

FUTURE *takes*

Your international platform for future related issues

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WFS Futures Learning Section Bulletin
Winter 2008 - 2009
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Third Cross-Cultural Thematic Issue

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Pakistan's Alternative Futures – Beyond the Pendulum of the Military General and the Politician

by *Sohail Inayatullah*
Professor, Tamkang University, Taiwan and Adjunct Professor, the University of the Sunshine Coast, Australia

In this essay, I outline five futures for Pakistan: (1) the Pendulum Continues Forever, (2) Collapse, (3) Joining Chindia, (4) the Great Game, and (5) a South Asian Confederation. The most familiar and likely are based on the pendulum of rule by the military and rule by landlord/politicians. These alternative futures are discussed in the context of archetypes and structures that can precondition one's perspectives on the future. It is envisioned



Inayatullah

that Pakistan can move from the more likely and less desirable futures to a process of anticipatory democracy where the citizens of Pakistan consider, create, and commit to building their preferred future.

DEEP STRUCTURES

With the assassination of Benazir Bhutto, Pakistan's future looked bleak. Among many others, Nathan Gardels
See Pakistan, continued on page 4

The Automation of Thought *Information Technology Holds the Key to Global Maturity¹*

by *William E. Halal*,
Professor Emeritus, the George Washington University

I lead a small research team that forecasts the evolution of technology and its massive impacts that are changing the world. Our major effort is the TechCast Project, an intelligent website that pools the knowledge of 100

It's obvious that global consciousness seems foolhardy in a world that celebrates today's culture of capitalism, power politics, money, glamour, consumerism, and "me." The 2008 financial crisis, however, is widely understood to mark an end to that era, and the outpouring of support around the world for the Obama presidency signals the possibility of global unity.



experts around the globe to forecast

See Global Maturity, continued on page 8



Mack

From the Desk of Tim Mack, President, World Future Society

This is another FUTUREtakes column where I summarize one of the briefings that WFS regularly does for organizations around the world concerning issues and trends affecting them. Recently, the Southeast Florida Library Information Network held a conference to address the challenges

in libraries, and WFS delivered the keynote. While incremental improvements of library workflow, user services, technologies, innovation strategies, and branding may have been sufficient for much of the 20th century, the level of social interactivity and complexity has grown to the point where broadening the vision of libraries' futures is imperative, if only to better understand their present.

James Billington, Librarian of Congress, has been backing a World Digital Library (WDL) www.world-digitallibrary.org initiative, launched through a partnership with the United Nations Educational, Scientific and Cultural Organization (UNESCO) and its 190 member countries. Google gave USD3,000,000 to build the launch prototype of the WDL, which was recently displayed to UNESCO in Paris. The initial version will be free and in seven languages (English, French, Spanish, Chinese, Russian, Arabic, and Portuguese). It allows content searches by time, geography, topic, and format (including books, photographs, movies, audio recordings, musical scores, architectural drawings, and maps). Unfortunately, Google's independent National Library Project has already seen complaints about poor scan quality, faulty metadata, and truncated access to the public domain, so the process may not be smooth.

This WDL is expected to offer content to users by early 2009 (starting with a few hundred thousand US items) and build from there as other countries digitize and upload their own content. Other supporting partners include Egypt's Bibliotheca Alexandrina, but there are also opponents, including France and some developing countries, who feel that the US has long been dominating the Internet to spread its own culture. Other points of WDL contention include: finances, design, national and global politics, privatization or nationalization of the Internet, cultural variations (among a range of preservation techniques and philosophies), and the necessary political will to complete the project.

But it is not just a world library that is facing challenges, and they go all the way down to the local level. For example, there is a range of major trends and challenges that

affect US libraries, including:

Technology: Libraries as 'thriving technology hubs' is a strong and positive image for local planners, but the cost of continued updating and enhancement of those hubs is a financial and logistic struggle. The shift of many library users into the virtual world seems to require libraries to follow and support these users, especially the younger ones. Digital content on demand is certainly one step up from lending DVDs, but nowhere near the demands required by full digital data curation: This includes digital preservation, metadata creation, and data validation of a constantly expanding digital universe. And many cataloguing issues are still matters of intense discussion, such as the comparability of semantic and ontological definitions of data sets.

One critical question is, how wide a range of services can libraries afford to deliver to users on Mobile Devices? Offering free WiFi use in library space is only a first step. Librarians in Second Life, e.g. Info Island and a virtual reference desk approach, would be a more aggressive approach, but the real question is the role of video conferencing and other tools in creating intellectual community centers. This would include using library webcasting for job interviews, translation, training, community news and so on, with Web 2.0 tools such as: blogs, wiki, instant messaging, RSS, social networks, screencasting, podcasting, gaming, photo sharing, streaming media,

and mashups (combining and remixing services into new combinations). However, the excesses of technolust are always a challenge when seen against the 'sanctuary' concept of the library, where technology is merely enabling. Accordingly, how will the open culture of social networking software and personalization interface with library traditions on ethics and privacy?

Engineering: Thousands of libraries in the US and elsewhere have reached, or are nearing, their maximum physical capacity. Digital collections take up little space and are less expensive to assemble and maintain. While the growth of the virtual library can offset this limitation, the in-house ability to add computers, electrical outlets, cabling etc. is also creating a ceiling on continued growth in many places – tied with the costs of broadband, software and hardware upgrades. Multitasking ease is also becoming important in physical design – the laptop culture needing unassigned and flexible space (well lit and inviting) designed around human versus technological

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FUTUREtakes welcomes articles that contribute to a reasoned awareness of the future, advance serious and responsible investigation of the future, and promote the development of futures studies methodologies. In addition, **FUTUREtakes** publishes book reviews, future studies exercises, discussion threads, letters to the editor or equivalent correspondence, and summaries of chapter programs. All published material will normally follow the guidelines delineated herein for contributed articles.

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Pakistan

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argues in his article, “Bhutto’s elimination a big boost for al-Qa’ida,”¹ that the West lost track of the prize, focusing on Iraq instead of on Islamabad. It is in Pakistan where the future of the Islamic world lies. Can a secular democratic Pakistan flourish? Or will the politics of Jihadism continue, with Kashmir returning as the battlefield?

While these issues are important in understanding Pakistan’s future, the deep archetypes and structures (inner symbols and external patterns) that underlie Pakistani politics are often forgotten. Nonetheless, they delimit what is possible.

Syed Abidi’s doctoral dissertation at the University of Hawaii, titled *Social Change and the Politics of Religion in Pakistan*,² made the observation that Pakistan’s political system can best be understood as a pendulum between civilian rule and military rule. The first stage was from 1947-1958 and was characterized by the parliamentary system with the dominant class being the feudal landowners. The second stage was from 1958-1968. This was martial law with an American presidential system and saw the rise of the capitalist class. The third stage – from 1968-1977 – saw the end of martial law (with a presidential and parliamentary system), the beginning of the Bhutto era, and the return of feudalism.

With the coup by General Zia in 1977, military rule returned and the capitalist class was back in power. The fourth stage had begun. This ended with his assassination in 1988.

The fifth stage was characterized by civilian rule (Benazir Bhutto and Nawaz Sharif) until Pervez Musharraf conducted his own coup in 1999 and began the sixth stage. With the events of 9/11, globalization and the rise of the Internet, this phase has seen the return of the capitalist class.

In 2008 the seventh stage of Pakistan’s politics appears to have begun. The military era has ended and the civilians are back in power with Asif Ali Zardari as President. While

the death of Benazir Bhutto is destabilizing, it does not challenge the deeper structure of Pakistan’s politics.

Pakistan thus swings back and forth between military and civilian rule and between feudal and capitalist economies. The archetypes are the military general and the politician/landlord.

But why has Pakistan been dominated by the poles of military and civilian power – and why the pendulum between these two poles? In his classic *State and Democracy in Pakistan*,³ noted political scientist and human rights advocate Dr. C. Inayatullah argues that one creates the conditions for the other: “As the military became more independent and powerful controlling national politics, its top brass developed an ideology and a set of perceptions to justify their political role. Politics was projected as an irrational, disorderly, inefficient and corrupt method of running the affairs of society compared with the rational, efficient, quick and clean way the military runs itself.”⁴ They believed they were morally bound to overthrow politicians if the politicians threatened the independence of the nation or if they meddled in the internal affairs of the military. As guardians of the nation, they believe they have the right to rule the nation. Once the civilians come into power, feeling threatened by the military, they attempt to control them. As well, with their feudal roots, a pattern of patronage and corruption sets in. This invites protests from other political parties, often leading to violence. Eventually, to stop the violence and decay – when there is weakness, and public contempt of the political party – the military rises up and takes over. Weaknesses emerge from various factors – internal politics, feudal politics, corruption, and external threats, with the particular cause changing over time.

Following Pitirim Sorokin’s⁵ theory of social change, each system overreaches, becomes more corrupt, focuses on its own survival, or makes long term decisions that may prove unpopular in domestic politics (for example, peace in Kashmir, disman-

ting of extremist Islam), and then the other group comes in. Both have created a pendulum that benefits only their own strategies and worldviews.

ARCHETYPES

Moving away from structural analysis and towards archetypes, these two poles represent different selves of Pakistan. The first is orderly, rational and in control – the general. The second is land-based, social, and at times chaotic. While it challenges military rule, it has its own structure of authority, even as it claims the authority of people’s power.

Can a secular democratic Pakistan flourish? Or will the politics of Jihadism continue, with Kashmir returning as the battlefield? While these issues are important in understanding Pakistan’s future, the deep archetypes and structures (inner symbols and external patterns) that underlie Pakistani politics are often forgotten. Nonetheless, they delimit what is possible.

At the level of archetypes, the back and forth dynamic works because in this sense one is the British adult and the second is the “Indian” adolescent challenging British rule. However, and this is the key, once the political challenger takes over the mantle of power, he or she has been unable to escape the shadow of the general – thus, Zulfikar Ali Bhutto became authoritarian himself, as have others. They move quickly from the teenager challenging power and authority to the feudal lord. The lord is also very male and foundationally hierarchical.

But there are two other roles in this field of power. What has stayed stable in Pakistan history is a third archetype – the bureaucrat in his suit and tie. The bureaucracy has remained strong throughout Pakistan’s history,

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as it is the trusted and stable servant of the powerful adult. Thus the executive has prospered while other political institutions – courts, for example – and the rest of civil society have remained weak. When politicians have ruled, the system has remained tied to its feudal past, i.e. strong lines of hierarchy, strong patronage to supporters. Thus, the citizen as archetype has remained out of power – or expressed himself via chaotic power – while other structures have taken their places in power. The bureaucrat has been tied to “red tape,” using rules to privilege himself, instead of “green tape,” using rules to create a better and innovative society.

There are thus four positions –military rule, chaotic people’s power that overthrows the ruler, the politician qua feudal lord, and the bureaucrat who ensures smooth transitions between all these types. Of course, it is arguable that political leaders have been far more democratic and the military creates the conditions for chaos (and thus justifies its dictatorial rule), since political rulers maintain their power through their feudal ties. Thus we see the dynastic nature of the Pakistan Peoples Party (PPP).

When the general stays too long, he invites the shadow self, equally violent. This is the *mujahidin* fighter, the *jihadist*, for example. They use military force but as power is asymmetrical, chaos works best for them. The jihadists do not need the bureaucrat; rather it is mullah who inspires them. Of course, if the extremists did come into power, then they, to implement their policies, would rely on the bureaucrats. The mullah, afraid that his story has become totally undervalued in the modernized and globalized world, has returned to past caliphate glories instead of moving toward wisdom and creating a novel future. He links with the jihadist to take over the entire system.

Each one of these archetypes has two sides – the general can be protective and moral (the enlightened despot) or can be amoral, staying too

long, clinging to power, assaulting human rights, and using religion or strategy to stay in power. The feudal lord can equally be protective or can stay too long and use his or her power for personal gain. The citizen can be chaotic or can bring social capital to the nation.

ALTERNATIVE FUTURES

What then are Pakistan’s alternative futures?⁶

1. The pendulum continues forever.

This would mean that after this particular civilian cycle, there would be another military coup in 7-10 years. Politicians will have some luck in ridding Pakistan of extremist fundamentalists, but old scores between the PPP and the Pakistan Muslim League or between the PPP and the military will still need to be settled. Issues of justice and revenge will continue and just as Pakistan’s economy is about to take off, another crisis will set in. Citizens will rally but then when they see no real change will become despondent. “Nothing is possible here,” or a similar catch phrase will be the inner story. Globalization will not go away but the politics will swing between growth and equity.

2. Collapse. This is the most feared scenario for all, particularly in the West. Civil war in Pakistan (the provinces going their own way), the inability to stop jihadism, Al Qa’ida or their friends finding some nukes, not

war in Kashmir. Capital flies away, economic development slows down and Pakistan becomes a nation of competing tribes. Women in this future are particularly vulnerable as the battle between religious and secularists throughout the Islamic (Arab influenced world) is fought over the “body” of the female. Is she a person unto herself or does the strong male (feudal lord, ruler, mullah) need to protect and control? In the collapse, chaos would reign. Over time, and perhaps even quite quickly, a strong military leader is likely to rise (the Napoleon scenario), but can the great leader unite all the tribes (the challenge facing Afghanistan today)?

3. Joining Chindia. With India likely to move into the ranks of the G-8 by 2020, gaining a permanent UN Security Council Position, Pakistan’s only hope in this scenario is to link in every possible way with India and China – or Chindia. Certainly Pakistan will favor the China part of the amazing rise, but in any case, in this future, economic growth is far more important than ideological struggles. To move in this direction, the Singapore or Malaysian model may be adopted. This model is characterized by a clear

vision of the future, transparency; breakup of the feudal system, limited democracy (one party rule), and creatively finding a niche role in the global economy, and then using that as a springboard to becoming a global player. However, the India example shows that economic rise is possible outside the East Asian model. In any case, this future is hopeful but requires investment in infrastructure and a favoring of globalized capitalism. Instead of lamenting the colonial past in this Chindia future, Pakistan creates its own transnational corporations. Politics moves from focusing on old

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to mention the global challenges of climate change, all lead to a slow decline destined for collapse. And if the challenge from the Pakistani and Afghani Taliban is resolved, the front-line will switch to half-century old

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wrongs (Kashmir, for example) to desired futures. Instead of Chindia, Chindistan is created.⁷

4. The fourth scenario is **the Great Game**.⁸ Pakistan remains a pawn, moved around for the strategic and ideological purposes of the great powers. Whether in proxy wars against the Russians or against 9/11 jihadis or whoever may be next, Pakistan's capacity to influence its future is low or non-existent. At best, it can only rent out its military, or territory, for others' battles. In this future (as in the current present), the rental receipts do not lead to even development – they merely enrich those getting the rent, generally the military. The national game becomes not how to transform the great game but how to get a piece of the action, legitimately or illegitimately. Those not part of the money game sing songs of grand conspiracies. These songs take away agency. While Pakistan has a dependency relationship with the rest of the world, citizens have a dependency – that is, child/adult – relationship with the government, expecting it to solve each and every problem, without taking responsibility for their own actions and blaming the government when it fails. At the collective level, Pakistan remains rudderless, evoking the words of the founder, but unable to follow through with action.

5. A Wiser South-Asian

Confederation.⁹ The challenges Pakistan faces are similar to what other countries in the region face – religious extremism, climate change, poverty, corruption, deep inequity, stale futures, and less than helpful archetypes. In this future, the only way forward is towards an EU model of slow but inevitable integration. While this may seem too positive and far away, it is not impossible. Each country needs the help of others to solve their problems. None can go it alone, and each can learn from the other. This requires learning, peace and mediation skills in all schools;

moving toward the sustainability development agenda; developing agreements in security, water, and energy to begin with; and a focus on the desired future and not on past injustices. Gender equity and systemic and deep cultural levels are foundational for this future. This future also requires an archetype that is neither the male general nor feudal lord nor the rebellious teenager, but the wise person, perhaps the *Globo sapiens*.¹⁰ Fortunately, the south Asian tradition is steeped with wisdom. Can this imagination be drawn on to create a different future? Already in Pakistan, there are hundreds of groups and thousands of individuals working on this vision. What is needed is systemic support for this future, and a move away from focusing on past injustices.

Moreover, can the mullah who is focused on religion for tribal power become the wise sage, the Sufi or *pir* focused on transformative power? Can other roles as well be transformed? For example, can the consumer become the producer, the client the citizen, the child the adult? And perhaps, as in East Asia, can new myths be created through grounded realities such as the economic miracle, which has now created new stories of social capacity and new identities? Pakistan was on the verge of this future in the early 1960s, and it is possible to rediscover this pathway.

THE PLANETARY CHALLENGE

If an alternative future for Pakistan is not created, the pendulum will continue with collapse always being in the background. Moreover, in the world we now live in, a weakness or pathology in any part of the planetary system threatens everyone. Pakistan's futures are part of the planet's futures – we all need to transform.

This transformation in Pakistan needs to be part of a multi-leveled futures visioning process – true citizen anticipatory democracy. Given the illiteracy in the nation, using television, radio, and DVDs offer a way to present scenarios of Pakistan's possible futures. Citizens can critique them

and offer their own preferred futures (in some detail, not the grand ideas approach) as to how they wish their lives to be in 2020 and what needs to be done today to move in that direction. In parallel with a citizen participatory process, a rigorous academic process can collect data to provide evidence of preferred, feared and alternative Pakistani futures. Finally, leaders can be consulted, since they can help provide inspiration. The process can thus move toward an anticipatory democracy that includes electoral and participatory democracy. Without these steps, foresight becomes merely another activity of the planning commission or a part of a military and political strategy that marginalizes opposing perspectives. Foresight itself then becomes part of the pendulum. However, too much is at stake to allow this to happen or to otherwise permit the current trajectory to continue. An alternative is needed and is possible.

¹ Nathan Gardels, "Bhutto's elimination a big boost for al-Qa'ida," *The Australian*, 4 January 2008, 4.

² Syed Masoom Abidi, Social change and the politics of religion in Pakistan. *PhD Thesis. Department of Political Science, University of Hawaii. Honolulu, Hawaii. May 1999.*

³ C. Iyanatullah, State and Democracy in Pakistan. *Lahore, Vanguard Books, 1997.* Dr. C. Inayatullah is with the Council of Social Sciences, Islamabad Pakistan. Dr Inayatullah <uinayat@dsl.net.pk>

⁴ *Ibid.*, p. 137.

⁵ Pitirim Sorokin, Dynamics of Social Change. *Boston, Porter Sargent, 1957.*

⁶ See Sohail Inayatullah, "Images of Pakistan's Future," *Futures (Vol. 24, No. 9, 1992)*, 867-878. Also available at www.metafuture.org.

⁷ I am indebted to Clem Bezold for this term. *Institute of Alternative Futures - <cbezold@altfutures.com>*

⁸ I am indebted to Zeenia Satti at zeenia_satti@yahoo.com for this scenario.

⁹ For earlier versions of this image, see, Sohail Inayatullah, Guest Editor, *Futures, Special Issue titled, "The Futures of South Asia," November 1992.*

¹⁰ I am indebted to Patricia Kelly for this term. I also wish to thank Dr. Kelly for editing earlier drafts of this article.

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Professor Sohail Inayatullah is a political scientist/futurist associated with Tamkang University, Taiwan (Graduate Institute for Futures Studies), University of the Sunshine Coast (Faculty of Arts and Social Sciences), and Prout College (prout-college.org). He has authored/edited twenty books and CD ROMs, including *Youth Futures*; *Macrohistory and Macrohistorians*; *Questioning the Future*; *The Causal Layered Analysis Reader*; and *The University in Transformation*. Inayatullah has authored over 300 refereed journal articles, book chapters and magazine editorials. In addition, he is theme editor (*Globalization and World Systems*) of the UNESCO Encyclopedia of Life Support Systems and has contributed articles to the Macmillan Encyclopedia of Futures Studies and the Routledge Encyclopedia of Indian Philosophy.

Internationally, among other groups, Professor Inayatullah has presented to the European Commission, UNESCO, the Organisation of the Islamic Conference, APEC, the Thai Capital Markets Academy, the Ministry of Trade and Investment of the Singapore government, the Ministry of Education of the Malaysian government, the European Academic Cooperation Association, University Sains Malaysia, and Ministries of other governments. In Australia, along with presentations to local, state and federal departments of government he has conducted futures workshops for dozens of educational organizations and corporations. He can be contacted at s.inayatullah@qut.edu.au and his Web site is www.metafuture.org.

POINTS FOR THE CLASSROOM

(send comments to forum@futuretakes.org):

- Iyanatullah mentions focusing on old wrongs and a nostalgia for past caliphate glories. Similar nostalgia can be found within other nations. To what extent will such elements of

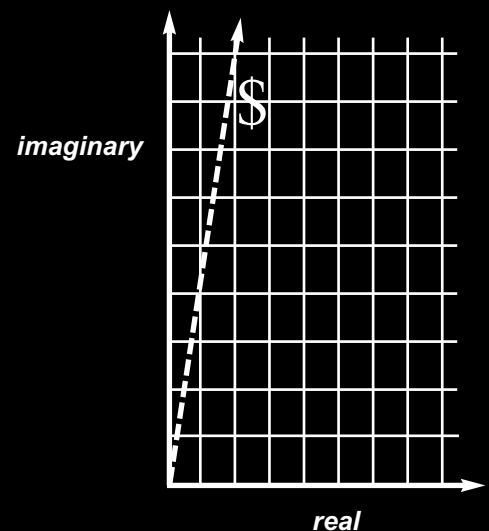
the past continue to influence the future and perspectives on the future?

- Iyanatullah refers to four archetypes that have influenced Pakistani government and society. Which archetypes are influencing your part of the world today, how relevant will they remain, and what new archetypes will emerge within the next fifteen years?
- In the “Great Game” future scenario for Pakistan that Iyanatullah presents, people expect government “to solve each and every problem, without taking responsibility for their own actions and blaming the government when it fails.” In various other countries, a change in government is often accompanied by high expectations. In 2020, will high expectations of government (or similar entity) characterize your part of the world?
- In what ways will education, educational methodology, and the type of education – for example, skills cultivated (e.g., “left brain,” “right brain”) – influence the evolutionary course of societies within the next 25 years?
- Feudalism is discussed at length in this article. Is feudalism a common stage in a nation’s (people’s) development? (Also see Halal article on global maturity, this issue) Related question: what is the next wealth? First it was land, then capital, now information. What is next?)
- Iyanatullah states that Pakistan was “on the verge of this future in the early 1960s.” Identify the drivers, “wild cards,” and other developments that may have changed the course of events.
- Iyanatullah characterizes the recent history of Pakistan as a pendulum of the military general and the politician, and he mentions Pitirim Sorokin’s theory of social change in which overreach is followed by correction. In another article (this issue), Professor Halal refers to a political pendulum, and others have used this metaphor to characterize nations that have two dominant political parties or competing constituencies (e.g., “management” and “labor”). In 2015, to what extent will

the pendulum characterize governance in your part of the world, or will another mechanism of social change prevail?

- Two of the scenarios presented herein, “Joining Chindia” and “A Wiser South-Asian Confederation,” involve different degrees of integration into a larger regional entity. Within the next ten years, will transnational regional entities replace the nation-state as a source of governance, identity, and perhaps trade? Conversely, will the coming years see more tribalism, semi-autonomous communities, or other smaller-scale entities? In other words, “fission” or “fusion” – and with what implications for cultural plurality? In answering this question, consider emerging technologies as well as social forces.
- In addition to the alternative futures for Pakistan presented in this article, what other ones to you envision for Pakistan and its neighbors? Also, what are possible “scenarios after next” for your part of the world?

- Hidden assumptions and “filters”?
- Self-amplifying perturbations?
- Imaginary money?



Explore these and related questions in “weak signals,” p. 13, and “The Think Tank,” p. 14.

Global Maturity

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breakthroughs in all fields (www.TechCast.org). I think of it as an “online research system,” a scientific version of Wikipedia, social networks, blogs, and endless other participative Web 2.0 sites that are raising global awareness dramatically.

The TechCast Project Maps the Technology Revolution

The TechCast Project has produced the most comprehensive forecast data ever assembled covering the entire span of technological innovation. It maps the “Technology Revolution” that is accelerating today as an explosion of ever more sophisticated information systems creates unprecedented gains in knowledge,

also poses unprecedented risks in energy, the environment, weapons of mass destruction (WMD), and other threats that require sophisticated responses unimaginable by present standards. For instance, globalization is causing World GDP to double by 2020 and quadruple by 2030, producing commensurate increases in ecological damage, energy shortages, and climate change. In global power politics, the system of Mutually Assured Destruction (MAD) that successfully restrained the USA and USSR from unleashing their nuclear arsenals is unlikely to hold up with a dozen or so

thought should be automated by far more sophisticated IT networks, a second generation of more powerful computers, smart robots that think and talk, and artificial intelligence that approaches human skills. I recently bought a GPS navigation system to guide me on a twisting adventure through California recently, and I am happy to report that the problem of getting from point A to point B has been solved.

As even better machine intelligence takes over common mental tasks, we will move up another level on the evolutionary hierarchy to address the global challenges that now seem overwhelming. Just as farm labor was automated 100 years ago, then factory work, and recently services, now IT is automating routine knowledge work.



... globalization will almost
CRISIS OF MATURITY”

producing breakthroughs everywhere. Our forecasts show that we can now realistically envision renewable energy replacing oil, medical control over the genetic process of life, computer power becoming cheap and infinite, mobile communications at lightening speeds, robots serving as helpers and caregivers, and much more to come.

My recent book, *Technology's Promise*,² draws on the work of the TechCast project to sketch out the risks and opportunities posed by the Technology Revolution, as well as the impact on social institutions, intelligence and consciousness, and other pivotal issues of our time. A key point is that relentless progress is driving the creative transformation of business and society, the entire world, and even what it means to be human. Our most striking conclusion is that globalization will almost inevitably lead to a “global crisis of maturity” about 2020 to 2030.

Global Crisis of Maturity

Technology is creating a world that is largely industrialized but that

nations going nuclear. And seemingly no end can be found to the corrosive destruction of terrorism.

This megacrisis seems insurmountable because the present world is not sustainable, and knowledgeable people know that a unified global system is needed to avert disaster. President Bill Clinton noted “there is no world system,” and the late Admiral Arthur Cebrowski, who pioneered the US military’s Office of Force Transformation, said “We have to recognize that a major transformation is inevitable.”³

The Automation of Human Thought

The solution lies in understanding that the Technology Revolution also holds the key to resolving the crisis of maturity. At about 2020, the very time when the planet is likely to teeter between calamity and salvation, our forecasts suggest that routine human

inevitably lead to a “GLOBAL
about 2020 to 2030.

Beyond Knowledge – Consciousness is the Next Great Frontier

It’s impossible to fully grasp the reality of a different era, but based on our projections, the Information Age should mature about 2020, leading to an era *beyond knowledge*. Something like a “global consciousness” is likely to emerge, focusing on higher level understanding, productive compromise, and on working out together the tough existential choices needed to survive. It might be called a “Global Era,” “Unified World,” “Global Community,” etc. Whatever the terms, the fact is that strategic planning, dialogue, collaborative problem-solving, diplomacy, conflict resolution, ceremonies, mediation, prayer, and other yet unknown “technologies of consciousness” may offer the next logical step in this evolutionary process.⁴ Here’s how General Petraeus was able to gain the support of 70,000 Sunni leaders in Iraq: “We cannot kill our way to victory. Tribal engagement and local reconciliation work.”⁵

Likewise, averting an ecological

See *Global Maturity*, continued on page 9

Global Maturity

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calamity will require agreement among nations to curb climate change, to collaborate on developing advanced energy technologies, and become responsible stewards of nature – heroic challenges requiring existential courage and enlightened self-interest beyond what is normally possible. Experiences with North Korea, Iraq, and Iran show that containing nuclear proliferation and terrorism cannot be achieved with military force alone but requires collaboration to bring radical states into the modern world where conflict is transcended.

It's obvious that global consciousness seems foolhardy in a world that celebrates today's culture of capitalism, power politics, money, glamour, consumerism, and "me." The 2008 financial crisis, however, is widely understood to mark an end to that era, and the outpouring of support around the world for the Obama presidency signals the possibility of global unity.

Beneath the surface, deep rivers of fresh thought are bubbling up. Professional pollster John Zogby has analyzed his data over the past 20 years to conclude "My surveying shows that we are in the midst of a fundamental reorientation of the American character... Away from wanton consumption and toward a new global citizenry in an age of limited resources." It is especially noteworthy that young people lead in embracing this global view, despite our common image of disheveled youngsters oblivious to all but their cell-phones and iPods. Zogby finds that young adults 18 to 29 years old constitute the "First Globals." This "digital generation" accepts all races, sexual orientations, national cultures, and other differences equally, and they are intent on living sustainable lives in a unified world.⁶

Other prescient voices are advocating global unity. Strobe Talcott, former US Ambassador to the UN, Deputy Secretary of State, and now President of the Brookings Institution, thinks global governance is coming: "Individual states will increasingly see it in their interest to form an interna-

tional system." And the recent report of the Millennium Project notes: "Ours is the first generation with the means for many to know the world as a whole ... and seek to improve global systems... This does not mean world government; it means world governance."⁷ The philosophical work of Ken Wilbur based on the spiral dynamics framework also bears out this same transition to maturity, and science defines a unified world as a Type 1 Civilization.⁸

Today's emerging global order seems to possess a life cycle all its own that is unfolding rapidly, provoking a series of mental shifts to address this crisis. The obstacles are enormous, but it is precisely because so many people are so deeply concerned that a change in consciousness is underway. We have accepted women in power, transformed planned economies into free markets, and begun to protect the environment. The tough challenge of shaping global consciousness lies ahead.

The Life Cycle of Evolution

This transition can be best grasped by seeing that technological evolution comprises a natural life cycle of the entire planet, much like the life cycle of any organism, although infinitely larger.⁹ Things look especially bleak

Things look especially bleak today because that's the normal situation facing any system struggling through maturity – a teenager, a nation, or an entire civilization. Whether it is a teen shedding the baggage of youth to become a responsible adult or a civilization struggling with a global crisis of maturity, the challenge is much the same – grow up or perish.

today because that's the normal situation facing any system struggling through maturity – a teenager, a nation, or an entire civilization. Whether it is a teen shedding the baggage of youth to become a responsible adult or a civilization struggling with a global crisis of maturity, the challenge is much the same – grow up or perish.

A great example of the energizing effect of this crisis is highlighted by the recent revival of General Motors. After losing its dominance of auto markets steadily over the past 30 years to Toyota, GM engineers rallied around the goal of introducing the world's first plug-in hybrid car with advanced lithium-ion batteries. The company has its best people working around the clock free of the normal GM bureaucracy under the slogan "failure is not an option." GM could still fail, obviously, but Maryann Keller, a long-time analyst of the company, thinks it's "a generational change."

Historic transitions on this scale are hard to grasp because they lead to a more sophisticated way of life that has never existed before. Understanding the evolutionary forces at work helps us see that the world is undergoing a natural process of maturity, with global intelligence and awareness increasing dramatically. Our great challenge now is to recognize that today's cumbersome institutions, religious dogmas, heated emotions, partisan ideologies, and other commonly outmoded forms of thought and consciousness itself will have to be confronted and resolved.

A Coming Move to the Center

Political systems are beginning to address these higher-level concerns. The past generation advanced the conservative views of Reagan and Thatcher, releasing the creative destruction of entrepreneurship and free markets from the iron grip of the welfare state. That era has ended with the decline of Republican power in the US today, and now the political pendulum seems to be swinging toward a center that unites conservative ideals of free markets with liberal ideals of community. It may seem optimistic, but I

See Global Maturity, continued on page 10

Global Maturity

continued from page 9

envision that the following generation will see a booming rise in collaboration to synthesize economic and political systems into a coherent whole.

This can also be seen in the transformation of social institutions for a knowledge-based world. Hierarchies are slowly dispersing into “self-organizing systems” able to manage complexity by harnessing the knowledge of ordinary people. And the old focus on profit is yielding to a “corporate community” of collaborative partnerships with employees, clients, and the public. These two major trends represent a union of the Western ideals of free enterprise and democracy, offering the possibility of resolving the political impasse between right and left that grips the US and much of the world.

The Most Likely Outcome

These conclusions are not optimistic or speculative but conservative estimates based on empirical evidence. Economic projections make it clear that the world must mature if it is to survive, and the TechCast data presents an entirely plausible path forward. In fact, our forecasts describe the most likely outcome rather than mere possibilities.

The crisis of maturity may not prove catastrophic if acted on in time, but a major turning point is inevitable as the multiple threats of world-wide industrialization, energy shortages, climate change, environment collapse, nuclear holocaust, spreading terrorism, global conflict, and other unknown crises reach critical levels about 2020 to 2030.



Halal

- Institutional Change, a special issue of *On the Horizon* (2005) Vol. 13, No. 1.
- 4 See Technology's Promise, *Op. Cit.*, Ch. 10
 - 5 “Our Man in Baghdad,” *Washington Post* (Sept 4, 2008)
 - 6 John Zogby, *The Way We'll Be: A Zogby Report on the Transformation of the American Dream* (NY: Random House, 2008)
 - 7 Strobe Talbott, *The Great Experiment* (NY: Simon & Schuster, 2008). 2008 *State of the Future* (Washington, DC, Millennium Project, 2008)
 - 8 Ken Wilber, *A Theory of Everything* (Boston: Shambala, 2001)
 - 9 Halal, “The Life Cycle of Evolution: A Macro-Technological Analysis of Civilization's Progress,” *Journal of Future Studies* (August 2004) Vol. 9, No. 1, pp. 59-74

William E. Halal is Professor Emeritus of Science, Technology & Innovation at George Washington University, Washington, D.C., and an authority on emerging technologies, strategy, knowledge, and institutional change. He has worked with General Motors, AT&T, SAIC, MCI, Blue Cross/Blue Shield, International Data Corporation, the US Department of Defense, the Asian Development Bank, and many other organizations. His publications include six books and hundreds of articles, and he substituted for Peter Drucker in giving a talk to 2000 managers at the Los

Angeles Coliseum. Prof. Halal is the founder of TechCast, a web-based system that pools the knowledge of experts to forecasts breakthroughs in all scientific fields. In addition, he co-founded the Institute for Knowledge & Innovation as a collaborative effort between the GW School of Business and the School of Engineering. Bill studied engineering, economics, and the social sciences at Purdue and Berkeley. Previously, he was a major in the US Air Force, an aerospace engineer on the Apollo Program, and a Silicon Valley business manager. *Macmillan's Encyclopedia of the Future* ranked him among “The World's 100 Most Influential Futurists,” together with H.G. Wells, Arthur C. Clarke, Alvin Toffler, and Daniel Bell.

POINTS FOR THE CLASSROOM

(send comments to forum@futuretakes.org):

- Halal foresees an era beyond knowledge. In what ways will the Information Age impact various professions that are presently based on extensive specialized knowledge? In turn, how will this impact education and training for these professions?
- Halal discusses present and projected social changes in terms of natural lifecycles and a process of maturity. Furthermore, he characterizes the anticipated “move to the center” in terms of the political pendulum. In a separate article (this issue), Iyanatullah discusses social and governance changes within Pakistan, also in terms of a pendulum, and one might argue that his “verge of this future” comment suggests an evolutionary or maturing process, perhaps in this case including a temporarily missed opportunity. During the forthcoming years, will social change be best characterized more as cyclical or more as linear progression (or regression), and why? Which social changes be regarded as part of a society's or a civilization's maturing process, and on what basis?

President

continued from page 2

needs, i.e. creative space – different types for different types of people – mixing work and socializing for collaboration, etc. This means quiet space as well as social spaces, e.g., variety spaces (for group effort and individual work, as appropriate, while keeping resources close at hand).

Culture: Reading is becoming a cultural issue. Significant segments of potential library users now see reading as a diminishing 20th Century pastime. According to the National Education Association, under 15% of the US population read more than 20 books annually (and over 65% read less than 10) – but if magazine and Web site reading is included, over 65% read five or more hours weekly (and over

See *President*, continued on page 11

¹ Portions of this paper are adapted from articles appearing in *Technology Analysis and Strategic Management* and *The Futurist*

² Halal, *Technology's Promise: Expert Knowledge on the Transformation of Business and Society* (London: Palgrave Macmillan, 2008)

³ Arthur K. Cebrowski, “Seven Secrets of Transformation,” in Halal (ed.),

President

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30% more than 11 hours weekly). E-books have been slow to gain ground, but that the technology is not close to maturity... Sony Reader Digital Books are not yet comfortable to use, but the upload capability is growing. Amazon Kindle is an improvement, BUT dedicated content is still too limited...

However, digital technology is part of the on-demand revolution, and instant gratification is a formidable force changing the way we consume media. The Google-driven decline of visitors to the reference desk has led to remote sites for academic libraries, i.e. going to where work is being done.

“Showing up” consumes resources, effort and money, i.e. “the economics of presence” concept. The Second Life version of the Newseum in Washington DC includes flying between exhibits. But digital library advocates also ignore the perseverance of the communal experience (why people still go to football games in person), which may lead to the end of traditional library restrictions [no talking, food, drinks, cell phones] to empower library-based social networks.

Economics: The need for increased public support to underwrite the increased public service role of libraries remains a critical challenge – one of public education and benefits documentation. One of the community benefits received from libraries can be seen as economic development services, i.e. job services. Three quarters of US employers accept on-line applications and a significant number accept only on-line, but only 20% of public libraries report adequate computer equipment and connection services. This has to change. The challenges of budget and space limitation continue to hamper library growth but that has not hindered advocates for cloned Barnes and Noble and Borders services – allowing talking, coffee, cell phones and easy chairs among lots of books. The goal of building a reputation for good service copies what independent bookstores have done to resist larger chain book stores. However, half of independents are now gone and

Reading is becoming a cultural issue. Significant segments of potential library users now see reading as a diminishing 20th Century pastime. According to the National Education Association, under 15% of the US population read more than 20 books annually (and over 65% read less than 10) – but if magazine and Web site reading is included, over 65% read five or more hours weekly (and over 30% more than 11 hours weekly).

the survivors continue to concentrate (perhaps futilely) on the ‘experience place’ – relaxation, coffee and food, performance, etc.

The more important question is what is the business of libraries? Lending books? Providing success in life for users? Meeting the desires of consumers to enhance self-image and meet ‘higher’ needs through self-actualization is a rather endless pursuit, and competing with entertainment or tourist attractions is misunderstanding the library concept – far better to adopt changes that fit with the values and highly durable culture of libraries, e.g., connecting users to information to assist in meeting their goals.

Education: How do people keep up with change...understand the trends...make choices about careers, resources, even lifestyles...? They need information from a trusted and neutral authority... The strategy of ‘dumbing down’ the library to keep the user numbers up ignores the educational core to libraries. There is intense concern, discussion and disagreement about priorities and the role and contribution of learning resource institutions within society – with no common consensus on methods of measuring achievement. While issues around the National Education Association report

To Read or Not to Read and the future of reading (regardless of the media used to present the material) are important, the real question is will humans continue to read in some manner and the answer is clearly yes....and then the follow on is...can libraries help them, regardless of the media?

Demographics: Not just the elderly boom in users, but a youth one as well. Libraries are still exploring: child raising roles beyond the biological parents, the needs of non-English speakers and cultural integration, etc. Much of this is driven by changes in how socialization and integration now occurs and in the patterns of singles and families. Many of the digital social networks are used primarily by persons under 30 years of age. Social media dialog can act like a never-ending focus or therapy group...including the negative feedback. Should the library system be a vehicle for social activism – moving users from curiosity to interest to insight to action...? Does this include targeting specific communities of need?

But things could be much worse domestically. The level of favorability concerning physical libraries is greatest among developed countries, and borrowing print books is still the number one activity while research in reference books is second. In spite of all the hype, computer Internet use is only 7th overall among library patrons. Interestingly, it is US college students who use more parts of libraries than any other group. In descending order, their uses range from study at 48% to Internet, database use, reference books, borrowing print books, research assistance, reading journal articles, and reading best sellers at only 8%.

Conclusion: Essentially, it becomes clear on examination that libraries are not a dying breed but one that is changing and growing. Given the chance and the resources, one can only imagine what libraries could become, utilizing new technologies, being guided by new metaphors, images, energies... Libraries have always been beacons of hope and aspiration, and they can continue to do so well into the 21st Century.

Book Discussion

• • • FUTUREtakes publishes synopses of World Future Society chapter programs. The following book review/discussion synopsis is from the Futurist Book Group of the Washington DC chapter.

Lockout

Michele Wucker

Publisher: Public Affairs

(August 13, 2007)

288 pages

ISBN-10: 1586485237

ISBN-13: 978-1586485238

Synopsis of the December 2007 meeting of the Futurist Book Group (WFS Washington DC Chapter); summarized and reviewed by Ken Harris

On the night of the first snowfall of the season, December 5, 2007, six members of the Futurist Book Group of the Washington Chapter of the World Future Society braved the elements to discuss *Lockout: Why America Keeps Getting Immigration Wrong When Our Prosperity Depends on Getting it Right*. Lisa and Milt Roney, two members of the group who both work in the immigration field, played a key part in our discussion. They noted that Wucker, a journalist, is not well known among experts in immigration and that the book contains a number of factual errors and misstatements. It further lacks citations of material, and some of the citations that it does provide are of questionable accuracy.

FUTUREtakes readers should keep in mind the full title of the book when deciding whether or not to read it. It is not primarily about the problem of illegal immigration of low-skilled workers, which has received so much media attention in recent years. It far more concerns America's need to import skilled workers, particularly scientists, engineers, doctors and nurses, from other lands to maintain its world technical and economic leadership because its own educational system does not graduate enough native-born Americans with these skills. FUTUREtakes readers also should bear in mind that the book is about the future only in a limited sense. Its

message is that America's future will not be bright unless it undertakes a serious immigration reform program, which is outlined in the concluding chapter. Indeed chapters 2, 3, and 4 of this 11-chapter book are historical; they recount aspects of the great wave of immigration to America between 1880 and 1920 and the severe restriction of immigration between 1924 and 1965. This appears to reflect the author's concern that America is drawing the wrong lessons from history in dealing with current immigration issues.

Wucker is concerned that the complex US immigration laws and regulations, dysfunctional immigration bureaucracy, and ambivalent attitude towards all immigrants, skilled and unskilled, are making it far more difficult now than previously for them to come here and continue to contribute substantially to the US and its culture and to acquire skills that benefit their home countries. Moreover, this is happening when other industrialized countries are more welcoming to immigrants while immigrant-sending countries, particularly China and India, now have more economic opportunities for their citizens. She says of the immigration laws, "America's immigration laws have been called 'second only to the Internal Revenue Code' in complexity... There are countless cases of people who face deportation because retroactive changes in laws, and government's failure to notify them or their lawyers, ended up making them 'illegal' even though they had made every effort to follow the law – and even believed for good reason that they were complying with it." She emphasizes that the bureaucracy administering the immigration laws in recent years has been overwhelmed not only by its workload but also by more stringent rules passed in the wake of the 9/11 terrorist attacks. Wucker sprinkles the book with case studies of how the complex and frequently

changing immigration laws and regulations and overwhelmed bureaucracy have adversely affected particular immigrants, to their detriment and to the detriment of the US, but unfortunately she does not give the reader data on how common such cases are, nor does she elaborate on the difficulties of selecting meritorious cases from the huge volume of applications.

One of Wucker's main themes is dispelling the popular notion that immigrants today are fundamentally different from those who came to America in the Great Wave between 1880 and 1920 because today's immigrants do not want to Americanize whereas those of the past did. She points out that large numbers of the earlier immigrants came only to make their fortune and had no intention of becoming Americans. In fact, she says that between 1901 and 1920, 36 of every 100 immigrants returned to their home countries for good. Moreover, their home countries encouraged them to return. However, the earlier immigrants who remained in America retained connections to their home countries and cultures and integrated into American society through ethnic associations like the Ancient Order of Hibernians and the German-American National Alliance and through work of the settlement houses, particularly that of Hull House in Chicago under sociologist Francis Kellor.

Wucker's concluding chapter argues for neither stopping all nor allowing completely unrestricted immigration. She proposes a 10-point program for US immigration reform. The feasibility of some of her recommendations is doubtful. For example, will it be politically possible to limit family preference visas, which she says are a leading cause of the recent spectacular growth of the immigrant population? Will it be possible to create a cabinet-level position devoted to

See Lockout, continued on page 14

Can you already see the *weak signals* of the next economic boom?

Elina Hiltunen
Editor, *Weak Signals*



The economic turmoil and the latest surprising events in financial markets last autumn have raised the question: could the financial crash have been predicted? Were there some weak signals of these events that could have better prepared us for the financial crash?

Using the Factiva database to capture financial data from major US newspapers, **Turo Uskali**, a Finnish professor with expertise in innovation journalism and weak signals, recently analyzed the subprime loans. Upon noticing weak signals of the financial crisis that were present as early as 2005, he commented that based on the articles in US newspapers and especially in the professional financial journals, the reader could have well anticipated the forthcoming troubles, even the crises.

According to Uskali, the *Wall Street Journal* was the first newspaper to warn about the forthcoming free fall of housing prices. However, the US Federal Reserve had warned about the risks of subprime mortgages since 1999, whereas the *Wall Street Journal's* warning came in 2005. Uskali claims that the US media woke up to the risks of the real estate markets in December 2006, while the issue got global attention only in March 2007.

Ojala and Uskali (2006) have studied the journalistic texts of the *New York Times* from the times before the market crashes of 1929, 1987 and 2000. In their study, they concluded that “*even if information and communication technology advanced dramatically from the 1920s to 2000, the flaws of the business journalism in*

writing about the stock markets have remained almost the same: their reporting is too enthusiastic (or positive) and uncritical, and therefore incapable of effectively detecting the weak signals of impending collapses on the Stock Exchange.”

Based on the studies by Uskali (2008) and by Ojala and Uskali, one might attempt to answer the following questions: could the financial crash have been predicted and were there some weak signals of these events that could have better prepared us for the financial crash? The answers to both of the ques-



Hiltunen

tions are yes. Weak signals were evident at least in some media, and we could have anticipated the crash by interpreting these signals right. So why did we fail to anticipate it? Like the media, people appear to be slow in changing their mental models. Changes, especially negative, appear to be difficult to accept. Uskali (2008) pointed out that the weak signals of the real estate price crash were first recognized by major institutions such as the US Federal Reserve Board and by specialized professional journals. Only later did the mass media react to the crises. One possible cause of this slowness is the superficiality of the journalists on the issues they write. Uskali calls for higher quality journalism for anticipating the changes in the markets.

If it is difficult to read the weak signals from media well in advance, either because the media do not report about them because or we do not believe them, could there be other indicators of the forthcoming changes? Professor **John L. Casti** has very fascinating theories about anticipating future changes. He has identified the concept of *social mood* as a key indicator of future events. He considers financial market averages to be a “sociometer” measuring a population’s mood in the way that financial markets are reacting to people’s beliefs about the future and present. With this hypothesis in mind, measuring the social mood of a nation or of the entire world becomes a challenging effort. Professor Casti and Finnish futurist **Leena Ilmola** are currently working on a project that tries to identify the correlation of social mood with stock index changes. They have analyzed many newspaper articles to identify positive or negative moods and then compared this data to the stock index. The results of their study indicate that the change in the social mood pre-indicated the changes in the stock index.

Of course, this method does not presently provide accurate predictions of future events or their nature, nor is there a patent solution for anticipating changes in the economy or in general. However, it is possible to fine tune ourselves so that we can better recognize weak signals. First, one can focus on the fringe. Look for disruptions in current trends, especially in cyclical

See *Weak signals*, continued on page 17

Lockout

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immigration in the face of near-certain bureaucratic opposition from the Department of Homeland Security, and would it be wise to further complicate the bureaucracy dealing with this important subject area?

In sum, the book could have been improved with more data to show how representative the “horror stories” about treatment of present-day immigrants are, more specific discussion of the future consequences of continuing the present haphazard immigration policies and programs, and more thoughtful recommendations for action. However, it is successful in dispassionately setting forth the historical context of one of the most emotionally laden subjects in the contemporary US.

POINTS FOR THE CLASSROOM

(send comments to forum@futuretakes.org):

- *The book points out that large numbers of the earlier immigrants to the US came only to make their fortunes and had no intention of becoming Americans. Additionally, the author observes that the earlier immigrants who remained in the US retained connections to their home countries and cultures and integrated into American society through ethnic associations. In his own recent article (Spring-Summer 2008 issue), Stephen Aguilar-Millan discussed two immigrant assimilation models at length – the mono-cultural model and the multi-cultural model. In terms of these two models or others, characterize assimilation of immigrants to your nation during the next decade.*

- *Discuss the future of immigration patterns among nations and/or regions. Consider:*
 - *Emerging economies, and economies that may weaken*
 - *Labor costs*
 - *Tomorrow's jobs*
 - *“Virtual immigration” (via IT)*
 - *Opportunities for workers, including emerging or dwindling opportunities in immigrants' home nations*
 - *Other demographic and related factors – for example, workforce age distribution, education levels, skills, consumer demand, and changes to the “linear” education-work-retire life pattern*
 - *Assimilation issues*
 - *The changing role of the nation-state in governance, diplomacy, and identity*

THE THINK TANK

The topic: The “economy after next” – exploring today’s hidden assumptions.

Characterize the world economy or your regional economy in 2015. Consider the following questions:

1. **Positive feedback loops:** Perturbations such as inflation or deflation, high unemployment, or (in some cases) stock market selloffs, tend to feed on themselves. Will such positive feedback loops continue to characterize the economy in your part of the world? If not, what damping mechanisms will emerge or grow stronger?
2. **Interdependencies and their impact:** As recent events have demonstrated, decisions and actions can lead to pervasive ripple effects that impact many people, sometimes far beyond a single geographic region. Examples have included downsizing decisions, home foreclosures, and activities that affect the environment. In some cases, the ripple effects come “full circle” to adversely impact those who initiated the precipitating actions. (For example, when several companies downsize because of revenue shortfall, the impact to consumer purchasing power often reduces demand for each company’s products and services leading to further revenue losses.) Will recognition of these interdependencies change the nature of the market between now and 2015, and if so, in what ways?

3. **Utility functions:** Present utility functions do not always account for long-term costs of investment decisions – for example, to economic robustness, the environment, public safety, or education. Likewise, they tend not to capture other hidden costs such as the increased healthcare costs that result from overwork and stress. Will the prevailing utility functions continue to characterize the next several years? If not, in what ways will new utility functions (or alternatives) differ from the present ones?
4. **Saving and consumption:** Some present-day economies promote saving while others promote consumer spending, which in some cases is based on perpetual creation and satiation of discontent. To what extent will tomorrow’s economy promote saving? Consumer spending? Longer or shorter investment time horizons?
5. **Imaginary money vs. real money:** In 2015, what percentage of money or wealth will be “imaginary” (paper wealth, including wealth based on speculative investment) vs. “real” wealth?

Share your thoughts! If you would like for your thoughts to be considered for publication as commentary, send them to forum@futuretakes.org.

Visioning and Creating Our Shared Future – Engaging Everyone

by Brenda Walsh, OP, Member of the Dominican Order in Racine, Wisconsin

Creating a vision of our shared future is not only the work of creative people from various fields of research and discovery; it is also the responsibility of each one of us to contribute to shaping, sharing and living the vision of a just, sustainable and peaceful world.

One approach, possibly a central element to any approach, is to reclaim our spiritual heritage and gifts that give deep meaning to life and that are a source of motivation and energy to work for the common good, not only locally but globally. This can inspire hope that “a different world is possible” and definitely within our reach. Spiritual and moral values are not a separate department of life. They are an integral part of every phase and aspect of our lives. They can help people create a world that is less grasping and fearful, less hateful and polarized, less power-hungry and revengeful, and more caring, compassionate, just and peaceful. People of all ages and cultures are searching for hope, meaning and purpose in life. Choosing an integral path that draws from their rich traditions and perspectives can offer opportunities for everyone to get involved in creating such a future.

However, there are additional aspects of visioning and creating a desired future:

1. Engaging the wisdom of elders.

There is a growing population of older adults who can offer their perspectives on balance and harmony, as well as a concern for the common good to a world often sharply divided by power and greed and lacking hope, meaning and purpose. At a recent Global Conference on Aging, participants heard a strong call from Irene Hoskins, president of the International Federation on Aging, to policy makers to think in terms of building a society that allows elders to participate in all aspects of life and to offer their wis-

dom and experience in a variety of ways. Such an approach would give the older population a new understanding of themselves and enable them to live safe, happy and productive lives.

2. Involving youth. Involving young people is another very important aspect of studying and shaping the future. Success in this depends largely on how the youth are approached. Are they seen and approached as people who have ideas and gifts to offer, or are they viewed as problems to be solved? Do we listen to their agenda, their hopes and longing, and then find ways in which they can share across generations, in various aspects of life? All across the country and in other nations, large crowds of youth are gathering to find a meaningful spirituality as well as ways to get involved in serving the most vulnerable populations and improving their lives. Engaging youth in this way can include them in a growing movement to make the world more respectful, compassionate and just. In addition, the younger people will themselves benefit by gaining a sense of purpose and by inspiring hope. The arts – poetry, music and art – are vehicles by which they can express the future and engage people of all generations.

3. Including vulnerable populations.

An additional need is to include the vulnerable populations in our society and encourage their contributions to the shaping of a positive future for all people. These people are often marginalized and excluded from positive participation in society. In some cases they are labeled as cheaters, loafers, or a societal burden. Including the vulnerable populations will call all of us to be people of a second chance, create a space for gifts and talents of young people, and help everyone transcend limiting notions of self-identity. All have a vital role to play.

4. Including people of all cultures. Connecting across cultures and creeds

will lead to a broadening of our perspectives and enable all to share various rich cultural heritages. Such an effort will require us to transcend ethnocentrism in its many forms, both personal and institutional. By growing in understanding, we can begin to look at new approaches to solving problems in peaceful ways. In addition, women need to be involved in all aspects of futuring. In some cultures, they are viewed as second class citizens and given subordinate roles to play. Both feminine and masculine gifts are needed to bring balance and wholeness to our world and to grow beyond the model of domination to one of partnership.

5. Including all of Creation.

Mapping a future for study and implementation must also include the whole

*Let us begin today
with courageous,
outside-the-box
steps, inspired
by the vision
that “another
world is indeed
possible.*



of creation. The possibility of environmental destruction looms large, in part because of present styles of living, value systems, and manners of relating. Care for earth and responsible stewardship of the earth's resources is essential to the very survival of humankind. Appreciating the beauty and wonder of nature can add to joy and peace in our world.

In conclusion, we have the ability to change the tide of the time. The question is: “Do we have the individual and political will to bring about a future that is whole and hope-filled for all people?” Let us begin today with courageous, outside-the-box steps, inspired by the vision that “another world is indeed possible.”

Book Discussion

- • • FUTUREtakes publishes synopses of World Future Society chapter programs. The following book review/discussion synopsis is from the Futurist Book Group of the Washington DC chapter.

The Tipping Point: **How Little Things Can Make a Big Difference**

Malcolm Gladwell

Publisher: Back Bay Books (January 7, 2002)

304 pages

ISBN-10: 0316346624

ISBN-13: 978-0316346627

Synopsis of the February 2008 meeting of the Futurist Book Group (WFS Washington DC Chapter); summarized and reviewed by Ken Harris

On February 6, 2008, the Futurist Book Group of the National Capital Chapter of the World Future Society discussed *The Tipping Point*. Perhaps because the book is well known and was a *New York Times* best seller, we had one of the largest turnouts in the group's four-year history. The book is yet another in our line of readings like *The Black Swan* by Nicholas Nassim Taleb and *The Long Tail* by Chris Anderson, which examine how change happens. Rather than attempting to forecast the future or to spin alternative future scenarios, these books provide ideas on things to look for when contemplating what the future might bring.

Chock full of examples, *The Tipping Point* compares social change to disease epidemics. In fact, Gladwell borrows the term "tipping point" from epidemiology. He shows that a "Tipping Point" occurs when gradually occurring change very suddenly becomes explosive change. His book examines the three kinds of people who make explosive change happen, two laws of change, and the contexts in which change occurs. Connectors, Mavens and Salesmen are the three kinds of change agents. Here is how Gladwell characterizes Connectors:

"This is what Connectors are like.

They are the Rod Steigers of everyday life. They are people whom all of us can reach in only a few steps because, for one reason or another, they manage to occupy many different worlds and subcultures and niches."

The vital role of connectors is that they can and do widely transmit information about change because they know so many people—not just their close friends but, even more importantly, their casual acquaintances, people who are not like them and who connect them to new information.

For their part, mavens accumulate lots of detailed information. Gladwell says, "The word *Maven* comes from the Yiddish, and it means one who accumulates knowledge." They are also socially motivated and want to help you make decisions using their unique expertise. Gladwell uses the example of price Mavens, whom supermarket managers fear because they know whether posted claims of low prices are correct or not; they are also called "price vigilantes" he says. According to Gladwell:

"Mavens have the knowledge and the social skills to start word-of-mouth epidemics. What sets Mavens apart, though is not so much what they know, but how they pass it along. The fact that Mavens want to help for no other reason than because they like to help, turns out to be an awfully effective way of getting someone's attention."

Salesmen have unique ability to persuade others of the correctness of a course of action. The core of their talent is an ability to quickly counter and overcome any objections a customer may have. One shortcoming of Gladwell's argument that came out in the group's discussion is that Gladwell never really explains who sells the salesmen on a new idea. Clearly, someone could be both a Maven and a Salesman. In the Maven role, he or she would learn about an idea, and, in the Salesman role, convince others of it. So much the better for spread of the

idea if one or more of the "customers" happen to be Connectors. But, suppose the Salesmen are not Mavens and do not have unique knowledge. Do Salesmen simply have an emotional need to convince people of an idea they believe they can sell whether they believe it or not? Gladwell doesn't say.

These three types of exceptional people—Connectors, Mavens and Salesmen—are the ones who start and spread social epidemics and cause change to reach Tipping Points. However, they are a small minority of the population—the 20% of the people who do 80% of the work. Although Gladwell does not directly say so, that social change epidemics cannot occur without their efforts is what he calls "The Law of the Few." This is the first of his two laws of change.

The second law is what he calls "The Stickiness Factor." This refers to another essential element of a social epidemic—its staying power. Gladwell attributes the success of the children's television programs *Sesame Street* and *Blues Clues* to their stickiness. Both programs' producers did extensive research on how children watched television and used the results of their research in design of the programs. Contrary to "conventional wisdom" of child psychologists, they found that children do not watch television like zombies. In reality, they watch when what is on the screen interests them and they understand it. With further research, the producers were able to tailor the segments to match their young viewers' interests to keep their ratings high and *Sesame Street* on the air. Nickelodeon's *Blues Clues* eventually bested *Sesame Street* in the ratings because its producers found two ways to make *Blues Clues* even stickier than *Sesame Street*. First, they found that children did not understand the puns intended to appeal to parents on *Sesame Street* and made *Blues Clues* dialogue completely literal. Second, they found

See Tipping Point, continued on page 17

Tipping Point

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that, unlike adult audiences, children enjoy repetitions of the same program even to the extent they know what will happen next, so they repeated each episode several times with the added benefit of reduced production cost. The latter point rang a bell with parents in the discussion who could recall reading the same stories to their children endless times. The group's discussion of stickiness was extended as participants recalled numerous advertising jingles that they could not get out of their heads such as, "Winston tastes good like a cigarette should."

Another of Gladwell's key points is his discussion of "The Power of Context." Change cannot occur unless the context for it is right. Context is a broader concept than timing; it refers to the total environment surrounding a potential social epidemic. With his discussion of the decline of the crime rate in New York City, Gladwell shows that epidemics can be stopped when the context in which they thrive is changed. In the 1980s, crime was rampant in New York, especially on the subway system with people decorating subway cars with graffiti and evading paying fares by jumping over or ducking under subway turnstiles. These acts were crimes but were not punished as such because police felt they had far more serious crimes to deal with like murder and armed robbery. However, in the mid-1980s, following the advice of consultant George Kelling, a criminologist, the New York transit authority hired David Gunn as Director to oversee a multi-billion dollar re-building of the subway system. Gunn believed in the "broken windows" theory, which Kelling and another criminologist James Q. Wilson had propounded previously. That theory says that by not fixing broken windows, one creates a feeling that no one is in charge and encourages more broken windows and more offenses. In other words, by not fixing broken windows, one creates a "context" in which crime is OK. Gunn steadfastly held to his belief that, by cleaning subway cars and punishing fare evaders, crime on

the New York subways would go down, and it did! Not only were painting graffiti on subway cars and fare evasion greatly reduced, but people arrested for fare evasion were often found to be guilty of serious crimes, so the arrests had added benefit. The concept was so successful that it was applied citywide, and New York became a very safe city even though sociological indicators like lower average age of the city's population pointed to an increase in crime.

FUTUREtakes readers will find *The Tipping Point* an easy and entertaining read—a tribute to Gladwell's talents as a staff writer for *The New Yorker* magazine and former *Washington Post* reporter. Nevertheless, they will find it very thought provoking. They probably will conclude, as did the group, that it is like *Divine Secrets of the Ya Ya Sisterhood*, one of Gladwell's examples, a true "book group" book (i.e., one that inspires discussion from many points of view). They may even find inspiration for a new point of view in their work as another discussion participant and I did.

POINTS FOR THE CLASSROOM

(send comments to forum@futuretakes.org):

- *To what extent is Gladwell's analysis of social change applicable to the social transformations that you have observed or with which you are otherwise familiar? How applicable will his analysis be to forthcoming social changes within the next decade?*
- *Many new ideas never gain enough support, even among Connectors, Mavens, and Salesmen, to lead to social change. There are several reasons for this. First, the change agents themselves (and many other people) have diverse "pet issues," and gaining consensus on priorities is often difficult. This challenge is compounded by information overload, in which there is substantial competition for attention. Case in point – the growing number of blogs. Another factor is the challenge of leveraging the "stickiness*

factor," given the short attention spans and continuing desire for novelty in some parts of the world. Nonetheless, some ideas do attract grassroots support to eventually culminate in social transformation. What unique characteristics do these "successful" ideas share?

Weak Signals

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trends such as those associated with the economy (boom-depression). A common reason for failure to recognize weak signals is that they are often blocked by one's filters. In addition, one might question hidden assumptions that people often make – for example, that energy will remain inexpensive or that home values will continue to increase without end.

With the economic depression now here, the challenge is to spot weak signals of the next boom and be prepared for it well in advance.

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Elina Hiltunen is a Futurist and Strategic Foresight Manager at Nokia Group. In addition, she is completing her Ph.D. on weak signals at the Helsinki School of Economics. Her interests include the definitions of weak signals and ways to use them in the commercial environment. She can be contacted at elina.m.hiltunen@nokia.com.


FUTURES LEARNING
World Future Society

edited by Steve Steele, Peter Bishop, and John Smart,
and Dave Stein –WFS Learning Section Steering Team

This issue features activities associated with World Future 2009, Innovation and Creativity in a Complex World, scheduled for July 17-19 in Chicago, Illinois, USA. For updates or additional information, visit www.wfs.org.

INSIDE THIS ISSUE:

1. Education Summit 2009 – Program
2. World Future 2009 – additional sessions of interest to educators
3. Educator Spotlight – Tom Lombardo

1. The WFS Education Summit: Innovation and Creativity in Education

contributed by Susan Echard, Vice President,
Membership and Conference Operations, World Future Society

Friday, July 17, 2009
9:00 am – 5:00 pm
Chicago, Illinois, USA

The Education Summit, scheduled in conjunction with "World Future 2009: Innovation and Creativity in a Complex World," will explore the cutting edge of education. A full-day program, the Summit will look at what tomorrow holds for education, including new technologies, new techniques and approaches to teaching futures, and visions for the coming decades.

8:30–9:00 a.m. Light Continental Breakfast
9:00–9:10 a.m. Overview of Day

Jay Gary (moderator), director and professor, School of Global Leadership and Entrepreneurship, Regent University, Virginia Beach, Virginia

9:10–9:55 a.m. How Web 2.0, Collaboration,
and Public Information is
Changing Higher Education

**WFS Futures Learning
Section *Bulletin***

Winter 2008-2009

Michael Rihani, president and CEO, Koofers.com,
Reston, Virginia

This session will explain how Web 2.0 services are truly pushing the academic envelope and in turn creating innovative way for higher education to accept and adopt these technologies into the classroom.

9:55–10:40 a.m. **The Future of Mobile
Devices for Learning**

Gloria Steele, education consultant, Technology &
Innovation in Education, Rapid City, South Dakota

This presentation focuses on ways to use mobile computing devices, including notebook computers and cell phones, to engage students. The use of mobile devices as tools for data collection, research, organization, audio and video production, collaboration, and the improvement of writing skills will be explored, and the development and management of classroom projects using these devices will be discussed. The findings from a statewide one-to-one high-school laptop initiative will be shared, highlighting the nature of critical features, including the technology used, the setting, the implementation plan, and impact on student goals and objectives. Together we will forecast the future role of these tools and features for enhancing teaching and learning.

10:40–10:55 a.m. **Break**

10:55 a.m.–12:00 noon **Creating Academic
Learning Futures in the UK**

Sandra Romenska, research associate for the project,
Creating Academic Learning Futures, Leicester, United Kingdom

Gilly Salmon, professor of E-Learning and Learning Technologies, University of Leicester, Leicester, United Kingdom

According to the OECD, higher education systems are being challenged by powerful forces from three interrelated fields: demography, funding availability, and technological innovation. Higher education institutions in the UK in particular are faced with two trends: a decline in the number of traditional learners, due to demographic changes and the introduction of tuition fees, and a rise in the number of nontraditional learners, driven by expansion of the knowledge economy, innovation in technology, and increased mobility. This discussion will focus on creating and exploring alternative futures for higher education through scenarios from emerging student voices. Taking the perspective of higher education and new technologies as complex systems, it will highlight possibilities for modeling futures using participatory and interactive methods.

12:00 noon–1:00 p.m. Lunch

1:00–1:45 p.m. Fostering 21st-Century Skills through Problem Solving International
(Includes students from the Chicago area to discuss their projects)

Marianne Solomon, executive director, Future Problem Solving Program International, Inc., Melbourne, Florida
Vicki Stein, program director, Future Problem Solving Program International, Inc, Melbourne, Florida

Learn about a program that utilizes creative problem solving, encourages students to research and analyze global issues of the present and the future, and provides the materials/tools for collaborative team work. The program also extends learning through the service learning component, Community Problem Solving, and the creative writing component, Scenario Writing, which is based 20–30 years into the future.

1:45–2:30 p.m. CoRT: Futurist Thinking Tools for Students

Lynda Curtin, president, de Bono for Schools, Glendale, California

The only reason schools exist is to cultivate students who can think broadly about any topic. The only reason people with an education get hired is because of their ability to think. Great thinkers can help create great futures. We are going to explore and experience key CoRT thinking tools that help strengthen creative performance. The trick is to learn how to take charge of your thinking energy and to direct it with a laser sharp focus after selecting which thinking tool you will use.

2:30–2:45 p.m. Break

2:45–3:45 p.m.

Foresight Issues in Business and Society: Required Course at Notre Dame, Mendoza College of Business

Tom Frecka, professor of accounting, University of Notre Dame, Notre Dame, Indiana

Jay McIntosh, adjunct professor, University of Notre Dame, Notre Dame, Indiana

The University of Notre Dame has decided to require a future studies course for all business students. Pilot versions of the course will have been taught to about 75 students before the requirement is instituted in 2009. About 500–600 students will take the required course each year in section sizes of about 25 students each. During the session, we will review course learning objectives, share the course syllabus and explain how the course is organized, discuss in-class activities and out-of-class assignments, and provide examples of research projects undertaken by students. It is expected that students will join in the presentation and share their experiences with the course.

3:45–4:30 p.m.

10 Trends Affecting the Future of Higher Education

Ralph Wolff, president and executive director, Western Association of Schools and Colleges, Alameda, California

American higher education has frequently been ranked as the best in the world. Is it still? Every major country in the world now recognizes higher education as key to global competitiveness and future prosperity. Yet major trends are affecting the quality and character of American higher education in significant ways. This session will review and analyze 10 major trends that already are influencing the future direction of higher education in the United States and beyond.

4:30–4:45 p.m.

Summary of Day's Events

Jay Gary (*moderator*), director and professor, School of Global Leadership and Entrepreneurship, Regent University, Virginia Beach, Virginia

Registration fee: \$125 members / \$150 nonmembers (includes light continental breakfast). Note: this is separate from WFS conference registration.

World Future 2009 is scheduled for July 17-19, 2009, in Chicago, Illinois, USA. Washington DC. For additional information about the conference and the pre- and post-conference activities, visit www.wfs.org.

2. The WFS Education Summit: Innovation and Creativity in Education

contributed by Susan Echard, Vice President, Membership and Conference Operations, World Future Society

The following additional sessions scheduled for "World Future 2009: Innovation and Creativity in a Complex World," will be of interest to educators and others interested in education (for updates or additional details including session times, visit www.wfs.org):

ENGAGING GLOBAL YOUTH THROUGH INNOVATION DESIGN CHALLENGES

Destination Imagination is the world's largest creative problem solving program for kindergarten through college-aged learners. DI participants develop life skills while solving challenges through their unique, hands-on experiences in the sciences, technology, mechanics, engineering, theater, improvisation, goal setting, time and budget management, team building, and leadership. The University of Minnesota's Leapfrog Institutes build positive futures for human capital development through the infusion of creativity and innovation in education. DI's collaboration with Leapfrog Institutes extends the organization's creativity and imagination program with knowledge construction, innovation, and active futuring components.

Who should attend: All those interested in youth and the development of life skills.

What you'll learn: Attendees will learn how youthful participants respond to specific Innovation Design Challenges (e.g., in energy, environment, social capital development, communications, conflict resolution, etc.) and how to continue and expand youth involvement in Innovation Design Challenges into the future.

How this new knowledge can be applied: Participants will be presented with innovation design challenges in a random "surprise" process. The Leapfrog Institutes and DI organizers will discuss their experiences in engaging youth in active futuring and will present a framework for opening the futures to younger generations.

Arthur Harkins, faculty director, Leapfrog Institutes, University of Minnesota, Minneapolis, Minnesota.

John W. Moravec, director, Leapfrog Institutes, University of Minnesota, Minneapolis, Minnesota.

Pamela F. Schroeder, affiliate director, Minnesota Destination ImagiNation, Minneapolis, Minnesota.

YOUTH CAN CHANGE THE WORLD: INTERNATIONAL MODELS AND NETWORKS FOR ADDRESSING GLOBAL CHALLENGES OF THE 21ST CENTURY

David Bornstein's book and PBS TV series *How to Change the World* tells stories of remarkable individuals

whose vision, foresight, and creative action have had a major impact on improving the world. This panel showcases three international models of how youth can collaborate in a similar way to create the conditions, generate inventions, or be catalysts for projects that can improve the world and address some of humanity's major global challenges. Some of the projects discussed include kids creating inventions for handicapped people in Israel; student-inspired community projects to promote clean drinking water through behavioral changes in homes in rural India; and three groups of high-school students and teachers from three continents who traveled to meet with the Dalai Lama in Dharmasala, India, to understand the nature and practice of happiness.

Who should attend: Educators, teachers, parents, and anyone who values the energy and creativity of youth to be able to help address global challenges and to help make positive changes in the world.

What you'll learn: Attendees will learn about three major international education projects that have directly involved or have been influenced by students' creativity and collaboration.

How this new knowledge can be applied: This panel presents the power of creativity and energy of having young people directly involved as co-participants in helping address global challenges for the twenty-first century. The projects, technologies/digital media, and community project-based learning approaches used by all these projects can help others learn how they can be involved in these or similar projects, and are models of how to best engage students.

Ted Kahn, CEO and chief learning officer, DesignWorlds for Learning/DesignWorlds for College and Careers, Cupertino, California.

Sherman Rosenfeld, project director and senior education researcher, Weizmann Institute of Science and Davidson Institute of Science Education, Rehovot, Israel.

Linda D'Acquisto, president and founder, KidCurators, LLC, Middleton, Wisconsin.

Miriam von Guggenberg, summer intern, Brandeis University, Project Happiness, Waltham, Massachusetts.

Max Marmer, senior, Lick-Wilmerding High School (San Francisco) and student intern, Institute for the Future, Palo Alto, California.

Koki Moribe, junior, Cupertino High School, Cupertino, California. He is a student client of DesignWorlds for College and is active in a major global science philanthropy project of his senior class, called Kenya Dream.

COMPLEXIPACITY

In 1970, British cyberneticist Stafford Beer forecast that the great challenge of the Information Age would be "managing modern complexity." Today, universal connec-

tivity is making us all “parallel-processors” and “multi-taskers,” while the Internet is inundating our decisions with input. Every day, science tells us more about how we affect the environment and how our environment affects us. With growing transparency, every institution exudes information, while the pace of innovation and change continues to accelerate.

Do humans—individual and collectively—have the capacity to assimilate all the newly accessible knowledge and use it to improve our policy decisions, buying habits, and personal choices? Will educators be able to equip us with the skills to manage our complex new world, or will our increasingly complicated decisions ultimately have to be made for us by computer algorithms and intelligent systems?

Who should attend: Educators from pre-K to postgraduate, human resource managers and recruiters, computer games developers and players, parents.

What you’ll learn: Latest findings on new workplace skills and the growing use of serious games to teach skills; problematic trends that will constrain the future of traditional education and training.

How this new knowledge can be applied: Educators can use examples of successful cyber-learning to promote the adoption of edu-gaming by their schools and in their communities; employers can implement online recruitment programs and adopt eLearning in-house.

David Pearce Snyder, principal partner, The Snyder Family Enterprise, Bethesda, Maryland; contributing editor, *The Futurist*, *Trend Letter*, *On The Horizon*, and *Innovate*.

DO LIBRARIES HAVE A FUTURE?

Are libraries, institutions we’ve treasured for millennia, going the way of the horse and wagon? Is there a role for libraries and librarians in the age of Google search and at a moment when Google is beginning to digitize all the books of the world’s great libraries for easy Internet access? Even as many cities and towns continue to build or expand their libraries, we need to ask: Will we really need brick-and-mortar libraries in 40 years? And even if libraries will exist only on the Internet, what will their role be? Will there be a profession called librarian by mid-twenty-first century, and if so, what will librarians’ duties be? These hard, vital questions about libraries’ future are inseparable from questions about maintaining the freedom of information—a traditional role of libraries—and about erasing the worldwide unequal access to new information technology, the so-called digital divide.

Who should attend: Anyone interested in discussing the future of libraries.

What you’ll learn: Presenters will focus on the new trends

affecting libraries and the steps libraries must take if they are to continue as vital, useful community institutions.

How this new knowledge can be applied: Attendees will be able to return to their communities with specific, concrete recommendations for restructuring and updating their libraries to fit twenty-first-century requirements.

William Crossman, founder and director, CompSpeak 2050 Institute, Oakland, California

Stacey Aldrich, deputy state librarian, California State Library, Sacramento, California

Rivkah Sass, executive director, Omaha Public Library, Omaha, Nebraska

THE STATUS OF ONLINE EDUCATION IN THE 21ST CENTURY

The advent of Internet education in the twenty-first century has changed the world, and how people communicate, learn, and interact with other cultures. We will bring you up-to-date on the most current technologies, delivery mechanisms, virtual worlds, applications, and trends in global online education. We will highlight global education and show how it has not only influenced the United States and Europe, but Third World countries as well.

Who should attend: Those interested in using the Internet to disseminate education and information, and those who wish to use that information to further their community.

What you’ll learn: The status of online education and what the current trends in global education are.

How this new knowledge can be applied: By utilizing the newest technologies and networks, individuals and organizations can further their influence and ability to network with other individuals around the world.

Diana J. Muir, director, The Personal Learning Center, LLC, New Windsor, Illinois

Solomon Negash, professor, Computer Science, Kennesaw State University, Kennesaw, Georgia

David Glick, director, Midwestern iNACOL Committee, St. Paul, Minnesota

Andy Ross, director, Global Services, Florida Virtual High School, Orlando, Florida

WHAT STUDENTS NEED TO KNOW AND BE ABLE TO DO TO BE PREPARED FOR THE FUTURE

Education is the engine of our civil society and our economy, wherever we live on the planet. However, discussions about education rage about everything from the mechanics of organization to test scores. Often, schools and colleges become political footballs as candidates run for or against certain programs or advocate a one-size-fits-all approach that they hope will get them through the next election. What will students need to know and be

able to do to be prepared for life in a fast-moving global knowledge/information age? What academic training, skills, attitudes, and behaviors will be essential? A viable education system should meet the needs and cultivate the talents and abilities of individual students while providing society with civil, employable, and fulfilled people who are eager to enrich us with their genius.

Who should attend: educators; business, government, and nongovernmental organization professionals; futurists and forecasters

What you'll learn: Participants will learn from ongoing observations about what students might need to know and be able to do to be prepared for life in an always-on, non-stop world. They will be involved in a process they can use to stimulate that conversation in their own communities or countries. They will learn why simply pursuing one-size-fits-all biases about one education remedy or another might not be constructive.

How this new knowledge can be applied: Leaders at all levels in every type of organization or community can apply this information and approach in considering what people know, what they might need to know, and the unrealized opportunities that are embedded in the diversity of genius that surrounds us.

Gary Marx, author; president of the Center for Public Outreach, Vienna, Virginia.

HOW TO START A NEW CAREER AS A FUTURES EDUCATOR

Have you ever watched those "Extreme Makeover" reality shows and wondered what you might look like—in a new career as a professor of Futures Studies? Have you ever dreamed about rolling over your work experience into a teaching position at the college or graduate level? Despite the small numbers of foresight educators today, the prospects have never been brighter. In this session, speakers will share the "ins and outs" of recreating yourself as a professor of foresight for academic programs ranging from business to organizational leadership to technology and the political and social sciences. Join the new vanguard of futurists who have decided to build their next career now.

Jay Gary, director and professor, of Strategic Foresight, School of Global Leadership & Entrepreneurship, Regent University, Virginia Beach, Virginia

Sue Whitfield, president, White Tree Consulting; member, Association of Professional Futurists; Crystal Lake, Illinois

Who should attend: Consulting futurists, business leaders, entrepreneurs, anyone who has something to give as a foresight educator.

What you will learn: Attendees will learn how to: 1) assess your own personal, professional, and academic assets, 2) deepen your understanding of how foresight relates to various disciplines, 3) identify schools that are more likely to hire futurists, 4) engage in "just-in-time" learning when asked to create online courses, 5) avoid the three common pitfalls that sideline those making this journey, and 6) find foresight educators who can mentor you, while you exceed all expectations.

How this knowledge can be applied: Participants can use this knowledge to recreate the second half of their lives as futures educators.

FOR MORE INFORMATION CONTACT:

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3. Educator Spotlight

Thomas J. Lombardo, Ph.D.

Tom Lombardo, Ph.D. is the founder and Executive Director of the Center for Future Consciousness in Scottsdale, Arizona and a leading researcher, writer, and speaker on the topic of the future. The author of *The Evolution of Future Consciousness* and *Contemporary Futurist Thought*, Dr. Lombardo brings a unique and powerful synthesis of contemporary science, psychology, and philosophy to the field of future studies and futures education.

An award-winning educator with over thirty years professional experience, he has supervised college faculty and



Lombardo

faculty departments and designed innumerable college courses, including complete undergraduate and graduate programs. Aside from psychology and philosophy, he has exten-

sively studied intellectual history, evolutionary theory, cosmology, the philosophies of science and time, science fiction, and most recently futurist literature, ranging from the future of science and technology to the future of psychology, human society, culture, and religion. In addition, he has worked in clinical education and mental health settings and is well versed in theories and practices of human growth, personal development, and self-fulfillment.

Dr. Lombardo's two most recent books on the future, *The Evolution of Future Consciousness* and *Contemporary Futurist Thought*, provide a detailed psychological study of the human capacity to think about the future and trace this capacity from prehistoric times through myth, religion, secular philosophy, evolutionary science, science fiction, and futures studies, concluding with a comprehensive review of contemporary theories and visions of the future. *Future Survey* describes the books as "awesome," "heroic," and an "ambitious synthesis"; Wendell Bell, Professor Emeritus of Yale University, uses the terms "brilliant," "encyclopedic," and "masterpiece"; Walter Truett Anderson, President of the World Academy of Art and Science, states that the books represent "a maturing of future studies, placing it solidly within the larger frameworks of human thought, and I would recommend it to anyone practicing or teaching in that field" and Tim Mack, President of the World Future Society, refers to the books as "innovative, thoughtful, enlightening, and entertaining." As he states, "Dr. Lombardo has accomplished what most of us can only dream about. He has produced two innovative, thoughtful and weighty overviews of the study of the future, written from two dynamically different perspectives, at the same time. And as an added bonus, the two books compliment each in highly original ways."

In his faculty position as chair of psychology and philosophy at Rio Salado College, over the last ten years Dr. Lombardo has been spearheading a comprehensive approach to teaching and assessing deep learning, critical thinking, educational ethics, and wisdom related capacities within all the courses in his departments. In addition, he has created a faculty self-evaluation and self-development plan as well as a workshop that focuses on the growth of wisdom in teachers and educators. In his view, the development and modeling of wisdom should be the central goal of education. Specifically regarding his ongoing interest in the virtue of wisdom, which he describes as the "highest expression of future consciousness," he has contributed numerous papers to the premier wisdom website *The Wisdom Page*. As resident futurist faculty at the college, Dr. Lombardo provides various workshops and presentations on futures related topics for Rio Salado staff and students, most recently on "Globalization," "Ecology, Sustainability, and the Future," and "The Exploration and Colonization of Outer Space."

Aside from the publication of his two books and his ongoing interest and study of wisdom, Dr. Lombardo's most recent work in future studies includes articles and presentations on the future of human psychology, the enhancement and evolution of future consciousness, education and character virtues, the future of marriage, personal responsibility and the future, and a series of articles for *Learning Tomorrow* on science fiction and the future.

Dr. Lombardo is one of the key developers of the World Futures Study Federation Pedagogical Resources in Futures Studies and serves on the Editorial Board of the *Journal of Future Studies*. His website (www.centerforfutureconsciousness.com) contains a wealth of informational resources on the study of the future. He is a graduate of the University of Connecticut and the University of Minnesota and a graduate fellow of Cornell University. He has served as the Chief Psychologist and Educational Director at John Madden Mental Health Center, the Dean of Forest Institute of Professional Psychology, and the Chair of the Psychology Instructional Council at Maricopa Community Colleges. His first book, *The Reciprocity of Perceiver and Environment*, is the best selling volume in Lawrence Erlbaum's *Resources in Ecological Psychology* and has been translated into Japanese.

Tom and his wife Jeanne, also an educator and writer, recently presented at the World Future Society conference on "Utopian Visions and Values for the Future," and together they continue to develop The Center for Future Consciousness, an educational institute dedicated to the enhancement of future consciousness and the evolution of humanity. Unique features in their educational approach include connecting the development of character virtues to heightened future consciousness and pulling together the psychology of future consciousness with the study of the future. When they are not in their study, Tom and Jeanne enjoy hiking in the desert, weightlifting, gardening, swimming, art, and music.

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