

The Academic Journal of St Clements University

# VERITAS



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**The Global Astigmatism of  
21<sup>st</sup> Century Education**

**The Dialectics of Youth  
Rebellion**

**What Drives Changes in the  
Earth's Climate**

**The Introduction of  
Marine Parks in  
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**How Well is the Public  
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**The Bunyoro-Kitara  
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**Trends and Predications  
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\**Veritas* is Latin for truth, reality.

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*A student learning via the Internet*

*Photo JSP*

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# Tunnel Vision - The Global Astigmatism of 21<sup>st</sup> Century Education

Dr Bruce Duncan\*

“Repetition is the reality and the seriousness of life.”<sup>1</sup>

Just as the pedagogue might use chants, chunking and rote learning techniques to embed knowledge, this article trumpets the reveille for democratically-minded supporters to unite now to campaign for internet-based education to be a formal (and informal) means of learning *throughout* the education system.

This article highlights the need for educators everywhere to advance and participate in online learning by joining an educational revolution! However, the United Kingdom receives relevant mention because that is where the writer lives.

The theme of open and accessible education for all is built on the successes of others and includes in measure, the concepts and pioneering successes of the Open University (UK)<sup>2</sup>, Phoenix University (USA)<sup>3</sup> and the University of South Africa (UNISA)<sup>4</sup>.

The facts cited herein will *again* confront the abuse perpetrated by mouldy legislation purportedly authorising and protecting traditional educational initiatives that, on their own, have reached their sell by date.

Accreditation, the *beit noir* of education will again receive brief comment.

## A PLEA FOR AN OPEN AND FINAL DEBATE

There is urgent need for an open and final debate with the educational guardians of exclusive State control.<sup>5</sup> Their Rip Van Winkle slumbers and neglect have bypassed the appropriation of advanced technological innovations. Education suffers a lag that cries out for an appropriation of Lincoln’s words, “By the people and for the people”<sup>6</sup>.

Harvesting for officially sanctioned educational access on the Internet must follow hard on the heels of the weeding objectives proposed hereunder.

1. British (and other) accredited<sup>7</sup> education must be equally available to all globally, internationally, nationally, regionally and in every home. This goal fulfilment necessitates the introduction of an enlarged classroom/ lecture theatre concept (at all levels). Such a change, to embrace a virtual classroom/lecture milieu, would revolutionise the spread and assimilation of knowledge. *This addition would include examination testing, assignments and student counselling.* Campus only studies are abrogated.
2. Technology currently on the market, including that used by the entrepreneurial Kaplan group<sup>8</sup> and the popular UK government accredited Pearson English testing system<sup>9</sup>, invites serious consideration and appropriation<sup>10</sup>.
3. An alarming report by the National Audit Office (UK) underlines the financial denominator in education, “While there are a number of financially strong institutions, there is wide variation in institutions’ financial performance and over 25 per cent of institutions in 2009/10 were performing below at least one of the financial benchmarks”<sup>11</sup>. In common with other countries, America is grappling with funding cuts in tertiary education and schools<sup>12</sup>. Cost effective education must be available to all; the 3 R’s can and must also be equally accessible *outside* the traditional entombing confines of expensive “Ivy League and traditional institutions” currently offering customer designed theatres that accommodate elitist and often financially burdensome learning<sup>13</sup>. Hopefully, points raised in this essay will provide the necessary ingredients for change.
4. To address the above issues and other anomalies, educationalists across the board must broaden their thinking and revise their approach.
5. Change must begin with the teacher-training curriculum that must include the realities of the virtual classroom<sup>14</sup> and educators must learn to “walk in space” – and embrace a new *modus operandi*.
6. The *full package* of internet education must offer accredited home/office tuition for all ages. Just as many school leavers *work* from home, so must those engaged in tertiary studies have the choice to *learn* from home.
7. Importantly, the democratising and adjusting of the educational setting requires that control be wrested from the fumbling hands of inept, arrogant Luddites. Interestingly, many pedagogues have left the chalkboard and slate era (common during the early education of the writer) adapting to and embracing the introduction of Smart Boards and related technological advancements. However, they now barricade themselves inside their cloistered, traditionally formatted classroom and exclude the new kids on the block – the Ethernet and the Internet. Why?
8. Reform measures must actively storm and destroy the traditional Bastille of limitations surrounding and imprisoning students within the claustrophobic confines of the classroom/ lecture room.
9. The entrée to education, effectively barricaded by “the where you live syndrome” is exacerbated

further by the *bottom line* credo – the cost. However, reasoned confrontation will introduce a new feeder road to less expensive learning. This route will create open access to the academic highway allowing participation through a cheaper tollgate – the www.

10. Internet-driven education will then reach the disenfranchised, lower income groups, physically disadvantaged and mentally needy individuals - they too have equal rights to easily accessible education.
11. The hamlets and villages of our land cannot remain isolated from accessible and affordable education. Rural communities need not remain last in the queue. Overcrowding in cities, with their universities and colleges would not burst at the seams to accommodate migrating students from the countryside homes.
12. Education and testing on the internet will offer academic opportunities and hope to those who battle with poverty and geographical separation from the main hubs of learning.
13. Expensive and troublesome visa acquisition, tertiary education fees and foreign-based accommodation would be dealt the coup-de-grace when internationally desired education travels over the Internet.
14. Charlatans who abuse the UK student visa system to gain access to Britain would be effectively barred – not by strained Border Controls but by internet accessed British education.
15. However, let us not throw out the baby with the water. Individuals who can afford expensive education must exercise their democratic right to spend their money as they decide. Importantly, however, educational cabals cannot be allowed to place top class knowledge out of the reach of those who do not have deep pockets.
16. Furthermore, we need to place reform at the apex of the hierarchical structure. Just as the People elect a President, the Minister of Education must be subject to the votes of constituents and the incumbent must be an experienced educationalist holding relevant qualifications (*par excellence*). We need to guard against the governmentally-proven *Peter Principal of Management*<sup>15</sup> where otherwise politically shrewd political appointees, lacking relevant educational and academic abilities proudly take their seat in chauffeur-driven luxury, only to direct the driver onto a spinning hamster-operated wheel of the “as it was in the beginning” cycle. For the sake of offering cost-effective education to all, reality must shake the nested comfort zones of antediluvian minds that cling to the mantra, “as it was in the beginning is now and ever shall be” educational

syndrome. The whinging, “if it isn’t broken don’t fix it” argument is both stale and destructive. Denial will cause the head-in-the-sand ostrich to lose the race.

Currently, the facts pasted to the masthead of reality reveal worrying conundrums:

17. The United Kingdom’s educational system remains riddled with class<sup>16</sup>, social<sup>17</sup> and financial exclusivity.<sup>18</sup> These disfigurements fly in the face of much-trumpeted equal opportunities legislation and non-discrimination sensibilities and deny human rights for all.
18. The institutionalised hypocrisy advocating *la liberté* and *non-discrimination* through curricula in already discriminatory and unequally accessed schools and universities, reeks of unacceptable, out-of-touch, compensatory and patronising conscience solving. Educational opportunities should not be hidebound by social, ethnic and monetary prejudices. Ironically, private entrepreneurs have hijacked non-accredited education whilst the appointed guardians of what is termed accredited learning have played second fiddle in Nero’s ensemble.

#### AN EXAMPLE

Let us highlight one aspect of education. Teaching English, as a second language is a cash cow for many entrepreneurs. Sadly, many place business objectives as their sole motivation for offering educational opportunities. Thus, quality teaching remains a minor consideration. For example, over the past five-years, the writer has researched, observed and examined attractively presented internet and canned computer packaged programmes offering English tuition to South Korean students.<sup>19</sup> Two online sessions were observed during December 2010. The, webcam and book-centred tuition took place over two 20-minute periods. The educator was in the Philippines - where the native language is not English. In brief:

- Aspects of grammar were unacceptable.
- The *lesson* and not the *student* formed the target of the instructor.
- Meta communication and paralinguistics, coupled with the methodology, conveyed impersonally structured rote learning; learning objectives were not clear and there was no checking of student understanding.
- The tuition rate paid to the educator was much lower than the fee demanded from a developed-world teacher.
- Understandably, the entrepreneurial enterprise brought in money but the quality of education suffered.

- The parents paid money but the student learned little of value.
- The qualifications of the teacher remain unclear.

Fortuitously, the writer visited the Philippines during February 2011. The business trip encompassed interviewing potential candidates for tertiary education placements in the United Kingdom. Three of the post-graduate interviewees deserve mention.

- Each was involved in teaching English to South Koreans.
- Worryingly, they had no teaching qualifications.
- Their involvement in teaching was a need to earn money.
- None had a passion for *teaching* – the tuition offered was a mechanical process for pecuniary gain.
- Two of the three would have just passed the B2 stage on the European framework scale.
- Thus, the blind lead the blind.

Ironically, private entrepreneurship has captured much of the non-accredited educational market using the Internet, but the State that accredits education remains inexplicably in the shallow waters of traditional classroom-binding instruction.

## ACCREDITATION

We must now confront (again) the sensitive and controversial subject of *accreditation* – the Cambridge Dictionary defines this as, “to officially recognise, accept or approve of someone or something”<sup>20</sup>. This noun, enshrining a meaning that is anathema to some, remains a bristling source of angst throughout the non-traditional and the historic education bodies, where incestuously controlled verification appointees are in command. *Veritas* has carried many articles about “accreditation” and the following will just revive some of the threads.

- Naric, for example, works within the UK Higher Education Framework to ensure quality control<sup>21</sup> – at least that is the theory.
- The National Council of Accreditation of Teacher Education (NCATE)<sup>22</sup> or The Teacher Education Accreditation Council (TEAC)<sup>23</sup> should accredit colleges and universities granting degrees in education. Both bodies are recognised by the Department of Education.
- The Quality Assurance Agency for Higher Education (QAA) “safeguards the public interest in the sound standards [sic] of higher education qualifications informing on and encouraging

continuous improvement in the management of the quality of higher education”<sup>24</sup> – that is the theory, anyway.

- Self-perpetuating bodies like the British Accreditation Council (BAC)<sup>25</sup> and the entrepreneurial Accreditation Service for International Colleges (ASIC)<sup>26</sup> provide statutory watch in keeping educational establishments free from the contamination of irregularities – in theory, anyway. However, the record reveals an avalanche of inefficient monitoring that continues to provide an open door for scam colleges to flourish and dupe many.
- The plethora of “accreditation bodies” remains a jungle of confused academic wiring. In the USA and Switzerland, for example, an “accepted” academic qualification from one State or Canton is not OK in another. What a travesty of logic. We continue to question both the sense and subliminal reasons behind this kind of ridiculous fragmentation.

Regardless of the scrolls of red tape, the current monitoring and control of what is loosely termed “standards” is generally farcical<sup>27</sup> and an insult to democratic involvement. The current “old boys” system needs an overhaul that embraces 21st century ideas from the People.

However, the august guardians of standards pontificate to all who elect to become part of their isolated “in group”. They arrogantly and insultingly label non-traditional dissident groups as “rogue universities and colleges”. Their defensive attitude gives birth to the “out group”. These shunned and reviled dogs, given a bad name, are exiled to Coventry so that education remains insulated from contamination despite their proven academic, professional and verified outcomes of success. Like the Pharisees of old, the threatened Establishment then snuggles into its homespun robes of power-invested self-aggrandisement and thus secures its parasitical and choking hold on legally sanctioned education.

## BACK TO THE THEME

Let us return to our theme and again enquire why governments throughout the world have not seized the opportunity to advance 3 R’s education? Why is there a calcification of progress regarding didactic evolution using technologies that otherwise drive the Global revolution?

Due to the spaghetti bowl of education, our envisaged rebellion should incorporate boundaries created and monitored by informed and qualified people whose interests centre on education. Therefore:

- Let us challenge those who say that it is too expensive to introduce education to the internet. Is it cheaper to build new schools and enlarge premises to cope with the increasing population?

Would the cost per student not be considerably cheaper than current expenditure?

- The concept of accreditation practice must be analysed and reviewed through open debate. The current abuses and shortcomings of the process must surface.
- Research about “standards” must take place.
- Research, not to affirm the vision of “education for all the people” but setting out the “how” of mission must commence.
- Research into the United Kingdom’s accreditation groups and guardians of standards would confirm that the emperor’s clothing is often of see-through fibre. A surface skim of the relevant facts using Google would be a revelation.
- However, research would enable change, growth and an escape from the abyss of a crippling and outdated system that runs on the oil of sentimentality and feudal originating distinctions.

The legendary action of Rosa Parks<sup>28</sup>, who refused to accept discriminatory historical racist horrors in a country where money bears the inscription, “In God We Trust”, set in motion an overdue political change in America. She was one of the many who paved the way for leaders like President Barack Obama who stated, “It took a lot of blood, sweat and tears to get to where we are today, but we have just begun. Today we begin in earnest the work of making sure that the world we leave our children is just a little bit better than the one we inhabit today.”<sup>29</sup> May we add, “... and to enable all to enjoy the same right to top class education regardless of their financial, geographical, physical, mental and social status”.

In conclusion, to address the educational chaos in the United Kingdom, for example, myopic and stubborn officials must change their thinking or pass through the doorway marked “exit”.

Can the St Clements University group rise to the challenge? Why, indeed, is the St Clements University group not engaged in adding online tuition to their already globally effective, professional and non-traditional approach to education?

This thesis calls upon all who demand educational reform to support change actively. Have we not learned from the successes of the Green, Yellow, and Jasmine Peoples Revolutions? It is time to address the arthritic and unjust educational vogue<sup>30</sup>.

Let us plant Ivy League education on every brick, mud and tin dwelling throughout our world. Indeed, the world is our classroom – let us engage all who wish to engage with the pulsating throb of a vibrantly reforming educational odyssey.

Viva! The People have the power. Away with cabal-centred control that obstructs equal educational opportunities for all.

“Let us rise up and build”<sup>31</sup> as we recall liberating words of the renowned world statesman, Nelson ‘Madiba’ Mandela, “Education is the most powerful weapon which you can use to change the world” (Nelson Mandela).

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## NOTES

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<sup>3</sup> <http://www.americanonlineuniversities.com/> (Accessed 5 March 2011).

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<sup>6</sup> Abraham Lincoln, The Gettysburg address. <http://showcase.netins.net/web/creative/lincoln/speeches/gettysburg.htm> (Accessed 1 March 2011).

<sup>7</sup> Previous articles in Veritas have addressed the issue of "accreditation" but a brief comment on the system will feature in this article.

<sup>8</sup> <http://www.kaplan.co.uk/> (Accessed 1 March 2011).

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<sup>14</sup> <http://www.english.cam.ac.uk/vclass/> (Accessed 1 March 2011),

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<sup>17</sup> <http://www.articlesbase.com/education-articles/education-there-should-be-no-class-distinction-1105857.html> (Accessed 27 February 2011).

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<sup>19</sup> I have been advised not to mention specific providers. Please conduct your own research to verify my statement.

<sup>20</sup> Cambridge Advanced Learners' Dictionary online <http://dictionary.cambridge.org/dictionary/british/accr edit> (Accessed 1 March 2011)

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<sup>27</sup> Veritas has carried an article in this regard.

<sup>28</sup> Academy of Achievement  
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<sup>29</sup> Barack Obama, President of the United States of America  
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Authors: Stephen J. Ball<sup>a</sup>; Richard Bowe<sup>a</sup>; Sharon Gewirtz<sup>a</sup>  
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# The Dialectics of Youth Rebellion

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In the 21<sup>st</sup> century we are accustomed to accepting youth as 'rebellious' or just plain disobedient. This is often considered a 'passing phase', and a part of 'modern' times. Yet such 'rebelliousness' is nothing 'new'. It has featured in numerous civilisations spanning thousands of years.

In our own times and in our own civilisation, there has been the 'beat generation', the 'hippies', the 'yippies' and sundry forms of anarchism and socio-cultural nihilism often manufactured by Sumner Redstone's MTV (Music Television) and other conglomerates.

## YOUTH REBELLION AS A SYMPTOM OF CULTURAL PATHOLOGY

Cultural morphology theory analyses cultures and civilizations as organisms with life cycles. It sees a culture that reaches the stage of civilization as having gone through organic cycles of birth, youth, maturity, senility and death. The most cited cultural morphological text, at least in the English-speaking world, has been that of the philosopher-historian Oswald Spengler.<sup>1</sup> His cultural morphological view contrasts with the dominant historical paradigm of Western academia which sees history as a lineal progression from 'ancient' to 'modern'. It provides a predictive analysis for the life stages of a civilization and is applicable to everything from banking to sex.

A cultural morphological explanation of 'youth rebelliousness' would suggest that the phenomenon is not peculiar to Western Civilization nor generally to our own times. History shows that it is not unique, but one of many symptoms of a civilization in its senile cycle. It is, in short, a *recurrent* theme.

Six thousand years ago an Egyptian tomb inscription lamented: *'We live in a decaying age. Young people no longer respect their parents. They are rude and impatient. They frequently inhabit taverns and have no self control'*. In the 8<sup>th</sup> Century BC, Hesiod wrote: *'When I was young, we were taught to be discreet and respectful of elders, but the present youth are exceedingly disrespectful and impatient of restraint'*.<sup>2</sup>

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<sup>1</sup> Oswald Spengler, *The Decline of The West* (London : George Allen & Unwin , 1971).

<sup>2</sup> That these quotes are cited as examples of how each generation in each civilization has a tendency to look on its own youths as somehow peculiarly troublesome and is therefore not really problematic, misses the significance entirely, and is an example of how the dominant lineal historical paradigm provides a limited view of history. Hence a British psychologist and TV presenter in citing these quotes does so not to show the dangerous cultural analogues of prior civilizations,

Two thousand four hundred years ago Plato wrote: *'What is happening to our young people? They disrespect their elders, they disobey their parents. They ignore the law. They riot in the streets inflamed with wild notions. Their morals are decaying. What is to become of them?'*

Instead of seeing the present nihilism of youth as a problem of civilization, contemporary analysts, bereft of historical perspective, see it as a passing phase that should be of no abiding concern. The cultural morphologist, looking at the parallels in prior civilizations, sees the phenomenon as 'a sign of the times', one of numerous warnings that something is organically wrong with our civilization.

## MANIPULATION BY THE RULE OF MONEY

During the Autumn (maturity) and Winter (old age) cycles of a civilization, to use Spengler's terms, the wealthy take the place of kings and priests as the ruling class of a civilization. This is *plutocracy*; the rule of money.<sup>3</sup> The German word *zeitgeist* (i.e. 'spirit of the age') describes the pervasive motivating force that dominates particular cycles. In the Winter cycle of a civilization, the *zeitgeist* is *money* and the ethos is *profit*. Even oppositional or antithetical ideologies that arise such as Marxism, having emerged from the same *zeitgeist* as the materialistic age, are found to be merely mirror images of what they are supposedly opposing. That is why Spengler, with his broad historical outlook, could say that socialism is imbued with the *spirit* of capitalism:

Herein lies the secret of why all radical 'poor' parties necessarily become the tools of the money-powers... Theoretically their enemy is capital, but practically they attack, not the *Bourse*, but Tradition on behalf of the *Bourse*. This is as true today as it was for the Gracchuan age, and in all countries...<sup>4</sup>

The antagonism plutocracy has for tradition, the traditional family and traditional gender roles in particular, manifests as support by Big Business for sundry 'radical' (sic) movements that are intrinsically anti-traditional. In our own epoch we can include

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but to critique the present older generations for an unfounded negative 'fear of youth', writing: *'Such quotes illustrate what I believe has become a historically nurtured and culturally damaging phenomenon: ephebiphobia - the fear of youth. But today this problem is worse than ever'*. Tanya Bryon, 'We See Children as Pestilent', *The Guardian*, March 17, 2009.  
<<http://www.guardian.co.uk/education/2009/mar/17/e-ephebiphobia-young-people-mosquito>>

<sup>3</sup> Oswald Spengler, op. cit., Volume 2, Chapter 8, 'The Form-World of Economic life: (A) Money'; Chapter 9, (B) 'The Machine', pp. 499-507.

<sup>4</sup> Oswald Spengler, *ibid.*, Vol. 2, p. 464.

feminism,<sup>5</sup> communism,<sup>6</sup> the psychedelic movement of Timothy Leary, the New Left, the 'colour revolutions' sponsored by George Soros and the US National Endowment for Democracy.<sup>7</sup>

## DIALECTICAL MANIPULATION OF YOUTHFUL PROTEST

In the same manner by which billionaire currency speculator George Soros, in tandem with the Congressionally-funded National Endowment for Democracy, is now able to bring hordes of (especially young) people into the streets in what is commonly regarded as 'spontaneous' demonstrations against regimes that are not amenable to joining the world market,<sup>8</sup> vested interests have for decades used the young as part of a dialectical process to change society.

In the 1980s a Hoover Institution Research Fellow, Dr Antony C Sutton, came to the conclusion that the answer as to why certain business and political interests back conflicting movements is to instigate *controlled crisis*, which can be managed *dialectically*. That is to say, from out of the dialectical clash of opposites – *thesis* and *antithesis* – something new emerges: *synthesis*.<sup>9</sup> It is widely known that dialectical struggle is the basis of Marxist historical analysis and tactics. What is not generally realised is that it might also be the basis for changing society used by capitalistic interests.

Are there any primary sources for the contention that vested interests use dialectics to create change? Zbigniew Brzezinski, who served as National Security Adviser under the Carter Administration, has been a

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<sup>5</sup> For the manner by which the CIA and the 'Establishment' recruited feminist luminary Gloria Steinem, for example, see: 'Gloria Steinem and the CIA: C.I.A. Subsidized Festival Trips: Hundreds of Students Were Sent to World Gatherings', *The New York Times*, 21 February 1967.

<http://www.namebase.org/steinem.html>

<sup>6</sup> Frances Stonor Saunders, *The Cultural Cold War: the CIA and the World of Arts and Letters* (New York, The New Press, 2000).

<sup>7</sup> For a laudatory article on the NED, see: Rachele Horowitz, 'Tom Kahn and the Fight for Democracy: A Political Portrait and Personal Recollection', *Dissent Magazine*, pp. 238-239. [http://www.dissentmagazine.org/democratiya/article\\_pdfs/d11Horowitz.pdf](http://www.dissentmagazine.org/democratiya/article_pdfs/d11Horowitz.pdf)

<sup>8</sup> See for example: M McKinnon, 'Georgia revolt carried mark of Soros', *Globe & Mail*, November 26, 2003,

<http://www.theglobeandmail.com/servlet/story/RTGAM.20031126.wx Soros1126/BNStory/Front/>

<sup>9</sup> Antony C Sutton, *An Introduction to The Order, 'Introduction'* (Bullsbrook Western Australia: Veritas Publishing Co., 1984).

foreign policy adviser to President Obama, and more importantly, served as the founding director of David Rockefeller's globalist think tank, The Trilateral Commission. As a young academic he wrote a monograph entitled *Between Two Ages*. In it he describes a dialectical historical process which would see the eclipse of the nation-state in favour of a global technocracy. In particular he hypothesised a 'global consciousness' (sic) and included secular liberalism as one of its stages, replacing the old European order of religious faith and aristocratic dynasties and state-craft maintaining a legalistic social contract between citizens by state-craft. He further saw Marxism as the *antithesis*, seeing it as an ideology that '*has served as a mechanism of human progress, even if its practice has often fallen short of its ideals*'. The *synthesis* seen by Brzezinski emerging now from then eclipse of 19<sup>th</sup> Century liberalism and communism, having dialectically fulfilled their historic mission of destroying the traditional social and religious order, is a 'new global conscious' spearheaded by,

"...transnational elites, composed of international businessmen, scholars, professional men, and public officials. The ties of these new elites cut across national boundaries, their perspectives are not confined by national traditions, and their interests are more functional than national."<sup>10</sup>

It might be seen from the above how the contempt for traditional values, patriotism, parental authority, the traditional family, and so forth that feature as 'youthful rebellion' dialectically serve rather than threaten the Establishment.

## SEX, DRUGS AND ROCK AND ROLL

After several generations of manufacturing the transvaluation of values in the realms of sexual mores, drugs, music, and attitudes towards authority, the New Left emerged as a catalyst for revolution, using the young where the 'proletariat' – fundamentally conservative by temperament - had failed to respond.

Much of the intellectual basis stemmed from the New School of Social Research in New York, focused on refugees from the Hitlerite regime, who had been associated with the Frankfurt School of Critical Theory, founded in 1923 by adherents of the German Communist Party.<sup>11</sup> These refugees included names that have become seminal in the social sciences, such as Theodor Adorno, Herbert Marcuse and Erich Fromm. They formed the so-called University of Exile within the New School. These refugees were selected

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<sup>10</sup> Zbigniew Brzezinski, *Between Two Ages: America's Role in the Technetronic Era* (New York: The Viking Press, 1970), p. 29.

<sup>11</sup> Patrick J Buchanan, *The Death of the West* (New York: Saint Martin's Press, 2002), pp. 78-96.



and sponsored by the Rockefeller Foundation's Emergency Program for European Scholars.<sup>12</sup>

One of the principal weapons against traditional society developed by the Frankfurt School is 'Critical Theory', which involves the deconstruction of all the foundations of Western civilisation.<sup>13</sup> *The Authoritarian Personality*, a seminal study produced by the Frankfurters under the direction of Adorno, has been used to 'prove' that sentiments in favour of traditional values on sex, family and patriotism are symptoms of repression and mental illness, and lead to 'fascism'. Conversely, those with a supposedly 'progressive' or leftist outlook are mentally healthy.<sup>14</sup>

Others from the Frankfurt School who synthesised psychoanalytical theories on sexual repression with Marxian economics, such as Erich Fromm<sup>15</sup>, Herbert Marcuse<sup>16</sup> and Wilhelm Reich<sup>17</sup> propagated widely the theory that 'sexual repression' is a product of capitalist society and that 'sexual liberation' would precede a social revolution. This 'sexual revolution' would require the destruction of traditional concepts of family, parenthood and child rearing. This Freudian-

Marxian synthesis was to provide the basis of the New Left youth 'revolt'.<sup>18</sup>

From out of this ideological fermentation the individual most responsible for laying the intellectual foundations of the New Left was Herbert Marcuse, who got his start in the USA as one of the refugees sponsored by the Rockefeller program. During World War II he worked for the Office of Strategic Services, the forerunner of the CIA, and then for the US State Dept. until 1950.<sup>19</sup> Prof. Martin Duberman, a leading Left-wing academic theorist and activist for the 'gay' movement, states: '*The philosopher Herbert Marcuse predicted that the new sexual liberation movements would become a powerful force, the agency for producing significant social transformation*'.<sup>20</sup> During the 1960s Marcuse became the 'guru of the New Left'; he was often discussed by the mass media, and his students began to gain influential academic positions and to promote his ideas, making him a major force in US intellectual life.<sup>21</sup> Marcuse's *Eros & Civilisation* was also funded by the Rockefeller Foundation, and became the manifesto of the 1960s counter-culture. He also received Rockefeller funding for his book *One Dimensional Man*.<sup>22</sup>

Another major influence from which the counter-culture emerged was the 'sexology' of Dr Alfred Kinsey, whose major sponsor was – again – the Rockefeller Foundation. Starting in 1938 Kinsey's survey on sexual mores provided a major critique of traditional attitudes towards morality. Although Kinsey himself does not seem to have had a political agenda, Kinseyan 'sexology' has been of major use for political purposes. The primary financial patron of the Kinsey Institute for Research in Sex, Gender and Reproduction has from the start been the Rockefeller Foundation,<sup>23</sup> augmented later by the Ford

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<sup>12</sup> '(3) Emergency Program for European Scholars, 1940-1945', Rockefeller Foundation Archives, <http://74.125.155.132/search?q=cache:tXK4eQ5oXbAJ:www.rockarch.org/collections/rf/refugee.php>

<sup>13</sup> Buchanan, op.cit., p. 80.

<sup>14</sup> T W Adorno, *The Authoritarian Personality* (New York: Harper Row, 1950).

<sup>15</sup> Erich Fromm, *Escape From Freedom* (New York: Rinehart & Co., 1941). The book is regarded as the founding document of 'political psychology'. The concept of 'freedom' according to Fromm, was that 'individualized man' would be freed from his so-called 'primary ties' of identity such as family, yet in achieving individuality would also find his belonging in the world and in mass humanity. Fromm writes: '*There is only one possible, productive solution for the relationship of individualized man with the world: his active solidarity with all men and his spontaneous activity, love and work, which unite him again with the world, not by primary ties but as a free and independent individual...*' Ibid., p. 36.

<sup>16</sup> Herbert Marcuse, *Eros and Civilisation* (Boston: Beacon, 1955), where Marcuse argued that instinct should not be repressed, and that such repression is inherent in Western Civilization. Marcuse argued that capitalism represses the libido of the proletariat. Reich argued the same in *The Mass Psychology of Fascism*, stating that Fascism can be defined as the psychotic outcome of sexual repression.

<sup>17</sup> Wilhelm Reich, *The Mass Psychology of Fascism* (New York: Orgone Institute, 1933). Reich also denounced the family as 'antisexual' and 'a central reactionary cell'.

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<sup>18</sup> K R Bolton, 'Sex-Pol' Ideology: The Influence of the Freudian-Marxian Synthesis on Politics and Society, *Journal of Social, Political and Economic Studies*, Washington, Vol. 35, No. 3, Fall 2010, pp. 329-355.

<sup>19</sup> *Encyclopaedia of World Biography on Herbert Marcuse*, <http://www.bookrags.com/biography/herbert-marcuse/>

<sup>20</sup> Martin Duberman, *Left Out: The Politics of Exclusion - Essays 1964-99*, (New York: Basic Books, 1999), p. 347.

<sup>21</sup> Douglas Kellner, 'Marcuse, Herbert', *The American National Bibliography*, [http://74.125.155.132/search?q=cache:5\\_KUmmTtH7QJ:www.uta.edu/english/dab/illuminations/kell12.html](http://74.125.155.132/search?q=cache:5_KUmmTtH7QJ:www.uta.edu/english/dab/illuminations/kell12.html)

<sup>22</sup> Herbert Marcuse, 'Acknowledgements', *One Dimensional Man: studies in the ideology of advanced industrial society*, See for the acknowledgement: <http://books.google.co.nz/books?id=63QdLKsuqCwC&pg=PR9&lpq=PR9&dq>

<sup>23</sup> 'What really happened to funding for sex research?', The Kinsey Institute for Research in Sex,

Foundation<sup>24</sup> and others. The director of the Kinsey Institute, Dr John Bancroft, has been explicit in his description of the role played by 'sexology' in the fermentation of youth counter-culture:

...And if we see many of these changes as reflecting a crisis in the relations between the sexes, even more dramatic and revolutionary was the rise of a powerful youth culture, reflecting a profound change in the relations between the generations. We have youth as a self-conscious group, stretching from puberty to the middle twenties, with puberty itself being several years earlier than had been the case in earlier generations. In the 1960s, the political impact of this youth culture was a force to be reckoned with.

*This new autonomy of youth as a separate social stratum reverberated with the golden years of capitalism, and the increasing earning potential of many young people, to produce a youth culture with major commercial impact.* Music and fashion were perhaps its most commercial manifestations. And the autonomy of this youth culture, and its distancing from the conventions of adulthood, was all the more dramatic because of the international nature of this movement. The music, the dress, the political ideals crossed long established cultural and language barriers with extraordinary ease, aided by the miracles of modern information technology, themselves very much the domain of the young. [Emphasis added – Ed.].

The personal liberation of the young from the constraints of their elders became mobilized into social liberation. And inevitably, the most obvious vehicles for liberation were sex and drugs. The rejection of conventional constraints as part of this youth culture became expressed in an openness to the pursuit of sexual pleasure which probably had no parallel, at least in recent history. The historian, Eric Hobsbawm, has described this cultural revolution as 'the triumph of the individual over society.'<sup>25</sup>

Bancroft – approvingly – reveals some important points; in particular he sees that "...the revolutionary ... rise of a powerful youth culture" was not of a rejection of the *spirit* of capitalism but an expression of the plutocratic rejection of traditional bonds in

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Gender and Reproduction,  
[http://74.125.155.132/search?q=cache:D-Db\\_DNVADAJ:www.kinseyinstitute.org/about/Movie-facts.html](http://74.125.155.132/search?q=cache:D-Db_DNVADAJ:www.kinseyinstitute.org/about/Movie-facts.html)

<sup>24</sup> John Bancroft M.D., *Kinsey Today Director's Column*, Spring 1998,  
<http://www.kinseyinstitute.org/publications/column3.html>

<sup>25</sup> John Bancroft 'Fiftieth anniversary lecture on the Kinsey Institute Today', *The Kinsey Institute Today*, 1997, 'Social changes'.

favour of a socially and morally detached egotism. This pseudo-rebellion is an expression of the *zeitgeist* of the materialistic age.

This brings us to another major ingredient of the 'youth rebellion': that of *psychedelia*, whose 'guru' Timothy Leary, like Gloria Steinem, was recruited to the CIA by Cord Meyer. Leary later credited Meyer with, "*helping me to understand my political cultural role more clearly*". In 1953 the CIA established a front, The Society for Human Ecology, and spent \$25 million on a research programme at Harvard, Stanford and Berkeley universities, to experiment with mind-altering drugs, particularly mescaline and LSD. In 1960 Frank Barrow of the CIA established at Harvard the Psychedelic Drug Research Centre. At the time Leary was a lecturer in psychology at Harvard. It is here, under Barrow's direction, that Leary began his experiments with LSD. Leary later stated, "*Some powerful people in Washington have sponsored all this drug research*".<sup>26</sup> Leary's psychedelia became a widely touted means of group psycho-therapy, with the therapists being termed by Leary as 'love engineers', with research projects being undertaken in prisons and orphanages.<sup>27</sup>

By 1967 Leary had become the icon of the counter-culture, his slogan being: 'Tune In, Turn on, Drop Out'. The involvement of the Establishment in promoting the drug counter-culture was frankly stated by Leary in an interview with *High Times*, a leading counter-cultural magazine of which he was an editor, in 1978:

"If you look back, many things that we thought were coincidences turned out not to have been accidents. The entire LSD movement itself was sponsored originally by the CIA to whom I give great credit. I would not be here today if it were not for the foresight and prestige of the CIA psychologists. So give the CIA credit for being a truly intelligence agency".<sup>28</sup>

In tandem with sex and drugs has been music in shaping the attitudes of the 'youthful rebel'. Again the same influences emerge. Music has since the time of Plato been recognised as a powerful shaper of the psyche for both good and ill.<sup>29</sup>

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<sup>26</sup> Mark Riebling, *Tinker, Tailor, Stoner, Spy, Was Timothy Leary a CIA Agent? Was JFK the "Manchurian Candidate"? Was the Sixties Revolution Really a Government Plot?*, Osprey, 1994,  
<http://home.dti.net/lawserv/leary.html>

<sup>27</sup> Joel E Cohen, 'Drugs and Inner Freedom', *The Harvard Crimson*, 25 October 1962.  
<http://www.thecrimson.com/article/1962/10/25/drugs-and-innter-freedom-pthe-professional/>

<sup>28</sup> Timothy Leary interview, *High Times*, February 1978.

<sup>29</sup> Plato, *The Republic* (Middlesex: Penguin, 1974), Book 3: 402, p. 163.

In 1937 the 'Radio Project' was established at Princetown University with funds from the Rockefeller Foundation. The head of the Project was Paul Lazarsfeld, an Austrian socialist<sup>30</sup> who had been brought to the USA as a Rockefeller Foundation Fellow<sup>31</sup>. He became one of the most influential social scientists in America as the founder of 'public opinion research'. At Princeton Lazarsfeld established the Office of Radio Research. Lazarsfeld's students were to become the heads of the CBS, NBC and ABC corporations.

In 1939 the Rockefeller Foundation radio research grant was transferred from Princeton to Columbia University, when Lazarsfeld became a professor of sociology. In 1944 the Office of Radio Research was renamed the Bureau of Applied Social Research<sup>32</sup>; in the 1950s and 1960s it became the leading university-based social research institute in the United States.<sup>33</sup>

The Frankfurt School's Theodor Adorno was one of the major research scientists employed by the Radio Project as director of the project's Music Division. His research was nicknamed *The Little Annie Project*; it examined the emotional reactions of listeners to characters and scenes, so that a scriptwriter could influence the response in an audience. Adorno described addiction to music as similar to other forms of addiction and as a means for the socialisation of the individual into a mass.

The intention of this brew of sex, drugs and music was stated by one of the luminaries of the rock scene, Paul Kantner of 'Jefferson Airplane': '*Our music is intended] to change one set of values to another ... free minds ... free dope ... free bodies ... free music*'.<sup>34</sup>

## FORMATION OF THE NEW LEFT

In his Establishment-published manifesto *Do It!* Jerry Rubin, one of the most militant young nihilists of the time, wrote: '*Rock 'n' roll marked the beginning of the revolution. ... We've combined youth, music, sex, drugs, and rebellion with treason, and that's a combination hard to beat*'.<sup>35</sup>

From this ferment emerged the 'youth rebellion' as an organisational manifestation, called the 'New Left'.

<sup>30</sup> 'Biographical Memoirs' (Washington: National Academy Press, 1987), Volume 56, p. 255.

<sup>31</sup> Ibid., p. 258.

<sup>32</sup> 'Biographical Memoirs', op.cit., p. 260.

<sup>33</sup> Paul Lazarsfeld, 'Biography', <http://www.answers.com/topic/paul-lazarsfeld>

<sup>34</sup> Paul Kantner, 'Grace Slick with Paul Kantner, 1971'; Peter Herbst (ed.), *The Rolling Stone Interviews 1967-1980* (New York: St. Martin's Press, 1989) p. 447.

<sup>35</sup> Jerry Rubin, *Do It! Scenarios of the Revolution* (New York: Simon and Schuster, 1970), pp. 19, 249.

The specific institution from which the New Left emerged was the Institute for Policy Studies (IPS) initially funded by James Warburg,<sup>36</sup> a scion of the Warburg international banking dynasty, and 'by the Warburg family' (sic).<sup>37</sup>

According to Sidney Blumenthal who conducted interviews with IPS for *The Washington Post* in 1986, 'IPS became a bridge between liberalism and the New Left during the 1960s and 1970s'.<sup>38</sup> IPS co-founder Marcus Raskin for example was associated with the Radical Education Project of the primary New Left movement, Students for a Democratic Society. Raskin was also a member of the Committee to Defend the Conspiracy, a legal aid group that was formed to assist the 'Chicago Seven', the New Left leaders, among whom was Jerry Rubin, who instigated the infamous riot at the 1968 National Convention of the Democratic Party. The IPS continues to receive funding from the major Foundations, including Ford and Rockefeller.<sup>39</sup>

The 'Students for a Democratic Society' (SDS) was born from the Student League for Industrial Democracy (SLID), the youth wing of the Rockefeller-funded, Fabian-socialist League for Industrial Democracy,<sup>40</sup> According to Political Research Associates, a prominent Left-wing think tank, SLID was the US affiliate of an international socialist youth movement which received CIA money: '*The Student League for Industrial Democracy (SLID) was an associate member of the CIA-financed International Union of Socialist Youth*'.<sup>41</sup> *SLID received funds to maintain its*

<sup>36</sup> Institute for Policy Studies, *Beginning the Second Decade, 1963-1973*.

<sup>37</sup> Institute for Policy Studies, *Beginning the Second Decade, ibid*.

<sup>38</sup> Sidney Blumenthal, "IPS - Left-Wing Thinkers", *Washington Post*, 30 July, 1986.

[http://74.125.155.132/search?q=cache:X-SHxRkyN9YJ:www.tni.org/archives/media\\_ips-wp1986](http://74.125.155.132/search?q=cache:X-SHxRkyN9YJ:www.tni.org/archives/media_ips-wp1986)

<sup>39</sup> Green Tracking Library, <http://www.undueinfluence.com/index.html>

<sup>40</sup> 'Timeline for the Young Social Democrats', Young Social Democrats, <http://74.125.155.132/search?q=cache:A-JZk738J:www.youngpeoplesocialistleague.org/library/timeline.shtml>

<sup>41</sup> The International Union of Socialist Youth is the youth affiliate of the Socialist International, comprising social democratic and Labour parties throughout the world. The IUSY was founded in Germany in 1919 under the leadership of the German Bolshevik Karl Liebknecht, and became the Communist Youth International. The IUSY was reconstituted in 1946. 'International Union of Socialist Youth, Statemaster Encyclopaedia, <http://74.125.155.132/search?q=cache:OaAnTsZAgKwJ:www.statemaster.com/encyclopedia/International-Union-of-Socialist-Youth>.



international contacts from the Foundation for Youth and Student Affairs, a major CIA conduit for funds'.<sup>42</sup>

Another recipient of CIA funding since 1950 has been the US National Student Association.<sup>43</sup> Philip Agee states that the NSA provided an important basis for the New Left, closely associated with the Student Non-violent Coordinating Committee and the SDS: "...[M]embers of Students for a Democratic Society provided important leadership for campus-based activities".<sup>44</sup> According to Angus Johnston, who had been secretary of the US Students Association, "...NSA played a vital role in the wave of student activism that rose in the early 1960s, doing much to advance a student-centered vision for the American university. Many of the founders of the Students for a Democratic Society (SDS) became involved in national activism through NSA..."<sup>45</sup>

One of those involved with founding the SDS, James Kunen, states in his memoir *The Strawberry Statement* that Big Business sought to channel funds to the SDS as part of a dialectical process. :

"In the evening I went up to the University to check out a strategy meeting. A kid was giving a report on the SDS convention. He said that at the convention men from Business International Roundtables, the meetings sponsored by Business International for their client groups and heads of government tried to buy up a few radicals. These men are the world's leading industrialists and they convene to decide how our lives are going to go. These are the boys who wrote the Alliance for Progress. They're the left wing of the ruling class. They agree with us on black control and student control..

"They want McCarthy<sup>46</sup> in. They see fascism as the threat, see it coming from Wallace<sup>47</sup>. The only way McCarthy could win is if the crazies and young radicals act up and make Gene look more reasonable. They offered to finance our demonstrations in Chicago. "We were also offered Esso (Rockefeller) money. They want us to make

<sup>42</sup> Political Research Associates, 'League for Industrial Democracy', *Right Web*, 10 January 1989, <<http://74.125.155.132/search?q=cache:Cv7179ovYrGJ:www.rightweb.irc-online.org/articles/display/>>

<sup>43</sup> Philip Agee Jr., 'CIA Infiltration of Student Groups: The National Student Association Scandal', *Campus Watch*, Fall 1991, pp. 12-13, <http://www.cia-on-campus.org/nsa/nsa2.html>

<sup>44</sup> Ibid.

<sup>45</sup> Angus Johnston, *A Brief History of the NSA & USSA*, US Student Association, <http://www.usstudents.org/who-we-are/history>

<sup>46</sup> Left-liberal Democratic presidential candidate Eugene McCarthy.

<sup>47</sup> Conservative Southern Democratic presidential candidate George Wallace.

a lot of radical commotion so they can look more in the centre as they move to the left".<sup>48</sup>

This Big Business dialectic with the New Left is confirmed independently by Gerald Kirk, who as a student at the University of Chicago, became active in the SDS, the DuBois Club<sup>49</sup>, the Black Panthers, and the Communist Party, as an informant for the FBI. Kirk broke from the Left in 1969. The following year, he testified before the House and Senate Internal Security panels:

"Young people have no conception of the conspiracy's strategy of pressure from above and pressure from below.... They have no idea that they are playing into the hands of the Establishment they claim to hate. The radicals think they're fighting the forces of the super rich, like Rockefeller and Ford, and they don't realise that it is precisely such forces which are behind their own revolution, financing it, and using it for their own purposes."<sup>50</sup>

The manner by which the dialectical process works was specifically demonstrated in 1968 when the SDS Columbia chapter instigated a student revolt and take-over of the University. Revolutionary leadership was taken out of the hands of the SDS and was taken over by the Students for a Restructured University (SRU)<sup>51</sup> that had been funded with a \$40,000 grant from the Ford Foundation.<sup>52</sup> The Ford Foundation 1968 annual report states that:

<sup>48</sup> James Kunen *The Strawberry Statement: Notes of a College Revolutionary*, (New York: Avon, 1970), "At the convention, men from Business International Roundtables", pp. 130-131.

<sup>49</sup> A Communist Party front named after Afro-American scholar and communist W E B DuBois.

<sup>50</sup> 'Investigation of SDS 1969', Committee on Internal Security, 91st Congress, 1st Session, Pt. 5, pp. 1654-1705 of hearings.

<sup>51</sup> 'Columbia University - Students for a Democratic Society - Unrest', ABC Evening News, 19 September 1968, Vanderbilt Television News Archive, <http://74.125.155.132/search?q=cache:hQs-Ccu5i1IJ:tvnews.vanderbilt.edu/program.pl>

<sup>52</sup> An article in a leading British Leftist magazine puts the amount given by the Ford Foundation to SRU at \$40,000. Mike Marqusee, '1968 The mysterious chemistry of social change', *Red Pepper*, 6 April 2008, <<http://74.125.155.132/search?q=cache:Qu0dvzQ7RuIJ:www.redpepper.org.uk/1968-The-Mysterious-Chemistry->>> \$40,000 is also the amount stated by Joel Geier, Associate Editor of the *International Socialist Review*, '1968: Year of Revolt', talk at the University of Illinois, Champaign, IL on March 26, 2008. Geier was a leader of the Free Speech Movement at Berkley during the 1960s. *International Socialist review*, <http://74.125.155.132/search?q=cache:Tw1lGIjtOAgJ:links.org.au/node/335+>

“At the University of California (Berkeley), a grant of \$500,000 was given for a new university Office of Educational Development that enlists both students and faculty in the planning and conduct of educational experiments. *These include new interdisciplinary courses that reflect contemporary social, political, and economic issues, and a system of residential colleges linked to specific student interests rather than to academic fields*”. [Emphasis added].<sup>53</sup>

What can be discerned in this statement is that the Ford Foundation was funding in Berkeley, noted as the centre of New Left radicalism, the institutional promotion of New Left ideology. Note the reference to ‘educational experiments’, ‘courses that reflect contemporary social, political and economic issues’, and the promotion of a system of so-called ‘specific student interests’.

The 1968 Foundation report states further:

“To facilitate thoughtful student involvement in academic affairs, the Foundation granted \$315,000 to the National Student Association for a three-year program. The grant will assist two principal activities: a national dissemination program to inform students of various patterns of educational innovation and change and participation of N.S.A. staff as advisors in student reform efforts”.

At Columbia University, which was severely disrupted by student demonstrations in the spring, grants were made to three groups studying and redefining the roles of faculty, students, administrators, and trustees. They included a faculty committee and a student organization that was active in the demonstrations but is dedicated to restructuring, not overturning, the university.

It is interesting that the Foundation report cryptically mentions ‘a student organization’ active in the New Left demonstrations with the SDS, Black Panthers and others, referring here to the Students for a Restructured University, without naming the SRU as the recipient. Students for a Restructured University presented themselves as the ‘moderate’ wing of the student uprising, the strategy being to threaten that if their ‘moderate’ demands were not met, the University administration would have to deal with the SDS and other extremists. This was the dialectical strategy in operation.

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<sup>53</sup> ‘Higher Education: Academic Reform’, *Ford Foundation Annual Report 1968*, <<http://www.fordfound.org/archihttp://www.fordfound.org/archives/item/1968/text/045ves/item/1968/text/045>>

## BRAVE NEW WORLD

Did this dialectical strategy stop in the 1960s or 1970s with the demise of what is termed the ‘New Left’? No. The dialectics pushed society as a whole over to the ‘Left’, to what is now commonly called ‘political correctness’. What was considered extreme decades ago, is now regarded as mainstream. Again we come back to the idea that such change becomes accepted as simple ‘change with the times, or ‘progress’. Ford, Rockefeller and other accumulations of wealth are still funding projects that were once considered part of ‘New Left radicalism’. The dialectical strategy of the 1960s and 1970s is still in use in the former Eastern Bloc where after Communism there has been a resurgence in national spirit, traditional values and religion, and in certain Third World, particularly Islamic, states which have been reluctant to sell their souls for lucre. Here the National Endowment for Democracy, and George Soros’ Open Society networks fund such classic ‘New Left’ causes as abortion liberalisation’ under the euphemism of ‘reproductive rights’, feminism<sup>54</sup>, and narcotics liberalisation,<sup>55</sup> and support with both money and training for opposition groups that have toppled regimes in the former Soviet bloc that were regarded as anomalies in the modern world.

The question that might be asked is why would what is known amongst radicals as the ‘Establishment’ fund the very movements that are supposedly out to destroy them? The answer is cogently expressed in a novel published in 1932, Aldous Huxley’s *Brave New World*,<sup>56</sup> where the ‘world controllers’ (sic) do *not* exercise total power with the crude brutality of a communist system, but with ‘kindness’ that keeps the slaves docile with ‘soma’, a narcotic imbibed as a sacrament, with sexual orgies (‘orgy-porgies’) to the accompaniment of repetitive, primitive beats of ‘music’, and non-reproductive sex which replaces the family; as the basis of a ‘new religion’ of happy servitude.

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<sup>54</sup> As a representative example, see: <Network Women’s Program of the Open Society Institute, *Mission Statement*, <http://www2.soros.org/women/html/mission.htm>>

<sup>55</sup> Soros pushes narcotics liberalisation primarily through the Drug Policy Alliance. Among the Board members are such Establishment figures as former Bush luminary George P Schultz; George Soros, Paul Volcker, former Chairman of the Federal Reserve Bank; and Vaclav Havel, first president of the Czech Republic, who came to power on the crest of the ‘velvet revolution’ with Soros patronage.

<sup>56</sup> Aldous Huxley, *Brave New World*, (London: Chatto & Windus), 1969.



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# What Causes Changes in the Earth's Climate?

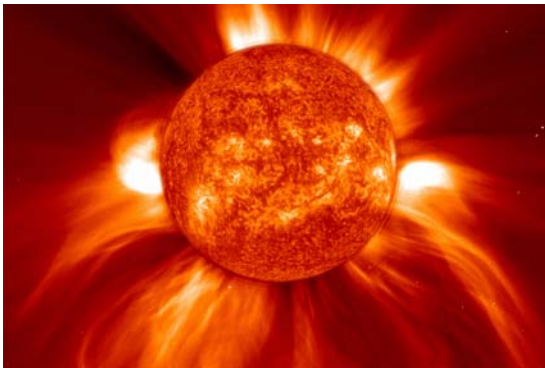
Gregg D Thompson\*

All planets experience *natural* climate change and Earth is no exception. Climate change is due to a range of climate drivers that interact with each other to form a chaotically changing climate on the planet<sup>1</sup>. Thankfully, the Earth's climate has been remarkably stable and pleasantly warm over the last 150 years, allowing humanity to thrive.

## THE EFFECT OF THE SUN

The Sun is by far the major driver of Earth's climate. It provides almost all the heat energy that drives our weather. We know this because every evening when the Earth turns away from the direct rays of the Sun the temperature drops, not one degree but anything up to twenty degrees. The Sun's heat is the main cause of the thermal updrafts (winds) which constantly mix the Earth's atmosphere. It is also the cause of lightning, storms, hurricanes, tornadoes and the heating of ocean currents and has a large impact on cloud formation.

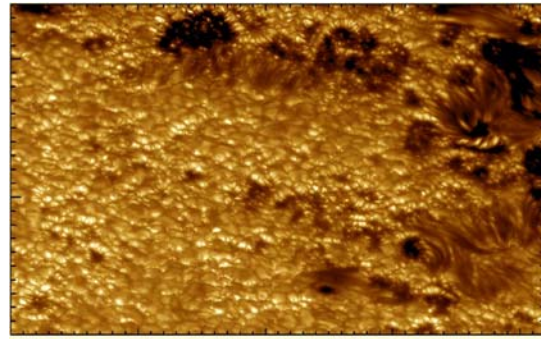
To understand how the Sun causes variations in the Earth's climate we need to know something about the Sun itself. The Earth is 13 000 kilometres across while the Sun's diameter is 1.5 million kilometres<sup>2</sup>. The Sun's temperature at the surface is thousands of degrees centigrade and millions of degrees at its centre.



*The Sun*

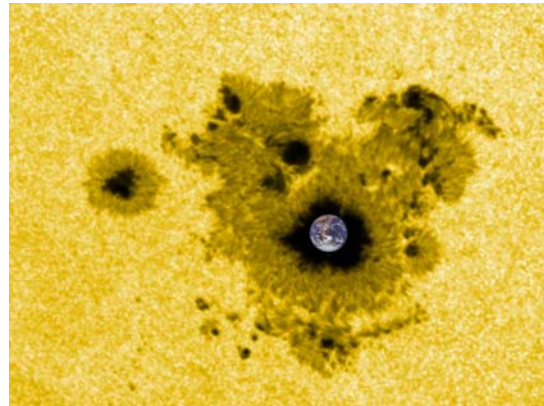
The Sun's surface is covered in individual cells 'bubbling' up from within the Sun (see photo below). Each bubble is the size of a continent on Earth. The dark portions are cooler regions that grow to form Sunspots.

Sunspots are actually white hot but because they are cooler than their surroundings, when we dull the surface of the Sun to view its detail, sunspots appear black by comparison. Sun spots are the Sun's storms. When they erupt, huge quantities of gas, atomic particles and radiation are thrown out towards the planets and these have a marked affect on our climate.



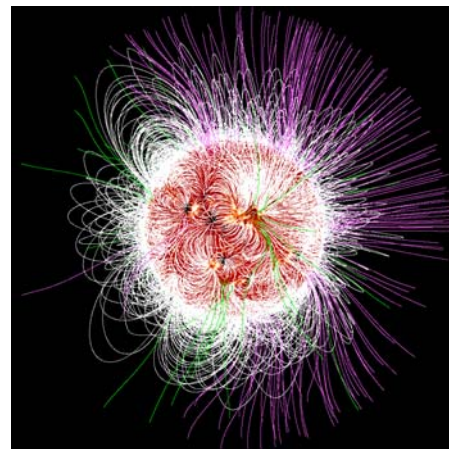
*Bubbles on the Sun's surface*

(The comparative size of the Earth to a medium sized sunspot group is shown below).



*A Sunspot*

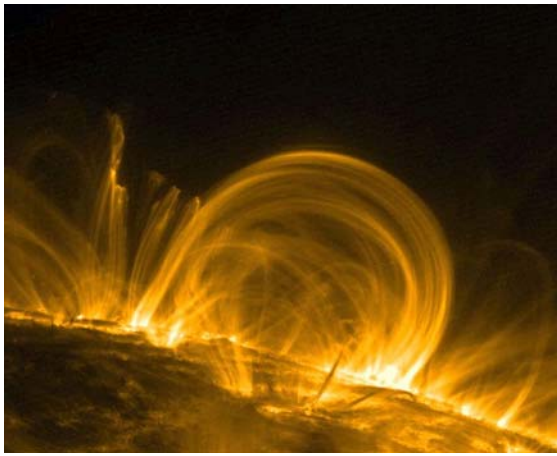
Superheated matter ejected from the Sun's surface travels along magnetic lines of force. Changes occur because the Sun's magnetic fields become twisted due to different rotational speeds within the Sun and the gravitational tugging of the planets. Eventually the magnetic fields become so twisted that they snap and the resultant sunspot storms eject large emissions of atomic particles into space.



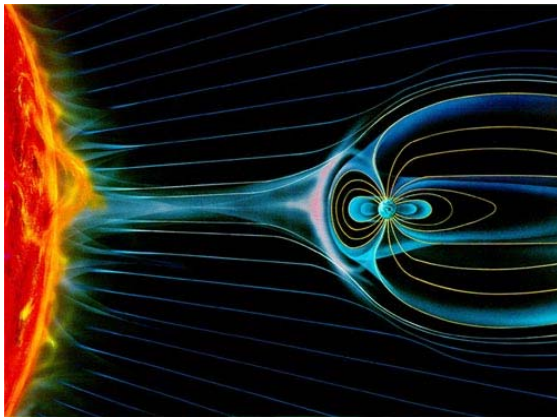
*The Sun's magnetic field*

The Sun's storms create gigantic 'flames' called prominences. These can extend a million or more kilometres from its surface<sup>3</sup>.





The Earth's magnetic field repulses much of the Sun's solar wind but large solar storms can cause power blackouts over large areas and fry electronic equipment. If a magnetic solar storm as big as that which occurred in 1859 occurred today, it would fry most of our electronic equipment and result in a communication chaos that massively disrupted government, banking, security, transport and business worldwide. Such an event could happen any time<sup>4</sup>.



*Solar storms moving around the Earth*

The strength of the Solar Wind determines how many cosmic rays from the galaxy enter the inner solar system. When the Sun is hotter and more excited, the Solar Wind is stronger so it pushes all but the most energetic cosmic rays away; this reduces cloud cover and the Earth gets hotter, as it was from the mid 90s to the mid 2000s. When the Sun is dormant, heating of the Earth is less and many cosmic ray showers enter the Earth's atmosphere. This increases cloud formation and precipitation (rainfall); this has been the case since 2006<sup>5</sup>.

**In Summary:** Although the Sun causes changes to our weather all the time, in the short term it only causes the Earth's temperature to rise or fall less than half a degree centigrade over a couple of decades. By this account, the Sun's output is relatively stable. But the Sun, like all stars is a somewhat Variable Star, and over large time scales, the Sun's radiance changes can cause increases and/or decreases of a *few* degrees. If

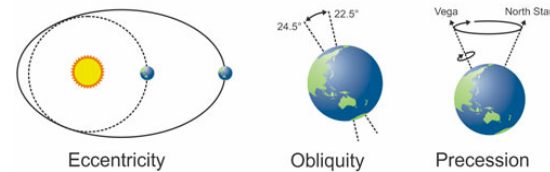
the Sun's radiance drops even slightly *and this is sustained*, a little ice age may occur. Ice ages are also likely to occur when the Earth's orbit changes from a somewhat circular orbit to a more elongated elliptical orbit and the planet is taken further away from the Sun. Major ice ages in which half of the planet may be ice-bound occur when the global temperature drops by 10°C or more. The last major ice age occurred between 25,000 and 15,000 years ago.

### THE EARTH'S ORBITAL VARIATIONS

The Earth's orbit around the sun is not constant. It varies due to:

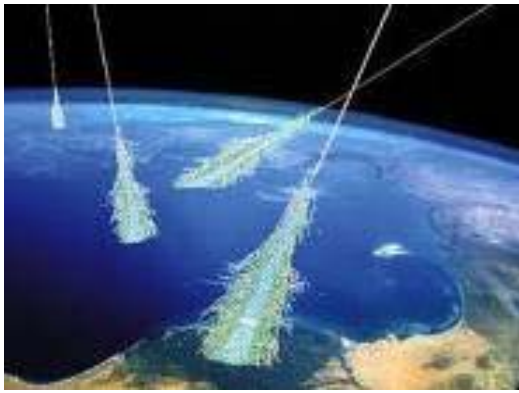
- Eccentricity which changes in the shape of the Earth's orbit.
- Obliquity which changes the tilt of the Earth's rotational axis, and
- Precession which causes the Earth's rotational axis to wobble.

### Milankovitch Cycles



**Eccentricity:** The Earth's distance from the Sun changes over time due to its orbit changing from being nearly circular to elliptical. This effect is caused by gravitational interactions with Jupiter and Saturn. When the orbit is elliptical the Earth travels further from the Sun at its furthest point by millions of kilometres. This can cause ice ages that last for centuries. The ever-changing planetary orbits create periods of 95, 125 and 412 thousand years causing the most extreme, long periodic changes in Earth's orbit thereby affecting its climate. (There are numerous natural cycles involved in climate. Some amplify, others act vice versa. They are not synchronised so they create, what appear at first glance appears to be random changes. This is a good example of Chaos which is actually a deeper level of order at work).

The gravitational 'tug of war' caused by the planets continually changing their positions as they move around the Sun stretches the Earth's orbit from time to time. The changing gravitational fields of the planets can cancel one another out or reinforce one another and this can move the centre of mass of the solar system back and forth from near the centre of the Sun to its outer edge. This movement winds up the Sun's magnetic fields thereby changing the output of the Sun's radiation, and this, in turn, affects the Earth's Climate as cited above. The strength of the Sun's magnetic fields determines how strongly cosmic rays (protons and neutrons) from explosive stars in the galaxy enter the inner solar system and therefore Earth's atmosphere.



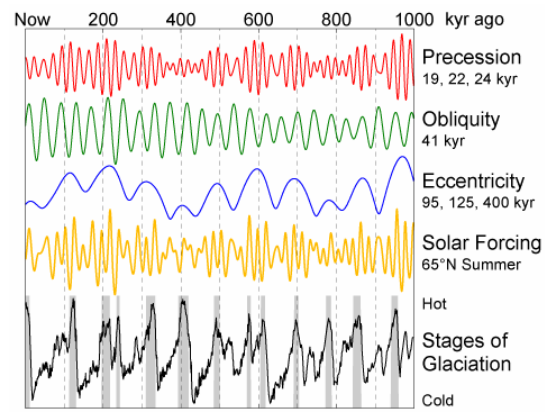
*Cosmic rays striking the Earth's atmosphere*

When the Sun is at solar minimum there is less solar wind pressure forcing cosmic rays away so many more can enter the atmosphere. The more cosmic ray showers there are, the greater the rate of precipitation (rain). This has happened since 2007 with the solar minimum. A single cosmic ray travelling at near the speed of light hits atoms of air in the upper atmosphere and this creates an enormous shower of particles that can reach the Earth's surface. Most of these particles are electrically charged so they act like dust, pollen and bacteria to seed cloud formation. This new discovery is very important in climate science because cloud formation plays such a major role in surface temperatures because clouds reflect much of the sun's light.

**Obliquity:** The Earth's axis changes its angle of inclination from 22 to 24 degrees over periods of 41,000 years and this affects how much the seasons will change. When the axis has its minimum angle less ice melts at the poles due to less sunlight and glaciers grow much more quickly.

**Precession:** This causes the Earth's to wobble on its axis, like a spinning top does as it becomes unstable. This varies over periods of 19,000 to 24,000 years. It influences when the seasons occur and from which side of the Earth's orbit summer will occur in the northern hemisphere. When the orbit is elongated precession can make the seasons more extreme<sup>6</sup>.

The diagram shows the variation in factors causing orbital variations over the past million years together with resultant solar forcing and stages of glaciation. Solar Forcing refers to how much latitude 65° North heats up during summer; it depends on how high in the sky the Sun is and this depends on the orbital factors cited above. NB The unit 'kyr' = 1000 years.



### THE ORBIT OF THE SOLAR SYSTEM IN THE GALAXY

The Sun travels around the galaxy like a rocking horse on a carousel<sup>7</sup>. This causes the solar system to be some times above the spiral arms of the galaxy but gravity pulls it back to the dense star fields in the plane of the galaxy before further movement causes it to go below the galaxy's arms and so on. One 'up and down circuit' takes about 37,000 years. Each time the Solar System goes through the spiral arms of the galaxy it is more prone to going close to passing stars. This can cause a much increased bombardment of meteors and comets which can have the most catastrophic effect on the entire planet.

Large meteor impacts can cause the most dramatic, instantaneous, worldwide impact on climate. It can take thousands of years for the planet to recover. A nickel iron meteorite 1 km across can cause extreme continent-wide effects. Rocky meteors can create a crater 30 kilometers in diameter. There are twenty known impact craters in Australia. Two of the most prominent are Gosses Bluff in Central Australia which is 60km in diameter and the Wolf Creek Crater in NW Western Australia. The release of a meteor's kinetic energy in a second causes a sonic and intense heat shock wave that can circle the globe several times. It can cause intense fires over hundreds of thousands of square kilometres and in larger cases the debris will explode, causing space rains across the planet. There is a 70% chance a meteorite will hit the ocean and create a gigantic tsunami. This may be a hundred metres high and surge over mountains when it hits land. A meteoritic ash cloud can blanket the sun for months or years. Nearly all life forms perish after a large impact. This type of intense climate change has occurred many times in Earth's history. In fact, it is how the earth was formed<sup>8</sup>.



*Wolf Creek Crater, North West, Western Australia*

## TERRESTRIAL IMPACTS ON CLIMATE

There are several phenomena on the planet itself that affect Earth's climate. All these drivers are natural and far more significant than anything man could possibly do.

### Continental Drift

Over geological time, the continental plates have continually drifted around the surface of the planet. New mountain ranges form while older ones erode away. Wetlands and deserts come and go. Australia was originally much further south; it seems to have had had a wet rainforest interior and an inland sea at its centre, dividing the continent. Volcanism existed all along the Great Dividing Range. In prior times there were flood plains on continents where mountain ranges exist today and ice ages have come and gone. The Sahara was once a rainforest with rivers running through it. More recently, during the few hundred years before the mid 1800s the Earth experienced a Little Ice Age; much of the northern hemisphere was ice bound in winter.

### Seismic Movement

The Earth's crust is constantly shifting. For instance, for some time the Netherlands, London and Venice have been slowly sinking; this is not because of sea level change, the land is **subsiding** due to the Earth's crust slowly buckling. This happens because continental plates are pulling apart in some areas and colliding in other areas to cause one plate to buckle upwards and the other to dive deep into the Earth's interior.

### Ocean currents

Ocean currents have a big effect on weather because they transport warm and cold water around the planet. For instance, if it were not for the Gulf Stream the west coast of America, the British Isles and Western Europe would be far colder than they are today. Currents and wind also play a significant role in how much the Arctic ice warms and how it floats around the pole<sup>9</sup>.

## Volcanic Eruptions

Volcanic Eruptions have a very significant impact on climate. The Deccan Traps that formed a chain of virtually continuous eruptions in the Himalaya Region along a fault line thousands of kilometres long, filled the atmosphere with poisonous gases and so much ash that it blocked out the Sun<sup>10</sup>.

## Cloud

Cloud is a major factor because it determines how much sunlight is reflected back into space. The effect is obvious at night; nights tend to be 'frosty' when there is no cloud cover, night temperatures are noticeably warmer when there is full cloud cover.

## Climatic Oscillation

Climatic oscillations between the Poles have a significant effect on Arctic climate, and the El Niño/La Nina events (the **Southern Oscillation Index**) that occur across the Pacific affects the entire globe. Atmospheric pressure and ocean currents across the Pacific oscillate every 3 to 7 years, with an average of 5 years<sup>11</sup>. El Niños cause increased cyclone activity in the central Pacific, flooding in Peru and drought in Indonesia and Australia. La Nina events have the opposite effect.

## HUMAN INFLUENCES

The drivers described above are natural and far more significant than anything man could do. There is no evidence of unusual warming of the planet at the present time, no evidence of a glass house effect, no evidence that CO<sub>2</sub> levels are abnormally high and rising or that increased levels of CO<sub>2</sub> are related to temperature rises, and no evidence of increasing violent weather events (see Potter 2009). Such arguments seem to have been initiated by an elite group who wish to promote world government and free trade arrangements to their economic advantage (Potter 2010, Bolton 2010). We see the media implicated in this, along with Governments and Green groups who wish to justify a carbon tax, major international merchant banks and stock markets who see an opportunity to make massive profits out of carbon trading, and people in the science community who see an opportunity to keep their laboratories operating via large research grants for climate related projects (Thompson 2011).

The 'commonsense' notion that anthropogenic (manmade) carbon dioxide emissions are affecting our weather has no ground in the facts. The notion that global warming and climate change are the result of human activity is based on emotive ideologies not real world science.

## NOTES

<sup>1</sup> See [www.youtube.com/watch?v=Cl4Pz1mwBao&feature=player\\_embedded#!](http://www.youtube.com/watch?v=Cl4Pz1mwBao&feature=player_embedded#!) and [www.ideasinactiontv.com/tcs\\_daily/2005/01/the-geologic-record-and-climate-change.html](http://www.ideasinactiontv.com/tcs_daily/2005/01/the-geologic-record-and-climate-change.html)

<sup>2</sup> To see the truly extraordinary relative size of Earth compared to the Sun and other stars go to: [www.youtube.com/watch?v=HEeh1BH34Q](http://www.youtube.com/watch?v=HEeh1BH34Q)

<sup>3</sup> For more information see: [www.en.wikipedia.org/wiki/Sun](http://www.en.wikipedia.org/wiki/Sun)

<sup>4</sup> To see how threatening this could be, see: [www.abc.net.au/catalyst/stories/2563545.htm](http://www.abc.net.au/catalyst/stories/2563545.htm)

<sup>5</sup> [www.theregister.co.uk/2011/01/21/rao\\_cosmic\\_ray\\_climate\\_forcing](http://www.theregister.co.uk/2011/01/21/rao_cosmic_ray_climate_forcing)

<sup>6</sup> For a simple explanation of these cycles see: <http://www.cotf.edu/ete/modules/msese/dinosaurflr/wobble.html> For a more detailed explanation go to: <http://www.physicalgeography.net/fundamentals/6h.html>

<sup>7</sup> See [www.hypertextbook.com/facts/2002/StacyLeong.shtml](http://www.hypertextbook.com/facts/2002/StacyLeong.shtml)

<sup>8</sup> [www.wikipedia.org/wiki/Gosses\\_Bluff\\_crater](http://www.wikipedia.org/wiki/Gosses_Bluff_crater) and [www.home.alphalink.com.au/~dannj/craters.htm](http://www.home.alphalink.com.au/~dannj/craters.htm)

<sup>9</sup> See: [www.en.wikipedia.org/wiki/Ocean\\_gyre](http://www.en.wikipedia.org/wiki/Ocean_gyre)

<sup>10</sup> See: [www.en.wikipedia.org/wiki/Deccan\\_Traps](http://www.en.wikipedia.org/wiki/Deccan_Traps)

<sup>11</sup> For a brief summary go to: [www.google.com.au/search?hl=en&defl=en&q=define:Southern+oscillation&sa=X&ei=hyGoTLjOPMarcZ\\_6qK4N&ved=0CBcQkAE](http://www.google.com.au/search?hl=en&defl=en&q=define:Southern+oscillation&sa=X&ei=hyGoTLjOPMarcZ_6qK4N&ved=0CBcQkAE)

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*\*Gregg D Thompson is a climate researcher, astronomer and environmentalist located on the Gold Coast, Australia. He is the author of two science books.*



## **The Bunyoro-Kitara Kingdom of Uganda**

**Dr George Reiff\***

Some Councilors of our university have been appointed representatives of the Kingdom of Bunyoro-Kitara recently. This ancient African Kingdom was extensive, prestigious and famous at the height of its power from the 16<sup>th</sup> Century onwards till the dawn of the 20<sup>th</sup> century. This article gives a short history of the Kingdom together with an outline of its current constitutional standing.

### **THE BANYORO**

The people of Bunyoro are known as Nyoro or Banyoro (singular: Munyoro); Banyoro means 'People of Bunyoro'. The language spoken is Nyoro, also known as Runyoro. Traditional economies revolved around big game hunting of elephants, lions, leopards, and crocodiles, but the Banyoro are now agriculturalists who cultivate bananas, millet, cassava, yams, cotton, tobacco, coffee, and rice.

Originally, the Banyoro were organized in clan-like structures of which the royal clan of the Kings, princes and princesses was dominant. The Omukama, i.e King (literally: Supreme Milk Giver) held executive, judiciary and legislative power. The King's subjects ensured that their King lacked nothing economically. Clans would bring food stuffs (Ebihotole) in turn and each clan had a specific duty to perform. For example, Abaliisa clan members minded the Kings cattle (Enkorogi), the Abahamba clan were hunters and the King's body guards (Abakumirizi), the Abasiita clan were artisans and craftsmen, and the Bayaga clan provided the King's chief entertainers.

Politically, the King had absolute authority over his subjects. He appointed county chiefs (Abamasaza) to administer each county. Below them were sub county chiefs (Abagomborizi) who were sub-county administrators who received reports from parish chiefs (Abemiruka) and sub-parish chiefs (Abatongole). At the grass root level were the village chiefs (Bakuru b'emigongo). Via this hierarchical arrangement the king's messages reached the people extremely quickly. In modern times, the office of Prime Minister (Omuhikirwa/Katiikiro) was established to head the civil service of the Kingdom. All county chiefs report to him and he in turn reports to the King.

The Kingdom of Bunyoro-Kitara was established following the collapse of the Empire of Kitara in the 16th century. The founding fathers of Kitara were known as the Batembuzi people. They were later succeeded by the Bachwezi. At its height, Bunyoro-Kitara controlled almost the entire region between Lake Victoria, Lake Edward, and Lake Albert.

### **THE BATEMBUZI DYNASTY**

The first kings were of the Batembuzi dynasty. Batembuzi means 'harbingers' or 'pioneers'. The Batembuzi and their reign are not well documented. All that we know of them is derived from myths and oral legends, so there is little concurrence among scholars regarding the Batembuzi time period in history, even the names and successive order of individual kings is in dispute. The number of individual Batembuzi reigns, as given by different scholars, ranges from nine to twenty one. It is believed that their reign dates back to the height of Africa's Bronze Age.

### **THE BACHWEZI DYNASTY**

The Bachwezi are credited with the founding of the ancient empire of Kitara, which included areas of present day central, western, and southern Uganda; northern Tanzania, western Kenya, and eastern Congo. Little is documented about this people; their entire reign is shrouded in mystery. So much so that they were accorded the status of demi-gods and worshipped by various clans.

The Bachwezi Dynasty must have been short; only three names of kings are documented by historians: Ndahura, Mulindwa and Wamara, in that order. In addition to founding the empire of Kitara, the Bachwezi are credited with the introduction of the unique, long horned Ankole cattle, coffee growing, iron smelting, and the first semblance of organized and centralized government under the king.

No one knows exactly what happened to the Bachwezi but there is no shortage of colorful legend with regard to their disappearance. One legend claims that they migrated westward and disappeared into Lake Albert. Another legend has them disappearing into lake Wamala, which bears the name of the last king of the dynasty. There is a popular belief among scholars that they simply got assimilated into the indigenous populace and are, today, tribal groups like the Bahima of Ankole and the Batutsi of Rwanda.

### **THE BABIITO DYNASTY**

The Bachwezi dynasty was followed by the Babiito dynasty of the current Omukama of Bunyoro-Kitara. Any attempt to pinpoint the dates of this, or any other dynasty before it, is pure conjecture; as there were no written records at the time. Modern day historians place the beginning of the Babiito dynasty at around the time of the invasion of Bunyoro by the Luo from the North. The first Mubiito (singular) king was Isingoma Mpuga Rukidi I, whose reign is placed around the 14th century. To date, there have been a total of 27 Babiito kings of Bunyoro-Kitara.

The Bunyoro-Kitara economy greatly hinged on agriculture carried on using traditionally made hoes. Barter trade was common. The Banyoro were able to

supply food to neighbouring communities because the fertile soils they occupied produced a surplus above that required for home consumption.

The people along Lake Albert known as the Bagungu were fishermen. Some communities were hunters using locally made nets, knives and spears to kill small animals. Bigger animals were killed using well dug deep pits (Obuhya). Fish and/or dried meat (Omukaro) were commonly exchanged for other food stuffs.

The Abanyakibiro got their living through the exchange of salt and fish. Salt processing in Kibiro is still going on today. The Banyoro also produced items made of wood, hides and skins, palm and sisal, iron and stone, pottery and mud. Such things were sold or exchanged for other needed items.

The Banyoro basically rose to power by controlling a number of holy shrines in the region and the lucrative Kibiro saltworks of Lake Albert. They also had the highest quality of metallurgy in the region. By this means Bunyoro became the strongest military and economic power in the Great Lakes region.

Bunyoro's problems began in the late eighteenth century with internal divisions and the coming of English Colonialism. With the help of the English, the Kingdom of Buganda seized the Kooki and Buddu regions from Bunyoro at the end of the century. In the 1830s, the large province of Toro separated, claiming much of the lucrative salt works.

By the mid-nineteenth century Bunyoro was a far smaller state, though it was still wealthy due to the income generated from controlling the ivory trade route that led over Lake Victoria and connected with the Indian Ocean. Following a protracted war between the Buganda people and the Banyoro, the capital was moved from Masindi to the less vulnerable Mparo. Following the death of Omakuma Kyebambe III, the region experienced a period of political instability with two Omakumas ruling at the same time.

In July 1890 an agreement was enforced by the English whereby the entire region north of Lake Victoria was given to Great Britain and vast portions of land were placed under Buganda rule. In 1894 Great Britain declared the region its protectorate but, in alliance with the Buganda, King Chwa Kabalega of Bunyoro resisted these efforts until 1899 when Kabalega was captured and exiled to the Seychelles and Bunyoro was annexed to the British Empire. Because of their resistance another portion of the Bunyoro Kingdom's territory was given to Buganda and Toro. This led to the country being put under the governance of Bugandan administrators. The Banyoro revolted in 1907 but the revolt was put down. The region remained loyal to Great Britain in World War I and, as a result, a new agreement was made in 1934 giving the region more autonomy.

## POST INDEPENDENCE

Uganda gained independence from Britain in 1962. The first post-independence election held that year resulted in an alliance between the Uganda People's Congress (UPC) and Kabaka Yekka (KY). The first post-independence government elected Milton Obote as executive Prime Minister, the Buganda Kabaka (King) Edward Mutessa II held the position of President and William Wilberforce Nadiope, the Kyabazinga (Paramount Chief) of Busoga, was Vice President. Thus, the traditional Kingdoms of Uganda where a vital part of the Constitution of 1962; they held a similar status at provincial level (Federo) to the Emirates in the United Arab Emirates and the Sultanates in Malaysia. However, this political marriage of convenience quickly soured and in 1964 Obote promoted a Bill providing for a referendum in the Buganda counties of Buyaga and Bugangazzi. This led to those counties seceding from Buganda and reverting to Bunyoro.

## THE CONSTITUTION OF UGANDA (1962)

The following extracts from the Ugandan Constitution of 1962 are relevant:

2. (1) Uganda consists of Federal States, Districts and the territory of Mbale.

(2) The Federal States are the Kingdom of Buganda, the Kingdom of Ankole, the Kingdom of Bunyoro, the Kingdom of Toro and the territory of Busoga.

(3) The Districts are the Districts of Acholi, Bugisu, Bukedi, Karamoja, Kigezi, Lango, Madi, Sebei, Teso and West Nile.

3. [This section came into effect on 1<sup>st</sup> January, 1965].

(1) Subject to the provisions of subsection (2) and (3) of this section, each of the territories mentioned in section 2 of this Constitution shall comprise those parts of the former Protectorate of Uganda that on the 8th day of October 1962, were comprised in that territory.

(2) The territory of the Kingdom of Buganda shall comprise those counties of the Kingdom of Buganda that on the 8th day of October 1962 were comprised in that territory, excluding the county of Buyaga and the county of Bugangazzi.

(3) The territory of the Kingdom of Bunyoro shall comprise the counties of the Kingdom of Bunyoro which on the 8th day of October 1962 were comprised in that Kingdom, with the addition of the county of Buyaga and the county of Bugangazzi.

(4) The boundaries of the county of Buyaga, as now forming part of the Kingdom of Bunyoro, shall be those of the county of Buyaga when this county

formed part of the Kingdom of Buganda on the 8th day of October 1962.

(5) The boundaries of the county of Bugangazzi, as now forming part of the Kingdom of Bunyoro, shall be those of the county of Bugangazzi, when that county formed part of the Kingdom of Buganda on the 8th day of October 1962.

(6) For the avoidance of doubts, it is hereby declared that the boundaries of the Kingdom of Buganda and of the Kingdom of Bunyoro shall be respectively as set out in Part I and Part II of Schedule 11 to this Constitution.

4. (3) The provisions set out in Schedule 3 of this Constitution shall have effect in the Kingdom of Bunyoro.

### **THE CRISIS OF 1966**

As a result of competition between the federal and the provincial governments a deep political crisis arose in Uganda in the early part of 1966. The events surrounding this struggle for power culminated in the Ugandan Army under Colonel Idi Amin's command attacking the palace of the King of Buganda, the late Kabaka Fredrick Walugembe Muteesa II on May 24<sup>th</sup> 1966. Kabaka Fredrick was able to elude capture and with the help of several loyal supporters he escaped into exile. This was the starting point for the state to deliberately and systematically turn its armed forces against their own people.

There was widespread corruption at various levels of government. Milton Obote was said to have taken part in the smuggling of gold, ivory and coffee from Zaire (the Republic of the Congo) with the collaboration of Idi Amin. On February 4, 1966; Mr. Daudi Ochieng, a KY monarchist member of parliament, introduced a bill calling for a commission of inquiry into these activities and the suspension of Idi Amin until such inquiry was completed. Obote's response and retribution came on February 22, when he had five of his cabinet ministers (Ibingira, Magezi, Lumu, Kirya and Ngobi) arrested and held without trial; he suspended the constitution also and assumed all executive powers. On February 26, rather than suspend him, Obote appointed Amin as his army commander. On March 3, Obote dismissed the President and Vice-President and assumed the functions of the Presidency. On April 15, the constitution was abrogated formally during a parliamentary session in which Obote was surrounded by troops. A Revolutionary constitution was adopted by MPs who had not even seen it beforehand let alone debated its contents.

In September 1967, Obote imposed a new Republican constitution on the nation, and declared himself President without calling an election. All kingdoms were abolished formally in the new constitution.

The events of 1966 unleashed a repressive regime which in turn spawned an army coup in 1971 led by Amin. The killings and terror that were perpetrated against the Kingdoms in 1966 now extended to other parts of Uganda.

### **THE KINGDOMS RECOGNISED**

Yoweri Kaguta Museveni's became President of Uganda on January 26<sup>th</sup> 1986. He had been strongly involved in the war that deposed Idi Amin in 1979, and the rebellion that subsequently led to the demise of the Milton Obote regime in 1985. In 1993 Museveni re-instated the traditional Kingdoms of Uganda; most commentators consider this 'a thank you' response for the support the kingdoms rendered him and his troops during the war. The 1995 constitution formally re-instated the traditional Kingdoms and their Kings, and by this means Museveni brought relative stability and economic growth to a country that had endured decades of mismanagement, rebellion and civil war.

### **THE CONSTITUTION OF UGANDA, 1995**

#### **Institution of Traditional/Cultural Leaders**

**246.** (1) Subject to the provisions of this Constitution, the institution of traditional leader or cultural leader may exist in any area of Uganda in accordance with the culture, customs and traditions or wishes and aspirations of the people to whom it applies.

(2) In any community, where the issue of traditional or cultural leader has not been resolved, the issue shall be resolved by the community concerned using a method prescribed by Parliament.

(3) The following provisions shall apply in relation to traditional leaders or cultural leaders:

(a) The institution of traditional leader or cultural leader shall be a corporation with perpetual succession and with capacity to sue and be sued and to hold assets or properties in trust for itself and the people concerned;

(b) Nothing in paragraph (a) shall be taken to prohibit a traditional leader or cultural leader from holding any asset or property acquired in a personal capacity;

(c) A traditional leader or cultural leader shall enjoy such privileges and benefits as may be conferred by the Government and local government or as that leader may be entitled to under culture, custom and tradition;

(d) Subject to paragraph (c) of this clause, no person shall be compelled to pay allegiance or contribute to the cost of maintaining a traditional leader or cultural leader;

(e) A person shall not, while remaining a traditional leader or cultural leader, join or participate in partisan politics;

(f) A traditional leader or cultural leader shall not have or exercise any administrative, legislative or executive powers of Government or local government.

(4) The allegiance and privileges accorded to a traditional leader or cultural leader by virtue of that office shall not be regarded as a discriminatory practice prohibited under article 21 of this Constitution; but any custom, practice, usage or tradition relating to a traditional leader or cultural leader which detracts from the rights of any person as guaranteed by this Constitution, shall be taken to be prohibited under that article.

(5) For the avoidance of doubt, the institution of traditional leader or cultural leader existing immediately before the coming into force of this Constitution shall be taken to exist in accordance with the provisions of this Constitution.

(6) For the purposes of this article, 'traditional leader or cultural leader' means a king or similar traditional leader or cultural leader by whatever name called, who derives allegiance from the fact of birth or descent in accordance with the customs, traditions, usage or consent of the people led by that traditional leader or cultural leader.

#### THE BUNYORO KITARA KINGDOM 2011



*Motto: For God and My Country*  
*Capital: Hoima*  
*Official language: Nyoro*  
*Ethnic groups: Nyoro/Banyoro*  
*Demonym: Bunyoro or Banyoro*  
*Government: Constitutional Monarchy under Omukama Solomon Iguru I and Prime Minister Yabezi Kiiza*  
*Area: 18,578 km<sup>2</sup>*  
*Population: 1.4 million (approx.)*  
*Religion: The people are primarily Christian.*

The current Kingdom covers the districts of Hoima district, Masindi district, Kibale district and Buliisa

District. Bunyoro remains one of the four constituent kingdoms of Uganda - see map.



The current ruler is Solomon Iguru I. The Kingdoms were restored when the Ugandan Parliament enacted Statute No. 8 in 1993. On June 11th 1994, His Majesty Rukirabasajja Agutamba Omukama Solomon Gafabusa Iguru I was enthroned as the 49th Omukama of the Kingdom and 27th Omukama of the Babiito dynasty. Unlike the pre 1967 Omukama, who was both titular head and a political figure of the government of Bunyoro, the Omukama today is a cultural leader above partisan politics, although he remains the titular head of the Bunyoro regional government. This is codified in Section 8 of the Fifth Schedule of Article 178 of the Constitution of the Republic of Uganda (2005 Amendment).

#### THE KING'S MISSION

King Solomon Iguru I's mission is to give his subjects cultural leadership and be a catalyst in the developmental process. The Omukama along with the other leaders of the area are planning to establish a university that will primarily focus on teaching relevant skills with regards to work in the extraction of natural resources. The university will also work to preserve the high level of cultural heritage in the area.

The King is in general doing a lot of work to improve the living standards of the people. Relations are maintained with the European community via the Development Organization Association of the Representatives of Bunyoro-Kitara. The King is also working to maintain the traditional Bunyoro culture, but at the same time altering the honors of the kingdom in a way that will bring them in line with western standards.

#### THE CONSTITUTION 2005 (AMENDMENT NO. 2)

In 2005 the following Amendment to the Constitution of Uganda was passed by the Ugandan Parliament:

An Act to amend the Constitution to provide for Kampala as the capital city of Uganda; to provide for the districts of Uganda; to provide that subject to the existence of regional governments the system of local government in Uganda shall be based on a district as a unit; to provide for the creation of regional governments as the highest political authority in the region with political, legislative, executive, administrative and cultural functions in the region and to provide for the composition and functions of the regional governments; to provide for regional assemblies for each regional government; to provide for grants for districts not forming regional governments; to replace the Fifth Schedule to provide for details relating to regional governments; to amend article 189 to recognize the functions and services of regional governments and to provide for related matters' [Date of assent, December 25<sup>th</sup> 2005; Date of Commencement December 30<sup>th</sup> 2005]. BE IT ENACTED by Parliament as follows:



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#### Fifth Schedule Article 178: Regional Governments

##### 8. Role of traditional or cultural leader

Where a traditional leader or cultural leader exists in a region the traditional or cultural leader shall:

- (a) Be the titular head of the regional government;
- (b) Be the titular head of the regional assembly and shall open, address and close the sessions of the regional assembly; and
- (c) Enjoy the benefits and privileges and roles as provided for in article 246 of this Constitution and by Parliament and the regional assembly.

#### **RESOURCES:**

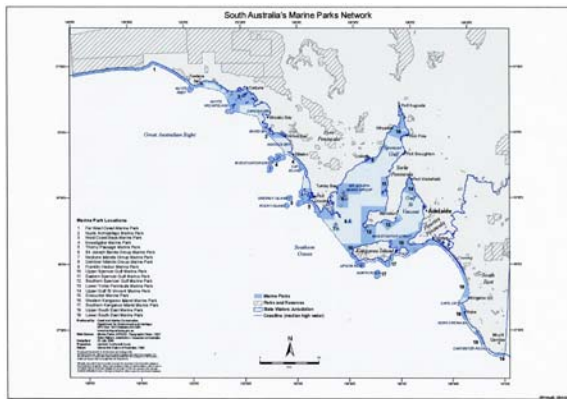
<http://www.state.gov/r/pa/ei/bgn/2963.htm>  
<http://www.statehouse.go.ug>  
<http://www.ugandatragelguide.com/bunyoro-culture.html>  
<http://www.bunyoro-kitara.com/>

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# The Introduction of Marine Parks in South Australia: The Subtle Use of Misinformation

Dr John Potter\*

In 2009, the South Australian Department for the Environment and Natural Resources created nineteen Marine Parks in accordance with the provisions of the South Australian Marine Parks Act of 2007. These parks are located in waters specifically under State Jurisdiction, and are exclusive of Parks like the Great Australian Bight National Park which is administered by the Australian Commonwealth Government. Exact figures are not available but a rough estimate suggests that the Parks cover around 30% of State waters and 75% of the South Australian coastline – see map below. The light blue areas are the State waters and the dark blue areas are the Marine Parks. Note the almost continuous dark blue line around the coastline and the integration of all offshore islands into Park reserves.



South Australian Marine Parks<sup>1</sup>

The initial reaction of commercial and recreational fishers to the creation of Marine Parks was surprise and dismay. One commenter saw them as a 'cruel hoax' (Neil Armstrong, Fishing World March 2010<sup>2</sup>); and it did not escape the notice of week-end anglers that the reserved areas were located on the best fishing grounds. But this reaction was nothing to that which was generated in 2011 when the Department asked Parliament to designate 25% of the Parks **exclusion zones**, i.e. totally out of bounds to the fishing and boating fraternity. On the 5<sup>th</sup> April 2011 a protest meeting organized by the Liberal Party opposition attracted 1400+ people who were sufficiently riled to pass motions of no confidence in the Government and to plan radical demonstration rallies in the streets of Adelaide.

It was pointed out at the meeting that not only would the Government's proposed action have serious implications for South Australia's commercial fishing operators but go a long way to eliminate recreational fishing, by far the biggest and most important recreational pastime in the State. Further, a member of

the Real Estate Institute of South Australia predicted that exclusion zones would sound the death knoll for twenty nine (29) small towns located on the South Australian coast as these centres were dependent for their survival on regular visits from tourists who were drawn to them because they were good fishing sites. The economy of Kangaroo Island, which was already strained prior to the Parks being created, is expected to suffer considerably. Ten other major centres on the main land coast would also be radically impacted. And it would not only be local people who would lose equity; on York Peninsula, 45% of rate payers live in the capital city (Adelaide) but have shacks in coastal towns for weekend relaxation purposes – fishing in particular. The picture drawn was that exclusion zones would render the South Australian coastline virtually uninhabited. And not the least concern is that recreational boat fishers will be tempted to travel well out to sea, beyond the reserves, at risk of life and limb, in order to pursue their favourite pastime.

The South Australian waters are renowned for fish of high quality. Species like King George Whiting (*Sillaginodes punctatus*), Snapper (*Pagrus aratus*) and Garfish (*Hypohaniplius melanochir*) have no peer as table fish anywhere in the world. South Australia is also renowned for its Australian Rock Lobsters (*Jasus edwardsii*), and the South Australian Southern Blue Fin Tuna (*Thunnus maccoyii*) and abalone (*Haliotis spp.*) industries have established links with lucrative markets in Asia. Supplies of all of these species are now under threat.

South Australian fish stocks have been monitored conscientiously over many years by the South Australian Department of Fisheries. In this project the Department has had good cooperation from commercial fishing operators because the operators are interested in the long term viability of their industry. Recreational fishers have also been supportive in accepting increasingly stringent bag and fish size limits and observed closed areas and closed seasons over time without complaint. The industry as a whole is quick to argue, from good grounds, that the Australian fishing operation is the best managed in the world. And if that is true, why is the South Australian State Government bent on introducing such a socially negative policy as exclusion zones in Marine Parks? Has the Government's case been scientifically and economically justified? For the costs in terms of State income, private equity loss, negation of food supplies and social disruption is considerable.

## MARINE PARK POLICY

The motivation for Marine Park policy in Australia has come directly from UN Convention on Biological Diversity presented at the "Earth Summit" held at Rio de Janeiro in 1992. Australia ratified the Convention in June 1993 and since that time the National Environment Department has been active in supplying the Convention with regular National Reports on the actions taken within Australia to advance the



Convention's objectives - see Reports for 1998, 2001, 2005, 2009<sup>3</sup>.

The Earth Summit was convened by the Ad Hoc Working Group of Experts on Biological Diversity appointed by the United Nations Environment Program (UNEP) in November 1988. The Group was asked to explore the need for an international convention on **biological diversity**. It completed its work with a Conference for the Adoption of the Agreed Text on the Convention of Biological Diversity ('the Convention') held in Nairobi, Kenya in 1989 and its recommendations were accepted by the UNEP in the same year. The Convention was opened for signatures on the 5th June 1992 at the Earth Summit and remained open until the 4<sup>th</sup> of June 1993 by which time 168 countries had signed up as Parties. The first session of the Conference of the Parties was held in late 1994 in the Bahamas.

The objectives of the Convention are stated to be:

- The conservation of biological diversity
- The sustainable use of its components, and
- The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

### **The Australian EPBC Act 1999**

In line with its Government's commitment to the Convention the Australian Parliament passed the Environment Protection and Biodiversity Conservation Act in 1999. The Australian Department of the Environment describes this Act as 'the Australian Government's central piece of environmental legislation'<sup>4</sup>. The Act aims to provide a legal framework to protect and manage 'important flora, fauna, ecological communities and heritage places defined in the Act as (eight) matters of national environmental significance'. The important words are '**national**' and '**significant**': 'national' is included to satisfy the autonomous States that this is not a Central Government take-over; 'significant' is included to satisfy the general run of landholders that they have nothing to fear from Central Government control and 'witch-hunts'. But an important addition was the conferring on the National Department of 'jurisdiction over actions that have a significant impact on the environment outside of the eight matter of significance listed in the Act'. [This provision has seen the National Department act well outside of its normal boundaries. For example, in 2009 wood cutting was prohibited along the Murray River plains because a parrot, claimed to be a threatened species, was understood to not like to fly over open ground(!). Over 2000 people lost their employment and income.]

Since the Act has been in place, the National Department of the Environment has set up numerous committees and working groups and published a large number of reports and fact sheets. Some of the more significant reports include<sup>5</sup>:

- The National Biodiversity and Climate Change Action Plan 2004-2007 (issued in 2004)
- The Implications of Climate Change for Australian Fisheries and Agriculture (issued in 2008)
- A National Approach to Addressing Marine Biodiversity Decline (issued in 2008).

### **The South Australian Marine Parks Acts 2007**

The power of Commonwealth agencies is limited by the National Constitution so the National Department of the Environment encouraged all Australian States to pass legislation which will advance the objectives of the EPBC Act at State level. Of significance for this paper is the South Australian Marine Parks Act of 2007. The objectives of this Act are stated to be:

'To protect and conserve marine biological diversity and marine habitats by declaring and providing for the management of a comprehensive, adequate and representative system of marine parks which will assist in:

- The maintenance of ecological processes in the marine environment
- The adaptation to the impacts of climate change in the marine environment
- Protecting and conserving features of natural or cultural significance
- Allowing ecologically sustainable development and the use of marine environments, and
- Providing opportunities for public appreciation, education and enjoyment of marine environments

The Act is purely a legislative device to establish Marine Parks; no specific park sites are listed and no specific management strategies are promoted in the Act. Those details are determined by Regulations developed by the Minister for the Environment, outside of Parliamentary control and influence.

### **Biodiversity**

Central to the UN Convention and the Australian National Act is the concept of 'biodiversity'. The International Union for the Conservation of Nature (IUCN) describes biodiversity as 'a term used to describe the wide variety of ecosystems and living organisms'<sup>6</sup>. It is seen to be:

- The foundation of life on earth
- Extremely complex
- Dramatically influenced by human activities
- Difficult to measure precisely

Other authors have presented biodiversity as a measure of ecosystem health, the implication being that *the greater the biodiversity the better the health of the system*<sup>7</sup>. And yet another definition is given by the

authors of the 2008 Australian National Approach to Addressing Marine Biodiversity Decline (see below)

'Biodiversity is the variation of life at all levels of biological organization. It refers to plants, animals and micro-organisms, the genes they contain, and ecosystems and ecosystem processes they form. It is typically considered at three levels: genetic diversity, species diversity and ecosystem diversity'

### **The Australian National Biodiversity Strategy Review Task Force**

In 2010, the Australian National Biodiversity Strategy Review Task Force Group provided 'an over-arching and high-level strategic national policy framework for biodiversity conservation and sustainable use'<sup>8</sup>. This was based on the following premises:

- Biodiversity is essential for our existence
- Biodiversity is of value in its own right
- Biodiversity is best conserved in its natural state
- The state of biodiversity reflects the state of the nation
- Natural Systems have a finite capacity to respond to changes in their biodiversity
- We should apply a precautionary approach to biodiversity conservation
- All Australians have a stake in biodiversity and should contribute to its wellbeing
- Our efforts to conserve biodiversity must respect the values of indigenous peoples
- Biodiversity should not be further degraded by the actions of the current generation.

The IUCN recently commissioned The Economics of Ecosystems and Biodiversity (TEEB) Study<sup>9</sup>. The foreword attributes the inspiration for this to the Millennium Ecosystem Assessment (2005)<sup>10</sup> and the Review of Climate Change by Nicholas Stern (2006).

### **The National Approach to Addressing Marine Biodiversity Decline**

In 2008, the Marine Biodiversity Decline Working Group provided the Australian Minister for the Environment with a Report<sup>11</sup>. With regard to Trends in Australia's Marine Biodiversity' (p.7), the report is ambivalent. On one hand it insists that 'the past 200 years of human activity have had substantial impacts on marine environments' and 'expert opinion... suggests that there is continuing decline occurring in Australia's marine biodiversity and ecosystems'. On the other hand it recognizes that the lack of baseline information on the current state and trends in the marine environment makes it difficult to make definite statements' (p.7) for 'we still know very little about Australia's marine biodiversity' (p.8)! Presumably the writers have two competing objectives: (1) They wish to claim that marine biodiversity is declining; and (2) being researchers, they wish to make a case for more research funds to be provided.

The Report identifies five issues which it sees as the most significant, broad-scale threats to marine biodiversity (p.3):

- Climate change
- Resource use
- Land-based impacts
- Marine bio-security, and
- Marine pollution

#### ***Climate Change***

Six possible effects of 'climate change' are listed and examples given to show that there is 'mounting evidence' of the impact of climate change on marine systems. The examples include (p.22 op cit):

- Coral bleaching
- Shifts polewards in species distribution due to warming temperatures
- Alteration in the timing of biological events like the spring phytoplankton bloom

#### ***Resource Use***

The marine resource uses included were: fishing, aquaculture, dredging, mineral/oil/gas exploration and extraction, shipping and tourism. But it is fishing that is mainly addressed (p.24), e.g. 'as Australian waters are low in productivity, fishing... must be maintained at low levels to provide ongoing access to these resources'. (What does this mean? We all know that fish stocks need to be managed, and they are being managed by the Fisheries Department).

#### ***Land Based Impacts***

Types of pollution listed were hydrocarbons\*, pesticides, heavy metals, pathogens, nutrients, sediments\*, and litter. (\*What are these?)

#### ***Marine Biosecurity***

Of concern here are marine pests that attach themselves to boat hulls and anchor chains. The examples mentioned were the Northern Pacific sea-star in Tasmania and Victoria (which is seen as a threat to South Australia, Western Australia and New Zealand), New Zealand screw shells (*Maoricoplus reseau*) and the black-striped mussel outbreak in Darwin.

#### ***Marine Pollution***

The main pollutants listed were: oil, sewage, pesticides, industrial wastewater, antibiotics, metals and radioactive waste. The main culprits were seen to be shipping, boats, oil and gas exploration teams, storm water run-off and poor land management practices.



## MARINE BIODIVERSITY DECLINE SCIENCE

The current state of scientific knowledge in relation to biodiversity decline in Australian marine environments is uncertain. The Australian State of the Environment 2006 Report concluded that:

‘we cannot... even in the **rare cases where we know changes are happening**, be sure whether changes in either the extent of the selected habitats, or in populations of particular species, are indicative of healthy or unhealthy changes...’. (author’s emphasis).

The 2008 report of the Marine Biodiversity Decline Working Group (op cit) confirmed that ‘large gaps exist in our knowledge of Australia’s marine environment’.

Nevertheless, in response to persistent questioning in the Parliament, the South Australian Department of the Environment issued a Fact Sheet in 2010 entitled “Science shows Marine Park benefits”<sup>12</sup>. This document assures us that:

‘marine parks are internationally recognized as an effective tool to manage and conserve marine resources and biodiversity’ and that ‘there have been many scientific studies on the effects of sanctuary zones which show positive benefits... includ(ing): increases in overall biomass; increased ability to reproduce; a spill over of larvae and adults into unprotected areas; and improvements in ecosystem and habitats’.

Twenty eight references are provided; eight are concerned with eco-system changes, six with fish stock contributions of reserved areas to adjacent areas, one with the effects of trawling and dredging and eleven with changes in fish populations. This is not the place to conduct a review of these papers but the report on the state NSW marine park science chaired by Professor Fairbrother of Flinders University (South Australia) is informative (see Fairbrother et al 2009). Fairbrother and his colleagues saw every aspect of marine research needing upgrading.

The Fact Sheet was not universally welcomed, especially by the fishing fraternity. Professor Emeritus Bob Kearney, currently Chairman of the Board of the (Australian) Fish Centre found it ‘exaggerated... and biased’ (see *The Advertiser*, 8<sup>th</sup> March 2011).

Overall it would appear that there is limited scientific evidence of marine biodiversity decline. (This is not surprising as prior to the year 2000 most marine parks were simply unique amenity areas set aside for the use of tourists and the scuba diving fraternity). This being so, advocates of marine parks are obliged to call on the opinions of so-called ‘experts’, pro-Marine Parks people who tell us they have seen ‘**some** evidence of decline in **some** places’ and argue that this is sufficient evidence to support the view that there is a

serious decline in Australian’s marine biodiversity’. A large conceptual jump indeed!

## DISCUSSION

Since the early 1980s, a great deal of emphasis has been placed on the term ‘**biodiversity**’ and a variety of definitions have been given for the term. The IUCN says it is the foundation all life, complex, influenced by humans and difficult to measure (above). There is nothing startlingly new in this, of course. We all know that we live on Planet Earth and are obliged to live ‘off the land’, and we all know that the biological world shows some variability. We also know that humans manage the ecosystems - sometimes to their advantage and sometimes not. And as for measurement, we have sophisticated tools and instruments for measuring of a wide range of parameters with sufficient accuracy for most purposes, so what is the issue here?

Some authors have implied that the greater the degree of biodiversity the greater the health of the system, and that a return to pristine conditions is a move in the right direction. In fact most pristine eco-systems had a limited number of plant species and associated animal life was similarly limited to species adapted to those plant species. Much of South Australia was covered with Mallee trees (*Eucalyptus* spp.) and anyone familiar with a Mallee scrub will know that there is not much else present under these trees with their gigantic ligno-tubers. Mulga (*Acacia aneura*) and Myall (*Acacia pendula*) eco-communities are similarly simple with regard to biological composition, presumably because the mean rainfall is very low (150mm) and the soil is deficient in nitrogen and phosphorus, two of the major elements essential for growth. With regard to general health, any pathologist will tell you that pristine eco-systems always evidence plant and animal diseases, parasites and predators. Animals in Africa survive, despite blood sucking ticks and liver flukes, but do not tell us that pristine conditions are the most healthy state that can be achieved. Smallpox was also a natural phenomenon until medical practitioners undertook to eliminate it from the planet.

The more we look into biodiversity the more it becomes evident that it is smoke screen, a ‘commonsense’ concept invented to justify an extreme conservation position. In the face of opposition the concept has had to shift ground over the years to a more extreme position, with the result that some of the most recent statements are becoming farcical. For instance, in 2003, the Millennium Ecosystem Assessment insisted that ‘the total number of species on the Earth is somewhere between 5 and 30 million (quite a range!) but only 1.7 to 2 million species have been formally identified’<sup>13</sup> How do we know how many unidentified species there are if we have not identified them? Informed people will tell you that the statement is untrue for most classes of animals and plants. Ornithologists will tell you that at least 99.9%

of bird species have been identified, and in South Australia, over the past century no one has found a plant species that is not listed Black's Flora (Black 1960). There are undoubtedly a **few** organisms at the bottom of the oceans that have not been fully identified, but there are certainly not millions. The MEA statement is mischievous, made to impress the ill-informed masses.

So who is pushing this agenda? To discover that we must look behind the Convention developed at the Rio Earth Summit in 1992, and when we do this we discover that it was the International Union for Conservation of Nature (IUCN), formed at Fontainebleau, France in 1948, that has played the key on-going role in developing both the Climate Change dogma and its offshoot, biodiversity.

The IUCN was the 'brain child' of Sir Julian Huxley, the first Director General of UNESCO and a key player in the 1940s in the ongoing neo-Malthusian project, that project by which an elite economic group aims to reduce the human population by any and every means (see Potter, 2009 and 2010 and Bolton 2010).

The influence of the IUCN on UN policy on the environment is evidenced by its principal role in the following UN developments:

- The UN's Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)
- The Convention on World Trade in Endangered Species of Wild Fauna and Flora (1974)
- The Convention on Wetlands (1975), and
- The World Conservation Project (1980), and
- The World Charter for Nature (1982)

The IUCN's current priority areas are stated to be:

- Conserving [biodiversity](#) and ensuring that any use of biological resources is sustainable
- Demonstrate how biodiversity is fundamental to addressing some of the world's greatest challenges
- Tackling [global warming \(climate change\)](#)
- Achieving [sustainable energy](#)
- Improving human well-being, and
- Building a [green economy](#)

Most of the objectives listed above are controversial and the IUCN has adopted sophisticated methods for gaining public support for concepts which radically confront established practices. Not the least important project has been the IUCN's effort to get its 'scientific' position established in the school curriculum. In this it has been remarkably successful; masses of younger people now hold to IUCN propositions without question.

On close inspection, Marine Park ideology is found to be based on the same arguments as those driving the Global Warming/Climate Change social manipulation agenda, which is not surprising as they are both creations of the IUCN. As with Global Warming, the case for Marine Parks has been built on misinformation presented with calculated stealth to achieve a given end, i.e. the reduction of human food supplies – in this case a reduction in sea-food - and dependence on a free market economy

### **Stealth**

The process leading up to the Earth Summit is marked by three ideological shifts.

#### ***Stage 1: Nature Conservation***

Nature conservation was a popular theme at the end of the Second World War; thanks to the USA dust bowl and city pollution in Europe. (Australia also had its soil erosion problems, e.g. see Potter 1964). It was not difficult for Julian Huxley to get 18 governments and 107 Nature Conservation Organisations to back the formation of the IUCN in 1948 and for the next 32 years to focus on legitimate projects like soil conservation.

#### ***Stage 2: Sustainable Development***

A shift came in 1980 when the IUCN was successful in getting the UN to formulate the World Conservation Policy (**WCP**). This emphasized the need to 'work with local people to achieve **sustainable development**', again, at first glance, a legitimate project. To provide funding for this strategy, the IUCN formed the World Wildlife Fund (WWF) and received donations from bodies such as the Ford Foundation – a body demonstrated to be in the forefront of social manipulation in our time (see Bolton 2011). The WCP fitted nicely with the aspirations of aid organizations like the World Bank, the UN Development Program (UNDP) and the UN Environment Program (UNEP). Large sums of money were provided for development programs, although much of it was spent on paying consultants and trainers rather than being spent 'on the ground'. (Of course, developing countries were left with the total debt!) This policy had another outcome; it led to investors seeking ownership of things like water and genetic resources, commodities formerly regarded as 'privileged rights'<sup>14</sup>. This was the first evidence within the environmental movement of economic interests operating behind the scenes.

#### ***Stage 3: Biodiversity***

A further shift came in 1982 with the adoption by the UN General Assembly of the World Charter for Nature. From this time forward 'biodiversity' became the watchword and policy and UN actions moved inevitably towards the 1992 Earth Summit.

## Misinformation

The South Australian Environment Department Science Fact Sheet (above) assures us that Marine Parks are 'internationally recognized as an effective tool to manage and conserve marine resources and biodiversity'. But even a superficial examination shows that Marine Parks will have little and in some case no effect on the five threats to Marine biodiversity listed by the Australian Conservation Department in The National Approach to Addressing Marine Diversity document. For instance:

- Climate change is listed as a major threat yet it is clear that Marine Parks are incapable of influencing sea temperatures. Further, Marine Parks do not have walls and shifts of species southwards, due to warming seas, will not be prevented by drawing lines in the ocean.
- The second threat listed is resource use; mineral exploration and extraction is mentioned along with shipping as a major problem. How is it then that the Government granted an exploratory licence for a company to drill for oil in the middle of the Great Australian Bight National Park recently? Further, two ports have been approved in South Australian waters over the past twelve months, one for the export of iron ore and the other to service a new explosives factory at the head of the St Vincent's Gulf; in both cases ships will be required to pass through Marine Parks to access them.
- Pollution from land based activities is the third threat listed. There are many current reports of inadequate waste water management along the South Australian coast, particularly near the City of Adelaide. Why is the South Australian Government suggesting that the solution is Marine Parks when it is obvious that Parks will have a nil impact on such problems.
- A fourth threat, Marine bio-security, is mainly concerned with pests being introduced from other areas. Clearly, the main threat is from international shipping, not local recreational and commercial fishing boats. Ships destined for Adelaide must pass through a Marine Park, either that located between York Peninsula and Kangaroo Island or that between Cape Jervis and Kangaroo Island but there has been no suggestion that international and interstate shipping operations should cease. Exclusion zones are aimed at local commercial and recreational boat holders, not for bio-security reasons but to meet an entirely different agenda.
- The Marine pollution threat seems to be a repeat of threats 2-4. Shipping and mineral exploration are again mentioned as the main culprits so the points mentioned above are relevant for this threat also.

In summary, we may say that the case for Marine Parks to conserve marine biodiversity in South Australia is not established. Firstly, there is no substantial evidence of any wide-scale biodiversity decline; fish stocks are well managed by commercial operators and recreational fishers under the direction of the Fisheries Department. Secondly, Marine Parks are a mis-match, incapable of averting the defined threats. This leads to the inevitable conclusion that the real aim is the elimination of fish supplies to South Australian and international markets. One fishing community, well known for its good management of the local marine environment, asked the Department of the Environment what people were going to do if they could not fish on weekends. They were advised to set up a Whale Watching Club! Clearly there is a social dichotomy in South Australia, being created by vested interests with no regard for the economic and social consequences.

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<sup>1</sup>[www.sa.gov.au/Conservation/Costal.Marine/Marine.Parks](http://www.sa.gov.au/Conservation/Costal.Marine/Marine.Parks)

<sup>2</sup>[www.fishingworld.com.au](http://www.fishingworld.com.au)

<sup>3</sup>[www.environment.gov.au](http://www.environment.gov.au)

<sup>4</sup>[www.environment.gov.au/epbsc](http://www.environment.gov.au/epbsc)

<sup>5</sup>see [www.climatechange.gov.au/publications](http://www.climatechange.gov.au/publications)

<sup>6</sup>[www.iucn.org](http://www.iucn.org)

<sup>7</sup>[www.environment.sa.gov.au](http://www.environment.sa.gov.au)

<sup>8</sup>[www.environment.gov.au/National.Biodiversity.Strategy](http://www.environment.gov.au/National.Biodiversity.Strategy)

<sup>9</sup>[www.iucn.org](http://www.iucn.org)

<sup>10</sup>[www.maweb.org](http://www.maweb.org))

<sup>11</sup>[www.environment.gov.au](http://www.environment.gov.au)

<sup>12</sup>[www.marineparks.sa.gov.au](http://www.marineparks.sa.gov.au)

<sup>13</sup>[www.iucn.org/what/tpas/biodiversity](http://www.iucn.org/what/tpas/biodiversity)

## NOTE

<sup>14</sup>The connection between this kind of ideology/financial interest with the South Australian Environment Department could not be plainer. In March 2011, the Department advised farmers in South Australia that they were intending to charge them for rainwater collected on their farms!

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## Teaching and Learning - a symbiotic relationship or ... ?

Dr Bruce Duncan\*

Teachers occupy classrooms, lecture halls and religious rostrums. Seminars proclaim teachers as experts in their field and informal teaching permeates homes, commerce and recreation. The list of educators is endless and the content of the flow of knowledge is infinite. However, do the sources of the generic teaching process 'give someone knowledge; train someone; instruct'<sup>1</sup>? This article will suggest that not all who dispense knowledge can educate. I will offer some solutions and suggest that effective teaching takes place only when the object of the process gives evidence that learning has taken place.



Source:

[gottesman.pressible.org/veronicagarza/the-tools-to-build](http://gottesman.pressible.org/veronicagarza/the-tools-to-build)

Firstly, not all who teach enable learning – because they are the cloned products of the 'cross the *t* and dot the *I* syndrome. Their teaching qualification extols academic prowess, subjects learned and the achievement of professional benchmarks. In essence, the open sesame to the world of pedagogy is through meeting criteria that focus on the teacher at the expense of the learner. The coveted teaching qualification skirts an assessment of the outcome of the pedagogue's communication regarding the *outcomes* of the teaching process in the learner – there is scant focus on the knowledge gained by the student. Current methodology, attractive handouts, dynamic presentation skills, articulate verbal abilities, good classroom management, structured lesson plans, monthly reports and meeting deadlines remain the 'self actualisation' goals for the teacher and the System – at the expense of the student. The wood (the learner) is lost amidst the trees (the teacher and the System). In parallel, the System also neglects to ensure that the authoritative piece of paper (fading with age) is subject to upgrading – after all, the life cycle of a decades old educational imprimatur is limited. We no longer eat fish and chips in newspaper

<sup>1</sup> Cambridge Advanced Learners Dictionary OnLine (Accessed 8 January 2011).

wrappings – because the UK Health and Safety boffins would soon descend and claim yet another scalp in the best interest of the Nation's health. In the prime interest of learner's, is it not imperative that the experienced teacher's learning outcomes face assessment and verification – in the experience of the learner? The proof of the pudding is in the *eating* thereof and not solely in the recipe.

Secondly, not all who teach can enable learning – because of not understanding their voraciously hungry ego. In 1961, Dr Jack Block, following in the steps of clinical psychologists upset fragile egos and ruffled Establishment feathers with his Q-Sort Method<sup>2</sup> of personality evaluation. One year later, The American Medical Association offered a positive and measured response to his theory once the furore had abated<sup>3</sup>. However, the *personality* of the teacher gained focus and one subsequent study described the effective teacher as:

"...liberal, sociable, showing leadership, extraverted, non-anxious, objective, supporting, non-authoritarian, non-defensive, intelligent, and aesthetically sensitive"<sup>4</sup>.

It would be great to meet such a saint but the point is made. Other studies indicated that the *personality* of the teacher played a prime role in their choice of occupation. Adlerian, Rogerian and other theorists have added their finding to the overall personality profile of the individual engaged in the world of pedagogy. Importantly, a publication on Servant Leadership by Irvin Buchen, addresses, inter alia, the "Identity: the curtailment and redirection of ego and image"<sup>5</sup> and is parallel with the imagery of the Biblically described Christ, where we are indirectly but forcibly challenged to look at ego gratification at the expense of student learning. Fragile egos that do not brook criticism, seek power behind the rostrum, and perform on their stage of self-ratification remind us of the venerable Bard who wrote, "All the world is a stage ..."<sup>6</sup> Sadly, there are educators who use their

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<http://www.abegs.org/sites/Research/DocLib1/%D8%A3%D8%AC%D9%86%D8%A8%D9%8A%D8%A9/The%20Q-Sort%20Method%20in%20Personality%20Assessment%20and%20Psychiatric%20Research.pdf> (Accessed 8 January 2011).

<sup>3</sup> <http://archpsyc.ama-assn.org/cgi/content/summary/7/3/230> (Accessed 8 January 2011).

<sup>4</sup> The University of Western Ontario Department of Psychology N6A 5C2 London Ontario Canada N6A 5C2 London Ontario Canada  
<http://www.akademai.com/content/q8727743204948t1/> (Accessed 14 January 2011).

<sup>5</sup> Journal of Leadership & Organizational Studies January 1998 vol. 5 no. 1125-134

<sup>6</sup> As You Like It 2/7

<http://www.artofeurope.com/shakespeare/sha9.htm> (Accessed 8 January 2011)

position to strut their considerable intellectual prowess, gain the adulation of the hearers and wallow



Source: [aspiehomeeducation.blogspot.com](http://aspiehomeeducation.blogspot.com)

in the spotlight of self-glorification – an ego trip that sends sensitive and vulnerable students scurrying under their desks. For many, the privilege of teaching becomes the accredited medium to hold court before a captive audience. Do we need reminding that our bread and butter come to us by courtesy of those whom we teach? The teacher is not the Lord Almighty; the teacher is the *servant* although not *servile*.

Thirdly, not all who teach can enable learning – because they teach the subject divorced from the world of the learner. Student-centred teaching is a fast developing concept. Many believe that teaching is *ipso facto* learner centred – but this is not so. The Bibliography will suggest further study in this important area of pedagogical development. Pioneers in the field of teaching such as Rudolf Steiner<sup>7</sup> drew the grudgingly given attention of teaching cabals to the place of the child in the education process. Evolving from the rote-learning methodology, educationalists like Steiner demonstrated how educators had overlooked the targeted object of the learning process, the student. The work of David Nunan<sup>8</sup> further opened the envelope that entrapped learners, and others follow today.

A relatively new player in the field was the Neuro-Linguistic Programming debut of the 1970s and, predictably, the Establishment reacted negatively and withdrew its acceptance. NLP did not find professional support amongst the self-appointed guardians of education who alleged that there was little empirical evidence to substantiate NLP claims. NLP concepts did not fit into their test tube mentality. However, pragmatists ignored the theorists and discovered the value of Neuro Linguistic Planning.

<sup>7</sup> <http://www.freedom-in-education.co.uk/Steiner.htm> (Accessed 9 January 2011)

<sup>8</sup> <http://davidnunan.com/> (Accessed 9 January 2011)

NLP patterns have been adapted and applied to aspects of education, personal communication issues, business management, sales techniques, coaching and team building. It is suggested that teachers consider adapting and using aspects of its methodology to enrich student-centred learning.

What student-centred learning is all about:

- Providing **choices** for students in relation to where, how, and when they study.
- **Fostering (focusing on) learning** rather than teaching (incorporating active rather than passive learning).
- Encouraging **student responsibility (and accountability) and activity** rather than teacher control and content delivery.
- Developing **mutuality and interdependence** in the teacher-learner relationship.
- Emphasizing **context-specific learning** in which students build their own new understandings and skills through engagement with authentic problems based on 'real world' experiences (emphasizing learning and understanding as opposed to simple coverage)<sup>9</sup>.

The challenge of student-centred learning affects the manner in which the teacher operates and shifts the focus from the teacher to enable the student to be part of the process.

1. Teachers set learning tasks less (let the students do more)
2. Teachers do less telling; students do more discovering
3. Teachers do more (instructional) design work
4. Faculties do more modelling (of the learning process -- for student benefit)
5. Faculties do more to get students learning from and with each other (collaborative)
6. Faculties work to create climates for learning (conditions conducive to learning)
7. Faculties do more with feedback (formative 'along-the-way' and summative assessments; grades and comments)<sup>10</sup>

<sup>9</sup> <http://interact-ctlt.blogspot.com/2007/10/what-is-student-centered-learning.html> (Accessed 9 January 2011)

<sup>10</sup> Maryellen Weimer <http://interact-ctlt.blogspot.com/2007/10/what-is-student-centered-learning.html> (Accessed 9 January 2011)

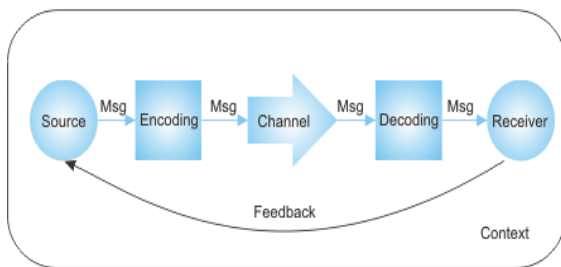


8. Faculties do more with feedback (formative 'along-the-way' and summative assessments; grades and comments)<sup>11</sup>

Fourthly, not all who teach can enable learning because they cannot *communicate* with their students. Their worshipping at their shrine of professionalism dictates that they abandon love and compassion and disregard the need for a professionally structured relationship oiled by basic humanitarian links, Why is it that many professors, lecturers and instructors have never had any instruction on teacher training - never mind learner-centred teaching? Knowledgeable people, academics, entrepreneurs and geeks do not necessarily make good educators. Consider, for example, the presenter who just reads the Power Point notes to the class; who is tied to his/her notes and spends more time speaking to or at the students than listening to what they are saying and observing their responses.

Communication is essential and in keeping with our theme of the essential need for a symbiotic relationship between teaching and learning, the following diagram has significance.

The Communications Process



Source: [mbaknol.com](http://mbaknol.com)

The footnote links with the full text of the diagram. The KEY following is an edited interpretation for the purposes of this article.

Key<sup>12</sup>: Source = The teacher who has a message to give.

Encoding = The teacher frames the message and this will be structured in their own language, cultural, intellectual, social and philosophical frame (that may be different from that of the learner).

Msg = The packaged message is then ready for transmission.

<sup>11</sup> Maryellen Weimer <http://interact-clt.blogspot.com/2007/10/what-is-student-centered-learning.html> (Accessed 9 January 2011)

<sup>12</sup> <http://www.mbaknol.com/business-communication/process-of-communication/> (Accessed 9 January 2011)

Channel = The channel will give definition to the message. How it is conveyed and what is used to give the message to the hearers (who might not yet be learners). Paralanguage and meta communication play important roles at this stage of the communication process. The structuring and composition of the channel can influence the message. NLP is apposite at this juncture and at the next stage.

Decoding = The freshly wrapped package is decoded within the language, cultural, intellectual, social and philosophical frame of the hearer, Consider the challenges this presents in a multi-cultural setting. Does the student receive the same message that was initially encoded? To ascertain this, the teacher could swiftly change gear and move to concept questions, discussion, paraphrasing, group work and role-play.

Feedback = The audit for both the teacher and the student.

Thereafter, the teacher could regroup and edit his/her message to fit into the world of the student.

Let us close with the following story from Naomi White (1937). Sadly, some 73-years later, little has changed in the world of many educators and students.

### I Taught Them All

"I have taught high school for 10 years. During that time, I have given assignments, among others, to a murderer, an evangelist, a pugilist, a thief, and an imbecile. The murderer was a quiet little boy who sat on the front seat and regarded me with pale blue eyes; the evangelist, easily the most popular boy in school, had the lead in the junior play; the pugilist lounged by the window and let loose at intervals a raucous laugh that startled even the geraniums; the thief was a gay-hearted Lothario with a song on his lips; and the imbecile, a soft-eyed little animal seeking the shadows. The murderer awaits death in the state penitentiary; the evangelist has lain a year now in the village churchyard; the pugilist lost an eye in a brawl in Hong Kong; the thief, by standing on tiptoe, can see the windows of my room from the county jail; and the once gentle-eyed little moron beats his head against a padded wall in the state asylum. All of these pupils once sat in my room, sat and looked at me gravely across worn brown desks. I must have been a great help to those pupils--I taught them the rhyming scheme of the Elizabethan sonnet and how to diagram a complex sentence."

Naomi White 1937

[Editor's note: the grammar structure is unedited.]



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Of course I'm listening Bear: In fact, "I'm all ears"...

Source: [cartoonstock.com](http://cartoonstock.com)



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# How well is the Public Informed about CO<sub>2</sub> Levels in the Atmosphere?

Gregg D Thompson\*

## SUMMARY

This paper reports the results of a survey with regard to people's views on the concentration of CO<sub>2</sub> in the atmosphere and the possible effect of this on climate. The target group was well educated Australian professional and business people. The results support the view that the public has been misled to think there is **tens of thousands of times** as much CO<sub>2</sub> as there actually is, for the simple reason that the media have failed to report the facts.

Why has such important information been withheld from the public? One view would be that, if the public were aware that the amount of man-made CO<sub>2</sub> is so incredibly small, there would be little belief in a climate disaster and the media would not be able to make a bonanza from higher sales by selling doomsday stories. Further, Governments and Green groups would not be able to justify a carbon tax; major international banks and the stock market would not make massive profits out of carbon trading and many in the science community would not be getting large research grants for climate related projects.

## SURVEY OUTLINE

The Global Warming/Climate Change debate has featured strongly in the media over the past several years. But media reports have most often been emotive and short on facts. The impression is gained that this has left the general public without the knowledge they need to develop an *informed* opinion on the subject.

To test this view a survey was conducted amongst one hundred well educated people<sup>1</sup>; business managers in large and small companies, medical professionals, accountants, lawyers, sales persons, engineers, scientists and trades people. The respondents were asked the following questions:

- Q1. What percentage of the atmosphere do you think is CO<sub>2</sub>?
- Q2. Have you ever seen the percentage given in any media report?
- Q3. What percentage of the CO<sub>2</sub> is man-made?
- Q4. What percentage of the man-made CO<sub>2</sub> does Australia produce?

- Q5. Is CO<sub>2</sub> a pollutant?
- Q6. Have you ever seen any evidence that CO<sub>2</sub> causes a greenhouse effect?

Regrettably, virtually everyone interviewed in the survey *did not know the answers* to the questions. So they were asked to give their *perception* of what they had heard from the media, the government and Green groups. These perceptions are summarised below and compared with the facts.

## QUESTIONS AND ANSWERS

Q1. What % of the air is CO<sub>2</sub>?

**Respondent's Answers:** Most said 20% - 40%; the highest was 75% and the lowest 2%.

**The Facts:** The mean concentration of CO<sub>2</sub> in the atmosphere at present is 0.038%, i.e. 380 parts per million. Most people learn about the composition of air in school but, because they do not use science in their day to day lives, they forget that the main gases in the atmosphere are nitrogen (78%), oxygen (21%) and argon (almost 1%). At 0.038%, CO<sub>2</sub> is a *minute trace* gas. See: [http://en.wikipedia.org/wiki/Atmosphere\\_of\\_Earth#Composition](http://en.wikipedia.org/wiki/Atmosphere_of_Earth#Composition)

Q2. Have you seen a percentage for CO<sub>2</sub> given in the media?

**Respondent's Answers:** All said 'No'.

Q3. What % of CO<sub>2</sub> do humans produce?

**Respondent's Answers:** Four respondents said they thought it was between 2% and 10% but most said between 25% and 75%; the highest estimate was 100%.

**The Facts:** Humans produce only 3% of the CO<sub>2</sub> in the atmosphere. As a decimal it is a miniscule 0.001% of the atmospheric gases (11 parts per million). The rest is produced naturally from decaying leaf matter, life forms in the ocean, volcanoes, grass and forest fires and from the surface of the oceans.

Q4. What % of man-made CO<sub>2</sub> does Australia produce?

**Respondent's Answers** ranged from 1% to 20%.

**The Facts:** The correct answer is 1% of the man-made CO<sub>2</sub>, i.e. Australia's contribution to CO<sub>2</sub> in the atmosphere is infinitesimal. Reducing it will have no effect on anything, so there seems to be no justification for the media making money out of doomsday stories; no case for the Government and Green groups to justify a carbon tax that will greatly raise the cost of living and go a long way towards destroying the Australian economy; no reason why merchant banks and the stock market should make massive profits out of carbon trading; and no reason why scientists should be given large research grants to research a non-issue.

Q5. Is CO<sub>2</sub> is a pollutant?

**Respondent's Answers:** Most thought it was a pollutant, at least to some degree.

**The Facts:** CO<sub>2</sub> is clear, tasteless and odourless and in no way a pollutant. On the contrary, it is a harmless, trace gas essential for plant and animal life. Calling CO<sub>2</sub> a 'pollutant' leads people to think of it as black, grey or white smoke, and this perception is reinforced by the media when they display images of 'smoke' coming out of power station cooling towers. In fact, this gas is solely steam condensing into water vapour.



In the picture, a tiny amount of CO<sub>2</sub> is trickling out of the thin chimney at centre and the only reason that the gas is visible is that there is a small quantity of smoke particles present. The media do not show skinny CO<sub>2</sub> chimneys emitting invisible gases; it does not make for sensationalist journalism.

It is easy to prove that CO<sub>2</sub> is invisible: breathe out and see! Also see if you can see the gas bubbling out of your soft drink, your beer or your sparkling wine. CO<sub>2</sub> is a natural gas and just as necessary for life as oxygen

Q6. Have you seen any evidence that CO<sub>2</sub> causes a greenhouse effect?

**Respondent's Answers:** Most did not know of any definite proof. Some said they thought the melting of the Arctic and glaciers was possibly proof.

**The Facts:** Firstly, there is no proof that there is a greenhouse effect in the atmosphere let alone any proof that CO<sub>2</sub> is contributing to such an effect. There are, however, proofs that CO<sub>2</sub> cannot cause a greenhouse effect.

It is true that CO<sub>2</sub> can absorb heat *a little* faster than nitrogen and oxygen but it becomes no hotter than them because all gases share their heat with the other gases in the atmosphere. Molecules are constantly colliding with each other and warm molecules lose any excess heat to other molecules during these collisions. That is why the air is **all one temperature** in any given volume. For a detailed explanation see:

[http://www.geocraft.com/WVFossils/greenhouse\\_data.html](http://www.geocraft.com/WVFossils/greenhouse_data.html).

It is easily enough to prove that high levels of CO<sub>2</sub> do not cause heating of the atmosphere. For instance, farmers who grow vegetables in glass houses pump in CO<sub>2</sub> to around 1000 parts per million (three times the concentration in the atmosphere) because they know that this causes plants to grow faster and better. These glass houses heat up during the day to *the same temperature* as glasshouses with normal air in them. Further, the planets Venus and Mars have almost 100% CO<sub>2</sub> atmospheres but have no runaway greenhouse effect causing continuous global warming. Their temperatures are stable.

## POLLS ON CLIMATE CHANGE

Despite the propagation of mis-information by the Climate Change lobby groups, polls in western countries are now showing that believers in man-made global warming are now in the minority. The change in public perception seems to be due to the cooler, wetter climate in recent times, combined with the revelations of climate fraud as in the case of the Climategate emails. Polls in Australia, the US and the UK have been conducted recently asking people what are the most important concerns to them out of a list of twenty; for the vast majority (>80%) global warming is placed at the bottom of the list! However, it would be helpful if public opinion were formed on facts rather than rhetoric and the whims and fancies of common sense thinking, so in what follows we share a few facts.

## THE OVER-RIDING INFLUENCE OF THE SUN

The Sun is by far the major driver of all weather on Earth because it is the source of 99.9% of the heat energy that creates winds and currents in the oceans which in turn produce weather. Without energy from the Sun, the Earth's temperature would drop to below freezing within days. (We all know that – the temperature drops as soon as the night falls). The reason for this is that heat is continually being lost from the outer atmosphere into space. We badly need

the Sun to shine every day! But the amount of energy we receive from the Sun varies over time due to changes in the number and frequency of magnetic storms on the Sun's surface. These storms show a cyclical pattern and this is the main cause of Earth's climatic variability. Such variability is completely natural and common in human experience.

The Earth has had much colder winters recently due to the lack of magnetic storms on the Sun. Cold winters have been particularly noticeable in the northern hemisphere. The Arctic Sea has re-frozen and glaciers that were receding are now surging due to heavy snow falls. By 2011 the solar cycle should have risen half way towards the 11 year maximum but it has not done so; in fact it has only just started rising. The last time the Sun acted this way was during the Dalton Minimum from 1790 to 1830; this produced 40 years of very cold winters with subdued, wetter summers – weather much like that we are currently experiencing. From 1450 to 1750 a more intense Maunder Minimum occurred which caused the Little Ice Age. The next 2-4 solar cycles will most likely be low in solar activity leading to noticeably cooler global temperatures over the next few decades. See:

<http://wattsupwiththat.com/2010/02/02/solar-cycle-24-update> and  
<http://www.climatechangedenier.com.au/climate-change/another-dalton-minimum/>

## NOTES

<sup>1</sup>Why not conduct your own survey? It only takes a few minutes per person to do so. To avoid bias, when surveying others, be sure not to provide answers until after you have written down your respondent's answers. Be sure to not show any expressions or make any statements that might indicate how their answers line up with reality.



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# Trends and Predications for the Population of Japan and Countries of European Union

Dr László Kovács\*

This article summarises some recent trends in population in Japan and the European Union and makes some projections as to possible population levels in 2050.

## Japan

Japan, in 1950 had 83.8 million inhabitants, and a continuous rise has been observed until 2005, when the country's population attained a maximum at 127.5 million. For the next decades, due to the low fertility and rising life expectancy, a considerable decrease is projected. The country's population however will remain higher by 2050 than it was in 1950<sup>1</sup>. By 2050 Japan's population will be 93.7 million, which is 33.9 million lower than in 2005. The population by 2050 is projected to be almost 26 per cent less than it was in 2000; a different pace of decrease is observed. Between 2000 and 2009 however, an increase of less than 0.1 per cent point is projected for the reason that after a plateau between 2004 and 2007 the decline started slowly. Between 2010 and 2029 a 4-6.5% cumulative decrease is projected. A faster decrease is expected to be between 2030 and 2050, around 8% for a ten year period.

## The European Union

The total population of countries in the European Union<sup>2</sup> in 1950 was 374 million. In 2000 it was 485 million and by 2050 it is projected to fall to 459 millions. European countries experienced a rise of fertility in the post-war decades and an increase in life expectancy; as a consequence in this period the number of population rose.

Eastern European countries<sup>3</sup> have had the most pronounced rise in the fifty years-period from 1950 to 2000. The population of 71.6 millions in 1950 reached

a peak in the nineties and with a slight decrease in 2000 reached 96.7 million. This represents a 35 % rise on the base year 1950. In the following decades a continuous decrease is projected, however at the end of the projection period, by the year 2050, the number of population is expected to be still higher by 10 % than it was in 1950. The Eastern European countries have a different process in the evolution of their population number: Bulgaria's population reached its peak in 1989 at 9.0 million; the Czech Republic in 1994 at 10.3 million; Poland in 1998 at 38.7 million; Romania in 1990 at 22.9 million; and Slovenia in 1997 at 2.0 million. The first country which experienced population decline was Hungary whose population has continued falling since 1981<sup>4</sup>. Slovakia's population is presently still rising; the maximum number of inhabitants is projected to be 5.5 million in 2017.

There is diversity in the change of projected number of inhabitants by the year 2050 in comparison with their population in 1950: Slovakia will have the highest increase (43 %); slightly less increase is expected in Poland (29 %), Romania (15 %), and Slovenia (9 %). The most accentuated decrease is projected to be in Bulgaria which is expected to have 36 per cent less population by 2050 than it has had in 1950. The population in Hungary will be 10% less by 2050 than it was in 1950 and the Czech Republic population will diminish by 5%. By 2050 each Eastern European country will have fewer inhabitants than in 2000<sup>5</sup>; the projected decrease for the entire region is 18.5% over the fifty years.

The population of Northern European countries<sup>6</sup> will increase from 1950 until around 2030, after that a decrease is projected. The total population of these countries was 74.0 million in 1950; 90.1 million in 2000 and is projected to rise to 94 million by 2050, i.e. 27% more than in 1950. Denmark is projected to have a largest number of population by 2032 (5.7 million), Finland in 2018 (5.3 million), Sweden in 2028 (9.3 million) and United Kingdom by 2036 (64.5 million). Baltic countries have a shrinking population beginning from the change of system: Estonia and

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<sup>1</sup> Japan's population in 2050 is projected to be 93.7 million, which is 11.8 % more than in 1950.

<sup>2</sup> Considering the 27 actual members of the European Union: Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom.

<sup>3</sup> Eastern European countries are: Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia.

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<sup>4</sup> The population of Hungary in 1981 was 10.7 million.

<sup>5</sup> Slovakia will be the only country which will loss less than 10% of population; the Czech Republic, Hungary, Poland and Romania will have around 12% less population by 2050 than in 2000; the corresponding percentage for Slovenia is 20%; and the highest decrease will be in Bulgaria: by 2050 will have 40% less population than in 2000.

<sup>6</sup> Northern European countries have been defined as Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Sweden and United Kingdom.

Latvia have had a largest number of inhabitants in 1989 (1.57 million and 2.67 million respectively); Lithuania in 1991 (3.7 million). The population of Ireland decreased slightly until 1960; however, from 1961 the population and it is projected to continuously rise until 2050<sup>7</sup>. The only region where population is projected to rise of more than 1% between 2000 and 2050 is Northern Europe: these countries will collectively have 4.3% more people by 2050 than in 2000<sup>8</sup>.

Southern Europe's population is expected to rise by 16% from 1950 to 2050. The total population of 92 million peaked at 121 million in 2010; a decrease is projected until 2050 when the number of population is expected to be 107.2 million. Each country, except Italy, currently has a growing population. Italy's population reached a peak in 2007 (58.2 million); by 2050 the country's population will exceed by almost 7% the population in 1950. The population of Cyprus will grow until 2033 (0.89 million), and decline towards 2050, but there will still be 70% more inhabitants than in 1950. The population of Greece, Malta, Portugal and Spain is increasing currently; however, in the next decades a turn down in their number of population is expected<sup>9</sup>. Spain's population will peak in 2011 at 40.6 million; Greece will reach its peak by 2015 (10.8 million), Portugal by 2019 (10.84 million), Malta by 2026 (0.42 million). The Southern European region's population by 2050 will be more than 10% lower than in 2000. Between 2000 and 2050 only Cyprus will have perceptible growth, exceeding 10%; Malta's population will be larger by 1.5% by 2050 than it was in 2000. The population of the rest of the countries will decrease between 2000 and 2050<sup>10</sup>.

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<sup>7</sup> In 1950 Ireland has had a population of 3.0 million; the lowest number has been in 1961 (2.8 million) and by 2050 is projected to have 5.4 million inhabitants, which is a more than 82% rise from the base year 1950.

<sup>8</sup> Half of the Northern European countries will experience a rise in the number of population in the period from 2000 to 2050: Ireland (42 %), Denmark (4.5 %), United Kingdom (7.5 %), and Sweden (1.8 %). Another half's population will decrease: Finland (6.7 %), Lithuania (23.7 %), Latvia (35 %), and Estonia (37.5 %).

<sup>9</sup> Greece is expected to have 33 per cent more inhabitants by 2050 than in 1950; Malta and Spain 27 per cent more; Portugal's population number will exceed by 18 per cent by 2050 its 1950's level.

<sup>10</sup> Greece's population will be 5 per cent lower by 2050 than in 2000; Italy's population shrinkage will be almost 13 per cent; Spain will have 11 per cent less inhabitants and in Portugal will live 4 per cent less people.

Western Europe population is experiencing the highest growth over the 100 years time period 1950 until 2050 and is expected to rise by 30%. This most populous region of Europe had a population of 136.9 million in 1950 and this is expected a rise to 178.8 million by 2050. Each of the Western European countries is expected to have more population by 2050 than in 1950. The highest growth in Europe is projected to be in Luxembourg: 144% more inhabitants in 2050 than in 1950<sup>11</sup>. An accentuated growth is occurring also in the Netherlands and France (71% and 64 % respectively). Between 1950 and 2050 the population will rise by close to 10% in Austria, Belgium and Germany. In Western Europe only Germany's population is falling these days: it peaked at 82.4 million in 2005 and by 2050 is projected to have only 73.6 million inhabitants. Austria will peak at 8.2 million people in 2016 (8.22 million); Belgium by 2020 (10.5 million); Netherlands by 2034 (17.7 million) and France by 2042 (70.1 million). By 2050 Austria's population will decrease to 7.5 million; Belgium will have 9.9 inhabitants; France 69.8 million; Luxembourg 0.7 million and the Netherlands 17.3 million. The entire Western European region will have the lowest fluctuation in the population number between 2000 and 2050<sup>12 13</sup>. By the end of the analysed period the number of population of these countries will be roughly the same than at 2000 (the population growth is less than 0.5 %).

## Summary

Between 2000 and 2050 is expected that the populations of Cyprus, Ireland and France and Luxembourg will rise more than 10%. Less than a 10% rise is expected in Malta, the Netherlands and Denmark, Sweden, and the United Kingdom. The remainder of the European countries will have decreasing populations. The decrease will be less than 10% Austria and Belgium, Finland, Greece, Portugal and Slovakia country. The Czech Republic, Hungary, Poland and Romania, as well as Italy, Spain and

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<sup>11</sup> In 1950 Luxembourg has had the smallest population (0.3 million) amidst the countries in the analyses; from 1980 Malta is the smallest.

<sup>12</sup> In 2000 the number of population was 178.0 million, by 2050 is expected a 178.8 million population.

<sup>13</sup> The evolution in the number of population although is differentiated amongst the countries: Netherlands, France and Luxembourg will experience a rise of their population between 2000 and 2050 (9, 14 and 64 % respectively) and Belgium, Austria and Germany will have to face with declining population (4, 7 and 10 % respectively).



Germany) will experience a population decrease between 10% and 20%. The population drop will be more than 20% in Japan and two Eastern European countries (Bulgaria, Slovenia) and the Baltic states (Estonia, Latvia, Lithuania).

The total population of countries of European Union is still increasing relevant to the base year 1950; however a decrease is expected in the next decades. Japan's population growth was more pronounced: whereas between 1950 and 2000 European Union had less than a 30% increase, Japan's population was more than 50% larger in 2000 than in 1950. In the next decades Japan will experience dynamic population shrinkage: by 2050 the number of population will be 26 per cent less than in 2000. In the same time period the total population of European Union countries will decline by 6%. Nonetheless, there are some countries in European Union which are projected to have a faster reduction of their population than Japan: Bulgaria (more than 40 %), Estonia (more than 37 %) and Latvia (35 %).

Figure 1: Changes in the number of population between 2000 and 2050 in Japan and countries of European Union

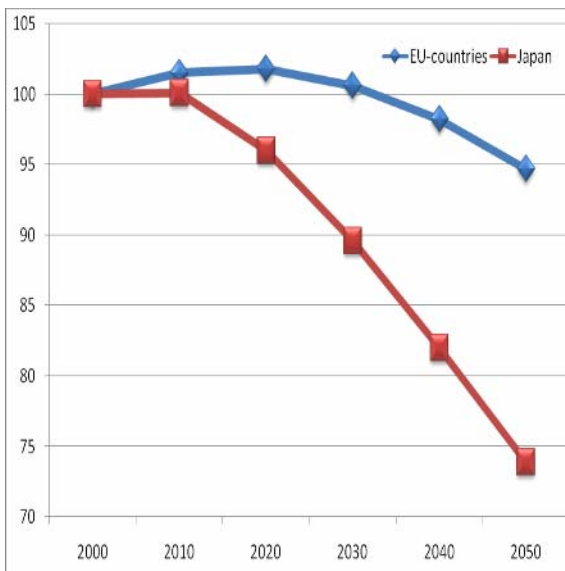


Figure 2: The change in the number of population in Japan and EU-countries between 2000 (white) and 2050 (black)

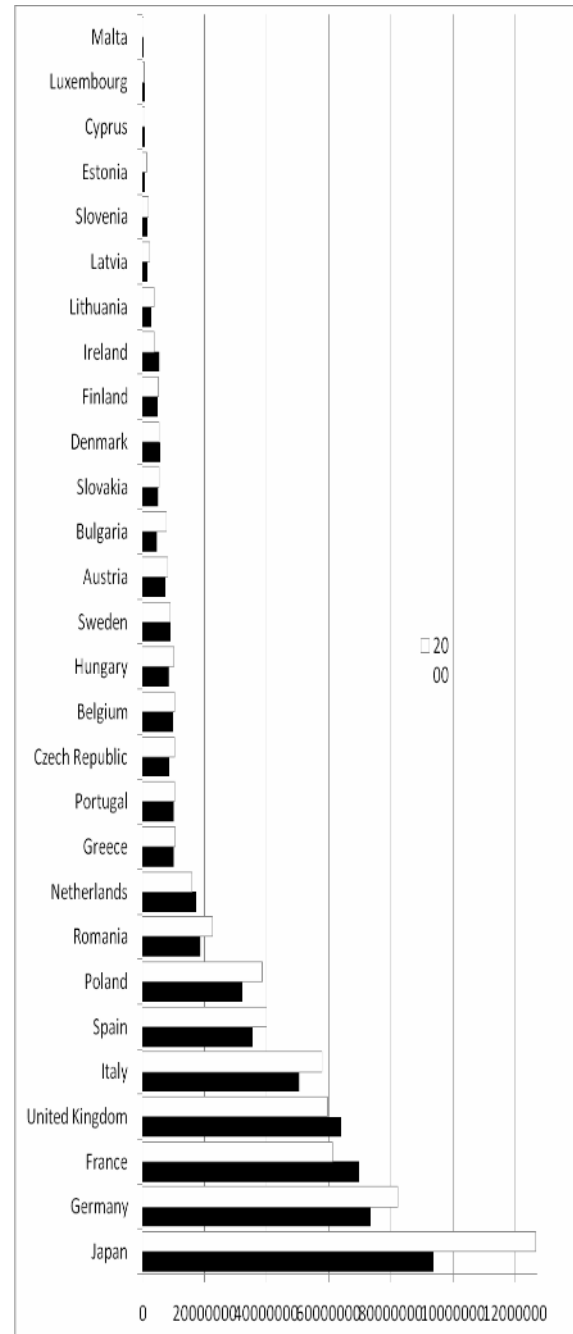


Table 1 and Graph 1: Change in the proportion of population (%), base year 2000 = 100% in Japan and different regions of Europe

	2000	2010	2020	2030	2040	2050
Japan	100	100	96	90	82	74
Eastern Europe	100	99	96	92	87	82
Northern Europe	100	103	105	106	106	104
Southern Europe	100	101	100	98	94	89
Western Europe	100	103	104	104	103	100
EU	100	102	102	101	98	95

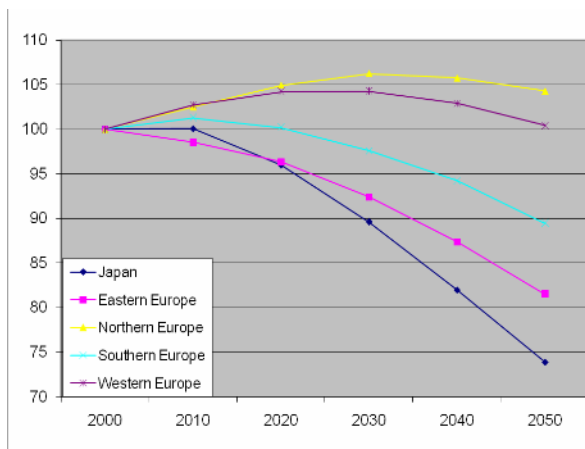


Table 2: Changes in the proportion of population in Japan and countries of European Union, base year 2000

	2000	2010	2020	2030	2040	2050
Japan	100	100	96	90	82	74
EU-countries	100	102	102	101	98	95
Austria	100	101	101	100	97	93
Belgium	100	102	102	101	99	96
Bulgaria	100	91	84	76	68	59
Cyprus	100	106	111	113	113	111
Czech Republic	100	99	97	94	88	83
Denmark	100	103	106	107	106	104
Estonia	100	94	87	79	71	62
Finland	100	102	102	101	97	93
France	100	106	110	113	115	114
Germany	100	100	99	97	93	90
Greece	100	102	102	100	98	95
Hungary	100	97	95	91	87	83
Ireland	100	112	123	132	138	142
Italy	100	101	99	96	92	87
Latvia	100	93	87	80	73	65
Lithuania	100	97	94	89	83	76
Luxembourg	100	113	127	140	153	164
Malta	100	104	107	108	105	101
Netherlands	100	106	109	111	111	109
Poland	100	100	98	95	89	83
Portugal	100	104	105	104	101	96
Romania	100	99	96	93	88	83
Slovakia	100	101	102	100	96	92
Slovenia	100	99	97	92	86	79
Spain	100	101	100	97	94	89
Sweden	100	102	104	104	103	102
United Kingdom	100	103	106	108	108	107

Table 3: Group of countries  
(rise and decrease of the number of population)

Rise (more than 10% increase)	Low rise (less than 10% increase)	Low decrease (less than 10% decrease)	Medium decrease (between 10% and 20% decrease)	High decrease (more than 20 % decrease)
Cyprus	Denmark	Austria	Czech Republic	Japan
France	Malta	Belgium	Germany	Bulgaria
Ireland	Netherlands	Finland	Hungary	Estonia
Luxembourg	Sweden	Greece	Italy	Latvia
	United Kingdom	Portugal	Poland	Lithuania
		Slovakia	Romania	Slovenia
			Spain	



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## COMMENT

### The Three Kings Festival

**Charles Stephens\***

Epiphany is celebrated with a wide array of customs around the world. Everyone agrees it is 'Twelfth Night' but as Eastern and Western calendars are not aligned, this falls variously from January 6th to January 19th. For example:

**Poland:** In Poland, "Trzech Kroli" (Three Kings) is celebrated in grand fashion, with huge parades welcoming the Wisemen, people often riding on camels or other animals from the zoo. The Wisemen pass out sweets, children march, enact nativity and dress in colors signifying Europe, Asia and Africa - the supposed homes of the Wisemen.

In 2010, by an act of Parliament, Epiphany was restored as an official non-working national public holiday in Poland for the first time since it was cancelled under communism. On that day Poles take small boxes containing chalk, a gold ring, incense and a piece of amber in memory of the gifts of the Magi, to church to be blessed. Once at home, they inscribe the year and 'K+M+B+' with the blessed chalk above every door in the house. According to tradition this provides protection against illness and misfortune for those within. The letters, with a cross after each one, are said to stand for the traditional names of the Three Kings - Kaspar, Melchior and Balthazar.

**Germany:** In Germany young people called 'Sternsinger' (star singers) travel from door to door dressed as the three wise men on Epiphany. The leader carries a star, usually of painted wood attached to a broom handle. Often these groups consist of four girls, or two boys and two girls, for the benefit of singing their songs in four part harmony, not necessarily three wise men at all. German Lutherans often note in a lighthearted fashion that the Bible never specifies that the 'Weisen' were men, or that there were three. The star singers will be offered treats at the homes they visit, but they also solicit donations for worthy causes, such as efforts to end hunger in Africa.

**Ireland:** The Irish call Epiphany Little Christmas or 'Women's Christmas' (Nollaig na mBan).

**Spain:** In Spain, it is traditional for children to leave their shoes, along with a letter for the Three Kings requesting toys, by the family nativity scene or by their beds. The shoes may be filled with hay for the camels, so that the Kings will be generous with their gifts.

**India:** In certain parts of southern India, Mar Toma Christians call Epiphany the Three Kings Festival and celebrate it in front of the church like a fair. Families

come together and cook sweet rice porridge. This day marks the close of the Advent and Christmas season and people remove the cribs and nativity sets at home.

**Peru:** Peruvian national lore holds that Lima was first 'Ciudad de los Reyes' (City of the Kings) by Pizarro because the date of the Epiphany coincided with the day that he and two companions found an ideal location for the new capital.

**Virginia, USA:** In colonial Virginia, Epiphany, or Twelfth Night, was celebrated with great merriment. For instance, it was considered especially appropriate as a date for balls and dancing, as well as for weddings. For the festival, a Great Cake was prepared, consisting in two giant layers of fruitcake, coated and filled with royal icing. Custom dictated that the youngest child present cut and served the cake and whoever found the bean or prize in the Twelfth Night cake was crowned 'King of the Bean' similar to the European king cake custom.

#### THE GOOD, THEY DIE YOUNG!

Whether we exchange gifts on Christmas or Epiphany, we are following in the footsteps of the Three Kings. The Magi came to adore a baby, perhaps a child by the time they reached Bethlehem. But the gifts they brought were not toys. In fact, the combination of myrrh and frankincense was ominous. Myrrh was for burial and frankincense was used in worship and sacrifice.

Jesus was not only a new leader, his birth brought a new way of leading. He would not only worship in synagogues and temples; he himself would become the sacrifice.

#### Epiphany 2011, Mpumalanga, South Africa

When Johan Holme Ndlovu, ANC chief whip in the Ehlanzeni district municipality in Mpumalanga, had not returned home by the early hours of the morning of the 8<sup>th</sup> January 2011, his wife called him on his cell phone. To Gift Ndlovu's surprise a stranger answered her husband's phone; she dropped the call, thinking she had dialed the wrong number. Soon after, she received a call from a stranger who told her: 'We have shot your husband. If you go to the bush at Lephong village, you will find him still alive'. She alerted the family and police. They started searching for Ndlovu and found him at 5am dead with bullet wounds to the upper body. The police are treating the case as murder but so far no arrests have been made.

Ndlovu's murder showed a striking similarity to the killing of Mbombela Municipality speaker Jimmy Mohlala on January 4<sup>th</sup> 2010, i.e. also at Epiphany. Jimmy was shot dead at his home in KaNyamazane near Nelspruit. Five people, including two policemen, were arrested in connection with his murder.

Sammy Mpatlanyane, Head of Communications in the Mpumalanga Provincial Department of Arts, Culture and Sports, was also shot dead in his house in Nelspruit last year. No arrests have been effected in his case.

These murdered men needed myrrh. Can we give them the gift of frankincense too?

## A LITANY

Since the ANC came to power in 1994, in Mpumalanga Province, the following people have either been killed, received death threats, disappeared or survived assassination attempts. The hit men, most of them alleged to be Zimbabwean and Mozambican nationals, are mostly still at large.

- Saul Shabangu (killed in 1998)
- Hebron Maisela (killed in 1998)
- Sydney de Lange (killed in 1998)
- Rose Alleta Mnisi (killed in 1999)
- Caswell Maluleke, (survived assassination in 2000)
- Joshua Ntshuhle (disappeared in 2005)
- Sizile Ndlovu, (survived assassination in 2006)
- Thandi Mtsweni (killed in 2008)
- Jimmy Mohlala (killed in 2009)
- Isaac Mohale Matsoabane (killed in 2009)
- Temba Monareng (died 2009)
- Mike Sifunda (died 2009)
- Simon Lubisi (died 2009)
- Lucas Shongwe (died 2009)
- Samuel Mpatlanyane (killed in 2010)
- Johan Holme Ndlovu (killed in 2011)

Like these local leaders, Jesus died before his time. But he did not die in vain. His death accomplished something significant, even monumental. Let us also take captivity captive! Let us declare that leadership is just too important to our children and youth to allow criminals to deplete the ranks of those who lead them.

Let the stench of these murders be replaced by the fragrance of myrrh combined with frankincense. May the victims rest in peace, may the gifts they brought us never be forgotten and may Africa's children live in safe and secure communities, protected from violent men like King Herod of old.

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## LETTERS

### MATHS TEACHING

I have just read John Potter's article (Veritas, December 2010) and have a few thoughts that I would like to share with your readers.

In line with John Potter's first hypothesis, it was my belief in my early days of teaching Mathematics that revision was a key element and comprehension (what the question is asking) very important. My approach was to get students to do past exam papers in preparation for exams as this gave them the opportunity to develop strong comprehension skills. The vocabulary used in exam papers was fairly standard over the years so students would face examinations with a sense (a confidence) that they knew what the question was asking and that the process required was one with which they were familiar. In 1966 I took over a group of Year 10 students for Mathematics. I had planned to have revision covering the past ten years papers but they worked faster than I had anticipated and I ended up giving them the last twenty years papers. In those days student's public examination marks were graded into 6 categories (1 to 6, with 1 being the top marks). That year we had 29 'ones' and 3 'twos' in Maths 1 and 25 'ones' and 7 'twos' in Maths 2. It was my perception that success in Maths transferred to other subjects; in that year 27 out of 32 of our student gained Government Scholarships.

Potter also mentions that he found value in teaching students to memorize definitions. In 1970 I was asked by the South Australian Public Examinations Board to join another teacher in preparing a Formula Sheet to be given to students undertaking public examinations. The idea was that prevent students having a mental block on remembering a formula and be prevented from carrying out the process. It took away the need for rote learning in the classroom, although I still insisted on the students learning the formulae.

With regard to rectangles, Potter found that students could recognize one visually but could not say that one angle was a right angle. I used to teach using definitions as starting points and develop properties from there. We would start with a four sided figure being a quadrilateral. From that we defined a parallelogram as having opposite sides parallel. Then we would prove, with appropriate diagonal construction, the properties of a parallelogram using congruent triangles. After that we would say that a rectangle was a parallelogram with one right angle by definition and from there we would prove all angles must be right angles. It was beautiful Euclidean geometry. Much testing would see that the idea stuck with most students.

In trigonometry I developed a ditty to help students remember definitions. One was:

some old hags  $s(\text{ine}) = \text{o}(\text{pposite})/\text{h}(\text{ypotenuse})$   
chatter all hours  $c(\text{os}) = \text{a}(\text{djacent})/\text{h}(\text{ypotenuse})$   
till old age =  $t(\text{an}) = \text{o}(\text{pposite})/\text{a}(\text{djacent})$

The 'old hags' used to produce a laugh. I met one of my weaker students (now an architect) recently; he said he could still remember 'the old hags' and would never forget it.

The other thing I did with trigonometry was to ask students nine questions and tell them that these questions were vital and any student who got one wrong in a test would be given a huge imposition. The questions were: "What is the exact value of sin, cos and tan for 30°, 45° and 60°?" The feature was that students were required to develop the answers using right angled triangles and not calculators; calculators would only give approximate answers whereas using Pythagoras's Theorem gave exact answers. For example,  $\sin 60^\circ$  by Pythagoras gave,  $\frac{\sqrt{3}}{2}$  so that  $\sin^2 60^\circ$  would be exactly  $\frac{3}{4}$ , not a decimal close to it. And so on.

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Contributors may contact the editors for advice on publication if they wish – email above. Otherwise the following guidelines are offered:

### CONTRIBUTIONS

The Journal takes the following:

- Short articles and essays                      2000-3000 words
- Research Reports
- Notes
- Letters to the Editor re published articles
- Book Reviews

### AUTHOR'S DETAILS

New authors are asked to submit the following with their paper:

- Details of their academic qualifications
- Their current place of work – title, address
- A head and shoulders photograph of themselves
- Their email address

### SUBMISSION

All articles must be submitted by email

### FORMAT

Contributors are asked to observe the following format where possible:

**Title:** 14pt Times Roman Font

**Name:** Author's name and brief biography together with a head and shoulders photo

**Body:** 10pt Times Roman Font for text

9pt Times Roman Font for tables

**References in text:** In the text ALL quotations must have quotation marks and a reference, e.g.

*James said 'all dogs are brown' (James, 2002)*

**Reference List:** List in **author's surnames alphabetically**

We observe the Harvard format, i.e.

- For a book: P.Jones (2001): Water Management, Raven Press, London.
- Journal reference: W.Smith (1998): 'Lemon Growing', *The Journal of Agriculture*, V.45-2, p.10.
- Reference to work listed directly preceding: *ibid*, p.20
- Newspapers: *The Star*, 3 September 1986
- Report: Australian Bushfire Commission Annual Report, 1997, p.71
- Unpublished thesis: M.Broad, "The Utility of Cross Referencing", M.Ed. Thesis, St Clements University 1999

