

THE TEILHARD NEWSLETTER

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Introduction

After the sad news of the death of Bill Cranston it has been difficult for myself personally and for the Association. Although it was a great shock we must all remember that Bill would have been the first to say that we must look forward and plan for the future, whilst building on the past. This initial newsletter is dedicated to Bill.

Shortly after the conference this year I travelled over to Largs to see Ness, the family and to help in Bill's office. It was a great privilege to see where Bill had worked and the family has asked me to pass on their thanks and appreciation to all who have contacted or helped the family.

<p>Tarde</p> <p>A veces, las estrellas No se abren en el cielo. El suelo es el que brillo Igual que un estrella de firmamento.</p> <p>Juan Ramón Jiménez</p>	<p>Evening</p> <p>Sometimes the stars Do not open in the sky. It is the earth which shines Like a starry firmament.</p> <p>Trans. By José Luis Iparraguirre D'Elia</p>
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When Teilhard looked at the earth he saw the same as Juan Ramón Jiménez . He saw God when he studied geology, when he looked at the dirt on his hands, he felt connected, he saw the beauty of the earth. When we, whoever or whatever we do live each day we must bear in mind the wonder of our existence.

Of course, there are many who would say that science has no bearing on religion. Teilhard experienced this attitude too and we must follow his example in being pioneers and look forward to the day when there are no difficulties found integrating science and religion.

As inadequate as I feel and as sorry as I am that this newsletter has been delayed I hope that this will help your studies. This may be the appropriate time to introduce myself. I am 35 years old, I live and work in Belfast. I work with computers for the Civil Service in Belfast. Twelve years ago I completed a degree in Applied Geology at the University of Hertfordshire, previously known as Hatfield Polytechnic. It was my R. E. teacher who introduced me to Teilhard and it was his love of logic and history that instilled in me a love for geology. I then completed a Masters degree in Science Communication but the market was not ready for science communicators and I ended up working in computers. Over the last twelve years I have been reading Teilhard gradually increasing my knowledge. It was only when I joined the British Teilhard Association that my knowledge of Teilhard increased in leaps and bounds.

This is a time when we must unite to share and

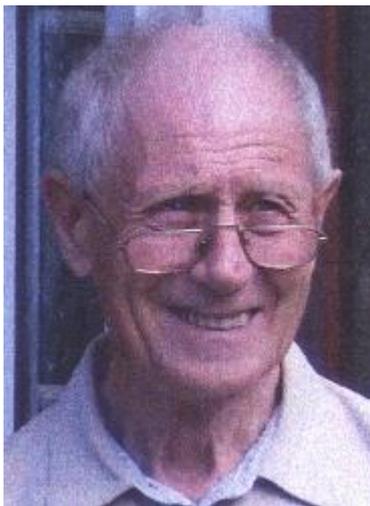
increase our skills and understanding of Teilhard. I hope that all members, new and old can have the same experience as me. I know Teilhard can be complex and difficult but when it comes to Teilhard I feel he is becoming more relevant and more needed for our times.

It was agreed by the Committee that the newsletter would benefit from having an Editorial Board rather than one editor. This will increase the chance that all views can be represented and it will make the newsletter more useful and interesting to all members.

I hope that you can help me and the team by completing the survey attached with this newsletter. I hope you enjoy this short edition and that it will inspire you to develop your interest in Teilhard and maybe even contribute to the next newsletter.

Obituary

Prof. Bill Cranston, Treasurer of the British Teilhard Association, died on Wednesday 14th March following a tragic road accident. Knocked down by a



car on 2nd March, he sustained severe brain injuries and never regained consciousness. The funeral was held in Largs, Scotland, on Monday 26th March 2007.

Bill was born in 1933 in Edinburgh and brought up on Islay, where his father was Factor to Islay Estates. He went to Dollar Academy and then

studied civil engineering at Glasgow University where he completed his doctorate. He met Ness in 1958 in Glasgow and they married soon after. With his wife and first son, Stephen, Bill moved to Slough, where he held a post as researcher with the Cement and Concrete Association from 1961 to 1980. Whilst living in Slough, their other children, Michael, Christine, John and Andrew, were born. During the 1970s, Bill was active in Slough local politics. He served on the local and county councils and was a governor at Slough College and at a number of local schools. During the 1980s, he worked on the UK's first prototype onshore wave energy project on Islay, this reflecting his belief that the engineering profession

should actively promote respect for the environment, human rights and social justice. In 1988 he was appointed Professor of Engineering and head of the Department of Civil Engineering at Paisley College, and he and Ness moved back to Scotland. Throughout his life he continued his commitments to several engineering institutes – and to the Royal Philosophical Society of Glasgow, for which he contributed a chapter, 'Engineering in the West of Scotland', in its publication *'No Mean Society': 200 years of the Royal Philosophical Society of Glasgow*.

In 1959, Bill converted to the Catholic faith. With Ness, he was a big supporter of the Campaign for Nuclear Disarmament, Fair Trade and Make Poverty History movements. With a hunger for travel and eager to learn from other cultures, they traveled widely to the USA, China, Egypt, India, Russia, and the Holy Land, and camped widely across Europe.

Bill took a leading role in the British Teilhard Association. Serving on the Association's Executive Committee, not only was he Treasurer of the Association but also ran the Membership scheme and was Acting Editor of the Newsletter. He was a mine of information on Teilhard de Chardin, and always keen to promote Teilhard to a new generation of followers. Ever loving a good debate, and always having something original to contribute, he will be sadly missed.

Conference Report 4-6 May 2007

Humanity's Place in Nature

Man's Place in Nature
Dr David Grumett

'Man's place in Nature' by Teilhard was the theme for this year's conference. However it was changed to "humanity's" to reflect the inclusive nature of contemporary life. As an introduction to Teilhard's thought it is superb but we felt it needed to be modernised. The aim of the conference was to attempt a modern assessment of this work.

Science may have changed radically over the past fifty years but Teilhard's vision on the role of evolution, to 'build the earth' remains the same. David Grumett was asked to provide an introduction to the conference, a summary of the book and a pointer towards the aspects of Teilhard's thought that he felt were most relevant to today.

The scientific work of Teilhard was central to his life and thought. Teilhard starts the book by looking at a new way of thinking – complexity-consciousness. He does this by drawing a graph with size increasing on the *y* axis and complexity increasing on the *x* axis. The development of life is shown as a line on the graph increasing exponentially.

He then goes on to define what these two terms mean. Size is straightforward; it starts with an electron and virus and moves upward increasing to the size of the earth. Complexity involves the maintenance of a system with a combination of distinct elements that increasingly interact. It does not involve aggregation, repetition or pattern forming units such as in crystallisation or in a pile of sand.

As life progresses it proceeds along the line with increasing complexity and size. Teilhard defined life as being about change. He wanted to create a contrast between the idea of science as being about stable systems and his idea of life as constantly changing.

As life proceeds we reach several key points. We pass the point where life begins and we proceed to a point where, enabled by specialisation we get cerebralisation - the creation of the nervous system. This enabled a great 'leap forward'. Order is introduced. Teilhard wrote:

"light is shed on the confused arborescence of this great mass of living beings. Order is introduced ... in

the end it leaps forward with one single impetus and along one single stem."

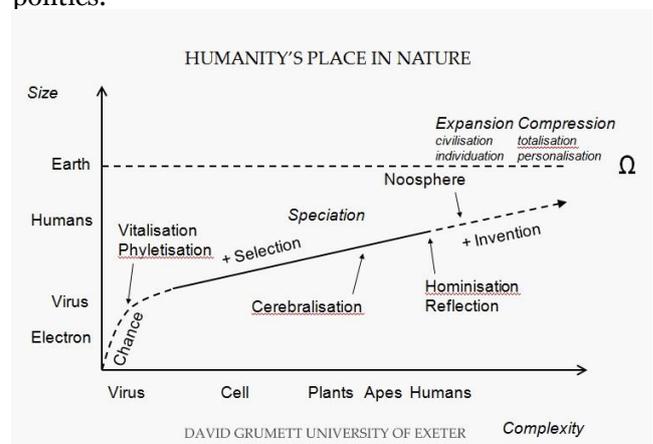
Here Teilhard makes reference to the evolutionary blossoming of life out of the 'tree of Eden'.

There are a number of conditions that are necessary for life to be created and as complexity increases these conditions are added:

Chance → selection → speciation → invention

As these conditions move life forward, life reaches another critical point - the threshold of self-reflection. At this point we have human beings who 'know that they know' and this ability enables a great leap forward. This thinking sphere is the noosphere and the strengths and weaknesses of human beings are reflected in the communities that are created. This indicates the direction of Teilhard's politics and although he remained convinced of a positive future, he knew very well what could happen when communities turn inwards upon themselves.

It would be difficult to write a complete summary of David's engaging and interesting talk. I would recommend that all readers of this newsletter read this short book. David went on to give an indication as to his interest for future study - To look at how God is revealed through Teilhard and the political insight of Teilhard. After the talk there was much discussion about the Omega Point and the future for global politics.



Dr Nigel Dower

For a lot of people globalisation means very little apart from a term used in the media to cover demonstrations and jobs' losses. A very important aspect of Teilhard's work was how he saw changes to society in the future. He talked about people moving closer together and politicians and religions working together, but the particulars have become very difficult to interpret as the world advances in technology. Moreover, politics have progressed over the last fifty years.

Dr Nigel Dower, who readily admitted having little knowledge of Teilhard, was impressed by Teilhard's use of the term 'planetisation'. In *The Future of Man*, Teilhard stated clearly that in the future, with rapid population growth over the confined surface of the earth, there would need to be a tightening of economic and social bonds. In this Teilhard anticipated the two levels of globalisation.

The process whereby separate parts of the world are brought closer together economically and through communications has been ongoing since the Roman Empire. The term 'globalisation' was coined in the 1990s. There are many complex definitions that have been proposed but one general aim is a 'single global economic system'.

There are two levels to the process of globalisation:

Causal - physical interconnectedness
Psychological - communities of thought – 'psychic communities' as Teilhard put it.

Scholte, in his book *Globalisation: A critical introduction* (2002), creates four dimensions:

1. Production:- The common perception of globalisation is that it is a juggernaut out of control perpetuating poverty and environmental damage. Capitalism is seen as a force that is outside our control. This need not be the case. We have an ethical responsibility to humanise capitalism such as by campaigning for fair tax rules and constraints that will limit the extremes. Production is something that is essential and it is something that we cannot avoid. It is possible that capitalism could be used to encourage development but whether development should be equal in all cultures is something that is up for debate .

2. Knowledge:- We are now in an age where knowledge is advancing rapidly. The downside of this is that knowledge is privatised with the recognition that 'knowledge is power'. The result of this is that science is hindered. It is important that we monitor the 'patenting of knowledge'.

3. Governance:- International relations are currently based on the *Peace of Westphalia*. This was the result of agreements made in 1648 to ensure economic stability. We now need a new model of governance to recognise that we are now citizens of a global civil society. Dower made reference to the 'Our Global Neighbourhood' report which will enable us to manage global situations efficiently because global problems need global solutions. It is regretful that currently a great deal of governance is carried out by multi-national companies. We can make a positive difference by campaigning with Non-Governmental Organisations.

4. Community:- As the Internet and communication technologies advance the community is decreasingly local. Social networking is now very popular and local areas are suffering. There are two types of global community – particularist (those bound together by one social characteristic, i.e. indigenous communities) and cosmopolitan (those bound together by a single concern but which may have vastly different social backgrounds, e.g. concern for whales).

After this, Dower spoke about his goal of creating a new global set of ethics. Something that all people would be able to share whilst retaining their own individual beliefs. According to Hines, we are 'global citizens with tribal souls'. This would be an ethic that we can 'assent to and consent to'. The most important values that we need to protect are those of democracy, dialogue and non-violence.

I believe that Teilhard would have approved of global citizenship and all the above ideas. We need global values and responsibilities and that we are all responsible for the future of the earth. With these noble aspirations in our heads the conference got off to a great start and it enabled many fascinating discussions.

Current issues raised by science in respect of the progress of humanity Dr John Gillot

The purpose of this paper was to give a critical overview of Teilhard in terms of a modern scientific point of view. Gillot was critical of Teilhard's vision and many people found this challenging, whilst appreciating the 'bravery' of Gillot to give such a talk at our conference.

Genetics is something that Teilhard was unaware of, although Teilhard was supportive of all types of technology. John Gillot mentioned briefly the idea that science and religion could not be integrated and that perhaps many religious people are too complacent about the nature of science and how it would conflict with religion.

Gillot believed that Teilhard had tried to cover too much and that he could not have sufficient expertise to have a firm understanding of what science really meant for religious people. He agreed with Stephen Jay Gould who had said that if we re-run the 'tape of evolutionary history', humanity may not appear. The idea that complexity gradually increases over time is an illusion. There is no progress and humanity is the result of an accidental by-product of history and perhaps this grim conclusion is simply being honest and a more appropriate response to our situation than looking to religion. The problem with religion is that it suggests there is some other 'agent' outside our control directing our destiny. This is the reason that John Gillot would say that Teilhard fundamentally misunderstood science.

This conclusion raises a problem for humanism and for the idea that progress is possible in the perfecting of humanity. Science has changed the idea of humanism in history, and we now need a radical re-appraisal of humanism in terms of science. On a scientific basis, according to Gillot, we now have no optimism for the future.

In terms of human nature, there are two extreme views that seem to be equally flawed:

Sociobiology - Humanity is reduced to a mere animal, and ethical rules need not apply.

Teilhard - Humanity is placed on a pinnacle above nature as different from and superior to nature as a result of the growth of complexity (according to

Gillot).

As we can see, both approaches create their own problems. Science would indicate that we are not above nature. Gillot then proceeded to explain why he thought there was a problem with modern research into complexity. The growth of complexity is an illusion, and he went on to criticise 'complexity theory' which takes a great deal of inspiration from Teilhard.

Complexity Theory is fascinating and there is a great deal of information about it, but it has proposed no mechanisms for growth and it appeals to the idea that the reasons for the growth of complexity are themselves so complex that humans may never understand them. This, to Gillot, is flawed logic. In reality, nature is inherently purpose-less. As a result of reflection we have imposed our view of progress on nature because we can perceive time and we have a natural instinct to look back in time and to see how things have improved. This is something that is so important to us that we have even imposed it on our understanding of nature, when in reality there is no progress. This is something that religion in general and Teilhard in particular have misunderstood, and we need to come to terms with this.

After the talk there was a great deal of discussion about genetics and the future of research, in particular the ethics of research into the origins of life and how Teilhard would have reacted to this new technology.

Life's Solution: Are humans evolutionary inevitable? Prof. Simon Conway Morris

"Evolution is true, it happens, it is the way the world is, and we too are one of its products. This does not mean that evolution does not have metaphysical implications; I remain convinced that this is the case." p. xv *Life's Solution*

We were lucky to have Simon Conway Morris because he is a very busy man. He flew in to London from Portugal to speak and he left immediately after his talk to travel to Cambridge. His talk was extremely well illustrated with a PowerPoint demonstration.

Conway Morris explained that although he was familiar with Teilhard, he was not an expert, although he would probably agree with what Teilhard had said.

Evolutionary convergence is the idea that there is some innate quality to evolution that drives it forward, causing similar forms in divergent areas such as different continents, isolated places such as cave systems and maybe even on other planets. Its drivers are such that they create many examples of similar forms. In response to the question 'What happens when we re-run the tape of life?', Conway Morris would answer that humanity is predictable, maybe even inevitable.

Life is based on a universal biochemical 'code' known as Deoxyribonucleic acid (DNA). DNA is a remarkable compound, and although artificial alternatives have been identified, they are so difficult to produce that they are unlikely to survive in the natural environment.

Contrary to the mainstream Neo-Darwinist viewpoint that life is not an accidental by-product, there are many examples of complex structures that we find, such as the eye, that create difficulties for a random explanation of life. The proteins and building blocks for the eye evolved independently, and this would indicate that there is a sense of purpose or direction in evolution.

Jared Diamond has claimed that the woodpecker is unique and is a good example of the randomness of evolution. In fact, woodpeckers have evolved independently twice, and in biology we find a number of parallel examples. Does this mean that humans have evolved only once?

Sabre tooth tigers have evolved independently at least twice. One type is placental, and one type is marsupial. (See page 131 in *Life's Solution* for further details.)

The camera eye has similar structure in fish, cuttlefish and ourselves. In fossil history the annalids evolved the eye independently seven times. The alternative type, the compound eye, has evolved independently four times.

The sensory system of the Star-Nosed Mole has an arrangement of nerves that is very similar to our eyes, and this would indicate that the camera type of eye is a 'form' that is inevitable in evolution.

In terms of echo location, the sensory system used by bats and dolphins also evolved independently. This would indicate that in terms of a mental substrate there is something common to the way organisms interpret the external world.

Birds retain certain features of dinosaurs but they have survived by being warm blooded. Bird song has evolved independently three times and it has been found that birds have a learning process that is similar to the way humans learn language. All children and birds go through a babbling phase before they work out bird song or language.

Social features:- Play enables social abilities. Birds and mammals have been observed playing in similar ways. The Kea parrots in New Zealand are renowned as 'teenage troublemakers'. They roam in groups of about ten exhibiting mischievous behaviour such as removing hub caps from cars and emptying rubbish. Birds are also adept at tool making. It has been shown

that although their brains are smaller, they have a different cognitive structure that enables their intelligence.

There has been a lot of discussion about 'encephalisation quotient', i.e. the relative size of brain and the relation to intelligence. There has been a great deal of progress in the understanding of animal intelligence in recent years. Elephants have been seen to recognise themselves in mirrors and they have been observed mourning their dead. Dolphins have also been observed using tools such as sponges to probe into cracks to avoid injuries.

10 – 15 million years ago, it has been found, humans made necklaces. This form of bodily adornment was probably used in social contact and there is evidence that it evolved independently.

Recently and controversially, on the Island of Flores evidence has been found for another species of the genus *Homo*. It is thought that this species survived until relatively recent times. Their brain is smaller than ours but its structure is similar. This would suggest that we only use a small area of our brains.

One of the main objections to the theory of Simon Conway Morris was proposed by Stephen Jay Gould: that the evolution of humanity had to be accidental. If it were not for the unpredictable meteorite that caused the extinction of the dinosaurs, perhaps the conditions would not have been created in which humanity could exist. To counter this, Conway Morris suggested that had the Ice Age, which was predictable, occurred 15-20 million years later, it would have definitely wiped out the cold blooded dinosaurs and this would have enabled the evolution of *Homo sapiens*.

Teilhard in China Part 1 Michelle Le Morvan

This is the first part of a summary of a paper given at the annual conference in May 2007. It is dedicated to the memory of Bill Cranston, whose unexpected death was a great shock, and a great loss both personally and to the Association.

Teilhard's first contact with China came about when some fossils which Fr Emil Licent, a Jesuit working in China, had sent to Marcellin Boule, Professor at the Paris Museum of Natural History, were given to Teilhard to identify. As a result of correspondence, Licent invited Teilhard to visit China and see the geology for himself. Licent had been working in China since 1914 and had established a museum and laboratory in Tientsin which he had made his centre. Teilhard reached Tientsin in May 1923. He also visited Peking where he began to establish contacts with Chinese and other foreign geologists based there. Père Licent had learned to speak Chinese and had become very familiar with travelling in China, which was far removed from anything Teilhard knew from Europe. Amenities outside the main cities were poor,

bandits infested the countryside and were opposed by War Lords and their soldiers who often also disliked foreigners. Teilhard owed a great deal to Licent who opened up China to him.

In the eighteen months which Teilhard spent in China in this first visit, they made two major field trips, the first of these into the Ordos desert and its surrounding mountain ranges (June - October 1923). The second was into Inner Mongolia - this will be described later. The Ordos is a desert plateau flanked by mountain ranges on the north and west and separated from them by the Yellow River (the Huang Ho) which forms a giant loop flowing north, then east and then south, leaving a desert plateau, bordered on the south by the Great Wall. They travelled from Tientsin by train to Pao t'ou where they had to hire animals for the remainder of the journey. These had to carry the cases which contained the fossils and other specimens they would collect on their travels. As they travelled along the ranges fringing the Ordos they were able to elucidate the

structure of the region and its rock types. They fall into a number of distinct groups:

1. At the base lie the crystalline basement rocks. These are Precambrian in age. They appear to be largely of sedimentary in origin and have been strongly metamorphosed. There is little evidence of igneous activity and most of them are crystalline metamorphic rocks.

2. The Palaeozoic Beds. These lay above the basement and in some areas the contact between the beds (chiefly sandstones and limestones) is visible and the junction is often a fault plane where the later rocks have been thrust over the basement. These beds show considerable folding and ranged in age from Carboniferous beds to Mesozoic beds (c 260 - 180 million years old).

3. The youngest beds lay horizontally over the folded Palaeozoic beds. The main part of the succession was:

- c. Loess (youngest)
- b. Red Beds (chiefly Pontian (Miocene) and Pliocene)
- a. Post-Carboniferous (oldest).

Many of these had been exposed by the down cutting of the Hwang Ho and the tributary rivers, especially along the southern margins of the plateau. Erosion had removed many of the deposits and exposed deeper levels. On the western side of the plateau, beds of Oligocene age were exposed around San Jacques (San tao ho) which corresponded to the Balucitherium beds of the Mongolian plateau. Further south some marine beds containing fossil fish remains were interbedded with lathstring sandstones. The thickness and presence of wind-borne loess varied considerably. Perhaps their most exciting

Reflections upon Human Becoming'

Philip Hefner has written this short book based on a series of talks given at a conference in 2001 on 'Human meaning in a Technological Culture'. Technology is progressing rapidly and opening up new worlds of meaning. Theology has traditionally been reluctant to engage with technology and Hefner should be complimented for this short book. It is perhaps, far from perfect, but it represents a first step, the confidence to produce tentative questions that we need to ask as we all try to get to grips with

discovery was the unearthing of three Palaeolithic hearths - the first ever found in China at that time. They were along the Sjara Osso gol, and further west along the Choei tong Keou. These hearths had associated stone tools and the remains of many mammals including horse, bison, elephant and gazelle. Gravel terraces were also found in front of the Western mountains of the region.

When their results were drawn together, Teilhard and Licent were able to begin a provisional description of the geological history of the region. The surrounding mountain ranges were uplifted during Jurassic times. It is probable that around this time the Ordos reached its present form.

Two of Teilhard's main interests were the mammal fossils of Cenozoic age (Eocene-Pleistocene) and the presence of Palaeozoic man in China. He had already written two papers (summaries) on the fossils which Licent had sent him. Now he wrote two more on the mammalian fauna they had found, and he was particularly interested in the rodents which he saw as abundant guides to evolution. He also co-authored a paper with P H Fritel on the Mesozoic plants they had discovered.

Though they discovered many Neolithic implements, he was primarily concerned with the Palaeolithic finds. He wrote or co-authored several papers, including one with Licent and Davidson Black on the Pleistocene human tooth found in the Sjara Osso gol, named by Black "the Ordos tooth".

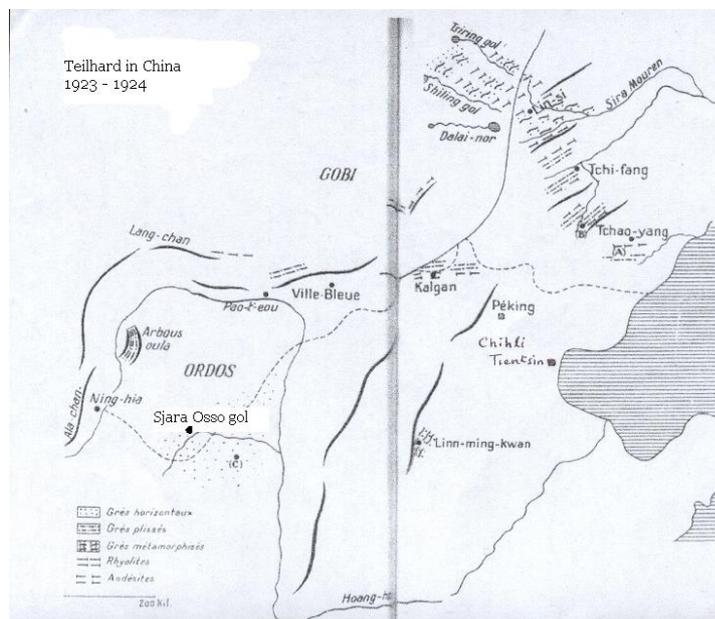
It is also important to remember that while they were in the Ordos that August, Teilhard wrote "The Mass on the World". Some idea of the trip may be found in *Letters from a Traveller* (1962, 1st hard-back edition, pp. 72-104).

To be continued ...

'Technology and by Philip Hefner

and understand the changes that technology will bring to us in the future.

Hefner wishes to discuss how we can think about topics like artificial intelligence, robots and all the new technologies that we see today such as genetic engineering. Hefner should be complimented for wishing to engage with these issues but as I will draw to your attention later in this article I think that Hefner has made a hasty judgement of Teilhard. As we have found before Teilhard isn't an easy thinker to



classify and make a judgement upon, especially when you are only reading one of his essays. I intend to show that Teilhard is more relevant and more realistic about the topic of technology and has probably more to say than Hefner about the use of technology in society.

Computers, it is claimed have reduced life to a brief spark, a cycle of processor time that will soon be able to replicate our own selves. This future realm of artificial intelligence could prove to be the final blow to religion. Hefner takes a different approach, claiming the use of creativity makes technology a sacred sphere of human activity.

Hefner takes one essay by Teilhard – ‘Some reflections on the Spiritual Repercussions of the Atom Bomb’ found in ‘The Future of Man’. He finds Teilhard’s approach innovative, in that Teilhard finds science and technology exciting, they are a celebration of humankind’s creative spirit, rather than the negative approaches, perhaps from ignorance that we currently see directed towards science and technology by some religious figures. Teilhard introduces his essay by stating briefly how proud he is that humanity has discovered atomic energy:

“By the liberation of atomic energy on a massive scale ... for the first time man has not only changed the face of the earth; he has by the very act set in motion at the heart of his being a long chain of reactions which, in the brief explosion of matter has made of him, virtually at least, a new being hitherto unknown to himself.”

Teilhard wishes to look to the future, what this means now, how we can use nuclear technology responsibly. Hefner also inspired by new developments in virtual reality and genetic engineering starts by looking at how we can make spirituality relevant for new technology and how it changes the definition of what it means to be human.

In chapter 1 of *‘Technology and Human Becoming’* Hefner contrasts Teilhard with the more rationalistic approach to nature. The idea that humankind is in combat with nature and that our ultimate goal is to exploit nature and become separate to it. In Teilhard’s essay on the ‘Atomic Bomb’ Teilhard states that it is through technology such as the atomic bomb that humankind is transformed. Humanity is ‘sucked’ through technology like water is sucked through a tree and it transforms us.

In chapter 2 Hefner looks at how medical technology is making it so easy to examine and improve our bodies. He reflects on whether we may be able to replace our bodies, perhaps even make ‘copies’ of ourselves in the form of robots. Hefner wants to discuss the ideas in science fiction that we may be able to produce robots and what will happen to those

robots. Will they be able to become complete human beings?

He discusses how modern technology alienates us from nature and leads to ‘self-destructive’ tendencies. He points out that this is not how Teilhard saw technology, Teilhard saw technology as transforming ourselves and not distancing ourselves from nature.

Chapter 3 discusses how computers have imitated our ability to think and how they have improved our ability to study how our minds work. Again this leads Hefner to reflect on how we would react in a religious sense to robots, what would happen if they started to have religious thoughts?

In chapter 4 Hefner starts to misunderstand Teilhard:

“Teilhard was wrong about one thing: this did not happen only with the atomic age. The first stone tool was the product of the imagination, of picturing the nonexistent into existence. Genetic engineering ... rests on our imagining that which does not actually exist. The same can be said of computer technology.”

Whilst Teilhard states clearly in his essay on the atomic bomb:

“Was it not simply the first act, even a mere prelude, in a series of fantastic events which, having afforded us access to the heart of the atom, would lead us on to overthrow the many other strongholds which science is already besieging?”

Here Teilhard states that the atomic tests indicated a new start, notice also that Teilhard states it is ‘science’ that has achieved this move forward, not technology but that science has created the ability for new technological breakthroughs in genetics, the power of the mind – possibly a reference to computing power, and psycho-analysis. Teilhard makes a tentative reference to future technology but most importantly he states that now that nuclear technology has achieved the ability to re-arrange matter, this will lead to breakthroughs in other areas. Teilhard was not wrong, Hefner has misunderstood Teilhard and Teilhard was correct to suggest that these breakthroughs are the result of pioneering science that enables new technology.

In chapter 5 Hefner sees technology wishing to replace religion with a new ‘story’ or explanation to our humanity. A new way to find meaning in an atheistic approach and he concludes in chapter 6 stating that the role of creativity in technology makes it a sacred sphere.

After the first atom bomb humanity had the power to destroy itself. This was a new position, a unique power and responsibility. Teilhard goes on in his essay to state clearly that other technologies that were

being developed such as computers and genetic engineering would also transform and improve ourselves.

In *'Man's Place in Nature'* Teilhard clarifies his position by saying that we should now be aiming at 'ultra-hominisation'. This is the result of technology but it is also unavoidably the result of many years of scientific study. 'Life', he says is responsible for creating 'a tide of knowledge' that creates a 'step-by-step' process for the improvement of humanity.

Teilhard continues in his essay where Hefner stops. Teilhard makes a clear assessment of the problems we will have with technology in the future. He puts the blame on one fundamental aspect – the removal of creativity in work and the rise of **boredom**. This boredom leads to self-destruction. The boredom is because we have too much leisure and we have lost our focus, technology is progressing rapidly, perhaps too rapidly and we have lost sight of God.

Hefner seems to make the assumption that it is only technology that has the ability to transform humanity. Whilst Teilhard in his essay makes no such assumption, he states that we 'all' have a responsibility for our future. It is not just in technology, but in scientific research. He also states that our future depends on society as a whole finding the strength and reliance to unite and devote energy to ending conflict.

Ultimately Teilhard is more mature and realistic about the problems facing us today. Hefner is ready to speculate on the future of artificial technology when current studies into consciousness are in dispute about even the very meaning and nature of consciousness. Perhaps science fiction's preoccupation with robots really reflects our fears

about the Pinocchio myth. I would suggest this is too much speculation.

Teilhard finishes his essay on the atomic bomb by drawing attention to the report on the first atomic test. The men who witnessed the atomic bomb in their anguish found themselves praying. Teilhard suggests that this is another reason that we need religion. I went to the Internet to see if I could find the 'Official Report' that he was talking about. I was quite surprised to find the full text of the 'The Smyth Report' on atomic testing online. I think this quote from General Farrell answers many of Teilhard's and Hefner's concerns about the role of technology. It also shows that nuclear technology was the result of more than technology, more than just science:

"We were reaching into the unknown and we did not know what might come of it. It can safely be said that most of those present were praying--and praying harder than they had ever prayed before. If the shot were successful, it was a justification of the several years of intensive effort of tens of thousands of people – statesmen, scientists, engineers, manufacturers, soldiers, and many others in every walk of life."

Interview with General Farrell, quoted in Appendix 6 of *Atomic Energy for Military Purposes ('The Smyth Report')*

Teilhard was correct to suggest that the responsibility for our future lies with all of humanity. As the atomic tests were the results of many different people so we all have the responsibility to use our intellect and our abilities to transform ourselves and we can only do this when we are firmly focused on God.

Monkey Talk

The ability of language is thought to be a uniquely human trait. One aspect of language is the creative ability to combine words to form new meanings. Klaus Zuberbühler, a psychologist at the University of St Andrews along with colleague Kate Arnold, have recently observed the combination of sounds to create new meaning in male tree-dwelling putty-nosed monkeys in Nigeria.

The 'Pyow' noise is released to indicate the presence of leopards, whilst the 'Hack' noise is released to indicate the presence of eagles. When these noises are combined into a primitive sentence - 'pyow pyow hack hack hack hack' this has the new meaning of

telling the group it is time to move on.

Teilhard would have been fascinated with this new research and it would have confirmed the presence of intelligence in other animals apart from man. It is one area that we should be observing over the next few years.

For more information: Arnold, K. & Zuberbühler, K. 2006. Language evolution: semantic combinations in primate calls. *Nature*, 441, 303

Theme: Teilhard: The English Connection

Venue: The Friars, Aylesford Priory, Kent

Friday 18th to Sunday 20th April 2008

To include an excursion to Hastings on Saturday 19th April to visit places associated with Teilhard's stay in England, 1908-1912

Keynote Speaker: François Euvé SJ, Lecturer in Fundamental and Dogmatic Theology and holder of the Teilhard de Chardin Chair at the Centre Sèvres, Paris.

Discussion Group – Web site update

<http://www.teilhard.org.uk>

The Association regrets that, owing to persistent posting of spurious and offending spam messages – deleted, in each case, as soon as seen – it has been considered necessary to close down the Discussion page for the time being. We regret any disappointment that this may cause to people genuinely interested in putting forward comments, suggestions, and ideas, or discussing thoughts relating to the ideas of Teilhard de Chardin.

In pursuit of above, I have been investigating the Yahoo Teilhard discussion Groups. I consider that perhaps the best is:

<http://tech.groups.yahoo.com/group/teilhard>

Please remember that when you enter Yahoo Groups, firstly you have to be a Yahoo member (with email address) and secondly you need to apply for membership to the group owner. This is relatively simple. The Yahoo group is busy and friendly.

Newsletter by Email

The Association has piloted and successfully distributed a small proportion of the previous newsletter by email. This worked well and the main advantages are that you receive the newsletter quicker and it reduces expenses. It also means that you have the ability to forward the newsletter to friends and colleagues. I would appreciate if anyone is interested in joining this service if they would email me, expressing which format you would prefer. I can distribute the newsletter in PDF or Word (*.doc) format. If there are any difficulties I am willing to assist. Other formats may be considered.

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General communications and enquiries about the Association should be addressed to the Secretary:
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1. How long have you been receiving this newsletter?

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Over 5 years

2. How would you rate this edition of the newsletter?

1. Poor to 10. Excellent

3. Is there a good variety of articles?

1. Poor to 10. Excellent

4. How would you rate the quality of printing / layout for those receiving electronic copies?

1. Poor to 10. Excellent

5. What issues would you like to see covered?

6. I would be interested if you could list your interests and your reasons for being interested in Teilhard.

7. Do you have any other comments or questions?

If filling out the form on the computer don't be afraid to simply type in a number or X where appropriate and please feel free to expand your answer beyond the size of the box if necessary.

Thankyou for taking the time to complete this questionnaire.