

Eliminating future shock: the changing world of work and the organization

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Abstract

Purpose – *To explore the alternative futures of work and the changing nature of the organization.*

Design/methodology/approach – *Along with a long-term macrohistorical approach, two futures methods are used: emerging issues analysis and scenarios.*

Findings – *Four scenarios are developed: business as usual (pendulum of labour versus capital); social and innovative transformation (moving toward the triple bottom line and flatter organizations); gut-wrenching globalization (outsourcing of everything and the end of the nation-state); and the unknown world (dramatic changes in the nature of work and organization, particularly because of AI technologies).*

Originality/value – *Novel approach in linking macrohistory to emerging issues to scenarios. Challenges litany approaches to work and the organization and links with deeper worldviews.*

Keywords *Globalization, Older workers, Outsourcing*

Paper type *Research paper*

Eras of change

I first found my view of the future disrupted in 1974 when I watched a film written by Alvin Toffler. I remember seeing, in the concluding scene, a couple walking romantically through a beautiful forest. Serene music accompanied the swaying of their hands. The world was calm, soft, predictable. And then the camera panned to their faces, and suddenly, in horror, I saw that it was not humans who had found Eden, but two robots.

It was this disruption of the natural world that Toffler accurately forecast. Changes in the nature of nature (genetics), in reality (artificial intelligence), in society (postcolonialism, post-national-state, post-everything), in truth (postmodernism) and sovereignty (globalization) have deeply challenged our world. And we are living through this rupture.

For Toffler, there are three historical eras – the agricultural (feudal, the strong male, closeness to nature, living within one's means), the industrial (the standardization of everything, the democratization of everything) and now the post-industrial. As we are living through this era, caught in this transition, we cannot see it quite clearly. Fish do not know they swim in water, and we remain unaware of the era we are in. We are often unable to decipher what trends are taking us into the future, and what trends are gloriously fighting to take us back to a previous era.

Thus not only is the present murky but certainly so is the mid- and long-term future. Some tools from the futures field can make this transition more understandable if not manageable.

First, and this is crucial, Toffler misunderstood a crucial point, something that is biting the entire western world. History is not merely linear, it can be cyclical, more like a pendulum. Globalization is not merely a simple linear process – as Michio Kaku writes – just get on the train, the single track[1]; rather, it is a complex adaptive pattern.

What this means is that humans can learn about history and thus make choices. These choices are not just individual but collective. What is new about this type of globalization is that there is collective reflection on this process – we are reflecting on our own evolution, indeed, intervening in human evolution, particularly the speed of evolution.

Forecasting in an environment where the future “out there” is changing because of the future in our minds (both how we think and how our bodies contextualize, limit, define what we can think) is fraught with challenges.

Moreover, the act of forecasting changes the forecast. The universe is not static, not disconnected from who we are. It is not empty, but already filled with our images and desires.

The shape of the future is not merely a linear upward rise of more science, more technology and more modernity – i.e. the end of history, of religion, of tradition, rather, that alternative trajectories are possible. Indeed, individuals and communities throughout the world have seen the linear future and said, “No, we don’t like it”.

Attack on the linear future

This attack on the linear future has come from many sides: the nation, the city, science and religion.

In Australia, for example, it has been the One Nation political party, challenging economic globalization and multiculturalism with the mantra of “One God, One People, One Nation”. While economic globalization continues unabated, multiculturalism certainly is under threat. Prime Minister Howard of Australia continues to dream of the white picket fence, when life was stable and serene. But it is not just Australia, but throughout the world, leaders and citizens imagine a nostalgic past. In the USA, from former Speaker Newt Gingrich to Senator Trent Lott to Representative Tom Tancredo, all decry multiculturalism. They fear that it is the “cult of multiculturalism” that will lead to the end of the USA (www.rightwingnews.com/interviews/tancredo.php). America will become “A Tower of Babel” (Bailey, 2006).

The challenge as well comes from other sites – health professionals have shown that city design impacts our health, our life years (Ewing *et al.*, 2003). Suburbs rob us of our health by destroying community and taking away walking possibilities. There is now as well a large body of evidence linking air pollution and traffic to heart attacks (Szabo, 2004). The modern city is not the zenith of progress but a failed future.

Spiritual approaches to science and society call for a re-enchantment of the world. Focusing on spirituality and health, evidence for meditation, yoga and alternative medicine continues to exponentially mount (Stein, 2003; Pirotta *et al.*, 2000; see also www.tm.org). Organizationally, there have been calls for spirituality as the fourth bottom line. Certainly, individuals desire more of their employer than merely providing a job. Identity and purpose have become equally important.

Institutionalized religion as well is challenging the linear assault, imagining a future from the past, whether this is Bush’s theological utopia linked to empire or Bin Laden’s fascist Islamic khalifate or BJP’s Hindutvatva. Each uses religion and the imagined past to imagine a different future from the modernist linear ascent of science and technology.

Eco-green visions also challenge the linear future. Using the deep myth of Eden with the Western archetype of Arcadia, they imagine a world where humans live with nature. It is cooperative communities that they prefer. Greed is challenged and humans must live within their means, reducing their footprint on Earth.

Feminists go deeper, challenging the nature of work itself – why is institutional work counted but not yet housework and other informal work? Current definitions of work, and their indicators are considered the problem. Dramatic new futures of community and organization which support new forms of work are imagined[2].

Perspectives on the futures of work

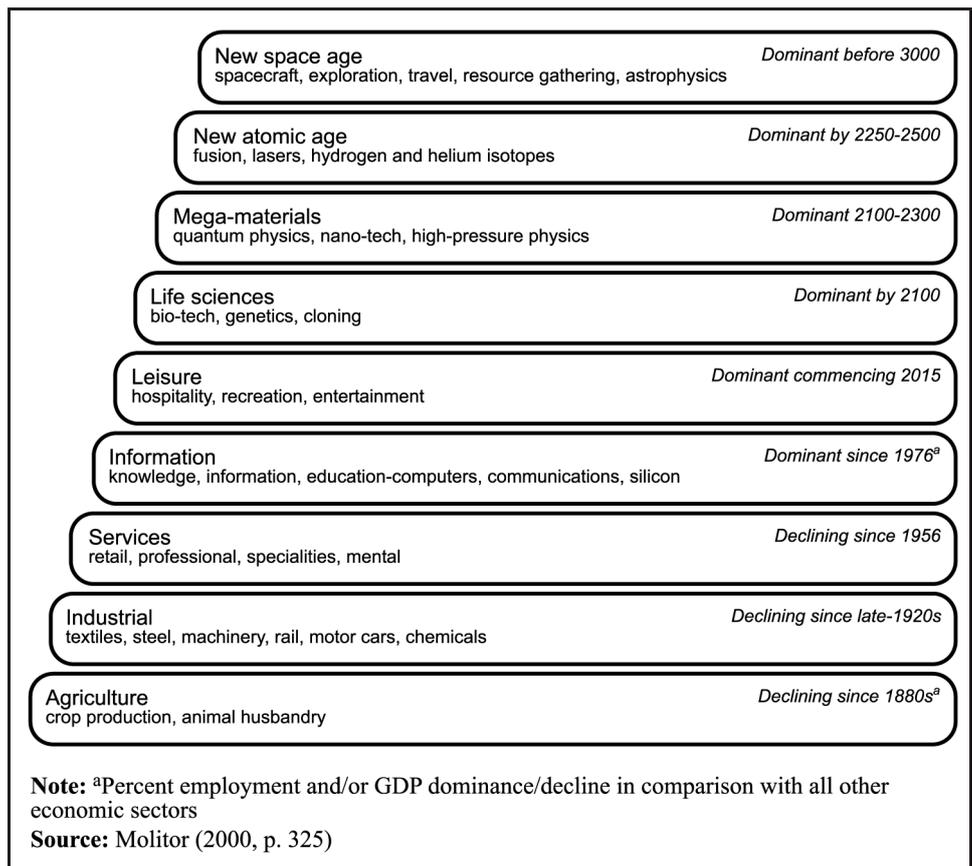
These grand perspectives rethink the nature of work

The linear ascent asserts that work will increasingly become de-linked from survival once the waves of globalization have created a true world economy. Each locale will do what it does best and trade with others. Generally, advanced nations will focus on finance and technology, with manufacturing being done by poorer nations, and manual labour by the poorest. Agriculture, of course, is the one variable, which remains protected, since food relates to survival and it is the heartland of each country. Losing the vote of the heartland would be challenging for the modernists-globalists and thus the protracted discussions on globalizing food and eliminating agriculture subsidizes.

Jobs in manufacturing continue to go down, having peaked in the USA in the 1920s (Agricultural in the 1880s) (see Figure 1). Eventually, manual labour will disappear in the factory[3] and in the home – a world of robots is our future. We will be designers, engaged in serving others – the tourism industry – and in the finance industry (not to mention the big growth – the conflict industry). Union power will also continue to decline[4].

In contrast is the Eco-green, where work is linked to the good life, to the dignity of expression, to being. Work is not necessarily linked to more material rewards, but rather there is more of an affinity to simplicity, slower time, and the general quality of life (see for example, www.simpleliving.net and Schumaker, 1973, which remains the classic). Whether through state intervention, cooperatives, retraining, or individuals themselves balancing their life and professional commitments, work is directly linked to dignity and the quality of existence.

Figure 1 Beyond the third wave – the nine eras of economic sector dominance



The Right, while sharing the view of simplicity, links work – hard work – to just rewards. The state needs to ensure that all have a chance to sweat and thereby accrue fair access to rewards. This is the famed Protestant ethic – hard work leads to rewards, in this life, and the next!

More recently has been the notion of smart work. Dignity and hard work are variables but working smartly so there is more time for leisure (or work-life balance, or passive profit making via investments) is far more crucial. Working for the sake of work – dignity – is considered an ancient value, far less useful than the capacity to intelligently adapt to changing technologies.

What these multiple perspectives point to is that future shock is not just occurring from the increasing rate of change, but from heterogeneous change, i.e. we appear to live in the same world but we do not.

Our images of the future, of work, of how the world should be, all differ. We live simultaneously in different times in history: some in agricultural, some in industrial, some in post-industrial and some already in the emerging dream cultural economy.

We time (and work) the world differently.

Futures thinking

It is not just the nature of change – heterogeneity – but that change is complex – a change in one part of the world influences the next, i.e. changing weather patterns and famine in Africa, dietary habits in China and Vietnam leading to SARS/bird flu, for example. Each change sets off first, second and third order impacts.

As well, it is loss of agency that creates the new future shock. Loss of agency is the capacity to influence the world, the sense that it is has all become too overwhelming – time, finance, marriage (the job/family balance) all conspire to remove the possibility of individual efficacy.

One response, and the Right is the best at this, is fear. “Some group is taking away our jobs, usually, foreigners, those who look different from us”. But not just foreigners, women have also been blamed. Next will be robots.

For shocked individuals, the failed response can be suicide – the impact of change is too overwhelming – “The future is bleak, there is nothing I can do about it.” Men have been most sensitive to this recently, young and old[5].

Moving forward in a world where the ego is unable to succeed is one problem. A world where there are conflicting messages for men is another. Having no space, no understanding of alternative futures – once the tragedies begin – is a third.

Erasing or adapting to future shock means:

- Understanding that there is more than one pattern to history and to the future: for example, Linear, cyclical, bifurcation, the pendulum and evolution adaptive (the spiral) approaches.
- Understanding that individuals and communities not only live in different types of space (geography) but different types of time (temporality) but also different ways of knowing (epistemology). We may be on the same planet but we live in different worlds.
- Understanding that we cannot bracket, closet, fortress ourselves off from other parts of the world. Energy, climate, viruses, stock prices should not be seen in local terms but in global planetary terms – karmic biteback[6], blowback are all real. Real solutions must be global in scope and local in participation and regional/national in implementation.
- Wherever we can, we need to find agency. In our personal life, in our organizations, in our local communities – agency is crucial for personal and collective health. Without a sense of being able to influence the world, we will curl up and die. Finding one's zone of influence is crucial.

- Work and organizations thus become not only places where we earn money, make friends but they are crucial sites for making meaning, creating community (emotional connections with colleagues) and most importantly, for finding agency. Being put down, feeling powerless – whether by the local office boss or aggressive colleagues – are not just minor issues for one’s health but central to avoiding, indeed, eliminating future shock. Enhancing productivity becomes a side issue in a culture of bullying. Work becomes an emotional survival issue[7].

This is even more important as we consider that the future, most likely, will not remain the same. Toffler may have had some of it wrong as have many other forecasters in assuming that technology would reduce work or create the paperless office. This was largely because their context was linear, predictive, forgetting that we live in adaptive complex worlds. Technology does make our life easier and simpler, but as our worldview is competitive and progress-based, we use the time opened up to increase productivity, to search for the next deal – it changes us. We do not contest “work”.

The mistake made earlier was thinking merely in terms of the new technology as creating innovation, instead of the system, worldview and story of the future that technology is nested within.

Certainly, the futures field has moved from focusing on single point forecasting (a precise accurate forecast) to scenarios (a range of alternative futures) to depth (the nested layered analysis) and finally, to using foresight so organizations become adaptive and visionary. It is those organizations who have had a clear vision and embraced ideas on the edge that have done the best the last 100-150 years, they have survived and thrived (de Geus, 1997).

As we explore in the final part of this article, vision and innovation can emerge from top-down, from the leader, or bottom-up, through employees/citizens. This is a challenge to the great leader hypothesis – that the leader creates the future, brings about change and sets the vision. He is the hero. Rather the purpose of the leader may be to create the capacity of those in the business, to innovate for themselves, to create, so they do not feel created on – to bring out the hero in others. This is changing the system so that agency is possible. This reduces future shock.

Future issues – trends and emerging issues

Future shock can also be reduced by anticipating tomorrow’s problems. Returning to issues of the futures of work and the futures of organization, what are some major challenges in front of us?

Outsourcing of services

This is the process of outsourcing, and now including not just manufactured goods, but outsourcing services as well. The call centre is the most obvious example, but as well basic science, basic research, data entry, data analysis and eventually accounting, law, risk management and life sciences. For business process operations, McKinsey and Company estimate that outsourcing could grow an additional US \$80 billion (*Newsweek*, 2006).

The outcomes of this could be:

- Innovation, moving up the ranks to finance/knowledge industry. The goal is to outsource as much as possible and focus one’s competitive edge on what cannot be outsourced, that is – Innovate or die.
- Breakdown in the capitalist system as workers join with professionals to challenge the globalization model. “Made in the USA or Australia” and “Buy Local” becomes not just a cry for labour but a cry for professionals. Will Globalization end once professionals are hit with dramatic job losses?
- Working with those areas that are receiving the outsourced work and partnering with them, that is, seeing them as current and future partners in the shifts in the capitalist system. As they rise, they come to you for new deals, new cycles of innovation.

- The last outcome is a world system shift with India and China reinvesting in OECD, i.e. creating a fairer globalized world.

Outsourcing plus AI systems spell an end to work as we know it. Add the fact that two billion new workers in about a dozen developing countries have joined or will soon be joining the global workforce and the world in a decade plus will look quite different to today (Ernsberger, 2005).

Aging

The choices are obvious. With an aging OECD, productivity has to increase. The median age is moving upwards – toward 40 – the worker to retiree ratio is changing (3 to 1 to 1.5 to 1) – all point to potential deep problems (Wallace, 1999; Inayatullah, 1999; Peterson, 1999; see also <http://webhome.idirect.com/~carcare/thoughts/aging.htm>). The choices include:

1. Increase migration – the problem of this is the ecological footprint of OECD nations (The USA and Australia have amongst the highest footprints) (see www.epa.vic.gov.au/eco-footprint/) will increase – water is already a problem. In Australia, cultural issues with the new migrants, will they be Anglo, or at least Mediterranean is a major issue. Throughout Europe, the issue of Islam and assimilation has already reached dramatic proportions (with France leading the charge via the politics of the headscarf). Generally, there is less enthusiasm for migrants since the “war on terror”. But it is not just the demand for particular nations that is an issue; rather, demand for highly skilled professionals who speak English will be global – other aging nations will want them. As well, cities will compete for the same young people, making the competitive battle not just between nations and regions, but between global cities as well.
2. Raise the age of retirement, so individuals work longer – to 65 at this stage for new workers.
3. End retirement, argues Ken Dychtwald. He argues that retirement is an outdated concept and far more flexible approaches are needed. These approaches need to meet the changing needs of employer and employee. These include:
 - the creation of a culture that honors lifelong learning, i.e. experience;
 - ending mandatory retirement; and
 - flexible work and of course flexible retirement (Dychtwald *et al.*, 2005)[8].
4. Use AI and other systems to increase productivity – aging is tempered with productivity from new technologies.
5. Genetic engineering, i.e. designer babies, state-led or sponsored population measures to deal with global competitiveness.
6. Rethinking of society so that work/organization are far more female/family friendly. Real daycares, permanent part time positions, parental leave – essentially delinking biology from society and delinking gender and work.
7. Change the foundational template of the life cycle, i.e. from birth-student-work-retirement to life long learning or other efforts to remove formal work as foundational in male identity formation. What this means is that a new inner template of our collective work lifecycle must be invented. Central to this are new concepts of aging – active aging, conscious aging, for example.
8. For organizations, a new template means developing aging policy that sensitive to various age-cohorts (matures, baby boomers, gen x, dot.com and later double helix children). Each group has a different view of aging and its resources consequences (competition for work and marriage).

Automation

Continued automation and rethinking employment and unemployment in all areas but specifically focused on smart systems – avatar angels, wherein miniature hand held or mobile phone devices monitor our health, consumption patterns, etc. Google in the real world, for example. In the extreme, automation and AI leads to full unemployment as the worthy goal[9], but generally the scenarios are around 30 per cent permanently not working, around 30 per cent part time and around 30 per cent as elite system designers – those who design, manage, enforce and generally legitimize the system.

Alternatively, depending on the efficacy of AI systems, this could move to 90 per cent not working with 10 per cent working. This last scenario assumes a tearing down of fake jobs, commonly known as feather bedding – work not really needed but kept to ensure that social unrest is low.

There may be wise ways to do this, i.e. if one nation reduces work hours, this makes them far less competitive, but simultaneous reduction across OECD nations would work.

Genetic engineering

The mapping of the genome cannot be underestimated. With individual maps soon available, tailored medicine, tailored insurance is just around the corner. At birth, we will be given a visual information map (a digital angel) – an interactive web site, with our life chances outlined, the tendencies towards certain diseases, the recommended behavior (gene intervention, diet, exercise) to deal with these tendencies. Certainly insurance companies will develop far more tailored products. Applying for work will as well be accompanied with a gene card. While there may be initial resistance, a genetic diagnostic will be one among many tools companies use to hire.

And it would be foolish to assume that government will not step in to legislate against the unequal treatment of those with certain genetic disorders.

On another level, we should expect that the slippery slope from gene prevention to gene enhancement to germ line intervention will be quick. Preventing diseases – early detection, even termination – will be easier to accept. However, once initiated then enhancement will follow soon, with parents, companies (certainly the military) seeking to advantage itself. Germ line intervention will be far more difficult as this means not only therapy and enhancement for this generation but for subsequent generations.

Demography

The demographic environment also continues to shift. The nearly 50-50 division of traditional (values, male dominance, followers of the book, small government) and modernists (technology, gender equality though not equity, followers of science, large government, international balance) is being challenged by the new group of cultural creatives. Argue Ray and Anderson (www.culturalcreatives.org), this group consisting of less than 5 per cent of the population in OECD nations (certainly the USA) 30 or so years ago, has now moved to 25 per cent. They focus on – change in consciousness, gender partnership, followers of the inner self, appropriate governance with an emphasis on town hall meetings, e-democracy, global governance and sustainability.

Work is suddenly not just a job, but about creating a better world. The company may need to represent deeper values – purpose, at the very least the triple bottom line, perhaps the quadruple (with spirituality, or personal health, or future generations as the fourth). Companies that do not focus on the other bottom lines will be unable to attract the best, those on a mission – the self-actualizers. And while many companies may be satisfied with the good enough – the best being too difficult to manage – the image of what constitutes a healthy environment will change, and other workers will also ask for changes in the organization to match inner needs (or, far less ambitious, a pool table, or a rest area).

It is important to note that this new demographic group does not translate into a political movement, for either labour or liberal or even green, but rather they seek a different ethic.

Leadership

This emerging demographic group as well challenges traditional notions of leadership and the nature of the organization. Among the two great uncertainties are[10]:

1. Will organizations in the future still be run by the classical strong male leader (authoritative, sometimes authoritarian – my way is the only way, I am the hero) versus the facilitated situational leadership feminine (partnership, providing vision and direction, listening, bringing out the hero in others)?
2. Will the future organization be the traditional industrial (hierarchy, 9/5 time, salary based on distance from manual labour, salary based on length of time, feudal, top heavy in terms of salary) or the learning/healing, the flatter postindustrial model?

In this framework, four futures are possible (see Figure 2).

The challenge for modern organizations is to move from the current tensions to the aspirational. This is far easier said than done – i.e. while there are many individuals who are experimenting with new types of leadership (the dot.com model, for example) the structure of the industrial, time-controlled, strict hierarchy models remains. Thus, ideals and idealism fall aside when confronted with the old structure. Apathy and passive aggression results.

Labour of course is caught. Unions have become isomorphic to the power structure they were fighting against, i.e. strong hierarchy, tough politics, and thus has a far harder time adjusting to the deep changes the world is going through.

At a broader macro-economic level, Asian nations are faced with a different problem. They seek to move from the agricultural (who knows who, the village elder, the community model) to the industrial (strategic planning, clear standards, merit based). Those who have done that – the East Asian nations – have done well economically. But OECD nations who seek to enter a knowledge economy have a different challenge. For them it is the move from an industrial to a knowledge economy.

The tension here is that flexible, responsive, accountable, swift labour markets and organizations are needed. However, the memory is of the loss of rights, of dignity, of large capital using arguments of flexibility (for the greater good, for the nation) for their own purposes. The challenge thus is two fold and certainly paradoxical. This is both giving

Figure 2 Four possible futures



security – perhaps in the form of part time permanent positions or in the form of basic rights for all (housing, food, clothes, education and health) in exchange for flexibility. And there may be a range of alternative options (guaranteed stock shares given at birth) or cooperatives where all share in the management, ending the classic labour/management contradiction. This is especially possible in the more knowledge intensive industries. But this is far from certain. For example, the university, among the most knowledge-based sectors, remains entirely feudal. Both sides of the argument are stuck – markets asking academics to be more market sensitive and academics wanting protection from the evil of greed.

Returning to the four patterns – scenarios – it is important to note that the aspirational does not need to be always networked, partnership based. Indeed, while networked may be the dominant pattern, in times of crisis the culture could transform to the feudal-military mode (strong leadership, full and non-questioning adherence to orders and command). Or other alternative configurations can be found.

Certainly the main point is that an industrial organization with patriarchal leadership does not appear to be desired.

Alternative futures

What then will the future look like?

At the very least there are four possibilities, at least in the mid-term, 10-20 years.

First, business as usual. This is the continued pendulum of labour versus capital, employee versus management and man versus nature. This is the back and forth between liberal and labour – should OECD nations become more globalized or more of a social welfare state. In Australia, for example, the tension is between the American and the British models. In each model the question remains, how can basic needs to be balanced with the incentive. As well, in Australia, there is the cultural pendulum between being UK-directed, Asia-directed and USA-directed. This is the back and forth debate between uni and multiculturalism. Who is the real citizen?

I consider this future the most unlikely given the issues outlined above. Aing, outsourcing, digitalization, geneticization, all challenge the status quo.

Second, social and innovative transformation. This is the move from single bottom line to a triple bottom line: profit with environment with social justice. And the fourth bottom line may be that of meaning and spirituality. This is, for example, the new well-being movement launched in Australia (www.wellbeingmanifesto.net/). This means organizations that are fluid, responsible to owners, managers and employees – multiple stakeholders and leadership that seeks to listen deeply. They are far flatter than current vertical structures. This is moving from Gross National Product to Gross National Happiness. As well, this is the move from multiculturalism to transculturalism (agreement on Gaian ethics as with the cultural creatives).

Third, is the continued Gut Wrenching Globalization, with an outsourcing of everything. While officially the discussion may be only buy goods made in your own nation it will be far less clear what this means as the nation becomes more and more porous. Nations will continue to have a harder time controlling goods, services, and information. This may lead to more prosperity. For example, the Business Council of Australia quite rightly calls for a clear vision and full effort in reaching 4 per cent annual growth. However, what is not explored are other aspects of growth – the work/family balance, for one. Finally, in a few decades, nation-states, such as Australia, for all practical purposes may not exist *per se* (of course the passport office and security will remain), becoming even more linked with global economies and certainly the Chinese economy. Whether the nation will be merely an outpost of Shanghai remains to be seen. It may be that the best of Australia goes overseas – values of the fair go, gender partnership, action learning, efficiency with a human touch, for example. That is, nations become more and more porous finding many of their cultural virtues becoming part of the global soup.

Fourth, is of course, the Unknown World. We cannot reasonably predict how revolutions in genetics, nanotechnology, digitalization and the brain-mind spiritual transformation will unfold. Identity may become far more individualized. It is likely to be a truly globalized world, where there is global governance and local governance. Home will be anywhere. Work as we have historically known it will end, given that poverty will be once and for technologically eliminated. In a world of abundance, what will the issues be? Certainly, it will be personal emotional/psychic issues – meaning, the search for bliss, maps of the inner world, and external ventures into deep space and deep oceans. But how this plays out is too soon to tell. Will 10 per cent design while the rest enjoy future incarnations of Big Brother (but now in holodeck format)? Or will there be endless e-referendums, chaos beyond what we could have ever imagined?

In the meantime, at least one country, in the short term has seen the consequences of this. Korea has already bet on this, and is now moving toward the Gross National Cool – focusing their GNP not just on goods and services but on culture industries. They are funding these, and developing capacity around gaming, film – all the social dimensions of the new technologies.

Clearly for labour, merely responding to the changing future will be disaster. However, for government and the corporate world, not including labour as it creates new futures is also a mistake. As they will resist the changes to the end.

In times of dramatic change, it is not just enough to look at the data, but ask how ways of thinking, our stories, will change.

But survival is an issue – the question to ask is: what work that I currently do can be outsourced and taken over by a clever AI system?

If we are all in this position, should we not start to think about a new politics and culture of work and the organization?

Or do we think business as usual will continue?

In my preferred world, I would like to see far flatter organizations, far more globalization (for labour, culture and capital), far more support for family friendly work/culture, and the use of technologies globally to move from fake work, to work that fits into deeper purposes – this is sustainability (the triple bottom line) plus transformation (moving to a global ethics) and creating the legal framework for far more authentic global and local governance.

Whether this is a possible is a far different story.

Notes

1. Says Kaku, "We have to get the message out that the future is a freight train. You have to get on this train or else it is going to bypass you and simply move on without you. This freight train is intellectual capitalism. Capitalism itself is making a historic shift away from commodities to intellectual capital". http://futurefoundation.org/documents/interview_kaku_laszlo.pdf (accessed 30 May 2006).
2. Charles Brass, formerly CEO of the future of work organization and now Chair of the Futures Foundation focuses on this point – the politics and ethics of the formal and the informal.
3. In the USA, in the 1960s, one-third of the workforce as on the factory floor, now it is less than 17 per cent. By 2020, writes Rifkin (1995), we will see in OECD nations the virtual elimination of the blue-collar factory worker. However, while this may be the case in the OECD it is not true globally, and we think globally now. Some nations are eliminating farming and agricultural labour, others are not.
4. The proportion of unionised workers in private firms has slipped below 8 per cent, its lowest since the 1920s. In the total labour force, only 12.5 per cent of workers are in a union, down from about a third in the 1950s Rifkin (1995).
5. www.fathersforlife.org/health/who_suicide_rates.htm For example, in Australia the suicide rate is 19 for men and 5.1 for women. In the USA it is 19.3 for men, and 4.4 for women.
6. Consequences of our collective desires, e.g. material abundance and hypertime leading to fast food eating – more and more meat and less and less exercise – leading to the karmic biteback of increasing obesity, diabetes, and heart attack rates.

7. www.bullyonline.org/resources/links.htm In South Australia, employers can be fined up to \$100,000 for failing to "adequately manage" bullying behaviour. www.bullyonline.org/workbully/oz.htm One study by Dr Michael Sheehan of Griffith University's School of Management estimates that bullying (including bad-mouthing, exclusion, sarcasm, screaming, swearing and offensive nicknames) affects between 3.5 per cent and 15 per cent of the Australian workforce, translating to a cost of AUD\$36 billion. See Lawrence (2001).
8. Direct quote from Future Survey, www.wfs.org The issue raised by Colin Blackman is why is this not happening. He writes: Do governments think that if you give people the individual responsibility and flexibility that they will retire at the first opportunity and then the state will have to pick up the tab anyway? Personal Email.
9. James Dator has argued this – full unemployment not unemployment is the measure of a good society. See: www.futures.hawaii.edu/dator/unions/literacy.html
10. This is based on dozens of futures workshops in Australia and the broader Asia-Pacific region.

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