A TRILOGY APPENDIX AS THE FIRST MAJOR ITEM

The first major item on our tour, as previously noted, is titled *Liberty and Justice for All Some*. Its major topics are as follows:

Liberty and *The Invisible Hand* Sociological Structure Impacts Wealth Creation A Strategic Approach to Wealth Creation Capability and Justice An Enlightened Perspective An Improved Sociological Structure Pursue Justice in Order to Obtain Liberty

Those side headings provide a clue to the line of reasoning. Additionally, a commentary is included in the form of inserts in the text, as it proceeds.

Liberty and Justice for All Some

By Maury Seldin

America is on the road to becoming a dystopia! The ideal of *liberty and justice for all is* being eroded by the trend in the distribution of income and wealth being skewed more and more to the right and the middle class losing faith in the system. The formation of the Tea Party has moved the nation toward policies built on a faulty understanding of the operation of the *invisible hand*; an understanding that manifests itself as liberty and justice for **some**.

The Occupy Wall Street Movement may be the seed of a transformation that has the potential of evolving to a new age of enlightenment on the order of the Enlightenment in an earlier era, also known as The Age of Reason. That Enlightenment was spawned by intellectual leadership that flowed from the Scientific Revolution into mostly European societies as a great cultural transformation. The masses began to look at things differently, significantly influenced by the thought leaders of their time and those who influenced the development of a broad range of disciplines.

The 2020 update on the "masses began to look at things differently" is on the platform item titled <u>Unity Counts</u>. The outline is as follows:

Now Hear This Massive Demonstrations Dysfunctional Systems The Voice of the People An Evolutionary Process An Interpretation of the Example The Frame of Reference The Key Elements in the Approach An Educational Innovation A Bit of Background The Trilogy's Content Analytical Systems and Action Reinvention, Reform, and Revolution Public Outcry Component Reform Strategy Coevolution

The opening two paragraphs are as follows:

Unity counts, and so does voting. But that is not enough. It will take a systemic evolution to save our freedom. That evolution may have already started. The first clue is the massive demonstrations. They are an emergent phenomenon arising in the environment containing the combined impact of the pandemic and the recession.

That deterioration of environment had already disproportionately affected the black portion of America's population. It was in this environment that the public viewed an outrageous abuse of police power. That injustice led to a needless death inflicted by a police officer who had the suspect under control, handcuffed and on the ground. The police officer, was charged with second-degree murder, having persisted with the stranglehold using his knee for more than eight minutes, while the victim was pleading, "I can't breathe." Three other police officers stood by while the crime by the police officer was being committed; and not one of them attempted to try to save the life of the suspect who was allegedly being murdered.

A great issue in the transformation known as the Enlightenment was the role of religion as the source of authority. Jonathan I. Israel, a leading authority on the subject, uses the term *Moderate Enlightenment* as the classification of enlightenment advocates that includes the philosophers advancing the role of reason, but seeking a compromise by clinging to religious thought in an attempt to reconcile the authority and faith of the past with the rising role of reason. The *Radical Enlighteners* rejected divine providence as the source of authority.

The Declaration of Independence hedged the issue. The key phrase is "We hold these Truths to be selfevident, that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness." The source of the rights is hedged in the statement as identified with the bold type added for emphasis "... these **Truths to be self**evident, that all Men are **created equal**, that they are **endowed by their Creator...**" The authority may be reason - **self-evident**; and/or divine - **created equal... endowed by their Creator.**

The critical point is that either source works as long as the source flows through the individual who possesses the unalienable rights from whom government derives its authority. That is the American system and those rights are constitutionally protected so that there will not be a tyranny of the majority.

The concern here is with the liberty to which every American has the right, and the attainment and/or preservation of that right is a matter of justice. The concern is that the extent of liberty enjoyed by the vast majority of Americans is being eroded and justice is being denied by failures in all three branches of the federal government and both leading political parties to adequately understand the evolutionary nature of the political economy and the limits on the ability to influence outcomes.

That is a serious charge, but can be substantiated by the reasoning that explains the events that led up to the housing bubble, capital market freeze, the Great Recession and the ensuing governmental actions. That detail is beyond the scope of this article, but the path to it is dealt with in the treatise from which this article is drawn. The scope of this article is to share an understanding of a potential path to closer attainment of liberty and justice for all; a path that would be more inclusive than that which has recently unfolded.

The understanding that is shared is partially based on nascent disciplines, especially those used in interdisciplinary approaches to understanding issues of modern times. That understanding uses perspectives different from twentieth century mainstream perspectives. Human natures differ, but a great commonality is the resistance to paradigm shifts. A popular quotation is of the wisdom of Max Plank who wrote "A scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die and a new generation grows up that is familiar with it."

Liberty and The Invisible Hand

Scientific truth can be of great assistance in clarifying misconceptions of the power of self-correcting systemic forces alluded to in the metaphor *the invisible hand*. The metaphor, as used by Adam Smith appears in his first book, *The Theory of Moral Sentiments*. It became well known through his second book, *The Wealth of Nations*. It seems that he picked up on the idea from a poem by Bernard Mandeville titled "The Grumbling Hive: or, Knaves turn'd Honest." The poem published in 1705 may well have been a political satire indicating that the bees had a thriving community while they pursued their self-interest, but when they pursed honesty and virtue the hive failed.

Adam Smith wrote in his *Essays* that philosophy was the "...science of connecting the principles of nature." At that time, in the midst of the Enlightenment, science had not advanced far enough to explain the operations of networks, emergent processes, and properties of networks at the macro level not present at the micro level. That philosophy, as a precursor to science, could connect the principle that the bees by pursuing their individual interests provided an emergent impact favorable to the benefit of the whole hive. What it missed was the limits of that capability and understanding the limits of the negative feedback system that enabled it to do as much as it could do. The system is now better understood by scientific advances, especially in entomology, network science, and complexity science.

The poem did not reflect an understanding of the biological basis of the behavior of bees. The biological basis of the behavior of bees as explained in the context of the operation of complex adaptive systems found in complexity science is provided by John H. Miller and Scott E. Page in their book *Complex Adaptive Systems*. The thrust of it is that bees have a genetic diversity in which the individual bee's body temperature influences huddling and fanning. The behavior is tied to a genetically linked trait. There is a genetic diversity so that while the hive needs to maintain a temperature in a fairly narrow range, the bees by seeking their own comfort fan their wings and cluster responding to their different comfort zones.

Clearly, if the hive is exposed to extreme temperatures, the bees do not have the capability to impact the temperature sufficient to protect the hive from destruction. That capability includes the number of

bees participating in the actions that generate the emergence and the impact of the energy expended by the bees. Their actions cannot overcome excessive changes. The capability of bees includes the selection of places for hives that that, though large enough to accommodate the bee society of their hive, have an opening small enough to provide protection from some variations in temperatures outside the hive.

Tom Seeley, a professor of neurobiology and behavior, explains the process as a result of his study of honeybee societies. His recent work, *Honeybee Democracy*, explains how when the population of the hive is approaching capacity of the existing hive, a scouting party is selected, presumably from the wisest of the bees. The scouting party sets out to search for potential sites that have some particular attributes, including a small entrance such as to a tree hollow and a large interior well protected from the elements.

The individual members of the scouting party do their explorations and upon return communicate to the other bees about the characteristics of what has been found. They do so by a dance. The process sorts out the candidate locations from which the final selection will be made.

The law of the colony permits the process to proceed with the bee advocates pushing their selections. However, at some point, the preferences of the majority of the bees kick-in to deter some advocates from pushing their find. When the expansion site is finally selected, it is the choice of individual bees as to who goes to the new site. That is a democratic society with a balance of liberty and law that operates with the concept conveyed by the metaphor of the *invisible hand*.

Sociological Structure Impacts Wealth Creation

The honey created in the context of the sociological structure of a honeybee hive is a form of wealth. That sociological structure of the bees is a complex adaptive system illustrated by the activity of the network of bees at the micro level that creates properties at the macro level of the hive that are not present at the micro level. The temperatures of the environment changes, and then as a result of that change, the individual bees adjust their behavior in light of the new environment. It is a negative feedback system similar to the operation of thermostats.

The American society is also a complex adaptive system. Wealth is created at increasing, or decreasing rates because the system is dynamic. The evolution of its wealth creation process is substantially more complex than that of honeybees because of a greater number of layers of networks and a wider range of individual choices at various levels of networks. These choices are influenced by the capability of the individuals (including individual organizations) and the capacity of the structure of the system.

It is the structure of the system through which outcomes may be influenced by public policy, but in a democratic society there are severe limitations on the ability of a hierarchical structure to control outcomes. The system relies heavily on the interaction of the supply and demand process that operates through markets that are constantly evolving.

The evolution changes the economic environment through emergent processes. The changes occur as environmental conditions impact market transactions that then impact business enterprises making their adjustments that may result in changes in institutional arrangements producing a new

environment. It is the reiteration of the process that produces an evolutionary result that is uncertain, and beyond sustained hierarchical control, but amenable to some influence as to range of outcomes.

Thus, the creation of wealth in the American economy is the product of an evolutionary process that is nonlinear rather than linear as is assumed in prevailing econometric models used by neoclassical economists. The supply and demand are not wholly independent variables as modeled in neoclassical economics, nor are the participants in the market as rational or as informed as believed under the efficient market theory. As a result, the linear models of traditional economics do not capture the lack of proportionality between inputs and outcomes. The resultant creation of wealth is thus uncertain.

Also uncertain are the side effects of intervention in the system where the intervention is intended to serve the interests of particular segments of society, or even society as a whole. The failure of the legislative policy makers, the Federal Reserve Board of Governors and various administration regulatory agencies to adequately understand the nature of the evolutionary system and the generation of unwanted side effects was in large measure responsible for the housing bubble and the capital market freeze that led to the Great Recession and its aftermath.

Private sector market participants were not free of fault in contributing to the debacle. Aside from what appears to have been an erosion of ethics in business practice, there was deterioration in the ability of the institutional structure to appropriately impact the private sector decisions. These forces in the evolution of the dynamic system led to the great destruction of wealth.

That destruction of wealth, deemed by many to be a result of systemic risk, was a major discontinuity in economic activity. It was an outcome that the market participants would have great difficulty in diversifying against, but one in which better policy could have mitigated enough so that the market adjustment process would not take such a great toll on the income and wealth of a vast proportion of the American public that was innocently impacted, especially by the loss of employment and the loss of wealth.

A Strategic Approach to Wealth Creation

Wealth creation starts with productivity, output relative to input. That may be of land, labor, or capital. Subsistence farming by its very nature does not produce much wealth. Its productivity may be enhanced by increasing the productivity of labor through better farming practices. Productivity may be further increased by the provision of capital that facilitates the application of better technologies.

The evolutionary process that brought the American economy a dramatic rise in wealth over the past two centuries operates on the principles of diversity, exploration leading to selection, and amplification that is sometimes called exploitation, but in a positive sense. That process is aided by innovation, both in the senses of sociological structure and technology. In societal structure, some key elements are liberty, along with private property and law that protects liberty and property, but what is absolutely critical is the presence of suitable vehicles for delivery of justice.

> Appendix 1E [from BOOK ONE without endnotes] The Integrity of American Democracy Undermined Democracy's Most Dangerous Branch

One can make the case that the most dangerous branch of the federal government is that led by the president; especially considering what has just been described regarding the qualifications of President Trump and his behavior. Perhaps the Constitution's greatest mission was to avert tyranny. It was for that purpose that a system of checks and balances was designed as part of the network of establishing three branches of government, and a system in which at least two political parties could work together and have an orderly transition of leadership. The Supreme Court in the design is the final arbiter, but it has now risen to become our democracy's most dangerous branch.

Democracy's most dangerous branch of the federal government is the court system that provides for lifetime appointments for Supreme Court justices in a structure where the expected norms appropriate for leading to the Democratic transition of power are not accepted. The gaming of the system has enabled a concentration of power.

The gaming of the system has to do with the voting process as well as the structural design for a separation of powers among the branches of government. It may seem strange, but there is no explicit constitutional provision for individual rights to vote...

Beyond both types of innovation there is the necessity of a delivery system. In America, the great advances in the production of wealth have been by business, but business relies on an infrastructure provided **by** government and **of** government. Innovations in these three areas (technology, sociological structure, and business operations) are vehicles for increasing the wealth of the American society. Some of this emanates from markets, but some requires suitable policy by various levels of government.

Much of the infrastructure provided **by** various levels of government is in the form of the externalities of roadways and other urban plant facilitators. The infrastructure **of** government provides the rule of law and the protection of private property as part of the externalities that form the structure within business and society operates. Tycoons who believe that their success is attributable to only themselves overlook the role of the sociological structure in facilitating their opportunity and thus their obligation to the rest of society that makes it possible.

Business enterprises require incentives as do investors in such enterprises. The creation and operation of an enterprise requires a vision sufficient to induce people to make a commitment to pursue the endeavor. Certainly the financial rewards are typically part of the incentive; but, the mix of incentives, including the personal satisfaction of achievement and the recognition of status vary widely.

The marginal utility of financial rewards has varying rates of declines depending on the individual, although for some the driving force is for more without limits. From a societal view, it is only necessary to provide enough to get the function performed. From some individuals' view, there may be a feeling of entitlement, but it may not be grounded in a thorough understanding of the system - only in what some individuals see as is in their interests. Justice demands that they pay their fair share for support of the sociological structure that made their success possible and its appropriate evolution to facilitate others to also perform the functions that are the business of business.

The creation of wealth through the business enterprise requires the risk of capital that will not be forthcoming without sufficient incentives. The incentives not only include the potential of profit, but the assurance of the protection of property rights so that the rights to the capital are protected. This requires an enabling environment.

A common mistaken belief is that the function of business is to make money. Some may have a belief as a philosophy of business the goal is to make money, but that is not the function; it is a motivation. An alternative philosophy of business is to provide a valued service from which a profit may be made. Such a philosophy includes other goals such as relationship to the community and to the work force that produces the product or service.

The function of business is to serve as a vehicle for society to produce and distribute goods and services affecting the welfare of the people in the society. Most of these goods and services in our American system flow through private enterprise. In general, private enterprise may be a more effective vehicle than a governmental enterprise, but there are exceptions. A competitive system may impose a discipline upon the enterprises allowing some to fail while others prosper. It is a great enabler of evolution especially dependent on a diversity of enterprises, a selection of what works, and a magnification of scale of what works with competitive organizations.

It is important to avoid the concentration of activities that lead to an enterprise being too big to fail. However, failure is a discipline of the system that contributes to the growth of sociological wealth and is an essential part of the process of evolution, but avoiding an excessive concentration of activity is simply a prudent way to assist in avoiding the choice between disaster and subsidizing enterprises by facilitating the creation of a moral hazard that induces many to pursue policies in which they reap the benefits and the American public bears the losses, if the losses occur.

Some failure is part of the normal process of evolution and the elimination of failure would be excessively costly in terms of creation of wealth for the society. For enterprises in which a competitive system is not feasible, as with those that require an economy of scale and avoidance of duplication such as some utility systems, a government enterprise may be more effective. There are various options regarding ownership, but monopoly situations require a kind of control different from competitive situations. In any case, the function still relates to providing or enabling a vehicle for the production and distribution of goods or services.

Some unwanted side effects are inevitable within varying ranges of liberty for the business enterprise. One of these relates to the impact on the environment. In such cases, constraints on activity may mitigate damages. Sometimes a market is created to trade mitigating impacts, but some activities are absolutely prohibited.

The unwanted side effects of particular concern here are with some characteristics of the distribution of income and wealth. Unequal distributions of income and wealth are an inherent byproduct of a competitive system. Not all participants have an equal capability or even an equal opportunity. Public policy may pursue the goals of enhancing equal opportunity, but there will still be an inequality in results. The nature of the resulting inequality is an issue of justice, and there are different perceptions of justice as well as of liberty.

A reasonable strategic approach to fostering wealth creation is to (1) utilize the natural forces that exist in market behavior to enable technological innovation that enhances the value of goods and services produced by market activity; (2) foster innovation in sociological structure that enhances the quality of life; (3) harness the complexity of the system that impacts the delivery of progress in wealth creation through business enterprise; and, (4) to do so in a system that fosters liberty and justice for all.

That last point, liberty and justice for all, is the toughest part of the political process because aside from shortfalls in the understanding of the realities of the operation of wealth creation and destruction, there are differences in value judgments about the distribution of income and wealth. Some of these differences are related to the trade-offs involved in different rates of aggregate economic growth in income and wealth and the distribution of income. The socialist idea of "from each according to his ability, to each according to his need" is a formula for very little wealth creation when applied to a culture such as the prevailing American culture. It can work with some small scale cultures, but requires human natures vastly different from those widely encountered in America.

The capitalist ideal of the so called *free market* has to deal with the extent of freedom in the market. All liberty and no law leads to chaos. Restraining liberty only so much as to enable the maximum growth in wealth may skew the distribution of wealth to a pattern that is unacceptable in a democracy because it may impoverish or otherwise deny justice to the source of authority in a democracy. Judgments differ as to where in a continuum of trade-offs between highest aggregate growth in wealth and equitable distribution of wealth an optimum may be found. Theoretically, based on prevailing values, including acceptably taking care of those who do not have the ability to take care of themselves under the concept of unalienable rights, it is a political compromise of social contract. The Constitution provides a protection from the tyranny of the majority, but does not spell out the choices to be made as the socio-economic system evolves in ways of unanticipated structural change.

Part of the problem is that social science has not evolved to the point where it is clear as to what the outcomes of different policies might be. The best that can be done is to pursue policies that are reasonably believed to narrow the range of outcomes. Furthermore, the choice of the range of acceptable outcomes is to be made as part of an acceptable process. The current process is unacceptable because ideology based on faulty understanding of the system; furthermore, hungers for personal and party power are trumping wisdom, statesmanship and compromise.

Redistribution of income has a negative connotation for many, but even those most opposed to the concept regularly trade some of their income for goods and services that they believe will make them better off and in so doing provide for a redistribution. It is a voluntary choice, and society can make such a voluntary choice when it seeks to pick a point in the continuum of the trade-off between aggregate wealth creation and equitable wealth distribution.

Biblical roots and Enlightenment reason advocate amelioration of the deprivation of poverty. Also to be considered is the deprivation of opportunity; both are part of a strategy for a more effective approach to pursue liberty and justice for all.

Capability and Justice

It is not the intent of the American system to have an equality in outcomes; an *inequality* of outcomes is a reasonable result of the system that enhances the welfare of society as a whole. But, it is not reasonable, or *just* in views of divine providence, for the system to result in poverty unabated by the system that is doing so well for the rest of the population. The inequality of outcomes may be approached by considering that sometimes liberty and justice are incommensurate values. Thus, society needs to make choices as to the rules by which the trade-offs are made, even if the choice is to not intervene. In the case of wealth creation, the liberties in a market system affect the aggregate quantity of wealth. In order for markets to function there needs to be some regulation and enforcement even among criminals in illegal activity who self-serve as judge, jury, and enforcer. It is a question of the character and extent of regulation.

Markets function most effectively in the public interest when there is a level playing field that with characteristics such as symmetry of information and market power. Some creative destruction in the Schumpeterian sense will exist because of innovation. The winners and losers include employees as well as management and investors, but it is an outcome that is generally best dealt with by enhancing capability of those adversely affected to participate gainfully in the new environment. To attempt to stop the process of innovation that results in displacement is as futile as experienced by the Luddites of the Industrial Revolution era.

There is a diversity of views as to appropriate public policy to deal with the problems of the middle income sector as well as the poverty segment that are adversely impacted by the evolutionary process that is increasing aggregate wealth. The resolution of the differences is no easy matter because there is a substantial variation in values and in understanding of the operation of the American political-economy is doing a really poor job of dealing with the inequities of the growth policies presumably devised to foster growth.

The public policy in addition to considering issues relating to the distribution of income and wealth needs to consider the issues of destruction of wealth. Two pieces of federal legislation that are fine examples for efforts to deal with the issues are the *Employment Act Of 1946* and the *Housing Act Of 1949*. The Employment Act was an attempt to foster high levels of income, output, and employment, as a way of outlawing depression, an avoidance of the destruction of income and wealth. The Housing Act was focused on facilitating a "decent home and suitable living environment for every American family." Those efforts worked supply and demand sides of the equation at various times, but are an example of efforts to affect the distribution of income and wealth by what is envisioned as a more equitable distribution.

There is a range of interpretations of liberty and justice that can reasonable accommodate all but the most extreme views. That range is rooted in values that may be attributed to divine providence and/or reason. This was discussed in the introduction of this article relevant to the Declaration of Independence being based on your choice of a transcendent view or a view of reason and reach the same conclusion on unalienable rights.

In the last decade there has been an additional side effect of the erosion of the middle class. It will take a reasonably well educated middle class to grasp enough of these concepts to deal with the complexity of liberty in its relationship to the rule of law providing an environment of liberty. The operation of *that process has a significant requirement for liberty and justice of which there are diverse perspectives.*

An Enlightened Perspective

An enlightened perspective encompasses the acceptance of *pluralism*. The concept, as discussed by Isaiah Berlin is "...the conception that there are many different ends that men may seek and still be fully rational..." The relevance, also as discussed by Isaiah Berlin is "We are urged to look upon life as affording a plurality of values, equally genuine, equally ultimate, above all equally objective; incapable, therefore, of being ordered in a timeless hierarchy, or judged in terms of some one absolute standard."

Acceptance of pluralism calls for some compromise in policy in order to accommodate differences in views. That compromise is an essential part of the democratic process. A major area for compromise is in the character and extent of policy to deal with liberty as *positive liberty* as well as *negative liberty*. The concept of liberty until the era of the Enlightenment was in a sense one of the absence of constraints on thought or action, hence *negative liberty*. However, liberty in another sense relates to the ability of an individual to pursue one's potential and have the power or resources of knowledge and/or money to command resources, especially those essential to some minimal standard of living as acceptable in the society, thus *positive liberty*.

Both negative and positive liberties are matters of degree. Some trade-off in negative liberty is undertaken as a matter of social contract in order to have the protections of law and to frame a structure that facilitates the achievement of positive liberty. Positive liberty becomes abundant for the wealthy, but is scarce for the poor. Currently, it is becoming scarcer for the middle class.

The essence of the enlightened perspective advocated in this article is that one could view the American society's political-economy as a complex adaptive system that evolves over time as a democracy, in which its capacity for wealth production has boomed, but its environment is rapidly changing and unless it reinvents itself, it will decline. That decline may have already started. The paradigm needs to be explored, especially as to (1) how to more effectively influence outcomes by attempting to harness the complexity of the system thought a better structure consistent with American values, and (2) how to empower the participants (nodes or agents in network science or complexity science) to make better decisions within their networks so as to improve the outcomes from the inherent emergent phenomenon.

Appendix D - BUILDING A NEW PARADIGM [as posted in the <u>third booklet</u>, Great Danger Emerges: Democracy Challenged.] Excerpts from Abridged Chapter Five, Part III: Making Progress Chapter Five BUILDING A NEW PARADIGM

Some Background on Building a New Paradigm

Building a new paradigm is a discontinuity in discipline development. It can be a paradigm shift as discussed by Thomas Kuhn in his The Structure of Scientific Revolutions, or it can be along the lines discussed by Steven Jay Kline in his Conceptual Foundations for Multidisciplinary Thinking. Kline identifies eight steps in the development of a discipline. Four, not necessarily taken in any particular order, are as follows:

1. Selection of a class of systems with an associated set of problems...

- 2. Observations of the behavior within the class of systems...
- 3. Organization of the observations into taxonomy...
- 4. Formation of "rules" that describe the phenomena within the taxonomy, either as a whole, or for particular subdomains. [See pages 199-200]

The "rules" concept refers to a very broad array of relationships defined with various degrees of rigor. The other four steps refer to the process of refining the rules in order to better represent the system...

Some Steps Already Taken

<u>The Class of Systems</u>. The Class of Systems under discussion falls into three related categories. The first is the individual's choices as to the selection of balance pursued between self-interest and community-interest. The second is the emergent properties of the selections made by members of the communities/networks at the various levels of networks in the society. The third is the information and the energy developed and disseminated among the various networks in the system...

This enlightened perspective is intended to foster what may be called a *Liberty Enlightenment*, possibly as part of a New Age of Enlightenment. The process is neither simple, nor is it rapid. Consider that the previous Enlightenment took generations to seed and generations to evolve to the point of transition of the source of authority from royalty and the church to the individual.

An Improved Sociological Structure

The American Enlightenment is a special case of a variety of the enlightenments that were experienced in various forms centuries ago by various segments of Western civilization. It was founded with the creation of a new nation - a nation that in two centuries became the hegemonic icon of Western civilization. The Darwinian gift of an understanding of evolution contains the concept of changes in species as a result of an evolutionary process, but the individual members of the species go through a process of birth, growth, and decline, ultimately ending in death but having had the opportunity to create progeny. The progeny may have different attributes as a result of the evolution.

For a society, this creation of offspring with different attributes may be referred to as *reinventing itself*. That is the challenge faced with the creation of a new age of enlightenment, this time with a better structure for a *Liberty Enlightenment*.

The American Revolution may be viewed as the beginning of a new species of political-economy containing a sociological structure predicated on liberty, particularly the freedom enjoyed by individuals to pursue their own interests. It drew on the European Enlightenment ideas and adapted them to a new structure, a framework with some modification that has evolved and is in many respects different from its origin. In the evolutionary process, there has been a substantial loss of freedom.

America's early character was described by Alex de Tocqueville, who a little more than a half-century after the American Revolution, and in the wake of the French Revolution of 1830, took a trip to America looking to extract some principles from the American experience in order to improve the system prevailing in France. That wasn't the official reason for the trip that required governmental authority.

That government of France had undergone revolutions from hereditary sovereignty to a constitutional sovereignty and had a substantially different culture than in America. But, de Tocqueville was interested in adapting principles of the American democracy to the French environment. He was especially impressed with the equality in America.

Since that time, some structural changes evolved, one of which was through a constitutional amendment in 1913 that transformed the senator election process from each state selecting its two senators by election of the state legislatures to a popular election, a direct election of two senators by the voters of each state.

The idea is to provide a favorable environmental structure for individuals to pursue their unalienable rights which in the early years of the republic involved small-scale networks. The New England small town meetings were networks with few people and strong links. Local legislation was an emergent result of the network interaction. As the size of American cities grew, the nature of the networks changed and so did the number of layers in the economic system. The political structure evolved and power shifted.

In more recent years, the power of the wealthy to influence the outcome of elections has increased, and so has the power of corporations with special interests by virtue of the ruling by the Supreme Court invalidating limits on corporate spending related to election campaigns. In the context of network science, those nodes have increased their strength of connections that influence outcomes relative to the strength of the general voting public because of the ability of wealth to influence voting by campaign advertising. Of course, the voters could still vote as they pleased. How well informed are the voters?

The framers of the constitution chose the state legislators as the source of elective authority for senators for two reasons. One was to cement relations with the state. The other was that the state legislatures would be an insulation from the pressure of the voting public. It was abandoned because some state legislatures were so contentious that seats remained vacant and then somewhat later there was bribery and corruption.

Some current efforts to deal with problems alluded to include the *No Labels* movement and the *Americans Elect* movement. The *No Labels* movement is a group of Democrats, Republicans, and Independents seeking to break the gridlock in Congress. The *Americans Elect* movement is an effort to get a presidential candidate nominated by voters directly through use of the internet. In both cases it is an effort to improve sociological structure by a change in process through which American voters can have their voices heard.

Such changes evolve over time and are heavily dependent on the capability of the voters to understand more about how the system operates. It is unrealistic to expect the masses to have a strong scientific background, but it is not unrealistic to expect the masses to have a better understanding of the values that they cherish, especially liberty and justice.

They also need a better understanding of some of the fundamentals of the economy as a complex adaptive system, especially as to the limits of markets and the conditions necessary for effective functioning. In short, **they need a better perspective of how society operates**, and it would help to

have values closer to those espoused as appropriate way for one to live in a society and the society to function. Forget achieving a utopia, just avoid a dystopia that can lead to the demise of a free society.

That understanding of values, behavior, and how the system operates begins at an early age. It is partly rooted in genes, but it is also partly rooted in memes. Dawkins coined the term *memes* as the counterpart to genes with memes representing the transmittal parts of culture. He writes "Songs, poems, and advertising jingles are examples of memes. So are clothes, fashions, and cosmetic surgery. Memes can be methods of communication... There are small memes...and large memes, such as democracy."

Translational research, combined with relevant evidence, appropriately communicated offers a way in which to increase the capability of the voting public to make better choices on policy preferences and selection of elected representatives. It would also help elected representatives make wiser decisions. The development of the translational research requires a blending of a variety of disciplines to produce a framework and evidence in which can be grasped in different levels of understanding depending on the viewer. It is similar to visiting a museum; the more one knows about art, the greater the appreciation one has for what is seen.

The process can utilize models as simple as the analogous models of democracy in honeybee hives. The key is in the perspective that while some systems are linear such as physics explaining billiard ball action, other are biological as explaining human health and balance. The most complex are sociological systems because there are so many layers of networks and successive decisions are subject to change in accordance with the change in environment.

Pursue Justice in Order to Obtain Liberty

A strategy for pursuing justice in order to obtain liberty is for science to do a better job in understanding complex adaptive system in human societies and to work with those who have the power to affect implementation so that the knowledge may be transferred in usable form. The obscurantists of the Middle Ages, the Scholastics, operated in a narrow range of ideas that delayed the Scientific Revolution and the Age of Reason. This speaks to a perspective of reality.

It can easily take a generation or more to get a wide change in perspective, but the information technology has shortened the time from what it took in an earlier era. The vehicle for pursuing liberty and justice for all starts with understanding what liberty is and what it does, and so how society may effectively organize. Decisions now are at the margin, so we are looking at two components. The first is to increase capability, and second is to modify structure.

Increasing capability starts with childhood education and an understanding of what is fair. Children learn to play by the rules when properly taught and they learn limits to their liberty and justice for them and others when rights are abused. They learn judgment.

Every child is entitled to an opportunity to learn at least enough to make her or his way in the system. The "it takes a village to raise a child" not only makes sense, it is an example of effective operations of networks. Denial of that opportunity is a really stupid sociological decision, not simply on humanitarian grounds, but **in terms of cost effectiveness to society in dealing with the results**. The American society needs to do a better job of pursuing justice at all levels, not simply in educating its children. The current challenge in avoiding another debacle is in pursuing justice to gain liberty in a positive sense. That relates to the work force and the distribution of income. Innovation in the post-World War II era was spawned by a great commitment by the federal government to research. We need innovation to produce new jobs and an educated population to, do them. One may lament the loss of jobs to others in a global economy, but the complexity of the world has changed and we need to explore, select, and adapt so as to create new wealth producing enterprises. Being brilliant generals prepared to refight the wars that were, simply won't do.

The future is uncertain, and there is no clear path to a utopia, and utopia is not the goal. But, in the last couple or few decades, America has been going in the wrong direction, towards a dystopia. If we utilize our basic values as Americans, "unalienable rights to life, liberty, and the pursuit of happiness," and adjust the structure to provide the liberty, and pursue justice to get closer to liberty and justice for all, we will enhance the quality of life in America in accordance with reasonable compromises on policy because we want our diversity. The diversity is essential to a continued evolution of what has turned out to be a great advancement of human rights whether sourced from divine providence or reason, but delivered by a process of self-organization that is now crying out for rebirth. How are we, as a society, going to proceed?

2020s SYSTEMIC VISION

Prologue

About six years ago, the founder of this website was calling for a Declaration of Reform in a treatise that is the centerpiece of the timely trilogy's third book, American Democracy: The Declaration, Pursuit, and Endangerment. A great deal has happened since then. Some of it was simply a continuation of the trend identified about a decade ago in the study of the subprime crisis and capital market freeze. Then about eight years ago, the first of the essays that that is ensconced in this trilogy as an appendix was written (Liberty and Justice for All Some)...

Dramatic changes are occurring this year (2020) with the pandemic and the associated recession underway. Those are discussed in in two overview essays (name and link) beyond the central overview essay focused on the timely trilogy, American Democracy Endangered. Additionally, the demonstrations calling for systemic changes in the financing and structure of law enforcement are indicating an inflection point in the processes and structures called American Democracy.

All of this leading to the discussion of a project started two years ago by the American Academy of Arts and Sciences, resulting in a just released (in June 2020) "final report of the bipartisan Commission on the Practice of Democratic Citizenship. It includes 31 recommendations to strengthen America's institutions and civic culture to help a nation in crisis emerge with a more resilient democracy."