

Correspondence

Communication and Language - The Tents of Science

From: Anne Silk, The Bostons, Thorns Close, Whiteleaf, Princess Risborough, Bucks HP7 0LU

In the 12thC the Persian philosopher and scientist Omar Khayyam wrote of "the tents of science" - a description which was relevant then and is even more relevant in the 21stC. Omar Khayyam, had he lived today would surely have been on the Council of the SMN! He was a mathematician, a scientist, a poet, an astronomer, he wrote algebraic texts and refined the calendar. He has been compared to Lucretius, both "In natural temper and in genius" and was a man of subtle intellect. The mental image of the differing branches of science, all conferring in their separate tents, is vivid.

Now jumping forward 900 years, a quotation from the European Journal of Physics "E" (Jan 2000) shows us that little has changed vis-a-vis communication. The Editor wrote "study of soft matter, colloids, biopolymers, complex natural products, even living tissue beganover a century ago. But this huge expansion was built by separate communities, with their own way of thinking and their own channels of communication". Today this separation is well past its sell by date. As the Editor wrote "this separation is obsolete. The time has come to bridge the gap between different disciplines, not only between Life and Material sciences, but between physics, chemistry and technology". In 1857 Michael Faraday, the brilliant discoverer of electromagnetism, wrote to Maxwell "Isn't there some way in which we can translate the hieroglyphics of science?" He was concerned 150 years ago about the impenetrability of scientific terms. To bring the subject right up to date, the Editor of Scientific American wrote a few months ago "Even people (working) in the same field can be excommunicated by the expansion of the Universe of knowledge and the increasingly weakened signal of specialised language".

The UK Medical Research Council are beginning a new series of research studies in 2000 - they are called "Discipline - Hopping Studies". This is a most welcome innovation for medicine, but unless chaos is to ensue, all must learn to speak the same language, otherwise the "Tents of Science" will effectively seal intercommunication once again. This letter is a short report of a paper of an initiative by Elaine Hadfield, Mike Rogers, Mike Reveley and Anne Silk to try to address this problem. We have all, in our various disciplines hit the communications barrier when crossing specialities and of course the whole subject was considered by the Centre for Frontier Sciences in 1997. To quote two light hearted examples first. ELM in City parlance means Ex Lord Mayor. But ELM in optics means External Limiting Membrane. QED stands for Quod erat demonstrandum, but also in physics Quantum ElectroDynamics. A recent European Union publication talked about 'Necromass'. This sounds like a service for the dead, but it is not. It is also known as CWD - coarse woody debris - or Dead Wood.

More seriously the dreadful term so loosely used "Geopathic Stress". What do those who use it mean? If we remove the mumbo-jumbo it is in fact a multifactorial term for the combination of natural acoustic and ground waves, extremely low frequency natural signals from faulting, distant Earthquakes, outgassing (radon etc), lightning strikes, and the microvolts generated at ground level by deep flow sub- surface water. I would like to propose a simple start to address the problem. I found it in a text on Geophysics and now

use it myself to de-jargonise written text. It is simply the use of an oblique sign between two words or phrases which mean the same, but to different disciplines. For example, biolocation/dowsing; ions/charged particles; xenobiotic/cannot exist in nature; arrhythmia/irregular heartbeat. The SMN has, hopefully, a very real role to play in bringing together, language-wise, the multidisciplinary specialities that form its core membership. Exactly how, and when, is for the future, but even the awareness and airing of the problem is a start.

Rare Seeds Research (To the Letters Editor of *Science*)

From: Don Braben, Venture Research International Ltd, Mount End, Theydon Mount, Epping, Essex, CM16 7PS, and, University College London
Email: DonBraben@compuserve.com*

Max Planck made his seminal discovery of the quantisation of energy a century ago. Within 25 years, our understanding of matter and radiation had been revolutionised. After another few decades, the DNA code had been revealed, superconductivity explained, and the transistor and laser invented. These incredible feats transformed civilisation. They were the products of industrial and academic research environments that once thrived on individual freedom. These environments are now under severe threat.

All too often today, the academic research environment favours objectives selected by consensus. Adequate provision must be made for work in the mainstreams, of course, but current policies make it almost impossible for latter-day Plancks to flourish. We believe that this is one of the most serious problems facing civilisation.

The problem can be solved by an adjustment to the global funding of basic research - currently about \$50 billion pa. Some \$10-20 million pa (or 0.04% of the total) should be sufficient to germinate the rare seeds of the Planck variety. But how can they be reliably identified? Pioneers and consensus can be poor bedfellows initially, and so peer-review often fails. There is an urgent need, therefore, for efficient selection procedures that are more tolerant of risk. We the undersigned intend therefore to create a Forum of concerned scientists, engineers, and others to draw attention to the problem. It would explore ways that a Planck-type fund might be raised, and stimulate the exploration of uncharted territories.

Don Braben

And:

Mike Bennett, Jodrell Laboratory) Kew Gardens
Terry Clark, University of Sussex
Peter Cotgreave, Save British Science Society, London
John Dainton, University of Liverpool
Peter Edwards, University of Birmingham
Nigel Franks, University of Bristol
John Guest, University College London
Dudley Herschbach, Harvard University
Jeff Kimble, California Institute of Technology
Harry Kroto, University of Sussex
David Price, University College London
David Ray, Oxford Innovation Ltd

Ian Ross, University of California at Santa Barbara
Ken Seddon, The Queen's University of Belfast
Gene Stanley, Boston University
Harry Swinney, University of Texas at Austin
Robin Tucker, University of Lancaster
Luca Turin, University College London
Claudio Vita-Finzi, University College London
23 January 2001 *To whom correspondence should be addressed.

Parapsychology and Scientific Proof

*From: Harold Van Colle, 9 Mayfields Close, Wembley Park, Middlesex HA9 9PP -
hvc@dircon.co.uk*

Here are my reasons why I do not think parapsychology is susceptible of scientific proof.

1. Most of the phenomena can be seen to be associated with the survival mechanisms of the animal kingdom based on instincts- the need for water, food, awareness of danger, social structuring, establishing territories, etc.
2. Instinctive behaviour is not connected with a thinking process as in humans. Some evidence for that is the building of nests, dams, tunnels, always in specific forms.
3. Some humans have the sensitivity to latch-on to some animal instincts e.g dowsing, mental telepathy etc., but success, as in experiments, is much dependent upon the ability to set aside the critical faculty during experiments. It seems that the critical faculty in humans when in operation blocks off access to animal instincts. Experiments with mental telepathy were conducted for a Ph.D. (Ernesto Spinelli), the subjects being young children. The youngest group at around 3 years were highly telepathic, way beyond chance, and it was found that as older children were involved, so the percentage of "hits" diminished due, it would seem, to the fact that the older children had a more developed critical faculty.
4. It was found, in dowsing for example, that if the dowser is under "test" (as in an attempt to prove results scientifically), the pressure in the mind of the dowser will be affected by the wish to succeed. Any form of guessing will create a false reaction. It has to be remembered that there is a direct connection between the mind and the body, as illustrated by experiments in ideo-motor (automatic) activity, and any form of "expectation" will lead to a false result.
5. In the case of pigeons flying long distances to return to their lofts, dogs and cats travelling back to their homes, salmon crossing the Atlantic back to their home rivers, scientists have suggested that the earth's magnetic field is the means by which these amazing journeys have been accomplished. It might be true that in certain instances the earth's field could be involved (as in the migration of birds), but it would certainly not explain the accuracy by which a pigeon, for example, finds its home loft in a house within a row of terrace houses within a city. During the few years of experimental work I found impregnation was a feature of psychic phenomena. That objects could be impregnated by both touch and by thoughts. Pigeons, dogs, cats, and probably salmon, impregnate their home bases, so that the

return home is achieved by dowsing for themselves, the impregnations being "themselves".

6. My observations in 5) probably have a connection with the impregnation of water, as associated with homoeopathy and the memory of water.

I have deliberately offered views in shortened form, but shall be more than happy to hear from any readers who wish to challenge, question, or discuss in greater detail anything I have suggested.

My website www.pni.org/philosophy offers enlarged views of some statements, and all forms of discussion will be welcomed via my email address hvc@dircon.co.uk

Dumbing Down

From: Ivo Mosley, ivomosley@aol.com

Max Payne declared my book 'Dumbing Down' a disappointment, but each of his major criticisms revealed he had not read the book. 'The issue of conflict between individual freedom and public responsibility is left unexplored'; this issue is precisely the subject of one of the longest essays in the book, Michael Oakeshott's.

The 'cultural shift from a rather strait-laced and puritanical country to a permissive society', which he claims is also ignored in the book, is tackled by Ann Glynn Jones and Oliver O'Donovan. He also complains: 'The fact that our society lacks any central value system is hinted at in these essays. It should be a dominant theme'. It is indeed a dominant theme, tackled most tellingly and directly in another of the longest essays, by Philip Rieff. Oliver O'Donovan's essay is an extended analysis of the corruption of morality when the idea of revealed truth is thrown out, as the baby with the bathwater of moral repression.

He labels me as being 'to the right of the Republican Party', for which he can have no other justification than my surname. My attack on the operations of 'free-market capitalism' as one arm of a new kind of global totalitarianism has got me into trouble with other reviewers as being 'student-lefty', it seems to have passed him by. Old-fashioned liberal I may be; right-wing libertarian I am not.

Finally, the 'self-declared bankruptcy of philosophy' is analysed, in its historical context, in the essay by Michael Polanyi. I don't mind being disagreed with; being misrepresented is another matter.