Thoughts on Mind, Thinking, and Creativity from Law and Social Science

Professor Winston P. Nagan, FRSA
Samuel T. Dell Research Scholar
Professor of Law, University of Florida
Chair of the Board of Trustees, World Academy of Art & Science

With the research assistance of Samantha R. Manausa
The concept of mind is one of the most notoriously difficult concepts. In part we cannot directly see the mind, and yet it determines the very being and becoming of the self-system. We cannot see its structure and we cannot see its actual workings. Many of the insights we have come from indirect experience. Indeed, the structure of the mind is a very recent insight, largely emerging from the insights of Sigmund Freud and his methods of probing the mind through interviews and interrogations, which generated the structure of the mind in terms of the unconscious and the conscious. These structures were further disaggregated in terms of a coincidence between a component of the unconscious and a component of the Id. The Id is a storehouse of emotionalized energy that drives human beings in ways that are dynamic and sometimes even destructive. The Id feeds into the ego, where the emotionalized torrent of unconscious energy is transformed into an articulate sense of the self’s needs and desires. These needs are critical for survival; the desires are essential for flourishing into domains that are unfolding. However, desires can be morally-justifiable or reduced to immoral or amoral gratifications. The self is connected to the collective of other selves, and the self therefore needs to manage and direct needs and desires in such a way that they are tempered and permit social advancement as a foundation for the idea of human solidarity. This brings into play the idea in Freud’s thinking that the self is being oriented in terms of ego demands by a Super Ego, which represents a higher level of moral understanding and consciousness. This, according to Freud, is more or less the structure of the mind.

Freud’s thinking influenced the development of the field of political psychology, and Freud’s categories were soon adapted to account for the different types of personalities and their interface in society, social obligations, and social achievements. From this perspective, the idea of the Id was absorbed into a politically and legally usable notion of identity, who the self is. The self is located situationally in space, time, and community, and in these areas the self-system has demands roughly analogous to the ego demand. But, in social and legal process, demands require an understanding of why demands are demands, and what it means to have opportunity and capability freedoms to have access to these demands. Demands are therefore values, but we need to know what these values are, and we need to understand the strategies by which they may be secured, if justified. One of the central issues buried in the idea of the self functioning as a demand of values is that it finds an effective fit for the evolution of democratic culture. If people cannot express demands, they can have no influence on their position in society and how their demands and desires may be secured. A society without demand is a dead or inert society. So much for the ego. What about the super ego? Social science theorists replace the super ego with the idea of expectations. Expectations imply some idea of rational accommodation to existential circumstances, which include shared expectations of all. Social and legal institutions provide guidance for how these processes may flow in time and space. Law and custom are the most obvious expressions of expectation. In law, one of the most critical expectations is the expectation of how power relations are to be managed. The prime expectation here is the expectation of constitutionalizing power.

So, we see that the structure of mind has been somewhat evolved to be more usable in the world of political science, sociology, and law.

Now we come to the question of how the thinking architecture of the self-system is to be given operational effect. This means we have to understand how the structures of mind function in order for the individual to be an active and not stagnant participant in society. Here, the unconscious is the reservoir of emotionalized energy, which drives the concept of identity in terms of being and becoming. The idea of identity is a powerful struggle about the individual self and what that individual self is, and what it might become. There is the elemental question of gender identity. There is the question of micro-social-familial identity. How does the essential “I” evolve into a contingent “we”? And how does the “We” evolve into an entity that moves from the micro-social to the social, to the global? Political identity is another challenging notion; why is it that some personality types evolve into essentially democratic personalities, while others evolve into authoritarian, totalitarian, narcissists, or psychopaths? Still other personalities are driven to achievements in the arts and the sciences. Which characteristics evolve and how, so that one may be a leader in science or history or any other field of intellectual or industrial endeavor? Here we are challenged to understand the importance of timing and education, and many inarticulate factors that may shape the creative, intellectual, or scientific orientation of the individual self –system. At some point, in the equation of the personality, some personality types develop an intuitive but powerful sense of creative orientation. In Freud’s approach, creativity springs from free association and young children, unconstrained by orthodoxy, tend to do more free association than other members of society. The qualities of thinking require discipline and the capacity to release from discipline and to free associate the complex emotional energies buried in the unconscious and which may be repressed in creative configurations. It was said that Einstein was able to fall into a state of thinking tapping into an unconscious level of subjectivity from which he emerged with revolutionary configurations. These areas remain a compelling challenge for the evolution of mind, thinking, and creativity.
INTRODUCTION
Thinking and creativity are important resources of human perspective in the development and social relevance of the practice of law. It is also an important goal or objective in the contribution that the social and political sciences make to the stability and endurance of the system of public order. The challenge to mind and creativity involves the capability of thinking human beings to manage and modify their behaviour on the basis of a model of social evolution of the context in which they are rooted. The study of the social and political sciences is, in general, to facilitate scientific and creative thinking about the foundations and prospects of the systems of public order that govern human societies.


An important focus of the social and political sciences invariably is influenced by the role of power and the emergence of law as important components of the architecture of the system of public order. In this sense the study of social and political sciences and the study of law and power are matters of intimate association. An important gloss on the notion of the science of society and law is the need to understand the nature of the public order as it is.

In this sense, the social sciences share with law the need to understand the state of law in society as it is. Both society and law work in the context of a time-space manifold of events of importance to both law and social sciences. The essential challenge of law and society in this context, is the trajectory of these events in the time-space manifold of events which include conceptions that implicate the anticipation of future of bodies politic for both law and society. This means that social process is inevitably a consequence of the dynamism of the legal and social events that project their consequences into the future time-space manifold.

However, the fundamental challenge to the tasks of mind, thinking, and creativity is that no particular future is assured unless we maximally deploy the capital of mind, thinking, and creativity in the context of legal and social theory. The challenge here is to build into the description and analysis of legal and social phenomena - at least a partial understanding of what those futures might entail. Moreover, it is impossible to avoid the consequences of thinking and creativity about the state of law and society without generating a concern for the possibility of improved creative futures. Indeed, in order to create a projected possible public and legal order we already encounter the prospect that description and analysis without explicitly deploying the faculties of thinking and creativity; we run the danger of being blindfolded about the being and becoming of humanity. Fundamentally, we are all stakeholders in the optimal usage of mind resources, thinking capacity, and creative orientation.
2. Thinking and Predicting Creative Solutions to Human Problems
The introduction suggests that we need to graft onto our conceptions and methods of legal and social process, a vital space for the role of thinking and creativity in the evolution and development of these phenomena. This perspective is made more important when we consider that the study of any form of social organisation and law will generate certain outcomes which we designate as problems emerging from the legal and social processes. The importance of a problem oriented gloss is that it gives social relevance and policy importance to the capacity to creatively anticipate problems before they actually occur. Additionally, problems themselves sharpen the guidelines that permit the anticipation of problems generated by value contestations on the plane of space and time.

Rather than being overcome by the specifics of a new scenario, agents look to create alternatives with thinking methods. These methods are deployed in ways that creatively challenge conventional wisdom and produce the possibilities of creative futures that are possibly attainable in part because we have carefully predicted the problems to which we must respond.


Tavory and Eliasoph (2013) develop a guideline that analyses how actors engage each other toward their futures. They then classify forms of future-coordination into three distinct types—(a) *protentions*, or moment-by-moment anticipations that humans regularly fail to properly appreciate, (b) *actors’ trajectories over time*, which progress in ways that are more or less culturally foreseeable; and finally, (c) *plans and temporal landscapes*, all-encompassing temporal orientations that humans experience as unavoidable and even normal.
By handling future-coordination in this manner, it is clear that the subtle choreography that preserves agents’ cooperative orientation toward the future while accepting motion, uncertainties, and missteps. Agents have to share a vision of a future with each other, even if done so indirectly—to be able to coordinate plans and or action.


The propensity towards greater levels of uncertainty seen in modern societies is reinforced by the interaction between nonconcrete outlooks and the role of technology for communication purposes. Communication is now immediate and is also networked through the globe. Thus the outcome of the unclear future prospects and the rise in the speed of communication is uncertainty.


Thinking and creative orientation are progressively becoming an important part of modern discourse relating to a wide range of social and political issues. Briefly the importance of the creative orientation to problems is a central and critical feature of good, responsible, and accountable governance. Virtually all bodies politic work on a notion that, on the plane of time, society has to anticipate the emergence of certain critical problems. For example, all bodies politic have an actual or prospective orientation to the future of security problems. Thinking and creativity permits us to examine problems in the light of realistic possible projections into the future and then plan for the contingencies of security and insecurity.
These matters may include size of the military, institutionalisation of intelligence services, coordination of law enforcement, investment in technologies of national defence, directing economies into situations where invention, production and distribution hold a proper place for defence interests.


The thinking and creative orientation regarding economic security is another of the most important aspects of the durability of the public order. Wealth is a critical base of power that may be used to secure all other values and institutions of importance. As a consequence, the anticipation of the prospects of economic security or insecurity is a critical factor that is implicit in studies of social and political science and law. The central issues are how to sustain a responsible process, to enhance the productive capacity of society including the full utilisation of its human capital. Thinking and creativity are critical human resources in this regard.

Thinking and creative orientation about optimising the productive capacity of society generates the important concerns about the fairest and most just method of allocating the benefits that inhere in the system of productive relations. A critical challenge to thinking and creative orientation about the optimal production and distribution of wealth is the expectation that the stakeholders in the system will have maximal opportunity and capability freedoms.

Thinking and creativity in all bodies politic have generated an interest in food security. Stakeholders must plan for contingencies that require sustained food production and storage facilities for long term food needs and interests; thus, anticipation will ensure adequate markets and state support to sustain food production. Bodies politic also have an important interest in health security. Bodies politic must predict the necessities for adequate health service and accessibility, problems of preventative strategies to improve health, and the anticipation of responses to health crises such as pandemics. Bodies politic therefore must generate thinking and creative resources to understand the needs of the body politic in access to health and wellbeing.

One of the most important to thinking and creative orientation is the development of human capital in society for the production and distribution of educational/enlightenment values. Depending upon the combined role of public and private education. Educational leaders must provide deep thought and creativity to the public policy issues of education at all levels. Education leadership must predict the problems of demographic growth, appropriate access to schools, technical training and universities to ensure the adequacy and preparedness of each generation of social participators.

The thinking and creative challenges in society must predict the problems of the nature and distribution of economic skills in terms of its labour potential. Both the state and private sector must therefore be concerned about the adequacy of labour opportunities and values to sustain capital in a society, this requires an understanding of labour needs and values and their distribution in the future. Because societies are not static in terms of their own legal and social structure the state must be alert to the predicted futures and the expansion and contraction of class stratification, gender stratification, ethnic stratification to ensure that opportunity freedoms are maximised and catastrophic disabilities which result in accelerated poverty are reduced. This requires deep thinking and profound commitment to creative orientation. In short, the critical challenge here to thinking and creativity is to clarify and develop possible future scenarios of approximate equality and avoid aggressive inequality. Radical inequality and unemployment may be anticipated as net losses to the aggregate value of the body politic.

Thinking and creativity are challenged, at least implicitly, to grapple with community coherence, which requires a degree of social solidarity and loyalty. Since these values are rooted in the principles of affection and compassion, bodies politic generally have an interest in reproducing family forms that maximise affection and positive sentiment as the emotional bases of bodies politic which bring greater social and political cohesion to the body politic. The politics of affection although understudied is nonetheless an important component for the continued success of any rational social order. One of the most difficult and challenging values that mind, thinking, and creativity must engage in is the emotional foundations of social solidarity, founded on the role of affect in both micro and macro social institutions. The future of the distribution of affection and compassion is by no means assured.

The challenge generated by principles of rectitude, morality, and ethics are major concerns for the evolution of mind, thinking, and creative orientation. All societies have some forms of religious, spiritual, ethical and moral experience to ensure longer term solidarity and patriotism. The bodies politic in general have an interest in the reproduction of those moral sentiments that make ethics and morality a common experience of social evolution. Rectitude therefore is a widely embraced expectation that elites consider a necessary element of social solidarity. Understanding the role of mind, thinking, and creative orientation in the context of rectitude is a vital and intellectually-responsible concern.

Finally, the state and society exist in cultural forms and traditions with elements of creativity that embody the fundamental aesthetics of the society. It is difficult to imagine a future social order with an absence of aesthetics. Therefore, society has a future interest in the future aesthetic of the body politic as a mechanism of approaching an enduring commitment to the solidarity of the body politic. The most important contribution of aesthetics is that it underscores the centrality of creative orientation to the study of mind and thinking.

The relevance of aesthetics may be understood from the dynamics of social communication and collaboration over time. This will give us a clearer sense of the salience of aesthetics to the public order of the community. Aesthetics in the form of propaganda may be crucial in time of crisis or war and may also be a political tool of propaganda to mobilise particular interests in the body politic.
3. SOCIAL DYNAMISM AND ANTICIPATION
In all social relations you may universally determine that human beings have needs, wants and desires. All humans come to social relations as an instrument of energy which with varying degrees of success humans use to acquire values they need want or desire. In seeking access to these values they will cooperate with each other or they will engage in some form of conflict with each other. When they are forced to resort to conflict the conflict is invariably about a valued thing that one participator wants and another participator denies. We can therefore predict that the state of any social organisation will generate outcomes of collaboration and outcomes of conflict.

Outcomes of conflict may be resolved by forms of lethal conflict or forms of conflict resolution. In general, if there is expectation of conflict resolution, because conflict may be lethal, then it is important to consider the scope, scale and strategies of lethality that may be employed. Here a responsible reaction may simply be the recognition of conflict is a zero sum game. One side wins. Those losers may have considered the loss and devised strategies for elite or group survival. The winners may have to consider a future where lethal conflict is diminished and were nation building solutions are needed.

The outcomes of conflict may represent a stalemate in which each side experiences loses and does not see advantages from continued conflict. The key protagonists may have to consider a negotiated solution to end the conflict on terms that are mutually beneficial and then consider how power should be managed to represent an effort to identify the common interests of the parties. Here the parties may consider methods such as the stabilisation of power relations and a fair distribution of power capacities.
The understandings may consider the evolution of a behavioural constitution in which the parties respect the agreed upon allocation of decision making powers in the body politic. The behavioural constitution may in turn generate the representation of constitutional expectations in a document. The parties may be realistic enough to note that the constitution may not necessarily abolish conflict.

The conflict may have to change in terms that are not destructive but produce results that strengthen the coherence and solidarity of the group as a whole. Such arrangements may consider institutions of dispute settlement which may include components of administrative justice, juridical forms of dispute settlement. They may consider non-judicial methods of settlement such as arbitration, mediation, conciliation, good offices, negotiation, as well as ad hoc methods to secure the pacific settlements of disputes.

In terms of legal culture, the dynamics of legal culture are triggered by the value contestations between participators. When a participator seeks to invoke the law to secure his or her interests it comes with an expectation of winning or the cost of losing. When a client seeks legal representation the client is generally moved by self-interest and therefore wants a cleaner sense of expectation of winning or the price of losing. Expectations will deeply influence judicial decision making since a great deal of what judges and decision makers do rests on their sense of cultural expectation as well.
judges use many tools to provide themselves with the guidance that their trained expectations will produce stability and an approximate sense of justice from the point of view of society, an articulate sense of the problems and conflicts that may be seen from a given context involving goals, trends, conditions, and prospective futures. this underlines the importance of predicting conflicts and predicting solutions to conflict as a consequence of a better understanding of social and political science. in the case of both law and social science therefore the sense of the state of the public order as a consequence of scientific insight permits via a focus on problems the capacity to predict problems and build on that by predicting solutions that the problems create.

thus far we have seen the centrality of prediction in the evolution of public orders influenced by social sciences and law. we now must engage in a technical shift of focus. if we accept the fact that the problems generated by social interaction are problems that require authoritative responses, we are still left with the challenge of how to identify and predict problems with the help of scientific specificity. this requires a provisional map of social dynamics in which we can locate the specific problem outcomes with a specificity that comes from mapping the social process and mapping the problems onto the different phases of that social process.

the most elegant method of mapping the social process emerges from the work of harold lasswell, myres mc dougal and their associates. this tool of contextual mapping they describe as a phase analysis for the purpose of the identification of problems with specificity in a specific contextual location. we summarise the phase analysis with a brief definition and a broader description. the conceptual basis of the phase analysis of mapping is as follows: human beings pursue values, through institutions based on resources. to develop this conceptual framework into a map, the following markers are used.

4. MAPPING THE SOCIAL PROCESS AND ITS RELEVANT ANTICIPATED PROBLEMS
The Problems identified in the map track the following:

(I). Identification of the **participators**

(II) The relevant **perspectives** of the participators
   a. perspective of identity
   b. perspective of demand
   c. perspective of expectation

(III) **Bases of power** (all demanded values sought, power, wealth, respect, health and wellbeing, skill, affection, rectitude, aesthetics).

(IV) **Situations** (spatial, temporal, institutional crisis)

(V) **Strategies** (coercive and persuasive-economic, diplomatic military, pacific methods)

(VI) **Outcomes** (problems relating to 1 to 5 above)

(VII) **Effects** (where the problems are resolved, who resolves, how they are resolved and the consequences for the production and distribution of values for the body politic). Every one of the categories above will generate problems.
5. MAPPING THE PROBLEMS OF PARTICIPATION
The problems of the universe of participators are as follows: who is included and who is excluded. The problems of inclusion and exclusion are the central problems of any political culture. In this situation we can specifically contextually locate the problem in a context of actual and potential stakeholders. The role of expectation here is that exclusion will be entrenched, diminished or extinguished.
6. PROBLEMS OF PERSPECTIVES
Item II identifies the perspectives or psychological states of the participators. The specific breakdown deals with conflicts or deprivations or indulgences based on the essential identity or the ascribed identity to the participators. For example, refugees have diminished rights, citizens have maximised rights. Hence the problem of whether refugees may acquire more rights to alleviate their condition. Indicators of identity can serve as markers for value indulgences or deprivations.

The perspective of demand represents insights of ego-psychology. It is ego that demands access to values that ego needs wants or desires. These can be identified as follows: power, wealth, respect, health and wellbeing, skill, enlightenment, rectitude, affection and aesthetics. When these demands are not met or there is deprivation and, problems result.
7. THE ANTICIPATION OF PROBLEMS AS VALUE CONTESTATIONS IN LAW AND SOCIETY
Above we set out a map that permits a contextual breakdown of the social dynamics in which each marker provides us with a key to the expectation of the contestations about values, which contestations permit us to predict the specific value problems and their precise location in the map of legal and social process. What follows is a brief summary of the major value contestations that we might predict in any social process at any level of analysis.
8. THE PROBLEMS OF CONFLICTS ABOUT THE VALUE OF POWER
Here, we ask the reader to analyse the specific problems of power by placing them in the context of the markers that we have identified in the map.

**Problems of power: claims to power and claims to depreciate power:**
- The power claim to be acknowledged as a human being
- The claim to appropriate status of group affiliation (Nationality, domicile, citizenship)
- The power claim of minority groups to equality and dignity
- The problem of the freedom of access to participate in the system of power relations
- The freedom of choice for reasonable access to power and other value institutions
- Freedom of access to representations via global governance and diplomatic institutions
- Freedom from capricious incarceration, seizures and confinement
- Problems of maximising the access of rule of law protections for individuals
- The maintenance of a strong independent judiciary and independent bar and wide access to legal services
Problems relating to the autonomy of the individual and basic respect

The value of respect is often viewed as the most fundamental value incorporated in the principle of human dignity. The problems therefore of the reduction of respect have a fundamental quality to them. The following are the anticipated problems of the production distribution of respect. The central problem concerning the issue of respect is whether the freedom of choice to fully participate in all the value institutions of society are respected or diminished.

- Freedom of choice to take part in all value processes
- Equal opportunities freedom and the replacement of invidious discrimination
- A central value of respect is the recognition of a person as a contributor to the public interest.
- Liberty of choice about the following:
  - Optimal involvement in shaping and sharing respect
  - Opportunity freedom to achieve realism in expectations
  - Opportunity freedom of access to institutions specialised and not specialised to
  - Ensuring all are respected during crises
  - Opportunity freedom from forced labour, violence and terrorist activities
Problems relating to enlightenment

- Optimal achievement in the aggregate sharing and shaping of enlightenment
- Provision of access to enlightenment for all
- Non-discrimination in procurement, usage and communication of knowledge and information
- Immunisation from biased communication
- Immunisation from deprivations of enlightenment inconsistent to crisis
- Opportunity freedom of assembly of appropriate resources for enlightenment
- Freedom from censorship, indoctrination and distortions

Anticipated problems relating to wellbeing

- For ideal influence and sharing of wellbeing
- For a essential and core levels of safety health and comfort
- For compassionate euthanasia
- For general contribution in realisation of bodily and mental health and growth
- For group continued existence and development
- For an atmosphere favourable to survival and development
- For freedom to acceptable wellbeing and other value institutions
- For availability of state support adequate to defend and fulfil demands for wellbeing
- For freedom to receive or decline medical service
- For the use of genetic engineering
• **Problems relating to wealth**
  • For preservation of high levels of efficiency
  • For essential levels of benefits from the wealth process
  • For experiencing benefits on the basis of input and compassion
  • For liberty to take part in the wealth process
  • Liberty to accrue resources for productive purposes of the public interest
  • Freedom from profligate use of resources (sustainability of values)

• **Problems of labour and skill**
  • For ideal aggregate in attainment and employment of skills
  • For additional acquisition in terms of talent and emotional energy
  • For acquisition of a basic minimum of skills pertinent to actual sharing in all value processes
  • For prospects of having talent recognized
  • For opportunity to procure skills and utilise them without discrimination
  • Freedom to right to use institutions specialised to skill
- **Problems relating to affection**
  - For an ideal aggregate in moulding and sharing of affection universally
  - For basic recognition necessary for individuals to obtain the motivations and capabilities of functioning effectively in shaping and sharing values
  - Freedom to provide and experience loyalties
  - Freedom to initiate and establish intimate and amiable personal relationships

- **Problems relating to rectitude, morality and ethics**
  - Preservation of public and civic mandate in which individuals’ demand of themselves and others that they act responsibly for the shared interest
  - Minimum prospects to obtain positive evaluation of rectitude
  - Movement toward a fuller involvement of all in responsible conduct
  - Freedom of association for promoting universal dignity on the basis of rectitude
  - Abolition of religious intolerance
  - Freedom of religious and rectitude association
9. SUMMARY
We can follow this model by posing the question of the deprivations of these values and the distinctive problems they represent. We can predict that the full reach of deprivations will reflect the fullest measure of human rights losses. We can predict that the general problems we have outlined give us a clue for the expectation of what further problems may be encountered in different aspects of the map of social and legal process. What is clear is that the intellectual task of identifying problems is the first step in the specification of problems in detail that we might predict. To predict these problems accurately permits us to deploy the intellectual tools of problem solving. These include the task of goal clarification and specification, the intellectual tools of trade analysis, the intellectual tools of scientific conditions, the deployment of the tools of developmental prediction, the deployment of the tools of creativity as a response to a future projection of problems that require legal and political intervention.

- **Creative Orientation, Scientific Consciousness, Technology and Values**

  The discussion of consciousness and values in scientific culture has always been an uneasy business. From a scientific point of view, the proper scientific culture is to be value-free. If the discourse of science is permeated with values, it is permeated with human subjectivity and not scientific objectivity. On the other hand, we know that in human society the important stakes about community organization, endurance, and promise seem to be tied up with values in some form or another. The traditional limit on the use of values from a scientific point of view remains a problem for the subjectivity of value-toned discourse. Let us start with a distinction. Values in the context of intellectual culture are used in two distinct ways.
First, values are used descriptively. In this sense, the scientific observer is merely observing the value-conditioned behavior of social or legal participators. What does the observer see? He sees individual human beings acting in a community, energized to pursue the things that they need, desire, or value. In this sense, viewed from an anthropological point of view, what we call things that are desired or valued might, in a basic sense, be the human needs that the individual seeks to secure in the social context of his or her life. This is simply a descriptive inquiry into what the individual wants, how the individual goes about getting what he wants, and what he does with the desired thing that he has gotten. This will give us a description of the system of community or public order and the production and distribution of values as it is.

There is another sense in which the term values is used. In this sense, the term is vested with normative importance. In other words, the question is not how values are produced and distributed but how they ought to be produced and distributed. This, therefore, is not a descriptive exercise; it is an exercise of normative judgment. In the case of values used as a description of community order as it is, we are dealing with propositions that can be proved or disproved by observation, creating a hypothesis about what is observed. Further observation may prove or disprove the hypothesis. This is an empirical inquiry. When values are used in a normative sense, we are really evaluating the goodness or badness of their production and distribution. The determination of the normative priority or the preference given to a value statement reflecting the “ought” will have to be established by some other criterion of validation.
That criterion, at least in the context of moral philosophy, is based on the idea that a statement about a normative preference or “ought” can be validated by reasons external to the statement-maker. In short, there are objective, justifiable reasons that may be formulated to determine the currency, or lack of it, of a moral or value proposition. We shall be using the terms value in both a descriptive and a normative sense, but we will attempt to secure a sufficient clarity of exposition that while we discuss them as interrelated matters, we can keep them sufficiently distinct in order to establish different insights into the problems we are discussing about society.

Human Needs and Values in the Anthropological Sciences
The anthropological literature has given us a key to understanding life in a very elementary community. Life revolves around human beings energized to satisfy human needs. Anthropologists also identify the structures that emerge from society which are specialized in whatever degree of efficacy to facilitate securing those needs. When we map needs onto institutions, we emerge with a social process that is based on the interaction of energies directed at securing needs through institutions. These institutions direct human energies, in some degree, to the satisfaction of those needs.
We can now begin to identify basic human needs as the goods, services, honors, and gratifications that people in society desire or need. Moreover, we can classify these desires/needs in terms of the basic values that the individual social participant acts to secure for himself and those dependent on him. Thus, we may emerge with a model of social process in which human beings pursue values through institutions based on resources. Now, this is a purely descriptive inquiry, but it is possible to observe that the needs/values and the institutions specialized to secure them are, generally speaking, identifiable. What are these values and what are the institutions specialized to secure them in any social process? Here, human thinking is necessary to know what a problem is, or what the dimensions of a problem are. This also requires a degree of imaginative orientation. If we understand the problem, the next challenge is more directly focused on the mind's capacity for creative orientation in order to solve problems, to the advantage of the human stakeholders. In an aggregate sense, we could probably focus our efforts about the production and distribution of values with the guidance of a postulate directed at maximizing human dignity and minimizing human indignity.

In this representation, values and institutions are represented descriptively in order to describe the system of community order as it is. It should, however, be understood that the social process of the community is a dynamic process in which there is an energy flow between the participators, the values, the institutions, and the results. Some of the results are generative of conflict. Other results are generative of the success of institutions functioning optimally. What is important is that social process is a generator of problems, and these problems are about the acquisition and distribution of values. This means that the dynamism of society requires a decision process that is frequently challenged to produce a solution to the problems of value conflict, value deprivation, or value over-indulgence. Thus, the community response to the problems that values pose for community order invariably must implicate a normative dimension about the optimal allocation of values in society. Indeed, some political scientists describe political science as concerned with the authoritative allocation of values in society.
In reviewing this map of values and institutions of social process, it is important to keep in mind that it is the human perspective that gives meaning and life to the values and institutions in society. The human perspective comes with the perspective of identity, ego-demands, and the value ideals of expectation. These perspectives are driven by deep drives for self-actualization, self-realization, and psycho-social fulfillment. In this sense, the private motives of personality, even when displaced on public objects and rationalized in the public interests, still represent an underlying force that moves the personality in all social relations. This underlying force may be the force of self-affirmation for self-determination and is the most foundational energizer of the demand for human rights and dignity. The relationship between personality and value achievement may itself generate a sense of inner-fulfilment, which, in turn, becomes the driver of still greater levels of value creation and achievement. In these manners of problem identification, problem solving, and the challenge of values in social interaction, the mind requires disciplined thinking and an approach to creative orientation that improves the prospect of the self and the community.

**Consciousness in the Identification and Allocation of Values in Society**

The problem of the allocation of values implicates the idea that there may be different standards which justify one form of allocation over another. Historically, at least in law, there has been an assumption that legal interventions are meant to discriminate between the claims for values that are just and those that are unjust. It is this challenge that has given rise to the great traditions of jurisprudence and, most importantly, the jurisprudence of natural law. Natural law, however, could only generate procedures, not substantive rules, to facilitate the use of right reason in the resolution of value conflicts.
Two of the most enduring of these natural law-based rules have survived and are essentially matters of procedural justice: audi alteram partem [the obligation to hear both sides] and nemo iudex in causa sua [no one should be a judge in his own cause]. However, we had to await the aftermath of the tragedy of the Second World War before we got a kind of official code of natural law in the form of the Universal Declaration of Human Rights. Although couched in the form of rights, the Declaration may be reduced to nine fundamental value-needs categories. The adoption of a code of moral priority, intended to bind all participants in the international system limited the speculation about the role of values in the social process. Although most intellectual and scholastic speculation stresses the notion that values are somewhat opaque, difficult to distill, and even more difficult to clarify, the adoption of the United Nations Charter has served as a political impetus for the development and clarification of values. As a starting point, therefore, we may reduce the Charter [a legally binding instrument of global salience] into several comprehensible and clearly articulated keynote precepts. We list them as follows:

- **Global Values, the UN Charter: the Normative Value Guidance for Science and Society**

  1. The Charter’s authority is rooted in the perspectives of all members of the global community, i.e. the peoples. This is indicated by the words, ‘[w]e the peoples of the United Nations.’ Thus, the authority for the international rule of law, and its power to review and supervise important global matters, is an authority not rooted in abstractions like ‘sovereignty,’ ‘elite,’ or ‘ruling class’ but in the actual perspectives of the people of the world community. This means that the peoples’ goals, expressed through appropriate forum (including the United Nations, governments and public opinion), are critical indicators of the principle of international authority and the dictates of public conscience.
2. The Charter embraces the high purpose of saving succeeding generations from the scourge of war. When this precept is seen in the light of organized crime syndicates’ involvement in the illicit shipment of arms, the possibility that they might have access to nuclear weapons technologies, and chemical and biological weapons, the reference to ‘war’ in this precept must be construed to enhance the principle of international security for all in the broadest sense.

3. The Charter references the ‘dignity and worth of the human person’ The eradication of millions of human beings with a single nuclear weapon or policies or practices of ethnic cleansing, genocide and mass murder hardly values the dignity or worth of the human person. What is of cardinal legal, political, and moral import is the idea that international law based on the law of the charter be interpreted to enhance the dignity and worth of all peoples and individuals, rather than be complicit in the destruction of the core values of human dignity.

4. The Preamble is emphatically anti-imperialist. It holds that the equal rights of all nations must be respected. Principles such as non-intervention, respect for sovereignty, including political- independence and territorial integrity are also issues that remain under constant threat of penetration by alienated terrorists or organized crime cartels.
5. The Preamble refers to the obligation to respect international law (this effectually means the rule of law) based on only on treaty commitments but also on ‘other sources of international law’. These other sources of law include values, which complement efforts to promote ethical precepts built into expectations of the universal ideals of morality.

6. The Preamble contains a deeply rooted expectation of progress, improved standards of living, and enhanced domains of freedom and equality for all human beings on the planet.

Based on the keynote precepts in the UN Charter, the world community also adopted an International Bill of Rights. The central challenge to a scholastic understanding of the International Bill of Rights is the need to clarify and distil its basic, underlying values. It may now be with confidence stated that we can distil at least nine functional values that underlie the entire international bill of rights. In a general sense, these rights, when considered collectively, represent the integrated, supreme universal value of human dignity. The central challenge then, is that those charged with decision-making responsibility must prescribe and apply a multitude of values in concrete instances and hope that their choices contribute to the enhancement of human dignity and do not, in fact, disparage it.
At an abstract philosophical level, distinguished philosophers such as Sir Isaiah Berlin have maintained that it is futile to attempt to integrate these values with the abstract principle of human dignity because fundamentally, these values are incommensurable. Not everyone agrees with this. Specialists in decision and policy acknowledge that human dignity based on universal respect represents a cluster of complex values and value-processes. Therefore, the challenge requires that ostensibly conflicting values be subject to a deeper level of contextualized social insight and a complete sensitivity to inter-disciplinary knowledge, procedures, and insights. Thus, decisions in these contexts are challenged with the task of broader methods of cognition and a better understanding of abstract formulations of value judgments.

Disciplined intellectual procedures have been developed to provide better guidance in particular instances of choice to approximate the application and integration of values in terms of the human dignity postulate. Does the ethic of universal respect and human dignity demand absolute, universal compliance at the expense of other universally accepted values? Ensuring that the values of respect, democratic entitlement, and humanitarian law standards are honored requires fine-tuned analysis and great subtlety in the structure and process of decisional interventions. Rules of construction and ‘interpretation’ are painfully worked out, which hold, for example, that even if a peremptory principle (ins cogens) of international law embodies an obligation erga omnes. It should be evaluated, appraised, and construed to enhance rather than disparage similar rights, which may also have to be accommodated. The currency behind the universal ethic of essential dignity and respect is that it provides practical decision-makers with goals, objectives, and working standards that permit the transformation of law and practice into a greater and more explicit approximation of the basic goals and standards built into the UN Charter system itself. This prescribes a public order committed to universal peace and dignity for the people of the entire earth-space community.
Global Values, Scientific Responsibly and the Perspective of Global Governance

Consciousness, Values and Public Order:

It is useful to approach the questions of value in terms of the nature of the public order that the rule of law system seeks to promote and defend. The system of public order secures the complex values that it is committed to defend by making an essential distinction between the minimum-order aspects and the optimum-order aspects of the system of public order.

Science, Values and the Minimum Order

The problem of scientific responsibility, values and the prospect of at least realizing a system of minimum order in the global governance of humanity now represents a critical challenge for scientific consciousness. We may understand the relationship between community, minimum order, and values by imagining a society without an expectation that agreements and exchanges made in good faith and according to law will be honored, that wrongs (delicts) inflicted upon innocent parties will be compensated, that basic interests and expectations of entitlement [as in fundamental norms of right and wrong] shall be sanctioned by a collective community response, or that basic structures of governance and administration will respect the rules of natural justice such as nemo judex in sua causa or audi alteram partem, and will in general constrain the abuse of power and thus the prospect of caprice and arbitrariness in governance. The necessity of minimum order in a comparative, cross-cultural, historic reality is that human beings interact within and without community lines. In doing so, they commit wrongs intentionally or unintentionally, they require some security over their possessions and entitlements, and their systems of governance aspire invariably to constrain the impulse for abusing power. These are the minimum values of social coexistence. It is in this sense that law as minimum order confronts the idea of justice and potentiality.
It is commonly thought that minimum order is a critical, but not absolute condition of a more just, more decent, more optimistic human prospect. The rule of law precept is uncontroversial in the sense of minimum order and its ‘boundaries.’ Peace, security, and minimal standards of human rights are reflections of these values in international, constitutional, and municipal law. Fundamentally, the quest for the maintenance of a minimum order in society would appear to be an essential condition for the individual or aggregate of individuals to evolve toward a social process that maximizes value production and distribution. It is possible to see in this an evolutionary idea of progressive change relating to the production and distribution, optimally for all social participants. It is imperative that in the education of scientists and technology innovators, that their sense of social responsibility is at least minimally influenced by the global values of a minimum sustainable system of world order.

Science, Values and the Optimum Order

This challenge to the public order raises the question of the production and the distribution of values beyond the minimum for social coexistence. This is an insight that is more challenging to the question of scientific responsibility and the values that ought to guide it. Clearly, a great deal of science will have an imprint that goes beyond minimum order and will be let loose in the domain of optimal possibilities and prospects. Here, it is critically important that value clarification be a component of the definition of scientific social responsibility. This is the challenge of the unequal distribution of opportunities or results. Human beings exist not only spatially, but also in terms of the duration of time and events.

There is hopefully a tomorrow, a next week, next month, next year, and next century. Human beings, such as scientists, are also transformative agents who make things happen, and in doing so underline the question embedded in the nature of law and community that we can change things for better or worse, for the common good or the special interests, for the sense of expanding human dignity or the prospect of a negative utopia, the rule of human indignity. This is a critical challenge for scientific consciousness.
The central challenge for values posed by the optimum order precept is the problem of the procedures and methods for producing values as well as the procedures methods and normative ideas about the fair distribution of the values that are produced in society. At the back of the concern for human values is the belief in human capacity for the essential, energized generation of value at every level of the social process and the human resource as a producer of ideas, insights, and values of exponential salience. At the back of the human dignity idea is the belief that widespread human dignity flourishes when the dignity of the individual flourishes and reproduces values of exponential importance for the common interest of all.

Fellows of the Academy have suggested that the nine values embedded in the International Bill of Rights [power, wealth, respect, rectitude, enlightenment, skill, affection, health and well being, and aesthetics] are the key to the notion of a public order of human dignity. They postulate that the maximal production and distribution of these values on a universal basis is the key to improving the human prospect and approximating a public order of human dignity. This means that the prescription, application, and enforcement of the fundamental values behind human rights remain a major professional challenge for the global processes of governance charged with the defense of global public order.

We may conclude that value needs are a condition and a consequence of focusing and directing the energy of the human perspective into concrete operations that establish institutions concentrated and specialized to value realization. In this sense, values and needs are incentives that generate a self-directed force, which ultimately evolves into institutions of effective power crucial to the allocation of values. It is possible to see these generalizations in the evolution of the sovereign authority of the nation-state and its own evolution from state absolutism to sovereignty routed in people’s expectations. Another insight of this model is found in the notion that the power process itself is energized by human expectations, especially expectations of demand.
Without demanding or claiming an aspect of social power, society would be static. Thus, we see in the power process, the social activist. In the United States, Rosa Parks resented segregation in public transportation, so she staked a claim to repudiate racial discrimination in public transportation. Gandhi was thrown off a train in South Africa because he was not white. He initiated a claim to challenge the power of the state to impose unjust discriminatory laws. His challenges to the power process brought him to India as a leader of the Indian Independence Movement. Nelson Mandela challenged apartheid and indicated in open court that he was committed to human dignity and democracy and that these ideals were ones that he was prepared to die for.

Therefore, it is important that we have a clear understanding of the process of effective power, and what the limits and strategies are of mobilizing bases of power, to effect meaningful social change. It is quite obvious that scientific consciousness, driven by a commitment to scientific social responsibly, will have to carry a significant level of commitment in utilizing social power so that the results of technology serve human purposes that are constructive and avoid those that are destructive. As Einstein suggested, the development of science and technology should be a blessing and not a curse on human kind.

From the perspective of science, consciousness and value the following framework is provided as value condition guidance for the technological innovators of our time and the immediate future.
Value Frameworks to Guide Science, and Social Responsibility

1. The value of life: This is a centrally valued human subjectivity. It is referred to not in the “pro-life” sense (that a pregnant woman must bear a child), but in the Bill of Rights sense (that a person has right to personhood and autonomy). The value of life, therefore, includes the respect and deference given to the individual in the global community.

2. Mind, thinking, creativity, and the problem of power: Should it be narrowly or widely shared? Is the common interest of all honored in a system that seeks to secure the widest possible participation in all key areas the power process? One of the central values identified in the Atlantic Charter was the freedom from fear. This concern for freedom has evolved so that today no one denies that there is a critical interdependence between the concept of peace as a human right and all the other values in the UDHR. Peace and security might well be included under the functional category of power. However, peace is recognized as a complex peremptory component of the human rights value system. It is of value to again recognize that there are complex ways in which all human rights values have an influence on peace and security, recognizing as well that peace and security at all levels are critical conditions for the effective mobilization of human rights values. A central aspect of the values of peace and security relates to the connection between the mobilizing force of strategy for the realization of human rights goals and the realization of these goals themselves. For example, is it appropriate to deploy violent strategies of action to achieve human rights objectives? Is it appropriate to disengage the value discourse involving strategy and struggle on the one hand and idealistic value objectives on the other hand? Gandhi, for one, insisted that the morality of struggle was even more important than the morality of distant idealistic objectives. Indeed, he also insisted that a disconnect between struggle, strategy, and goals was morally indefensible.
3. *Mind, thinking, and creativity, and the value of economic and wealth processes*: Is the common interest of all better secured by optimizing the capacity to produce and distribute wealth or the opposite?

4. *Mind, thinking, and creativity, and the value of respect and equalitarian values*: Should invidious discrimination be fully prohibited (covering all areas of race, gender, alienage, etc.)? Can equality be meaningful if it is only a formal, juridical idea without regard to the legacy of exploitation, repression, and discrimination?

5. *Mind, thinking, and creativity, and the value of educational and enlightened values*: Should these values be widely produced and distributed or narrowly experienced? In the context of science, the critical value that secures scientific innovation and the liberation of scientific consciousness is the freedom of inquiry. The challenge posed by dramatic technological innovation is that further scientific consciousness will generate an internal process focused on scientific responsibility and a deeper sense of the value implications and consequences of technological innovation. The problem with regulating science is the problem that it will be regulated by a politically ignorant constituency, who may seek to appropriate technology with selfish special interests.

6. *Mind, thinking, and creativity, and the value of skill and labor values*: The centrality of labor and skills values to the human condition indicates that these are central and fundamental values implicated in the rights and expectations of those who seek to create and sustain these rights and labor values. Should these rights and expectations be widely shaped or narrowly shared?
7. **Mind, thinking, and creativity, and the value of health and well-being values:** The delivery of reasonably formulated and accessible healthcare and social services to all is now widely regarded as crucial entitlements, if the most basic standards of decency in politics and society are valued. Today, unemployment aid, social security, Medicare, and other social services are considered crucial to a society that cares for its people.

8. **Mind, thinking, and creativity, and the value of the family and other affective values:** Because the family is the basis of collective existence and is central to the human rights of children, the public policies of a society that destroys family (and other affective ties) pose a problem for the wide generation of affective values including the loyalty values of patriotic deference.

9. **Mind, thinking, and creativity, and the value of moral experience and rectitude:** A system that endorses the centrality of moral experience to the legal and political culture and seeks to maximize the spiritual freedom of all is yet another of the central themes of the human rights. How do we translate expectations of care or fundamental moral experience into the practical prescription of law and policy?

10. **Mind, thinking, and creativity, and the value of cultural and aesthetic experience:** The term cultural includes the concept of the aesthetic. In fact, the word “cultural” could encompass all the value preferences that we might extract from the UDHR. There is, however, a narrower meaning that the term culture might carry. That meaning ties in with the notion of human rights as also emblematic of the diversity of human experience, experience that reflects the cultural richness of humanity as a global community. There is great controversy about the issue of culture and tradition, culture and creativity of the present, culture and the elaboration of the aesthetic, which may capture and nurture the cultural narrative of creativity and beauty which may in fact be the critical psychological view of how the glue of social solidarity promotes creativity. The boundaries of this discourse are controversial.
Sensitive matters of sexual regulation which may differ widely may be justified by culture and yet here the culture of tradition may not be compatible with the culture and creativity of the present or the future in human rights terms. For example, female genital mutilation justified by cultural tradition is not justified by either religion or by the science of human sexuality. Human rights thus provide a process by which these boundaries may be appropriately protected and appropriately expanded according to the normative challenges of human dignity. The current discourse often suggests that universality trumps cultural relativity or vice versa. This is not necessarily helpful unless one sees these ideas as only the starting point for value clarification and application from a human rights perspective.

11. Mind, thinking, and creativity, and the value of the eco-system: Today, we recognize a complex right to a viable eco-system on what theorists have seen as Spaceship Earth. The values embedded in the protection and promotion of a healthy eco-system, are, like many other values, issues of complex inter-dependence and inter-determination. However, implicit at least, in the concern for the integrity of the eco-system is clearly the notion that there are no human rights if there is no environment in which human beings can survive and possibly even improve the human prospect. But this insight suggests an even higher level of moral consciousness in the sense that the eco-system (with its plant life and animals, wild and domesticated) is part of a complex cycle, in which human beings are both custodians and also utterly dependent as individuals and as society. This means that we now see in nature not something irresponsibly exploited and destroyed but central to our identity as a sentient species. To take a simple example, for all the vaunted technology of human progress and human egotism, no one has seen a dog or a cat or a rat or indeed the most elemental of recognizable life forms outside of this lonely and unremarkable planet called Earth. Thus, as humanity, we now look at life even in its most humble forms as not only indispensable to the interconnected chain of life on this planet but we see in it something new and utterly connected to the very consciousness of being human and being alive. In short, we know that our dogs identify with us. We may now know those ordinary pets in terms of how they and all other living forms have shaped our identity both psychologically and physiologically.
CONCLUSION

These comments provide guidelines to the role of mind, thinking, and creativity in the context of law, society, and fundamental values. It also stresses the expectation of creative problem-solving methods to find solutions to problems that can rely on the projection into the future of developmental constructs that predict the most negative and the most probable positive consequences and then seeks to use a refined anticipatory technique to find solutions that approximate the positive construct. Here, the emphasis on the developmental construct has a direct focus on the vital importance of creative orientation.

The paper provides a capsule overview of the way mind and thinking functions in the normal business of governance. Noting that the predicted problems are consequences of social interaction, it provides a model of the social process with critical markers that delineate central elements of social interaction on a cross disciplinary basis. This is an important aspect of the process of scientific thinking. Since problems emerge distinctively from every marker and social process, this model is used to provide a provisional thinking context specifying the value problems generated in general by human interaction. The problems are essentially problems about conflict regarding values. What is critical is that expectation using this model of social process can provide us with a tool that gives precision to predicted problems. Critical thinking skills are central here.

The next question is conflict resolution which requires problem solving. This requires us to anticipate the conflicts of our goals and values at stake, the historic trends relating to these values, the scientific conditions which affect the production and distribution of values, the anticipation of both positive and negative futures, and the creative orientation of problem-solving in the direction of a constructive outcome.

These comments seek to clarify the salience of mind, thinking, and creative orientation to science and scientific consciousness, the importance of cultivating that consciousness not only in creative ways but in ways that are morally and ethically compelling. This means that consciousness should be alert to the dynamics of positive and negative sentiment in the shaping of the technological paradigm of the future. Even more importantly, the anticipation of scientific consciousness is crucial for anticipating self-regulation itself by being better informed about the values it seeks to promote and defend. Successful anticipation of self-regulation of science avoids the danger of control and regulation by forces completely ignorant of the implications of science and technology. This means that scientific leadership must be more articulate in the defense of the values that sustain a creative, dynamic and responsible scientific culture as an indispensable foundation for an improved world order based on human rights and human dignity. Mind, thinking, and creative orientation are crucial to a broad sense of intellectual responsibility.