<u>THE SKEPTICAL</u> <u>INTELLIGENCER</u>



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Incorporating the Skeptical Adversaria: *the ASKE Newsletter*

Edited by Michael Heap

To access a pdf copy of this issue, please contact the Editor at m.heap@sheffield.ac.uk. If you are an ASKE member and would like a paper copy sending, again email the Editor.

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ANNOUNCEMENT

The 16th European Skeptics Congress will take place at Goldsmiths College, London from Friday September 11th to Sunday September 13th 2015. The congress website is at http://euroscepticscon.org/ and will be regularly updated. For the moment, any enquires to m.heap@sheffield.ac.uk.

GUIDELINES FOR AUTHORS

The *Skeptical Intelligencer* welcomes formal and informal contributions on any subject within the ambit of the Association for Skeptical Enquiry (ASKE).

Formal articles should be aimed at the intelligent layperson, and authors should take particular care to define or explain unusual terms or concepts. Equations, statistics or other numerical and symbolic tools may be employed whenever required. Articles should be as succinct as possible, but may be of any length.

Authors of contributions to the Skeptical Intelligencer should be take care to ensure that texts are temperate in tone and free of vituperation. They should also ensure that arguments are either supported by express evidence/arguments or identified as speculative. 'Do not pretend conclusions are certain that are not demonstrated or demonstrable.' (T.H. Huxley).

Before being accepted for publication, submitted texts will be reviewed by the Editor and any appropriate advisors. Where improvements or changes are desirable, the editorial team will work with authors and make constructive suggestions as to amendments.

Authors should submit an electronic, double-spaced copy of their article or letter.

When referring to another work, authors should:

• Cite only the surname, year, and (where appropriate) page number within the main text: e.g. '...according to Hyman (1985: p. 123), the results of this test were not convincing...' or

- "...according to Bruton (1886; cited in Ross, 1996)..."
- List multiple references in date order: e.g. '...a number of studies have thrown doubt on this claim (Zack, 1986; Al-Issa, 1989; Erikson, 1997)...' In the case of electronic material, give the author and the date the material was accessed on line
- Place Internet addresses URLs in angle brackets: e.g. http://www.nothing.org

A complete list of references in alphabetical order of authors' surnames should be given at the end of the article. The list should be compiled using the following conventions:

- Articles: Smith, L.J. (1990) An examination of astrology. Astrological Journal, 13, 132-196.
- Books: Naranjo, X. (1902) The End of the Road. London: University of London.
- Chapters: Griff, P. (1978) Creationism. In D. Greengage (ed.) Pseudoscience. Boston: Chapman Publishers.
- Electronic material: Driscoe, E. Another look at Uri Geller. http://www.etc.org. Accessed 21 April 1997.

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Finally, authors may use 'sceptic' or 'skeptic' (and their derivatives) according to their preference.

For further information contact the Editor Michael Heap at m.heap@sheffield.ac.uk.

Editor's Announcement

ASKE's *Skeptical Intelligencer* is a quarterly magazine. Paper editions are available on request (see front page). The magazine is widely circulated electronically to skeptical groups and individuals across the globe. Formal and informal articles of interest to skeptics are welcome from people of all disciplines and backgrounds. Would you like to contribute a regular column in your specialty or area of interest – e.g. an 'On the Fringe' feature? Or would you like to take over one of the regular features? Please get in touch with the Editor if you wish to make a contribution to skepticism in this way.

REGULAR FEATURES

FROM THE ASKE CHAIRMAN

Michael Heap

Three myths recently debunked

There are a lot of believed-in myths or popular unfounded beliefs out there that provide skeptics with plenty of work. Sometimes, sadly, with little to show for it - cf. Randi's metaphor of 'the unsinkable rubber duck' - though this should not restrain us. Below I pass on some recent discussion on BBC's Radio 4 about two believed-in myths, plus details of a recent report on mythical foxes in Tasmania. Note that I don't call them urban myths; I believe that an urban myth is something different. (Another example of such a myth of the type presented here, which I have previously analysed [see note 1] is that the Nazis, and for that matter the Russians under Stalin, put fluoride compounds in the water supply to subdue the population.) We cannot be certain that some of these beliefs are indeed myths, but we can point to a complete lack of evidence for them.

The four-minute mile psychological barrier

May 5th this year was the 60th anniversary of Roger Bannister's achievement in becoming the first person to record a time under 4 minutes to run one mile. His official time was 3mts 59.4secs. Since then, for various reasons, the record time has been gradually lowered but not in the last 16 years, the current holder being Hicham El Guerrouj with a time of 3mts 43.13secs in 1999.

BBC Radio 4's programme *More* or *Less* marked the anniversary with a bit of myth-busting. The presenter, Tim Harford, announced the following quote from motivational speaker Anthony Robbins' book *Awake the Giant Within*:

Bannister destroyed forever a forbidding belief barrier. Almost as soon as he destroyed that barrier others pulled to after him. Within one year of his triumph, 37 other runners also broke the 4-minute mark.

This is the kind of 'gee whizz' anecdote that those who earn their living by promoting 'the power of positive thinking' like to tell us.

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What is the truth? Mr Robbins was asked by *More or Less* to confirm his figure and he reduced this to 24 in the first year and 37 within 2 years of the event. However it seems that the records indicate that only 5 other people broke the barrier in the 12 months following its being breached, one being John Landy, around 6 weeks after his great rival. Five runners broke the barrier the following year. It was not until 1960 that 24 people had achieved this, and it was 8 years before the total had reached 37.

Phyllis Pearsall and The A-Z of London

Ah well! Never let the truth get in the way of a good story, as they say. Another case in point concerns Mrs Phyllis Pearsall (1906-1996), who is credited with creating the A-Z map of London in the 1930s. According to her obituary in the *Independent (note 2)*:

(I)n the mid-1930s the A/Z (as it was originally called) was conceived, and during the gestation period Pearsall walked some 23,000 streets of London, collecting street names, house numbers along main roads, bus and tram routes, stations, buildings, museums, palaces etc., in addition compiling the street index in alphabetical order. Finally after years of intensive labour, rising at

5am and walking for 18 hours a day, the London A-Z was born in 1936. It was researched, printed and distributed by Phyllis Pearsall alone....

Other obituaries replicate this heroic account of Mrs Pearsall's work, likewise the Oxford Dictionary of National Biography and the online encyclopaedia Wikipedia (note 3). It is reported that the impetus for her taking on this mammoth task was that in 1934, while living alone in Horseferry Road, she became lost on her way to a party in Belgravia and was soaked in a storm. A biography entitled Mrs. P's Journey: The Remarkable Story of the Woman who Created the A-Z Map by Susan Hartley (2002) repeats the sensational story (note 4). And recently there has been a musical about her achievements - The A-Z of Mrs P (note

Well, apparently this account of how Mrs Pearsall came to compile the maps of London streets is largely mythical. In brief, she was assisted by several people and relied on existing maps and not 'walking some 23,000 streets of London'. Mr Peter Berthoud, a London historian, is writing a fair and balanced account of her role in creating the A-Z of London (notes 6; see also *note* 7). He appeared on Radio 4's Today programme on 20.5.14, along with Jimmy Wales, the cofounder of Wikipedia, to talk about Phyllis Pearsall and the perpetuation of believed-in myths in general.

It does seem that the debunking of the more florid accounts of Mrs Pearsall's contribution may have established another myth, namely that she herself was responsible for the creation of these myths (see *note* 8 for an example). However, Mr Berthoud has studied her autobiographical accounts and considers that these largely exonerate her from being the

author of her own mythology. He is currently unable to locate a convincing source of this.

The foxes that never were

It was recently reported that for the last 11 years, £27 million has been spent by Tasmania attempting to eradicate foxes that were never there in the first place. According to a report ('An independent scientific review of the Tasmanian fox eradication program'-see note 9):

In 2001 the Tasmanian Parks and Wildlife Service reported that 11-19 foxes had been deliberately released into the Tasmanian environment. Tasmanian Although aPolice investigation later found no evidence to support this claim, a fox eradication program (FEP) based upon widespread buried baiting with 1080 poison (sodium fluoroacetate-Ed.) was underway by 2003. Key to the claims concerning the presence, distribution and eradication of foxes in Tasmania has been evidence based on opportunistically acquired post mortem specimens, anecdotal fox sightings (there were over 3,000 of these-Ed.) and scat DNA data.

The report's summary includes the following advice:

The claim that the FEP was based upon timely precaution due to a perceived threat is difficult to justify when the nature of this threat was initially contingent upon anecdotal and flawed information...Reliance upon subjective, anecdotal or opportunistically acquired information carries a risk of having no clear justification for the start or finish of precautionary action and no

empirical measure of its success. The FEP approach is a salient warning of how evidence based risk management is essential in invasive species management.

The above scientific report provides salutary reading for anyone seriously committed to the idea that large cats are roaming over great swathes of our countryside.

In the UK, for many years there have been frequently reported anecdotal sightings of large cats (lynxes, panthers, pumas, and even lions) for which hard evidence (capture, live or otherwise) has been remarkably unforthcoming. The above scientific report provides salutary reading for anyone seriously committed to the idea that large cats are roaming over great swathes of our countryside.

Notes

1.http://www.mheap.com/Flouridation %20and%20the%20Nazis.pdf 2.http://www.independent.co.uk/news/ obituaries/obituary-phyllis-pearsall-1312265.html 3.http://en.wikipedia.org/wiki/Phyllis_

Pearsall
4.http://www.amazon.co.uk/Mrs-Ps-

4.http://www.amazon.co.uk/Mrs-Ps-Journey-Remarkable-Story-Created/dp/0743408764

5.http://www.broadwayworld.com/uk-regional/article/THE-A-Z-OF-MRS-P-to-Play-Southwark-Playhouse-Begin-20-Feb-20131108#.U38PdHJOXZ4

6.<u>http://www.peterberthoud.co.uk/2014/05/real-story-of-az-maps-by-phyllis-pearsall/</u>

7. There is also a more critical account by Mrs Pearsall's half-brother Alex Gross and other members of the family at:

http://www.untoldsixties.net/a_to_z.ht
m.

8.<u>http://greatwen.com/2014/01/06/phyllis-pearsall-and-searching-for-truth-in-the-a-z/</u>

9.<u>http://www.tasmanianfox.com/Tasmanian_Fox/HOME.html</u>

Follow-up to 'A preliminary test of a claim of communication by spirits through a computer'

The above article, featuring a paranormal claim by 'C', appeared in the last issue of the *Skeptical Intelligencer*. C has since informed me that, although she obtained lancet needles for the purposes of drawing drops of her blood, she did not use them. Also the catalogue of samples of blood-stained material contained scanned copies and not the originals. I am happy to make these corrections.

Further discussions with C of the possible reasons why this preliminary test did not give the predicted results have led me to conclude that, unless the effects (changes in an audiorecording of external 'silence' stored on a computer) are clearly observable then there is not a satisfactory scientific test of the claim. If anyone has any further ideas on this I am happy to consider them.

LOGIC AND INTUITION

Recently, and coincidentally, I came across two instances where a piece of statistical information may tempt us into jumping to the wrong conclusion because we fail to take into account an important detail that is missing.

Are elderly drivers safer?

The first of these is as follows. On Fridays around 5.50 p.m. I am usually in my car listening to Radio 4 (don't you ever listen to anything else? - Ed.),

and at that time there is usually a session devoted to listeners' opinions on various matters that have featured in the news programmes. The listeners' contributions are generally informative, sensible and often amusing but it is also interesting to be alert to some of the misinterpretations and biases in the reasoning behind their opinions and their complaints and criticisms.

Earlier this year there had been some discussion on one of the programme about whether the age at which one reapplies for a driving licence should be raised from 70 to 80. This idea was based on statistics from insurance companies showing that while 8% of drivers are 70 and over, they are only responsible for 4% of 'crashes', whereas the 15% of drivers who are under 30 are responsible for 34% of

crashes, clearly a disproportionately higher accident rate than the elderly.

Well, it seems reasonable to conclude from this, as some listeners did, that you are safer in a car driven by an elderly driver – probably because he or she is likely to be more cautious and responsible – than in a car driven by a younger driver, who perhaps is more likely to be irresponsible and reckless.

This may be the case, but then some listeners pointed out that those people who came to this conclusion had overlooked something of a statistical nature that is crucial. What was it that they pointed out?

League tables for cancer

The second example on the theme of missing information came up in Chapter 11 of the book *Thinking Fast and Slow* by Daniel Kahneman. It concerns a league table of the incidence of kidney cancer in the 3,141 counties of the USA. The author informs us that:

The counties in which the incidence of kidney cancer is lowest are mostly rural, sparsely populated, and located in the traditionally Republican states in the Midwest, the South, and the West.

This information immediately causes us to seek an explanation in, for example, the healthy rural lifestyle

enjoyed by people who live in these areas. But just as in the previous example, before we can jump to this conclusion there is a statistical detail that needs to be taken account of. What is this?

See page 17 for the answers.

Follow-up to previous item

Many thanks to readers who responded to the thought experiment in the previous issue. They were all very interesting and diverse. I am getting round to putting these together.

MEDICINE ON THE FRINGE

Michael Heap

Medical Innovation Bill

From the *Daily Telegraph* (online):

Since the death of his wife, Josephine Hart, to ovarian cancer, Lord Saatchi has campaigned to change the law so that, with consent, doctors can treat patients dying of cancer and other diseases with new and innovative treatments, instead of having to stick to failed standard procedures, as the law currently requires.

Well, if you choose your words as carefully as the writer of the above piece, then few people are likely to object. But, despite the support of other powerful figures, and even the government itself, the Medical Innovation Bill has provoked alarm in many quarters because of the fear that if passed, it will give licence to doctors to try out untested treatments and leave patients at the mercy of 'mavericks and quacks'. One influential authority who has expressed these concerns is Mr Robert Francis OC who headed the inquiry into the mistreatment of patients at Stafford Hospital (report published in February 2013). According to Mr Francis:

To legalise the taking of a step which may result not only in disappointment but in some cases actual injury, while at the same time removing the right to compensation, is to do a disservice to patients rather than give them real hope. There does not appear to be anything to stop the bill applying to treatment and practices believed to be dangerous to patients and which are not innovative, but which have been tried and found wanting.

He goes on to point out that 'responsible medical innovation' is explicitly permitted under current laws and if doctors do not understand this:

...they should be corrected by guidance, not by legislation which exposes vulnerable patients to unjustified risks.

For details of the bill go to: http://services.parliament.uk/bills/2012 -13/medicalinnovation.html

and

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/285325/The_Medical_Innovation_Bill

.pdf

For skeptical commentary and opinion see the following three sites:

http://goodthinkingsociety.org/

http://www.quackometer.net/blog/2014 /04/the-saatchi-bill-a-quackscharter.html

http://www.ministryoftruth.me.uk/2014/06/04/what-saatchi-doesnt-tell-you/

To pee or not to pee

It's come round again. With the recent invasion of barrel jellyfish around the shores of the UK has come the old wives' tale that, should you have the misfortune to be stung by one, urinating on the wound will soothe the pain. And the lesson, as always, is don't. It won't help and, like freshwater, could make it worse. Vinegar is good but if you don't happen to be carrying any then plain seawater can be effective.

Red wine off the 'health benefits' list again

In JAMA Internal Medicine, Professor Richard Semba of John Hopkins University and his colleagues have published results which failed to demonstrate that a key compound in red wine that was thought to protect the heart does not help people live longer. The compound, resveratrol is an antioxidant found in grapes, red wine,

peanuts, chocolate and certain berries, and it has been credited with a large number of health benefits in various studies. But the study on a large group of Italians - who consume a diet rich in resveratrol - found that they do not live longer and are just as likely to develop cardiovascular disease or cancer as individuals who consume smaller amounts of the compound. Resveratrol concentration was not linked to inflammatory markers, cardiovascular

disease or cancer rates. Says Dr. Semba:

The story of resveratrol turns out to be another case where you get a lot of hype about health benefits that doesn't stand the test of time. The thinking was that certain foods are good for you because they contain resveratrol. We didn't find that at all'

And, according to the paper:

Although annual sales of resveratrol
supplements have reached \$30

million in the US alone, there is limited and conflicting human clinical data demonstrating any metabolic benefits of resveratrol.

For a summary of the study visit; http://www.medicalnewstoday.com/articles/276718.php

But another study by researchers in the medical school at... (that's enough studies – Ed.).

LANGUAGE ON THE FRINGE

Mark Newbrook

More (partly justified) skepticism about the linguistic mainstream

The anti-prescriptivist approach to dialectological sociolinguistic and variation, best exemplified in recent decades by the pioneering work of William Labov, arose as a professional reaction to very widespread folklinguistic attitudes. Labov and his academic followers have argued since the early 1960s that non-standard native-speaker usage (as in Cockney She ain't 'elpin') is **not** linguistically inferior to the equivalent standard usage (She isn't helping) as many nonlinguists believe.

While there is obviously a valid role for standard varieties of languages (see 'Atheism, Ortholexics and maps of Australia' below), the Labovian view is clearly largely correct in its own terms (by what criterion can spontaneous, systematic native-speaker usage - especially if unambiguous and otherwise clear - possibly be deemed simply 'bad' or 'wrong'?); but the strongest versions of it have been challenged by writers such as John Honey, a historian with knowledge of linguistics. Honey has proposed that there is still a good case to be made (at least in social terms) for a considerable degree of prescriptivism (especially regarding accents), and that the mainstream academic sociolinguistic program which involves the

wholesale modification οf folklinguistic attitudes to accent and usage differences is in fact unrealistic (even though it appears to fit in well with current egalitarian notions on a broader front). And, although Honey himself clearly overstates his case in places, some of his points appear at least arguable. For instance, he suggests with some persuasion that Labov exaggerates the coherence of some texts delivered in non-standard usage (such as a much-quoted diatribe on the (non-)existence and nature of God delivered in 'Ebonics' = African-American Vernacular English: So you know it ain't no black god doin' that bullshit, etc.) and the contrasting lack of coherence in some passages couched in more standard language (such as a similar discussion of the reality of witchcraft - albeit more credulous, and admittedly verbose and undisciplined in Standard American English).

Although Honey himself clearly overstates his case in places, some of his points appear at least arguable.

Many sociolinguists were dismayed and/or offended by Honey's views; see for instance Peter Trudgill's review at http://www.phon.ucl.ac.uk/home/estuary/honeyrev.htm. In 1991, soon after

Honey came to prominence, he and I were both attending a conference in Brunei, where I was the only qualified linguist who would eat or have coffee with him (while making it clear that I did not by any means agree with everything he said). This surprised some people there, and I myself came to be regarded with a degree of suspicion.

References: William Labov, Sociolinguistic Patterns (Philadelphia, 1972) and Language in the Inner City (Philadelphia, 1972); John Honey, Language Is Power: The Story of Standard English and its Enemies (London, 1997) and Does Accent Matter? The Pygmalion Factor (London, 1989).

The iconoclastic mainstream linguist Geoffrey Sampson has argued in similar vein to Honey that the wellknown claims - some of them emanating from sociolinguists - to the effect that former US President George Bush's diction (sometimes mockingly called 'Bushonics') is especially incoherent are exaggerated. (Of course, these claims are often made for political reasons.) See Sampson's The Instinct' Debate 'Language (London and New York, 2005).

Greek words but not Greek, Latin words but not Latin

Some texts which are said to be or appear to be in specific languages are

not. Some of these are spoofs; one such is the pseudo-Latin rhyme beginning (in one version) e sybille eres ago es in aro, fortibus which is meaningless as Latin but in fact reads 'Eh, see, Billy, 'ere's a go, forty buses in a row!' (see Editor's note). But some such texts are seriously intended or interpreted - and some of these, despite first appearances, are not really in any language! One example, alleged extraterrestrial involving of knowledge ancient human languages, appears in the work of Paul Potter, who upholds the veracity of the very strange 'messages' which the well-known UFO-abductee **Betty** Andreasson (now Luca) reportedly received (over a long period) from alien entities. (Readers with long memories will recall an earlier reference to this case in this column.) Most of these 'messages' are simply strings of words familiar or otherwise, drawn (often with some distortion) from Latin, Greek and other languages; most of them are Latin or Greek words or English/pseudo-English words based apparently based on languages. Where a word exists in inflected forms in the source language, the citation (dictionary) form is virtually always the one which appears here, and there is no grammatical structure. Potter translates the sequences, adding grammar as is convenient to his proposed message. It is not at all clear why aliens would communicate like this; if they knew Latin or Greek, they could surely write in these languages. Human fakers (who may not actually be familiar with Latin or Greek but who could easily possess dictionaries and a conversion table for the Greek alphabet) must be suspected.

There are in fact other cases involving UFOs where a string of the citation forms of words taken from a foreign language is presented as if it were a meaningful sentence.

There are in fact other cases involving UFOs where a string of the

citation forms of words taken from a foreign language is presented as if it were a meaningful sentence. One such case arose in the Garden Grove case of 1975. abduction acknowledged as a hoax. The sequence (allegedly channelled) was nous laos hikano (early Greek: 'mind', 'people' as in we the people, '[I] come'). A gloss 'I come in the mind of man' was offered: but all three forms are citation forms, and the grammar has merely been added by the translator.

The cultural historian Ronald Hutton found a similar case in a body apparently modern (1940s?) incantations using Latin words. Most of the incantations were genuinely in proficient Latin (and of great interest), but one of them again consisted only of a string of Latin words with no grammatical structure. As Hutton remarks, all that was needed to write 'text' was an English-Latin this dictionary.

References: Paul Potter, Gravitational Manipulation of Domed Craft: UFO Propulsion Dynamics (foreword by Betty Andreasson/Luca), (Kempton, IL, 2008); Alvin H. Lawson, 'Garden Grove (California) Abduction Hoax', in The Mammoth Encyclopaedia of Extraterrestrial Encounters, 2nd edn, ed. Ronald D. Story (London, 2002), pp. 258-60; Ronald Hutton, The Triumph of The Moon (Oxford, 1999), p. 307.

More alien Greek

Another UFO case involves what appears to be a single Modern Greek word (in Greek script) in the written material displayed on artefacts supposedly associated with Roswell Incident/Alien Autopsy case. However, the word includes a common spelling error grounded in ignorance of many less-educated native speakers about the origin of the form. (See http://www. metacafe. com/watch/321906/look_at_this_ufo_c rash.) This again suggests possibility of fakery.

Atheism, Ortholexics and maps of Australia

When I was a member of Victorian Skeptics (1991-2003), I was active on a

number of atheist bulletin-boards, some of which strayed into general One of these skepticism. controlled by a group of atheists based in South Australia: their leader was Keith Cornish, a former Baptist preacher who had transferred his fervour into his new belief-system. At Australian National Skeptics Conference of 1999 in Adelaide (billed as the last such conference in mock anticipation of the imminent Millennium and the dreaded Bug!), this man exhibited posters proclaiming a dogmatic and highly specific atheist manifesto which bizarrely included various seemingly irrelevant scientific ideas such as the Big Bang. (Surely some genuine atheists might - like some qualified astronomers such as Halton Arp – reject this notion, or any other specific currently orthodox scientific theory, without commitment to atheism per se being thereby impugned?) Cornish and his followers had no time at all for anyone who espoused any religious belief, and at one stage identified me (an atheist since childhood) as a Christian 'mole' merely because I suggested that they might usefully treat thoughtful and well-informed believers as worthy opponents rather than as idiots.

I decided to take things further and volunteered to speak lightheartedly on 'Nutters I Have Known' (linguistic and other).

Another person who posted in these fora was also a supporter of the minority view that the Portuguese were in Australia as early as 1505-10 (not impossible but not proven) – and of a loosely associated and much more obviously 'fringe' theory that some features of the Australian coastline, as seen on maps, actually represent the heads of animals, etc. (supposedly by design). This contributor too would not countenance my objections, and at one point railed at me in public when I challenged her at a seminar she gave.

Yet another contributor to these fora was a (moderate) prescriptivist

thinker on language who proposed a new branch of linguistics to be called Ortholexics; this would specify the meanings of words. The meanings he identified as 'true' were often in fact merely the older meanings of the words, often now obsolete, or else meanings which were seen as preferable for reasons good (clearer, less ambiguous, etc.) or bad (those meanings which, by way of historical contemporary chance, apply in standard varieties). This person and his supporters were disappointed and indeed a little cross when I raised the standard descriptivist objections to his proposal (see 'More skepticism' above) - even though I cheerfully granted that languages used as English is used need standard varieties, that this implies a degree of (rational and carefully-expressed) prescription, and that responsible linguists can properly assist with this (as many Melbournebased linguists, including frequently did, notably at a regular conference called The Style Council). I was even accused of 'muddying the waters' when I acknowledged that there is a clear case for a degree of prescriptivism in technical domains, where precise, unambiguous usage is required.

More fun in Melbourne

Every southern autumn, Melbourne stages a huge comedy festival which attracts many major international performers. One of the many buildings which host the sessions is the Trades Hall in the inner suburb of Carlton, where there are several suitable meeting-rooms. The Melbourne Atheist and Existentialist Societies, both long run by the indefatigable David Miller, used to use these rooms for their monthly meetings, each of which features a talk; during the Festival these sessions were surrounded by comedy acts in nearby rooms. In 1999 one speaker appeared to have decided to get into the festival spirit; his talk had an over-the-top deep-ecological/postmodernist and he himself arrived dressed as a tree. However, the talk itself proved to be a serious treatment of the issues in

question! The next year, I decided to take things further and volunteered to speak light-heartedly on 'Nutters I Have Known' (linguistic and other). better-than-usual advance publicity I managed to fill the room with festival-goers emerging from The Mighty Boosh, Boothby Graffoe etc. and eagerly choosing by way of a change a rather different but still overtly comedic performance advertised at the door as 'free' (accurate) and 'better than the footy' (arguable!). The session was well received and indeed well reviewed, much to my relief.

Riders to recent entries

Here are some further points arising in response to comments made on my material:

Reform of English Spelling (Vol. 15, 2012)

In some cases, specific inflected forms of words may be homophones, homographs or homonyms, even if the dictionary forms are not, and vice versa. Thus, rode and rowed in I rode home and I rowed home are homophones, and the orally-uttered sentence is thus ambiguous, while the dictionary (present tense) forms ride and row are quite distinct. Naturally, strictly phonemic spelling systems would not be able to distinguish the past tense forms. Another English example: the plurals of the nouns axe and axis are pronounced differently, as of course are the singulars, but are homographs (axes).

Welsh Heads and Phones (2013:1)

Another case parallel with Welsh ff versus ph. In German, the vowel-letter \ddot{a} , bearing an umlaut, is pronounced exactly the same as e (they represent the very same phoneme); the former is used only where the word in question is an inflected or derived form of a stem which itself displays a without an umlaut. Thus, $M\ddot{a}nner$ is the plural of Mann ('man'; note the similar effect in the English plural form men); the unrelated homophonous word Menner ('cattle-drover'; now also a surname), which has mo associated form with a, displays e.

Does Being Multilingual...? (Part 1) (2013:2)

Other English verbs which, like think, 'attract' negatives out of late-sentence subordinate clauses include want and seem (I never want to see you again; I can't seem to get this open). Another issue involving the 'scope' of negatives involves the word many. Surprisingly, the passive-voice sentence The target wasn't hit by many arrows does not mean the same as its active-voice 'equivalent' Many arrows didn't hit the target ('few arrows hit the target' versus 'a lot of arrows missed the target'; the former says nothing about how many missed, the latter nothing about how many hit).

Bigfoot-Talk 2 (2013:4)

An example of English treating /ju:/, structurally, as a single phoneme: /ju:/ in words like assume alternates with a (short) simple vowel phoneme in assumption, etc., just like long-short vowel-phoneme-pairs in word-pairs such as serene and serenity. But note also that in many accents (East Anglian, Cockney, General American and most other American accents, etc.) most cases of /ju:/ (the largest set of exceptions are word-initial, as in you or use) appear instead as the single phoneme /u:/; e.g., new appears as /nu:/ rather than R.P. ('BBC') /nju:/.

The semantic property of ambiguity does not distinguish non-standard ('ungrammatical') English from standard.

More Fun Things 2013:4

I remarked that the non-standard sentence Jo go home at 5 p.m. is not normally ambiguous — but in some non-native usage (though **not** usually in non-standard **native** usage, as for instance in East Anglia) it **might** be ambiguous, in that it could correspond either with Jo goes home at 5 p.m. (present tense) or Jo went home at 5 p.m. (past tense). In such cases, a semantic issue naturally **does** arise. But semantic issues of **this** kind (nonlogical) **can** arise in native (including

standard) usage as well. For example, standard forms such as *Jo goes home at 5 p.m.* have a range of more subtly distinguished senses: habitual (regularly, every day), near-future (today) by arrangement, etc. Thus the semantic property of ambiguity does not distinguish non-standard ('ungrammatical') English from standard.

More Fun Things 2014:1

The elements of written numerals such as 18 are, as noted, in the 'wrong' order when read off as English eighteen and similar forms in some other languages. But of course some languages, such as Hebrew, are written right-to-left: in such cases, all multidigit 'Arabic' numerals, for example year-names such as 2014, appear in the order' in running However, this seems to generate little difficulty; likewise when such multidigit forms replace the traditional sets of logographic number-characters in modern written Chinese.

More fun things

Some taboo words are regarded as much 'stronger' in some communities than in others. My grandmother Eluned (1899-1986) was from near Llangollen in North Wales, where any reference to the Devil was perceived as very shocking. During a row, my grandfather once told her to 'go to the Devil' (as a Cestrian he pronounced it *Divil*); she was seriously distressed, sent him to Coventry for days, and was barely able to tell my mother what he had said ('I don't really like to repeat it').

Incredulous, the Scot rejoined:
'You dinnae shoot a moose!
You catch it wi' a wee trap in
the hoose!'.

Another member of my Welsh family, growing up bilingual near Denbigh, used to invent English words, to the frustration of her mother. She had no trouble at all saying *ele-* or *phant*, but when repeatedly asked to say *elephant* she stubbornly enunciated *hammanun* every time!

Talking of Welsh relatives: I was once at a conference where a lastafternoon paper on 'Welsh Relatives', which we all assumed would deal with the Welsh words equivalent to who, which, etc., began 'Well, I'm going to start with my Auntie Blodwen ...'.

Most Scots are not bilingual but their English can be interesting! My father, injured during the 1944 D-Day landings, found himself in an army hospital, with a Canadian on one side and a Scot on the other. The Canadian remarked that after the war he would be resuming his pastime of going shooting moose with his brother. Incredulous, the Scot rejoined: 'You dinnae shoot a moose! You catch it wi' a wee trap in the hoose!'. (This example illustrates part of the dreaded Great Vowel Shift, of which more on request!)

More next time!

Editor's note

The reader may like to try a French example: Par d'elle yeux Rhône que nous

REVIEWS AND COMMENTARIES

Anomalistic Psychology: Exploring Paranormal Belief & Experience by Christopher C. French and Anna Stone, 2013. Basingstoke: Palgrave Macmillan, pp. 348. ISBN-10: 0230301509, ISBN-13: 978-0230301504.

Reviewed by 'Swiftsure'

This is a book that gives an impressive insight into why belief in the paranormal is widespread, despite the fact that there is no confirmable evidence that ghosts, telepathy and other paranormal claims have any existence in reality. Why do people believe – often passionately – that their paranormal experiences must be true, even though some of their beliefs sometimes border on the absurd? *Anomalistic Psychology* attempts to answer that type of question.

The authors - Christopher C. French and Anna Stone - make it clear that their hypothesis is that the paranormal is not real, and also make it clear that, like any scientific hypothesis, it might just be wrong. They are not claiming that the paranormal is certainly not real; rather, they regard it as improbable, given the fact that there is no underlying theory offered by parapsychologists to support their paranormal claims, and of course positive claims by parapsychologists have not been successfully replicated

by mainstream science. The paranormal is *probably* not real, and they take their research forward on that basis.

The book itself is not a 'debunker's handbook'. Instead, it is primarily a textbook designed to be used by students of psychology – in particular, Anomalistic psychology in relation to the thought processes that lead people to believe in and reinforce their paranormal and even supernatural claims. It is, however, a book that can be read and understood by an

intelligent person who would like to find out more about a subject that is controversial, to say the least, and it guides the reader in a logical way through the maze of psychological traps that most of us can easily fall into.

For sceptics, the book is perhaps particularly useful as a way to understand their own scepticism. French and Stone mention those they call 'uninformed sceptics', who are maybe too eager to attack paranormal claims and sometimes the people who hold those cherished beliefs. It isn't helpful for scepticism if some sceptics simply go on the offensive – accusing believers of being stupid, gullible, fraudulent and so on. It is probably more fruitful to discover why believers think as they do, and then try to find a way to explore those beliefs and find out why they are held so strongly, rather than trying to simply debunk them.

It's easy to find many books that are aimed at sceptics, and they are generally very good at showing why particular paranormal claims probably not true. Famous hauntings or UFO sightings, for example, are commonly featured in such publications and show why some claim or other is demonstrably false. But the fact that a particular paranormal claim is proven to be wrong does not invalidate all paranormal claims.

French and Stone mention those they call 'uninformed sceptics', who are maybe too eager to attack paranormal claims and sometimes the people who hold those cherished beliefs.

Anomalistic Psychology takes a more global view, and examines the various cognitive biases that everyone is susceptible to. Sceptics, I would suggest, have no special immunity from error in logical thinking, and that is something worth keeping in mind when reading this book: sceptics often tend to pride themselves on their

critical thinking skills, but if this book is read properly, even sceptics should gain an insight into their own thought processes, and some, like me, might even (reluctantly, perhaps) admit to recognising some of their own biases in certain areas. (But that's not a bad thing if we are all genuinely trying to discover the objective reality that must be out there.)

Most sceptics are familiar with the more common cognitive errors such as confirmation bias and subjective validation, but the authors delve further, examining the effect of age, race, socio-economic status, crosscultural influences and a host of other possible factors that might affect a person's propensity to believe in the paranormal. Some of those factors show no significant relationships, or the results of such studies are sometimes ambiguous; some research, however, shows up some interesting findings.

Among the believers, it turns out that that men and women, for the most part, are not much different in their belief in various paranormal phenomena, but women tend to believe more than men in life after death, spiritualism, precognition, lucky superstitions. charms and Men, however, are more likely to accept the possibility of UFOs, alien visitation and cryptozoology – things that are not scientifically proven, but at the same time are not contrary to scientific principles. In other words, men are more likely to believe in some unproven possibilities, but women have a stronger belief in scientifically implausible phenomena. This could be due to gender roles that men and women are encouraged to adopt - men tend to be more interested in science, so they may be more accepting of alleged phenomena that have at least some level of scientific plausibility.

But the book contains many examples of paranormal beliefs and the possible reasons why those beliefs are held onto. Are there maybe developmental factors? After all, children are brought up with stories about magic and fairies, and often get

the 'hard evidence' of Father Christmas and the Tooth Fairy. True, parents don't encourage those beliefs indefinitely, but what about their own beliefs and the influence they have on impressionable minds over time?

Whatever is going on, Anomalistic Psychology demonstrates that the reasons why people believe unproven paranormal phenomena cannot be distilled down to a few handy catch-phrases. People creatures influenced complex innumerable factors - environmental, biological, peer groups, mental states, reinforcement by TV 'documentaries' that promote unproven claims, and so on and on.

Anomalistic Psychology demonstrates that the reasons why people believe in unproven paranormal phenomena cannot be distilled down to a few handy catch-phrases.

There is little doubt that prior important. beliefs are also very Someone who already believes in ghosts is more likely to perceive something unusual in terms of that belief, rather than try to find an actual cause. There is a long list of fallacies that people fall for – not because they are stupid, but because they are not aware that their interpretation of what they perceive might have another, more likely, explanation. Most people are not good at calculating probabilities, for example, coincidences are often given more meaning than they deserve; illusory correlations pass them by; imperfect memories are relied on as though they were just like a video playback – even false memories can be created that seem as real as actual events.

All of us also process information non-consciously, unaware that our experiences are being processed by the brain as we go along.' We can pick up information without being aware of it, and when it comes to mind later, it can be too easy to assume that some piece of knowledge was acquired by

paranormal means if we have no recollection of how we came about it.

Overall, Anomalistic Psychology gives a fascinating insight into the ways that people perceive (and misperceive) the constant influx of information and experiences they contend with every day. Their interpretation of various events is coloured by an astonishing array of

influences, few of which are immediately available to conscious awareness, hence the tendency for most people to say with (usually unjustified) confidence, 'I know what I saw/heard/felt...etc.'.

The book has, of course, a comprehensive list of references, and each chapter includes a brief list of recommended further reading. There is

also a good index, so looking up various subjects is easy, and there is a useful glossary of terms used in the book. It is an essential textbook for students of Anomalistic psychology, but also an excellent reference book for sceptics. It would be a useful addition to any sceptic's bookshelf.

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The Norm Chronicles: Stories and Numbers about Danger by Michael Blastland and David Spiegelhalter. 2013. London: Profile Books, ISBN 978 1 84688 620 7.

Reviewed by Ray Ward

Meet Norm, Prudence and Kelvin. Each chapter in this book begins with a story about them facing hazards, demonstrating danger, risk and chance. For people, say the authors, probability doesn't exist. They don't do what the numbers seem to suggest they should, feeling safe when in danger and vice versa; numbers matter less than feelings of power, freedom, values, likes, dislikes, and emotions. Many more topics than can be mentioned here are discussed, and I can only pick a few. Are natural risks worse than unnatural ones (travel, technology, obesity)? There is great concern over very rare events. Children considered safe with their parents (who in fact present the greatest risk), while enormous efforts are made to protect them from strangers, though the chance of a stranger trying to abduct a child is small, that they will succeed very much smaller, that a child will be murdered smaller again, that the murderer will be a stranger even smaller still. But still we have insanities like the man threatened with 'child protection issues' because allowed

daughter, 7, to walk 20 metres from home to a bus stop every morning unaccompanied. Yes, the rare cases are horrific, and their rarity is no comfort to the parents, but they stand out precisely because they are rare: you will never see the headline 'No children killed on their way to school The unusual disproportionately reported, so we think it more common, and vivid events are recalled not merely more vividly but in the belief there are more of them. Clusters of incidents mislead, though they are normal and occur by chance; the alternative, a perfectly regular pattern, is obviously absurd. There is a 'philosophy of protection' (every accident is seen as someone's failure), not a 'philosophy resilience' (the ability to thrive in world where bad things happen). Reports amending sensational stories rarely attract the same attention as the originals. Bad occurrences coinciding with another event are seen as connected when often they are just coincidences. The death of a girl of 14 after an HPV vaccine injection is still

used as 'proof' of the dangers of the vaccine, though it was revealed three days later that she died of cancer unrelated to the vaccination. There is the 'effect heuristic': if you like an idea you find it harder to see how it might affect you. Caution can have unintended consequences: after 9/11 many people took to their cars instead of flying, and more people than usual were killed. Health and safety myths are discussed: it isn't illegal to throw sweets to the audience at pantomimes, are conker fights banned. 'Radiation' is a bogey word, but it is in fact everywhere; you get the same dose from eating a big banana as from going through an airport whole-body scanner. 'Chernobyl' is even more emotive, but a UN report said that there is no persuasive evidence of health effects on the general population except for easily-preventable thyroid cancer in children from contaminated milk. The dose in Fukushima province after the tsunami was, at maximum, little more than the average annual dose to people in Cornwall. This is an excellent and thought-provoking book.

Egyptian Hieroglyphic Decipherment Revealed: A Revisionist Model of Egyptian Decipherment Showing Evidence that the Ancient Egyptian Language and the Ancient Hebrew Language are Closely Related by David J. Leonardi, 2013. CreateSpace, pp. 202. ISBN/EAN13:1491271442/9781491271445.

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Reviewed by Mark Newbrook with assistance from Daniel Potter, PhD Researcher, University of Liverpool

In my piece on Egyptian in *Skeptical Intelligencer* 17:1 (2014) (pp. 9-10) I referred briefly to the ideas of David Leonardi. Since I wrote that piece Leonardi has published further on his ideas, and more extended comment appears to be required.

In his previous work, notably in his book Discovering Ancient Biblical Hebrew Word Formation (Las Vegas, 2010), David Leonardi has argued that both Ancient (Biblical) Hebrew and Ancient Egyptian have been badly misanalysed by mainstream scholars. In fact, he rejects the accepted decipherment of Egyptian (starting in the 19th Century), and he believes that medieval and modern scholars (starting with the 'Masoretic' reformers of Hebrew spelling) have failed to recognise or acknowledge major changes in the use of the Hebrew script (a previously unembellished character 'abjad' = an displaying only consonants) and have thereby missed major changes in the language itself (note 1) He holds, in fact, that Ancient Hebrew and Ancient Egyptian were much more closely related than is generally held (on pp. 8, 12, 91-92 in this present book he suggests that the degree of 'overlap' is around 80-85% or even higher; see also p. 26 for his unsupported claim that the Egyptians 'must have had their language based on 22 "letters"). He also claims (pp. 16, 26, 99, etc.) that the Ancient Hebrew language in particular, with its supposedly coeval abjad, was closely equivalent to an implausibly recent universal ancestor language or 'Proto-World'. position itself is very obviously nonstandard; and another of Leonardi's important non-mainstream stances is the associated view that accidental similarities between words in different

languages with similar meanings are very rare (see p. 98, where he discounts the work of the leading mainstream philologist Donald Ringe on this issue, glibly accepting some highly contentious critiques of Ringe's thought) (note 2).

It has to be said at the outset that Leonardi's approach, exposition and use of terminology, in this present book as in his earlier work, are difficult understand. He and I have corresponded extensively over the years, but his use of linguistic terminology is idiosyncratic obscure, and more generally his wording is often strange. (One of his favourite terms is paradigm, which he uses very loosely to refer to almost any set of linked linguistic items; see for example pp. 11, 22, 69, 90, 102, etc., etc., and note the very odd out-ofcontext quotation on p. 202.) Many points concerning his precise intentions remain unresolved, and indeed he often appears to be contradicting himself. In particular, Leonardi's account of early Hebrew morphology and phonology (see *note 1*) remains inadequately explained. It is thus not always possible to evaluate his views with confidence. In addition, the precise relationship between Leonardi's ideas and mainstream thought is frequently obscure; he himself seems to be misled by his grasp of linguistics at a relatively modest level into believing that he fully understands the status and the thrust of mainstream and nearmainstream ideas and how they relate to each other and to the mainstream ideas promulgated by himself and others. And he has effectively ignored my repeated corrections (supported by other qualified correspondents) of some of palpable errors, for instance

regarding the structure of New Testament Greek (a language with which he is essentially unfamiliar); some of these errors persist in the book now under review (note 3).

It has to be said at the outset that Leonardi's approach, exposition and use of terminology, in this present book as in his earlier work, are difficult to understand.

This present book expounds, in much greater detail than before, Leonardi's claim that Ancient Egyptian is closely related to Ancient Hebrew. Leonardi's focus here is mainly upon vocabulary: Ancient Egyptian and Hebrew words, as written and (as far as can be determined) spoken. Like most non-mainstream authors, he pays little attention to matters of grammar, especially syntax – although grammar is often crucial in establishing relationships between languages. He does refer in places to matters of morphology, for instance on pp. 7, 9. Even here, however, he ignores what is known about the Semitic language 'family' which includes Hebrew and its close relative Phoenician (crucial in context); because he sees Hebrew as close to Proto-World, he treats the language, apart from its links with Egyptian, as if it were a language 'isolate' with no known coeval/earlier 'genetic' relatives (like Basque).

Now it is generally agreed by linguists that there is indeed a 'genetic' relationship between the Ancient Egyptian and Ancient Hebrew languages; they are both considered part of the Afroasiatic language family which includes Semitic and some other more specific language families. But

this does not mean that they are closely related in respect of their vocabulary (or other features), still less that they are the same language or even were to any degree mutually intelligible. As noted above, Leonardi regards himself as knowledgeable about historical linguistics, and he even runs a bulletinboard misleadingly called simply Historical Linguistics which promotes his idiosyncratic ideas on decipherment and historical morphology (see also below); but he disagrees with this rather basic and obvious observation. He acknowledges the difference of opinion; but he attempts to explain the mainstream view in terms of the failure of scholars to notice the large number of features allegedly shared by Egyptian and Hebrew (p. 8). However, this attempt depends entirely upon three principles of analysis (listed by him here as (1) - (3); and all three of these principles involve his own undemonstrated (and often obscure) reinterpretations of Egyptian and Hebrew. Leonardi regards the accepted decipherment of Egyptian as based on 'guesswork'; but in fact it is his own account which appears to be grounded mainly in guesswork, as is repeatedly instantiated throughout Chapters 2 (see below), 3 (pp. 30-36), 4 (pp. 37-52) and 8 (pp. 78-82). Here he ignores well-established facts and interpretations, and some of his own proposals appear no less ludicrous.

Indeed, as in his earlier work on Hebrew, Leonardi does not by any means furnish adequate reasons for rejecting the established decipherment of Egyptian and accepting his own interpretation. The repeated success of the established decipherment as a basis for interpreting new texts suggests that it is largely sound. In order to overturn and replace it, Leonardi would need to show (a) that this apparent success is in fact illusory and (b) that his own novel interpretation works at least as well and indeed better, across the same large corpus of data. He does not accomplish either of these tasks, or even seriously attempt them (see also later on his numerical statements on

this front). Indeed, he offers no evidence even for his idiosyncratic method of transliterating Egyptian into the Roman Alphabet. On all these points, he merely states his own decisions ('I find that...', etc.; see for example pp. 20, 58, 60, etc., and for a general statement see pp. 13-14), and in places he dogmatically announces the accuracy of his general 'findings' (for instance on pp. 92, 182).

Even when he is discussing Hebrew, his own language of specialisation, Leonardi's exposition is weak at times.

In his introduction (pp. 7-8, 13-14; see also pp. 28, etc.), Leonardi notes his 'discovery' of Latin influence on the phonetic values of hieroglyphs within cartouches (the oval rings surrounding the names of pharaohs) as used in Egypt in Graeco-Roman times, near the end of Ancient Egyptian history. But this is hardly 'discovery', still less damaging to the established decipherment; the specific cartouche names associated with individuals such as Augustus would of course show Latin influence as they are Egyptian renderings of Latin names. (Greek names rendered into Egyptian display similar effects. See below on Leonardi's claims about Greek in Chapter 9; see also *note 3*.) But this is in no way enough to support Leonardi's notion of more general Latin (or Greek) influence upon the Egyptian language or its spelling conventions, especially in respect of the many common words which long pre-date Graeco-Roman times. Indeed, the use of characters within Graeco-Roman and Ptolemaic cartouches (for instance on the Rosetta Stone) was an impetus for the full decipherment of the hieroglyphic script, not a source of error. More generally, Leonardi appears to be unaware of the phenomenon of loan-word usage in Egyptian and Egyptian svllabic orthography (a distinctive manner of writing loan-words). Interestingly, he

does not include any loan-words proper in his decipherment.

Leonardi's claim (repeated from his earlier material) that 'Coptic Egyptian is a little related, but not related enough so that Egyptian could ever be deciphered with a full knowledge of Coptic, in my estimation' (p. 14) is preposterous. Coptic is the final stage of the Egyptian language (before the introduction of Arabic into Egypt), and thus is merely another phase of the same language as seen throughout pharaonic history. Lexical, semantic and structural changes can be traced throughout Egyptian history up to and including Coptic. More of Leonardi's non-standard and inadequately supported ideas regarding Coptic and the history of the Egyptian language are presented on pp. 85-87, 126-135, 183-188.

Even when he is discussing Hebrew, his own language of specialisation, Leonardi's exposition is weak at times; for example, his very brief reference on p. 17 to the use of consonantal symbols to represent vowels reads as naïve.

In Chapter 2, Leonardi presents in more detail his views on the process of decipherment of Egyptian, enunciating eleven 'methods and principles'. Here he makes various unjustified and undefended methodological assumptions: the need to apply similar methods to Egyptian hieroglyphs on the one hand and to pictographic writing considered generally on the other (p. 18), the need to commence in each such case from the idea that the principle of acrophony (note 4) very probably applies (pp. 18-19, 21), etc. Another issue of the same kind involves Leonardi's unsupported reinterpretation of the probable crosslinguistic significance of very general and widespread features such as the doubling of letters or other symbols (p. 20) and his apparent ignorance (p. 25) of the Egyptological literature on the similar matter of sets of three identical symbols (in fact used to indicate a plural).

Chapters 3, 4 and 8 include repeated references to Hebrew forms

(in Chapter 8 Leonardi refers to his non-mainstream theories about the origins of the Hebrew abjad (see note 1) and in the process makes various errors and advances implausible crosslinguistic claims); and Chapters 5 (pp. 53-59) and 6 (pp. 60-70) are devoted to Hebrew. Egyptologists will not be especially concerned with these latter chapters unless they are already persuaded that Leonardi's general notions are likely to make sense. Chapter 5 begins with a discussion of the principles of transliteration (p. 53) which makes some sense but is confusingly obscure in other places and fails to take into account the centrally relevant issues of (a) script-types and (b) the contrastive phonology of the languages in question.

As in his earlier work, he misreads the statements of mainstream linguists such as P.H. Matthews about these matters, and he attacks 'straw men'.

In Chapter 7 (pp. 71-77), Leonardi presents his idiosyncratic ideas about decipherment and morphology (as applied to Egyptian and Hebrew and also generally) and introduces an obscure and largely unnecessary system of novel terms applying to this area. As in his earlier work, he misreads the statements of mainstream linguists such as P.H. Matthews about these matters, and he attacks 'straw men'. I propose to comment in detail on this chapter in later work.

Chapter 9 (pp. 83-87) deals with the alleged influence of Egyptian on Greek; here, Leonardi is in the company of non-mainstream authors such as Martin Bernal (Black Athena: The Afroasiatic Roots of Classical Civilization, Vol. 1: The Fabrication of Ancient Greece 1785-1985 (London, 1987), etc.). Unfortunately, as noted above, Leonardi is altogether unfamiliar with Greek. He attributes to Egyptian influence older Greek forms with known Indo-European etymologies (p. 83), provides

erroneous spellings and phonemic representations of Greek words (pp. 84, 85), implausibly reinterprets both the etymology and the geographical reference of the Greek-language placename Kappadokia (p. 84), and makes unsupported generalisations alleged phonological parallelisms between Greek, Coptic and the Semitic languages (p. 85). On p. 87 Leonardi suggests that Greek, like Latin (see above), in turn had a pervasive and confusing influence on Egyptian hieroglyphic writing. See below on his 'Afrocentric' comments in this chapter. Leonardi also displays his ignorance about Greek in other sections. He argues (unconvincingly tendentiously) that the Septuagint (the Greek translation of the Hebrew Old Testament) was prepared hundreds of years later than it was (p. 16); and he even states, quite wrongly, that in the Greek Alphabet the letter omikron is followed by phi (p. 26). See also note 3.

Leonardi's argumentation blatantly weak throughout. His text displays the repeated use of inexact expressions such as 'x is actually y', 'x is almost the same as y', 'x shows a resemblance to y', etc. His use of numerical statements in claiming/anticipating success in reinterpreting Egyptian (pp. 8-9, 14-15, 69, etc.) is unacceptably loose; when he talks of successfully identifying 140 or 400 symbols he (a) fails to distinguish between discovering (i) the phonetics/phonology (pronunciation) and (ii) the meanings of the symbols in question and (b) does not even specify the overall total number of symbols under consideration, thus preventing any statistical assessment of his case. But in fact he ignores perhaps 99% of Egyptian texts, focusing very largely upon a limited, unrepresentative sample of cartouches and royal names, and thus invalidating his new method of decipherment at the outset. Logical fallacies are also frequent in Leonardi's text.

In addition, Leonardi makes some egregious errors regarding matters of linguistic fact, and overgeneralises

when it suits his case to do so. On p. 16, for example, he states that 'modern languages all seem to have very irregular derivational morphologies', in contrast with Ancient Hebrew and Egyptian as reanalysed by him (see also pp. 183-184); but there are numerous counter-examples, notably Turkic and Finno-Ugric ('agglutinating' languages with very regular morphologies). And on p. 12 Leonardi misreports mainstream ideas about the structural functions of Egyptian vowels (a 'straw man') and states as a fact the highly dubious 'Afrocentric' view that a wide range of African languages can be linked with Ancient Egyptian (repeated on pp. 85-87). Other (convenient) errors include the statements (overt or implied) that two unrelated words cannot readily have the same meaning (p. 56), that two phonetically-similar phonemes are unlikely to be written with different symbols (p. 99; if such cases really do involve distinct phonemes this idea is ludicrous), that two phoneticallydissimilar phonemes cannot be written with the same symbol (p. 14), and that if a text (such as the Rosetta Stone text) is presented in two different scripts this shows that the two passages are also in different languages (p. 186). See also *note 3*.

Furthermore, Leonardi's text itself has been poorly written, poorly proofread and oddly typeset.

Furthermore, Leonardi's text itself has been poorly written, poorly proofread and oddly typeset. Specifically, the conventions for hieroglyphic transcription are used haphazardly when used at hieroglyphs are often presented in nonstandard formats, back-to-front or translated within square brackets. (The premise of reading hieroglyphs in the direction of the faces is clear and is universally accepted within academic Egyptology; Leonardi actually asserts this principle, but then ignores it numerous times, notably throughout

Chapter 4.) Furthermore, Leonardi's punctuation is at times clumsily nonstandard; one example involving parentheses and a comma is on p. 15. On the same page there is also a good example of the ambiguity and general obscurity which have always characterised Leonardi's writing (see above): it is not at all clear what he means by 'more than one phonetic value'. There are many other such one particularly obscure cases; sentence concludes the second paragraph on p. 10. Leonardi's use of some specific expressions, such as in theory (for example on p. 72) is also obscure. His conventions for citing forms and meanings are both nonstandard and (by his own admission) inconsistent; see pp. 10-11 where he sets them out. And on p. 186 he openly relies on his memory for information rather than referring to a source (reminiscent of Erich von Däniken 'quoting' Exodus from memory in *Chariots of the Gods?!*).

Overall, the model proposed by Leonardi has no basis in reality and can be shown to be incongruous with the slightest academic rigour.

Overall, the model proposed by Leonardi has no basis in reality and can be shown to be incongruous with the slightest academic rigour. Leonardi's statement '[m]y claim is one that can be proven true or false, though it may take years to reach an irrefutable proof' (p. 14) is extremely bold; but in fact it takes only minutes to demolish his claim. And when Leonardi claims (personal communication) that 'the evidence I have gathered thus far would be exceedingly unlikely unless Ancient Egyptian and Ancient Hebrew were [closely] genetically related' he displays only his own inadequate grasp of the principles involved. This would be much less alarming if he did not have any influence upon others. Unfortunately, his bulletin-board and the circulation of his books may afford him the opportunity to exert some such unwarranted influence. I hope that this review will go some way towards counteracting such effects.

Notes

1. Leonardi holds that Ancient Hebrew in fact had an uniquely highly systematic structure involving (essentially) monophonemic (consonantal) morphemes (not recognised by mainstream Hebraicists), that God simultaneously spoken and written Hebrew fully formed (which supposedly explains its allegedly highly systematic nature), and that relationships exist between the of supposed meanings his monophonemic morphemes and the manner in which the phonemes ('letters') represented by the Hebrew abjad are pronounced. He also suggests (on p. 11 of this present book and elsewhere) that languages of this kind can be regarded as 'ideal' - an apparently prescriptivist notion, the validity of which linguists would dispute. For much more on Leonardi's ideas about Hebrew, with references, see the relevant sections of Chapters 1-4 of my book Strange Linguistics (Lincom-Europa, Munich, 2013).

2. Rejecting the mainstream view that accidental similarities are common, Leonardi derives various words taken from a range of languages from Hebrew. using the unreliable comparative methods typical amateur work in this area. For instance, he derives English walk from a Hebrew word meaning 'walk' and allegedly to be transliterated w-l-k = w (uncertain meaning) + l-k ('proceed') (p. 102). Like other such writers, he ignores established etymologies in arriving at such claims. (Other examples from his earlier work: he derives English is with its very clear Indo-European etymology – and yes from Hebrew y-s ('affirm') as interpreted by him; and he relates the Malay word mata ('eye') to its Modern Greek equivalent mati and derives both words from Hebrew roots, ignoring the known derivation of the Greek word from earlier ommation, 'little eye'.) This section of Leonardi's book (Appendix D, pp. 98-104) is in fact replete with other errors and loose

arguments. Note for instance Leonardi's references here and elsewhere to the blatantly nonmainstream philological ideas of Isaac Mozeson, who ludicrously traces many English and other non-Semitic words to Hebrew, and his own attempt on p. 102 to equate a Hebrew interrogative prefix and English wh- in who, what etc. - in fact, the latter has a very clear Indo-European origin and demonstrably cognate with equivalent (but phonetically dissimilar) forms in Greek, Latin and Sanskrit. See also Note 3 and references to the relevant pages in the body of this review.

3. The most salient of these errors involves a seriously misguided attempt reinterpret a very familiar grammatical feature of New Testament Greek (the masculine genitive case inflection -ou) as a transliteration of a Hebrew letter which Leonardi is seeking to reinterpret as representing a phoneme very different from that which it is taken to represent by mainstream scholarship (this latter specific matter arises again and again in his work; see for instance p. 44 of this present book). At one time he seemed to have retreated somewhat from his reinterpretation of the Greek forms after correspondence with me; but it appears again in this present book (pp. 100-102). And – perhaps misled by the very dissimilar grammar of Hebrew – Leonardi describes Greek noun-forms with different inflectional endings such as genitive -ou as just mentioned, 'accusative' -oun, etc. as mere 'spelling variants' and argues that they involve transliteration from Hebrew rather than reflecting Greek syntax and morphology as they in fact do. (A similar error is made - with other motives – by Jerry Lucas and Del Washburn in their Theomatics: God's Best Kept Secret Revealed, Briarcliff Manor, NY, 1977, pp. 37-40; for comment, see my Strange Linguistics, Leonardi simply 179.) also misrepresents the phonology /pronunciation of some Greek words, such as the Greek version of the Biblical name Uriah (p.100), and

makes various other erroneous statements about Greek.

4. Acrophony involves the conversion of a logographic symbol (representing an entire word) to an alphabetic or abjadic letter representing the initial phoneme of the corresponding spoken word. For example, the form of the Hebrew/Phoenician abjadic letter beth (which later became Greek beta and Roman B) derives from a logographic and pictographic symbol resembling a house, which was used earlier to represent the Hebrew/Phoenician noun *beth* ('house'), one very common word which has beth as its initial phoneme.

ANOUNCEMENTS

THE EUROPEAN SCENE

A SKE is a member of the European Council for Skeptical Organisations. It has an Internet Forum on which you can read comments on sceptical issues from contributors and post your own. To access this, log on to the ECSO website (below).

Contact details for ECSO are:

Address: Arheilger Weg 11, 64380

Roßdorf, Germany Tel.: +49 6154/695021 Fax: +49 6154/695022 Website: http://www.ecso.org/

Via the website you can access articles, news, and commentary on a range of

topics of interest to sceptics.

Denkfest 2014

September 11-14 Zurich, Switzerland

Core topics: Medicine & methods, evolution, humanism in the 21st century. Talks in English and German with simultaneous translation. See:

http://www.denkfest.ch/ https://www.facebook.com/denkfest/in

<u>fo</u>

The 16th European Skeptics Congress

This will take place at Goldsmiths College London in 2015 and will be hosted by ASKE. Related organisations will also be involved. Further details will be announced later but keep an eye on the congress website:

http://euroscepticscon.org/

OF INTEREST

SCEPTICISM, SCIENCE AND RATIONALITY (GENERAL)

Sense About Science

Be sure to keep visiting the 'Ask for Evidence' webpage and report on your own efforts when you have 'Asked for Evidence'. At:

http://www.senseaboutscience.org/pag es/a4e.html

Do you have or know of a journal club, discussion group, departmental dinner, youth club, WI group ... any event that might benefit from a short, fun and engaging Ask for Evidence talk? Contact:

mgoldman@senseaboutscience.org

Dick Taverne, our founder and patron, has released his memoirs, *Against the Tide*: 'A must-read for anyone interested in British politics and its history in the 20th century'. He

and his publishers have kindly offered Sense About Science and our friends a discount code to order it. Use the promotional code 'SENSE' in the checkout. Buy the book at:

https://www.bitebackpublishing.com/b ooks/against-the-tide-hardback

Science in trouble

'Scientists like to think of science as self-correcting. To an alarming degree, it is not'. See disturbing article at: http://www.economist.com/news/briefing/21588057 scientists think science.

ng/21588057-scientists-think-scienceself-correcting-alarming-degree-it-nottrouble

Misrepresentation of statistics

Find out how to lie with data visualisation at:

 $\frac{http://data.heapanalytics.com/how-to-}{lie-with-data-visualization/}$

Journal article generators

With a few clicks of your mouse you can automatically generate your own

scientific journal article (and maybe even get it published). Go to:

http://pdos.csail.mit.edu/scigen/

Or, if you fancy writing an impressive-looking article on mathematics, go to:

http://thatsmathematics.com/mathgen/

If you want to have something published in a New Age magazine, try:

http://sebpearce.com/bullshit/

And you can generate your own Deepak Chopra 'words of wisdom' quote; go to:

http://www.wisdomofchopra.com/

Spurious correlations website

Per capita consumption of cheese in the US from 2000 to 2009 correlated at .95 with the number of people who died by becoming tangled in their bedsheets. For this and other remarkable correlations see:

http://www.tylervigen.com/

More websites of skeptical interest

From Brian Robinson:

'I've become a keen fan of *The Conversation* – really authoritative, fact-checked, short, evidence-based articles, including a good science representation.' See:

http://theconversation.com/uk Examples of articles are:

- 'Wired for happiness? Evolutionary psychology falls short of science' at: http://tinyurl.com/py2ta6j.
- 'Search for alien life could remain fruitless, study finds' at: http://tinyurl.com/pnflloy.

From Chris French:

A website has recently been launched called 'Quackbusters Guide: an Introduction to Pseudoscience and the Paranormal for Young People'. Coauthored by Chris French, David Simmonds and Tessa Kendall. designed by Gareth Rosser, and supported by the British Humanist Association, it aims to encourage an of the understanding difference between science and pseudoscience, and to put us on our guard against intellectual dishonesty. It attempts to offer at least a glimpse into the mysteries and wonders, and the liberating possibilities of science, as opposed to the allure of pseudoscience and the paranormal. It is hoped that some sections may be useful for teachers, for example in science, psychology, social studies or English; but the site could also be a useful resource for general readers. It covers topics such as creationism, alternative medicine, ghosts, psychics, UFOs, mythical creatures, mind over matter, Bermuda Triangle, fringe archaeology, fire-walking and loads more. The website is:

http://quackbusters.org.uk

Finally, visit the website of the Good Thinking Society:

'Our goal is "to encourage curiosity and promote rational thinking", hence the positive title of the organisation. At the same time, this inevitably means battling against irrationality and pseudoscience.....' Simon Singh.

http://goodthinkingsociety.org/

SCIENTIFIC TOPICS

Female hurricanes

No, we mean the real thing. Female hurricanes kill more people than male ones. Why? See:

http://phenomena.nationalgeographic.c om/2014/06/02/why-have-femalehurricanes-killed-more-people-thanmale-ones/

DNA forensic evidence questioned

'DNA analysis exposes flaws in an inexact forensic science' (video). http://www.nytimes.com/2014/05/19/us/dna-analysis-exposes-an-inexact-forensic-science.html? r=1

Stem cell research

Scientists in Japan had claimed stem cells could be made cheaply, quickly and ethically just by dipping blood cells into acid. They have now written a retraction that apologises for 'multiple errors' in their report. *Nature*, the journal that published the findings, is reviewing how it checks scientific papers.

The Turing test

'No, A "supercomputer" did NOT pass the Turing test for the first time and everyone should know better'.

https://www.techdirt.com/articles/2014 0609/07284327524/no-computer-didnot-pass-turing-test-first-timeeveryone-should-know-better.shtml

MEDICINE (GENERAL)

The Nightingale Collaboration

Please visit the Nightingale Collaboration website for an update on the numerous successful complaints to the Advertising Standards Authority (ASA), the Medicines and Healthcare products Regulatory Agency (MHRA), and other regulators.

And if you do not already do so, why not sign up for free delivery of their electronic newsletter? At:

http://www.nightingalecollaboration.org/

MMR jab

Families who failed to win compensation cases driven by flawed research into the MMR vaccine are suing their lawyers for pursuing 'hopeless' claims and enriching themselves on legal aid. (So, a lot of lawyers made a lot of money pursing these false claims and now a lot of lawyers are going to make a lot of money suing them.)

 $\frac{http://www.thetimes.co.uk/tto/law/artic}{le4130409.ece}$

Homeopathy

'Homeopathy has long been provided on the National Health Service, but is it now in terminal decline?' Plus 'More misleading claims at NHS Homeopathic Hospitals' See the Nightingale Collaboration at:

http://www.nightingalecollaboration.org/index.php?option=co m_content&view=category&layout=bl og&id=5&Itemid=7

Meanwhile, a draft paper by Australia's National Health and Medical Research Council (NHMRC) assessed research into the effectiveness of homeopathy on 68 health conditions and concluded, 'There is no reliable evidence that homeopathy is effective'.

No doubt some people will find this hard to swallow (*you're fired – Ed.*). http://www.theguardian.com/world/20 14/apr/08/homeopathy-is-bunk-study-

says

and

http://consultations.nhmrc.gov.au/public_consultations/homeopathy_health

Also see 'Belgian Government legislates to restrict the availability of homeopathy to its citizens' at:

http://www.homeopathy-ecch.org/

Cancer Quackery

From the *Daily Telegraph*:

'Controversial Harley Street specialist (i.e. 'a certified nutritional microscopist and qualified iridologist' – Ed.) is found guilty of claiming he can cure cancer in a landmark case brought by trading standards'

http://www.telegraph.co.uk/health/107
32023/Duped-by-the-blood-analyst-who-says-he-can-cure-cancer.html
Accounts of this case also appear at:
http://www.chapmancentral.co.uk/blah
g/2014/04/skeptics-v-error-denton/

and

http://www.chapmancentral.co.uk/blah g/operation-quackdown/errol-denton

Clinical trials

Remember to visit the All Trials website and sign the petition calling for the registration of all clinical trials.

http://www.alltrials.net/

From Sense About Science:

(On 2.4.14) MEPs voted by a huge majority to adopt the Clinical Trials Regulation, 547 in favour and 17 against. This means new law will, after 2016, require any new drug clinical trial in Europe to be publicly registered and results reported. This is terrific news. Read more at:

http://www.alltrials.net/2014/europe-votes-for-clinical-trial-transparency/

But the new law does nothing towards publication of past trials, the trials that were done on the medicines we use today, so there is still a huge amount we have to do. Please help by sharing today's news (with #AllTrials if you're on Twitter or Facebook) and if you can, please donate at:

https://www.justgiving.com/alltrialsap

peal

Registration of deaths

From Sense About Science:

Read our open letter to the Prime Minister on 'Late registration of deaths'. Currently, sudden infant deaths, drug related deaths, suicides, deaths in prison or police custody and unexplained deaths can take up to two and a half years to be registered, so statisticians, public health officials and researchers don't know about them.

http://www.senseaboutscience.org/pag es/late-registration-ofdeaths.html#sthash.ViBELqfK.dpuf

Health policy statements, etc.

From Sense About Science:

We collaborate with a number of brilliant organisations who fact-check the news, policy statements, health stories and much else online and we are going to create a single place where all that work is visible, and searchable. We're starting with NHS Behind the Headlines and a handful of others I can't yet reveal. If there are any fact checking sites or organisations you like

but think we might be unaware of, please let me know. Contact:

mgoldman@senseaboutscience.org

Fertility claims

See the Q&A project conducted with Ask for Evidence partners Mumsnet, along with Progress Educational Trust and the British Fertility Society. The public asked for evidence on gadgets that track your fertility cycle, supplements improving sperm count, acupuncture helping IVF, the risks of conceiving later in life and much more.

bit.ly/1nwClB7

Health and safety

Brown has written Tracey campaigning book with Michael Hanlon about the absurd safety rules that blight modern life, encourages people to hold rule makers to account (Google for newspaper reviews). Available from Amazon at: http://www.amazon.co.uk/gp/product/0 751553492/ref=as_li_qf_sp_asin_tl?ie =UTF8&camp=1634&creative=6738& creativeASIN=0751553492&linkCode =as2&tag=wwwsenseabout-21

PSYCHIATRY AND PSYCHOLOGY

'Forbidden Psychology website

From Tomasz Witkowski:

Spreading pseudoscientific myths is much easier nowadays than it was in the XX century and it is far more difficult to resist against them. Psychology is a prolific source of myths and urban legends. Therefore, several years ago I started to write my devoted debunking to pseudoscience in psychology. Last time I have launched its English language version entitled 'Forbidden Psychology'. Why forbidden? Because the topics covered by my blog as well as by my books cannot be found in psychology text books or popular literature. If you do not afraid to into critical thinking and to put some doubt in your heads please visit my blog, comment my posts, share and discuss them.

Best regards

http://forbiddenpsychology.wordpress.

com/

Dyslexia

For another (balanced) view of the current dyslexia debate, see *In Conversation* at:

http://tinyurl.com/q9kwwpc

Sleep-related anomalous experiences

For those of you interested in sleeprelated anomalous experiences, there is an article in the *Daily Mail* on 'exploding head syndrome': At:

http://www.dailymail.co.uk/health/artic le-2620837/Is-exploding-headsyndrome-reason-sleep.html

Ritual satanic abuse

Family of deceased nurse Carole Myers win new inquest in 'satanic abuse' claim.

http://www.thetimes.co.uk/tto/news/uk/article4126978.ece?CMP=OTH-gnws-standard-2014_06_22

RESEARCH PROJECTS

From Rebecca Constantine:

'I'm looking for participants for a study on out-of-body experiences (OBEs) and cortical excitability. Specifically, I'm looking for people in the London area who have had one or more OBEs in their life to participate at the study in the department of psychology, Goldsmiths, University of London. The experiment is short, just 30-40 minutes and involves a simple computer-based task and a couple of questionnaires. In return we will enter you into a prize draw to win a £30 Amazon voucher. Also you will have the satisfaction of knowing you have participated in some valuable research.' For more details email:

ps301rc@gold.ac.uk

RELIGION

Witch hunting

Controversial 'witch hunter' Helen Ukpabio comes to London. See:

http://www.channel4.com/news/witchhunter-london-nigeria-children-helenukpabio

CRYPTOZOOLOGY

The Yeti

Tests on 'fur' from around world finds none genuine, but Himalaya sample could be new kind of polar bear

http://www.theguardian.com/world/20 14/jul/02/yetis-ruled-out-by-scientists

MISCELLANEOUS UNUSUAL CLAIMS

Sally Morgan

'Psychic' Sally Morgan flops in Middlesbrough.

http://mylespower.co.uk/2014/05/18/a-rather-embarrassing-night-for-psychic-sally-in-middlesbrough/

Drinkable sunscreen

A company recently announced the launch of the world's first drinkable sun screen, but closer analysis shows some very questionable claims.

http://www.theguardian.com/science/br ain-flapping/2014/may/20/hard-toswallow-the-worlds-first-drinkablesunscreen

UPCOMING EVENTS

THE ANOMALISTIC PSYCHOLOGY RESEARCH UNIT AT GOLDSMITH'S COLLEGE LONDON

http://www.goldsmiths.ac.uk/apru/spea kers.php

http://www.skeptic.org.uk/events/golds miths

Seminars are held on Tuesdays at 6:10 p.m. in Room LGO1 in the New Academic Building, Goldsmiths College, University of London, New Cross, London SE14 6NW. Talks are open to staff, students and members of the public. Attendance is free and there is no need to book.

You are strongly recommended to register (at no cost) with the APRU's 'Psychology of the Paranormal' email list to ensure that you are informed of any changes to the programme. Visit:

http://www.gold.ac.uk/apru/emailnetwork/

http://www.twitter.com/ChrisCFrench

or

http://feeds.feedburner.com/apru
For videos of some of the previous
talks visit:

http://www.gold.ac.uk/apru/lectures/

SKEPTICS IN THE PUB

http://www.skeptic.org.uk/pub/ https://twitter.com/SITP?refsrc=email Choose the venue you are looking for to access the upcoming events.

LONDON FORTEAN SOCIETY

http://forteanlondon.blogspot.co.uk/
The society meets on the last Thursday
of each month, except July and
December, at The Bell, 50 Middlesex
Street, London E1 7EX.

CENTRE FOR INQUIRY LONDON

http://www.cfilondon.org/

CONWAY HALL LECTURES LONDON

http://conwayhall.org.uk/talks-lectures

LOGIC AND INTUITION: ANSWERS

Are elderly drivers safer?

Two listeners to the programme made the following point. The crash statistics do not allow for one (at least) important consideration and that is the number of miles driven over a period of time (say a year) by the young and elderly respectively. The more miles a person drives, the more likely he or she is to have a crash. So maybe, as would not be an unreasonable assumption, the lower crash rate for elderly drivers is that they do not drive as much as younger drivers. To resolve this obviously requires more data.

League tables for cancer

The clue to the missing information is in the description 'sparsely populated'. This *suggests* that the counties in question have smaller populations. (To

be fair it doesn't immediately follow that they do, but Professor Kahneman indicates that this is in fact the case.) One consequence of this relates to 'the law of small numbers' and we should see what the data look like at the other extreme before going any further.

In fact, the author informs us that counties fitting the previous description of those having low cancer rates are also over-represented amongst those having the *highest* cancer rates. Clearly the explanation in terms of healthy living is not sustained.

What may well be happening is this: small samples are more likely to give more extreme distributions than large ones. Let's say you tossed two coins a large number of times. On around 1 in 4 occasions there would be

100% heads and 100% tails on another 1 in 4. Now do the same with four coins. On only around 1 in 16 occasions will there be 100% heads. likewise 100% tails; and on around 1 in 4 occasions, 75% (i.e. 3) will be heads, likewise 75% tails. As you increase the number of coins you toss each time, the lower the percentage of times you will have extreme distributions and the more tightly the distribution will be concentrated around the peak probability (50% heads and 50% tails).

So the next time you see school performance tables in which small schools are over-represented at the top end, look at the bottom end as well.

THE ASSOCIATION FOR SKEPTICAL ENQUIRY (ASKE)

- ASKE is committed to the application of rational, objective and scientific methods to the investigation
 and understanding of ideas, claims, and practices, especially those of an extraordinary and paranormal
 nature.
- ASKE is committed to challenging the uncritical promotion of beliefs and claims which are unsupported or contradicted by existing objective and scientific knowledge.
- ASKE opposes the misinterpretation and misrepresentation of science for purposes which deceive the public.
- ASKE supports the objective evaluation of all medical or psychological techniques offered to the
 public and opposes the uncritical promotion of techniques which are unsupported or contradicted by
 existing scientific knowledge.
- ASKE supports all efforts to promote the public awareness of the rational and scientific understanding of extraordinary and paranormal claims.
- ASKE is committed to a rational understanding of the reasons and motives which underlie the promotion and acceptance of irrational and paranormal claims and beliefs.
- ASKE accepts the rights of individuals to choose for themselves their beliefs about the world.

About ASKE

Founded in 1997, ASKE is an association of people from all walks of life who wish to promote rational thinking and enquiry, particularly concerning unusual phenomena, and who are opposed to the proliferation and misuse of irrational and unscientific ideas and practices. This is our quarterly magazine and newsletter. To find out more, visit our website (address below).

If you share our ideas and concerns why not join ASKE for just £10 a year? You can subscribe on our website, write to us at the address below, or email:

m.heap@sheffield.ac.uk

email: aske1@talktalk.net; website: website: aske1@talktalk.net;