Tomorrow in the Outer Space Remember the Dreaming

- Technology, Spirituality and the Human Today -

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Abstract: With a pastiche title reminiscent of novelist Javier Marias's *Tomorrow in the Battle Think on Me*, this article sets out to compare two extremes of "identity, difference and memory": Western trans-humanism and Australian Aboriginal Dreaming. The main assumption is that the two have drawn on surprisingly similar concepts (immortality/eternity, universality/ubiquity), and yet their approach to the individual and to self-management sets them wide apart. While avoiding idealising either of them, the article does plead for a "return of knowledge" from the formerly colonial space to the formerly colonising world.

Key-words: Progress; Technology; Aboriginal spirituality; Transhumanism;

Introduction: A Memory

On Europe Day a few years ago, a prestigious Romanian publishing house hosted in one of its Bucharest outlets the launch of a book titled *Sfârşitul Occidentului* and a debate about "the demise of the West." The author, best-selling historian Lucian Boia, and philosopher Gabriel

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Liiceanu were there to discuss the topic. Their main points were that 1) the West, broadly understood as (Western) Europe and North America, has been the world leader throughout the past millennium, but is currently declining, with the Popular Republic of China (worryingly) set to take over as the new global hegemon; 2) the West has been able to hold that position up to now because of its exceptional role as a "demiurge" constantly generating cutting-edge developments, particularly technology, which "beamed out" upon the rest of the world, ensuring global progress; 3) the fabulous engine of Western leadership seems to have come to a halt, the influence of the West reaching its limits and just starting to shrink back because unable to put forward any new Idea at present, any new Vision or Utopia impressive and inspirational enough to make the rest of the world go on and embrace it. In short, the West's stock of Progress has run out.

Listening to the gloomy forecast for the civilization I was born into (even though marginally, in a country typically described as a borderland between the West and the (near) East, so one of the outer edges of European civilisation [Boia, 2012, p. 9-10]), I could not help raising this question: "so has the West finished learning everything there was to be learned from its former colonies?" The colonial slant was coming from the following rationale: announcing the end of the West's capability to advance any further seemed to imply the end of its capacity for learning, and the West can't have already reached a plateau in learning. For centuries, it was the output source, the key exporter of administrative apparatuses, knowledge, policies, technology, etc. to its colonies (from the Americas to India, the Middle East and New Zealand - a considerable part of what we usually call "the rest of the world"), which derived their modernization from it, even if through often very painful social processes. The centuries of output, however, have simply not been counterbalanced yet by proportional input. The feedback process appears incomplete, the balance has yet to be restored. In other words, the West has not learned, so far, as much from its former colonies as they did from it. There is still knowledge to be listened to, acquired, and developed into further progress - although we might have to change the meaning and even the ethos of progress.

Thus, while colonial considerations were left out of the abovementioned debate, which followed its own course, back in May 2013, the present article sets out to explore their relevance along the Past-Memory-History-Progress-Space line which is allegedly (stereo)typical of

First-World (i.e. Western) civilization. Specifically, I will look into how contemporary developments in First-World technology (cybernetics, Nano robotics and the transhumanist philosophy which paved their way) relate to the spirituality of the first humans who set foot in Australia, around 50,000 B.C.: the Aborigines. The latter colonial subjects of the British Empire had, as scholars have remarked, a quite sophisticated cosmogony and ontology (Charlesworth et al., 1990; Eliade, 1973) when the "whitefellas" (as the Aborigines refer to the whites) started colonizing their continent in 1788. How does the whitefellas' own "Self" and worldview today compare to that? Have First-Worlders come a long way away from "primitive" thinking? Have they grown to understand much better humanity's major concerns since time immemorial, namely Time and Space? How much progress have they made in comprehending the Universe and themselves? How advanced are, ultimately, human identity and self-management in the First World and in the Other World, respectively? These are some of the issues that will be discussed over the next pages.

Over-, Trans- and Old Über-: The Self, That Stumbling Block to Reason

As a rule, whether the Universe was created by God, by the Big Bang or through a combination of the two, time in the First World is believed to have started at one point and to have kept unfolding since then. It "ticks on even if nothing occurs" and it is "the arena in which events occur" (Swain, 1993, p. 19). It is linear, sequential and numbered; the past, the present and the future are its yardsticks, with memory acting as chronicler and foresight as visionary. Hence, history is a record of events in "irreversible chronological order" (Eliade, 1973, p. 190), and progress - a race to reach the future, driven by a firm will to "the Beyond".

(Unsurprisingly, when the First-World colonizers came across Aborigines, they considered them, in an either idealizing or demeaning fashion, "living savages [who] revealed the ways of our pre-historic ancestors" [Swain, 1985, p. 46]. Ironically, but in line with the rapport - rife with misunderstanding - between the Aborigines and the "whitefellas", the Aborigines "thought whites were the returned spirits of their dead relatives" [Swain & Bird Rose, 1988, p. 88].)

1973: futurist author FM-2030 (Fereidoun M. Esfandiary, 1930-2000, the son of an Iranian diplomat, a USA author, lecturer, and one of the founders of the transhumanist movement) urges the world to "make a break with the traditional concept of linear historical progress" (Esfandiary, 1973). In a delightfully shocking but also at times truly visionary work, he identifies Time, Space and biology as the master limitations of Homo Sapiens, death as the arch enemy of human freedom and emancipation, and all of them as "the root causes of the deepest human suffering" (p. 54). FM-2030's rationale seems commonsense: humanity has reached a stage of development where it has the capability, expertise and tools to apply medical, societal and planetary changes that can make humans, quite simply, immortal, ubiquitous and trans-biological.

Recommended measures to be taken towards achieving that goal are duly listed. As a principle, humans are to leave behind forever Time, Space and the prison-house the two have kept us in so far precisely by extending "ourselves throughout All-Time and All-Space" (Esfandiary, 1973, p. 12). For example, concepts like home and permanent residence should be replaced by constant travelling (an interesting echo of Aboriginal nomadism) and regular relocation, living for no longer than 6 months in units called "Mobilia", resort-like "Instant Communities," or simply colonies on other planets. All that mobility ensures "a dynamic enrooted evolution" and makes humans transplanetary: ubiquitous (Esfandiary, 1973, p. 23).

Time, on the other hand, can be transcended by overcoming our biological limitations through plastic surgery to remove aging markers such as wrinkles, organ replacement to ensure continued health for our systems, and various body enhancements. "Let us, for instance, improve on our eyes not simply by implanting contact lenses, but also micro lasers, micro radars and sonars enabling us to see through objects, through darkness and fog, and across vast distances." Also, "let us implant electrodes under the skin so we can better self-control our minds, emotions, bodies [...]. Self-control our brain waves to instant-erase pain and suffering — instant-stimulate pleasures and ecstasies — visions and dreams and total recall of any experience in the past" (Esfandiary, 1973, p. 72) - such are the breakthrough changes for which technology is our "greatest ally" (Esfandiary, 1973, p. 49).

2005: futurist and Google Director of Engineering Raymond Kurzweil points out that an acceleration of technology development is taking place, as technological progress is exponential. Put differently, the more it develops, the faster it keeps developing, since one invention prompts another, which immediately inspires further innovation, and so on, as part of an overall process of acceleration by interaction. He regards this technological speed-up as just another evolutionary process which, however, will determine a serious paradigm shift for humankind (2005, 04:46).

Its emergence was prefaced, in a way, by the invention of the telephone, which can be regarded as "the first virtual-reality technology" enabling humans to be virtually present somewhere while absent, cutting right through the classical limitations of Space. Deeper into the new paradigm, humans will be able to plug in to computers, which are obviously much more proficient at "doing analytic thinking, remembering billions of facts accurately," and to share in their knowledge at will, instantaneously. Eventually, "we are going to merge with our technology" (Kurzweil, 2005, 20:22), possibly by hosting nanobots "inside our brain, [to] interact with our biological neurons" and to generate "full-immersion virtual reality from within the nervous system."

(Strangely enough, the richness of the resulting sensory experience, as described by Kurzweil, reads as a covert plea against the kind of psychedelic "tripping" provided by drugs, and in favour of the allegedly similar "boost" provided by nanobots: "the nano-bots shut down the signals coming from your real senses, replace them with the signals that your brain would be receiving if you were in the virtual environment, and then it'll feel like you're in that virtual environment. You can go there with other people, have any kind of experience with anyone involving all of the senses. 'Experience beamers,' I call them, will put their whole flow of sensory experiences in the neurological correlates of their emotions out on the Internet. You can plug in and experience what it's like to be someone else. [...] It'll be a tremendous expansion of human intelligence through this direct merger with our technology" [Kurzweil, 2005, 20:42].)

2010: Cyborg anthropologist and "digital philosopher" Amber Case remarks that tools (hammers, axes, screwdrivers, etc.) have always been "physical modifications" of our physical selves, so naturally what advanced technology is offering today is "extension[s] of the mental self" (2010,

01:30). Our PCs, for instance, with the significant amount of data we store on them (photos, diaries, work-related documents, holiday plans and what not), act as our "external brain" - incidentally, so does the Internet, which "has become our primary external storage system" (Cohen, 2011, par. 11). If we accidentally lose that data, "you suddenly have this loss in your mind" (Case, 2010, 02:01) because "your external memories" (04:53) are suddenly gone. Also, our online profiles are our "second selves" with which people interact whether we (ourselves) are there or not (02:21). Indeed, there is a bit of immortality in the (often idealized) digital selves we leave behind after we die, which future generations can virtually keep relating to (Selinger, 2013, par. 13).

2011: To better connect to his wife, as well as the building he worked in at Reading University, Professor Kevin Warwick had an RFID (Radio Frequency Identification Device) implanted in his left arm. The device enabled him to feel from a distance the physical movements of his wife, an RFID carrier herself, the two communicating directly from brain to brain (with no words, no eye contact, and no body language) for the first time in the history of humankind. As for the building, since the automated door, light and heating system reacted to his mere presence just as desired (i.e. doors opening and lights/heaters getting switched on or off at the right time, without the necessity of any physical action other than walking in), the Professor felt "myself and the building were sort of one," thanks to the little RFID (2012, 03:23).

Content with the effects of the implant he has been trying out personally, Professor Warwick praises such devices enthusiastically for at least three benefits. First, one can send brain signals, via a computer, to computer-plugged robot components located wherever in the world, thus extending their body, as it were, by operating non-biological limbs. For the full science-fiction flavour, but also a realistic understanding of the procedure, it is probably worth quoting the whole fragment:

Your brain and your body don't have to be in the same place. Now, with the technology, as long as we can do that. You can have your brain here and as long as you can clip, plug your nervous system into a network, your body could be partly in San Francisco, partly in the south of France [...,] maybe on another planet and so on." (2011, 11:52).

Secondly, and upgrading from RFID to "chips in our brains," we can attain greatly enhanced memory, downloading massive data from computers directly to our brains, or conversely, uploading content from our mind on to computers or the Internet. Finally, a recent research program focusing on implanting human neurons into robot bodies allows one, in effect, to have their loved ones still around after their death. (As the Professor himself puts it, "if you have a loved one and they're about to die or something, just take a few of their neurons, you know, and they will still be around in their robot body form" [2011, 08:54].)

Professor Warwick's (perhaps too) spectacular prediction is that the "Earth is going to be controlled by cyborgs" - a cyborg being a human who has "technology that's integral, that's part of [them] and also enhances [them], it gives [them] extra abilities" (2011, 01:28) - fitted with "super memory, super senses and superpowers," while "humans are going to be something of a subspecies" (15:27).

2014: Sure enough, nine years later Google Director of Engineering Raymond Kurzweil comes out of the technology laboratories again, to encourage us to prepare for "hybrid thinking." Let me preface his plea for (again) nanobots with a real-life example he uses as proof of the latest advances in neuroscience-cybernetics interdisciplinary research. The example refers to a teenager who underwent brain surgery; as there are no pain receptors in the brain, she wanted to be conscious during the operation so that she could chat with the surgeons. At one point she laughed. The doctors realized it was because they had touched a particular area of her brain. They noticed that "whenever they stimulated particular, very small points on her neocortex [...] she would laugh. So [...] they quickly realized they had found the points in her neocortex that detect humor, and she just found everything hilarious whenever they stimulated these points" (Kurzweil, 2014, 05:36).

The human neocortex, it seems, is the springboard of Homo sapiens' most spectacular evolutionary leaps. Therefore, it is the ideal location for nanobot implants. Advantages? The nanobots inserted into the capillaries link the human neocortex to a synthetic one that is part of a cloud technology system, and humans can thus perform a tremendously complex, two-/three-second search for information in the cloud. To illustrate with Kurzweil's figures, that would mean upgrading from our current "300 million modules in the neocortex" to "a billion more" - as if

using 10,000 computers for a few seconds to do our search (Kurzweil, 2014, 07:39). Clearly, the in-brain nanobot is the key to humanity's upcoming "qualitative leap in culture and technology" (Kurzweil, 2014, 09:24).

Progress: It becomes ever harder, if not even embarrassing and/or counterproductive, to ignore the fact that projects which used to be pure science-fiction four decades ago have been and are being developed into quite real facts, from unusual actions such as making a prosthetic hand from another continent move, to increasingly popular products like Google glasses, which enable human eyes to record and broadcast the "film" of whatever they see. Without a doubt, futurist technology stopped being science-fiction and started making history (as well as medicine and commerce), in the First World. So it is perhaps quite timely for non-scientists, especially humanists, to catch up with the maths, as it were, and confront, process and organize the new knowledge in a more rigorous way.

Transhumanism as a philosophical trend may be precisely such an effort. While FM-2030 acted as one of its initiators, it was not until 1998 that "The Transhumanist Declaration" was drafted by a group of scholars of whom Nick Bostrom, the Director of the Future of Humanity Institute at Oxford University, is but one. The document is important insofar as it recognizes a situation: "Humanity stands to be profoundly affected by science and technology in the future" (World Transhumanist Association [WTA], 1998, par. 1); it lists some objectives: "the preservation of life and health, the alleviation of grave suffering, and the improvement of human foresight and wisdom" (par. 5); and it cautions against the ethical risks involved by transhuman modifications. To prevent such risks, new corresponding policies should be "guided by responsible and inclusive moral vision" (par. 6), and individuals ought to be allowed "wide personal choice" (par. 8) over the extent to which they wish to embrace technological devices conducive to transhuman capacities, status and identity.

The Declaration suggests that the starting point of the transhumanist rationale is the notion that "humanity's potential is still mostly unrealized" (WTA, 1998, par. 2). As shown above, to fully achieve it requires overcoming the limitations imposed on humans by their own biology and the effects that Time and Space have on it. Extending the body through cybernetic devices (Warwick, 2011), extending the brain "through

this direct merger with our technology" (Kurzweil, 2005), getting over human biology to attain "biological emancipation" and become "posthuman" (Esfandiary, 1973, p. 62 & 67) - the formulations of such overpowering transhumanist aspirations are saturated with little linguistic markers called prefixes (ex-, extra-, over-, post-, trans-) which unanimously lead us to two realizations: that the First-World will to "the Beyond" is still very much in full swing, and that there is, among contemporary minds, an undeniable amount of fascination with - or else latent emanation of - Nietzsche's Übermensch.

As pointed out by Max More, a "strategic philosopher" who claims to have coined the term "transhumanism" in the 1990s (but acknowledges A. Huxley had used it previously [More, 2010, par. 5]), the Übermensch scope of the transhumanist project relies on "technology as a means of self-overcoming" (More, 2010, par. 10) and from that privileged standpoint undertakes to carry out Nietzsche's "craving and joy of questioning," to practice and profess a "pan critical rationalism" (par. 7). Thus, transhumanism may well be the symptomatic extreme of the First World's veneration of "Reason". Still, one could hardly not shrug and wonder, rather irreverently: was this what it was all about? Was all the thinking, all history, all technology and progress, all the reasoning about ultimately transcending "man"? Transcending the self? Nanobots seem well positioned to stand for an answer.

Aboriginal Dreaming. Wherever the Spirit Goes on

"Oh look, that's me up there!" an Aborigine told author Richard Kimber, pointing at a stone (Charlesworth et al, 1990, p. 15). He had no RFID or nanobot implants. But he did mean he was the stone, too, besides being himself - just as the stone was an integral part of his self. This kind of existence was once described as an "extravagant mode of being" (Eliade, 1973, p. 48) and classed alternatively as part of a "cosmology", a "mythology", a "religion", a "spirituality" or simply a "worldview", to mention some of the terms by which First-World scholars have tried to comprehend what the Aborigines themselves call "Dreaming" (with no oneiric implications at all). Let us expand on it.

While there are various Australian Aboriginal populations with various dialects and cultures, and consequently no "single unified

cosmology" can be derived from them, generalizations can be made, especially regarding the structure of the Aboriginal worldview (Swain & Trompf, 1995, p. 22). First, there is no definite beginning, no first creator or creation (Swain & Trompf, 1995, p. 24); the very notion of "the first" does not make much sense to the Aborigines, whose languages have no words for numbers. (The "Aborigines did not count" and did not have numbers; instead of "one", "two", "three", etc., they had qualities or concepts such as "singular", "dual", "duality", "trinity", "fivesome", "plural" [Swain, 1993, p. 18-19; Swain & Trompf, 1995, p. 20]).

The Aboriginal worldview is not sequential, serial, time-determined (hence, perhaps, the First-World belief that the Aborigines have no history); it is place-determined and implies, rather than a historical record, "a storage of information [which is] synchronous and spatial" (Swain, 1993, p.26). (As a nice counterpart to the First-World appreciation of left-hemisphere activity such as analytic thinking, Swain points out that, due to their previous nomadic lifestyle and hunter-gatherer status, the Aborigines "rely more than Whites upon 'right-hemisphere'" and spatial, rather than temporal orientation.)

As for the story of that memory, Mircea Eliade has astute insights into it, successfully translating it into First-World-compatible philosophy. The imagery of the Aboriginal Dreaming is essentially embryological and easily "interpreted in terms of procreation, pregnancy, embryonic existence, and obstetric operations" (p. 41). In the Dreaming, there is "always already" a something: "an original condition of indefinite virtually" (p. 49). An amorphous potential, a shapeless mass replete with creative possibilities, wherein the capability to act and possible actions are "already present, waiting to be used" (Swain & Trompf, 1995, p. 23).

Out of it the Spirit Ancestors take shape and take action; they move across the land and actualize its virtualities, bring into shape the landscape: hills, rocks, trees, waterholes. There are two features of the Ancestors that a linear and sequential intellect might find difficult to take in. On the one hand, their movement is not linear and "stepped"; rather, they move about the land leaving behind trails of their spirit, so that sites A, Q and H are both distinct and connected; thus, they enable a crisscross of spiritual relatedness between the places and landmarks that they create here and there. Put differently, they create a "spiritual continuum"

whereby "all existence [...] has consciousness (Charlesworth et al., 1990, p. 60; Swain & Trompf, 1995, p. 24).

On the other hand, they both move on from where they acted, and linger on wherever they created something. The spirit they shaped into this or that landscape feature both stays "in there" and continues with them (a similar notion implies, I believe, Derrida's *différance* [1982, p. 11-12]), as they proceed in their foundational journeys. Eliade remarks on "their multiplicity and their simultaneous presence on the earth" (p. 50).

In addition to creating sites, the Ancestors "also inserted in some places 'spirit children' and 'spirits' of various animals, brought forth from their own bodies," Eliade explains (p. 42). Such spiritual "seeds" later become "life spirits" (kurunpa, in some Aboriginal dialects) and determine the totemic identity of children. Varying from one Aboriginal culture to another, a human child belongs to the kurunpa planted by the Ancestor at either the site where the child was conceived, or the site where the pregnant mother first felt the child move inside her womb. Kurunpa can also be inherited matrilineal or patrilineal or both (Charlesworth et al., 1990, p. 74-75), and it accommodates other life spirits (for example, by initiation into and adoption of another site's kurunpa). Not unlike the Ancestors' spiritual continuum, one's "personal life spirit continuously expands" (Charlesworth, et al., 1990, p. 57).

The individual, in this spiritual structure, is at one point initiated into his or her fuller identity. It is again Eliade who identifies a suitable equivalent in the First-World notion of anamnesis. During the initiation, the individual learns about his/her Ancestor, the Ancestor's wanderings, sites and teachings about those places - all of which make up the Law. (Asked to define the Law, an Aboriginal interviewee answered: "There are several kinds of myths that are the basis of the Law, all of which are teachings of the Spirit Ancestors." If myths, i.e. the Ancestor Spirits' actions, are the *basis* of the Law, then it is not unreasonable to regard the Law as a foundational, all-encompassing principle, a kind of arch-algorithm: "The whole exists in Aboriginal thought as a conceptual principle rather than an ontological existant. That principle is referred to in Aboriginal English most often as 'Law'...." [Charlesworth et al., 1990, p. 56; Swain, 1993, p. 24] As far as I could realise, the Law includes solid ethical, epistemological, ontological, social and last but not least, pragmatic, crafts-related tenets.)

By stepping into the fuller Ancestor knowledge, the initiate becomes the Ancestor: "he remembers his coming into being [...] and his most remote deeds," mainly the shaping of the land, but also the making of tools like spears or fishing hooks. Just as in Plato's anamnesis, "the physical objects help the soul to remember his real identity;" in addition to that, through initiation the Aboriginal individual recognizes his/her "own fabulous biography" (Eliade, 1973, p. 59) in the creational performance of his/her Ancestor. Therefore, when an Aborigine says, "this mountain is my Dreaming" (Swain, 1993, p. 25), it is an expression of (spiritual) recognition: s/he acknowledges at once his/her relatives (the mountain, the Ancestor that shaped it, the kurunpa inherent to it), and also the potential or virtuality s/he shares in, as a person integrated in the Dreaming.

More than anything else, the Aboriginal worldview resembles a paradigm of continuous (and continued) creativity by excellence. Its main concepts, the Dreaming, the Ancestors, the Law, the life spirit/kurunpa and the Aboriginal individual lend themselves to this reading; they can be viewed as "pillars" of "an ongoing creative paradigm" set not in a definite, completed historical past, but in an eternal present continuous "on the move," where creation is absolutely unfinished business - everyone's business. Thus, the Dreaming suggests continued virtuality and procreation. The Ancestors appear as shapers of potential, creators bringing about sites and objects, but also disseminating creativity (the life spirits in potential and the spiritual trail they leave behind). The Law is perhaps the best approximation to (but arguably better than) First-World history, a record of creations and a corpus of ongoing creativity potentialities. Finally, the Aboriginal self, a (re)creative creature of the land, stands as the conscious, knowledgeable re-enactment of the Dreaming.

Concluding openings

There are no overs, posts or übers in the Australian Aborigines' explanations of their Dreaming. However, there are, undoubtedly, substantial similarities between the First-World's transhumanist worldview and the Australian Aboriginal present-continuous one. Where the former seeks to transcend the limitations of Time, Space and human biology, the latter has never been time-bound and has always regarded

being as ubiquitous "multipresence" (the person here is the rock over there). While the First World seems increasingly eager to connect to the global village, the Other World of the Aborigines keeps being a well-cared for network of spiritual kinship consistent with itself.

One difference, though, is that in the First World the self wants to get away from itself, from its non-virtual reality and from the planet, too, be it by escaping into prosthetic promises of the Beyond, by internalizing quite literally high-tech material Nano gadgets, or by designing future habitats on Mars. While the Other World appears "enhanced" enough through its ongoing creative connection to the land, and "expanded" enough (with no tech special effects) thanks to their continuous partaking of the Dreaming. It would be cliché to plead Enlightenment-style for a "return to nature," instead of cyberspace, for spirituality along with technology, and for the self within, rather than the transhuman beyond. Yet the First World does seem ripe for taking some quality time and minding. Other (hi) stories. It would change deeply, I believe, the course and substance of our progress.

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