

# Some Theories of Social Change for Futures Practitioners

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## Abstract

*This paper describes how a sampling of theories from the fields of physics, chemistry, biology and psychology help inform the work of a practicing futurist and offer futures studies a basis for viewing a future beyond images arising from history alone. Physics, chemistry and biology offer theories that are particularly helpful for the more objective forecasts describing future technologies and systems. Psychology offers theories for addressing the more subjective changes in society, including values and beliefs. These theories help shape methods that make the future useful to a diverse clientele. After describing different theories from multiple fields the author offers a vision of the future that emerges as an imagined 21<sup>st</sup> century.*

**Keywords:** mechanics, relativity, objective, subjective mind, complexity, evolution, opposed complementarity, psychological types, vision

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## Theory for Futures Studies

Theories matter. Theories derive from perspectives and perspectives matter. For futurists theories direct conjecture, open hidden possibilities, provide explanations and organize views about change while supporting methods for engaging people with futures. This article takes readers on a journey through various theoretical spaces that open the door to a beautiful future which cannot be seen by looking only in the rear-view mirror of history. This author started a journey through theories in different fields with a challenge from Professor James Dator to his graduate students in 1981 at the University of Hawaii. Dator told his students to develop theories of change as they honed their skills in futures methods. My work as a futurist has long been bolstered by theories drawn from many fields of study, some of which are included in this article. The search for new possibilities combines theory with history because history does not simply repeat itself. The theories touched on in this article come from physics, chemistry, biology and psychology. Others in commu-

nications, sociology and literary criticism are also useful, but beyond the scope of this article. For the author's work theories form an open-ended learning process through which images of change emerge. The future envisioned at the end of this paper may only be comprehensible or apprehensible through the lenses of many very different theories leading to an imagined future that is far more hopeful than most people can believe is likely or even plausible based on the history they have lived or read about.

### **Theory from Physical Sciences: Mechanics to Relativity**

The so called "hard" sciences of physics and chemistry contribute particularly to an objective view of our material world. The march of ideas from simpler explanations about this world to more complex understandings of nature is especially evident in physics. For example, Sir Isaac Newton's stunning calculus showed how the mechanics of cause and effect could explain planetary motion and make accurate predictions which have been the mainstay to this day for transportation both on and off this planet, as well as for the dominant governance systems operating on the planet over the past two hundred years (Dator, 2007). The boundary conditions within which Newton's truths operate only became clear in the early 20th century. Then the more complex truth of Albert Einstein's theory offered an understanding of the relationship between time and space that overturns common perceptions that time is objectively the same for us all and separate from space (Einstein and Infeld). Quantum physics further overturned long held assumptions about nature and the objective perspective (Shlain, 1991).

The challenge of consulting futurists working within an organizational context often begins with the attempt to get people to leave their strongly held views of reality which are reinforced by cultures that may impose invisible constraints on new thinking. The physics of relativity and quantum are so difficult for people to comprehend that the theories offer a lever to open minds so they allow new possibilities to enter into individual and collective thinking. For example, when the Army Medical Department (AMEDD) contracted with the Institute for Alternative Futures (IAF) to conduct a futures workshop for over forty officers in order to make futures thinking available, the concept of time from Einstein became the basis for a new IAF forecast that younger generations will interact differently with time than previous generations. Our new technologies could be teaching young people in particular to more than just multi-task as they work with various types of time – synchronous, asynchronous, milliseconds and nanoseconds – but to actually change the neurological structures in young brains (2008 & 2009).

This forecast and a dozen others helped workshop participants open their thinking beyond the ordinary assumptions that defined AMEDD approaches, leading them to explore implications of change and make recommendations to their commands for more futures capability within the Army.

A deeper lesson for futurists comes from the story about how Einstein's theory changed minds, overturning implicit and comfortable assumptions about the predictable nature of reality. One of the most important challenges we face as futurists is to open minds in cultures that rely on the comfortable assumption that the recent past

will largely define the future. As Dator describes the thinking of futurists: "We have concluded (at least I have) that the future is fundamentally plural and open, an arena of possibilities...and not of discernable inevitabilities" (Dator, 1998). Our challenge is to introduce this conclusion in a way that changes minds and has futurists as beloved as Einstein was in the eyes of a public (Issacson, 2007) that may not fully understand how we think or what we do. Of course the challenge to change minds and be liked demands theory that goes beyond objective reality to explore the subjective mind, but first it is worth understanding how systems change in nature.

## **Complexity Sciences**

The shift from a future caused by the past to a more open arena gained further scientific support from Ilya Prigogine, who won the 1977 Nobel Prize in Chemistry. His theory provides a scientific basis for indeterminacy (1980). Now scientists from various disciplines explain phenomena beyond a simple cause and effect mechanism, including both chance and chaos that lead to the emergence of complexity (Gleick, 1987; Waldrop, 1992). A number of principles from chaos and complexity theory are especially important for futures. First is that closed systems, which follow the laws of classical physics exist alongside open systems in which entropy can lead not only to chaos, but also to the emergence of higher order systems. Second is that highly complex systems are sensitive to initial conditions such that a small variation can be amplified into a large change. Both of these principles are important for futurists forecasting evolution and human society.

For example, chaos and complexity theory helped IAF organize a "Health Systems Design Workshop" in 1994 that sought to use concepts drawn from the chaos literature. We had people working in healthcare bring multiple perspectives together to address healthcare as a complex, open and evolving system. At the time, the dominant metaphor describing the healthcare system was a balloon – a closed system that responded to pushes for change by pushing out a deformity elsewhere in the system. There seemed to be no way for people to comprehend the totality of the system. The workshop introduced the concepts of feedback, resiliency, self-organization, evolution and complexity along with a vision for healthcare that all people agreed would be better. Participants were able to identify progressive changes to align key stakeholders, though they also saw potential for regressive moves cascading toward wickedly complicated forms (National Pharmaceutical Council, 1995). While claiming no great success in bringing healthy change to healthcare, the workshop certainly introduced a profound change in my own thinking that inspires my work to this day.

## **Evolution**

Notions of evolution first emerged in biology with the theory Darwin proposed. This work provided "the central theory of biology" for over a century though there is no theoretical biology guiding the reductionist attempts to describe life in such areas as molecular and cellular biology nor is Darwin's theory organizing the nascent quest for a "computational biology" (Noble, 2002, p.7). Yet evolution does invite a long

view from the beginning of time to look objectively at the processes in nature, which leads as well to a new subjective view of humans. Jonas Salk presented this view by contending that from the moment of creation in the "Big Bang" the principle drive for evolution has been "opposed complementarity" which moves between opposites, such as the past and the future. The initial complementarity was in the opposition of non-existence and existence, which then moved to the energy-mass dualism from which came the proton-electron dualism and then the genetic-somatic cell dualism. Evolution does not resolve the opposition of such dualism, but works between the poles. In a similar way futurists work between the poles of currently perceived reality and a vision of an idealized future. The method of creating and holding a tension between opposites is as much a part of developing a change process in an organization as it is a part of evolution, and invites us to create the future collectively, which is the wisdom of Salk.

*I am convinced that, although we cannot predict the future, with understanding Man [sic] can, to a considerable degree, influence the course of coming events in his favor. This is based upon the evidence that a new transformation is occurring in the circumstances of human life<sup>o</sup>Xnew in the history of man and of the planet – to suggest that Man's past performance should not be taken as the only basis for judging his future (1973, p.x).*

Salk's understanding of the underlying pattern in human evolution is consistent with the notion that even in chaos strange attractors may guide evolution to higher orders of complexity. He forecast that the demographic growth of the 20<sup>th</sup> and 21<sup>st</sup> century would create an inflection point that would guide us into a new value proposition that no longer makes growth our central concern as a species. By recognizing deeply held values and projecting them into the future in order to form a tension, or opposed complementarity, with today's perceived reality futurists can employ a method that is consistent with shaping evolution.<sup>1</sup> This is the method IAF calls aspirational futures. Our experience with the method shows that while most groups seek to resolve the tension, those that hold the tension prove more creative and capable when it comes to strategy for shaping a preferred future.

The idea that evolution shapes the future is, as futurist and scholar Sohail Inayatullah recognizes, widely upheld in futures studies (Inayatullah, 2008). Teilhard de Chardin first recognized the possibility that evolution would continue toward a more complex human intelligence, ultimately creating a unified mind capable of greater appreciation of God (1959).

This image offers an interpretation of the phenomenon of the World Wide Web and the thrust of globalization: the bi-polar world has become a multi-polar, networked society. To go further into the study of the human mind that has yielded some of the richest theory for futurists to mine, let's turn to C.G. Jung, whose work has guided much of my exploration of the inner world and the collective mind.

## **Theories of the Mind: A Subjective Introduction to the Field**

Long after reading Teilhard de Chardin my foray into psychological theory started with an inappropriate joke – probably not a surprise to those who know me. In the mid-1980s I flew to a client company to sell a project on the future of sales automation, and was just at the point of closing the sale with a team of executives when I made a wisecrack that, the moment it left my lips and registered on their faces, I knew killed the sale. Chagrined I went back to my hotel room and asked myself. "Where did that come from?" Not long afterward an acquaintance recommended I read Carl Jung's work, and I discovered that his theory offered insight into the unconscious source of my bad sense of humor, and in addition gave me a window on the future and a guide to the personality and cultures I encounter as a professional futurist. I was struck in particular by a passage of Jung's:

*The discovery that the unconscious is no mere repository of the past, but is also full of germs of future psychic situations and ideas, led me to my own new approach to psychology. A great deal of controversial discussion has arisen around this point. But it is a fact that, in addition to memories from a long-distant conscious past, completely new thoughts and creative ideas can also present themselves from the unconscious – thoughts and ideas that have never been conscious before. They grow up from the dark depths of the mind like a lotus and form a most important part of the subliminal psyche (1968, p.25).*

## **Introduction to Psychological Type Preferences**

Without knowing it I had already been indirectly introduced to Jung's theory when I joined IAF in 1982 and Clem Bezold suggested I read about the Myers-Briggs Type Indicator (MBTI). Early in the 20<sup>th</sup> century Katherine Briggs devised a personality typology from literature, and she subsequently realized Jung recognized the same types she had identified. Katherine worked with her daughter Isabel Briggs-Myers to devise the MBTI instruments in order to test and popularize Jung's theory. Futurists should be grateful.

Jung's theory about innate personality types emerged from his traumatic split with Sigmund Freud over a dream interpretation, Jung's theory of the collective unconscious (Kerr, 1994). Out of his struggle to understand his differences with Freud, Jung identified two fundamental psychological functions and an innate preference for either the inner world of introversion or the outer world of extraversion (1971: p.452 & 535). Each of the functions has two forms that are "opposed complementarities". One is most commonly preferred by futurists, and that is the form of perception Jung called intuition, and described as "instinctive apprehension" (1971: pp.453-4) which prefers to perceive the whole and look to the future.

Those with the opposite preference, called sensing or sensation (1971: p.461), would rather look at the parts as they are in the present. My own preferences (ENFP) start with extraverted intuition which is highly oriented to the future as perceived in the outer world. Much of my learning as a futurist has been from helping clients with an opposite preference for highly detailed, fact-based views. They often find the future

difficult to comprehend. While I am fascinated by patterns of change – trends leading to forecasts and scenarios – they are more comfortable in today's world. So understanding the difference between futurists and their complementary opposite "nowists" has proven important to my clients.<sup>2</sup> Futurists cannot afford to have the kind of split with their clients that Jung and Freud had, so understanding type differences are important to help sustain futures in a society generally more oriented to the past or present.

While the modal perceiving-function type for futurists is certain to be the intuitive preference, as it is at IAF, the judgment-function type function is either "thinking" or "feeling". The thinking preference for objective logics to determine what is true is widely shared among futurists. It shows up especially in the ability to anticipate technological change and understand complex systems. The feeling preference for subjective values and belief shows up among futurists focusing more on social, cultural and political change. There is an interesting tendency for objective thinking to be the more masculine preference while the feeling preference tends to be more feminine. Psychological health for Jung was the movement toward wholeness from the initial conditions of the innate psychological preferences (1961). For futurists this means both integrating the sometimes unconscious forms of judgment and relating concepts of the future to the concrete specifics of today. The MBTI is sometimes used to chart healthy psychological growth for individuals from the conscious ego structures defined by the initial conditions of inborn preferences into the unconscious functions that were repressed during ego formation. Many MBTI practitioners also use the typology to address the collective psyche of an organization, profession or even a country.

My learning about MBTI helps me approach audiences, clients and individual conversations with an understanding that others may prefer different ways to know the future from my own. Practically speaking, an audience preference can be predicted by looking at MBTI data on professions. I can also recognize verbal cues that suggest the need to work beyond my egocentrically typical approach to meet the needs of others. Without this method I'd be at risk for repeating a memorably embarrassing talk given to a meeting of community pharmacists nearly twenty years ago. Five minutes into the speech a few people in the audience were riveted to their seats, eagerly awaiting my next idea. Almost two hundred other pharmacists sat deathly bored, looking at their watches unable to believe so little time had passed since the speech began. After all these years I still remember a comment on one of the damning evaluation sheets: "Just what planet was he talking about?" Subsequent research taught me that at the time the modal type for community pharmacists was introverted, sensing, thinking and judging – opposite to my own. Today I would know to use more pregnant pauses, sequences of facts and objectively stated conclusions to help such an audience find the relevance of the ideas on planet Earth.

An understanding of personality preference type supports multiple methods for design and facilitation with groups when working on the future. Some techniques lend themselves to particular types, which often constitute the dominant preferences in a profession or organization, while others work for any group. For example, almost any group will be composed of both extroverts and introverts. So when conducting a

brainstorm, it works well to level the field by asking people to take a minute to write down ideas first, which provides time for those who prefer to think before they speak to state their ideas. Otherwise it is often the case that discussions are largely shaped by those extroverts who speak first, sometimes leaving the ideas that have been thought through entirely missing from the brainstorm. Other techniques may be shaped specifically for a type found to be most dominant in a group. For example, sales groups and product teams often make extroverted feeling and sensing the dominant preference, which makes simulations and role playing an effective method for them to work with futures.

## **Developmental Psychology Theories**

Over recent years many developmental psychologists have built upon the early understanding from Jung. Many different psychologists have contributed to the theory of developmental psychology, but futurists are most familiar with Don Beck's and Christopher Cowan's efforts to promote the importance of the "Emergent Cyclic Levels of Existence Theory" of Clare Graves (Beck & Cowan, 1996). By simplifying and popularizing Grave's original work, Beck especially has made many futurists aware of the theory. A key idea for futurists is that psychological development can predict the evolution of human society as it moves up a spiral (2006). Graves saw evolution as a dynamic interplay between innate human neurological potential and problems of life that must be overcome. This interplay involves adapting to increasingly complex situations through a process of transcending the problem while including formerly effective ways of adapting. Each stage includes the capabilities of those below it on the spiral. This adaptation is dynamic, oscillating between more self expressive values and more collectively-oriented values.

The stages described by Spiral Dynamics have served as the basis for IAF scenarios in which characters and dominant influences were coded by IAF, giving clients clues to solutions ranging from simpler to more complex. When I wrote these scenarios I asked my teenage daughter to read the narratives to see if the characters worked, not only as embodiments of stages but also as recognizable people. They did (IAF, 2006).

At one point in his research Graves noticed a particularly impressive leap in problem-solving ability. He called this transition the "second tier" (1996, pp.274-292) leading to the first-ever notion that development was an open-ended system.

Both Jung and Graves used stimulus words. Jung identified these words in his research on the unconscious, while Graves saw they could be associated with the different stages he studied. Jung used a word association test, timing how long it took subjects to respond to a word prompt with another associated word, in order to test Freud's discovery of the unconscious. Jung noted that unbeknownst to his subjects response times to certain words were delayed. Subsequent research showed these words were associated with repressed early life events, leading Jung to identify complexes in the unconscious (Stein, 1998, p.44). Graves found that some stimulus words can also be associated with the different stages he researched (Cowan & Todorovic, 2005, p.466), providing indicators that can be used for further empirical work on the stages of the spiral in different cultures or industries (IAF, 2007).

Many other psychologists have independently provided maps describing developmental stages and while the map is not the territory these maps provide a view of the same territory, albeit through a different lens and using words as markers to emphasize different features. Jenny Wade, for example, describes stages similar to Spiral Dynamics, but offers a theoretical basis taken from Nobelist Illya Prigogine and the physicist David Bohm (1996). Wade's view of the mental transitions to the second tier stages was developed before today's fMRI capability and neuroscience perspective, but it can be linked to the MBTI and Carl Jung's thesis of psychological health as a wholeness. Wade effectively describes the integration of the more masculine and left-brained consciousness characterized by Jung as objective "thinking" with the more feminine and right-brained consciousness characterized by Jung as subjective "feeling." In lower stages these types of judgment are in conflict and waste mental energy. At the higher stages they do not; they combine a surge of synergy that leads to more complex consciousness. In Wade's own words:

*Complex changes in mentation are thought possible because the cortical hemispheres are acting in a coordinated manner... 'Whole brain' thinking is a synergistic blend of left- and right-hemispheric styles, integrating intuitive, holistic, special, and symbolic processing with linear, rational analysis. Hemispheric entrainment not only permits the increased cognitive capacity noted by developmentalists, but may be responsible for what has been perceived as the integration of masculine and feminine components of the self as well.... (1996, p.166)*

Jane Loevinger added to the map of developmental stages in the 1970s with her description of ten stages of ego development (1976). Her sentence-completion test provided word stems (e.g., I am.....) and subjects completed the sentences which were then scored by trained researchers using rules to categorize the responses according to stage of development. Loevinger's data-driven theory maps pre-conventional, conventional and post-conventional stages of ego development. The post-conventional development would be second tier in Spiral Dynamics. Susanne Cook-Greuter followed on from Loevinger's work, mapping the post-conventional stages and gathering data to more extensively map the higher stages (1999). Cook-Greuter's research identified post-conventional development stages among subjects who were in their twenties, which will be important to futurists if it signals a generational trend (2007).

Using different – but still compatible – terms, Harvard developmental psychologist Robert Kegan indicates that post-conventional development, which he calls "fifth order of consciousness", should not be anticipated before people reach the age of forty (1994, p.352). Like Graves, Kegan indicates that higher level consciousness appeared only at the beginning of the 20<sup>th</sup> century, which he attributes to longer life spans allowing more people to mature developmentally. Kegan also provides a rationale for the oscillation of the spiral between "me" and "we" that is consistent with Wade's description of the entrainment that occurs. The masculine sense of self is more separate with rigid ego boundaries while the feminine sense of self connects more to the world, until after forty these distinctions blur. Importantly, Kegan also explains why the "transcend and include" principle works up the spiral.



*If one position is actually more complex than the other, it should be able to understand the other's position on the other's own terms, to extend empathy for the costs involved in altering that position, and to provide support for, rather than dismissal of, the prior position (1994, p.334).*

There is widespread agreement among developmental psychologists that a more complex consciousness, capable of addressing increasingly complex problems, forms in individuals who are in supportive and challenging environments. If they are correct, this is important for a global society. More than half of the human population now lives in urban environments, which offer both more complex environments in terms of human interactions and more ecological challenges.

In addition to insights about development, we've benefited from insights about intelligence. The simple, long dominant idea of an intelligence quotient, which relies largely on an aspect of cognitive intelligence, has been supplemented by Howard Gardner's initial observation of seven types of intelligence (1983) and expansion of types beyond that (Smith, 2008). Daniel Goleman expanded the understanding by popularizing studies of emotional intelligence (1995). People typically understand immediately when asked if they've ever known a cognitive giant who was an emotional pygmy, and they often laugh if asked if they ever had to call him boss. The remarkable ability of emotional giants is a key factor in groups that do amazingly well at problem solving. The remarkable ability of a group to work with great effectiveness and little discord may be due to the addition of spiritual intelligence, as exhibited by the Dalai Lama and witnessed in the work of Western neuroscientists and psychologists who along with Eastern Buddhists are creating an agenda of learning about the mind (Goleman, 2003).

Some clients have used the notion of an evolutionary spiral to good effect. While there are dangers futurists should recognize with this hierarchical model there are also benefits that organizations can realize. The inherent belief supported by the model is that we can progress upward to solve more complex problems, and that at the second tier we transcend the needs of ego to celebrate the inclusion of the other selves we work with. In effect we can enlarge the "we space" to make collaborative teams perform more joyously and effectively. One client – a marketing company – used the map of stages to look at client companies. They recognized that the European companies that were more committed to corporate social responsibility could respond to a higher value proposition than some of the more competitively oriented American clients. This helped them create a new product and service offering while at the same time developing a strategy to identify the American clients who were opening to new offers. Another client used forecasts from The 2029 Project along with their understanding of the evolutionary spiral to recommend changes to the curriculum for U.S. colleges of pharmacy to support "meaningful strategies for teaching ethics, cultural and linguistic competency, intra- and inter-professional teamwork and community engagement with underserved populations", which led them to conclude:

*Regardless, pharmacy's leaders have been assessing this changing landscape for some time and recognize that the pharmacist of the future must be an empathic coach to a diverse population of patients with a wide range of needs spanning*

*prevention and wellness and complex chronic co-morbidities. They must also be scientists prepared to manage data and information and interpret and apply best evidence to the direct care of individuals and groups. Finally, they must be leaders of change, not passive observers, or the pace of future changes may in fact represent a sufficiently disruptive technological force as to minimize the future contributions of pharmacists as "theranosticians" (Wells, Beck, Draugalis, Kerr, Maine, Plaza, & Speedie, 2008, pp.7 & 8).*

The combination of a noble vision with the notion of evolution can motivate important changes, but I recognize the shadowy side of the evolutionary spiral idea that can convey a terrible arrogance through which I may seem to put myself above other people. Indeed, that is a problem that can only be resolved through the recognition that in a spiritual way we are all trapped in the illusion of difference and only compassion can help us out of this trap.

### **Integral Psychology Theory**

The introduction of spiritual intelligence onto the larger map of intelligence and psychological development owes much to the integral work of Ken Wilber (1991, "all quadrant, all level" (AQAL) map Wilber encompasses both Jungian and developmental psychology in a way that supports the most optimistic forecasts and complete environmental scans (Slaughter, 2004; Inayatullah, 2008). Wilber used holarchies, in which holons (wholes nested in more complex wholes) comprise all of nature as well as human development (1997, p.32). The holarchy proved a critical concept for IAF when forecasting the ability of biomedical R&D to improve human health over the decades ahead. Scientists convened by IAF saw remarkable abilities emerging from knowledge technologies, a personalized risk infrastructure and a new understanding of disease based on Western science and Eastern worldviews (IAF, 2005). Yet when asked what the many breakthroughs in science would achieve for health in the year 2029, they challenged me to forecast the level of ethical development in the world that would direct science in the decades to come.

This challenge threw me into months of reading and discussion, which was influenced by Ken Wilber's work. Recognizing that nature—including human nature—is a holarchy, we extended this notion into human systems as well, contending that biomedical R&D is nested inside health care, in a political economy that is nested inside ethical systems. The forecast that a higher level ethical concern will emerge by 2029 is therefore crucial to biomedical R&D achieving the greatest contribution to all of life. This can be an uncomfortable conversation within scientific cultures, many of which strive for individual achievement but are self-conscious about doing less good for others than they could. A high level of ethical achievement will be necessary to develop a Health Advocate Avatar, a project identified during the work on 2029 to serve the poor as well as the rich. This project offers the possibility that our robots will act as the intelligent agents who help take us to a higher ethical stage. In this case the robots will deserve and need rights in the face of less ethical humans (Dator, 2006).

Wilber's identification of holarchy fits developmental stages recognized by psychologists, but adds his view of the process through which people move to the post-

conventional levels of existence. He describes development occurring along different lines, including the multiple intelligences, adding that not only life's problems but also peak experiences take us up temporarily to higher stages than our 'center of gravity' stage. Wilber offers the possibility that spiritual disciplines, such as meditation or prayer, along with physical, cognitive and psychological practices form the basis for movement towards higher stages (2005).

My own attempts to adopt meditation disciplines and reflect more deeply on compassion have proven helpful both in my work and personal life. Facing the death of my mother and then myself, I have enjoyed the exploration of different conceptions of what happens after death and engaged in many wonderful conversations with people holding different beliefs. As a futurist I am comfortable thinking about the moments before and after my death, and as I grow older I appreciate the stories that convey what a good death may mean. For example, a dear friend told me about her father Henry, who was also my friend, dying with cancer. I found it enormously heartening. When she was called to his bedside her father was mentally going through his past life, but aware she was there he narrated so she could share with him. Then as he approached death he told her: "I am on a boat crossing a river and it is so foggy I can't see. There's a light! A bright light! Should I go to it?" "If you're ready Dad." She replied. "Go ahead." Henry's last words were "I am going to meet time and it's maker." Last week I was at a meeting on good death and healthcare reform, where a speaker who has written extensively on dying asked the people assembled: "who looks forward to dying of cancer?" I was the only person there who raised my hand. Thank you Henry!

Moving to higher stages by strengthening multiple lines of development is potentially as important to our collective evolution as it is to our personal journeys through life. On a planet with over six billion people moving up developmentally through pre-conventional, then conventional and post-conventional stages it is possible that a growing number of people with post-conventional ways of being will have an outsized effect on the large majority of the population. Imagine a tipping point of people in different societies transcending the egotism associated with conventional leaders to become the more capable people at the "psychic level" Wilber describes (2000a, p.193).

*This expanding identity is directly reflected in moral awareness.... For you will treat as yourself those with whom you identify. If you identify only with you, you will treat others narcissistically. If you identify with your friends and family you will treat them with care. If you identify with your nation, you will treat your countrymen as compatriots. If you identify with all human beings, you will strive to treat all people fairly and compassionately, regardless of race, sex, color, or creed. If your identity expands to embraces the Kosmos, you will treat all sentient beings with respect and kindness, for they are all perfect manifestations of the same radiant Self, which is your very own Self as well (2000b, p.116).*

This future becomes easier to imagine thanks to recent developments at the forefront of psychology.

## Positive Psychology Theory

*To develop selves capable of dealing with the evolutionary forces rushing us into the third millennium, it is imperative to become better acquainted with the functioning of the mind (Csikszentmihalyi, 1993, p.28).*

Much of the functioning of our minds is invisible to us, including unconsciously held prejudices that commonly deceive us into consciously held fallacies. Pioneering psychologists Martin Seligman and Mihalyi Csikszentmihalyi have established positive psychology as a new field (Haidt, 2006) incorporating and building on the insights of Freud and Jung into the unconscious mind. They offer tools to consciously shape the unconscious mind in healthy ways. Seligman's early work on optimism has helped people alter the internal conversations that predispose them to failure, ill health and shortened life (1990). Positive psychology offers many tools to help people identify their strengths and virtues to create an agenda that builds from those strengths to achieve happiness (2009).

Positive psychology can connect the agenda futurists share with age-old wisdom traditions. Psychologist Jonathan Haidt describes the wisdom agenda in terms that read like a vision statement for futurists:

*First, wise people are able to balance their own needs, the needs of others, and the needs of people or things beyond the immediate interaction (e.g., institutions, the environment or people who may be adversely affected later on). Ignorant people see everything in black and white – they rely heavily on the myth of pure evil – and they are strongly influenced by their own self interest. The wise are able to see things from others' point of view, appreciate shades of gray, and then choose or advise a course of action that works out best for everyone in the long run. (2006, pp.152-3).*

In many ways the most recent developments in modern psychology align with the far older Buddhist "universal enlightenment movement" that legend has it was initiated by Nagarjuna (Thurman, 1998). Perhaps then, futurists can join with psychologists on an agenda aligned with and in support of the ends foreseen by ancient wisdom traditions. Right now I am working on this agenda to help people devastated by war by bringing physical, nutritional, behavioral and medical, psychological, spiritual and social knowledge together to guide programs. A vision that I helped develop over a decade ago saw healers "take those who are broken to make them whole." While I am only a futurist, rather than a healer, I have found that by bringing all the theories I read about into my practice and working personally to become more compassionate as I journey toward death I can sustain hope that at the end of this journey I will smile. My own vision for this journey is that it goes on past my death.

## Vision for the Future

The future is like a projection screen for the mind – our individual, group or collective mind extending even to the worldview of an era cast into the unknown yet intimated by who we are and what our deepest aspirations long toward. My own projec-

tion comes from an imagination inspired by many theorists, teachers and futurists as well as the combined visions of many client organizations and leaders from whom I have been privileged to learn. Here is what it shows me.

Before I leave the planet a new generation of leaders from different cultures will form a collaborative network dedicated to solving the global problems emerging from the 20<sup>th</sup> century including climate change, energy dependence on carbon and governance failures everywhere. These leaders will generally be younger and more technologically gifted than more established world figures from previous generations, but what is most striking is how much fun they have working together. The network will create highly complex solutions that work sequentially to tipping points when the effects cascade through global systems to resolve problems that grew incrementally over decades or centuries. The speed of change will be amazing. However, the network does a remarkably effective job of preparing people to accept change. Most of the population does not understand how the networked leaders bring change about, but there is widespread support. Tens of millions of people will seek to become part of the network of global leaders and hundreds of millions strive to capitalize on its success but while the network touches everyone, how one becomes a leader in the network remains an elusive mystery to most people. Yet everyday they see evidence that amazing changes are underway, and every year it feels more and more like in the 21st century history is on hyperdrive.

Sometime after my death the next remarkable contributions pour forth from the collaborative network as designs for 21<sup>st</sup> century living. These designs are part architectural and engineering wonders incorporating knowledge technologies and nanotechnologies while they are part educational and sociological advances. Living by design starts years before conception and continues through the dying process. The environments created for each child nearing birth incorporate knowledge of genetics, proteomics, epigenetics, chi energy, systems biology and neurosciences that extends from the molecular through ecology. All are negotiated through the values of the parents, families and communities with advice from the global network delivered through avatars. The environments for dying are often quite traditional, rich in religious symbolism and memorable for those who continue to live with the memories of the dead. Yet there is also a rich countercultural celebration of immortality through virtual reruns of people's lives and many people live on seemingly forever.

Long after I have disappeared, living and dying by design turns from its more networked and communal expressions into a far more individualistic quest for enlightened being. Global society has moved far beyond the old struggle to realize the Charter for Human Rights, and is striving to create conditions through which all people can realize their fullest potential. This potential is described by a new religion that draws from wisdom traditions East and West, utilizes scientific advances and reaches into every psyche on the planet. Tibetan Buddhists feel like the new religion is a reincarnation of a time when spiritual masters ruled their country, and they are happy. Christians are excited about the new Christianity and they are ecstatic. The Muslim, Jewish and Hindu populations also interpret the new religion in their own terms, and it serves them well.<sup>3</sup>

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## Notes

1. IAF has evolved through the opposed complementarity of idealism and pragmatism, which may be best exemplified by a project Clem Bezold organized, The Disparity Reducing Advances Project. Retrieved on September 1, 2009 at: <http://www.altfutures.com/draproject/>.
2. For this term I thank Senator Jay Rockefeller who responded to the author's testimony as a futurist before the Bi-Partisan Commission on the Future of Medicare that he was a "nowist".
3. Ken Wilber wrote: The past had the Great Religions. The future will have the Greater Religions (1997, p.65). [this book needs listing in the refs list as well.]

## References

- Beck, Don. (2006). *Spiral dynamics integral level 1 certification course*. Denton, TX: Spiral Dynamics Group
- Beck, Don E. & Christopher C. Cowan (1996). *Spiral Dynamics – mastering values, leadership and change*. Malden, MA: Blackwell.
- Cook-Greuter, Suzanne. (1999). *Postautonomous ego development: Its nature and measurement* (Doctoral dissertation, Harvard Graduate School of Education, Cambridge, MA.) UMI Dissertation Information Services. (UMI #9933122).
- Cook-Greuter, Suzanne. (2007). Personal communication.
- Cowan, Christopher, & Natasha Todorovic (Ed.). (2005). *The never ending quest – Clare W. Graves explores human nature*. Santa Barbara, CA: ECLET.
- Csikszentmihalyi, Mihalyi. (1993). *The evolving self*. New York: HarperCollins.
- Dator, James. (1998). *Advancing futures – Futures studies in higher education*. Westport, CT: Praeger.
- Dator, James. (2006). Will America ever become a democracy? In James, Dator, Mika Mannermaa, & Paula Tiihonen (Eds.), *Democracy and futures*. Committee for the future, Parliament of Finland.
- Dator, James. (2007). Governing the futures: Dream or survival futures. *Journal of Futures Studies*, 11(4), 2.
- de Chardin, Teilhard. (1959). *The phenomenon of man*. London: Harper & Row.
- Einstein, Albert, & Leopold Infeld. (1938). *The evolution of physics – from early concepts to relativity and quanta*. New York: Simon & Shuster.
- Gardner, Howard. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic.
- Gleick, James. (1987). *Chaos – making a new science*. New York: Viking.
- Goleman, Daniel. (1995). *Emotional intelligence*. New York: Bantam.
- Goleman, Daniel. (2003). *Destructive emotions: can we overcome them?* New York: Bantam Dell.

- Haidt, Jonathan. (2006). *The happiness hypothesis: Finding modern truth in ancient wisdom*. New York: Perseus.
- Inayatullah, Sohail. (2008). Six pillars: Futures thinking for transforming. *Foresight*, 10(1), 11.
- Institute for Alternative Futures. (2005). The 2029 project: Achieving an ethical future for biomedical R&D. Retrieved August 29, 2009, from <http://www.altfutures.com/2029.asp>
- Institute for Alternative Futures. (2006). Diabetes & obesity 2025. Retrieved August 29, 2009, from [http://www.altfutures.com/foresight/Diabetes\\_Scenarios\\_June\\_1st.pdf](http://www.altfutures.com/foresight/Diabetes_Scenarios_June_1st.pdf)
- Institute for Alternative Futures. (2007). Pharma 2029 – pharma's future today. Retrieved August 29, 2009, from [http://www.altfutures.com/docs/pharma\\_2029\\_report.pdf](http://www.altfutures.com/docs/pharma_2029_report.pdf)
- Institute for Alternative Futures. (2008). Boundaries and time in 2039. Retrieved August 29, 2009 from <http://www.altfutures.com/amedd2039/>
- Institute for Alternative Futures. (2009). The end of the future. Retrieved September 1, 2009, from [http://www.youtube.com/watch?v=7n5pptAwjVY&feature=channel\\_page](http://www.youtube.com/watch?v=7n5pptAwjVY&feature=channel_page)
- Isaacson, Walter. (2007). *Einstein – his life and universe*. New York: Simon & Shuster.
- Jung, Carl G. (1961). *Memories, dreams, reflections*. New York: Random House.
- Jung, Carl G. (1968). *Man and his symbols*. New York: Dell.
- Jung, Carl G. (1971). *Psychological types*. Princeton, USA: Princeton University Press.
- Kerr, John. (1994). *A most dangerous method: The story of Jung, Freud and Sabina Spielrein*. New York: Vintage.
- Loevinger, Jane. (1976). *Ego development: Conceptions and theories*. San Francisco: Josey Bass.
- National Pharmaceutical Council. (1995). *Health Systems Design Workshop*. Reston, VA.
- Noble, Denis. (2002). Biological computation. *Nature for Encyclopedia of Life Sciences*. London: Nature.
- Noble, Denis. (2006). *The music of life – biology beyond the genome*. Oxford: Oxford University Press.
- Salk, Jonas. (1973). *The survival of the wisest*. New York: Harper & Row.
- Slaughter, Richard A. (2004). *Futures beyond dystopia: Creating social foresight*. New York: RutledgeFalmer.
- Seligman, Martin. (1990). *Learned optimism: How to change your mind and your life*. New York: Simon & Shuster.
- Seligman, Martin. (2009). University of Pennsylvania authentic happiness. Retrieved September 1, 2009, from <http://www.authentichappiness.sas.upenn.edu/Default.aspx>
- Shlain, Leonard. (1991). *Art & Physics – parallel visions in space, time & light*. New York: HarperCollins.
- Smith, Mark K. (2002 & 2008). Howard Gardner and multiple intelligences. *The encyclopedia of informal education*. Retrieved August 29, 2009, from <http://www.infed.org/thinkers/gardner.htm>
- Stein, Murray. (1998). *Jung's map of the soul*. Peru, OH: Open Court.
- Thurman, Robert. (1998). *Inner revolution – life, liberty, and the pursuit of real happiness*. New York: Riverhead.

- Wade, Jenny. (1996). *Changes of mind: A Holonomic theory of the evolution of consciousness*. New York: SUNY Paperback.
- Waldrop, M. Mitchell. (1992). *Complexity – the emerging science at the edge of order and chaos*. New York: Simon & Shuster.
- Wells, Barbara, G., Diane E. Beck, JoLaine R. Draugalis, Robert A. Kerr, Lucinda L. Maine, Cecilia M. Plaza, & Marilyn K. Speedie. (2008). Report of the 2007-2008 Argus Commission: What future awaits beyond pharmaceutical care? *American Journal of Pharmaceutical Education*. Retrieved October 31, 2009, from <http://www.ajpe.org/view.asp?art=aj7206S8&pdf=yes>
- Wilber, Ken. (2000a). *Grace and grit – spirituality and healing in the life and death of Treya Killam Wilber*. Boston: Shambhala Publications.
- Wilber, Ken. (2000b). *Integral psychology – consciousness, spirit, psychology, therapy*. Boston: Shambhala.
- Wilber, Ken. (2005). *The integral operating system version 1.0*. Louisville, CO: Sounds True.