

The Evolution and Psychology of Future Consciousness

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Abstract

This paper describes the psychology of future consciousness and its evolution and historical development from prehistoric to contemporary times. Visions of the future are described pertaining to ancient religion and myth; the rise of Western science, rationalism, and the secular theory of progress; the Romantic counter-reaction; science fiction and future studies; modern Eastern and Western thinking; and contemporary paradigms highlighting evolution, technology, psychology, society, religion, and integrative perspectives, culminating in a discussion of wisdom and the Second Enlightenment.

Keywords: Future Consciousness, Psychology, Evolution, History, Mythic Narrative, Science, Enlightenment, Romanticism, Optimism and Pessimism, Reciprocity, Competition, Progress, Science Fiction, Future Studies, Technology, Social Theories, Integrative Theories, Eastern and Western Perspectives, Wisdom

Introduction

"It is not the fruits of past success but the living in and for the future in which human intelligence proves itself." (Friedrich von Hayek)

Future consciousness is the total set of psychological abilities, concepts, and experiences humans use in understanding and dealing with the future. Future consciousness is part of our general awareness of time, our temporal consciousness of past, present, and future. It includes the normal human capacities to anticipate, predict, and imagine the future, to have hopes, dreams, and fears about the future, and to set goals and plans for the future. Future consciousness involves thinking about the future, evaluating different possibilities and choices, and having feelings, motives, and attitudes about the future. It also includes the total set of ideas, visions, theories, and beliefs humans

have about the future – the cognitive and theoretical content of future consciousness (Lombardo, 2006a, pp.5-6).

The expression "future consciousness" and the systematic study of its nature date back at least as far as the work of Öystein Sande and Johan Galtung in the 1970s. Galtung described "future consciousness" as being conscious of what is possible, probable, and desirable in the future. He surveyed, in his classic *Images of the World in the Year 2000* study, the level of intensity and extent (or length) of future consciousness among a large sample of the general population in ten selected countries in Europe and Asia. (Ornauer, et.al, 1976; Galtung, 1982) Basing his work on Galtung's "Ten Nation Study," Sande proposed six fundamental dimensions of future consciousness: Length, level of interest (personal, national, and world), optimism versus pessimism, influence, expectations (what people think will happen), and values (what people want to happen). (Sande, 1972) As my colleague, Jonathon Richter, discusses at length, a similar concept, "future time perspective," originally inspired by the work of Kurt Lewin in the 1930s, identifies five dimensions: Extension, coherence, density, directionality, and affectivity; this very similar conceptual model of consciousness of the future has been studied by a number of researchers in psychology throughout the 1980s and 1990s. (Richter, 2003)

In this paper I expand upon the psychological scope and detail of these studies and add evolutionary, historical, and cross cultural perspectives. Building on the work in my two books, *The Evolution of Future Consciousness and Contemporary Futurist Thought* (Lombardo, 2006a; Lombardo, 2006b), I will present a broad theoretical overview of the evolution, psychological structure, historical development, contemporary breadth, and potential future direction of future consciousness. Some of my main hypotheses are: Humanity, from its most prehistoric beginnings, has possessed some rudimentary level of future consciousness; future consciousness has progressively evolved and diversified through human history; all of the basic capacities of human psychology are involved in future consciousness; all the main systems of religious, philosophical, scientific, and social thought have informed future consciousness; and future consciousness should continue to evolve and enrich in the future. In the conclusion I will propose that the virtue of wisdom, which I describe at the end of this paper, is the highest evolutionary expression of future consciousness and should be actively cultivated and pursued in our creative journey into the future.

Psychological Evolution and Prehistory

Future consciousness is built upon the perceptual awareness of time, of past, present, and future. Through perception, humans, as well as animals, are aware of duration, stability, and change; of becoming and passing away; of patterns, rhythms, and forms of change; and of an experiential direction to time. The perception of time is contextual, built on the relative awareness of persistence and change and anchored to concrete events and the temporal relationships between events in the environment. Consequently there is no perception of absolute time or the experience of a timeless and instantaneous now. Perception involves the experience of duration, for persistence and change can not be defined independent of duration. Further, although perceptual

awareness clearly embodies flow, there is also an awareness of fundamental continuities in the environment. Perception also involves experiences of becoming and passing away, of discontinuities in time, anchoring the future and the past and giving experiential perceptual time a direction. Perception may be limited in temporal expanse, but it is not restricted to an absolute and timeless here and now or a totally fluid transformation (Lombardo, 2006a, pp. 7-13).

Not only do all animals have basic perceptual abilities, all animals appear to demonstrate the capacity to learn. Learning involves the acquisition of new behaviors or new knowledge due to interactions with the environment. Learning reflects the past but is used in dealing with the present as well as anticipating the future. The phenomena of learning and memory illustrate that awareness of the past is tied to awareness of the future. As we acquire knowledge and understanding of the past, our capacity to anticipate and predict the future grows – the same areas of the brain are used in recollecting the past and anticipating the future (Lombardo, 2007). Through perception and ongoing interaction with the environment, animals learn about patterns of change and regularities in the environment and demonstrate informed anticipation regarding the future. Temporal consciousness, through learning and memory, expands in both directions away from the more narrow confines of perception and the relative here and now (Lombardo, 2006a, pp. 28-29, 82-83).

Fundamental to the psychology and behavior of animals that can experience emotion, are the complementary feelings of hope and fear. Fear is the emotional anticipation of something painful or destructive; hope is the emotional anticipation of something pleasurable or life enhancing. Hope and fear have a future focus – they are anticipatory. Animals and humans act to realize what is hoped for and avoid or escape from what is feared. Beginning with such primitive emotionally based motives, both animals and humans show a variety of goal-directed and purposeful types of behavior. Behavior directed toward a goal is both purposeful and future oriented, since a goal is something that is realized in the future as a consequence of behavior. When an animal searches for a mate or for food, the search behavior is future focused. Aside from the emotional dimension of hope and fear, there can be a cognitive dimension as well, where the anticipated event (positive or negative) is imagined in the conscious mind, and perhaps even thought about or ruminated over. Hence, as a concluding general point, I would suggest that the basic emotions of hope and fear, though clearly elaborated and enriched in humans through thought and other cognitive processes, form the core of future consciousness and emotionally color and direct all our visions and ideas about the future (Lombardo, 2006a, pp. 13-27; Lombardo, 2006c).

Early hominids such as *Australopithecus* and *Homo habilis* undoubtedly exhibited goal-directed behavior, experienced both hope and fear, and also demonstrated learning and had memories of the past. But new features of future consciousness emerged in these earliest prehistoric ancestors of humans. The construction and utilization of primitive tools is one paradigm example of a new development in future consciousness, since tools are made (in the here and now) to serve some future end. Tool construction and use is also a clear example of planning, for a series of behavioral steps are executed in a certain order to achieve some end. The immense capacity for the creation and use of all forms of physical instrumentality, from axes, bowls, and plows to

automobiles, telephones, and computers, is one of the distinguishing features of our species; through tools we manipulate and affect our environment to achieve complex ends; we alter our environment to create transformed living and working spaces. In all cases, future consciousness is integral to the realization of this broad and multi-faceted ability. The evidence for tool construction and use in *Australopithecus* is somewhat controversial, but *Homo habilis* almost certainly made and used tools (Lombardo, 2006a, pp. 88-89).

Various explanations have been presented for the acceleration of brain size in our ancestors (including the emergence of tools), but a common one is that the increasing complexity of social organization among our ancestors pushed the evolution of the brain. Another example of a new form of future consciousness that is connected with both social organization, as well as the use of tools and hunting behavior, is that our ancestors collectively hunted and butchered animals and brought the meat back to their social group before consuming it. This is delayed gratification practiced by the group to serve the needs of the group – a clear example of social future consciousness – and in fact, this fundamental mode of behavior is critical to any functioning human organization in numerous ways (Lombardo, 2006a, pp. 89-94).

Early hominids appeared to move from an alpha male-dominated social order, where the dominant male had free sexual access to all females in the group, to male-female bonding that involved long term commitment revolving around the raising and protecting of the young and the sharing of food and sex (Wade, 2006). This long-term negotiation represented a clear step forward in future consciousness, again with a social dimension, but now bringing in additional qualities such as fidelity and romantic love (Fisher, 1992). It has been argued that this form of male-female bonding brought into play decision making, choice, and the capacity of free will overriding the simple impulsive (and, for the female, submissive) act of sexual intercourse with whomever whenever (Shlain, 2003).

Another critical development in future consciousness during prehistory was the psychological discovery or realization of individual death. Death, of course, is an observable phenomenon in the saga of life, but at some point in our prehistory we came to realize that death personally awaits us all in the future. Coincident with this realization we began to bury the dead and perhaps as early as 50,000 years ago had some conception of religion and possibly an afterlife (Fraser, 1987). Future consciousness now stretched beyond the observable natural world into some type of imagined world beyond.

Also during the period of 50,000 to 40,000 years ago, when our ancestors had achieved a relatively modern physique and anatomy, both representational imagery and spoken language emerged. (The time range for the emergence of full blown human language is still somewhat controversial.) These twin capacities provided a monumental boost to future consciousness. If we could paint pictures on the walls of caves, clearly we possessed the capacity for imagination – mentally representing visual objects that were not present. Language provided a symbolic system, again representing objects and events not perceptually present, and supported complex thought patterns. In fact, both representational art and symbolic language offered "thinking spaces" in which early humans could hypothetically represent and contemplate reality

(Lombardo, 2006a, pp. 98-105). Imagination and language, supporting thought, further freed the human mind from the confines of the actual and the present and expanded the range of both historical and future consciousness considerably. The psychiatrist Anthony Reading (2004) strongly argues that language and symbolic thinking was critical to the emergence of future consciousness. Also, cave paintings from around 40,000 years ago frequently appear to be arranged in an order that is narrative in form – they look like mythograms – sequences of pictures that tell stories. Story telling, whether through pictures or words, became a critical emergent feature of future consciousness in the ages to follow (White, 2003; Wade, 2006).

Narrative, Myth, and Abstraction

Mythic thinking is a fundamental mode of human understanding (Donald, 1991) and was a highly important developmental stage in the evolution of future consciousness. Myths are narratives and serve as a key foundational component in all of the major world religions. The earliest recorded linguistically expressed thoughts on the future are myths dating back 5000 years. Archaeological evidence though can trace back the earliest mythic figures to at least 15,000 years ago, from ancient pictorial and sculptural representations, and the two major mythic figures identified in these pre-historical findings are the mother goddess and a male counterpart – either a hunter or a bull (representing the male side of fertility). The earliest recorded myths in linguistic narrative form usually contain some version of these two central archetypes, the female more closely connected with the themes of nurturance, fertility, and cooperation, and the central male archetype more closely associated with competition, violence, and warfare. In the most ancient myths, the power of creativity, including the capacity to raise the dead back to life, is associated with the female goddess, but this shifts over in later myths to the male. The male gains control of the future.

Within myth, the future, as well as the past, is portrayed in narrative and dramatic form and personified through the main gods and goddesses who play out the saga of nature, human civilization, and the cosmos. Through myth, future consciousness is personified and dramatized (Lombardo, 2006a, pp. 144-156).

It should be noted though that imagery, symbolism, and various forms of representational art continue to develop along with the linguistic stream of narrative myth; imagery is often combined with the word and the story. Even into the present day, the word and the image both provide highly influential ways to represent the future within human consciousness (Shlain, 1998).

Certain fundamental themes regarding the nature and meaning of life emerge in early myths and many of these themes are connected with humanity's growing understanding of time and the future. The struggle and oscillation of order and chaos, of creation and destruction, of love and hate, and good and evil are common themes in numerous early myths across the globe. Anchored by such complementary or bipolar archetypal themes, the cyclic theory of time emerges as an extremely influential and pervasive view, showing up in Egyptian, Taoist, Judaic, and Indian religion and myth. Time, both past and future, is conceptualized as a circle and a harmonious balancing of complementary forces. The Taoist *Yin-yang* is perhaps the paradigm case of this

view of reality and time; everything in reality is conceptualized in terms of balanced complements (or reciprocities) – male and female, light and darkness, heaven and earth – and time is an orderly process of unending oscillation between complements. The future repeats the past, and the future can be foretold, but for the purpose of living harmoniously with the flow of the *Tao*, rather than to control it. Yet there is also the alternative idea, from as early on in the history of human civilization as ancient Babylonia and Zoroastrianism, that cosmic and human history has a progressive dimension, often represented as either the triumph of order over chaos or good over evil. This is the beginning of the linear view of time – of history and the future. Time is a line, rather than a circle. Further, in the future, humans will need to play an active role in the realization of this progressive movement to time. We are not seen as passive in the "shape of things to come" (Lombardo, 2006a, pp. 157-185).

In modern psychology, significant research has been devoted to the oppositional attitudes of optimism and pessimism (Seligman, 1998). As Polak (1973) has argued, human civilizations thrive when they embrace a positive or progressive vision of their future (optimism), and human civilizations decline when visions of the future become pessimistic or apathetic. Basically these two attitudes, of optimism and pessimism, derive from the basic human emotions of hope (optimism) and fear (pessimism) regarding the future. Connected to the attitudes of optimism and pessimism are the psychological attributes of self-efficacy and perceived helplessness. Both individuals and cultures are optimistic about the future if they believe they have power in guiding it or the gods are helping them, and are pessimistic and depressed about the future if they feel helpless or the gods are against them (Lombardo, 2006a, pp. 19-23, 48-50).

Mythic narratives of the future also contained an ethical or moral dimension. The struggle of good and evil is central to the Zoroastrian story of human history and the future and all major Western religions (Judaism, Christianity, and Islam) and associated narratives echo this moral interpretation of the unfolding of history. Zoroastrianism probably influenced all these Western religions, directly or indirectly (Noss, 1999). In general, most mythic narratives identified various virtues and ethical values to be emulated and followed in life, and these virtues and values provided a prescriptive direction for how to live and realize what was best in life, in the present and in the future. Through the actions of mythic (archetypal) figures represented in these stories, ideals of thought, emotion, and behavior were illustrated and supported. The normative or prescriptive dimension of future consciousness that began with the mythic narrative continues up through the present day, and is also tied to the basic human emotion of hope, for what we hope for frequently defines what we believe is the good.

A key normative principle that emerged in ancient times was reciprocity. Reciprocity served as the foundation for the idea of justice, as well as trade and ethical behavior within or between social groups. In the East, the idea is central to both Confucian and Taoist philosophy. Reciprocity is connected with the idea of cooperation. Robert Wright (2000) argues that the ongoing creation of mutually beneficial transactions – cooperation that leads to a positive reciprocity - defines the fundamental progressive direction within the growth of human civilizations. Howard Bloom (2000) argues that reciprocity (which includes the principle of justice) and conquest are the two fundamental forces that have shaped human history. Bringing the psychology of

the sexes into this discussion, Riane Eisler (1987, 1995) contends that early goddess-centered cultures were partnership societies emphasizing cooperation, but these goddess-centered cultures were replaced by male centered god cultures that emphasized domination, war, and competition. Humans appear to have a long history of violence and conquest dating back tens of thousands of years, at least coincident, if not prior to the emergence of goddess cultures. All told though, the mythic male and female archetypes seem to represent two key features of human psychology that have strongly influenced the nature of future consciousness and more generally the structure and dynamics of human affairs. Is the future realized through competition, violence, and domination or is the future realized through cooperation, nurturance, and partnership? These two mindsets and approaches to life have vied with each other throughout human history in determining the course of the future. Interestingly the idea of reciprocity figures in both approaches to life, for "an eye for an eye" – retributive justice – embodies the idea of reciprocity as well.

Although ideals regarding life and the future initially were represented in mythic or narrative form, another mode of human understanding became increasingly powerful in ancient times and provided an alternative way to represent ethical values, as well as the nature of reality and human existence. This new mode of thinking was the abstract, theoretic, and logical/rational. One can observe the beginnings and eventual ascendancy of this way of thinking in ancient Chinese, Indian, and Judaic writings, but it is the ancient Greeks who are most closely associated with bringing this cognitive capacity to full fruition. Instead of describing reality in terms of narratives populated with personified beings, the abstract theoretic mode of thinking describes reality in terms of general principles and ideas that are logically or conceptually connected rather than linked through narrative and drama. Abstract ethical thinking shows up in Hammurabi's Code and Moses' Ten Commandments, but in the ancient Greeks we find highly developed abstract philosophies, incorporating ethics, ontology and epistemology, and the beginnings of science, in numerous writers, such as Parmenides, Plato, Aristotle, and Pythagoras (Lombardo, 2006a, pp. 185-204).

The line though between the pre-Greek and the mythic versus the Greek and the rational/abstract should not be drawn too sharply, for at least two reasons. First, as the above discussion illustrated, there were clearly theoretic and abstract qualities embedded in mythic-religious thinking. Aside from the theoretic qualities connected with Taoist philosophy, early Hinduism, as expressed within both the *Rig-Veda* and the *Upanishads*, exhibits a strong abstract dimension within its cosmology and theory of reality. Second, early Greek philosophers and scientists were almost certainly influenced by ideas that originated in either ancient Egypt or even the East. The idea of an "eternal one" contained in Parmenides resonates with the Hindu concept of *Brahman*, and the idea that reality is flow, involving an ongoing interaction of "opposites", as espoused by the Greek philosopher Heraclitus, sounds very much like the Taoist *Yin-yang*.

Further, it should be noted that the ancient Greeks were not simply rational beings (but then what humans are?). Human emotion – the passions – figured significantly in Greek life, in art, literature, and social festivals. The classic distinction between the Apollonian and the Dionysian is intended to capture the two sides of the Greek psy-

che. The Apollonian represents the rational side – the world of order and thought – whereas the Dionysian, clearly expressed in the various celebratory activities of ancient Greeks, represents the emotional and passionate side of human life – of personal abandonment – and is often associated with the chaotic and impulsive (Lombardo, 2006a, pp. 185-187). These two modes of experiencing the world, which are not simply Greek but show up in human psychology across the globe, have clearly colored and structured the evolution of future consciousness. For example, in the eighteenth and nineteenth centuries, the successive European philosophical movements of the Enlightenment and Romanticism express, respectively, the Apollonian (rational) and the Dionysian (emotional) approaches to life and to the future. Should reason guide us into tomorrow or should emotion and passion?

Another feature in the evolution of future consciousness in pre-modern times is the development of history as a discipline of study. Myths, of course, contained histories of both humanity and the cosmos, but at least as early as Thucydides, history began to acquire more scientific and abstract qualities. Theories of history emerged, and these theories connected the past with the future. Temporal consciousness was expanded and enriched in both directions away from the present, with a principled and abstract understanding of the past providing a foundation for predicting the future (Lombardo, 2006a, pp. 209-210). (To recall, memory serves future consciousness.) History and the future were, in fact, tied together in both directions. One can conceptualize the future as a consequence of the past, but one can conceptualize the past as guided or directed by "intended future ends." The second mode of thinking is teleological and the Greeks, as well as many other cultures, frequently saw the saga of time as leading to some destined or providentially guided end. The teleological mode of thinking about time shows up both in Eastern and Western histories, philosophies, and myths-religions.

The teleological mindset is clearly present in St. Augustine's vision of the future, where significant events in the past, such as the story of Adam, Eve and the Garden of Eden, and the death and resurrection of Christ pre-figure (point toward) coming events in the future. Human history, according to Augustine, is being guided toward a pre-determined end involving a transformation of the earth and ascension into Heaven of all deserving human souls. Augustine's theory of time is linear and progressive and, although religious and theistic, sets the stage for the secular concept of progress that emerges in the West in modern times (Lombardo, 2006a, pp. 236-241).

Modern History, Evolution, and Science Fiction

The emergence of science in modern times is usually associated with the triumph of rationalism and empiricism over myth and superstition. Science provided a mode of understanding and investigation into reality that, its practitioners and advocates believed, was superior to religion and myth. The principles of rationalism and empiricism, as developed by leaders of the European Enlightenment and the Science Revolution, presumably provided a method for understanding reality (including the past) and predicting and more effectively guiding the future. Beginning with Galileo, teleological explanations of reality were also rejected – for Galileo, the past deter-

mines the future and not vice versa. The philosophers of the Western Enlightenment embraced the concept of progress in time – that the future could be better than the past (according to many of them human history had already demonstrated this positive direction across time) and they believed that the key to maximizing the forward motion of human civilization was through science and reason. Abandoning a religious or mythic foundation for ethics and morals, they sought to find secular ideals and values that could be supported through reason and would provide a normative direction for the future. Utopian visions emerged, such as in Francis Bacon, Condorcet, Marx, and Saint-Simon, which outlined ideal societies that could exist in the future if the principles of science, reason, and secular thinking were followed faithfully (Lombardo, 2006a, pp. 290-339).

Science was a clear expression of the Apollonian mindset in humans – to attempt to understand reality in terms of abstract, theoretical, and logical principles. Within science, the Apollonian was coupled with empiricism – the attempt to understand reality through detailed observation and experimentation. In many respects, the European Enlightenment was a philosophical, political, and social expression of the scientific attitude, with the clear intent of applying it to the future direction of humanity. However, this approach to life ran into opposition and conflict on at least two major fronts. First, the Romantic reaction rejected the supremacy of reason and science as a way to understand and find meaning in life, as well as a way to guide the future. For the Romanticists, science and reason, and their offspring, technology, industry, and social bureaucracy, were leading to a repressive and inhuman future. What the Enlightenment philosophers hoped for as a "brave new world," the Romanticists feared as some dark nightmare or hell on earth (Lombardo, 2006a, pp. 357-375). Secondly, the vision of reality and the future which emerged in Western Europe in modern times was increasingly attacked as being Eurocentric, elitist, and self-serving. Different non-Western cultures around the world, based upon their respective histories and values, had developed alternative views of reality and the future, but the modern West seemed intent upon assimilating everyone into their mindset and way of life regarding the future (Watson, 2005; Nisbet, 1994; Sardar, 1999a).

As noted earlier, humanity (predominately with males) has a long history of war-like behavior, violence, and conquest. This general mindset and mode of behavior is not limited to the West, but shows up pervasively across the globe (Bloom, 1995; Ghiglieri, 1999). Further, the psychology of violence and conquest provides a "dark vein" within the complex tapestry of future consciousness in that conquest through war and violence has a strong future focus to it – the intent is to forcefully direct the future (of others) toward a specific end. Conquest can occur through various ways and not just military violence. There can be economic, political, or cultural competition with the intent to vanquish or assimilate the adversary. The spread of Western culture throughout the modern world over the last two centuries, whether through military might or social indoctrination, has been frequently seen as an attempt to conquer and dominate the minds and behaviors of people around the world. Clearly what is at stake here is what vision (or visions) of the future will control the direction of humanity. I highlight this point, since when I turn to contemporary theories of the future, it is important to see that different contemporary theories exist in a state of competition

with each other. We not only fight over the future through physical violence, we also fight over it at a social and psychological level, attempting to conquer the minds of others through ideas, arguments, promises, economics, and enticing images.

The competitive vision of reality provided another major theme in nineteenth-century Western thinking on progress and the future. First, Adam Smith formulated the basic principles of economic capitalism which promised, at least at a material level, continued progress in the future based on the idea of competitive production and consumer selection of the best products in the marketplace (Lombardo, 2006a, pp. 320-322). Second, the idea of evolution in the natural world emerged as a central idea in science, especially after the publication of Darwin's *The Origin of Species*. Though Darwin also talked about cooperation in nature, the ideas of competition and "survival of the fittest" became more closely associated with his theory. Evolution provided a general scientific theory of progressive change through history that did not depend upon supernatural or mythic forces, and this theory would serve as the foundation and inspiration for numerous perspectives of the future (secular and even religious) of the future in the century and a half ahead up to the present (Lombardo, 2006a, pp. 375-412).

Toward the end of the nineteenth century, a new form of future consciousness exploded on the scene, combining elements of myth, Enlightenment and Romantic philosophy, science, and evolutionary theory. Beginning in the writings of Jules Verne and H. G. Wells, science fiction synthesized the narrative form and archetypal and moral features of myth with the techno-scientific and secular extrapolations of Western thinking. Science fiction was born with an equal mixture of fear and hope regarding the future, bringing both the optimism of science and the Enlightenment and the pessimism of Romanticism regarding the secular and technological promises of the modern West. It was also both Apollonian and Dionysian, weaving abstract and theoretical science together with human passion, adventure, excitement, and terror. Both awe and wonder, as well as fear and trembling, were experienced within science fiction; the future was felt as well as thought and imagined. The future was also personified through the characters of its stories.

Though science fiction is often narrowly identified with technological extrapolation, space travel, aliens, and robots and computers run amuck, as the twentieth century unfolded, with its social, political, and cultural dramas, science fiction evolved into rich and comprehensive story telling about the future, covering all aspects of the future, from science and technology, to psychology and future human evolution, the sexes, society, religion, and the environment. The future of cities, the future of war, the future of love and human relationships, the future of life on the earth, and the future of spirituality, among many other topics, has been fodder for its stories. Science fiction can be seen as thought experiments about the future – "what if" scenarios – but perhaps most centrally, as embodying the new mythology of the future (Lombardo, 2006b).

One key strength of science fiction is the diversity of its visions of the future. There are, of course, both optimistic and pessimistic visions, plus many other ones that do not fit neatly into either category (include the strange, bizarre, and disconcerting). Drawing upon some classics in contemporary science fiction, we also find the

creative invention of innumerable different human societies in the future, such as in Dan Simmons *Hyperion* series (1989, 1990, 1995, 1997); alternative long-term future cosmic scenarios for humanity and the universe, as in Stephen Baxter's *Manifold* trilogy (2000, 2001, 2002); and alien and not-so-alien intelligent species and societies that provide mirrors and points of contrast for our own species, such as in Vernor Vinge's *A Fire Upon the Deep* (1992) and *A Deepness in the Sky* (1999) and Robert's Sawyer's *The Neanderthal Parallax* (2002, 2003a, 2003b). In resonance with the contemporary social theorist and futurist Ashis Nandy who states that it was the literary artist Jules Verne who best predicted the future, the creative artistic license within science fiction supports the invention of a myriad of possible futures – a vast universe of imagination that stretches future consciousness.

Contemporary Theories and Paradigms of the Future

H. G. Wells was also a pivotal starting point for the discipline of future studies. Whereas science fiction approached the future in a narrative form through the medium of fiction, future studies emerged in the twentieth century as an effort to understand the future in non-fictional terms, often incorporating strong elements of theoretical abstraction and approximations to scientific methodology. Future studies is a plurality of voices. "Futurists" may attempt to predict the future – at least identifying possibilities and probabilities. Or they may attempt to identify "preferable futures" bringing the dimension of ethics and values into thinking about the future. Futurists may focus on narrow areas of the future or attempt to provide comprehensive visions. Along the way, futurists have developed a variety of different methods and techniques for generating possibilities, probabilities, alternative scenarios, and preferable images. Among futurists there is ongoing debate regarding how best to think about the future and even whether future studies is a coherent discipline at all. Still, a great deal of study and discussion has ensued, and there are numerous publications and organizations, and both full-blown social movements and a variety of social gatherings and meetings dedicated to trying to understand the future and make the best of it (Lombardo, 2006b).

History, culture, and even politics and business have had a strong impact on the development of future studies. There are classic and highly influential futurist texts such as Wendell Bell's scholarly *Foundations of Future Studies* (1997) and *Futuring* by Ed Cornish (2004), the founding President of the World Society, which adopt a rational, empirical, and scientific perspective, grounded primarily in Western thinking. But there is also Richard Slaughter's (former President of the World Futures Study Federation) *The Knowledge Base of Futures Studies* (1996) that takes a more culturally balanced approach, including contributions from both Western and Non-Western futurists. Edited and published by Ziauddin Sardar, *Rescuing All Our Futures* (1999a) provides a good selection of Non-Western visions on the future, as well as a variety of critiques of futurist thinking in the West. According to Sardar (1999b, 1999c) and other contributors to his volume, the future is being "colonized" by the West and future studies, at least as practiced in the West, is a primary instrument in this colonization. The West dominates thinking and visioning on the future with a single image

and epistemology that emphasizes globalization, prediction (as prescription), technological development, economic growth, and scientific rationality. Through the power of Westernized international corporations and its ubiquitous outreach in advertising, a single, consumerist culture is being propagated and sold to the population of the world. For Sardar, the question is how to open the future to different possibilities, different voices, and different modes of thinking that derive from non-Western cultures that will empower non-Western people to create distinctive and diverse futures for themselves that are not just imitations of the West. Sohail Inayatullah (1999, 2005), in both his contribution to this volume as well as in other writings, reinforces Sardar's arguments and highlights the need to expand and enrich futurist methodology and epistemology, to bring more "depth" into our understanding of the dynamics of history and change, and to broaden our concept of rationality beyond Western notions so as to include intuitive, social, and spiritual elements found in the East. For Inayatullah, we need to envision futures that create "cognitive dissonance" with the present.

Ashis Nandy argues in various publications (1996, 1999, 2006), which includes articles in both Sardar and Slaughter's books, that the West has even constrained what constitutes acceptable "dissent", and that inspired by both the artist and the shaman, citizens of the world need to open their minds to "strange voices" (relative to the status quo) and attempt to "subvert the inevitable future." As Nandy points out, everyone (not just futurists) needs to think about the future and accept responsibility for creating his or her own future; he notes not only a disconcerting silence from citizens around the world regarding the future, but also a kind of surrender of their creative power over the future, a passive inertia – clearly signifying an absence of future consciousness.

Much of the twentieth century can be described as an ongoing, multi-faceted conflict over the future; the various battles have not simply been intellectual debates, but have been fought and continue to be waged at social, economic, physical, and military levels as well. In both the East and the West, there were strong and often militant and violent efforts to indoctrinate and subjugate huge numbers of diverse people to various political ideologies and futurist visions, such as occurred with the rise of German Nazism and Soviet Communism. There was the Cold War, fought on many fronts, military, cultural, and political, between Western capitalism and Soviet Communism, over which form of social and economic order and way of thinking would rule the world in the future. Since mid-century, we have seen: The rise of feminism challenging the masculine-dominated social and economic world order, the intensification of conflict between Westernization with its accompanying embrace of globalization and non-Western indigenous cultures, the growing battle between those who support technological and economic development as our salvation for the future versus those who are concerned with protecting our environment and realizing a sustainable society, and, as one last example, the emergence of Post-Modernism, which in embracing relativism, rejects any single system of values and truth. In general, throughout the twentieth century and into the twenty-first, many different theories and paradigms of the future and consequent social movements have emerged (often reflecting themes and trends that we can trace back through human history) that provide alternative and often competing viewpoints and ways of life for how to approach the future. The fundamental

issues being contested are not simply over truth and preferable directions for the future, but over social power, individual autonomy, mutual respect, and other basic values of life (Lombardo, 2006b).

One fundamental clash of perspectives revolves around change and transformation versus either stability (preservation of the status quo) or a return to some envisioned ideal past - what Virginia Postrel (1999) refers to as the conflict between dynamism and stasis. This is a complex issue since a social movement may see itself as advocating for change, yet from a competing perspective it may appear that this very movement is actually supporting the preservation of the status quo. As an example, advocates of the Western model of progress see themselves as supporting change °V in this case continued economic growth and development – yet from the perspective of naturalistic and ecologically minded individuals, advocates of economic progress are simply trying to preserve the status quo, whereas the ecologically minded see themselves as supporting a new way of conceptualizing the relationship (non-exploitive and non-dualistic) between human society and nature. Conversely, from the perspective of economic progress theorists, the naturalistic perspective is often seen as a retreat to some idealized past. Religious fundamentalists, and what Paul Ray (2000) refers to as "Heartlanders" in the United States, can also be seen as supporting a return to the past (or a preservation of time-honored ways). Such perspectives are frequently seen as at odds with modernists, secularists, and evolutionists who advocate for continued economic and technological growth, and/or see change determined by naturalistic and evolutionary forces without any directional guidance from God. Hence, both sides can see themselves as supporting change and the other side as stagnant.

Advocates of either the Western idea of progress or the scientific theory of evolution see themselves as embracing growth and change, and there are innumerable versions and mixtures of these points of view. Beginning with Alvin Toffler (1971, 1980, 1990), and continuing through James Gleick (1999) and Ray Kurzweil (1999, 2005), there are those who believe that social and technological change and/or evolution is accelerating. Writers like Barbara Marx Hubbard (1998), John Stewart (2000), and Mihaly Csikszentmihalyi (1993) believe that humanity is beginning to gain conscious (or intentional) control of evolution and this process should continue to grow in the future. There are innumerable different theories of evolution, as a biological, cultural, and even cosmic process, and interpretations of how the general principle applies to humanity's future. Thinking on evolution is in evolution, and some would say that evolution itself is evolving. As noted above, the ideal of progress has been subjected to varied critiques since the nineteenth century and consequently, in response to these criticisms, the idea of progress has also evolved, with alternative contemporary views of what constitutes real progress. In recent decades, people have increasingly realized the importance of sustainability, as a critical determining factor, in any viable conception of progress. Additionally, humanistic and quality of life values have become more central in some theories of progress (Lombardo, 2006b, pp. 260-267; 271-277).

The ideas of evolution and progress can even take a spiritual form, such as in the writings of the Hindu philosopher and Yoga master, Sri Aurobindo. Aurobindo weaves together evolution with Hinduism in a holistic system, rejecting both the other-worldliness of Hinduism and the materialistic interpretations of evolution. For Aurobindo,

the entire cosmos is evolutionary and the central direction of evolution is the liberation of consciousness and the realization of the divine within the natural world. He proposes that through a series of evolutionary stages, the history of the universe, life, mind, and human society is progressively leading toward this realization. Starting from the Hindu concept of Brahman - the absolute eternal conscious oneness and ultimate self which underlies all reality - Aurobindo believes that humanity should consciously guide its evolution toward communion and identification with this divine self and consciousness. In doing so, identification with the conscious ego needs to be overcome.

For Aurobindo, our species is a transitional form, existing at a certain level of mentality and consciousness which will be transcended in the future. He foresees multiple levels of conscious evolution from where we are today. In fact, Aurobindo believed all of earthly reality, including our physical environment and our physical bodies, would be progressively transformed into something higher as we spiritually evolve. Evolution is multi-dimensional (body, mind, and spirit) and holistic. Our future spiritual evolution will take place both individually and collectively and, in the process, human society and its institutions will be transformed as well. Through a psychologically comprehensive and disciplined practice of "Integral Yoga" humanity can apprehend the simultaneous diversity and unity of all things, and literally bring heaven to earth. Interestingly, Aurobindo developed an intense collaborative partnership with a woman, "the Mother", and described their intimate spiritual symbiosis as "one consciousness" – intimating at a higher form of human existence that he and the Mother realized on their personal evolutionary quest (Sri Aurobindo Information; Sri Aurobindo Wikipedia; Sri Aurobindo Society; Hamilton, 2002).

The antithesis of evolution, progress, and sustainability is decline, catastrophe, and collapse. There are various futurist scenarios that anticipate a downward turn for humanity, if not total extinction. One can describe these as visions of fear, whether based on religious, cultural, or scientific grounds. We can destroy the environment, exterminate ourselves with atomic or bioengineered weapons, fall into a socially barbaric and destructive state, or degenerate into a culturally and intellectually shallow and empty condition such as in Huxley's *Brave New World* (Lombardo, 2006b, pp. 277-280). Such fearful and pessimistic apprehensions can play a positive role in our thinking about the future for they add the necessary elements of caution and realism; as J. T. Fraser said, "Nightmares are dreams whose usefulness is to keep us on our toes."

Scientific and technological perspectives are highly influential in contemporary thinking on the future. Such theories emphasize a number of themes: Information and computer technology, where computers and the Internet will presumably revolutionize human civilization and everyday human life – computers may pass us by in the predicted "technological singularity"; biotechnology and how we will transform both ourselves and other life forms through genetic engineering; robots and how we will soon have numerous intelligent and perhaps sentient mechanical servants caring for all our fundamental needs in life; nanotechnology that will transform our material foundations; and lastly, space technology and exploration, where humanity will become a cosmic presence spreading throughout the galaxies. All of these areas of science and

technology can be seen as interwoven, the developments in each area positively contributing to developments in other areas. There are many who believe that continued technological growth will totally and radically transform all aspects of human life and society for the better. Within this mindset, future consciousness is optimistic and rife with technological images (Lombardo, 2006b, pp. 282-299).

Technological theories of growth are often coupled with economic and materialist theories of growth and progress, since the driving engine behind economic growth is frequently seen as technological innovation. Further, technological theories of the future highlight the physical dimension of human reality while economic theories of progress often equate a better quality of life in the future with increased material wealth, goods and products. Hence, one can contrast those futurist visions that emphasize the physical realm and material evolution with those that emphasize psychological or spiritual growth. And then there are those views that attempt to integrate the two perspectives (Lombardo, 2006b, pp. 325-332).

Optimistic economic and technological visions are challenged on numerous fronts. For one, naturalistic and ecological perspectives object to the focus on the physical transformation of the environment, when it appears that the transformation is damaging to nature, cutting humanity off from the value of nature, or treating nature as simply a means toward some human end. Ecological thinking highlights the holistic quality of reality, where everything is seen as interdependent – humanity must envision a future that respects all of nature and not just simply the human dimension. And, as noted earlier, non-Western futurists have criticized the technological – economic vision as a predominately Western ideal intent on monopolizing and controlling the future for all of humanity (Lombardo, 2006b, pp. 299-302).

Psychological and psycho-social theories also frequently go in a very different direction from economic and technological views of the future. Instead of focusing on the external physical factors of human life, psychological theories highlight the inner mental reality of people or the interpersonal relationships between people in thinking about the future. Positive psychology attempts to identify those character traits or virtues that should be practiced and strengthened to create heightened human happiness and well being in the future (Seligman, 2002); creativity and cognitive enhancement perspectives emphasize strengthening the constructive powers of the human mind (Csikszentmihalyi, 1996); Riane Eisler (1987, 1995) discusses how to change gender identity, interpersonal relationships, and social power from a dominator to a partnership mentality so as to transform the family, human organizations and society; and Margaret Wheatley (1992) applies contemporary scientific concepts, such as chaos, complexity, and quantum theory, to the future of business organizations and personal development. Transhumanists combine the technological with the psychological, arguing that the future evolution of the human mind will be facilitated through technological enhancements to the human brain, and human biology in general (Lombardo, 2006b, pp. 292-293).

In thinking about the future one can also focus on the social dimension of humanity. There are a great many different social theories about the future, often in contradiction to each other. One central theme among many theories is globalization – the world is integrating economically, politically, and culturally (Lombardo, 2006b, pp.

315-321). Writers, such as Thomas Friedman (2005) and Gregory Stock (1993) see this integration being facilitated by technology and, in particular, the computer networking of the world. Friedman and Stock, as well as many others, see globalization as a positive development. But there are writers such as Samuel Huntington (1996) who see conflict and cultural division within the world of tomorrow and Richard Florida (2002, 2005) who observes a growing economic disparity among cultures and regions of the globe. Robert Putnam (2000) sees Americans, at least, "bowling alone," having lost a sense of connectedness and community, and Benjamin Barber (1995, 2001) identifies a fundamental clash between the homogenizing and dominating efforts of big corporate business and the reactionary regional movements to preserve autonomy and uniqueness. Postmodern philosophy argues that there are innumerable cultural, as well as individual perspectives, and there is no single point of view or way of life that can claim absolute authority or legitimacy; human society is an irreducible pluralism (Best and Kellner, 1997). Non-Western thinkers grapple with the social implications of futurist possibilities as well. Though not supporting philosophical relativism, Inayatullah (2005) does advocate for a true "conversation of civilizations" and authentic and inclusive global governance, which builds on "foundational values" and a sense of common humanity, and looks toward the future rather than retreating into an idealized past. Sardar (2005) argues for a dynamic growing "garden of identities" – a "plethora" of multiple, transforming ways to be human (both collectively and individually) where there is mutual support and appreciation among people rather than antagonistic and divisive opposition. In general, unity versus diversity is a basic overarching and controversial theme within social future consciousness.

Developing out of the great religious traditions, there is a variety of religious and spiritual perspectives on the future. I have already briefly discussed religious fundamentalism and at more length, Aurobindo's evolutionary Hinduism. One can make a fundamental distinction between Western views (Judaism, Christianity, and Islam), all of which derive off of a Zoroastrianism vision of the struggle of good and evil with the eventual triumph of the good, and Eastern views, such as Hinduism, Buddhism, and Taoism, which, in general, have a more cyclical view of time and the future (Lombardo, 2006b, pp. 356-361). In addition to these more traditional and time-honored visions of the future, the growth of individualism, coupled with the accessibility of diverse religions to people around the world, has spawned New Age spirituality, through which people pursue individual spiritual pathways into the future, informed by and selectively borrowing from all the various religions, as well as mystical and indigenous traditions. Further, New Age tries to combine the spiritual-religious with the scientific, ecological, and psychological, a trend that is seen in other contemporary visions that have a religious or spiritual component and which also attempt to integrate the scientific, as well as the evolutionary, into their visions of the future (Lombardo, 2006b, pp. 356-363). As one example, the Omega Point theory as espoused originally by Teilhard de Chardin (1959) and more recently Frank Tipler (1994, 2007), pulls together the ideas of God and evolution into a single unified framework. Within this mindset, future consciousness is cosmic, evolutionary, and optimistic.

There are quite a few perspectives on the future that provide integrative visions, bringing together scientific, technological, ecological, psycho-social, and religious-spiritual ideas into comprehensive theories of the future. Within such mindsets, future consciousness is multi-dimensional and synthetic. Such integrative theories frequently also attempt to synthesize Eastern and Western perspectives. The Integral Culture movement and Ken Wilber's Integral Philosophy pull together holistic and evolutionary themes from contemporary science, as well as elements of Eastern and Western thought, that are applied to human relations, society, humans and nature, and spirituality (Lombardo, 2006b, pp. 368-373). Spiral Dynamics provides an evolutionary and historical perspective on the development of social organizations and moral belief systems up to the present and into the future, and attempts to "explain" how many of the different views on the future fit together as developmental stages in human thinking and behavior (Lombardo, 2006b, pp. 373-376). Eamon Kelly (2006) describes contemporary human society in terms of a set of fundamental "dynamic tensions" that cover ecological, political, economic, technological, and religious issues. Further, he contrasts Eastern versus Western logic in describing how we should approach the future. (In some important ways, Kelly is a Taoist.) Walter Truett Anderson, in a series of books written over the last fifteen years, has attempted to weave together issues of culture, epistemology, and philosophy (*Reality Isn't What it Used To Be*, 1990); history, technology, and human psychology (*The Future of the Self*, 1997); evolution, technology, and ecology (*Evolution Isn't What It Used To Be*, 1996); globalization, technology, and ecology (*All Connected Now*, 2001); and philosophy, science, and human enlightenment (*The Next Enlightenment*, 2003) into an exceedingly rich perspective on the past, the present, and the future. Critical of profit motivated capitalism, hedonistic materialism, and religious dogma, Prabhat Ranjan Sarkar developed a Spiritual or Neohumanism, bringing in spiritual, economic, social, scientific, ecological, and moral themes to create a long term view of human progress; progress is the evolution of consciousness and movement directed toward the well-being of everyone. Basing his philosophy on love and respect for all things and the central human ideals of freedom, equality, and justice, Sarkar proposed that the physical, mental, and spiritual realms of humanity all need to be addressed in a vision of the future. A new social order – a "moral society" - is needed for the future, emphasizing cooperation over competition, collective welfare over profit, and transcendent ideals over self-interest (Proutist Universal; Ananda Marga; Inayatullah, 1999, 2005). And finally, as a common theme that runs through many works, the idea of a New (or Second) Enlightenment, reflecting an ethical, psychological, and social transformation in humanity, has been proposed as a hopeful and preferable futurist vision for the world. In reviewing the principles espoused in New Enlightenment writings, as well as the related literature on contemporary thinking on wisdom, it is highly noteworthy that Eastern as well as Western philosophical themes are present (Lombardo, 2006b, pp. 386-391; Nisbett, 2003).

Conclusion: The Future Evolution of Future Consciousness

In reviewing the evolution of future consciousness, it is clear that different psychological capacities and modes of understanding have emerged within our history relevant to thinking about and understanding the future. Different belief systems and values have also developed through the varied and intertwining histories of myth, religion, philosophy, social theory, science, science fiction, and future studies. Within the last century, a great plurality of theories and paradigms has emerged, often having origins in the past, and these different viewpoints and approaches exist in a complex array of varied alliances, competitive relationships, and conflicting oppositions. Different themes or areas of speculation get highlighted and there are numerous theories as well that attempt to synthesize into comprehensive pictures these different themes and even, at times, opposing points of view. I envision that this intricate tapestry and fusion of futurist thinking will continue into the future and, in fact, will evolve or develop further. Although there are expressed concerns, given the fast paced, stress and anxiety-ridden, quick fix, attention-deficit disordered world we live in, that human temporal consciousness is actually narrowing more toward the immediate here and now, I think that dialogue, debate, conversation, and even "war" over the future will not lesson, but probably intensify. This is part of the ongoing evolution of future consciousness. The more complex the world becomes, the more we need future consciousness to evolve (Lombardo, 2006a. pp. 61-67).

Yet, in spite of this great diversity of thinking on the future, I would suggest that an integrative understanding of optimal future consciousness can be captured in a revitalized and updated conception of the virtue of wisdom. The pursuit of wisdom has a long history across all the main cultures of the globe and various defining qualities of this revered human capacity have been identified and studied; for example, the ability to see the big picture and the ability to apply knowledge to the challenges of life. There has recently been a resurgence of interest in the systematic study of wisdom, and based on this recent research and thinking, I propose that wisdom represents the highest form of future consciousness. To understand why, consider the following definition: Wisdom can be defined as the continually evolving capacity to grasp the big picture of life, of what is important and meaningful, and, guided by ethics and virtue, the ability to apply this understanding to enhance the well being of life, both for oneself and others. Wisdom is holistic and ethically informed knowledge applied to the betterment of life. Also, as I have described elsewhere, a contemporary and updated understanding of wisdom relevant to the challenges and issues facing humanity in the future should incorporate Eastern and Western modes of understanding, recent advances in science and philosophy, as well as educational theory and human psychology, and an integrative balance of scientific and spiritual insights. Wisdom is a highly expansive and integrative human capacity and virtue. The pursuit, development, and ongoing application of wisdom can serve as the central ideal in the New Enlightenment, putting an ethically informed and psychologically enhanced expression of future consciousness at the forefront of our collective journey into the future (Sternberg, 1990; Macdonald, 1996, 2004; Lombardo, 2006c).

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