
3. Carl Rogers and W.R. Coulson, eds. *Man and the Science of Man* (Columbus: Charles E. Merrill Publishing Company, 1968).
4. B. Nicolescu, *Manifesto of Transdisciplinarity* trans. K. Claire Voss (Albany: State University of New York Press, 2002), 147-152.
5. Winston Nagan and Garry Jacobs, "New Paradigm for Global Rule of Law," *Cadmus* 1, no.4(2012): 131-141.
6. Paul Johnson, *A History of the American People* (New York: Harper Perennial, 1998), 780.
7. Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge: The Belknap Press of Harvard University Press, 2014).
8. Winston Nagan and Madison Hayes, "Simulated Judgment on Campaign Finance in the Constitutional Court of the Republic of Azania," *Eruditio* 1, no.5(2014): 21-30.
9. Ian Johnson and Garry Jacobs, "Crises and Opportunities: A Manifesto for Change," *Cadmus* 1, no. 5(2012): 11-25.
10. Alberto Zucconi, "The politics of the helping relationship: Carl Rogers' contributions," *Person-Centered & Experiential Psychotherapies* 10, no.1(2011): 2-10.
11. Garry Jacobs, "Ways of Knowing: Life Beyond Chaos," *Eruditio* 1, no.4 (2013): 9-30.
12. Sri Aurobindo, *The Life Divine* (Pondicherry: Sri Aurobindo Ashram Trust, 1970), 1018.
13. Roberto Poli, "Anticipation: A New Thread for the Human and Social Sciences?," *Cadmus* 2, no.3(2014): 23-36.
14. Garry Jacobs, "Ways of Knowing: Life Beyond Chaos" *Eruditio* 1, no.4 (2013): 9-30.

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Anticipation: A New Thread for the Human and Social Sciences?

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Abstract

Anticipation is increasingly at the heart of urgent contemporary debates, from climate change to economic crisis. As societies are less confident that tradition will provide an effective guide to the future, anticipatory practices are coming to the foreground of political, organizational and personal life. Research into anticipation, however, has not kept pace with social demand for insights into these practices. The paper outlines the main contributions to the understanding of anticipation from the human and social sciences, focusing in particular on the most recent developments.

1. Introduction

Anticipation is increasingly at the heart of urgent contemporary debates, from climate change to economic crisis. As societies are less confident that tradition will provide an effective guide to the future, anticipatory practices are coming to the foreground of political, organizational and personal life. Research into anticipation, however, has not kept pace with social demand for insights into these practices, their risks and their uses. The conditions should be created for interdisciplinary collaboration and conceptual development to inform decision-making, strategy formation and societal resilience. To achieve a fuller understanding of the centrality of anticipation to human behaviour a research base must be developed that is capable of assessing and enhancing the potential of anticipatory practices for individuals, organisations and society while mitigating the risks of human behaviour. This research base is in development, but it is fragmented. Bringing researchers together from across disciplines, to explore the question of how humans anticipate, and the risks and uses of such anticipatory practices, will lay the foundation for understanding and creating future-oriented dialogue across disciplines and subsequently enhance decision and policy-making.

A better and more complete understanding of anticipation and its effects will improve theories and models of individual and collective human behaviour and its consequences. The benefits will thus assist those who are explicitly seeking to understand and design 'the prepared society', to make a more effective and sustainable use of technologies, to create more inclusive democracies and to explore the boundaries of human endeavours. The ability to anticipate in complex (self-generating, unpredictable) environments greatly improves the resilience of societies facing threats from a global proliferation of institutions, agents and forces, by articulating insecurities through anticipatory processes.

2. A First Surprise

As soon as one starts collecting data on anticipation, the first unexpected surprise perhaps is the finding that over the past century many scholars from many different disciplines and fields have worked on anticipation. (Nadin, 2004); (Zamenopoulos & Alexiou, 2004); (Poli, 2010). The unwelcome result is that nobody has systematically collected and compared the various proposals to date. It may well be that the same phenomenon has been discovered time and again. Even so, it would be interesting to know the differences, if any, among the various phenomena and among the theories purporting to capture them. It may be that different scholars have seen different aspects of anticipation, and a thoroughgoing comparison between the different proposals may help develop a more rounded-out theory. The following notes outline a map of the territory. A former paper of mine (Poli, 2010) provided an even more preliminary, somewhat idiosyncratic, survey, and it included some information on areas not covered by the present sections, such as semiotics (Nadin, 2004), engineering (Camacho & Bordous, 1998); (Astrom & Murray, 2008), and artificial intelligence (Butz, Sigaud, & Gerard, 2003); (Butz, Sigaud, & Baldassarre, 2007). In the meantime I have discovered other areas that have contributed to anticipation, such as language (for which see Streeck and Jordan (2009), a special issue of *Discourse Processes*), family therapy (Boscolo & Bertrando, 1993; Goldbeter-Merinfeld, 2005; Selvini Palazzoli, Boscolo, Cecchin, & Prata, 1975), and the advanced design approach (Bleecher, 2009; Celi, 2014; de Mozota, 2006; Zamenopoulos & Alexiou, 2004). The next sections cover only some of the main areas of the territory that, for good or ill, are considered the main articulations of the human and social science: namely psychology, anthropology, sociology, and economics. It is patent that much systematic work remains to be done.

3. Psychology

Anticipation is an old friend of psychologists. Herbart claimed that anticipations of sensory effects not only precede voluntary movements but also determine them. This thesis, known as the Ideomotor Principle (IMP), runs contrary to the claim that psychic processes in general are determined by stimuli (i.e. it is at odds with both behaviorism and most of current cognitive psychology; for an overview of IMP see Stock and Stock (2004); for a treatment unfolding the idea that, after all, stimuli may not be as important as mainstream psychology believes see Albertazzi (2013)).

After the prelude represented by Herbart, studies on anticipation in psychology have been conducted only very recently, providing evidence of distinct forms of anticipation in learning, attention, object recognition, and many other cognitive activities (see Hoffmann (2003) for references; for an overview of the impact of anticipations on cognitive development see Butz (2008)).

These studies show that behavior is more goal-oriented than stimulus-driven. In other words, they show that there are robust reasons for challenging one of the main assumptions of cognitive science, namely that stimuli come first. The contemporary version of IMP claims instead that ambient interactions reinforce *anticipated* outcomes.

Behavioral and cognitive schemata – be they pre-given or acquired – shape the way in which organisms perceive the environment. For this reason they are anticipatory: "Schemata construct anticipations of what to expect, and thus enable the organism to actually perceive the expected information" (Riegler, 2003, p. 13).

However, the most systematic development of anticipation in psychology is the theory of prospection presented by recent research (Seligman, Railton, Baumeister, & Sripada, 2013), a major contribution to a new conception of psychology as a whole. As a matter of fact, during the past decade psychologists have begun a systematic study of people's orientation towards the future (for a non-technical introduction to time perception see Hammond (2012)). Seligman's paper, however, has the nature of a paradigm shift, and it will likely provoke heated discussion. The paper's main aspects are the following:

- Historical reconstruction of the development of twentieth-century psychology, with a particular focus on the limits of behaviorism and cognitivism;
- Empirical collection of data, especially on white rats;
- Presentation of the idea of the 'prospective brain' and analysis of its 'default mode'.

Other aspects include a comparison with and critique of Kahneman and Twersky's prospect theory (not to be confused with Seligman's prospection theory) which deals with the prospective reformulation of several psychological disorders and analysis of memory, subjectivity, consciousness, and free will. I am providing this highly compressed summary to show that, whilst in my reconstruction below I will have to be very selective. The paper is worth reading in its entirety.

Prospection, for Seligman, is the representation of possible futures – an idea undeniably close to anticipation. While prospection is a ubiquitous feature of the human mind, much psychological theory and practice has understood human action as determined by the past. According to mainstream psychology, anticipation is seen as "a violation of natural law because the future cannot act on the present" (Seligman et al., 2013). However, "prospection involves no backward causation; rather, it is guidance not by the future itself but by present, evaluative representations of possible future states" (Seligman et al., 2013).

While "viewing behavior as driven by the past was a powerful framework that helped create scientific psychology, … accumulating evidence in a wide range of areas of research suggests a shift in framework, in which navigation into the future is seen as a core organizing principle of animal and human behavior" (Seligman et al., 2013).

If the future indeed becomes a core organizing principle of the mind, the past will have to recede from being a force driving needs and goals to being a resource from which agents "selectively extract information about the prospects they face. These prospects can include not only possibilities that have occurred before but also possibilities that have never occurred" (Seligman et al., 2013, p. 119). To do so, "the prospective organism must construct an *evaluative landscape* of possible acts and outcomes" (Seligman et al., 2013, p. 120).

Moreover, "the success or failure of an act in living up to its prospect will lead not simply to satisfaction or frustration but to maintaining or revising the evaluative representation that will guide the next act" (Seligman et al., 2013, p. 120).

> *"Since all the modes of time are mutually interconnected, changes in any one of them reverberate on the others."*

The entire conceptual framework of psychology changes when we shift our focus from the past to the future. Since "at any given moment, an organism's ability to improve its chances for survival and reproduction lies in the future, not the past … learning and memory, too, should be designed for action. These capacities actively orient the organism toward what might lie ahead and what information is most vital for estimating this" (Seligman et al., 2013, p. 120). Moreover, the focus on expectations helps in reconsidering the role of past experience, which ceases to be seen as a force directly molding behavior and becomes information about possible futures. "Choice now makes sense … stretching well beyond actual experience and enabling them [the rats in the paper's exemplification, but I see no obstruction towards understanding the claim generically] to improvise opportunistically on the spot" (Seligman et al., 2013, p. 124). There is more than opportunistic improvisation, however: namely the "active, selective *seeking* of information ('exploration')" (Seligman et al., 2013, p. 124).

Furthermore, there is no need to see expectations as limited to conscious processes only. Indeed, "generating simulations of the future can be conscious, but it is typically an implicit process … often not accessible to introspection, and apparently occurring spontaneously and continuously" (Seligman et al., 2013, p. 126).

4. Anthropology

Anthropology has traditionally focused its research on non-industrial societies; moreover, the main focus of anthropology has been the cultural reproduction of identity, which for the most part means analysis of the ways in which societies develop their sense of the past. These claims are no longer valid: anthropology has begun to focus on both industrial societies and the ways in which societies develop their sense of the future (Appadurai, 2013, p. 285). As a cautionary note, one may add that "anthropology has the means, but not yet the concerted conversation, to develop an ethnography of the near future of the 21st century" (Guyer, 2007, p. 410).

Within anthropology, the recent debate on its future has been ignited by Guyer (2007). Previous efforts to call attention to the future within anthropology had little impact (Munn, 1992; Wallman, 1991). Munn (1992), for instance, already saw that the future is a crucial topic for anthropology: "anthropologists have viewed the future in 'shreds and patches', in contrast to the close attention given to 'the past in the present'" (Munn, 1992, p. 116). Here I will consider only three main contributions to this otherwise rich debate: namely the already-mentioned works by Guyer and Appadurai, together with Piot (2010).

Guyer starts by noting the emptying "of the temporal frame of the 'near future'" (Guyer, 2007, p. 409). What has been called the 'postmodern condition' seems to be based on a "reduction to the present" (Jameson, 2002, pp. 207, 209). Since all the modes of time are mutually interconnected, changes in any one of them reverberate on the others. Jameson notes that the sense of the past and future within the present tends to become feebler and feebler (Jameson, 2002, p. 214). As a counter-move, he proposes learning to see utopian tendencies as they develop. To which Guyer replies: "I like the general direction here but doubt the matrix. The spaces opening up are not alternative or utopian in any holistic sense. They are reconfigurations of elements that are well-known already, moved in to colonize particular phases and domains of individual and collective life that have been released from answerability to a more distant past and future" (Guyer, 2007, p. 416). Moreover, "the spaces opened up offer innovative extrapolation from some vantage points and block any cumulative momentum from others.… In many literatures and in formal and informal daily life, I perceive a similar rising awareness of a time that is punctuated rather than enduring: of fateful moments and turning points, the date as event rather than as position in a sequence or cycle, dates as qualitatively different rather than quantitatively cumulative" (Guyer, 2007, p. 416).

Guyer's analysis is based on the concept of 'near future'. The question that she raises is whether the near future includes "a gap, a space, a rupture in time" – that is a singularity that cannot be described but only believed and witnessed. If indeed the near future includes a temporal rupture, this implies that previous frameworks providing temporal coherence have been substituted by a series of new frameworks "entailing continual temporal arbitrage to stay afloat" ((Han, 2004); (Guyer, 2007)).

Piot's reconstruction of West Africa after WWII explains how the end of the Cold War has been a major disruption for the colonial system of governance: "the end of the Cold War has changed the sociopolitical landscape in ways that demand new theoretical tools" (Piot, 2010, p. 16). All the recognizable continuities notwithstanding, Piot remains "committed to the idea that a threshold has been crossed and that the contemporary world is undergoing significant shifts in modes of sovereignty and forms of political-economic organization, shifts that dramatically transformed Africa in the 1990s" (Piot, 2010, p. 13).

Perhaps surprising from a European perspective, in West Africa Pentecostal churches are the main forces forging a new understanding of the future. By urging a break with the past, including rejection of the old structures of authority, these churches reshape temporality (Piot, 2010, p. 9). Attention may be called to the fact that "US pastors are now traveling to Africa to be ordained – because they see African Christianity as a purer form – before returning 'home' to engage in 'mission' work" ((Jenkins, 2002); (Piot, 2010, p. 63)).

There is more than this, however. The issue is not limited to rejection of the past; the really intriguing issue is that "futures are replacing the past as cultural reservoirs" (Piot, 2010, p. 16). While our understanding of these Pentecostal-mediated futures is remarkably poor (for an insider's point of view, see (Heward-Mills, 2006)) the very possibility of using futures as cultural reservoirs is central to the idea of anticipation.

In order to develop a systematic understanding of the future, anthropologists should examine "the interactions between three notable human preoccupations that shape the future as a cultural fact, that is, as a form of difference. These are imagination, anticipation and aspiration" (Appadurai, 2013, p. 286), even if "we have not yet found ways to articulate how anticipation, imagination, and aspiration come together in the work of future-making" (Appadurai, 2013, p. 298). Nevertheless, "as we refine the ways in which specific conceptions of aspiration, anticipation, and imagination become configured so as to produce the future as a specific cultural form or horizon, we will be better able to place within this scheme more particular ideas about prophecy, well-being, emergency, crisis, and regulation. We also need to remember that the future is not just a technical or neutral space, but is shot through with affect and with sensation. Thus we need to examine not just the emotions that accompany the future as a cultural form, but the sensations that it produces: awe, vertigo, excitement, disorientation" (Appadurai, 2013, pp. 286-287).

The capacity to anticipate the future is socially differentiated, however. On understanding that "'the capacity to aspire' is unequally distributed" and that "its skewed distribution is a fundamental feature, and not just a secondary attribute, of extreme poverty" (Appadurai, 2013, p. 289) one begins to grasp some of the deeper issues related to the future as a cultural reservoir. Not everybody has access to this reservoir.

As a step towards building a future reservoir where none is available, one may consider the productive role played by memory. "While state-generated archives may primarily be instrumental of governmentality and bureaucratized power, personal, familial, and community archives –especially those of dislocated, vulnerable, and marginalized populations—are critical sites for negotiating paths to dignity, recognition, and politically feasible maps for the future" (Appadurai, 2013, p. 288). Put differently, without "the capacity to aspire as a social and collective capacity … words such as 'empowerment', 'voice', and 'participation' cannot be meaningful" (Appadurai, 2013, p. 289).

Anthropologists need to engage in a "systematic effort to understand how cultural systems, as combinations of norms, dispositions, practices, and histories, frame the good life as a landscape of discernible ends and of practical paths to the achievement of these ends. This requires a move away from the anthropological emphasis on cultures as logics of reproduction to a fuller picture in which cultural systems also shape specific images of the good life as a map of the journey from here to there and from now to then, as a part of the ethics of everyday life" (Appadurai, 2013, p. 292).

This effort will evidence the difference between what Appadurai calls 'the ethics of possibility' and 'the ethics of probability'. The former is based on "those ways of thinking, feeling and acting that increase the horizon of hope, that expand the field of the imagination, that produce greater equity in what [he has] the capacity to aspire, and that widen the field of informed, creative, and critical citizenship". Conversely, the ethics of probability deal with "those ways of thinking, feeling, and acting that flow out of what Ian Hacking called "the avalanche of numbers"… they are generally tied to the growth of a casino capitalism which profits from catastrophe and tends to bet on disaster" (Appadurai, 2013, p. 295).

5. Sociology

Alfred Schutz argued that we simultaneously live in different contexts of meaning, with different temporal dimensions, at different levels of familiarity. Schutz distinguished three main systems: thematic, interpretative and motivational. The system of most interest here is the last one, the motivational system (Schutz, 1972; Schutz & Zaner, 1982).

According to how motivational systems operate, actions are typically framed by two types of opposition: the opposition between my actions and yours and the opposition between future and past actions. Future actions are interpreted according to an 'in-order-to' structure, whilst past actions are interpreted according to a 'because' structure. In-order-to motives are components of the action: they shape the action from within. By contrast, because-motives require reflective acts upon already-taken decisions. This structure helps explain why we perceive actions as free according to in-order-to-motives and as determined according to because-motives.

Actions are always elements of wider projects, which in their turn rely on various stocks of knowledge. One of the most familiar components of knowledge is the stock of typical expectations, which may become actual in typical circumstances and predetermine typical reactions. As Riegler notes, "Instead of getting overwhelmed by the details of a new situation, humans seek to replace them with familiar activity and behavioral patterns that show a high degree of predictability to putatively gain control again, to be able to anticipate the outcome" (Riegler, 2003, p. 12). In this sense, indeed, new experiences may be familiar to their type.

Expected social behavior constrains social life ((Schutz, 1972); (Berger & Luckmann, 1969); (de Jouvenel, 1967)). The distribution of social capital (including economic, relational and intellectual forms of capital) further distinguishes the typical anticipations of the future characterizing different social groups (Bordieu, 1984). While "the network of reciprocal commitments traps the future and moderates its mobility," it nevertheless makes social life less difficult in the sense that it "tends to reduce the uncertainty" (de Jouvenel, 1967, p. 45). On the other hand, the growing degree of uncertainty experienced by contemporary society implies that something more is at stake. Specifically, what is at work is the covert connection between a peculiar interpretation of rationalization and an equally peculiar interpretation of the future. As to the former, already at the beginning of the past century Weber showed that efforts to make social life more rational generate the unintended consequence of raising uncertainty (Adam & Groves, 2007, p. 12; Weber, Lassman, Velody, & Martins, 1989).

The subsequent distinction between two main kinds of futures paves the way for a better understanding of the roots of social uncertainty. Adam and Groves distinguish between "the embedded, embodied, contextual future", on the one hand, and the "decontextualised future emptied of content, which is open to exploration and exploitation, calculation and control", on the other (Adam & Groves, 2007, p. 2). I shall distinguish them as respectively concrete and abstract futures.

Not surprisingly, economic agents see the future as a commodity, a good to trade like any other good: banks calculate the value of the future with respect to interest and credit,

insurance companies calculate the value of future risk (Adam & Groves, 2007, p. 10). These futures are abstract possibilities, independent of any context. They are reduced to pure, i.e. abstract, exchange value. The future as a commodity "can be calculated anywhere, at any time and exploited for any circumstance" (Adam & Groves, 2007, p. 10). Once the future has been traded as an abstract exchange value, "speed provides not only evolutionary and cultural but also commercial advantage" (Adam & Groves, 2007, p. 102). Trading concrete with abstract futures paves the way for the onset of uncertainty (Adam & Groves, 2007, p. 55). Furthermore, the experience of the past two centuries shows that "efforts to control, manage and engineer the future produce unprecedented uncertainties" (Adam & Groves, 2007, p. 77).

The tendency towards higher degrees of uncertainty experienced by contemporary society is further strengthened by the interplay between abstract futures and the role of information and communication technologies. Not only has communication become instantaneous, it is also networked across space to cover almost the entire planet. As a consequence, the usual, primarily local, order of causal dependences recedes into the background and contributes less and less to sense-making efforts. Again, the net result arising from abstract futures and globally networked instantaneous communications is the rise of uncertainty (Adam & Groves, 2007, p. 55).

Disturbingly, as uncertainty increases, the capacity to anticipate real, i.e. concrete, futures decreases (Adam & Groves, 2007, p. 35). The more our activities generate outcomes extending into the deep future, the more our explicit anticipatory capacities diminish.

Leaving abstract futures aside, two main kinds of concrete futures can be distinguished: pre-given futures, and futures in the making. The former are the futures resulting from relevant pasts, the futures resulting from given structures, from individual embodiment and social embedding in networks of social relations. These futures are primarily past-driven and common-sense-based. On the other hand, the futures in the making are growing possibly latent futures. Adam and Groves distinguish them respectively as 'present future' and 'future present'. Present futures are "futures that are imagined, planned, projected, and produced *in* and *for* the present" (Adam & Groves, 2007, p. 28). Economic and scientific forecasts are cases in point. They colonize the future from the present (Miller, 2007). Present futures are continuations of the past through the present. Future presents, on the other hand, are futures "that can be known, 'seen' and anticipated". As far as future presents are concerned, they are the futures that are used in the present, the futures that enter into and shape the present.

The distinction between 'present future' and 'future present' was initially introduced by Luhmann (Luhmann, 1982, p. 281). According to Luhmann, while present futures are utopian, future presents are technologically biased. Adam and Grove develop a different understanding of these two expressions based on the difference between 'pre-given futures' and 'futures in the making'. I am suggesting that they add a more explicitly active component to their description indicated by the expression "using the future". I will reserve the qualification of 'anticipatory' only to those systems that can use the future in the present.

To return for a moment to present futures, the value of a given present future is calculated against its alternative present futures. The present future generating the larger profit is the

future with the highest value. "In this way the future as such becomes tradable: one future outcome is tradable for another, on the basis of its estimated returns" (Adam & Groves, 2007, p. 73).

"Are we sure there are no other institutional frameworks and configurations of social relationships that are further able to advance democracy, freedom, and respect for individual and social rights?"

Adam and Groves call the future in the making 'latent'. A latent future is a future 'on the way' that still has to surface and become visible. Even if a latent future is hidden and invisible in the present, it is nevertheless an actual component of the present: it is a future "living within the present".

This may be the appropriate place to note that "during the past thirty years substantial experimental data have shown that all axioms of expected utility theory have been violated by real subjects in experimentally controlled situations" (Berthoz, 2003). Real agents are far from being ideal or idealized decision-makers, as expected utility theory assumes. On the contrary, we systematically make mistakes, for various reasons including social pressure, the tendency to agree with others, the influence exerted by hierarchical structures, the role of emotions, the desire to be right, the way in which problems are represented (Berthoz, 2003). All this may eventually provide robust evidence that it is time to update the decision-making programs used in business schools for managers, public policy schools for administrators, or military schools for soldiers.

As we have seen, the invention of abstract futures is one of the sources, possibly the most important one, of the rising level of uncertainty in contemporary society. The idea of developing strategies intended to reconnect abstract and concrete futures presents itself as the natural option to consider. The suggestion is not to return to anything like the 'good old times' because nothing historical reverts to any of its previous states. The only possibility, as always, is to move forward. What has to be considered is whether it makes sense to reconnect what was severed. However extraordinarily successful the bourgeoisie has been, the institutions that it has invented are only two centuries old. Are we sure there are no other institutional frameworks and configurations of social relationships that are further able to advance democracy, freedom, and respect for individual and social rights? Wright's idea of 'Real Utopias' faces such questions (Wright, 2010, p. 4). Indeed, one cannot rule out that at least some of the problems being faced are directly or indirectly connected to the form that political institutions have historically taken in the West. Imagining new institutional frameworks may be of assistance in addressing some of these issues. Clearly, it would not be sufficient to simply carry out purely abstract thought experiments on institutional changes. As social scientists, we can and must also assess whether the newly proposed frameworks are desirable (for instance in the sense of mitigating the adverse consequences in question), viable (i.e. capable of withstanding the test of time), and achievable. A fra-

mework that induced unbearable unintended negative effects, that proved unsustainable in the long run, or that could not be established in practice would not constitute an acceptable outcome (Wright, 2010, pp. 13-14). Identifying the ways in which existing social institutions and social structures cause harm for people is a natural starting point. Complementarily, a better understanding of the variety of human flourishing clarifies the capacities that any institutional framework should respect, protect and improve.

"Within economic thought there seems to be an unrestrainable tendency to see everything as risk."

According to Wright, a theory of transformation involves four central components: (1) a theory of social reproduction; (2) a theory of the gaps and contradictions within the process of reproduction; (3) a theory of the underlying dynamics and trajectory of unintended social change; and (4) a theory of collective actors, strategies, and struggles (Wright, 2010, pp. 17-19). All of these obviously involve the future and should be integrated into a full-fledged theory of anticipation.

6. Economics

Economics deals with the future in many different ways, at many different levels. Governments deal with forecasts on the inflation rate and the increase or decline in the Gross Domestic Product; almost any aspect of the strategic management of companies concerns the future: from calculation of the production of goods adjusted to seasonal variations to long-term decisions about producing entirely new goods or opening new factories. In turn, finance is entirely based on anticipations. Leaving aside all its remarkable technical complexities, the basic rule of finance is simple, almost trivial: buy assets that are going to grow in value, sell assets that are going to fall in value – both sides include unavoidable reference to the future. However, as later chapters of Beckert's book will show, the vast majority of ways to see into the future exploited by economists is severely constrained. There are entire realms of anticipation that have never been considered by economists.

Even within economics, however, things are starting to change. Jens Beckert in particular is opening new avenues. Particularly worth mentioning is his endeavor to break down the walls that so far have isolated economics, political science and sociology from each other (Beckert, 2013a, p. 324).

In order to understand the micro-processes underlying macro-economic outcomes, one should focus on agents' expectations. The economic activities that are pursued or avoided are established by expectations. The problem is that "under conditions of fundamental uncertainty, expectations cannot be understood as being determined through calculation of optimal choices taking into account all available information, but rather are based on contingent interpretations of the situation in the context of prevailing institutional structures, cultural templates, and social networks" (Beckert, 2013a, p. 325). It is here that Beckert introduces the concept of 'fictional expectation' referring to "present imaginaries of future

situations that provide orientation in decision making *despite* the incalculability of outcomes" (Beckert, 2013a, p. 325). This means that fictional expectations are more imaginations about the future than they are forecasts. Like imaginations, fictions add creativity to the economy and contribute to the dynamics of capitalism (Beckert, 2013b, p. 220). As Beckert explicitly declares, "the notion of fictional expectations is directed against the concept of 'rational expectations' constituting the micro-foundation of much of modern macro-economics" (Beckert, 2013a, p. 325), (Beckert, 2013b, p. 221). The reason is clear: according to rational expectations theory, aggregate predictions are correct because individual errors are random. Therefore predicted outcomes do not diverge systematically from the resulting market equilibrium. As a consequence the uncertainty of the future becomes a predictable forecast, paving the way for the rational calculation of optimal choices. On the other hand, the true openness of the future makes it impossible to explain decisions as calculations of optimal choice (Beckert, 2013b, p. 221).

"It is the images of the future that shape present decisions" – Jens Beckert

Despite all the objections raised against the just summarized train of thought, such as the role played by cognitive biases or true novelties, the ideology of the rational calculation of optimal choices is still the position defended by the vast majority of working economists. Apparently, economists tend to analyze uncertainty as if it were risk. As should be well-known, the distinction between the calculability of risk as opposed to the incalculability of uncertainty was introduced by Frank Knight as early as the 1920s (Knight, 1921). This notwithstanding, within economic thought there seems to be an unrestrainable tendency to blur their differences and to see everything as risk.

Beckert's intention is to reintroduce a difference between risk and uncertainty by raising the question of the nature of expectations under conditions of uncertainty. Here is his answer: "Structurally, expectations depend on cultural frames, dominant theories, the stratification structures of a society, social networks, and institutions. But the concept of fictional expectations gives the notion of expectations at the same time a political twist because expectations are seen as being open to the manipulation by powerful actors" (Beckert, 2013a, p. 326).

In order to clarify his concept of fictional expectation better, Beckert openly claims that "it is the future that shapes the present—or, to be more specific: it is the images of the future that shape present decisions" (Beckert, 2013b, p. 221). The fact is that actors must develop expectations "among other things, with regard to technological development, consumer preferences, prices, availability of raw materials, the strategies of competitors, the demand of labor, the trustworthiness of promises, the state of the natural environment, political regulations, and the interdependencies among these factors", despite the true unknowability of the future (Beckert, 2013b, pp. 221-222). Hence expectations are real fictions – there is no chance of seeing them through the opposition between truth and falsehood; eventually, the proper opposition will be based on the difference between convincing as opposed to unconvincing expectations. Moreover, expectations are more than 'mere fantasies' because actors

develop plans that are based on and include them (the difference between 'mere fantasies' and 'design fantasies' reaches back to (Schutz, 2003, p. 148)).

Finally, fictional expectation works on an 'as if' base: "fictional expectations represent future events as if they were true, making actors capable of acting purposefully with reference to an uncertain future, even though this future is indeed unknown, unpredictable, and therefore only *pretended* in the fictional expectations" (Beckert, 2013b, p. 226).

7. Toward a Discipline of Anticipation?

The generality of anticipation raises many questions. On the one hand, it shows that anticipation is indeed a general feature of a variety of phenomena and research fields. From this point of view, anticipation traverses disciplinary boundaries and may indeed become a point of unifying perspective. On the other hand, the danger is always present of treating in a uniform manner phenomena that are essentially different. The theory of anticipation may risk the same fate as suffered by systems theory (at least in some phases of its history) and 'anticipation' may become a catch-all term for so many different phenomena to be scientifically unhelpful.

As far as the social sciences are concerned, a clear result emerges from the above overview: that the boundaries among the various social sciences appear more and more meaningless. The more the efforts to develop the discipline of anticipation proceed, the more the traditional walls separating the social sciences will break down.

However partial the preceding overview may have been, it has nevertheless shown the variety, generality, and depth of the interest in anticipation of the future. Not surprisingly, terminologies differ widely, and the lack of a uniform theoretical framework within which to understand anticipation will become a major obstacle to the establishment of anticipation as an autonomous, unifying research field.*

The following five aspects emerge from the overview as likely components of the incipient Discipline of Anticipation:

- The difference between calculable risks and incalculable uncertainty. The former emerges from closed futures – closed because calculable – and the latter characterizes open futures. While there is only one way to be closed, there are many ways to be open. There are also many different ways to open a closed system, which implies that the process of opening a system is not generic.
- The difference between the distant future and the future in the present. The further distinction between 'present future' and 'future present' – that is, the distinction between the future as a projection of the past (a form of calculable future) and the future as a proper anticipation of the future – distinguishes different types of the future in the present. An issue to be addressed is whether the future in the present and the near future are synonymous concepts.

* For a first effort to lay down the basis of the Discipline of Anticipation see R. Miller, R. Poli and P. Rossell, "The Discipline of Anticipation. Exploring Key Issues", 2013, http://unitn.academia.edu/RPoli.

- The difference between continuous future and the discontinuous or ruptured future. While it is granted that the far future will include major discontinuities, the issue is whether the opposition between continuity and discontinuity characterizes also the future in the present or the near future.
- The difference between systems able to use the future as opposed to systems unable to do so. I shall call 'anticipatory' only the systems that have the capacity to use the future in the present.
- If it is acknowledged that there are different types of anticipations arranged along a variety of dimensions (such as (1) biological, psychological, and social forms of anticipations, (2) explicit and implicit anticipations, (3) calculable and incalculable anticipation; (4) continuous and discontinuous; etc.), the question arises as to how they interact with each other. Under what conditions do the various forms of anticipation work together? Under what conditions do they interfere and even block or destroy each other?

This list, though partial and provisional, raises further questions. Anyway, while a full-fledged theory of anticipation will likely require further, presently unaddressed components, the above five components show that a systematic effort to gain better understanding of the many nuances of anticipation promises to pay dividends.

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Bibliography

1. Adam, B., & Groves, C. (2007). *Future Matters*. Leiden: Brill.
2. Albertazzi, L. (Ed.). (2013). *Handbook of Experimental Phenomenology. Visual Perception of Shape, Space and Appearance.* Chichester: Wiley-Blackwell.
3. Appadurai, A. (2013). *The Future as Cultural Fact*. London: Verso.
4. Astrom, K. J., & Murray, R. M. (2008). *Feedback Systems. An Introduction for Scientists and Engineers*. Princeton: Princeton University Press.
5. Beckert, J. (2013a). Capitalism as a System of Expectations: Toward a Sociological Microfoundation of Political Economy. *Politics and Society, 41*(3), 323-350.
6. Beckert, J. (2013b). Imagined Futures: Fictional Expectations in the Economy. *Theory and Society, 42*(3), 219-240. doi: 10.1007/s11186-013-9191-2
7. Berger, P. L., & Luckmann, T. (1969). *The Social Construction of Reality*. Garden City, NY: Anchor Books.
8. Berthoz, A. (2003). *La décision*. Paris: Odile Jacob.
9. Bleecher, J. (2009). Design Fiction: A Short Essay on Design, Science, Fact and Fiction. from http://drbfw5wfjlxon.cloudfront.net/writing/DesignFiction_WebEdition.pdf
10. Bordieu, P. (1984). *Distinction. A Social Critique of Taste*. Cambridge, Mass.: Harvard University Press.
11. Boscolo, L., & Bertrando, P. (1993). *I tempi del tempo. Una nuova prospettiva per la consulenza e la terapia sistemica*. Torino: Bollati Boringhieri.
12. Butz, M. V. (2008). How and Why the Brain Lays the Foundations for a Conscious Self. *Constructivist Foundations, 4*, 1-42.
13. Butz, M. V., Sigaud, O., & Baldassarre, G. (Eds.). (2007). *Anticipatory Behavior in Adaptive Learning Systems: From Brain to Individual on Social Behavior*. Berlin: Springer.
14. Butz, M. V., Sigaud, O., & Gerard, P. (Eds.). (2003). *Anticipatory Behavior in Adaptive Learning Systems*. Berlin: Springer.

15. Camacho, E., & Bordous, C. (1998). *Model Predictive Control*. Berlin: Springer.
16. Celi, M. (Ed.). (2014). *Advanced Design Culture*. Dordrecht: Springer.
17. de Jouvenel, B. (1967). *The Art of Conjecture*. New York: Basic Books.
18. de Mozota, B. B. (2006). The Four Powers of Design: A Value Model in Design Management. *Design Management Review, 17*(2), 44-53.
19. Goldbeter-Merinfeld, E. (2005). *Le deuil impossible. Families et tiers pesants*. Bruxelles: De Boek.
20. Guyer, J. I. (2007). Prophecy and the Near Future: Thoughts on Macroeconomic, Evangelical, and Punctuated Time. *American Ethnologist, 34*(3), 409-421. doi: 10.1525/ae.2007.34.3.409
21. Hammond, C. (2012). *Time Warped. Unlocking the Misteries of Time Perception*. Edinburgh and London: Canongate Books.
22. Han, C. (2004). The Work of Indebtness: The Traumatic Present of Late Capitalist Chile. *Culture, Medicine and Psychiatry, 28*(2), 169-187.
23. Heward-Mills, D. (2006). *Ministering with Signs and Wonders*. Accra: Parchment House.
24. Hoffmann, J. (2003). Anticipated Behavioral Control. In M. V. Butz, O. Sigaud & P. Gerard (Eds.), *Anticipatory Behavior in Adaptive Learning Systems* (pp. 44-65). Berlin: Springer.
25. Jameson, F. (2002). *A Singular Modernity: Essays on the Ontology of the Present*. London: Verso.
26. Jenkins, P. (2002). The New Christianity. *The Atlantic Monthly*(October).
27. Knight, F. H. (1921). *Risk, Uncertainty and Profit*. Boston, MA: Hart, Schaffner & Marx.
28. Luhmann, N. (1982). *The Differentiation of Society*. New York: Columbia University Press.
29. Miller, R. (2007). Futures Literacy: A Hybrid Strategic Scenario Method. *Futures, 39*(4), 341-362. doi: 10.1016/j.futures.2006.12.001
30. Munn, N. D. (1992). The Cultural Anthropology of Time: A Critical Essay. *Annual Review of Anthropology, 21*, 93-123.
31. Nadin, M. (2004). *Anticipation. The End is Where we Start from*. Baden: Lars Mueller Publishers.
32. Nadin, M. (2010). Annotated Bibliography. Anticipation. *International Journal of General Systems, 39*(1), 35-133.
33. Piot, C. (2010). *Nostalgia for the Future. West Africa After the Cold War*. Chicago: The University of Chicago Press.
34. Poli, R. (2010). The Many Aspects of Anticipation. *foresight, 12*(3), 7-17.
35. Riegler, A. (2003). Whose Anticipations? In M. V. Butz, O. Sigaud & P. Gerard (Eds.), *Anticipatory Behavior in Adaptive Learning Systems* (pp. 11-22). Berlin: Springer.
36. Schutz, A. (1972). *The Phenomenology of the Social World*. London,: Heinemann Educational.
37. Schutz, A. (2003). Das Problem der Personalität in der Sozialwelt. Bruchstücke. In R. Grathoff, H.-G. Soeffner & I. Srubar (Eds.), *Alfred Schütz Werkausgabe: Theorie der Lebenswelt 1. Die pragmatische Schichtung der Lebenswelt* (pp. 91–177). Konstanz: UVK Verlagsgesellschaft mbH.
38. Schutz, A., & Zaner, R. M. (1982). *Reflections on the Problem of Relevance*. Westport, Conn.: Greenwood Press.
39. Seligman, M. E. P., Railton, P., Baumeister, R. F., & Sripada, C. (2013). Navigating Into the Future or Driven by the Past. *Perspectives on Psychological Science, 8*(2), 119-141. doi: 10.1177/1745691612474317
40. Selvini Palazzoli, M., Boscolo, L., Cecchin, G., & Prata, G. (1975). *Paradosso e controparadosso. Un nuovo modello nella terapia della famiglia a transazione schizofrenica*. Milano: Feltrinelli.
41. Stock, A., & Stock, C. (2004). A Short History of the Ideo-Motor Action. *Psychological Research, 68*, 176-188.
42. Streeck, J., & Jordan, J. S. (2009). Projection and Anticipation in Embodied Interaction. *Discourse Processes, 46*(2-3), 93-268.
43. Wallman, S. (Ed.). (1991). *Contemporary Futures. Perspeciives from Social Anthropology*. London: Routledge.
44. Weber, M., Lassman, P., Velody, I., & Martins, H. (1989). *Max Weber's "science as a vocation"*. London ; Boston: Unwin Hyman.
45. Wright, E. O. (2010). *Envisioning Real Utopias*. London, New York: Verso.
46. Zamenopoulos, T., & Alexiou, K. (2004). Design and Anticipation: Towards an Organisational View of Design Systems *CASA Working Papers*. London: Centre for Advanced Spatial Analysis (UCL).

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Society and Social Power

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Abstract

Society is the source of immense power. Over the past few centuries humanity has recorded phenomenal growth in its collective capacity for accomplishment, as reflected in the 12-fold growth in global per capita income since 1800. The remarkable achievements in living standards, longevity, science, technology, industry, education, democracy, human rights, peace and global governance are the result of the exponential development of the capacity of society to harness human energies and convert them into social power for productive purposes. Today, humanity possesses the power and capabilities needed to fully meet the multi-dimensional challenges confronting global society. The source of this energy is people. Human energy is transformed into social power by the increasing reach, frequency and complexity of human relationships. Society is a complex living network of organized relationships between people. Its power issues from channelizing our collective energies in productive ways by means of organizing principles such as coordination, systems, specialization of function, hierarchy of authority, and integration. This immense social power remains largely underutilized. Social science needs to evolve a comprehensive, trans-disciplinary understanding of the roots of social power and the process by which it is generated, distributed and applied. This knowledge is the essential foundation for formulating effective social policies capable of eradicating forever persistent poverty, unemployment and social inequality. This article is based on a series of lectures delivered by the author in the WAAS-WUC course on "Toward a Trans-disciplinary Science of Society" at Dubrovnik on September 1-3, 2014. It traces the development of social power in different fields to show that human and social capital are inexhaustible in potential. The more we harness them, the more they grow. Unleashing, directing, channeling and converting human potential into social power can eliminate all the problems confronting the world today.

1. Introduction

Human beings seek to accomplish goals to fulfill their needs and aspirations. People have sought different things, depending on their economic and social position, at different periods in their lives, and at different periods in history. Needs have evolved, from personal physical survival, to emotional fulfillment, to global and idealistic concerns. Needs change over time, new ones replace earlier fulfilled ones, but throughout, we see that they have all been met. Some are met readily and easily. Some demands are conceded after a prolonged struggle. But human aspiration is eventually fulfilled, and the power for this fulfillment comes from society.

Society not only facilitates the realization of aspirations, it also anticipates our needs and fulfills unexpressed wishes. It possesses great powers and capacities that are drawn from within itself. Its potential for accomplishment is infinite. A trans-disciplinary science of society that studies the formation of society, the generation of social power and the empowerment of the individual members for personal and collective accomplishment is essential for a new human-centered development paradigm that can solve all the problems that confront the world today.

2. Society as a Web

Society is usually thought of as something out there. It is that which is outside of us, our family, home, institution or work place. It is abstract. Like the air all around, it is invisible, intangible. But if it is not there, the absence is immediately felt, and existence becomes impossible. So, what exactly is society?

Society consists of people. We do not refer to society during the Jurassic period or in the South Pole. These people who are collectively described as a society are related to each other. These relations can be physical or psychological in nature. Society also consists of structures that bring people together, and like the relationships, these structures can be physical or non-physical.

Though society feels amorphous, it has a physical basis. The biological tie is one basis for bringing people together. The family gives a sense of belonging. It is the first group with which we all identify. The parents, siblings and children form a close-knit unit. The extended family and the clan come next. Geography is another basis for a set of people to be grouped together. People of one village, town, province, city state, region, country or continent are referred to as a society. We talk about the American society, the Arabs in the Persian Gulf, the Russians in the Siberian region or the Asian immigrants in Europe.

The sense of identity felt on the basis of geographic location or biological tie used to be confined to very small groups. Today, clan loyalty or fierce regionalism is increasingly giving way to a growing sense among many people that we all share a common identity and destiny as human beings. Society is evolving from the nation state to the human community.

Society is not adequately defined by physical groupings alone. It has a psychological basis as well. Ethnicity, educational background, profession, economic stratum, class, caste and institutional membership can distinguish and group people. Thus, we have the society of the Asian industrialists, European artists, Chinese communists, the Harvard or Oxford alumni, the upper or middle class, the people below poverty or without literacy, the world's billionaires, indigenous tribes of Africa, Silicon Valley entrepreneurs, the republicans, democrats, priests, warriors, doctors, teachers, scholars, writers and so on.

Ideas can bring people together, regardless of their location or other attributes. People who are opposed to the use of nuclear power, who care deeply for the environment, who advocate greater economic equality or who believe in religious harmony, anywhere in the globe identify with each other. In this way, society also consists of groupings that are essentially

mental in nature – beliefs, opinions, ideals, attitudes, sentiments, religion, political ideology and values. So we have people of different religions who are referred to collectively as a group – Christians, Muslims, Jews, Hindus, Buddhists. We have liberals and conservatives, communists and capitalists, Keynesians and monetarists, atheists and theists.

In theory, people can be grouped on the basis of various formal and informal, physical and mental coordinates. But to actually bring them together, some structures are required. Otherwise, what can make a person feel one with another person who lives a few miles away? How can one even know the other exists? Houses, roads, community halls and town squares are physical structures that bring people together physically. Villages, towns, cities and countries mark the boundaries of the groups. Shops, market places, schools, colleges and offices let them transact. Transportation facilities enable movement and help bridge distance. Telephone instruments, telephone lines, wireless devices, satellites, telecom companies, research organizations and government departments comprise communication facilities that keep people in contact.

The building that one calls house gives an objective reality to the biological tie of the family, but it is not just this physical structure that fully explains the idea of family. A set of rooms – some brick and mortar are not enough – and the social construction of roles and responsibilities are needed to make the biological tie real and complete the family. Society consists of many such non-physical structures that bind people. Language, manners, customs, standards and laws are some. They define and guide the interactions between people. They are like the standardized language, HTML, which makes it possible for billions of people to interact with one another on the internet.

Guilds, unions, currencies, governments, armies, religions, trade, markets, factories, ports, banks, courts, parliamentary assemblies, hospitals, schools, newspapers and other media are specialized institutional structures that enable society to engage in a wide range of activities – for self-defense, production, exchange, commerce, governance, healthcare, education and recreation.

Educators, educational institutions and education are three different but related components of society. Educators are a group of people, the institution is a physical structure, and education a social organization that encapsulates the collective knowledge of humanity and provides it to each child in a period of 15-20 years. Societal groups are interdependent, and often overlap. One can be an Indian Hindu software engineer, an American Republican lawyer, Chinese Buddhist Silicon Valley entrepreneur, a European banker belonging to the royalty or an African tribal who has studied to become a doctor and migrated to Canada.

Society is a complex, but organized, structure of such groups and subgroups of individuals and organizations.

3. A Living Organization

One and one makes two only in Arithmetic. In all else, 'the whole is greater than the sum of its parts,' as Aristotle said. Bringing together two objects, such as the horse carriage and

the engine can result in something far greater in complexity, utility and power, the motor car in this case. The integrated circuit chip, a screen and keyboard give the computer. When the computer is hooked to a telephone, we have the internet. Add any one component to the web – education, commerce, entertainment, socializing, advertising, news, book publishing – and a new industry is born. Perhaps the greatest illustration of Aristotle's statement is society. Society is more than the sum of all people. It is an intricately linked, complex organization. It is like the human body.

"The recent Arab Spring shows how conscious society is."

Various types of molecules come together to form cells, tissues, organs, organ systems and the entire human body. But the body is much more than a collection of molecules. It is a highly complex, sophisticated organization of all these molecules, cells, tissues, organs and systems. The smooth functioning of all the parts and the interlinks between them determine the survival and functioning of the body. Even the slightest change or disturbance can result in a breakdown. Every part is integrated with every other part. A change in any one affects the whole, which is true for the human body as well as the society. Society is alive.

This living organization, just like the human being, has senses. It responds to stimuli, expresses itself, and has survival instinct. It remembers, learns, reacts, acquires skills, aspires, grows, evolves.

Minutes after Britain's Princess Kate steps out of her car, dresses similar to what she is wearing are sold out in online stores. Society seems to be watching, literally. Fashion is one of the simplest signs of society's senses. Society responds to its surroundings. Whenever there is any natural calamity in one part of the world, aid pours in from everywhere. Whether it is a tsunami in Asia, typhoon in the Caribbean or famine in Africa, the world comes together to act. When there is a success in one place, it is recognized, and emulated elsewhere. The Indo-Arabic numerals that we all use today originated in India, was improved in Arabia, reached Italy, and then spread to the rest of Europe. Try multiplying two 4-digit numbers using Roman numerals, and by the time you are finished, you will realize why this development is so important. Green Revolution, brought about by improved seeds, was developed and tested in Mexico. When this became a success, India imported these hybrid varieties of seeds and eliminated famine. Soon, other countries in Asia and Africa followed.

The recent Arab Spring shows how conscious society is. An unfortunate act of one poor vegetable seller in Tunisia sparked off a revolution in 20 countries, and impacted the whole world. Society sees, feels, thinks, acts. It also learns from past mistakes. After an economic crisis or humanitarian disaster, society takes steps to prevent its recurrence. After the Fukushima nuclear plant disaster in 2011, it was not only Japan that changed its nuclear policy, countries everywhere chose to stop or slow down their nuclear programs.

We are becoming increasingly aware that we cannot isolate ourselves from others; we all share a common fate as humanity. Terrorism and climate change are negative reminders of this fact. Everyone is becoming aware that if trees are cut in South America's Amazon forests, or coal is burned excessively in villages in Africa, it can result in the melting of the

Polar ice caps and Himalayan glaciers and rising sea levels in America and Europe's coasts. When scientific discovery or technological advancement in one laboratory benefits people worldwide, or online learning democratizes education for all, they remind us that we are part of one living organization called society.

4. Social Power

Jules Verne published his famous novel *Around the World in 80 Days* in 1873. The novel portrays a wealthy English gentleman who wagers that he can travel around the world in a mere 80 days and achieves what was considered impossible at the time. When he manages to reach the shores of England after braving storms, fighting tribals, and crossing forests and raging rivers, everyone considers it a miracle. This is fiction, but it closely reflects the reality of the period. Long journeys, whether by sea or by land, were fraught with risk. Columbus could not get people to even agree with his idea that one could go east by sailing west. He failed to find financial support in Portugal, Genoa, Venice and England, and managed with great difficulty to get the backing of the king of Spain. Ferdinand Magellan, who is supposed to be the first man to circumnavigate the globe, actually did not. His ships and part of his crew did, he died along the way in the Philippines, in a battle with the native people. Travel was slow, dangerous, unreliable, difficult.

"The number of people killed in battle – calculated per 100,000 people – has dropped by 1,000-fold over the centuries."

Compare this with travel today. Travel agencies, online booking, and improved modes of transportation have made travel fast, safe and comfortable. Some amount of luck may be necessary, but surely there is no need for a miracle to enable us to complete the journey as planned.

Travelling around the world is no longer considered the achievement of a lifetime, but business as usual.

How did this happen? How have we become so powerful? There are airplanes, computers, internet and cell phones, true. But this change has not been brought about by technology alone. Technology cannot explain all of the power we possess today. This change over 50-100 years or more is seen not just in travel. We see it in every sphere of life. We are better off than ever before.

We live longer today. Healthcare has improved. Life expectancy that was 31 in the early 20th century is 72 today. We see less starvation and famine. The world has immense productive power, to grow more crops, to create more goods. 200 years ago, Thomas Malthus said that human population growth would outpace food production. A UN study predicts that the world will have surplus food, in excess of the needs of the population by 2030.[1] A 100 years ago, Ford customers had the choice of "any color you want as long as it is black". Today, one does not have to be shopaholic to know that we are all spoilt for choice.

We live in the most peaceful of times. It is not easy to get this impression from reading the daily newspaper, but historically, the number of people killed in battle – calculated per 100,000 people – has dropped by 1,000-fold over the centuries. War like WW I or II is unthinkable in Western Europe today.

Primitive early man living outside society went out, and either returned with food, or had become food himself. It was each man for himself. Today, the family nurtures the young till the age of 18 or 21, taking care of their physical, social, emotional, financial and educational needs. The family is a microcosm of society. What the family does to its members, society does in a larger way.

Most countries provide its citizens security, law and order. We do not go to sleep wondering whether the neighboring country will invade our borders in the night and colonize us. We have our governments and armies, there is also international diplomacy. We are all covered by a fabric of law. We do lock our doors at night, but we are also fairly sure that powers stronger than our front door are protecting us, and that law enforcement agencies are policing and ensuring safety. The idea of human rights is established. We have rules for property as well as intellectual property. There are rules that bind international trade. There are conventions enforced even in the treatment of prisoners of war. There are even laws that protect animals and natural resources.

Better transportation and refrigeration facilities and trade links between countries have brought the world's produce to our supermarkets. When a major phone manufacturer launches a new version, it becomes available simultaneously in every continent. Online stores deliver all over the world. A hundred and forty years ago, Jules Verne said in *Around the World in 80 days* that the world has become smaller. Then how do we describe the world today?

Earlier, people had to wait for the next day's newspaper to find out what happened in the world that day. Later, radio and TV brought us news the same day, and then events began to unfold live. Today, we have live streaming video, not just from major international news channels, but from people on the street who have a cell phone and internet connection. We can also reach out to the world better. Expensive and cumbersome trunk calls are replaced by instant wireless communication.

Education is no longer the domain of a select few. It was expensive and not easily accessible. In the 16th century, a wealthy German merchant asked a learned man how to give his son a good business education. The learned man told him, *If you want your son to learn addition and subtraction, then any French or German university will do. But if you want the boy to go on to more advanced subjects like multiplication and division, then you had better send him to Italy*.[2] Today, all primary school children all over the world learn the multiplication tables without leaving their country or town or village. Almost every country has compulsory, free primary education. All the knowledge accumulated by earlier generations over millennia is made available in a capsule form, and delivered to the student through formal education in 15-20 years. We take for granted all the knowledge that we have. Among a group of illiterate people, the one person who could read and write enjoyed great power. We

all have that power today. Education has become more easily accessible too. Student loans are available. Books that were so few and precious used to be chained to libraries. Today there are book stores, book banks, private and public libraries. Massive Open Online Courses (MOOCs) have electronically opened up the classrooms of the world's best universities to all. With the advent of the digital reader, electronic books and online libraries, it is time and energy that are in short supply.

The internet has accelerated the pace of individual empowerment. Getting a book published, previously a challenge even for renowned writers, is a simple task today. Without the backing of a publishing group, without an investment, one can self-publish one's writing, through Amazon or other similar services. Ebay and many similar sites make a trader of anyone, we do not need a physical store to sell anymore.

Banks and other financial organizations allow us to do what was not possible earlier. If it were not for the bank loan, only the wealthy could venture into entrepreneurship. Today venture capital and bank credit can make an entrepreneur of anyone with an idea or skill. The opportunities that were available to only the wealthy or influential earlier are now available to every one of us.

Women in most countries can vote today, whereas a 100, even 50 years ago, they could not. Even some men could not. Being different is not condemned or frowned upon as much as before. Being colored, left handed, physically challenged, homosexual, unmarried, divorced, part of the minority, and being a liberal in a conservative society or a conservative in a liberal society are more accepted today. Individuality is accepted.

We were born with all these rights, we did not fight for them or have to ask for them. We received them, for no fault or desert of our own. All these powers we enjoy today are diverse expressions of the collective capacity of society. Society possesses great powers and capacities for accomplishment, and it enhances the power of its members to accomplish any and everything they seek to achieve. The experience and knowledge of the entire human community accumulated over countless generations are freely offered to each new generation. We are the product of a long line of evolution. We start off with the accumulated achievements of past generations, and build on it. So social capacity grows over time.

Not all development is positive, there are setbacks and digressions. Some movements seem to go in cycles. Even when there is progress, it is not uniform or fast. School enrollments for girls in Mali in 2012 are comparable to those in the United States in 1810. So there are countries that are 200 years apart. In Afghanistan, women are celebrating now because they are allowed to ride a bicycle. But the overall direction in which we're moving is progressive.

5. Empowerment of the Individual

As society makes progress, it empowers the individual members more and more. The individual does not exist separate from society. His or her growth is defined, sanctioned and supported by society. All movements headed by an individual derive their energy and power

from the support of the society. Success of any magnitude, in any field, for any person, has a parallel in the world around.

> *"The individual and the society are like nuclear physics and astronomy, one is the finite microcosm, and the other is the infinite macrocosm."*

When Martin Luther posted the ninety-five theses on the door of the Castle Church of Wittenberg in 1517, the Protestant Reformation was launched. But the Reformation was born not because he posted the theses, it was because his views were accepted by people, because the people were ready for the Reformation. Luther's views spread like wild fire and within years 200 new religious denominations sprouted up around Europe. His power came from society, if not all of it, from some sections of it that endorsed his views.

All great leaders rose to power on the strength of their followers' support. Mahatma Gandhi was able to free India from colonial rule because he was accepted and obeyed by 300 million Indians. Mikhail Gorbachev was able to end the Cold War and dismantle authoritarian rule because the Russians aspired for greater freedom, and people everywhere wanted an end to the threat of nuclear war. The individual and the society are like nuclear physics and astronomy, one is the finite microcosm, the other is the infinite macrocosm. The interaction between the two is the catalyst and formula for social evolution and personal growth. Neither is complete without the other. The individual is the quintessence of society, and includes all the complexity of this macrocosmic society in specific expression.

6. Sources of Social Power

The source of social power is people. It is from people's aspiration, energy, and capacities that society derives its power. When individual capacity is organized and channeled through a system, it becomes social power. This process of this transformation is illustrated by the story of a 16th century Indian emperor, Humayun. Humayun was engaged in a military campaign, when his wife was expecting their first child. Humayun was anxious to get news of the delivery as soon as possible. The problem was his army camp was at a distance of hundred miles from the palace. The fastest horse and the best rider would take more than a day to cover the rough terrain in the scorching heat. One wise old minister said he had a solution, and announced that he would arrange for the news to travel to the emperor within minutes. Now, this was in the 16th century, before the era of instant long distance communication. So what did this minister do? He ordered tall towers to be erected every few miles between the city and the army camp. He stationed a man with a drum on every tower, and a code was agreed upon. The moment the baby was born, the drum message was relayed, from tower to tower, across the hundred mile span in less than five minutes. A simple system made possible a feat that seemed impossible. Hundred drums and hundred men together cannot do this, but when they are arranged at a uniform distance from each other, along the hundred mile route,

instant communication becomes possible. This is how society gets its power, by harnessing the energies and capacities of its individual members, and channelizing it through a system, much as the magnifying lens channelizes sun's rays and creates fire, or the dam and the turbine channelize the river water and generate electricity.

Society is made up of people – their aspirations, energy and potential. Therefore it is a teeming mass of this potential that is unorganized at first. Human energy is released by human aspiration – for physical survival, happiness, accomplishment. The more intense the aspiration, the greater the energy released. Aspiration arises in response to crises, such as war or the spread of a contagious disease. It also arises in response to emerging opportunities –independence, democratization, spreading education or entrepreneurship. Sometimes the distinction between crises and opportunities is blurry. The threat of global warming has opened up research and development of renewable energy sources. The challenge or opportunity awakens the aspiration for a solution. This releases energy.

Energy is of many types. It can be the physical energy of a laborer, skilled work of the carpenter, plumber or goldsmith. It can be the dynamism of the leader or industrialist. It can be the erudition of the scholar, the creativity of the artist, the imagination of the writer or the mental energy of the engineer. All human activity is an expression of this energy. All human accomplishment is the result of the proper direction and application of the energy. The energy when directed towards finding a solution, becomes force. Force organized, becomes power.

A simple analogy to this process of generating social power is seen in the everyday task of lifting a heavy object. A box that one person cannot lift alone, can be carried by four people together. When the four individuals, who represent society here, come together, and aspire to lift the object, they exert themselves and energy is released. When each directs it towards lifting the object, the energy becomes a force. When all four lift the object, at the same time from four different sides, the force is organized, and the power thus generated lifts the box. This coordination of four individuals gives the power to do something which none of the four can individually accomplish.

In this way, society is a huge reservoir of all our energies, skills, capacities, knowledge, intelligence and aspirations. A group of people lifting an object, and the old minister stationing hundred men on hundred towers are simplistic models. Society is filled with more complex organizations – family, market, trade, industry, economy, government, army, law, education, value systems – that focus and organize human energy so that individual human capital is transformed into social capital. The quality of the organization through which the energy passes decides the quality of the power that issues. The knowledge with which the power is directed and administered decides the productivity of the power. Over time humanity has evolved more and more effective forms of social organization.

7. Coordination

The idea of four people lifting a heavy object together is so simple that there hardly seems to be any theory behind it. But this marks an important step in the evolution of society. By coordinating the efforts of many people, society acquires capacities that are not available

when everyone acts in isolation. When the caveman went out in search of food, if he came across a lion, or a pack of lions, that could be the end of his story. If on the other hand, he found a deer, he could chase it or aim a spear at it, and if it was too fast for him, he had to try his luck elsewhere. But when two or three men went out together, things became different. One could herd the animal in a direction, another could be ready for it, a third could watch their back, and the bigger the group, the stronger and safer they all became, and more effective became the hunt. When the hunter gatherers took to farming and settled down in one place, they built their dwellings close together. There was safety in numbers. Villages formed, and collectively, everyone had the protection that the lone individual lacked earlier.

Insurance is another organization that empowers through coordination of another type. It divides the risk among everyone. In return for a small sum, the power of the collective offers everyone the capacity to tide over a heavy personal loss.

A small contribution from many sources amounting to a massive work is seen in the online encyclopedia Wikipedia. It is the work of over 30 million editors, 3 million of whom have been active at different times, each contributing a miniscule part of the compilation. No one man or woman is capable of doing this task alone, but each small addition or edit has gradually resulted in this repository that contains 30 million articles in 287 languages. The vastness of Wikipedia is not only because of the internet or the wiki application. Technology is such an integral part of every aspect of our life that it is very easy to explain everything as a result of advances in science. But science itself is a product of social evolution. Before the internet or the wiki, a similar project was carried out. In the mid-19th century, Professor James Murray led a literary project that similarly drew from the knowledge, expertise and time of tens of thousands of people. He gave an open call for volunteers to submit all the words they knew in the English language, along with the first known use of the word, its origin, meaning, usage and so on. This project received over six million submissions over a period of 70 years, and became the first edition of the Oxford English Dictionary.

By coordinating us and our efforts, society has generated remarkable power, with which it empowers each one of us.

8. Specialization

Specialization is an improvement on coordination wherein different individuals or subgroups within a group perform different tasks, and collectively accomplish far more than would otherwise have been possible.

An examination of the organization of an army, the ancient Roman army for instance, reveals power of specialization. Instead of entering as a single large mass, the Roman Army broke into many columns during the battle. They had specialized divisions, each with a specific role – foot soldiers, archers, cavalry, javelin throwers, signal bearers. Some soldiers had special skills, such as swimming across rivers to surprise the enemy, much like modern day commandos. In the background, the army was supported by physicians, blacksmiths, cooks, drivers, porters, spies, messengers and men who took care of the animals. No amount of

brute force, courage or determination of the enemy could match the tactical strength of such specialization.

Specialization is an improvement on coordination, and generates greater social power. The term *Specialization* has a rather high sounding connotation, but we see it in practice everywhere. The family has its own specialized divisions – for protecting the members, providing for everyone's physical needs and comforts, housekeeping, taking care of the children, fulfilling the emotional needs of all, instilling discipline and inculcating values in the younger generation. Specialization exists everywhere – education, agriculture, industry, governance – and increases the productivity and efficiency of the organization.

9. Hierarchy

Specialized Roman divisions working in coordination defeated powerful armies. Imagine for a moment what would have happened if everyone in the Roman army had started giving orders during a battle? If a general had disobeyed the king, or a centurion had told his general that he had a better plan, or a soldier decided that he knew best, they would have simply been run over by the enemy. Vertical grouping and delineation of authority and responsibility are required for the smooth functioning of any organization.

Like specialization, hierarchies are seen in all organizations. Colleges have a vice chancellor, different departments with a dean to head each, and lecturers in the various departments. Schools have a principal, various grades and a class teacher for every grade. Political power is differentiated into local, state, national and international levels. Every profession has its hierarchy of expertise – from service technician to production engineer to designer. Authority and responsibility flow through this path so that the whole group functions effectively.

This vertical division is seen even in families, though parental authority is becoming more difficult to exercise! Many Prime Ministers and Presidents, or maybe all of them are criticized by their own countrymen, but no country that does not want to be dissolved into chaos can do without them. Also, how dysfunctional would a country be if each and every decision had to be taken by the President! Hierarchies prevent this by differentiating authority and responsibility vertically into different levels, so the highest authority is assigned matching responsibility, and the smaller issues are handled by others lower down the line. This raises productivity and efficiency of the whole organization. Social capacity combined with social authority gives social power.

10. Integration

Integration magnifies the energy of organization. Within a group, when the various subgroups and their activities are integrated, the overall effectivity is enhanced.

Amartya Sen, the Indian economist and philosopher who won the Nobel Prize for Economics in 1998, said that countries with functioning democracies do not suffer from famine. What is the connection between democracy and the availability of food? Society's power to integrate is seen here. In democracies, the government is answerable to the public. The leaders are more responsive to their voters' needs. Democracies generally have a free

press that reports unbiased news. So the press watches what the government is doing, the people are aware of what their leaders are up to, they can voice their opinion in the press, and the leaders know the entire country, even the world is watching. Lack of transparency will allow one to get away with anything. But this integration of food production and supply, responsible governance and the media has the power to eliminate famine.

In this way, society generates tremendous power through coordination, specialization, hierarchy and integration. This power is made available to every member of society, to make use of and benefit from.

11. Inter-convertibility of Power

Society offers different types of power –food, healthcare, governance, law, education, science, production, trade, commerce, communication, transportation, recreation. All these forms of power are inter-convertible. The Roman Empire converted military might into economic power. Today, a country with a strong economy can use its money power to leverage political power. A farmer, using the power of technology, can produce more crops, and make more money. He can use this money to educate his children. So the power of technology can be converted into food, wealth, education and more. A commercial organization can use better transportation and communication facilities to expand the business. Knowledge can be used to get a job, make money, buy the latest technology, travel, communicate or gain social status. Physical prowess or artistic talent can be used to earn money and fame.

Power of any one type can be transformed into any another.

12. Individuals and Networks

Those who think that social networking began with Orkut and improved with Facebook must be teenage or younger. Humans have always been socially networked. Relationships are hardwired in us. They have helped us survive as a species. They stimulate our mental and emotional development. All human accomplishment can be traced to relating to others constructively.

The World Wide Web shows how powerful interlinking can be. Even search engines rank a website higher if it is connected better to other sites. Great civilizations of the past flourished when they forged trade links with other civilizations. The English language assimilates some 4000 new words from other languages every year. The more it accepts foreign words, the more it grows and is accepted. The stronger the connections between the nodes, the greater the opportunities for success.

All that we use – language, numbers, education, employment, money, clothes, food, stationery, furniture, buildings, roads, gadgets, freedom, law – are products of society. Society offers these vast resources to each one. That Wikipedia is the work of 30 million people is conceivable to us, if not the actual magnitude, but at least in concept. But as we go through the day, do we realize how many people have contributed to making each act of ours possible?

Society offers vast resources to each one. Some go to school, and learn. Some do not. Some do just enough work to make the grade. This is what we all do on a larger scale with ourselves in society. Those who take the slightest effort to make use of these powers are carried on by the movement of progress in society. Those who refuse to participate in society and isolate themselves for whatever reason, fail to benefit from the collective resources. There are some who see what society has to offer, empower themselves, and go on to accomplish, both personally and for the collective. These are the formed individuals who go from being led by society, to leading society instead. They create change; they are at the forefront of social evolution.

"A small portion of society's powers are organized and channelized through systems and made productive. But not all social capacity expresses in action."

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13. Unutilized Potential, Infinite Potential

The earth receives enough solar energy in one hour to meet human needs for a full year. But solar power accounts for less than one tenth of one percent of global energy produced as the world struggles to meet the demand for energy. Most of the sun's rays are unutilized. Similarly, a small portion of society's powers are organized and channelized through systems and made productive. But not all social capacity expresses in action. A large part of our personal and collective lives are unorganized, and our capacities unutilized. Inequality in the distribution of wealth and freedom, poverty, unemployment, illiteracy and scarcity of opportunities alongside unused human potential reveal the inefficiency of present social systems.

Human capital is the ultimate source of all resources, and it is inexhaustible in potential. It grows by giving, much as information grows when shared. Social power is not subject to any inherent limits. It has unlimited scope for development, organization and application. A complete knowledge of the process by which human and social capital develop and are converted into power can be utilized by any individual to rise to the highest level of accomplishment and by any society to become a leader of human social evolution. Such a knowledge is essential for establishing a new human-centered development paradigm.

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Notes

1. *World Agriculture 2030* Food and Agriculture Organization of the United Nations, August 20, 2002 http://www.fao.org/english/newsroom/news/2002/7833-en.html
2. Georges Ifrah, *The Universal History of Numbers: From Prehistory to the Invention of the Computer* (New York: John Wiley, 2000), 577

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The Conscious Individual

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Abstract

This article traces the evolutionary development of human consciousness and its increasingly complex and sophisticated organization as human personality from the instinctive behavior of the animal and the subconscious conformity characteristic of early forms of human civilization through progressive stages of transition from physical to social to mental levels of awareness and from the undifferentiated social consciousness of the member of the tribe to the emergence of independent thinking, creativity and uniqueness, which characterize the Conscious Individual. The individual and the collective evolve in tandem. The collective imparts its acquired capacities to its members. The emerging individual acts as a catalyst to spur further development of the collective. Each stage of the journey is the same in essence and structure at progressively higher levels of consciousness and organization. The higher the level achieved by the collective in terms of quality and complexity, the greater the knowledge and organization demanded of the individual. The article ends by cataloging crucial points at which modern society is mired in outmoded conceptions, superstitious beliefs, pre-modern values and archaic institutions that obstruct humanity's further evolution from problems and limitations to ever-expanding opportunities. The conscious individual is the key to that process.

The conscious individual is the most complex phenomenon yet discovered in the universe. The individual is the vanguard of human evolution. Society has the capacity to create conscious individuals as a finite expression of its infinitely vast and varied social potential. At an earlier stage society fosters development of members who conform to its values, rules and norms and submit subconsciously to domination by the collective.

Mind is the highest instrument of the individual, yet it remains largely ignorant and unconscious both of the world outside and its own true inner being. Human beings becoming mentally conscious is the process of civilization. It is mental awakening. The individual becoming conscious of the existence of eternal, infinite Spirit is spiritual awakening.

Primitive man, though endowed with an intelligence as great as our own, was largely unconscious of the world in Space beyond his immediate community or of existence in Time beyond the recent past and immediate present. Growing awareness in Space and Time is growth of consciousness and spiritual awakening. Animals are guided and protected by unerring subconscious instincts. Humanity has largely lost this subconscious knowledge as civilization advanced, replacing subconscious instinct with conscious knowledge of hunting,

agriculture, language and education. The flawless knowledge of subconscious instinct can be regained at a higher level as mental insight by a transformation of subconscious into conscious processes.

Our growing knowledge of Geography and History is a sign that human beings are becoming increasingly aware in Space and Time. The development of literature, especially poetry, is indicative of our increasing awareness of subtle psychological realities beyond the reach of the senses.

"Humanity progresses in the measure it becomes conscious and organizes that consciousness."

Humanity progresses in the measure it becomes conscious and organizes that consciousness. The individual grows by becoming conscious of relationships with other people and society. Life presents crises that compel us to discover new knowledge, create new institutions and acquire new behaviors. Natural calamities are the outer symptoms of such crises. Death is their physical inward expression. Mental confusion is the stimulus for growing comprehension. Resolving crises enhances our understanding of Life, the world in which we live, society and ourselves. Confusion is mental. Crises are physical and social. Improved understanding enhances our effectivity. Increasing mastery of nature is an expression of growing consciousness. This is the external social progress. A corresponding inner progress drives our individual evolution psychologically and spiritually.

Language was born when man became mentally creative. Education is the process of society consciously passing on to future collective generations the knowledge of the collective acquired through its past experience, making conscious the collective individual. Culture makes people conscious of the value of other people. Existence, history, civilization, culture, law and custom are successive stages in the evolution of society. Humanity, long fascinated by the moon from afar, now walks upon it.

"The world is beset with problems that appear insoluble largely because we are unconscious of the social capacity that already exists and the social potential waiting to be developed."

The conception of the World University Consortium represents humanity's growing global awareness of the power of knowledge. Education began as language and speech. Language represents mental conception expressed verbally. Language and education make possible the transmission of knowledge from one generation to the next, which is essential for humanity to learn from past experiences and avoid the necessity of continuous repetition. Education has the power to abridge the historical experience of time by the application of Mind in the field of organisation. In early times that knowledge was just sufficient to help people survive physically and nomadically. The awareness of social identity and the conscious striving for social progress within groups came later as the innate urge of gregariousness

led human beings to associate with one another for territorial defense and sedentary social life.

Thus, humanity has advanced through progressive stages of a long evolutionary journey individually and collectively. Each stage of this journey is essentially the same in essence and structure at progressively higher levels of consciousness and organization. The higher the level in terms of quality and complexity, the greater the knowledge and organization demanded. With respect to food, this has meant a gradual shift in emphasis from mere quantity to quality and improvement in taste. The evolution from simple sounds to complex harmonies of music is a parallel qualitative movement. Advances in each dimension parallel those in other dimensions. Each aspect advances horizontally to cover wider areas and new fields of expression and vertically to form higher levels of organization. Thus, local level food production has evolved into national and global food systems. Monoculture crop production and limited diets have been replaced by multi-national cuisine. Folk music of local origin has evolved into myriad varieties and unlimited choice generated globally and accessible around the world. This social process is analogous to a tree's progressive growth as roots, trunk, foliage, flowers and fruit. The same process repeats everywhere with infinite variations in expression.

"The New Paradigm can be fuller and richer than anything now imaginable, if only we do not cling to outmoded concepts, vested interests and dead conventions."

No resource or opportunity is ever fully availed of. A large portion of the public is largely unaware of the services offered by governments. People are unaware of the enormous benefits conferred and creative opportunities offered by society and by life. No human being utilizes all his or her knowledge, skills and capacities. No society fully engages all its members. The law of utilization demands that supply be many times larger than the demand. The human brain and its potential remain mostly unused.

We confront a paradox of needs and opportunities. Humanity possesses a huge surplus of productive and technological capacities that remain underutilized, yet we confront perpetual problems of scarcity. The world is beset with problems that appear insoluble largely because we are unconscious of the social capacity that already exists and the social potential waiting to be developed. Like the child in the story, someone should have the courage to state that our insoluble problems are like the emperor's new clothes. A sense of helplessness and hopelessness prevents us from seeing the incredible power society has created for human accomplishment in all fields and for modifying our ideas, attitudes and actions to more fully avail of it. The New Paradigm can be fuller and richer than anything now imaginable, if only we do not cling to outmoded concepts, vested interests and dead conventions.

We condemn other cultures for preventing the development of their women and children, forgetting that women acquired the right to vote in America only in 1922 and in Switzerland only in 1971. We condemn the corruption in developing countries forgetting that most of the prosperity and wealth of Western nations was acquired before laws were introduced to

legalize and sustain the status quo. Forms of discrimination and corruption have changed. In the name of democracy we have 'legalized' plutocracy. We blame the terrorists and fundamentalists of the world for disturbing our peace and security while clinging with equal fervor to our own archaic forms of fundamentalism that 'terrorize' the billions who are excluded. In the name of free markets, we have created a new aristocracy of the speculators. In the name of technological progress, we disenfranchise millions of workers, rob tens of millions of youth of their future and witness soaring levels of inequality. In the name of democracy, we perpetuate a system of global governance over which veto power is exercised by five nations which happened to be the victors in a war fought before 95 percent of the world's population was even born. In the name of security we cling to our nuclear arsenals that can only destroy and never secure anything, proliferate the dissemination of small arms around the world, and insist on expanding a cooperative security system that exponentially enhances the perceived threat to nations that are excluded, rather than building one that is truly inclusive and cooperative. Why have we not solved all these problems and eradicated these inequities? Why do we hesitate and submit? Why did Western nations repeat the folly of earlier generations by consciously dismantling the regulatory protection that ensured seven decades of financial stability? Are we really incapable of understanding the source of our problems and fashioning effective solutions? Or are we too secure and satisfied as respectable members of society to willingly rock the boat?

"In the name of democracy we have 'legalized' plutocracy."

"The need of the hour is for the 'supreme court' of world public opinion to overrule perverse decisions of governments."

We are the species that have emerged from the forest, settled the globe, traveled to edge of the solar system and peered into distant corners of the universe. Who is in charge of human evolution? We have invented money and now let it possess us. We have created markets and now in the name of neo-liberalism let them rule us. We have fashioned an endless succession of technological wonders and now let them replace us. We have developed rule of law and democratic governance to promote freedom and equality and now passively succumb to new forms of tyranny. We reject countless superstitions of earlier generations in favor of new knowledge, yet continue to uphold the right of citizens to own weapons capable of firing 900 rounds a minute over a distance of 1000 yards based on a law established at a time when a flintlock musket could fire a single shot per minute over a distance of less than 100 meters. Is this really what human rights stand for? So long as governments refuse to ban gun-carrying and passively condone the frequent death of innocents, they have no right to criticize terrorists or fundamentalists.

If the US Supreme Court insists on the right of corporations to dominate US elections or the World Court refuses to enforce the provisions of the Nuclear Non-Proliferation Treaty

abolishing all nuclear weapons, or the five permanent members of the UN Security Council refuse to renounce their undemocratic powers, then it is time for the world public opinion to rise up in protest and demand wiser counsel and more truly democratic institutions of governance. The need of the hour is for the 'supreme court' of world public opinion to overrule perverse decisions of governments. Law is a codification of public conscience and when it ceases to reflect the evolution of that consciousness, it must be modified, supplanted or rejected, regardless of the sanctimonious pleadings of vested interests and archaic institutions.

"Thought should rise boldly in the world to offer leadership."

Though slavery was abolished by constitutional amendment in 1865, it persisted for a century until Rosa Parks sparked the onset of the American Civil Rights Movement. Her action qualifies her as a conscious individual. The world has seen many more conscious individuals such as Churchill, who defended liberty in WWII; Franklin D. Roosevelt, who humanized capitalism with the New Deal; and Gorbachev, who worked from inside to demolish the authoritarian fortress. When Club of Rome came out with the slogan "Limits to Growth", the world responded enthusiastically. Now perhaps the same world should respond joyously with the call for "Limitless growth of human well-being". The Gordian knot that helps keep problems alive needs to be cut right now for the emergence of the conscious Individual.

Though unconsciousness continues to rule, it does so by default and cannot claim the right to rule. That right belongs only to consciousness. Society as well as the individual has to become conscious and continue to grow in consciousness. Gorbachev became conscious and the Soviet Union dissolved. It is true that there is no leadership in the world today, but there can be leadership in Thought. The world is facing an evolutionary crisis. It cannot be solved by appeasing the culprits. The French Revolutionaries did not negotiate with the French aristocrats to plead that they renounce their autocratic power. Charles I was not consulted before he was removed from power. Thought should rise boldly in the world to offer leadership. If not a distinguished individual, then at least a group of like-minded international organisations now see some light at the end of the tunnel. This is a process of the world consciously emerging from the folly of its own ignorance and fundamentalism. The individual must become conscious in order for the society to follow. For the conscious individual, there is no problem in the world too difficult to solve. Rather the conscious individual will discover opportunities all around.

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