

THE SKEPTICAL INTELLIGENCER

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Incorporating the Skeptical Adversaria: the ASKE Newsletter

Edited by Michael Heap

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Editor's Announcement

ASKE's *Skeptical Intelligencer* 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. Details about house style are available from the Editor. We also welcome writers who would like to contribute a regular column - e.g. an 'On the Fringe' feature or take over one of the regular features.



FROM THE ASKE CHAIR

Michael Heap

Big cat sightings yet again

It is four years since I last sat down at my laptop and wrote on the subject of big cat sightings in the UK for ‘From the ASKE Chair’ (see *Skeptical Intelligencer*, 17(4), 2014). Prior to that I wrote a piece on the same topic for the Autumn 2008 issue of *Skeptical Adversaria*. The impetus for writing the former piece was reports of the sighting of a tiger near the Disneyland theme park near Paris. After a couple of days of panic, the hunt for the creature was scaled down and it was concluded that it was either a European wildcat or a large domestic cat.

As I wrote at the time, ‘For years now there have been regular reports that large cats such as lynxes, pumas, panthers, leopards and even lions have been spotted in the British countryside, occasionally making excursions into towns and cities’. Once again the stimulus for me to revisit this phenomenon is a newspaper report of such a sighting on 26.8.18, this one being ‘a huge puma’ in Bolsterstone, Sheffield, several miles from where I live. There was just one eyewitness and no other evidence of the beast’s presence.

As it happens, our two moggies Alice and Sammy are currently being put about by visitations in our garden and even our home of a huge cat. It is in fact a Maine Coon, one of the largest breeds of domestic cat – a beautiful specimen in this case, and very friendly. A Maine Coon by the name of Teddy Bear turned out to be the identity of the notorious ‘Essex lion’, spotted and photographed by a couple in August 2012 in a field near Clacton-on-Sea. Before its true identity had been announced someone else had come forward to say that he had heard ‘the roar of a lion’ that evening.

Has there been any progress in confirming the existence or otherwise of these creatures? No, but as they say, ‘This one will run and run’. However,

two recent happenings do not sit easily with the idea that there are such animals in the wild. The first is the tracking down and shooting of a Eurasian lynx that escaped from a Welsh zoo in November 2017 (*note 1*), demonstrating that it’s not so difficult to obtain a specimen if there is one known for sure to be at large. The second development is the proposed introduction of wild lynx into certain areas of the country, one such location being Kielder Forest in Northumberland (*note 2*). Such a move is strongly opposed by farmers who fear that the lynx will kill their sheep. Nobody has been seriously arguing, ‘They are already there’.

A cat mystery solved

Since 2014 hundreds of mutilated corpses of domestic cats in and around Croydon, south London, and later across England, have been reported to the police. It was believed that the killings and mutilations, including decapitations, were at least initially perpetrated by one person in south London but that the cases reported in localities other than the Croydon area could be the work of (human) ‘copycats’. A description of the alleged killer was released by a local animal charity, South Norwood Animal Rescue and Liberty (Snarl). The suspect was described as being a white man in his 40s with acne scars, dark clothes and short brown hair, who may be wearing a headlamp or carrying a torch (*note 3*). Criminological experts have been quoted in the media describing the likely personal characteristics of the offender(s) and the motives behind his or their gruesome activities. Alarm has been expressed about the possibility that humans may be the next victims; in fact animals other than cats have been included in the litany of deaths. It is reported that the police have spent half a million pounds in their 3-year investigation (*note 4*).

During this time a number of voices have been heard suggesting that the whole affair may be akin to a ‘moral panic’ and that in the vast majority of cases the deaths of the animals have a more prosaic explanation. In fact something similar happened in the 1990s with dozens of cat killings being reported in Greater London. The Metropolitan Police began an investigation in 1998 but dropped it a year later after consulting Stephen Harris, professor of environmental sciences at the University of Bristol. He concluded that the cats had been killed by cars, then mutilated and even decapitated by foxes, something that had long been known to happen. Concerning the current investigation, in July 2018 in *New Scientist* he wrote that the pattern of blunt-force trauma followed by removal of the head and tail once the blood has congealed is consistent with road traffic accidents, then scavenging by foxes (*note 5*).

In September the Metropolitan Police announced the closure of their investigation into the Croydon Cat Killer (later dubbed ‘the M25 cat [or animal] killer’), concluding that the evidence is consistent with the above explanation. Somewhat predictably this has been greeted with fury and dismay by owners of the deceased pets, likewise the organisers of Snarl who have devoted much time, effort and publicity to mapping and investigating hundreds of reported killings. They remain stubbornly committed to the cat-killer theory, as do some experts who have previously publicly opined in its favour (*note 5*). Accusations of a cover-up are sure to follow. Like big cat sighting, I fear this one will run and run (*and run – Ed*).

Notes

1. <http://tinyurl.com/y797dhca>
2. <http://tinyurl.com/ybhro4ny>
3. <http://tinyurl.com/yczdl3f>
4. <http://tinyurl.com/yarhjhf2>
5. <http://tinyurl.com/y9tfnhjr>



LOGIC AND INTUITION

The Joe Johnson mystery

Joe Johnson's recent obituary revealed that he married his widow's sister. How did he achieve this? (No, he did not conduct her wedding ceremony.)

Worth a gamble?

I have a bag in which there are 5 balls, 2 white and 3 black. I invite you to draw out 1 ball at a time. If it is white I give you £1; if it is black you give me £1. You can stop any time (or until all 5 balls are drawn) and the balls then go

back in the bag for the next go. You can have as many goes as you want. Will you take up my offer?

Answer on [page 19](#).



THE EUROPEAN SCENE

European Council for Skeptics Organisations

There are quite a number of countries with national skeptical organisations, many of which are affiliated to ECSO. 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/> (which has an email contact facility)

Facebook:

<https://www.facebook.com/skeptics.eu/>

ECSO also has a Twitter handle, @SkepticsEurope.

The ECSO website now has a comprehensive calendar of skeptical events taking place across Europe.

The ESP - European Skeptics Podcast



Building a bridge for skeptics

<http://theesp.eu/>

From Amardeo Sarma of the German Skeptics (GWUP)

'We have started a campaign against the German anti-vaccination film „Eingeimpft“ and have actually secured the domains eingepfift.de and eingepfift.org. It would be great if skeptical organizations in Europe and beyond could link to this to improve both visibility and ranking:

<https://www.eingepfift.de>

GM crops

'The European Court of Justice has just delivered a scientifically absurd ruling, in defiance of advice from its advocate general, but egged on by Jean-Claude Juncker's allies. It will ensure that more pesticides are used in Britain, our farmers will be less competitive and researchers will leave for North America.' See:

<http://tinyurl.com/ybvrcgxa>

Clinical trials

'Data released today show that thousands of clinical trials conducted in Europe violate EU rules that require results to be published within 12 months.' See:

<http://tinyurl.com/ybtb8zzc>

And: 'The AllTrials campaign, run by Sense about Science, have launched a new interactive website which shows that half of the trials on the EU register - 49% - haven't reported results.'

<http://eu.trialstracker.net/>

News from Latvia

From Austra Muizniece:

'Yay! European Cancer Patient Coalition kicked out Latvian Rīgvir cancer quacks who had infiltrated the NGO, pretending to be a grassroots organisation! At least European institutions have more sense than Latvian ones.' See:

<http://tinyurl.com/yay44eph>

The Santilli telescope

Two years ago Italian-American fringe scientist Ruggero Santilli sued Pepijn

van Erp of the Dutch Skeptics for defamation when he wrote about one of his inventions, a telescope which Santilli claims can detect 'anti-matter light'. The lawsuit has now been settled. Santilli also sued Professor Frank Israel, chairman of the board of Stichting Skepsis. This case was dismissed by the court. See:

<http://tinyurl.com/ydde57e9>

Measles in Romania

'Plummeting vaccination rates leave poor country at the forefront of an escalating European trend' says the *Wall Street Journal* in a report on the deadly measles outbreak in Romania. See (by subscription):

<http://tinyurl.com/y8zpgpww>

Association Française pour l'Information Scientifique

The French association (AFIS) which publishes the skeptical magazine *Science et pseudo-sciences* is celebrating its 50th anniversary in Paris on Saturday 17th November. See:

www.afis.org

Homeopathy in France

Lille University has suspended its degree in homeopathy for the 2018-19 academic year. See:

<http://tinyurl.com/ycd732sa>

Quackery in Spain

'Hundreds of Spanish scientists ask for action against pseudoscience "that kills".' See:

<http://tinyurl.com/y8twg4jv>



MEDICINE ON THE FRINGE

Michael Heap

Ben Goldacre

A much-respected figure in skeptic circles, Dr Ben Goldacre, author and head of the Evidence-Based Medicine DataLab in Oxford's Nuffield Department of Primary Care Health Sciences, has been appointed chair of the UK government's new HealthTech Advisory Board. The appointment was announced in a speech by the Health Secretary at the NHS Expo in Manchester setting out 'plans to make the NHS an ecosystem for the best available technology, including innovations in areas such as artificial intelligence and machine learning'. The HealthTech Advisory Board will report directly to the Secretary of State and 'will highlight where change needs to happen, where best practice isn't being followed, and be an ideas hub for how to transform the NHS to improve patient outcomes, patient experience, and to make the lives of NHS staff easier'.

Your heart age

Did you take Public Health England's online heart age test (*note 1*)? I did and I have discovered that my heart age is 92. And apparently I can expect to live to the age of 83 without having a heart attack or stroke. I had to reply 'don't know' to the questions about what my blood pressure and cholesterol level were. If I reduce these and lose weight my heart age will come down to 79 and I can expect to live to the age of 84 without having a heart attack or stroke. I am 69 and in good health, eat healthily, and I run and swim every week, so information that implies (I presume) that I have the heart of the average 92-year-old man comes as a bit of a shock to me.

The GPs' magazine *Pulse* has something to say about this: 'GPs have expressed concerns about Public

Health England's latest campaign, after they found that it tells anyone over 30 to go to their GP if their cholesterol level or blood pressure is unknown. PHE launched its new heart age campaign this week, which asks members of the public over 30 to take an online test to find out their 'heart age' and their risk of suffering a heart attack or stroke. But NICE has previously rejected the use of lifetime risk scores - such as the one this test is based on - due to a lack of evidence.

'Doctors have questioned the advice and the campaign's potential impact on their workload, but PHE said that it does "not anticipate" the campaign, due to run until 30 September, will drive "high volumes of people" to their GP.'

'This test is ridiculous.'

Ben Goldacre.

Here's where Ben Goldacre pops up again (*note 2*). He tweets: 'This test is ridiculous. Try it. PHE's tool tells a woman in her 30s that her heart age is older than her real age because she's not had her cholesterol done. And tells her to get her cholesterol done by GP. There is no evidence for this, pointless excess GP workload. There are 8.7 million people in the UK in their 30s. This PHE "heart age" tool seems to be incorrectly telling them ALL to go to their GP to get their cholesterol checked. If only one in 100 do so, that's 87,000 pointless GP consultations. Expensive.'

Margaret McCartney

More good sense on the above subject can be heard from Margaret McCartney in Radio 4's excellent series *More or Less* (7.9.18; *note 3*). Dr McCartney is a GP in Glasgow and a

regular contributor to medical features on the radio and in newspapers and magazines. Until recently she had a column in the *British Medical Journal*. Her final contribution is worth reading (*note 4*). It is entitled 'Margaret McCartney: A summary of four and a half years of columns in one column' and is a list of the take-home messages for all of the 36 essays she has penned on medical matters for the *BMJ*. My top eight favourites are:

- Screening is often counterintuitive. False positives proportionately rise when prevalence falls.
- Earlier isn't necessarily better. Lead time bias and overdiagnosis create mirages and do harm.
- Poverty kills. Statins do not effectively treat poverty.
- Many people seek to make money from those who don't understand science. Doctors should call out bollocksology when they see it.
- We should aim not to 'raise awareness' but to improve knowledge.
- Political in-fighting over the NHS wastes time, money, and morale. We should seek cross party cooperation, use evidence, and acknowledge uncertainty in decision making.
- Appraisal is bunk (*hear, hear! – Ed*)
- Less medicine may be better treatment. It can often feel risky to deprescribe, even though it shouldn't.

In fact every single one of them is indispensable. So print off the whole list and stick it somewhere for all to see.

Notes

1. <http://tinyurl.com/ycboohlu> (The test is until 30.9.18)
2. <http://tinyurl.com/yba9xh6m>

LANGUAGE ON THE FRINGE



Mark Newbrook

More from ‘Celeste’ on me on Mafundikwa on Amazon!

I refer here to ‘Black or not?’ in my ‘Language On The Fringe’ #35 (*Skeptical Intelligencer* 19:4 (2016), pp 5-7). ‘Celeste’, who had accused me of white supremacism in my Amazon.com review of Saki Mafundikwa’s *Afrikan Alphabets*, responded thus to my rebuttal: ‘You’ll find that Whites will come up with narrowly defined terminology to not give credit to Africans. This is why they come up with terms like true alphabet – recent invention, mid 90s [MN: this is of course untrue] – (which coincidentally creates a superior vs inferior dichotomy, squarely placing Europeans in the Superior category [MN: not true], while denying that the Phoenicians were African [MN: they almost certainly were not]). There is no such thing as a ‘true alphabet’. It’s typical White Supremacy in action. ... They [Europeans] are the 2nd youngest population on earth (by mistake) [MN: who are the youngest?], and have caused more destruction to populations and civilizations older than them, yet they somehow think they can define and redefine and reshape things and place themselves at the very center of everything, where they do not belong, especially since it wasn’t that long ago that they were illiterate etc. (less than 1000 years ago) [MN: again, obviously, untrue]. Nothing new under the sun (which they can’t be in lol). Like many institutions created or either controlled by Whites, it’s always used in the interests of their own people, Linguistics is no different.’ Etc., etc. Eh? I have responded again. Watch this space (full correspondence on request, or find my review on Amazon.com). Most crucially: a [true] alphabet is a writing system in which each character corresponds (approximately) with a phoneme. None of the African systems discussed in the book meets this criterion – though some of them are, as

I myself observed, scripts superbly suited to the languages in question and in no way inferior to alphabets.

Egyptian hieroglyphs read in the Dark Ages?

St Cyril (C9 CE) is believed by Eastern Orthodox Christians to have translated the New Testament from Greek into Old Church Slavonic, after devising an alphabet for this purpose. (His scholarly successors later replaced this alphabet with the Greek-derived ‘Cyrillic’ alphabet subsequently used to write OCS and some other Slavic languages.) Milan Elisin, a Serbian writer, claims (as part of a complex set of non-standard linguistic ideas expressed in bizarre, opaque, partly machine-written English) that Cyril had access, in arriving at his OCS version, to pre-Christian Egyptian-language material, later incorporated into the NT – for example, a hymn beseeching divine relief from a drought. His goal here is to show that the OCS in places preserves the NT text better than does the Greek – which is of course regarded by scholars as the **original** (although some have held that some sections, notably parts of the Gospel of Matthew, are translated from an original in Aramaic). But these supposed Egyptian elements of the NT are not themselves known at all; and it will be urged by mainstream experts that – like all scholars between post-dynastic times and the C19 decipherment – Cyril himself was unable to read hieroglyphic Egyptian (or Egyptian written in any other script; the related Coptic language, with its Greek-inspired alphabet, is another matter).

There is, however, a two-volume treatise entitled *Hieroglyphica* (‘[Egyptian] hieroglyphs’), which is said to date from late C5 CE in a Greek version attributed to one Philippus; the Greek text purports to be a translation from an Egyptian original. Among many other topics, the two volumes

furnish translations/ explanations of a total of 189 hieroglyphs.

St Cyril (C9 CE) is believed by Eastern Orthodox Christians to have translated the New Testament from Greek into Old Church Slavonic, after devising an alphabet for this purpose.

The author of the Egyptian version is named as Horapollo (from the Greek god-names *Horus* – an Egyptian divinity – and *Apollo*). The main source on the background of the treatise is the *Suda*, a C10 Byzantine Greek-language historical encyclopaedia. The (unknown) author of this work states that Horapollo was a polymath of late C5 CE and was one of the last active Egyptian priests; he was forcibly converted to Christianity as the traditional Egyptian beliefs were finally suppressed. It is far from clear that this Horapollo actually existed. Later editors, some of them having occult affiliations, attributed the work to other authors with the same name, or even to Horus himself. Various other works are attributed to one Horapollo or another! But, regardless of the authorship: unless the original and the translation were in fact produced at a much earlier date, the above would – if the text is genuine (see below) – imply that some people were still able to read and indeed write hieroglyphic Egyptian in C5 CE. This was well before the time of St Cyril, but long after the subjugation of Egypt to Roman rule in 30 BCE at the end of the Alexandrian dynastic period (during which Greek had already become the main official language of Egypt).

The Greek of the ‘Philippus’ version of the text is unconvincing and of poor standard, and it has been suggested that the work attributed to Horapollo is itself a medieval/ early-

modern forgery, perhaps from as late as early C15 – at which time it came to light and acquired a considerable following. And some of the statements about the meanings of hieroglyphic characters are clearly wrong (compare the Latter-Day Saints’ readings of ‘Reformed Egyptian’ texts). On the other hand, many modern Egyptologists are persuaded that at least the first book was based on a genuine – if confused and incomplete – knowledge of hieroglyphs. So maybe knowledge of the writing system did persist until at least C5 CE.

A new scholarly book on the Horapollo matter is Mark Wildish’s *The Hieroglyphics of Horapollo Nilous: Hieroglyphic Semantics in Late Antiquity* (2017).

A creationist blast against linguists!

In June 2018, Paul Brateman posted on Facebook (*note 1*) regarding some anti-evolutionist claims lately made by Donald J. Morrison in the *Hebridean News* (*note 2*). Morrison especially invokes linguistic evidence in this connection. For example, he states: ‘There are no “primitive” languages. All languages have a system of sounds, words, and sentences that can adequately communicate the content of culture; so no language is degenerate in that sense’. He regards this as ‘undeniable evidence of a divine Creator’.

Now it is true that the specifically linguistic evidence for evolution is not as decisive as the biological evidence; and this particular comment is substantially correct. Mainstream linguists would suggest that the lack of diversity observed in these respects arises because of the short time-depth of human language by comparison with most emerging biological features (probably less than 200,000 years – although see below on new ideas regarding *Homo erectus* communication) and the ephemeral nature of spoken language, which results in a biologically negligible time-depth of 5,000 years for the earliest actually attested linguistic data

(this is the date of the earliest known writing). However, there is **some** evidence of linguistic evolution even within this brief period, involving the structures of pidgin languages, differences in general levels of complexity (useful or unnecessarily complicating) between ‘genetically’ related and otherwise similar languages, the recent emergence of certain types of grammatical structure not found, in any language, in the oldest records; etc.

New languages are in fact developing all the time. For instance, Hinglish, a language resulting from contact between Hindi and English, has recently emerged and is now actually being taught.

So even here Morrison is on shaky ground. And his other points are still weaker. For instance, he states: ‘If mankind had advanced through a so-called evolutionary process, then there should still be developing languages today. However, the stark fact is mankind’s languages are vanishing from civilization at an alarming rate – thus proving that evolution is a lie. And if evolution were true, then the process by which mankind has obtained 7,000 languages would be continuing today. Has the evolutionary process ceased?’ This is altogether confused. New languages are in fact developing all the time. For instance, Hinglish, a language resulting from contact between Hindi and English, has recently emerged and is now actually being taught (*note 3*).

If Morrison means that on an evolutionary account of the origins of language we should observe **primitive** languages coming into being today, the obvious rejoinder is that the presumed ‘primitive’ ancestors of language have long been superseded/replaced (by the more effective languages with which we are familiar), and the conditions which long ago allowed them to develop and flourish no longer obtain.

It is true that many languages are, in contrast, dying out, or indeed have already died out. But this is because of hostile non-linguistic factors (globalisation, etc.) and has nothing to do with linguistic evolution or with any other core-linguistic factors.

Brateman refers here to the Indo-European language ‘family’ and its reconstructed common ancestor language, Proto-Indo-European. Darwin and other C19 evolutionists did see this model of linguistic change, which was still novel in their own time, as analogous to evolutionary biological diversification; and so it is, in a very general sense. But the specific notion of Proto-Indo-European (like that of any other particular ‘family-ancestor’ language) is irrelevant in this context; it is in no way associated with the creationist idea that all human languages stem from one divinely-created ancestor (initially by means of sudden diversification at Babel). It is not in fact known whether or not all human languages stem from one ancestor; but whether there was one ancestor or multiple ancestors they were spoken much earlier than Proto-Indo-European, which was the ancestor only of one of the many known language ‘families’. And a single common ancestor, if such existed, need not necessarily have been divinely created.

Furthermore, the changes which lead to the diversification within language ‘families’ in historical times are for the most part **not** closely analogous to biological evolution. The specifics of linguistic behaviour/thought are acquired rather than genetically inherited; and most linguistic changes, even the most ‘successful’, are not especially adaptive (the main exceptions are some obviously adaptive vocabulary changes). In contrast, genuine (slow) linguistic evolution involves the development of language as a phenomenon – not these short-term specific changes and instances of diversification which we observe in particular languages.

For a philosophically-informed discussion of these matters, readers should turn to Robert Pennock's 1999 book *Tower of Babel: The Evidence Against the New Creationism*. This book constitutes an invaluable rebuttal of the new creationism ('intelligent design theory') as it stood at that time. As the title suggests, Pennock exemplifies and discusses the failings of creationism (and the successes of evolutionary theory) chiefly in the context of language change, an area of study which is less 'charged' than biological evolution but (despite the above-mentioned differences between linguistics and biology) is still centrally relevant to the issues at hand. My review of Pennock's book appeared in *The Skeptic* (Australia) 20:1 (2000), pp 54-57, and a short version is on Amazon.com.

Have we been sailing – and talking – for a million years?

I referred above to *Homo erectus*. Over the last few years, there have been several archaeological finds indicating that humans have been crossing the narrow seas to new lands, in sufficient numbers to establish viable populations, for a very long time – roughly a million years. Flores and Crete, already islands at the time, were the first such locations identified. The latest case involves the finding in the Philippines (again, already insular) of stone tools which were used some 700,000 years BP to slaughter a rhinoceros (*note 4*).

If the evidence that the Australian Aborigines sailed from Indonesia some 65,000 years BP is accepted (as of course it is; they have clearly been in Australia for that long, and the land-bridge to South-East Asia was gone then), then this evidence of earlier voyages should be accepted too. But in that case the time-depth of 700,000 or a million years establishes the ability to build and sail substantial boats as originating well before the days of our own species. This was *Homo erectus* (or the like)! It looks as if these early people really had the mental capacity for such feats.

On 30/5/18, New Scientist acknowledged the growing strength of the case for *Homo erectus* the sea-farer.

On 30/5/18, *New Scientist* acknowledged the growing strength of the case for *Homo erectus* the sea-farer (*note 5*). The article and associated literature refer also to other non-*sapiens* species (Neanderthals, Denisovans, the 'hobbits' of Flores, etc.); but these populations are of considerably later date than *erectus*, and, while fascinating, evidence of their accomplishments would be less dramatic. A leading figure in this discussion is Robert Bednarik, an Austrian-Australian autodidact archaeologist who is perhaps best known for his ideas regarding the Aboriginal 'Dream Time' and for his interchange with Alice Roberts on the vexed question of the single or multiple origins of *Homo sapiens*. Because Bednarik is regarded by some as a 'maverick', his name has been taken in vain by 'fringe' archaeologists/epigraphists such as the very assertive 'Viewzone' group who sought to invoke his ideas as supporting their own (compare the invoking of the late academic 'Big-Bang skeptic' Halton Arp by 'fringe' astronomical thinkers). But Bednarik himself is egregiously well-informed, and his 2014 book *The First Mariners*, including his reports on projects in the style of Thor Heyerdahl which he began in 1996, is taken very seriously in the discipline.

Although Bednarik himself is no longer based in Australia, there is ongoing Australian interest in the *Homo erectus* question, notably concerning ancient human remains found at Kow Swamp in northern Victoria. The Kow Swamp finds have now been reinterred by the local Aboriginal community and are no longer available for study (an example of a well-known contemporary ethical/scientific issue). Although the finds appear to be of relatively recent

date (13,000-6,500 BP), some initial descriptions of the crania identified 'archaic characteristics not seen in recent Aboriginal crania' and proposed that the remains probably represented *Homo erectus*. This would seem to imply the survival of *erectus* in Australia until as recently as 10,000 BP. This interpretation has been disputed and an alternative interpretation proposed involving artificial cranial deformation practised on *Homo sapiens* (presumably for cultural reasons). (One is reminded of the 'non-exotic' interpretation of the 'hobbits' of Flores as a *sapiens* population exhibiting genetically-based physiological defects.) No such practice is known in the area today; but of course 10,000 years is a long time in the context of the histories of partly nomadic peoples.

Of course, if *Homo erectus* really was in Australia 10,000 years BP this does **not** demonstrate the presence of the species on the continent in pre-Aboriginal times; there might conceivably have been a later migration. But 10,000 BP is already an **extremely** late date for the very survival of *erectus*; and if *erectus* was indeed able to sail there **could** have been a very long-standing population in Australia, perhaps from as early as a million years BP.

Another archaeological site important in this general context is Lake Mungo in south-western New South Wales. The 'Mungo Man' remains, at one stage tentatively identified as non-Aboriginal, were eventually shown to be, in fact, Aboriginal; this was important in helping to establish that the Aboriginal people were in Australia at a very early date and thus were probably the first human inhabitants of the continent – a matter of considerable cultural and political importance. But the long-running case of the 'Bradshaw Paintings' (albeit lacking in relevant fossil evidence) still brings this conclusion into question; and, obviously, any decisive evidence of *Homo erectus* in Australia at a very early date would re-define Aboriginal

settlement as, at best, the first *Homo sapiens* occupation of the land.

These matters are of interest to linguists in that it has been argued that in order to plan a community sea voyage and construct the relevant vessels *Homo erectus* must have had language – spoken or signed. As the case for sea-faring *erectus* has strengthened, this point has become more salient. The notion that pre-*sapiens* humans had languages – obviously, totally unrelated to the much later tongues used by our own species, including those with which we are familiar, and quite possibly radically different in type – is excitingly iconoclastic. However, decisive evidence is never likely to emerge; it appears altogether too

optimistic to imagine that *Homo erectus* could **write** and that caches of documents might be found and that such texts – despite their wholly exotic nature – might yield to decipherment.

Some ‘maverick’ or ‘fringe’ work on early Australia involves proposals that put the above in deep shade! For example, *Out of Australia: Aborigines, the Dreamtime, and the Dawn of the Human Race* (2017), by Evan & Steven Strong, argues that *Homo sapiens* actually originated from Australia, not from Africa; early Aborigines (who, as is agreed, **could** journey on the seas to a degree but are not **known** to have gone so far) spread the species around the world. The Stronges reinterpret the DNA-based and archaeological evidence, but also

invoke traditional Aboriginal myths, claiming the right to rehearse what ‘Aboriginal culture-custodians’ insist is true – which presumably is challenged only ‘disrespectfully’, at one’s peril. In an associated book, they link the relevant Aboriginal beliefs with the Gnostic Scriptures! I am seeking/awaiting authoritative skeptical reviews of this material.

Notes

1. <http://tinyurl.com/ycec2as5>
2. <http://tinyurl.com/ybd2dx39>
3. <http://tinyurl.com/y88tzqyt>
4. <http://tinyurl.com/yd4nngkx>
5. <http://tinyurl.com/ybz2oajv>

REVIEWS AND COMMENTARIES



SCAM: So-Called Alternative Medicine by Edzard Ernst. Exeter: Imprint Academic, 2018, pp223. ISBN 9781845479708. Paperback £14.95.

An insider’s perspective laced with humour, irony and satire, evaluating alternative medicine and seeking to prevent readers from wasting money on bogus treatments.

Reviewed by Richard Rawlins

Exeter University’s former Professor of Complementary Medicine starts his latest book with a warning: ‘This book might unsettle you. If you are a true believer in so-called alternative medicine (SCAM), you might find the things I am about to tell you disturbing’.

Based on his 25 years of research, Ernst has compiled 50 easily assimilated essays in seven chapters intended to stimulate readers to think critically about healthcare in general and so-called alternative medicine in particular. He succeeds.

As modern medicine continued its inexorable progress - driven by science and based on evidence - those treatments, therapies and modalities which did not keep up became sidelined. The ‘fringe medicine’ of the 1950s and 60s morphed with alternative lifestyles into ‘alternative

medicine’. Then, as that cultural trend became less trendy and marketing required a fresh approach, ‘complementary medicine’ became the promoters’ favourite term. Hence, ‘complementary and alternative medicine’ - CAM. But Ernst points out that if a therapy does not work, it cannot be an alternative to medicine; if a therapy does work, it belongs to ‘medicine’. *SCAM* not only perfectly describes what is in the tin but offers a degree of honest explication not always found amongst enthusiasts for the therapies.

The brief career synopsis that the professor offers in the introductory chapter is particularly timely for his critics who impugn his motives and so often resort to *ad hominem* attacks. Context is all. A comprehensive account is given as to why it was that he moved from having at least some

belief in CAM, took up a chair to research and teach on the subject, and then to his realisation, based on that research, that for the most part the treatments and therapies going under the rubric ‘complementary and alternative’ might well be scams in the conventional meaning of the word. What was he to do? A scientist with integrity should publish all his research and opine upon that of others. Who would wish it otherwise? That degree of integrity did not find favour with all persons of importance.

The second chapter on ‘Basics’ offers a concise review of the topic in a straightforward style, but as you read through the book, the mood darkens. Many readers, many patients and even some princes will not be too surprised at the exposure of ‘Common Problems’ in chapter three, but by the time you get to the fourth chapter on ‘Research

and Researchers’, incredulity at the vagaries of human thought begins eating away at any confidence the reader might have in the ability of our species to be sapient.

Given the true value of any therapy is not determined by its risks alone, but by the balance between the risks and the benefits, Ernst points out: ‘Even the most abominable safety record of conventional medicine would be no reason to tolerate the deficiencies of SCAM’. The abundance of logical fallacies used to defend SCAM are explained with clarity – *tu quoque* being a classic and deserving of an explanation boxed for emphasis. It would be worth photocopying page 112, cutting out box 12, and keeping it in a wallet to facilitate discussions with enthusiasts.

‘The Tricks of the SCAM Trade’ revealed in chapter five, which focuses on ‘Healthcare Practitioners’, will amaze readers not used to scepticism. They deserve to be alarmed, if not frightened. They will be wiser for reading carefully. By the time ‘Patients and Consumers’ are considered in chapter 6, previously uncritical readers

may have become cynical about any claims in healthcare at all. Sadly, the uncritical public and camees who use camistry, will probably not dare venture too far on this journey to enlightenment. They will be the poorer for ignoring this sagacious synthesis.

Even the most abominable safety record of conventional medicine would be no reason to tolerate the deficiencies of SCAM.

But Ernst then reminds us of 19th century American politician Frank A. Clark’s opinion: ‘The next best thing to solving a problem is to find some humor in it’. Chapter seven looks at ‘The Funny Side’. Readers are advised: ‘How to become a Charlatan’; How to give ‘a SCAM lecture’; ‘How to avoid Progress’ that might come from accepting criticism; and how to deal with politicians, princes and sycophants.

Ernst closes by emphasising that his book ‘is not a text against but as a plea for something’. For patients to be protected against their own gullibility

and for regular medical professionals to be more conscientious about offering the time, compassion and empathy that all patients need and deserve.

With a glossary explaining terms which might not be familiar to all readers and a comprehensive index, *SCAM* is essential reading for all those tempted to stray from the tortuous path of modern evidence-based medicine. The consciences of those practising in the domain of implausible, imaginary therapies will be pricked, but they will be the better for it. Such practitioners may be quacks, even knowing frauds. How are we to know? They must answer for themselves that ancient Delphic maxim, expounded on by Socrates: ‘Know thyself’. This book is a valuable assistance to all readers engaged in that essential task.

Richard Rawlins MBA FRCS is an orthopaedic surgeon, an Apothecary, a member of The Magic Circle, and author of ‘Real Secrets of Alternative Medicine’

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What Beliefs are Made From by Jonathan Leicester. Sharjah: Bentham Science Publishers, 2016. eISBN: 978-1-68108-263-9, ISBN: 978-1-68108-264-6.

From the author

I am a retired neurologist with some background in psychology. I have been interested in the nature and purpose of belief for fifty years (*Journal of Mind and Behavior*, 2008, **29**, 217-238). The book is about how people do believe, not how they ought to believe, psychology rather than epistemology. My view is that belief is a feeling that is a signal to the person that he or she believes the item under consideration, and its primary purpose is to be one important guide to practical action. I believe belief guides action both directly and through its role in giving speed and economy to inquiry. The idea that belief is aimed at action, not

at truth, suggests explanations for some of the puzzles concerning belief. Life-saving actions often have to be made quickly, often without good evidence to guide them, and when it would do no good to withhold judgement. Belief has evolved to meet these imperatives, with some sacrifice of accuracy for speed. Some of the unconscious biases of reasoning, including confirmation bias and overconfidence of correctness, also become understandable. My view depends heavily on previous writings of David Hume, Bertrand Russell, and Charles S. Peirce. I believe I have made a strong case for these views. More recently there has been a

functional MRI study with results that support the feeling theory (*Annals of Neurology*, 2008, **63**(2), 141-147). My hope is that a better understanding of belief might indirectly help people to believe better.

The book works with and uses evidence from ordinary secular beliefs. I have not been especially interested in religious belief, but because religious belief is of such general interest I finish by examining two topics which have some relevance to religion, viz. the nature of conscience and the unsolved mind-body problem. I believe the feeling theory of belief allows some helpful comment on these.

The book is on Open Access at:

<http://tinyurl.com/yb4fw8bq>

or Google 'What Beliefs are Made From/ Jonathan Leicester' and open the entry 'What Beliefs are Made From - Bentham eBooks - Bentham Science'. This gives the Foreword, Preface, Contents, and the first three pages of each chapter, which includes all the brief introductory chapter, as well as several reviews and how to get hold of the book, either as an e-book or a hard-cover conventional book.

Reviewed by Tim Mendham

This review originally appeared in 'The Skeptic', the magazine of the Australian Skeptics, and is reprinted here with permission of the editor, Tim Mendham.

Jonathan Leicester is a retired neurologist. His book on the nature of beliefs covers a wide range of theories and examples. In the foreword, Prof Dominic Murphy of Sydney University suggests that Leicester is looking for a unified theory of belief 'by arguing that belief is a distinctive feeling ... by saying that what beliefs have in common is the way they feel, rather than their functions or their causes'. And there are many causes of belief – physical, psychological, and cultural determinants are all covered – and he looks at four theories of belief: the intellectualistic, the dispositional, the feeling or occurrent, and the eliminativist theories.

As he explains:

The intellectualistic theory proposes that belief is a cognitive act related to evidence that the thing believed is probably true, and implies that the purpose of belief is to indicate truth. The dispositional theory holds that we recognize our own beliefs by observing how we react to things (much as we infer the beliefs of other people), and implies that the purpose of belief is to guide action. The feeling theory claims that belief is a particular feeling that comes to us and is a signal to us that we believe the thing under

consideration. And eliminativist theories claim that belief does not exist, but is an illusion of our language and culture'. He says that there are difficulties with each of these theories, and examines each in turn 'seeking to find which one fits the evidence best.

Judging by the amount of space he devotes to each, he seems to favour the 'feeling' theory, and certainly he finds 'there are fewer and less serious problems with the feeling theory than there are with the intellectualistic theory', and he backs up his preference with quotes from David Hume, Bertrand Russell, Walter Bagehot, and even St Paul.

In areas of specific relevance to skeptics, he talks about various causes of belief – largely negative causes – such as a failure to use evidence, faulty use of evidence, an inability to withhold judgement, vacillation, desire, wishful thinking, prior beliefs, community attitudes, direct experience, testimony, and good old ego defence mechanisms, among many others. He criticises those (singling out humanists) who hold that:

(P)eople are reasonable and able to form their own moral sense. ... The humanist often feels that he has worked out right and wrong by the power of his own reasoning, but he underestimates how difficult it is to do this, he underestimates the power that influence and authority have on his thought and belief, and he underestimates the power of the irrational factors that contribute to belief.

It has always been the appreciation of many skeptics that education, learned profession, and social position are no defence against personal preferred beliefs, no matter how eccentric, even when they seem totally out of synch with the rest of a person's attitudes and approaches (i.e. cognitive dissonance).

He follows with discussions of conscience, morality and, of course,

religious faith. He says doubt is an important element of belief, and doubt is the antithesis of faith:

St Paul wrote that faith is the assurance of things hoped for, the conviction of things not seen. Hope implies doubt. Some doubt is reasonable when believing in things unseen. St Paul also wrote that faith, hope, and love are the three essential things. The philosopher Manuel de Unamuno wrote that faith without doubt is dead faith. I believe that doubt stimulates thought and lack of doubt inhibits thought, that faith without doubt is certainty, and certainty promotes intolerance, and intolerance kills love.

He looks into the physical and neurological aspects of belief, and states that:

Neural plasticity is the mechanism behind all learning, all remembering, and normal forgetting. ... An animal with no neural plasticity would be a reflex automaton.

Leicester has written to the author of this review stating that:

Some readers have not noticed that my Preface says the book is on the nature and purpose of belief, about how people do believe, not how they should believe. So they say I should have gone into justification ... about how people should believe. My hope in writing, not explicitly stated, was that a better understanding of belief would indirectly help people to believe better.

This he attempts to do, covering much information and debate, sometimes very briefly where a much longer book might have given more time to some very complex issues. But within the parameters of a book that runs for just over 180 pages, he makes a good fist of dealing with another difficult but vitally important element of humanity, and the conscious and unconscious influences on our behaviour, as faulted as they may be.



MARK'S BOOKSHELF

Mark Newbrook

Paranormal Science: The Christian Right's War on Reality

Antony Alumkal

New York University Press, 2017,
pp x + 243

In my review of Kurt Andersen's *Fantasyland: How America Went Haywire: A 500-Year History* (*Skeptical Intelligence*, Summer 2018), I referred to a comment made in 2004 by George W. Bush's advisor Karl Rove, to the effect that in C21 'we [the US administration] create our own reality'. This comment has become something of a 'meme'; and it is cited again in the introduction to the book presently under review. Alumkal introduces it at this early stage in his book as closely linked with the bombastic ideas of the 'Christian Right', a grouping which he identifies as a central power in the movement to suppress scientific truth when it is inconvenient or offensive from the point of view of conservative American Christian thought. The relevant ideas and their effects clearly warrant further consideration in this more specific context.

As I noted in discussing Andersen's book, the USA is rather different in the relevant respects from other 'western' countries, in that in recent times Christianity has been much more important in public life in the USA than in the rest of 'the West'. Belief in creationist interpretations of *Genesis* and other fundamentalist theological positions remains strong; and indeed adherence to conservative (often fundamentalist) versions of Christianity is regarded by many as a key part of the American identity. There is thus a very high-profile opposition between conservative Christian believers, on the one hand, and 'materialist' or 'naturalist' scientists, historians, philosophers and skeptics, on the other. And the fact that many leading politicians, including Bush and now Donald Trump, endorse

and identify with the former body of opinion throws all this into extremely high relief.

The issues in question do not by any means loom so large in, say, the UK, where Christianity is becoming a (large) minority persuasion and where even serious Christian (and Jewish) believers generally accept the scientific consensus on matters such as evolution. There are only occasional crises in this area (for instance the recent furore about Ofsted's negative assessments of some orthodox Jewish schools in London). But because of the enormous political and economic influence of the USA and of American leaders, it is still important for non-Americans to understand the much more general and more damaging situation across the Pond. (Early in his book Alumkal provides a classification of influential evangelical tendencies and movements in the USA which many non-American readers will find unfamiliar but, in context, most interesting.)

Moderate religious believers who do interpret their faith in terms of the scholarly consensus on science (etc.) find themselves struggling to be part of the same Christian community as their conservative 'brethren'.

Alumkal – who is a professor of the sociology of religion in a school of theology and a moderate episcopalian Christian who wants his religion to support the scientific enterprise and liberal causes – was inspired to write his book by the work of the historian Richard Hofstadter in the 1960s on 'paranoia' in American public life – and by Hofstadter's intellectual legacy. This tradition of scholarship furnished him with a title for the book and with much material concerning the tendency

in various strands of thought to identify hostile conspiracies aimed at undermining what the groups in question hold to be true and good. The fundamentalist Christian Right's 'Manichean dualist' (white versus black) opposition to mainstream science – and to moderate manifestations of their own religion which on their analysis are making concessions to the forces of Evil – is of this nature. Those who disagree with these 'paranoid' thinkers are seen either as themselves part of the evil conspiracy or as deluded dupes.

Alumkal is clearly anxious about the fact that because of these tendencies the 'gap' between the world of scholarship and conservative popular thinking in the USA is (and looks set to remain) so large; a society divided in this way must become dysfunctional. Moderate religious believers who do interpret their faith in terms of the scholarly consensus on science (etc.) find themselves struggling to be part of the same Christian community as their conservative 'brethren'. And many studious young Americans are confronted with a stark choice between, on the one hand, strict religious adherence (urged upon them by their families and home communities, especially in the South) and, on the other, a life of scholarship.

Indeed, writers such as the anti-evolutionist Phillip E. Johnson (much cited here) openly identify those Christians who seek to combine the allegedly deeply incompatible world-views of the Bible (read literally) on the one hand and of science on the other as hypocrites and/or as bogus believers motivated by essentially non-religious goals. And in the USA honest, overt atheism (or even thoughtful agnosticism) is a much less socially acceptable alternative stance than in Canada, Europe or Australasia. Even those American scientists (maybe

60%) who are themselves unbelievers and who mostly move in their 'ivory-tower' circles where religion is of negligible importance and naturalism is the dominant philosophy, might hesitate to identify in the public domain as non-religious, if only for fear of jeopardising funding from non-academic sources. They prefer to avoid attacks from either side by presenting religion as a private matter with no implications for academic activity (especially in empirical domains; note the concept of 'non-overlapping magisteria'). This situation is plainly unstable.

Alumkal identifies four main areas of doctrinally-grounded conservative/anti-scientific thought where these issues arise, and discusses them in turn in the central four chapters of his book. They are: the anti-evolutionist 'Intelligent Design' movement, the 'Ex-Gay' movement (many of the Christian Right advocate 'gay conversion therapy', which is apparently soon to be outlawed in the UK) and opposition to pro-LGBT movements more generally, 'Christian Right Bioethics' (opposition to abortion, assisted dying, etc.; these practices are seen as usurping God's role) and denial (often misleadingly called 'skepticism') of the reality of catastrophic climate change or of the role of human activity in causing same. Some of these sets of issues have so far been of more concern to the skeptical movement (CSI, ASKE, etc.) than others, but all four are legitimate targets of skeptical thinking and action. And in all four cases most skeptics will surely share Alumkal's alarm and will agree with most of his observations and proposals.

The specifically religious element in these anti-scientific positions is frequently very overt. Comments such as 'God does not arrange it so that people are born homosexual or born in a wrongly-gendered body' or 'God will not allow climate change to ruin the Earth' are common in the relevant literature. And, in so far as human beings are to be deemed responsible for any ill effects, this is said to be a

consequence of their sinful disobedience to God's commands, their abjuring of their God-given dominion over the universe (the Christian Right do not believe that intelligent extra-terrestrials exist) and specifically over the Earth (this applies especially to the abandoning of human practices now believed by most scientists to be causing harmful climate change), and their refusal to seek salvation through Jesus.

It is clear that for many on the Christian Right science is simply wrong if its findings really are in conflict with a literal interpretation of the Bible.

Of course, the Christian Right does often also cite scientific evidence as supposedly in its support if properly interpreted, for example in claiming that those aspects of climate change which cannot plausibly be denied are in fact for the good. Note also the popularity on the Christian Right of the few scientists who accept creationism and other such positions – scientists such as Jerry Bergman (recently discussed in this forum). There is in addition a tendency to embrace strong readings of Thomas Kuhn's 'paradigm shift' interpretation of changes in scientific orthodoxy – and indeed to suggest (misleadingly) that mainstream science itself should be regarded as a manifestation of 'faith' (like a religion) and that it has now 'gone postmodernist' and no longer purports to be arriving at increasingly accurate analyses of the world ('post-normal science'), while still jealously defending its hegemony in the academic world.

But this secondary focus on science is in fact largely pragmatic in character, arising partly out of awareness of the high prestige of science even in the USA and partly out of the need to avoid legal difficulties involving, e.g., the teaching of biology (where there has been much litigious activity regarding attempts to insert

overtly religious anti-evolutionist material into curricula, grounded in the 'separation of church and state' enshrined in the US Constitution). It is clear that for many on the Christian Right science is simply wrong if its findings really are in conflict with a literal interpretation of the Bible, and elsewhere absolutely must be interpreted in biblical terms, however implausibly.

Alumkal traces the recent history of each of the four skeins of Christian Right thought – including interactions with hostile mainstream scholars/skeptics such as Johnson's sharp exchanges in the late 1990s with the philosopher Robert Pennock (author of the excellent 1999 book *Tower of Babel: The Evidence Against the New Creationism*).

Some points made (or implied) by the Christian Right do need to be acknowledged and, if ultimately rejected, adequately rebutted; and it is arguable that despite his erudition and his manifestly clear thinking Alumkal is so committed to his overall position that he occasionally does not do justice to such points. For instance, when discussing Johnson's clash with Pennock on methodological vs metaphysical naturalism and other such exchanges he might have observed overtly that if some phenomena accepted in traditional religious thought (for instance, miracles, special creation) really do occur it might still be difficult (to say the least) for naturalist scientists to acknowledge this – simply because of the apparently overwhelming problems with experimentation, with the perceived need for the **decisive** exclusion of non-paranormal explanations (at least in terms of Ockham's Razor, etc.) or even with the formulation of genuinely testable hypotheses. This effect can lead scientists and other modernists to be (or at least to appear) dogmatic on this philosophical front, thereby entrenching the Christian Right's resentment at the current hegemony of (naturalistic) science in academic quarters (see above). (Andersen too fails to grapple with this issue.)

Alumkal does acknowledge that the Christian Right, itself often accused of paranoia, is right to observe that the ‘New Atheists’ (Richard Dawkins, etc.) are also arguably paranoid in perceiving organised religion as a theocratic tyranny. This is an exaggeration even of the situation in the USA and is certainly ‘over the top’ as far as the contemporary UK is concerned. On the other hand, the Christian Right (somewhat ironically) regard Dawkins *et al.* as their **allies** in exposing the alleged hypocrisy of moderate Christians whom (as noted above) they see as trying to ‘have it both ways’ – though this perception is **not** reciprocated!

There is much more that could be said about the fascinating and important contents of this book. It is to be highly recommended.

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Artists on Language and Life-Forms

The Lost Words

Robert Macfarlane & Jackie Morris.

Hamish Hamilton (associated with exhibition at The Foundling Museum, London), 2017

Beautiful Monsters

Anya Charikov-Mickleburgh, Laura Dekker, Donal Moloney, Ed Saye, Evgenyi Strelkov & Dina Varpahovsky.

Exhibition (Portico Library, Manchester) & brochure, 2016.

I have had much to say of late about artists’ ideas about human language. Another such artist is Jackie Morris, a book-illustrator, who collaborated with Robert Macfarlane to produce this book and the associated exhibition. Macfarlane is a Fellow of Emmanuel College, Cambridge and an acclaimed author who also identifies as a ‘word-collector’ and mountain-climber.

The authors’ main concern involves the disappearance of words from the language of children (these words often remain absent from the language of the adults these children become). The words in question are mainly nouns

and relate to features of the natural world (animals, plants, etc.) which are increasingly unfamiliar to young people in their now mainly urban environments. It is suggested that in order for these words to be ‘conjured’ back into familiarity they need to be spoken aloud – thus creating ‘the right spells’, ‘the old, strong magic’ – rather than merely read. The book goes on to present (on its large-size pages) beautiful, imaginative pictures of a range of life-forms in the alphabetical order of their names in English. For each life-form there is a body of written text consisting of successive lines beginning with the successive letters of its name; thus acorn is followed by ‘As flake is to blizzard, as / Curve is to sphere ...’, etc.

The nouns are given without articles (a, the), as if they were proper names representing non-human persons (or uncountables like water); this is, of course, a common device in mythological and other such speech/writing, and its use strengthens the notion that we are in a magical realm here. Indeed, the ideas presented here seem to reflect the ‘naturalist’ conception of language: words are not merely conventional, arbitrary symbols (as modern linguists would suggest is almost always the case) but rather have an inherent, perhaps mystical relationship with the things they describe, and thus have power.

It is not clear how serious/literal Macfarlane & Morris are being in making their proposals. If their idea is merely to use good art and well-chosen wording to encourage people (especially children) to perceive nature as wholesome and deserving of attention, surely no-one could object. But, if they are suggesting that there is more to the matter than this, there is an onus upon them to deal with some pertinent and obvious facts. Words are language-specific, their forms change and vary (even in pre-modern conditions), and very similar words can have very different meanings/references in different languages. Indeed, words can be altogether replaced over time, for instance where

taboo discourages use of the original word (one thinks of the originally euphemistic words used in various languages to refer to the hare, perceived in pagan times as demonic). In addition, there are cases where two or more given languages (especially those used in pre-scientific cultures) classify nature (like any other aspect of the world) differently, sometimes without good translation equivalents. The significance of contemporary English spellings must also be called into question: spellings too vary and more obviously change over time, and indeed any given language was at an earlier stage (a highly relevant stage, in context?) not written at all.

It is suggested that in order for these words to be ‘conjured’ back into familiarity they need to be spoken aloud.

Of course, Macfarlane & Morris might say in response that they themselves are naturally working with contemporary English and its users, and that word-forms from earlier stages of English or from other languages would be just as effective for native speakers of those other language varieties. But in that case special significance can hardly be claimed for the specific word forms cited. In broadening one’s terms of reference in this context, it is important not to become irreducibly mystical (or simply to ‘cop out’ of the task of justifying one’s ideas).

The literature is replete with other examples of the notion that words per se have power. A strong example in fiction is that of the ‘Deplorable Word’ in C.S. Lewis’ ‘Narnia’- series novel *The Magician’s Nephew*; when uttered, this word destroys all life in the world in question, except that of the one who utters it. And some have made ‘factual’ claims on this front. Jim Brandon advocated the ‘Fortean’ notion of ‘lexi-linking’, which involves the view that the members of pairs each consisting of a word and a type of real-world

entity (not necessarily apparently connected) can come to be genuinely associated across a range of locations and situations on the basis of repeated usage; the world changes and the word-thing nexus arises again and again, seemingly by coincidence. Other authors, indeed, maintain that words and other features of language can possess (or be furnished with) magical or other spiritually powerful effects, often regardless of their meanings and in some cases even if they are merely homophonous with other words which might themselves be deemed magical or otherwise important in context. For instance, Shelley Lessin Stockwell finds it important to add the invented word Awomen to Amen in prayer in order to ensure that women as well as men derive the supposed associated benefits, although of course the word

Amen has no etymological connection with the English word men.

In a very different vein: the excellent exhibition ‘Beautiful Monsters’ at the Portico Library was (as its title may suggest) of more interest in a cryptozoological than in a skeptical-linguistic context; but some of the exhibitors evince an interest in sophisticated animal communication as ascribed in fiction/legend to mythological entities and as reportedly demonstrated by some cryptids (notably by Bigfoot/ Sasquatch; see my material on this question in this forum). One of the artists expressed (in conversation with me) the idea that animals ‘obviously have language’; there was a hint that if anyone denies this it must be because of narrow-minded ‘speciesism’. Now the well-founded current mainstream consensus is of course that only *Homo sapiens* of

all known animals certainly uses language or any system of comparable complexity and flexibility. Unless a highly dramatic empirical claim really is being made, statements such as the one just cited either reflect a naïvely anthropomorphising view of non-human animals (as manifested in much children’s literature such as Kenneth Grahame’s *The Wind in the Willows* or Joel Chandler Harris’ ‘Brer Rabbit’ series) or else involve the use of the term language in a looser sense, referring to the non-linguistic communication systems of various species. Given the unfamiliarity of linguistics in the lay world, confusion of this kind is hardly surprising; but it should perhaps be of some importance to non-linguists working professionally with language-related notions to arrive at a more accurate viewpoint.

ANNOUNCEMENTS

OF INTEREST

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| <p>SKEPTICISM, SCIENCE AND RATIONALITY (GENERAL)</p> |
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Sense About Science

Keep visiting the Sense About Science website for new developments:

<http://www.senseaboutscience.org/>

The Nightingale Collaboration

Keep visiting the Nightingale Collaboration website. If you have not already done so, why not sign up for free delivery of their electronic newsletter?

<http://www.nightingale-collaboration.org/>

Good Thinking

Make sure that you are on the Good Thinking’s Newsletter email list:

<http://goodthinkingsociety.org/>

Also, see the video of the inimitable Michael Marshall presenting an account of his work as project manager of Good Thinking at the US Northeast

Conference on Science & Skepticism, 2018.

<http://tinyurl.com/yd3ywugc>

Scientific research

The House of Commons Science and Technology Committee has issued its latest report on Research Integrity (Sixth Report of Session 2017–19). ‘This inquiry looks at trends and developments in fraud, misconduct and mistakes in research and the publication of research results. Research by Parliamentary Office of Science and Technology indicates the trend in misconduct/mistakes in publishing is still upwards. There has also been a so-called “crisis in reproducibility” of research. The Committee continues the previous Committee’s inquiry, taking forward the evidence it had received before the General Election.’

<http://tinyurl.com/ybuwgh9x>

Also: ‘The uncomfortable truth of science is that it survives largely on

good faith. You’ll hear plenty of talk about transparency, logic, and evidence, and these are the ideals of the scientific method. However, the reality is our scientific institutions have historically encouraged a trust-based approach, essentially taking the methods and analysis scientists present at their word. In recent years, many scientists have become less comfortable with trust alone, and have taken aim at corroborating scientific work. Pre-registration of clinical trial methods and mandatory reporting of results are becoming more common. Organizations are also asking to see raw scientific data, no longer satisfied at taking analyses for granted Faith in the good intentions of our colleagues probably isn’t something we wish to lose. When scientists choose to act honestly, as they usually do, our traditions function just fine. A recent media firestorm over cell phones and brain cancer, however, reveals how

simple it still is for an act of bad faith to baffle and even break the scientific system.'

<http://tinyurl.com/ybks95oz>

Reproducibility of research findings

'The world of social science got a rude awakening a few years ago, when researchers concluded that many studies in this area appeared to be deeply flawed. Two-thirds could not be replicated in other labs. Some of those same researchers now report those problems still frequently crop up, even in the most prestigious scientific journals. But their study, published ... in *Nature Human Behaviour*, also finds that social scientists can actually sniff out the dubious results with remarkable skill.' See:

<http://tinyurl.com/yb93wd7w>

And: 'Updated: A re-replication of a psychological classic provides a cautionary tale about overhyped science.' This concerns research published in 1988 by German psychologists appearing to show that if your mouth is forced into a smile, you become a bit happier, and if it's forced into a frown, you become a bit sadder. Subsequent studies failed to replicate this but an investigation of why this was so reveals that the original findings are replicable.

<http://tinyurl.com/y9kxnfog>

Fake science

'On June 21, 2018, a dozen self-declared scholars gathered in a small meeting room of a hotel in Venice, Italy. As the session began, they sat in silence and listened to the presenter. "Close your eyes," said a woman identified as Rebecca Ellis, from the University of New Orleans. "Right now, I want you to think of your favorite color and picture in your head." This was not a meditation class but one of the sessions of a scientific conference organized by the questionable World Academy of Science, Engineering and Technology, or Waset. In the audience, among students and professors ready to speak on topics ranging from criminal law to

mental health and mineralogy, was a group of South Korean reporters from Newstapa, a Seoul-based investigative journalism center and partner of the International Consortium of Investigative Journalists. Having submitted a paper created using SCIGen, a joke program which generates random scientific essays with charts and figures, the journalists were invited to present on tele-communications. Their pseudo-scientific talk was warmly received.

'The Venice event was just one of hundreds of fake scientific conferences that Waset holds every year, according to the Newstapa investigation.'

<http://tinyurl.com/y9ym3pxf>

Science in court

'Courts don't determine scientific facts': 'Most people have probably seen the recent news that Monsanto has been ordered to pay \$289 million following the ruling by a California jury that Monsanto's glyphosate (a.k.a. Roundup) is dangerous and likely contributed to Dwayne Johnson's cancer. I could write many lengthy posts about why that ruling is wrong.'

<http://tinyurl.com/y8cvtuz9>

Website of interest

'InFact with Brian Dunning is the web video series that gives you the real facts behind popular myths, promoting high-quality information that helps people live better lives.' Click on the link below to access an accumulating series of brief, informative, myth-busting videoed talks (with text) on a range of subjects of interest to skeptics.

<http://infactvideo.com/>

Teaching evolutionary science

'In this episode of Talk Nerdy, Cara speaks with Bertha Vazquez, the Director of the Teacher Institute for Evolutionary Science (TIES) of the Richard Dawkins Foundation for Reason and Science, a division of the Center for Inquiry. They discuss her incredible work providing the tools and training necessary to effectively teach the science of evolution throughout middle schools in the United States.'

<http://tinyurl.com/yanx4gp5>

Climate change

The BBC has issued formal guidance to its journalists on how to report climate change.

<http://tinyurl.com/y8or7yqe>

Denialism

'In recent years, the term has been used to describe a number of fields of "scholarship", whose scholars engage in audacious projects to hold back, against seemingly insurmountable odds, the findings of an avalanche of research. They argue that the Holocaust (and other genocides) never happened, that anthropogenic (human-caused) climate change is a myth, that Aids either does not exist or is unrelated to HIV, that evolution is a scientific impossibility, and that all manner of other scientific and historical orthodoxies must be rejected....There is no doubt that denialism is dangerous. In some cases, we can point to concrete examples of denialism causing actual harm.'

<http://tinyurl.com/ybpn4qqx>

MEDICINE

Cancer quackery

How our deceptive cancer cure video went viral and reminded people to be skeptical

'Videos promoting unproven cancer cures spread like wildfire on social media, so the people at the Office for Science and Society created one of their own with a twist ending....As of this writing, our video has reached over 8.3 million people across all platforms. By our standards, this is remarkable and genuinely unexpected. Of course, it can't compare with viral clips quacking about easy solutions to complicated diseases. But with more than 116,000 shares, our little reminder to be skeptical has undoubtedly left the comfort of our own echo chamber and reached the kinds of people who needed to see it.' At:

<http://tinyurl.com/y6uwluvl>

And not surprisingly: 'In (a) cohort study of 1,901,815 patients, use of complementary medicine varied by several factors and was associated with refusal of conventional cancer

treatment, and with a 2-fold greater risk of death compared with patients who had no complementary medicine use Patients who received complementary medicine were more likely to refuse other conventional cancer treatment, and had a higher risk of death than no complementary medicine; however, this survival difference could be mediated by adherence to all recommended conventional cancer therapies.’ At:

<http://tinyurl.com/y7eqqhl4>

And: ‘Doctors face difficult conversations with patients with metastatic cancer for whom NHS treatment has failed. A growing problem is how to advise patients who opt to pursue expensive, experimental treatments in the private sector, including orthodox therapies given in unproved combinations and doses but also alternative therapies with no evidence behind their use. The BMJ today publishes figures that show how crowdfunding for alternative cancer therapies has soared in recent years (tables 1 and 2). The figures, collected by the Good Thinking Society (see <http://tinyurl.com/yadv97bq>), a charity that promotes scientific thinking, show that since 2012 appeals on UK crowdfunding sites for cancer treatment with an alternative health element have raised £8m (€9m; \$10m). Most of this was for treatment abroad.’ (Editor’s note: I can vouch for this. My local newspaper recently reported the case of a woman with ovarian and cervical cancer whose supporters ‘raised £300,000 for revolutionary treatment in Germany’. This was at the Hallwang Clinic in Dornstetten, where patients receive expensive and unproven treatments for a range of diseases including cancer. Sadly this patient has announced ‘It’s devastating - the cancer has come back of its own accord’ and is appealing for more funds.) At:

<http://tinyurl.com/yc46tu6k>

and see:

<http://tinyurl.com/yc72zqgq>

Mobile phones and cancer

‘Last week the Observer published an article by Mark Hertsgaard and Mark Dowie on a disturbing topic – the idea that telecoms giants might collude to suppress evidence that wireless technology causes cancer. The feature was well written, ostensibly well researched, and deeply concerning. Its powerful narrative tapped into rich themes; our deep-seated fears about cancer, corporate greed, and technology’s potentially noxious influence on our health. It spread rapidly across social media – facilitated by the very object on which it cast doubt. Yet as enthralling as Hertsgaard and Dowie’s narrative might be, it is strewn with rudimentary errors and dubious inferences. As a physicist working in cancer research, I found the authors’ penchant for amplifying claims far beyond that which the evidence allows troubling. And as a scientist deeply invested in public understanding of science, I’ve seen first-hand the damage that scaremongering can do to societal health. While it is tempting to rage into the void, perhaps this episode can serve as a case study in how public understanding of science can be mangled, and what warning signs we might look out for.’

<http://tinyurl.com/y8xx8vy3>

and

<http://tinyurl.com/yd54vwhd>

Vaccination

‘Twenty years after his discredited paper linked autism to the MMR jab, the doctor (*Andrew Wakefield*) – who was struck off the medical register in the UK – has become a leading light in the US and frighteningly influential worldwide.’ An alarming update on the activities of this disreputable individual.

<http://tinyurl.com/y8ec2xx7>

Also: ‘An author who has published four articles about the alleged risks of vaccines — but who lied about his name and claimed an affiliation with the Karolinska Institutet — has lost one of the papers. He will also lose

three more, Retraction Watch has learned.

<http://tinyurl.com/y748h852>

Also: ‘Bots and Russian trolls spread misinformation about vaccines on Twitter to sow division and distribute malicious content before and during the American presidential election, according to a new study. Scientists at George Washington University, in Washington DC, made the discovery while trying to improve social media communications for public health workers, researchers said. Instead, they found trolls and bots skewing online debate and upending consensus about vaccine safety. The study discovered several accounts, now known to belong to the same Russian trolls who interfered in the US election, as well as marketing and malware bots, tweeting about vaccines.’

<http://tinyurl.com/y7juql6u>

And see the link below for an update on the lack of evidence for any association between autism and vaccination.

<http://tinyurl.com/ya37r2h9>

Meanwhile: ‘Re: That list that starts “There is no science that shows vaccines may cause Autism, except in all these government published studies which show vaccines may cause Autism.” You maybe have seen it on Facebook or on neighborhood discussion groups, or similar.’ See:

<http://tinyurl.com/y9dqkze7>

Homeopathy

‘Following the NHS decision to exclude homeopathy from publicly-funded drugs being upheld by a High Court judge, it is now calling for the homeopathic groups which challenged its decision to pay back all legal costs incurred. The British Homeopathic Association (BHA) fought the NHS decision in court; now the NHS is looking for full reimbursement of the £120,000 it incurred in defending the BPA’s legal challenge, arguing that the bill for “tap water masquerading as medicine” should not be picked up by UK taxpayers.’ At:

<http://tinyurl.com/yatmt43a>

Meanwhile: ‘The last place in England to offer publicly-funded homeopathy is to stop providing the practice on the NHS. Bristol’s clinical commissioning group (CCG) has decided to end NHS-funded homeopathic treatment except in exceptional circumstances.’ See:

<http://tinyurl.com/y9cut7mu>

Also: See the definitive statement about homeopathy by Edzard Ernst in the *Spectator*: ‘To dispel this false impression, I have collected all the “official verdicts” about homeopathy that I could find, regardless of what they tell us. By ‘official verdict’ I mean recent statements from national or international organisations (rather than from single individuals) that:

- are independent
- conducted a thorough assessment of the evidence
- have a reputation of being beyond reproach

<http://tinyurl.com/yc8x9ztv>

And see the ‘quick reference guide’ to homeopathy by the Royal Pharmaceutical Society at:

<http://tinyurl.com/y8muv22>

Acupuncture

A @PLOS ONE paper titled ‘Comparison of acupuncture and other drugs for chronic constipation: A network meta-analysis’ that appeared in April 2018 has been retracted.

<http://tinyurl.com/y9ym3pxf>

‘Functional medicine’

‘The American Academy of Family Physicians (AAFP) has partially lifted its moratorium on continuing education credit (CME) for courses in so-called “functional medicine,” but only to the extent that these courses give family practice doctors sufficient information to educate interested patients about the topic. “How-to” courses teaching various functional medicine techniques, modalities or applications for implementation in treating patients remain under the CME moratorium. The AAFP’s decision was announced in AAFP News in March and later reprinted in the *Annals of Family Medicine*. Unfortunately, it is only by accessing these articles that physicians

and the general public will learn the history and current rationale behind the AAFP’s decision: Previous literature reviews did not find sufficient evidence to support the use of functional medicine in family practice and “in some cases, determined the claims being made to be potentially dangerous”.’

<http://tinyurl.com/y7vpeulb>

Naturopathy

A lengthy critical review of the 4th edition of *Textbook of Natural Medicine* by Joseph E. Pizzorno and Michael T. Murray.

<http://tinyurl.com/y7hknpxf>

Peter Gøtzsche

‘The Cochrane Collaboration’s Governing Board of Trustees voted unanimously on 25th September to terminate Professor Peter Gøtzsche’s membership of the organization, and his present position as a Member of the Governing Board and Director of the Nordic Cochrane Centre.....The Governing Board’s decision was based on an ongoing, consistent pattern of disruptive and inappropriate behaviours by Professor Gøtzsche, taking place over a number of years, which undermined this culture and were detrimental to the charity’s work, reputation and members. Professor Gøtzsche has also repeatedly represented his personal views as those of Cochrane, including in correspondence with members of the academic community; in the media; and when acting as an expert witness for a criminal trial.’

<http://tinyurl.com/y7flpqjg>

Brian Wansink

‘A prominent food researcher has resigned from his post at Cornell University after an investigation found major issues with his research. Six of his high-profile journal articles were retracted earlier this week. Brian Wansink, known for his buzzy behavioral science studies focusing on food, has been removed from all research and teaching at Cornell following an internal investigation that revealed academic misconduct, the

school announced in a statement Thursday.’

<http://tinyurl.com/ydyr8mzz>

Natural Cycles birth control app

‘Natural Cycles was hailed as a stress-free, hormone-free contraceptive. Then women began reporting unwanted pregnancies. ...I was sold on shiny promises, a sleek user interface and the fact that a former Cern physicist, Elina Berglund, was at the company’s helm. But four months in, it failed. Berglund helped discover the Higgs boson; but it turns out her algorithm couldn’t map my menstrual cycle’ (*and that of other users*).

<http://tinyurl.com/yd85t3ur>

Treating sunburn

‘To treat a sunburn, the very best thing you can do is prevent yourself from getting one in the first place. Wear protective clothing, don’t stay out in the light for too long, slather on gobs of sunscreen (far more than you think you should), and reapply often. Still, even with the best intentions, many of us end up with that dreaded lobster look. In consequence, the market offers tons of treatments—and equally as many old wives’ remedies claim that they provide superior relief. But the scientific answer is surprisingly simple: Just cool and moisturize your burned skin’.

<http://tinyurl.com/y886d32b>

Stem cell injections

‘In the wake of a Contact7 investigation, a growing number of people are coming forward to report spending thousands of dollars on stem cell injections that have failed to relieve any of their chronic pain. Stem cell injections - not derived from embryos, but other sources like donated amniotic tissue - are not covered by insurance and are not FDA-approved to treat conditions like orthopedic pain. But they’re marketed aggressively in newspapers and magazines, and on television, as an alternative to traditional medical procedures like surgery.’

<http://tinyurl.com/y7gdaqap>

Workplace wellness programmes

‘Workplace wellness programmes are an assemblage of wellbeing activities like yoga or cycling clubs, packaged together with diagnostic activities like biometric screenings; their aim is to reduce sickness, increase productivity and cut insurance costs for an organisation’s members. This is big business – in the USA, the market is around \$8 billion – with a return-on-investment claim, thanks to a plethora of studies that tout the benefits of these programmes But whether staff enter these kind of initiatives in the first place is usually up to them, making it hard to evaluate their effectiveness, as those who choose to participate may differ in key ways from those who do not. To assess the benefits of the programmes accurately therefore requires a randomised-controlled study. This is what the National Bureau of Economic Research published recently, and it leaves these programmes looking sickly.’

<http://tinyurl.com/ybdv7dvy>

Recommended exercise

‘An entire industry has been built on the claim that 10,000 steps a day were necessary to be healthy. But where did the figure come from?’

<http://tinyurl.com/y7nm35tz>

Fish oil

‘A new systematic review of clinical trials shows no clear benefit to consuming omega-3 fatty acids in food or supplements.’

<http://tinyurl.com/y7wpg06t>

PSYCHOLOGY AND PSYCHIATRY

Psychotherapy

A thoughtful article by Thomas Witkowski of the Polish Skeptics Club: ‘When I observe the practice of medicine, particularly psychotherapy, I am unable to avoid the impression that many of those offering their services in medicine and psychotherapy have simply forgotten about the existence of the principle of *primum non nocere*, and their decisions have nothing in

common with a rational calculation of the threats and benefits. But is the application of ineffective therapeutic methods consistent with that principle? The cautious answer is yes – as long as they bring positive psychological effects comparable to those that come from the use of a placebo.’ At:

<http://tinyurl.com/y9dd64hd>

POLITICS AND PUBLIC POLICY

Fake news enquiry

A UK parliamentary committee has published a preliminary report highlighting what it describes as ‘significant concerns’ over the risks to ‘shared values and the integrity of our democratic institutions’. It calls for ‘urgent action’ from government and regulatory bodies to ‘build resilience against misinformation and disinformation into our democratic system’: ‘People are increasingly finding out about what is happening in this country, in their local communities, and across the wider world, through social media, rather than through more traditional forms of communication, such as television, print media, or the radio. Social media has become hugely influential in our lives. Research by the Reuters Institute for the Study of Journalism has shown that not only are huge numbers of people accessing news and information worldwide through Facebook, in particular, but also through social messaging software such as WhatsApp. When such media are used to spread rumours and “fake news”, the consequences can be devastating.’

<http://tinyurl.com/yaf55jm7>

CONSPIRACY THEORIES

‘The rapid rise of QAnon in Trump’s America is the latest iteration of improbable beliefs entering the mainstream. Mocking it is not an option. Jeff Glorfeld reports. A recent edition of *New Yorker* magazine includes a story about the growing number of people who insist that the Earth is flat. Vital to their belief is the understanding that the moon landings

were faked – indeed, space flight in general, and many accepted scientific principles are, they say, all part of a network of conspiracies, organised towards achieving an unspecified goal.’

<http://tinyurl.com/ybrbrpsa>

MISCELLANEOUS UNUSUAL CLAIMS

Sally Morgan

‘The company (*Sally Morgan Enterprises*)—of which UK psychic Sally Morgan is the director—has now entered into liquidation. According to a report prepared by liquidators FRP Advisory and filed with Companies House, Morgan owes the Revenue £2,919,354 in relation to taxes and an accelerated payment notice [APN]. “Based on the information available to date and the assumptions made, it is currently uncertain as to the level of monies available to distribute to unsecured creditors,” the report stated.

<http://tinyurl.com/ydz4z4wz>

Ghosts

‘Mike Brooker, who describes himself as an international psychic medium, says drivers have reported seeing phantom lorries, vanishing hitchhikers and Roman soldiers between junctions 16 and 19 in Cheshire. He said there is a “real negative energy” on that part of the motorway which he has dubbed Britain’s Bermuda Triangle.’

<http://tinyurl.com/y8bcus4e>

UFOs

‘This month, the two major online sites for reporting UFOs – the National UFO Reporting Center and the Mutual UFO Network – both documented steep drops in worldwide sightings. The declines started around 2014, when reports were at a peak. They have since reduced drastically to 55% of that year’s combined total, many UFO interest groups have folded, and numerous previously classified government documents have been disclosed.

<http://tinyurl.com/y9nuk56e>

UPCOMING EVENTS

ECOSO

The ECOSO website has a calendar of events of skeptical interest taking place all over Europe, including the UK. See 'The European Scene', earlier

18TH EUROPEAN SKEPTICS CONGRESS

This will take place in 2019 in Ghent and will be hosted by the Belgian and Dutch skeptical societies.

THE ANOMALISTIC PSYCHOLOGY RESEARCH UNIT AT GOLDSMITH'S COLLEGE LONDON

Chris French has organised an exciting programme of seminars for this academic year. Visit:

<http://www.gold.ac.uk/apru/speakers/>

Also of interest (and open to the public) is the programme of seminars organised by Goldsmiths Psychology Department which can be found at:

<http://www.gold.ac.uk/psychology/dept-seminar-series/>

SKEPTICS IN THE PUB

Choose the venue you are looking for to access the upcoming events.

<http://tinyurl.com/twohd4x>

CONWAY HALL LECTURES LONDON

25 Red Lion Square, London WC1R 4RL

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

CENTRE FOR INQUIRY UK

For details of upcoming events:

<http://centreforinquiry.org.uk/>

LONDON FORTEAN SOCIETY

For details of meetings:

<http://forteanlondon.blogspot.co.uk/>

COUNCIL OF EX-MUSLIMS OF BRITAIN

For details of meetings:

<http://tinyurl.com/y8s6od5r>

SCIENCE EVENTS IN LONDON

Eventbrite lists a series of scientific meetings in London (some free, some not-so-free). At:

<http://tinyurl.com/m8374q9>

'Funzing' organises evening talks at social venues in London, some being of interest to skeptics. See:

<http://uk.funzing.com/>

LOGIC AND INTUITION: ANSWERS

The Joe Johnson mystery

Joe was first married to Alice. They divorced and he then married Alice's sister and remained with her.

Worth a gamble?

Yes indeed! Always keep strictly to the rule 'only draw out another ball if you are losing'. Here's why.

W = white ball; **B** = black ball

Applying the above rule, the possible outcomes for each go are:

W wins **£1**, 4 out of 10 goes

BW wins **£0**, 3 out of 10 goes

BBWW wins **£0**, 1 out of 10 goes

BBWBW loses **£1**, 1 out of 10 goes

BBBWW loses **£1**, 1 out of 10 goes

So: in 4 out of 10 goes you win **£1**

in 4 out of 10 goes you win **£0**

.....in 2 out of 10 goes you lose **£1**

In sum: in 10 goes you win **£2** (on average).

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:

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