

Crisis of Cooperation

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{I recommend reading the overview in the “Summary” and “Conclusion,” and then return to the full document for the detailed discussion}

Two Basic Forces in All of Nature

Two forces are fundamental in all of nature, including the human social domain. From the cosmos to sub-atomic particles, from the United Nations to the single family, these forces apply universally. We name these forces in different ways within different subject areas: attraction and repulsion, aggregation and separation, positive and negative, contraction and expansion, unification and division, integration and disintegration, accumulating and dispersing, assembling and disassembling, putting together and taking apart, synthesizing and analyzing, accepting and rejecting, arriving and departing, approaching and withdrawing, collecting and scattering, cooperating and competing, etc. I have explored the nature of this fundamental unification – division force dynamic in a separate essay [“Two Forces in Reality”]; and I have discussed in another essay how this dynamic has played out to the present in the very long range development of human society [“The Integration Trend in Human Society”]. These two essays are available on my website: www.dynamic-humanism.com .

In this essay, I consider one expression of this basic force dynamic – the role of the competition – cooperation opposition in human social relations. I first discuss why the state of this competition – cooperation dynamic is critically important in the modern civilized context. I then consider the biological variables in humans upon which the cooperation – competition dynamic rests. Next, I assess several cultural variables that influence how this dynamic is managed to favor one orientation or the other. Finally, I consider the potential of genetic engineering to “improve” human biology so as to promote social cooperation. I will argue that in the context of modern complex, civilized society, culture must shift to considerably strengthen cooperation at the same time that it reduces the influence of competition if humanity in the civilized condition is to sustain and make progress in the face of its several, imminent and potentially grave, global challenges.

In this regard consider the following observation by Nobel Laureate Richard E. Smalley in his 2003 lecture, “The Top Ten Problems of Humanity for the Next 50

Years.” Here they are in Smalley's descending order of significance: energy, water, food, environment, poverty, terrorism and war, disease, education, democracy, and population. As a social scientist, I would contend that while the efforts to address these challenges separately or in concert are admirable, commitment to universal cooperation across all nations is a precondition if these efforts are to get off the ground and have a reasonable chance for success.

The Competition – Cooperation Dynamic in the Modern Civilized Context

As the dominant species worldwide with technology to assure this dominance, modern humans are very rarely the prey for other species. So, competition is no longer across species to humans. Humans have reached the point where their predatory behavior is mostly expressed between and among different human groups as they compete for resources. Access to resources is most often the underlying cause for competition, although race, ethnicity, religion and other cultural factors are often fronted as the source of these predatory activities across groups.

In the last two centuries, with the advent of modern medical science, the worldwide human population explosion has become the underlying driver for competition for limited resources among different human groups. The concomitant technological explosion, with all of its many benefits, has at the same time led to planet wide pollution, species degradation, and global warming that together threaten the viability of the resource base that supports this expanded human presence. Technology is also the source of hugely advanced competitive weapons, which, if detonated in sufficient numbers, can severely impact resources regionally, and potentially worldwide, and even blow the current civilized human state back to a condition of bands and tribes, if not all the way to extinction. When we add to this global scale, nuclear challenge the salvation-through-apocalypse motivation that two of the major world religions justify for their fundamentalist believers, the vulnerability of humanity rises yet another notch.

At the same time that science has put humanity on the verge of controlling its own biological evolution and of beginning the process of colonizing the cosmos, humanity is in a position to destroy these unprecedented opportunities due to the imminent state of its multiple, global vulnerabilities. And while these vulnerabilities are significant in themselves, their threat is magnified exponentially due to the combination of a very short time frame available for addressing them and the excessive influence of the human competitive “instinct”

in social relations, especially at national and international scales. Being able to adequately address these multiple, worldwide vulnerabilities in a timely manner is only likely to occur if humanity insists that a high degree of cooperation in social relations at all levels becomes an unconditional requirement.

Compared with other species, modern humans are a VERY new species on Earth, and humans need to keep in mind that most complex species that have evolved on the planet have flourished for a relatively limited time only to go extinct. Humanity is living in its window of opportunity, and that window can close at any time from forces beyond human control: geological or cosmological causes. It would be the height of folly for humanity to be the cause of its own demise by failing culturally to promote social cooperation and to restrain social competitiveness so that the major global challenges over which humans do have control can be resolved.

The civilized state of humanity is but a recently floated trial balloon – for most humans a 3,000 year old infant in the 200,000+ year history of this relatively “new” Homo Sapiens species. This experiment in complex civilized society shows a lot of promise, especially in the last 300 years, since many leading nations among humanity have extricated themselves from the social organization that civilized humanity initially developed based on autocracy and hereditary class distinctions [eg. kingship]. But, overall, humanity continues to carry a great deal of absolutist religious, racial and ethnic baggage that creates hardened divisions and that justifies a lot of horrific, competitive behavior [jihad, genocide, ethnic cleansing, terrorism, civil war, guerrilla warfare, violent repression, world war, etc.].

If human civilization is to persist and have the opportunity to make further progress, humanity must curtail its competitive orientation and emphasize its cooperative orientation so it will be able to seek real, coordinated solutions to its significant global challenges. If these challenges are left unresolved, they can bring humanity to its knees and the promise of civilization to a close. So, the very survival of complex society is at stake!

Biologically Based Variables and Cooperation

1) Competition and Cooperation “Instincts”

Humans are genetically/biologically predisposed to be both competitive and cooperative. The human cooperative orientation is focused internally within groups to assist with child rearing and collective predation efforts and to

minimize conflict among group members. The competitive predisposition is expressed in predation itself and in conflicts that arise over access to mates and among human groups over resources. Culture has developed to support both cooperation and competition. But when biological survival is at stake, competition trumps cooperation except under special circumstances. Another way of saying this is that under duress self-interest tends to trump social obligation at all levels and scales from individuals to nations.

In the modern era, the human competitive orientation remains prominent throughout our societies – internally most apparent in child's play, sports, drama/film, trade, struggles over mates, conflicts over resources, domestic violence, gang conflict, and criminal activity – and externally in trade, conflicts over resources, and warfare among different human groups. The human competitive “instinct” is pervasive and fundamental. And, at the social level, this “instinct” to competitiveness is what underlies the self-interested perspective and individualistic values in human relations. As such, this competitive inclination and self-interested, individualistic point of view gets expressed at all social levels – between and among individuals, couples, families, communities, states, nations, and across ethnic, racial and religious groups. In short, competition can arise along any line of social differentiation that humans make.

As prominent as the human competitive orientation is, humans are also by nature cooperative. As a social species, human survival also depends on the ability of humans to work and live together in at least small groups – extended and multifamily bands and tribes. Through modern research, first in socio-biology and then in genetics, the biological/genetic basis for the cooperative “instinct” in humans has finally been proven. We now understand that cooperation is not just motivated by culture; it is built into human genes. The human cooperative “instinct” provides the foundation upon which culture builds to define positive social relations at all levels from couples to families to tribes to nations to international federations. The human cooperative “instinct” is fundamental. Together with culture, it forms the basis for communal [social] values as expressed in human relations at all levels. The human orientation to cooperate is what supports humanity's commitment to toleration, respect, fairness, equality, caring, and sharing in human relations.

Humans have always had to balance these two opposed and dynamic tendencies – competition and cooperation. Our various societies and cultures reveal the different ways we have attempted to accomplish this balancing act. Some cultures are more bellicose, some more pacific, but all cultures

demonstrate the ability to switch from one tendency to the other depending on the challenges they face.

2) Gender and Cooperation

This is a risky topic and one where the critique can be offered that any position taken is either scientifically inaccurate or “politically incorrect.” But, the issue needs to be addressed, and I approach the topic from the perspective of evolutionary biology. Biologically human males and females depend upon the same primary sex hormones [testosterone and estrogen], just in different proportions. And this male-female dichotomy is in fact more of a continuum than a fixed division. So, while men for the most part have a much higher level of testosterone and a much lower level of estrogen than women, there is a range. And the same is true for women but in the reverse positions: much higher estrogen and much lower testosterone. The higher level of testosterone in men is related to greater male physical stature and musculature. The greater strength that results is then associated with the cultural role of men in virtually all societies as defenders of human groups and their territories from predatory animals and other human groups – that is responsibility for the integrity of human groups within and at their territorial boundaries. And the male assigned role of controlling animal predators is immediately aligned with the role of hunting animals to provide food. Women with their higher level of estrogen are generally smaller in stature and musculature than men and are assigned cultural roles that generally focus their activities internally toward childbearing, child rearing, domestic activities, and often community gardens.

These are the traditional roles of males and females and the associated difference in sex hormones that have pertained in human groups since the inception of the species – so far as we know. What seems to have occurred is that the inclinations set up by biological distinctions have been complemented by culture in the designation of roles. Or put another way, culture [roles] and biology [genes and hormones], as we might expect, have evolved together and in sync. Culture can, of course, work in the opposite direction, but this seems to have very rarely been the case.

Now, what are the implications of this division of hormones and roles when it comes to the competition – cooperation dynamic? Male testosterone in conjunction with adrenaline is the flight – fight hormone combination, and the traditional male role in defense and hunting calls on the capabilities that this combination affords. So, while the male can be cooperative when this hormonal combination is not engaged at a higher level, he is primed biologically and

culturally for competition. Estrogen is the hormone that is essential in women for childbearing and child rearing functions, which can consume most of the woman's life in aboriginal hunter gatherer bands and tribes. Domestic functions, which are often traditionally assigned to women, can be seen as ancillary to these primary childbearing and child rearing functions. Collectively, these are nurturing functions which require biological and social cooperation to be successfully exercised. So, while women can be competitive if circumstances demand it, they are primed hormonally and culturally for cooperation.

So, what is the conclusion on the relationship of human gender and cooperation? While males and females are both capable of competition and cooperation, men are biologically and culturally primed for competition while women are biologically and culturally primed for cooperation. Together the two sexes balance one another, especially in aboriginal societies, in which equality across the sexes prevails in spite of the role differentiation. By contrast, in complex civilized societies, historically there has been a clear cultural tendency to authoritarian social structures where males have dominated and occupied the leadership roles, and where women have been assigned subservient and dependent roles. The implications of this imbalance is that civilized culture has tended to skew toward a competitive male orientation. Only in the last 200+ years, and mainly in western societies, have women emerged to demand equal cultural status with men, and they are still struggling to achieve full leadership and economic equality. So, at the same time that modern human civilized society is in significant need of greater cooperation, women are not in a position, even in the societies where they have gained in equality, to assist in offering this direction. Worldwide, most women in civilized societies continue in subservient status with little cooperative impact on a competitively oriented male world.

Gender can offer a significant biological assist in asserting a cooperative orientation in modern human society, but in much of the world the retention of the male dominated culture of a bygone era in civilization is suppressing this option. What is needed is not to just bring women worldwide into cultural parity with men, but for women to take the lead and to insist that culture restrain the male competitive orientation. Unfortunately, the present influence of gender in complex society continues to support competition both within and across human relations and societies.

3) Personal and Impersonal Social Relations and Cooperation

The approach humans have evolved to take in social relations was established during the 95% of the time – 200,000+ years – that humans have spent in social

structurally simple bands and tribes. By contrast, the complex social structure of civilization is essentially very new – 3,000 years for most humans. So, humans carry into the civilized condition their long established hunter-gatherer approach to social relations.

Cooperation in hunter-gatherer society is mostly limited to the personal relations that are known within the relatively small local group – family, friends and immediate neighbors. Most often, relations beyond this small group are regarded more cautiously first as casual acquaintances, then as strangers, and finally as potential enemies. So, for hunter-gatherers, impersonal relations outside of one's local group are approached with one's competitive guard up, not with the assumption that cooperation is to be expected.

Efforts to extend this limited hunter-gatherer view of personal relations and thereby gain in the social scope of cooperation encounter the difficulty that the distinction between familiars [personal relations] and strangers [impersonal relations] at the hunter-gatherer level appears to be biologically built in for humans. This is apparent in the very early differential response of infants to the faces of familiars [smile] versus the faces of strangers [cry] – long before culture has any impact. And while culture encourages adults within complex societies to at least tolerate impersonal “others,” the tendency to retain the more rudimentary hunter-gatherer distinction between personal and impersonal relations remains primary with humans both within and especially among complex societies.

In this regard, consider how humans “manage” social relations in the urban context where encountering a person on the sidewalk necessitates a glance to determine whether the individual is a familiar, and if not, to look away and ignore the person as a “tolerated” stranger. And the more noticeably different this individual is from us, the more circumspect our behavior is within this toleration. In a really congested urban situation, we avoid all eye contact and all passers-by are treated as the impersonal, unknown “other,” unless something interrupts our calculated disattention. This basic differentiation between personal familiars and impersonal strangers sets the social stage for what becomes on the one hand greeting and cooperation [among personal relations] and on the other hand disattention and competition [among impersonal relations]. So, the biological basis for viewing impersonal others with caution is directly associated with the biological “instinct” to compete and the biological basis for recognizing personal others with acceptance is one with the biological “instinct” to cooperate. In each case, these built-in tendencies reinforce one another.

4) The Default Presentistic, Narrow Human Perspective and Cooperation

Humans are the only species able to anticipate, take a broad perspective, and plan long term including planning for significant changes in all aspects of their lives. But, unfortunately, humans are predominantly presentistic and quickly lose sight of the long term, broad point of view as the immediate needs of the present keep intruding and becoming focal. So, the short term, narrow perspective trumps the long term, broad perspective except for “time outs.” Success in addressing the multiple and interconnected challenges of complex society and culture requires sustaining the broad, long term point of view, which is inherently more inclusive and therefore more cooperative. Modern civilized society is greatly diminished by humanity's biologically built-in, default, presentistic, narrow perspective which supports competition more than cooperation. A citizenry that is not capable of sustaining a broader perspective and of evaluating information from this point of view is not positioned to make choices to support longer term planning and the cooperation that it will take to realize the benefits of this planning.

5) Human Focus on Loss/Disappointment and Cooperation

Related to the above presentistic predisposition of humans is the fact that humans are inclined to recognize and enjoy the benefits and pleasures that come to them for a short time while they tend to remember their losses and disappointments long term. Benefits/gains are quickly incorporated as normative and become part of what is expected; losses/disappointments are retained and replayed with resentment and end up motivating long term animosity/grudges/retaliation. It is much more difficult to cooperate when we are twice as influenced by our losses/disappointments as we are by our gains. Because our memory of the negative leaves us inclined to view the world before us with caution, our default stance trends competitive rather than cooperative. This is our biological survival instinct affecting our perception and taking social precedence. For complex society to make progress, culture has to battle against this built-in predisposition.

6) Human Self-Protective Psychology and Cooperation

When humans are anxious/stressed/disappointed, aspects of human psychology come to the fore that undermine cooperation. Humans are inclined to greatly overestimate their responsibility for the good that comes to them while they excel at both denying responsibility for the negative events that happen to them and projecting to others the cause for such negative events. We celebrate excessively our successes and play the victim when it comes to our failures.

This built-in psychology protects our individual and group self-esteem, but it undermines our ability to deal with the world objectively. And, importantly, it underlies our inclination to select facts that support our beliefs and to reject facts that we find challenging. Especially when we are under stress, this psychological complex greatly limits our critical thinking ability and allows us to commit to all kinds of falsehoods and misconceptions. When we employ these devices without awareness to protect ourselves and our groups, we limit the basic reality that we share with others and so restrict our options to cooperate. Culture has a huge task to overcome this built-in psychological complex, which, if useful at one time, is a significant impediment when it comes to civilized societies becoming more cooperative and making progress.

7) Human Capacity for Empathy and Cooperation

Humans have the built-in emotional capacity to identify with others and to be sympathetic and empathetic, which can result in altruistic social behavior. This capacity definitely supports cooperation. The problem is that this capacity tends to be evoked and expressed primarily in the zone of personal relations and secondarily as a response within the arts, especially drama. As we have noted above, it is in the vast area of impersonal relations in complex society that insufficient cooperation exists. Moreover, emotionally, empathy is countered by hatred, and unfortunately it is very easy to hate the impersonal stranger. So, emotions are important in determining the nature of social relations, but overall in impersonal complex society they tend to support caution and the competitive rather than accommodation and cooperation.

Overall, what do we conclude about the role built-in human biology plays in the competition – cooperation dynamic? Biology/genetics favors the competitive orientation in human relations, but is in better balance with the cooperative disposition in simpler, hunter-gatherer societies where personal relations dominate than it is in complex civilized societies where impersonal relations are pervasive. Humans come very recently to the complex civilized state – and especially to the modern complex civilized state, but human biology does not serve well the extent of the need for cooperation in this “new” societal condition. This situation means that the influence of culture to promote cooperation becomes that much more important.

Cultural Variables and Cooperation

At this point, I consider a number of areas of culture in modern complex society that influence the relative strength of either side in the cooperation – competition

social dynamic. The tendencies we find within each of these cultural areas and then collectively across the areas as a whole will suggest where we stand in our ability to attain the desired goal of increased cooperation in social relations.

1) Representative Democracy and Cooperation

Complex civilized societies arose about 10,000 years ago and only slowly came to dominate the human population about 7,000 years later. Until very recent times, these civilizations relied on highly stratified, authoritarian governments. In such societies it is most often exclusive access by a relatively small elite to power and resources together with repression that assures complicity, not voluntary cooperation among the populous. "Cooperation" in such authoritarian societies is more apparent than real. Only in the last 300 to 500 years has the movement arisen in leading civilized societies toward political equality first for all male land owners, then all men, and finally all citizens of age regardless of gender or economic status. Representative democracy based on the principle of equality among all citizens is the result. And political equality promotes cooperation. In voting, citizens cooperate in selecting their representatives. And through their representatives, citizens participate equally in the decisions that directly affect their lives. Candidates who offer different policy viewpoints compete to be representatives, and voters cooperate to decide with equal input which candidate with what perspective they prefer to represent them. In spite of the fact that in this competitive election process different parties often create intense divisions within the citizenry, if basic fairness is maintained and if political ideology does not foreclose on compromise, cooperation can prevail.

Political democracy rests on the concept of equality, and equality encourages cooperation. In contrast, economic capitalism encourages competition with the gains accruing exclusively to the winners. When democracy and capitalism are appropriately balanced, the consequence can be to encourage creativity and innovation while not allowing social inequality to become excessive. Balance is the key, and capitalism is always pulling in the direction of inequality and individual/corporate/business self-interest. Democracy must implement and enforce the regulations necessary to keep the pull of capitalism in check while not stifling the positive consequences of reasonable reward for risk, creativity and effort. If money/wealth/influence from special interests – corporate or otherwise – is allowed to undermine the integrity of the democratic process, the necessary balance can be infringed. This is one of the risks we in America are now taking.

2) Rule of Law/Independent Judiciary and Cooperation

In the authoritarian governmental structures of most of the civilized period, justice was as much a matter of one's political or religious position as it was of anything resembling universally applicable law. Only in the last 600 years and only in some civilized societies has the law slowly become truly codified, and applied universally and in an egalitarian manner – at least in principle. And only in the last 250 years has an independent judicial system arisen within government to assure equal and fair treatment for all citizens.

One of the important tasks of an Independent Judiciary is to assure fairness in the cooperatively oriented political realm. Assuring that the egalitarian principle is maintained lies at the heart of an Independent Judiciary and this applies to the election process, the creation of law by the Legislature, and the administration of the law by the Executive branch of government. Equality in basic civil rights, in the law, and in the enforcement of the law as assured by the judiciary creates a level “playing field” where all citizens are to enjoy the same guarantees and treatment, if not the same opportunities.

Of course no judiciary is entirely free from the influence of vested interests, especially economically and politically powerful interests. So, the judiciary itself, whose judges are elected or appointed through the political process, has to incorporate a layered system of review where decisions at one level can be appealed to a higher level to assure that the law is both fair and applied fairly.

Such a judicial system with its own built in checks and balances serves to guarantee equality for all citizens, and as we have seen elsewhere, the condition of equality creates the context in which cooperation can occur and be encouraged. Most nations within what is known as western civilization operate with such an independent judiciary in combination with a truly representative democratic political structure. Unfortunately, there are many ways to subvert the egalitarian orientation of a combined representative democracy and independent judiciary, and many of the non-western countries that claim such structures execute them so poorly or so weakly that they are in fact authoritarian – ruled by kings or dictators or the military. And not a few nations make no pretense of being egalitarian and define themselves outright as authoritarian.

So, while political and judicial systems exist in some countries that support equality among their citizens and thereby generally encourage cooperation, many nations are only nominally committed to such systems and continue to

demand complicity rather than encourage cooperation through their legal systems. And at the international level, there is only a relatively weak commitment to a worldwide judicial/court system [the World Court], even from the nations with established representative democracies and independent judiciaries. The overall result is that while the potential exists for judicial systems to promote equality and cooperation in social relations within and among nations, this potential has been realized at a rather restricted level – once again leaving competition as the primary mode at worldwide scale defining societal relations.

3) Education and Cooperation

In complex civilized society, education can play a critical role in supporting cooperation. As it stands, even in developed countries, education does not meet this need. Why? There are at least three reasons. First, education has to instill the skill of critical thinking in the populace. Without this ability the citizenry is subject to emotional and populist appeals as well as the whims of the rumor mill, which the Internet has become expert at purveying. Critical thinking empowers citizens with the ability to assess information for the logic of the arguments presented, the expertise of the presenter, and the adequacy of the evidence cited. Critical thinking also assists citizens to separate a presenter's communication skills [charisma] from the adequacy of the conclusions offered. Educating for basic reading, writing and math skills and for knowledge is valuable, but too often this is what passes for education with critical thinking skills left to develop without assistance.

Second, education has to broaden the understanding of students/citizens so they have the ability to recognize and respect alternative values, perspectives, and worldviews, while being aware of the assumptions implicit in the worldview they choose to adopt and support. When worldviews are adopted wholesale without examination, narrow understanding results and students/citizens are left without the ability to adapt creatively in the face of change. And change is inevitable, and rapid change is the norm in modern societies. Engendering open-mindedness, flexibility and adaptability in all citizens in all aspects of their lives as well as in their relations with others both within their societies and across nations forms the foundation for cooperation at all levels. Limited exposure means limited awareness, and the isolation that results promotes both absolutism regarding the truth value of one's own beliefs and uncertainty and fear of others with different views – strangers. And strangers are regarded as likely competitors.

Third, education in the round encourages development of the whole person: the old triumvirate of mind, body and spirit and the connection of these three to emotions. Of course in reality all three of these together with emotion are totally intertwined, but we separate them for purposes of discussion. In what has become traditional education in western culture, the developed mind tends to be associated with the two goals of education cited above – reason [critical thinking] and open-mindedness [breadth of awareness]. Spirit can be included in the domain of mind through the mental function of intuition, but in public education spirit has unfortunately been bundled together with religion and pushed to the periphery. In marginalizing intuition and spirituality, public education makes little effort to develop this aspect of the human mind and this source of awareness. Education in the round needs to retrieve and train this dimension of mind and bring spirituality, not religion, back into western education. When the education of mind develops both reason and intuition, instincts and emotions are aligned to play their proper roles. The intimate connection between intuition, spirituality and cooperation is explored in a following section, “Religion, Spirituality and Cooperation.” Suffice it to say here that education that includes “spirit” in this sense is a very important source encouraging cooperation in social relations.

In the very lengthy past of aboriginal societies, education was ongoing with living as youth learned by watching and doing under the constant tutelage of parents and elders. In modern complex civilized societies with the florescence of specialized roles, education has become a separate domain. Efficiency in learning skills and preparing for diverse occupational options drives this separation. What is lost in this process is the connection of children and adolescents with adults and with the community as a whole. And what develops in place of this connection to the adult community is a separate adolescent culture with a time period that seems to extend with each generation. Adolescents, whose minds do not fully mature until they are in their mid-twenties and who are not integrated into the community, often lack a sense of direction and purpose and feel themselves to be adrift. The result is often an adolescent culture of protest that emerges in the teen years which is often associated with anti-social behavior. Such a separate subculture is frequently both dysfunctional [eg. gangs] and anti-educational. As presently structured, the goal of education itself is being defeated when these circumstances are allowed to prevail.

What is needed to address this counter productive adolescent situation in modern public education is to reconnect education to both community and

activities that have a pragmatic consequence. At the junior high and high school levels, the community based education model together with an experiential orientation to curriculum can assist greatly. Adults, especially senior citizens, need to be a continual part of this education environment, keeping students connected to community and to learning that has tangible results. Pragmatic results support self esteem in ways that abstract test results do not.

Adolescents can be encouraged to be creative and innovative without the need to protest and descend into anti-social activities. The more broadly connected students are to community and the more satisfied they are as a result of a sense of accomplishment from a real contribution to community, the more they will be inclined to adopt a cooperative orientation to social relations at all levels. Presently, public education is not adequately fostering cooperative social relations in its teenage citizens, and these adolescents are carrying this weak cooperative orientation into adulthood – by default, allowing competition to lead.

Overall, public education, even in most leading western societies, is not meeting the need to promote cooperation. Even higher education at the college and university levels in these societies often fails in this regard. Little wonder that the competitive orientation to social relations remains dominant worldwide.

4) Economy and Cooperation

In hunter gatherer bands and tribes, resources are generally shared fairly evenly among the members with some slight privilege given to elders, those who make provisions available, and those in special need. Sharing is common within the personal relations that apply in these small human groups. Across different bands and tribes, there is very often competition for resources, and what sharing occurs tends to be ritualized in special events that bring the bands/tribes together. Outside of these kinds of events, a more or less formalized network of relations exists to accommodate trading for resources. The most basic of these “traded” resources concerns reproduction and involves the location of mates. Trading networks tend to be local, but the extent of local to local to local connections can easily create what in effect becomes a regional trading system.

The alternative to trading is raiding, and the more tenuous the local connections across different bands and tribes and the more limited the availability of needed resources, the more common raiding becomes. And raiding can be violent to the point of constituting warfare.

So, at root, economic systems within traditional bands and tribes are internally very cooperative and the connections in behalf of trade across these bands and tribes require cooperation to some extent, becoming less cooperative and more competitive the more indirect and impersonal the social connections become. Managing this cooperative to competitive continuum is necessary in order for different groups to acquire needed and desired goods and resources. And as economic systems enlarge and become more complex with the advent of chiefdoms, city states, nations, and civilizations, this same cooperative-competitive dynamic sustains and must be managed. Communistic economic systems stress public ownership and the equal sharing of all resources within national level social structures, while capitalistic systems stress competition and wealth accumulation to the “successful” within and among these national structures. Regulated capitalism and socialism are located in the middle on this competition – cooperation economic continuum.

In the modern setting among larger civilized nations, the world economy, as constituted under the World Trade Organization [WTO], has become one of the forces for increasing economic connections across nations. As such it promotes cooperation, this within what are interestingly competitive economic enterprises. But, because the WTO, and most of the international trading agreements that exist beneath it, are defined almost entirely by economic criteria, they exclude consideration of ecological and social variables – leading to unfair economic advantages and disadvantages in the competition for trade among individual nations. So, the vastly increased scope of trade generated in the modern world economy is, as currently constituted, both a force for greater cooperation and a force for continuing competition and potential conflict.

If the nations of the world can commit to a revision of the WTO to incorporate important social and ecological variables and in doing so to become more fair, then the modern world economy can become a force for greater overall international coordination and cooperation with the potential for political and judicial integration to follow. It is even possible for this revised world economy to become the catalyst for the kind and degree of international integration that is required to meet the several serious and immediate global challenges facing humanity as a whole. It is no small irony that trade, which is essentially a competitive enterprise, could be the main factor that leads humanity worldwide to greater integration and cooperation!

5) Inequality, Poverty and Cooperation

People who are struggling to survive are by necessity in a competitive mode. And people who perceive themselves to be disadvantaged or victims in comparison to other citizens are inclined to view their advantaged “brethren” competitively. Poverty and inequality do not encourage an orientation to cooperative social relations. But promoting equality does not mean that talent and industry should not be rewarded with significant benefits. However, if these benefits become excessive or exclusive to a few, relations across the resulting inequality divide tend to become competitive. Citizens whose needs are being met and whose expectations are realistic are generally open to cooperation. In short, happy and satisfied citizens incline toward cooperation.

The lengthy initial period of complex society saw the relative social equality that was characteristic in earlier human bands and tribes abandoned and replaced with hierarchical authoritarian structures [warlords, kings, emperors, popes, pharaohs, dictators, etc.]. Only in the last 300 years with the advent of political representative democracy and in the last 100 years with the various equal rights movements has equality among the citizenry been partially reclaimed. But the trend toward equality is very young and fragile indeed, and we see this trend constantly being reversed in various authoritarian “take overs” among young democratic nations. As fragile and privileged as the social institutions are that assure equality in the modern social setting, it is astonishing that so few citizens take seriously their political enfranchisement and vote in elections. Citizens need to recognize that complacency undermines the integrity of democracy and invites the loss of social equality in complex society.

In today's “information immediately everywhere” world, the perception of inequality is not just within communities, states and countries; it is across regions and continents. What is fair and equitable in terms of life style and standard of living is slowly becoming standardized at world scale. The result is that the heretofore privileged standard of living in developed western countries is being challenged by those in under developed countries to the consternation of the citizens in these western nations who feel that their expectations for improved status are no longer being met. Unmet expectations in both developed and under developed nations together with grossly unequal standards of living are a significant source of the continuing competitive orientation in social relations both within and across nations.

6) Science and Cooperation

Science in its pure form of discovery is a strong force for social cooperation. Science in its practical expression is the basis for technology which can serve either competitive or cooperative social goals. More on this in what follows.

Science emerged as the study of the material dimension of existence. The further it has proceeded in its discoveries in the nature of the material domain, the more science has become aware of the significant role of the immaterial or energetic/field dimension of reality. Current theory in cosmology holds that this immaterial energy domain precedes material existence in the origin of the universe and constitutes at least 70% of all of current reality. As science is more and more concerned with the immaterial, it begins to explore what is otherwise known as the subjective, and the subjective is one with the spiritual. So, almost in spite of itself, science has become a major source for discovery in both the material/objective and immaterial/subjective dimensions of both human existence and the broader reality in which humanity participates.

Apart from science's practical application in technology that can provide the basis for products and thereby serve the competitive goals of corporations, the major input of science into social relations is to promote cooperation. It can do this first in affirming the immaterial/spiritual dimension of reality which supports cooperation [For details on this see the later section in this essay: "Religion, Spirituality and Cooperation"]. But science also promotes cooperation in its ability to challenge the worldviews of human groups when these worldviews are based on belief and opinion rather than on factual evidence. And since differences in beliefs and opinions are a primary source of competition/conflict among human groups, the input of science can be critical in unifying human understanding about the nature of reality and human existence. And, the more different human groups share in their worldviews, the easier it is for them to cooperate. So, at root the science of both the material and the immaterial has the ability to contribute to cooperation in social relations. But at the same time the technology that emerges from science can contribute to competition.

The potential value for cooperation that science can afford is unfortunately not realized in significant part because scientists are reluctant to actively assert the significance of the results of their work in the public domain. This reluctance dates all the way back to the Middle Ages when science emerged in a context where religion possessed the authority to assign heretical status to scientific findings with which it disagreed and put the scientist's life in jeopardy. Ever

since, science has avoided conflict with established religious beliefs. And in today's world where religious fundamentalism is being allowed to represent religion, it is easy for virtually any scientist's findings – or the findings of an entire branch of science – to be viewed as in conflict with such beliefs.

Until the 70% of citizens in western nations who are not committed to fundamentalist religious beliefs have the courage to support the factual and evidence based worldview derived from science, the potential of science to promote cooperation in social relations will not be realized. More on this challenge in the later section on “Religion, Spirituality and Cooperation.”

7) Communication and Cooperation

Open and free communication [free speech] in all forms serves connections among humans, and as such it engenders cooperation. In the face of disagreement among individuals and groups at all scales, communication also provides an opportunity for discussion to resolve these differences and an alternative to direct physical action and conflict. Fighting and warfare arise when communication breaks down and is abandoned. This situation applies for all human groups across all of human history. The more thoroughly connected communities, states and nations are, the greater is the motivation to seek resolutions to disagreements through communication and the greater is the reluctance to shift to physical conflict.

From the beginning, face to face communication, especially oral language, has been the primary form of communication among humans with additional input mainly from visual sources in gesture, posture, action, dress, artifacts, and setting. Pictographs appeared to supplement this communication array relatively early with full blown written language arising in a few civilizations starting about 8,000 years ago. Every increase in communication capability has had significant ramifications on human relations, broadening the options for connecting and making information more permanent while reducing the time and increasing the distance for communication to occur.

Worldwide, humans now depend on virtually instantaneous electronically based audio-visual communication. With the Internet, observational satellites and ubiquitous security sensors, humans are more and more intimately known and connected to one another and to the vast repositories of information that are stored electronically. With ever greater means to assure transparency, it is harder and harder for individuals, corporations, states and nations to hide, to

cheat, to keep secrets. And interestingly, competition thrives on secrets and keeping humans at all levels separated so one group can seek an advantage over another. So, as more and more immediate and universal communication causes transparency to deepen and broaden, the norm becomes for all information to be shared, promoting cooperation and restraining competition.

The penetration of information has reached the point where satellites can read individual license plates and GPS can track the continuous location of individuals, where financial records contain virtually all personal and business transactions, and where comprehensive profiles exist for nearly all individual and group purchasing preferences. Infrared and other means exist to penetrate buildings allowing observation of activities behind walls and closed doors. In the modern world, privacy exists only where there is no interest in penetrating it. And while governments and corporations furiously scurry to protect their confidential information through encryption, opposing governments and corporations and hackers are equally busy decoding and accessing this information ever more rapidly.

Given the very clear trend that electronic communications have taken, especially since WWII, the potential exists in the modern world to increase connections among humans worldwide to the point where the unknown/uncertain “stranger” basis for impersonal relations dissolves and all relations become personal. Humans are in fact much further down this path than they even realize, and this path supports the advancement of cooperation at all levels from among individuals to among nations. But, while this is the clear potential trend coming from evolving electronic information technology, world culture lags significantly behind, dwelling in the more competitively oriented status quo. As such, humans are not able to currently take anything like full advantage of the cooperative option in social relations that information technology affords. Awareness of the potential and of the exponential speed with which this trend is proceeding is important as it constitutes one of the few developments that offers some encouragement that humanity may be able to address its several global challenges which are likewise escalating in pace and intensity.

8) The Information Media and Cooperation

If modern, instantaneously connected complex society does not require that information for public consumption be reliable, the basis for the public to make reasoned and effective decisions [political and otherwise] will be undermined. The privilege of free speech can be carried to the nonsensical point of not only allowing but also promoting the dissemination of misinformation and outright

lies. Checks and balances must also apply to the media and all other public information sources. Currently this is not the case.

Ironically, while information technology has the potential to contribute to cooperation in social relations, the media, as it is currently practiced by a majority of its purveyors – as well as the media's adjuncts in talk shows and Internet blogs, tend to promote competition and conflict. If the media were committed to disseminating accurate information, it could complement the potential cooperative input of information technology. But currently most of the media is about entertainment or infotainment and it is driven primarily by the profit motive. What sells is the sensational, and the sensational is all about impression and rarely concerned with the truth. The more extreme the statement or video, the more the media is attracted to cover it; and the more sensational the coverage is, the greater the interest of the public; and the broader the range of public interest in their coverage, the greater the profit to the media and their advertisers. Somewhere in the world there is always a fire, a murder, a terrorist attack, a kidnapping, a robbery, a drowning, a flood, a major storm, a corrupt leader, an outrageous tweeting politician, etc. to report, and the media focuses on generating vivid accounts of these events.

The problem is that while the media's focus on the extremes does not reflect the majority conditions in the non-sensational center, the impression the public gets is that the conflict between the extremes reflects the norm. And the media's constantly focusing attention on the highly charged and competitive extremes results in unwarranted stress, anxiety and fear being generated in this exposed public. An anxious and fearful public is a public primed for caution, not cooperation as it approaches social relations. So, while some media products are responsible, unfortunately the overall effect of the media as it is presently practiced is to support a cautious/competitive orientation among humans.

In a world that is more and more oriented to and dependent upon information, the reliability of that information becomes critical. But in the present context where the right of free speech extends to allowing radio and television talk shows and internet blogs to promulgate outright lies and calculated disinformation, the public is exposed to everything from confirmed truths to absolute falsehoods without the means to distinguish between the two. Information that is made available for public consumption must be held to a higher standard if we expect citizens to be well informed as they make decisions and try to participate consequentially in their societies.

Just as an independent judiciary exists in developed western societies to assure that laws and the administration of the law accurately conform to the intent of our constitutions, so an independent information agency needs to exist to rapidly assess the accuracy of the information that is made available to the public. Current information assessment sources on-line like FactCheck.org are valuable for the few who use them, but they are not sufficient in their speed of evaluation, their scope, their recognized validity, or their authority. Fully vetted public information can have the result of shutting down some of the worst Internet based rumor mills and tabloid like products, which presently taint the domain of public discourse.

Information dissemination is not a game where hyped offerings based on highly selected evidence, or no evidence at all, can be permitted to influence public opinion. Information is powerful, especially in our highly interconnected modern world, and the citizenry deserves at least the awareness of where the information they are receiving ranks on an accuracy scale as determined by an independent, unbiased public source. When the public can be assured that they are relying on accurate information, they can feel more comfortable in cooperating based on that information.

9) Health, Longevity and Cooperation

Modern scientific medicine, sufficient food, and life styles in later years that are not so physically demanding are making it possible for humans to live almost twice as long on average as they did just 2-300 years ago. One consequence is increased pressure on natural resources due to an increase in human population. And humans who experience or perceive themselves as being under pressure due to resource limitations are less likely to be cooperative and more likely to be competitive. On the other hand, senior citizens, who are not in the throes of the hormonal turmoil of the reproductive years, can offer a perspective on life and events that is more reflective and less reactive. In short, seniors can perform the traditional role of Elders in society whose wisdom can have the overall influence of supporting greater cooperation in social relations.

But to perform the role of Elders, seniors in the civilized context have to remain fully engaged in their communities and be broadly informed – well educated [see the “Education and Cooperation” section]. Unfortunately, at least in the leading modern western societies, the cultural celebration of youth together with the prevailing move of adults retiring from work to lead separate lives of relative

leisure mitigate against seniors becoming elders and having a positive effect on increased societal cooperation. And many seniors are not “well educated,” so, they do not qualify as elders because it is not wisdom that they have to offer.

So, while seniors are a potential resource as Elders to promote cooperation, currently, nominally educated and disengaged seniors in civilized countries unfortunately do not perform this function. Under these circumstances, older citizens in their sheer numbers and resource requirements end up adding somewhat to the competition side of the competition – cooperation equation.

10) Defense, the Military and Cooperation

The more competitively oriented both individuals and the societies of the world are, the more they feel the need to defend themselves against their potential opponents. And the more individuals and nations feel themselves to be under threat from others, the greater are the resources expended in behalf of protection and preparing for potential conflict. In the U.S. private realm, the NRA supports an entire industry to feed everything from hand guns to assault weapons together with storehouses of ammunition to individual citizens and local militias. At the national level, the U.S. annual expenditures on military and military related activities amount to \$1,300,000,000,000 – this in a total annual federal budget of \$4,000,000,000,000 [33%]. This is a huge dedication of national resources to an exclusively competitively oriented enterprise. While the U.S. is an extreme case in this regard – even among nations with significant defense related spending, the worldwide natural and economic resources devoted in one way or another to national and regional security are tremendous.

Imagine the difference it could make if cooperation took the lead in social relations at the private, state and national levels, and these resources were applied to improving the quality of life for all of humanity. Unfortunately, private and public expenditures in behalf of personal and national security are currently founded on an exclusively competitive view of these relations.

11) Religion, Spirituality and Cooperation

{This section requires some background and explanation since the important distinction between religion and spirituality is not commonly understood}

In all societies at all levels of complexity, there are two basic sources of cooperative social relations: ethics – the culturally determined rules of social behavior; and morality – the spiritual awareness of how others are to be treated.

With regard to ethics, citizens are explicitly taught from an early age to respect, assist, and treat other of their fellow citizens fairly and honestly. This ethical source of cooperative social behavior is very important; and it is a component in all societies – large and small, modern and traditional. By contrast, morality is often framed by religion with spirituality at its core providing the essential awareness. Religion is the social institution within societies that asserts itself as the primary authority to represent spiritual awareness. However, spirituality itself is only secondarily housed in such institutions since there are a great many religions, and religions arise to support the other institutions of society at least as much as they serve to connect citizens to spiritual awareness. It is necessary to further explore the relationship of spirituality and religion before we come to a discussion of spirituality itself and its relationship to cooperation.

The role of religion in complex society is a double edged sword. On the one hand, religions specify a moral code of social behavior and tie adherence by its devotees to this code as necessary if they are to be accepted by society and if they are to expect a positive life after death. Many religions do not treat their members equally, so, while the behavioral code they require does produce shared social rules within the group, what may appear as cooperation in the membership often amounts more to demanded complicity. In addition, at the level of relations among different religious groups, contrary religious beliefs constitute a major source of competition which ranges all the way from disagreement to violent conflict/warfare. And some of the worst religiously motivated, aggressive behavior occurs across sects of the same religion where life and death can literally be put at stake over relatively minor differences in belief. So, internally religion promotes mostly complicity, not cooperation; and externally religion is a major motivator of competitive, often violent behavior.

At the present time, much of the citizenry of modern, developed, western society has withdrawn from membership in the churches, mosques, and synagogues of the religions of Abraham. For most of these citizens, this withdrawal does not mean rejection of the beliefs of these religions, just the adoption of an agnostic/bystander position. This agnostic fence sitting stance, which is practiced by the majority of the populace, together with the policy of religious tolerance, which most mainstream religions espouse for their members, are what allow the extreme fundamentalist believers to commandeer representation of the Christian, Islamic and Jewish faiths. The media loves to focus on the extremes, so these fundamentalists enjoy a totally disproportionate amount of both attention and influence. The result is that while most citizens of western society do not support the religious dogma that leads to religious conflict, they

do not step forward in a vigorous way to challenge those believers that do support such extreme beliefs.

Until tolerance and agnosticism in the populace become rejection of religious belief systems, religions will continue to supply a major motivation through fundamentalism for social relations across religious groups being regarded as impersonal and competitive – inviting serious conflict. An allied problem is that the majority of agnostic fence sitters are unfamiliar with the spiritual experience and perspective, which could replace the literal religious beliefs from which they have withdrawn and both relieve the impetus to competition and promote cooperation instead. Unfortunately, for many citizens, spirituality has been lost together with the withdrawal of support for religious institutions. If spirituality could be retrieved for the citizenry without reinstating religion, then humanity could revive a significant support for social cooperation.

All religions contain at their core the spiritual experience and perspective, which, properly understood, supports cooperation in human relations. Religion provides a framework for accessing and understanding the spiritual experience, but access can be more or less exclusive and beliefs more or less literal and convoluted. Spirituality is universal; religion provides the cultural container, and there are many different containers, each of which has its own issues, but each of which tends to lay exclusive claim to the truth – the one and only way to achieve spiritual awareness, proper behavior, and life eternal.

In the structurally simpler hunter gatherer/aboriginal societies of the long period of human social development, the spiritual perspective is conceived mostly in terms of a sacred principle that pervades all of reality in which all natural things, including humans, are alive/active, relate to one another, and in some way share in a common, unified existence [animism]. Young citizens within these societies grow in spiritual awareness, particularly as they are exposed to and increasingly participate in adult rituals [art, music, dance, story, and song]. At the time of physical maturity, adolescents are often encouraged through initiation rituals to have a deeper and more personal spiritual experience [eg. vision quest]. This experience inculcates the spiritual/moral source of cooperative social behavior in the individual, who, following this ritual, returns to the group with this newly solidified spiritual perspective, social understanding, and sense of self.

As societies have become larger and more complex – first as chiefdoms, then as city states, and finally as civilizations – full blown religious institutions with elaborate belief and ritual systems have arisen. In this process, spirituality

became institutionalized and regulated with access controlled by specialists [eg. priests]. In addition, what had been a relatively simple sacred principle in all of reality evolved into highly defined literal and absolute belief systems with mostly social implications. And this religious system frequently justified subservient behavior by the common citizens, and served primarily the economic, political and social interests of an elite class of citizens.

In the last 500 years and within western civilization, as science emerged and as an independent artisan class arose together with the beginnings of a moneyed economy, religion was first challenged for its social exclusivity [Protestant Reformation]. The result was that devotees gained more direct access to the spiritual experience, but the core defining beliefs remained literal and absolute.

In the last 200 years capitalistic enterprise has exploded to take advantage of technological opportunities revealed by science with the result that the quality of life for modern humans has been substantially improved. As this has occurred, many citizens have discarded the literal beliefs and earth centered worldview that underlie the major religions of the developed world. In this process, spirituality was freed from the confines of religious dogma, but instead of its inherent value being recovered, it has been rejected along with the religions that circumscribed it. In its place, the perspective of secular materialism has become dominant with citizens focusing their attention on the satisfaction that can be gained through the accumulation of wealth and material well being.

From the spiritual point of view, this secular material result has merely replaced one error with another: the error of an exclusive and absolute materialism substituting for the error of an exclusive and absolute religious belief system. And in this pendulum swing, the opportunity to recover the major support for social cooperation that spirituality potentially offers has been largely squandered. More recently, Islamic, Christian and Jewish religious fundamentalists have provided further motivation for the public of modern secular societies to reject religion, and, unfortunately, spirituality along with it.

Since the deeper form of spiritual experience is unfamiliar to many in modern secular societies, it is necessary to describe what occurs in this experience so that its relationship to social cooperation becomes clear. As far in the past of human history as we can determine, humans have regarded their world in both pragmatic, objective, material, and rational terms and in sacred, subjective, spiritual, and intuitive terms. These perspectives and mental faculties [reason and intuition] are coordinated and flow imperceptibly in and out of one another

most of the time as they are called upon to address different tasks. They are separated in this discussion purely for heuristic purposes.

With the preceding background finally in place, we are now ready to explore the relationship of spirituality and social cooperation. The core of spirituality is the experience of the unification of the self and reality. This experience occurs at different depths and encompasses more or less of the surrounding social and natural world. The spiritual experience offers a perspective that is as fundamental as the material perspective in human existence. It requires no particular religious beliefs or rituals, just activation, development, and utilization of the intuitive faculty of the human mind. And intuitive mental competence is a basic human mental capability, as basic as rational competence, which also requires development and training. Spirituality is just an alternative way of knowing and experiencing one's self and of operating in the world. Disregard the intuitive capability or the development of human intuitive competence and humans exist in a diminished condition of who they are and can be.

Spirituality, which is the foundation for religion, provides the moral basis for the communal perspective and the cooperative behavior that proceeds from it. Here is how this occurs: When humans open wide their intuitive faculty [which accesses the spiritual/subjective perspective] and quiet their rational faculty [which accesses the material/objective perspective] the path to the deeper experience of the spiritual emerges. With guided training along this path, the unification experience emerges gradually as the self progressively incorporates more and more of the social and natural world. This is the approach that the ascetic Buddhist faith takes with the ultimate goal of attaining "Enlightenment." Without training and under circumstances that promote a breakthrough into intuitive activation, the unification experience can arise suddenly and be experienced as the complete transformation of one's self. In the fundamentalist Christian religion this more sudden form of the spiritual experience is called being "Born Again" and is interpreted as confirming the literal Christian system of belief. In native American culture the unification experience can be the consequence of a successful vision quest in which a new personal identity is discovered by the initiate and a new, more refined way of understanding the self in relation to the band/tribe and the surrounding ecology emerges.

The core spiritual/unification experience is one where the sense of self expands to include more and more of both the social and natural world – as an integral part of the self, no longer separate and distinct. And as the social and natural world is incorporated into the self, or put another way, as the self expands to

include the “outside” social and natural world, it becomes an obligation to treat the components of that world with respect. As an extension of one's own being, the individual shares identity with this “larger” world and therefore has responsibility for it. That is the moral sense and motive that lies at the heart of social cooperation because in the deep spiritual sense all other humans or animals or plants are YOU. With developed spiritual awareness, the requirement to cooperate and share and care is not just a matter of social rules [ethics]; it is a function of recognizing that these “others” are really extensions of yourself [morality]. In a sense you are just treating your “greater” self with the consideration and respect that You deserve.

It is a grave loss when humans and their societies and cultures loose this deep spiritual sense of knowing the self, society, and the natural world. And the loss shows up dramatically in the reduction of support for the human “instinct” to cooperate, allowing the competition “instinct” to prevail in the vacuum that is created. The tendency to treat social relations as impersonal and competitive supports exploitation. By contrast, an inclination to treat social relations as personal and cooperative supports respect and assistance. And the modern, secular, material, a-spiritual western world suffers from the loss of input from spiritual awareness and its support for experiencing all social relations as personal – as extensions of the personal self. Relying solely on ethical training to promote cooperation is a weak alternative to having both a strong ethical and moral/spiritual basis of support for social cooperation – for treating all humans as personal relations. In today's world, between secular materialism on the one hand and religion on the other, spiritual/moral support for cooperation is much weaker than it could be. [For a more in-depth presentation of my approach to the relationship of religion to spirituality and both to social values see: “Religion and the Sources of Social Values,” available on my website: www.dynamic-humanism.com]

12) Art and Recreation and Cooperation

Art and recreation begin in hunter gatherer societies as activities associated with either religious ritual or play. Celebration itself tends to be ritualized. So, what we separate out as art and recreation in civilized societies is mostly integrated into ritual or everyday social events in aboriginal societies. As such, these activities tend to be more cooperative than competitive in their orientation. In these cultures, there is little of what today in civilized societies would be called secular art, formal game and sport, and separate recreation activities. In the civilized setting, art [graphic, plastic and performing] and recreation [hiking,

biking, sailing, kayaking, bird watching, etc.] can support cooperation but often they do not, depending on how they are approached and engaged. Art that is merely sensational entertainment [eg. most action films and video games] or sport that is highly competitive and aggressive [boxing and most professional sports] are essentially devoid of spiritual or cooperative value. The same can be said of rip and run recreation served by ATVs, mountain bikes, snowmobiles, dune buggies, jet skis, etc. In the main these forms of art and recreation exhibit and support competition both socially and toward the natural environment, even when they involve teams that secondarily support social values. In the secular arts and entertainments, sentimentalism, gratuitous violence and sexual titillation are often focal, and in their sensationalism they attract an audience for their purveyors, whose objectives are almost exclusively economic. Unfortunately, there is little social or spiritual value in most of these offerings.

Some secular art explores social relations and personal character in a serious way, and such art generally supports social and communal values. And some recreation invites reflection and contemplation in and of the natural world. Where recreation invites connecting to, sharing in, and supporting the components of this natural world, it can be both socially and spiritually significant. So, some secular art and recreation do support cooperation, but they are in the minority within the domain of art and recreation in modern complex society.

Great Art derives from and expresses spiritual awareness in symbolic form – the realization of connectedness and a shared identity at some level beyond the individual. And it encourages in its audience this same awareness and sensitivity. Creating and experiencing this art is expanding in effect and it supports cooperation as it stretches the boundaries of individual and group identity. In the arts, great music, dance, and drama [in both theater and film] can evoke this kind of experience in both the performer and the audience. And in terms of recreation, there are ways to walk in the woods or on the beach or enjoy a flower or a magnificent landscape that can invite this kind of expanded awareness. But, unfortunately, this kind of art and recreation is not the norm in modern western cultures where art and recreation definitely trend toward sensationalism and the gratuitous display of aggressive behavior. As a result, overall, the arts and recreation support competition rather than cooperation in social relations. [For a more in-depth discussion of the role of art in the context of spirituality see: “My Approach to Interpreting Art and Religion,” and “The Role of Art in Dynamic Humanism,” available on my website: www.dynamic-humanism.com]

Genetic Engineering and Cooperation

As challenging as the issue may be, genetic engineering could contribute to achieving the needed shift to a cooperative biological foundation for humans in complex society at world scale. This, assuming that all the fears, ethical issues and potential complications could be adequately addressed! Genetic self-engineering of the human species is a huge socio-cultural challenge, but one that technologically is very rapidly emerging on the horizon. Rectifying genetic based diseases and defects is now available on a limited basis and is posed to advance rapidly as the details of the human genome become better and better determined.

The follow-on “engineering” phase will be devoted to “improving” the capabilities of the species. It is in this phase that the greatest concerns arise, especially given the earlier horrendous excesses of eugenics. But it is also the phase where the option to enhance the human predisposition to cooperation emerges. It is here that the human biologically grounded traits that detract from the ability of humans to cooperate and to sustain cooperation can be considered for alteration. Apart from the panoply of ethical concerns, the greatest risk is that engineering genetic “improvements” will itself become a competitive enterprise and will be employed to favor one race or society over another – increasing competition rather than reducing its influence in world culture. It is entirely possible that in order for genetic “improvements” to the species to be universal and equitable at world scale, the level of cooperation among humans may be required that the engineering itself would be intended to effect!

Whatever role human genetic engineering may play in the future of both the species and human complex society, this capability is emerging, and its role must begin to be very seriously considered. And given the fact that it seems nearly impossible for cultural change to effect increased cooperation at anything like the pace and scale required, it appears that human genetic engineering will need to somehow be in the mix to assist with a solution.

Summary

In all of nature, two opposing forces are present: attraction and repulsion, aggregation and separation, etc. In the human social domain these are the forces for cooperation and competition. To the extent that humans have influence on this dynamic in their social and natural world, humans and their

cultures must manage this basic dynamic so humanity can survive and thrive during the species' window of opportunity. Currently and on a worldwide scale, humanity faces several major challenges that require a high degree of cooperation at the international level in order to be adequately and fairly addressed: human population at least twice the ecological carrying capacity of the planet; basic resource depletion and contamination – especially air, fresh water and terrestrial and ocean ecosystems; plant and animal species extinction and habitat loss at an alarming rate; gross inequality in economy, standard of living and opportunity within and across social groups at all levels; high risk for drug resistant, viral and bacterial pan epidemics; nuclear conflagration capable of extinguishing the civilized state of humanity; climate change proceeding at a geometric rate of impact capable of severely impacting the world food supply and necessitating mass migration and fomenting political and economic upheaval. Independently, each of these challenges looms large in the present and requires worldwide, international planning and coordinated implementation to be solved. Collectively, these challenges are truly daunting and essentially impossible to address without a commitment to full cooperation at every level of social structure from communities to all nations.

Sustaining the status quo of nominal cooperation together with an underlying and more powerful orientation to self-interested, competitively oriented social relations is an invitation to disaster at all levels for the civilized state of humanity. The status quo means humanity's current and imminent challenges will not be addressed individually or collectively and not in a timely manner. Sustaining the status quo means limiting cooperation to a very constrained view of personal relations and allowing an essentially competitive approach to prevail throughout the vast realm of impersonal relations. Presently, this approach to social relations at all social scales is responsible for the cautious, tentative, suspicious, competitive nature of most human relations in and among modern complex societies. The fact that assertive men, with their innate biological charge of testosterone and adrenalin, conduct most of these relations at the larger social scales supports the continuation of this status quo, competitive condition.

To date, culture within individual complex societies has only been strong enough to promote a state of toleration in the predominantly impersonal social relations of these societies. And toleration is the lowest level of the cooperative orientation. Toleration as a minimum condition across nations is a goal of the United Nations, but sustaining commitment even along this line is tenuous. Ironically, economic and defensive self-interest have proven to be the major motivators for cooperation in the international realm; this, in spite of the fact that

economy and defense are fundamentally competitive activities. And the United Nations, with the veto power given to Security Council members, is structurally designed to be too weak to generate broad based consensus/cooperation on all but relatively minor issues.

No pan-national culture has yet arisen to require the higher levels of cooperation in respect, accommodation, assistance, and true caring and sharing. International, coordinated assistance in the event of major outbreaks of disease, genocide, or natural disasters are occasions when nations do come together, but these occasions are temporary. Once these issues are addressed, relations among nations tend to return to the default positions of either self-interested cooperation or direct competition. What is needed to address humanity's collective challenges is the emergence of a universal world culture that is strong enough to require commitment to high level cooperation in all human relations at all social scales. This, together with an international institutional structure with the authority to enforce that commitment – a real, independent World Court overseeing mandatory arbitration to resolve all substantive conflicts.

On a few of the cultural variables considered in this essay, current trends are encouraging in suggesting that humanity may be able to achieve increased cooperation together with a reduction in competition: representative democracy emphasizing equality at the political level and allowing all voices to be heard and considered; equal rights and the rule of law in an independent judicial system promoting equality and punishing excessively competitive and exclusively self-interested actions; electronic communication of information to the point of full transparency eliminating the ability to hide self-interested intentions and seek advantage, which are essential for competitive activities to be pursued successfully.

Other trends on other significant cultural variables are discouraging: the failure of standard religious institutions to condemn religious extremism, even when such extremism promotes conflict to the point of soliciting the apocalypse; the loss of supportive input on cooperation from spirituality in developed and developing nations with their shift to a secular material focus; the competitive social proclivity of males as a result of the biological combination in males of testosterone and adrenaline hormones; the current world economy with the WTO operating under its existing insufficient and unfair rules and mandates; the entrenched private defense industry and military industrial complex which rest on a competitive base and which eats up huge economic and natural resources that could otherwise be used to promote opportunity, equality, and cooperation;

the proliferation of nuclear weapons; blatant conditions of inequality and poverty which promote resentment and discourage cooperation; the role of media in focusing on socially divisive and extreme activities and pronouncements for their sensational entertainment and economic value – with the result that the stress and fear that are promoted in the populace end up eliciting caution and restraint in social relations.

On other important cultural variables, while the potential exists for them to contribute to increased cooperation, as they are currently formulated their influence is weak, neutral or negative: education could keep adolescents engaged with adults and their communities, and it could instill critical thinking skills, intuitive competence, and breadth of cultural perspective so citizens would have the ability to properly assess information and be aware of their own biases; science could promote its major findings to the citizenry and challenge the legitimacy of contrary beliefs and opinions; an independent world court system could be strong enough to arbitrate and settle disputes among nations before they escalate to physical conflict; senior citizens could remain engaged in their communities and provide the kind of wisdom of which elders are capable; art and recreation could withdraw from purveying the purely sensational and aggressive and provide experiences that encourage citizens to discover and develop their more expansive sense of self; the world economy could be governed by fair WTO rules and regulations that could promote connections among all nations that are so complete that moving to conflict would become clearly counter productive.

Genetic engineering to increase humanity's orientation to cooperation and to reduce its tendency to competition will arise in the relatively near future as an option to assist what seems to be an almost impossible task for culture change alone to achieve at the scale and pace required. But human genetic engineering to “improve” the species, whether for increased cooperation or other capabilities, comes with its own set of very significant issues and challenges, if it is to be applied equitably.

Conclusion

While much greater cooperation is what humanity needs if the civilized state is to survive and thrive, it is a Herculean task to achieve it, in part because humans are not inherently primed to be cooperative beyond local personal relations. Given the biological and cultural behavior set that humans bring to impersonal relations in the modern civilized condition from their long hunter

gatherer past, we cannot be naive about what we are asking/proposing when we suggest the need for a pan-culture strong enough to convert impersonal relations into personal relations. And presently, universal human cooperation has not been asserted as the primary underlying need upon which all other national and international objectives rest. Without this recognition, the commitment does not exist to create a pan-cultural entity, which would develop a plan and formulate an implementation strategy to address humanity's challenges. The need is immediate and urgent, but the components are not in place to begin to see cooperation dominate in human relations at a national level, much less at world wide scale.

Sure, every enlightened individual can make their personal contribution to be more cooperative, and that is important. But the fact is that most people in the world devote virtually all of their time and energy to just making it through their "everyday." If we had a couple of centuries to work from the bottom up toward this goal of greater cooperation, such an approach might work, but in all likelihood humanity does not have anything like that luxury of time. In my view, the only real option to address the need for a world wide movement to demand much greater cooperation is a top down approach led by a world wide enlightened elite that has the skill and authority to break through the political morass of current national and international relations and insist on action. Where is this enlightened and empowered elite, or even the recognition that it is needed? Within the United Nations? Potentially, but not as it is presently constituted!

If humanity is not paralyzed by the scope of the cooperation issue and how incredibly unprepared humans are to address it, humanity can at least start by recognizing the goal and understanding why this issue is both so inherently difficult and so critical to be met.