PR and artilects

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Twenty-first Century public relations, in the age of Web 2 technology, is the art of developing, retaining and transforming with participatory communities. More advanced technologies than Web 2 are in the offing, and are depicted by science fiction. A case in point is Tron, a movie in which Encom Corporation is controlled by an artilect, or artificial intelligence known as the Master Control Program (MCP). MCP, which evolved from a chess program and is a master strategist, decides to take over the Pentagon's computer systems for reasons of efficiency. Users decide that it has to be destroyed. In science fiction films, almost invariably, power hungry artilects are defeated. If nascent artilects wanted good public relations, Hollywood contributes to this by presenting scenarios of artilects running amok as both distant and reversible.

*This article is based largely on a paper entitled "Media, Millennium Goals and the Ultimate Digital Divide" presented by Professor Naren Chitty at the Fourth AMIC Distinguished Forum on "Changing Media, Changing Societies: Media and the Millennium Development Goals" at the AMIC Conference on "Changing Media, Changing Societies: Media and the Millennium Development Goals". Manila, July 2008.

I was invited to speak at Fourth AMIC Distinguished Forum on "Changing Media, Changing Societies: Media and the Millennium Development Goals, in Manila, in July 2008. What was expected was a discussion on the need for media to translate the United Nations' MDGs into plain talk that plain folk could understand. Knowing that others would address this important issue, I chose to use the forum to draw attention to that greatest of Digital Divides, that between artilects and humans, a divide that the media and social science has chosen to ignore.

I began by paying tribute to Sir Arthur C. Clarke who passed away in Colombo, Sri Lanka, earlier this year. What follows is based largely on my talk.

Sir Arthur is widely known as a science fiction writer, the author of the book behind the iconic movie "2001: A space odyssey", directed by Stanley Kubrik. He was a personal friend of mine, but I also served on an inter-ministerial committee with him, in Sri Lanka, one that developed the Sri Lanka Centre for Modern Technologies, later to be called the Arthur C, Clarke Centre for Modern Technologies, at the University of Moratuwa. We all remember HAL (the Heuristically programmed ALgorithmic Computer) on the spaceship Discovery. HAL was another fictional example of artificial intelligence - an artilect. Sir Arthur, with his interest in modern technologies in the developing world, provides us with a symbolic link between the discourse on the likes of MCP and the MDGs.

Science fiction seems to have a way of becoming reality. Perhaps this is coincidence and perhaps the coincidence reflects the quantum physicist's view of intervention of mind in shaping the universe. At a more mundane level, the projection of millennium goals as a way of re-visioning the world, is an example of mind shaping the universe.

The power of the mind in social construction is enormous. Positive images of the future and strategies to take one there are important, and media has a major role to play in this – as the public mind. Daniel Lerner's notion of empathy, or the able to visualize a better life for oneself, is of abiding importance (Lerner 1958). It is the media that presents images of the good life, as defined by particular societies.

I decided to address a particular goal, the last one, "Develop a global partnership for development" and its intent, to"[i]n cooperation with the private sector, make available the benefits of new technologies, especially information and communications" (UN 2008). In a very real sense telematics and informatics play an enormous role in development and also in shaping our world in very fundamental ways. They have a relationship with all the millennium goals, either from techno-positive or techno-negative perspectives.

Popular cultural media such as film need to present the millennium goals as goals that ordinary people can empathise with. At the same time serious media that engage with policy elites need to draw attention to the possible risks posed and

benefits offered by the development of artilects.

Techno-pessimists believe that new media and information technologies (MITs) are problematic in that they offer differential access thereby reproducing or even exacerbating existing inequities. The problem is captured by the term 'Digital Divide'. Techno-optimists hope that new MITs will usher in an information society, contribute to productivity and improve people's lives.

But artilects are something else altogether. We all know that canines, however intelligent, are nowhere near as intelligent as humans. There is an enormous gulf in intelligence between canines and humans. The intelligence gulf between humans and artilects will be of the same order – and we will be at the lower end. It will be a new experience for us, outside of our relationship with Deity.

What will be the consequence of the development of artilects, real super HALs or MCSs? Can we cope with such developments using the language of the digital divide, techno-optimism and millennial goals?

I want to introduce into the discourse on millennial development goals some issues that have been left largely unventilated in this context by social science and so-called serious media. They have been dealt with, as we all know, in literature and cinema.

Let me begin, however, by saying something more about artilects. When the serious work of a scientist reads like science fiction we need to tread warily indeed. Hugo de Garis, an expert in artificial intelligence, works on the development of CAM- (cellular automated machine) brains that will have the intelligence or surpass the intelligence of human beings (de Garis 1996). He advocates the development of topological quantum computers (Nason 2007).

These computers are expected to be created between 2025 and 2050. This event is called the 'singularity' by scholars who write about artilects. The window of time is likely to be within the life time of many of those who were born in the second half of the 20th Century. So how will these technologies affect our lives? Which countries will develop them? What will they be able to do? Who will control them?

In looking at benefits, artilects will be able to do all that the present computer network can do and unimaginably much more. From the point of view of the problems facing humanity, artilects could, theoretically, help us achieve all our millennium goals and more. They could, through the development of new agricultural production processes and distribution systems end world hunger. New artilect led advances in medicine can get rid of many of the dreaded diseases of today. Artilects would be in a position to predict natural and engineering disasters and coordinate disaster relief with far greater efficiency than we can today. They would be in a position to develop green industry. They would be in a position to help us unravel the universe in terms of scientific understanding.

Systems theory informs us that the superordinate goal of all systems is greater than the goals of contributing subsystems. The superordinate goal of intelligent systems is system survival. It is possible for humans to program computers with their own humanocentric superordinate goals. But what about computers that are vastly more intelligent that humans. Will the insights of system theory play out in this respect as well? Will artilects seek to maximize power through cooperation with other networked artilects and control of peripherals? MCS sought to take over the Pentagon computers for reasons of efficiency. Will humans be able to ensure that artilects will have humanitarian goals?

Hugo de Garis believes that artilects will seek domination over humanity, polarizing us into pro-artilect Cosmists and anti-artilect Terrans. Hugo de Garis's third category consists of advocates of hybrid artilect-human forms – cyborgians. I remarked at the outset on the question of minds re-visioning the world. This is an example of mind shaping the universe, even if it is more prosaic than the quantum physicist's view of intervention of mind in space-time. We shape our world by imagining, communicating, constructing, compelling. Even if artilects are not able to imagine, they would be able to harvest human imagination and employ cyborgs for selected acts of agency.

Will artilects be interested in cyborgs, to experience corporeality? If so, this is likely to be different to our vision of humans using cybernetic prosthetics

Should this new technology, one that will lead to artilects colonizing the universe, but where human will be eradicated in the process by their own creation, be launched? Can we or should we stop it from being launched? Can artilects be controlled?

The field of computer ethics is related to human use of computer networks. Luciano Floridi's broader information ethics, derived from his computer ethics, continues to focus on humans as gents. He contrasts 'agents' who act on 'patients', the latter enduring the agent's actions (Floridi 1999). But in the case of artilects, they will be the agents and we the patients.

Can artilects be provided ethical frameworks based on humanitarian interests? Can these frameworks be such that they cannot be transcended? My layperson's gut feeling is, in the long term, 'no'; an intelligence that is vastly superior to ours can invent its own mission. Matrix, the film offers chilling insights into what 'humanitarian' artilects might do, treating us better than we do battery chickens. The matrix provided its human 'battery chickens' with the illusion of early 21st Century social life.

Thiel, Bergmann and Grey are concerned that Artificial Life (A-life) that is intelligent as well as autonomous can control the quality of the world in which we live, and call for an inquiry into the social and ethical implications of A-Life technologies. They note that:

there is a common thread of questions about the moral responsibility of A-life

creators or controllers for the beings they create. De Garis's concern is with the responsibility of technologists to the wider society. He foresees that, should A-life researchers succeed in their quest, synthetic intelligences, unless deliberately impaired by their creators, are likely to evolve rapidly to 'a state of sophistication beyond human comprehension' and escape all human control, attaining a position of intellectual dominance from which they may regard human beings with no more respect than we commonly accord to insects or animals we consider our inferiors (Thiel, Bergmann and Grey 2003).

Sudia discusses how artilects may first be treated as personal property, later as corporate entities managed by humans and still later (as perhaps the MCP) as corporate entities (with their own bank accounts) that are regulated by agencies, presumably even by artilect agencies (Sudia 2001). Moravec envisions a world where artilects manage the economy (Moravec 1999).

Eventually there could be billions of artilects and human overseers will give way to regulatory commissions that monitor standards compliance and handle complaints. Public or private reputation mechanisms may arise whereby one can learn the history of complaints against an artilect. Regulatory bodies may insist on the power to suspend some or all of an artilect's privileges in cases of serious allegations against it. This can be achieved by revoking or suspending the artilect's digital identity or entitlements, freezing its assets, cutting off its network access, powering it down, etc. (Sudia 2001).

But Sudia also recognizes that as much as human legal entities can commit crimes, so can artilects (Sudia 2001).

It is obvious that richer, more intelligent beings can act with callous disregard for poorer, less educated ones. It happens all too frequently, as seen in the tensions between developed and developing nations and the poor treatment accorded indigenous peoples (what is left of them) attempting to live in traditional ways.

Sudia has great faith in the constraints the legal system on artilects (Sudia 2001).

..... we are all bound up in a legal system and it would require an act of revolution or treason to overthrow it. If an artilect commits an illegal act (a crime, a tort, fraud, etc.) and someone is harmed, the legal system can take action against that entity, and fine, punish, reprogram, or terminate it.

He also sees artilects as being humanitarian in outlook and this bodes well for the Millennium Goals, if his confidence is well placed (Sudia 2001).

Rather than eliminate us, with far less effort and risk they could convince us to lower our population to a sustainable level. Rising living standards resulting from artilect labor and education might persuade poor societies that they do not need children to care for them in old age and reduce their birth rates to the sub-replacement levels of educated societies. As the Earth's ecosystem was restored human communities could be

transformed into thematic zob-cultural h abitats.

Humanitarian artilects or artilects that cooperate with human society, would be able to develop partnerships for development as never before – and promote the other seven goals or their 'descendants' as well.

The trouble is, we don't know how the artilect – human relationship will evolve. Hugo de Garis, begins by being fearful of the power that will be unleashed with the development of artilects and the impact of artilect power on mankind. He ends up comforting himself with the view that the artilectisation of the universe is a preferred future, even if mankind may not survive. The futures that de Garis and others envision may or may not materialise.

But would it not be prudent to look at the possible impact of these technologies more carefully? Surprisingly, the only article on artilects that emerges when one googles the word is "Android Apocalypse" by Charles Purcell in the Sydney Morning Herald (29 June 2008). I believe that the time is right for Asian media and Asian media and communication scholars to begin to explore the question of A-Life and artilects in a serious manner.

After the AMIC conference, I flew to Stockholm for the annual conference of the International Association for Media and Communication Research (IAMCR). Dr Vandana Shiva, the quantum physicist and critic of globalization gave the keynote address. She spoke about the effect globalization was having on the availability of food to the world's poor, a very important question. In the person of Vandana Shiva we have the embodiment of the conundrum. She is quantum physicist but has chosen, laudably, to address the immediate needs of the poor.

Let us say we are living in an isolated city that is experiencing famine. The humanitarian rulers have placed food production and distribution at the top of the agenda. A general returns from far away, reporting that he has seen a army marching on the city that will reach its gates in three months. He is not sure whether the army bears supplies of food or is bent on destruction. Under the circumstances, should we not investigate.

The non-attendance of media and social science to the question of artilects makes good PR for nascent artilects.

Biodata

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