

THE SKEPTICAL INTELLIGENCER

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Incorporating the Skeptical Adversaria: the ASKE Newsletter

Edited by Michael Heap

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REGULAR FEATURES



FROM THE ASKE CHAIR

Michael Heap

Predictions by ‘experts’

During the election campaign the Brexiteer politician Michael Gove was frequently reported by the media to have opined that the British people had had enough of experts. This quote is still regularly attributed to him by way of illustrating that politicians don’t like experts, since all too often the policies favoured by the former conflict with the advice and warnings of latter. This sentiment is one to which probably most skeptics would subscribe. Yet we should also be alert to the prejudicial manner in which soundbite quotes like this one are frequently flung around. Examples of this go back a long way and it would be too much of a digression to list some examples. Suffice it to say that what Mr Gove actually said on June 6th was ‘The people of this country have had enough of experts from organizations with acronyms, saying that they know what is best and getting it consistently wrong’. However his interviewer interrupted him mid-steam, hence the abridged quote.

I for one think Mr Gove made a good point. How could any layperson come to a reasoned conclusion about the merits of remaining in the EU or otherwise with so much conflicting advice and opinion from ‘experts’? Admittedly, it was doubtful whether many of these ‘experts’ were really

experts at all, merely writers who had gained undeserved influence in the media in matters of which they had no more understanding than the intelligent layperson.

Be economical with your predictions, particularly when they involve human behaviour.

Where experts and pseudo-experts are likely to be pilloried is when they make public their predictions on matters of national interest and turn out to be wrong. In the last two years some of them – political commentators – have met their Waterloo in a big way – viz the last two general elections, the US presidential election and the EU referendum. Based on the polls, I myself wrongly guessed that Theresa May would have a comfortable working majority but I didn’t claim to have any relevant expertise that allowed me to go beyond casually mentioning this to my wife and a couple of friends, let alone announcing it to the nation for a handsome fee.

As it happens, there has been great interest in what appears to have been extraordinary prescience on the part of someone not hitherto considered as a political or economic forecaster. Step up to platform novelist Daphne du Maurier (1907-1989). I have in front of

me one of her lesser-known novels *Rule Britannia*, published in 1972. This was at the time that the UK was negotiating to join the European ‘Common Market’ and did so officially on the first day of 1973. In 1975 the electorate voted by referendum to remain a member but in *Rule Britannia*, against the advice of the Prime Minister, the majority reject membership, with dire consequences for the economy. Salvation is sought by a union with the United States. The new nation is called USUK, as in ‘you suck’ (if you haven’t already done so, recall to mind Theresa May holding hands with Donald Trump not long after his inauguration, and the astonishingly forgiving and sycophantic attitude of the Brexit-supporting press towards this man following his election). In the novel the union turns out to be a disaster.

We shall have to see whether events follow the downward spiral depicted in Dame Daphne’s novel. For the time being be economical with your predictions, particularly when they involve human behaviour, and if you insist on announcing them, hedge them with some reference to probability – ‘On the whole, I think it more likely than not that ...’, ‘It’s not certain, but...’, and so on. At least that’s my advice.

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.



LOGIC AND INTUITION

Leaves on trees

If there are more trees than there are leaves on any one tree, then there exist at least two trees with the same number of leaves. True or false?

And is the answer the same if we substitute 'bedrooms' for leaves and 'hotels' for trees?

Incidentally, if on average you solve three quarters of all puzzles like

this and I only solve one third, what would be our success rate if we worked together?

Answer on page 18.



THE EUROPEAN SCENE

European Council for Skeptics Organisations

For readers unfamiliar with the European skeptic scene, there are quite a number of countries with national skeptical organisations, some 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/>

<http://senseaboutscience.org/activities/evidence-matters-eu/>

17th European Skeptics Congress

There is still time to book your tickets for the 17th European Skeptics Congress organised by the Polish Skeptics' Club in cooperation with the Czech Skeptics' Club Sisyfos under the auspices of ECSO. The congress is from September 22nd – 24th, 2017 in the wonderful city of Wroclaw, Poland.

James Randi will be attending along with a galaxy of international speakers on a range of fascinating topics. Don't miss it!

Congress website:

<http://eurosepticcon.org/>

Facebook:

<https://www.facebook.com/europeanskpticscon/?ref=bookmarks>

message about it, that would be very much appreciated.

Sad news from Belgium

'A Belgian court has convicted two parents in the death of their infant, who succumbed to malnutrition and dehydration because his parents were firm believers in unconventional nutrition. The court gave both a suspended six-month sentence because they failed to take adequate action to take care of baby Lucas, who died at seven months old with organs shrunk to half their size and without any fat around them....The parents own a natural dietary shop and backed alternative food to the fullest, applying it to their newly born third child.'

<http://tinyurl.com/ycc2c9mq>

From Marian Kukan

(On measuring research output)

Marian Kukan, a founding member of the Slovak Society of Skeptics, wishes to draw the attention of readers to the following two papers published in *The Skeptik*, the society's journal.

Kukan M and Ginter E: 'h-index: a misleading value for evaluation of scientist research output'. *The Skeptik*, 2013:2, 87-88. This may be accessed at:

<http://tinyurl.com/y9e6ujgy>

Kukan M and Ginter E: 'A proposal for characterization of research scientists in scientific databases'. *The Skeptik* 2014:2, 49-50. This may be accessed at:

<http://www.spolocnostskeptikov.sk/en/node/611>

The ESP - European Skeptics Podcast



Building a bridge for skeptics

<http://theesp.eu/>

There has been a further series of ESP interviews (total now almost 80), and postings announcements concerning the skeptic scene in Europe. 'Please, send feedback, information on events and recent news from your country that you think others in other countries might be interested in. You can use the contact form, send an email to info@theesp.eu or tweet at us @espodcast_eu. If you could write a review on your blog, website or iTunes and let us know by sending us a



MEDICINE ON THE FRINGE

Richard Rawlins

Retired from clinical practice, Dr Rawlins continues as an orthopaedic medical expert witness to the courts. As a member of the Magic Circle he is well used to dealing with deception, and reveals all in 'Real Secrets of Alternative Medicine' (Amazon) and at www.placedo.co.uk.

This is an abridged version of the winning essay for the RSM Retired Members Society President's Prize 2016. The full essay, with references, may be obtained on request from: richardrawlins2@gmail.com.

Trust me, I'm a doctor

The contemporary instruction to 'Trust me, I'm a doctor' has been used conceptually since physicians parted company with the priests and magicians of ancient days. However expressed, the concept of trust has been integral to medical practice in Western culture since Hippocrates of 400 BC.

Trust is a fundamental need of human existence, encompassing a firm belief that another person will be reliable, that confidence in their honesty and integrity is not misplaced, and assurance that they will act altruistically for the benefit of another. There is, however, an important difference between trust based on blind faith and that based on informed mutual understanding with a dash of scepticism.

Suggestion and the engagement of response expectancies accounts for the placebo effects seen in all medical practice. This is how 'alternative medicine' and camistry (the practice of CAM) achieve beneficial effects. If there is plausible evidence of useful outcomes beyond placebo effects, whatever methods are employed sooner or later become incorporated into 'medicine'. But can camists, or doctors, be trusted to obtain fully informed consent?

In 800 AD, Muhammad ibn Zakariya Razi (Rhases) wrote a medical book for the public so they could have some guidance as to the diseases from which they might be suffering - a forerunner to Internet information. However, physician and

law professor, Dr Jay Katz, found 'no major documents on medical ethics between the time of the Greek city states and the 18th century which revealed even a remote awareness of a need to discuss anything with patients that relates to their participation in decision making'.

Society has always expected doctors to place patients' interests above their own, but quackery and fraud have never been far away.

Illness makes patients extremely vulnerable. Society has always expected doctors to place patients' interests above their own, but quackery and fraud have never been far away. In order to reassure patients that their trust in medical attendants was not misplaced, the United Kingdom passed the Medical Act in 1858. Even so, patients were still expected to trust their doctors.

The theme of trust in doctors has been often been considered in contemporary culture. Variants have been used regularly by Dr Leonard McCoy in Star Trek - 'Dammit Jim, I'm a doctor'. Dr Who advised, 'Trust me, I'm the Doctor'.

The directive has now found its way onto tee shirts, badges, mugs and other merchandise in the mass market. The BBC has used 'Trust me, I'm a doctor' as a title for its medical consumer programme since 1996, though the satirical undercurrent of the first series is now reduced to homeopathic proportions. More recently, other professions have appropriated the term. 'Trust me, I'm a lawyer' has been used for over twenty years, and modern alternatives include

'Trust me, I'm a magician'. Ironically, magicians claim to be honest - they tell you they are going to fool you, and then they do!

The peculiar qualities which mark a modern doctor in contemporary Western society, and which are deserving of patients' trust, have been set out in Principles of Biomedical Ethics (2013). Four fundamental principles are stated: Respect for Autonomy; Beneficence; Non-maleficence; Justice.

Respect for autonomy is the most important. The other dimensions can be achieved only if doctors can be trusted to obtain fully informed consent for treatments. 'Any notion of moral decision-making assumes that rational agents are involved in making informed and voluntary decisions. In health care decisions, our respect for the autonomy of the patient would, in common parlance, imply that the patient has the capacity to act intentionally, with understanding, and without controlling influences that would mitigate against (*sic*) a free and voluntary act. This principle is the basis for the practice of 'informed consent' in the physician/patient transaction regarding health care.'

The concept of informed consent has increased in importance since the Doctors' Trials at Nuremberg and the Tuskegee syphilis experiment in the latter half of the 20th century. Katz is credited with drawing attention to the failure of the modern medical profession to properly communicate with patients.

The doctrine of informed consent has evolved since 1957 when the California appellate court said physicians must not only obtain consent, but must 'reveal any facts necessary for intelligent choice by the

patient'. Initially, the UK House of Lords rejected that requisite. In Sidaway (1985) one Law Lord opined that the prudent patient 'was a fairly rare bird, not readily found in his natural habitat on the Clapham omnibus'.

Under Bolam, the standard of medical care was to be determined by medical evidence. The Lords extended this principle to include the quality of information to be provided to a patient about a given treatment - but that standard itself was determined by medical opinion. Lord Templeman opined, 'the provision of too much information may prejudice the attainment of the objective of restoring the patient's health'.

The position in the UK has more recently changed. In Montgomery (2015), the Supreme Court, reversing the judgments at first instance and on appeal, has now plainly said that Sidaway should no longer be followed.

It has become increasingly clear that the paradigm of the doctor-patient relationship has shifted. Patients are now widely regarded as persons holding rights, rather than as the passive recipients of care by the medical profession. Reviewing Montgomery, Nigel Poole QC opines, 'It remains true that the manner in which a doctor gives information can strongly influence what decision a patient makes. Many patients are content to be guided by their doctors. Other patients will have strong opinions about their treatment and will make decisions that their doctor thinks unwise. So be it - that is their right. Patient autonomy has to be respected and that is now, unequivocally, the view of the Supreme Court'.

Current professional practice reflects these legal and societal developments. Under the rubric Good Medical Practice (2013), the GMC requires that doctors should 'Work in partnership with patients. Give patients

the information they want or need in a way they can understand. Respect patients' right to reach decisions with you about their treatment and care'. This instruction applies also to patients taking part in clinical trials, some of whom will be receiving placebos unknowingly. Current regulatory frameworks have recently been questioned as it appears that in many trials, fully informed consent might not have been obtained (pace Tuskegee). This is particularly problematic when researching homeopathic and other 'alternative' remedies, as basic ethical requirements have often not been met. Even placebos may be associated with risks of harm - a concept rarely conveyed to patients. An article in the BMJ of 17th September 2016 emphasises, 'Openness is vital, both to minimise avoidable participant harm and to maintain public trust'.

Patients are now widely regarded as persons holding rights, rather than as the passive recipients of care by the medical profession.

Patients should be able to trust their doctors to share all relevant information. Conversely, doctors should be trusted to keep patients' medical information private and confidential - but there are current concerns that this ancient ethical principle is now being forcibly set aside by inquisitive governments. When asked the question 'Which profession do you trust the most?' there is no doubt about which the public consistently places at the top of the list, nor that which is at the bottom.

Issues of trust are critical when dealing with politicians. In the UK, lack of trust about statistics used in support of policies for seven day working in hospitals has resulted in loss of trust in political masters -

fuelling the extremes of industrial action of 2016. Many doctors no longer feel that patients come first. The GMC originally established the medical profession as self-regulating, but current developments have placed the profession firmly in the hands of government. Although the GMC is supposed to be an independent regulator, the appointment of Mr Charlie Massey as its chief executive is inevitably viewed with suspicion and lack of trust by many doctors. Private Eye's 'MD' has pointed out: 'Mr Massey was the director-general of acute care and workforce at the Department of Health, working closely with health secretary Jeremy Hunt on the junior doctors' contract and Mr Hunt's vision of a "truly seven-day NHS." In the absence of any extra staffing and funding, or indeed a clear definition, this would seem an ultimately futile ambition'. As demoralised 'junior' doctors attain senior positions, the corrosive effects of current medico-political mistrust is likely to affect UK healthcare for years.

I am not infrequently asked what to do about an ailment. I am inclined to reply, 'Ask your doctor the simple question, "If you were me, what would you do?"' That should elicit a reply based on clinical, ethical and practical healthcare considerations, including issues of commissioning. Options can then be weighed - including 'go private'. The doctor should be trusted to be honest and bear Katz in mind: 'One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient'. Patients may be sceptical, but doctors should be trusted to offer compassion for a patient's present suffering, realistic hope for the future, and love at all times. And as St. Paul said, 'The greatest of these is love'.



LANGUAGE ON THE FRINGE

Mark Newbrook

Not that language!

As I remarked in *Skeptical Intelligencer* 19:4, if one starts off with an assumption/ guess that one is listening to a particular language it is often possible to misperceive utterances as being in that language. Indeed, using the loose methods adopted by most non-mainstream thinkers, one can ‘prove’ (spuriously) not only that almost any two languages share large amounts of vocabulary (as is demonstrated by many of the cases discussed in Chapters 1 and 2 of my 2013 book *Strange Linguistics*) but also that some short texts are ‘really’ in a language other than what they appear to be in. See for example: Bruria Bergman’s tendentious and self-indulgent claim that a Japanese temple chant is in fact in Hebrew, modified to fit Japanese phonology (in twenty minutes I myself was able to devise a spoof Late-Latin reading which is closer to the Japanese phonetics than Bergman’s Hebrew is, and indeed also has a clearer meaning **and** fits the historical situation better!); Augustus Le Plongeon’s equally unconvincing claim that Jesus spoke Mayan on the Cross rather than (rather odd) Hebrew or Aramaic; and James Churchward’s easily refuted claim that the Greek alphabet, as normally recited, is really a poem in Mayan!

Problems with polysemy

A word is ‘polysemous’ if it has a range of related meanings (either clearly distinct, one from another, or a cline). Thus the English word *bank* is polysemous in that it can mean ‘high-street bank’, ‘reserve bank’ (such as the Bank of England), etc., and (moving ‘further out’ along the cline, by way of metaphor) ‘blood bank’, ‘bottle bank’, etc. Polysemy is contrasted with homonymy, which involves semantically **unrelated** words (normally of different origins) which at the time in question happen to have the

same written and spoken form: e.g., *bank* as above and *bank* meaning ‘river edge’. (Naturally, many pairs of homonyms, including this pair, were earlier spelled and/or pronounced differently.) Polysemous words used with their various related meanings are obviously more liable to be confused in normal discourse than are homonyms (except where puns make deliberate use of homonymy for humorous effect).

The words skeptic (with its originally American spelling) and sceptic have remained homophonous but have come to have different ranges of meanings.

Cultural and technological changes can create new cases of polysemy or even, later, of perceived homonymy, as for instance where *drive* [an animal] (with a whip, etc.) and *drive* [a motor vehicle] are now generally regarded as separate, homonymous words. And occasionally pairs/sets of polysemous words remain homophonous (same pronunciation) but have come to display variant spellings which partly correlate with their divergent meanings. For example, the words *skeptic* (with its originally American spelling) and *sceptic* have remained homophonous (which obviously helps to generate confusion between them; in speech, it is not immediately clear which word is in question) but have come to have different ranges of meanings. Especially outside the United States, the former version is chiefly used to refer to the tradition exemplified in ASKE or CSI publications, mainly involving critical analysis of **non-mainstream** ideas; whereas the latter is mainly used (**only** so used in the United States, to the small extent that it is used there at all) with quite another range of meanings

and references: (a) ‘radical scepticism’ (the very **non-skeptical** and anti-modernist philosophical view that very little can reliably be learned about the world), (b) doubt or denial regarding **mainstream** ideas which are well-established but are nevertheless treated as controversial in popular fora, as in *climate-change sceptic* (here the term is often used tendentiously and misleadingly to claim common ground with genuine skepticism as described above), (c) a more general attitude of doubt regarding claims about the world.

A cross-accent advantage of the spelling *skeptic* is that before the ‘front’ vowels E and I the sequence *sc-* is almost always pronounced /s/, **not** /sk/.

Another potentially awkward and confusing case of polysemy involves *entail*. In the technical (philosophical) sense of this word, **any** proposition is entailed by an inconsistent set of propositions, and **any** necessary truth is entailed by **any** proposition; in the everyday sense, which is much more useful in non-philosophical contexts, only **mutually relevant** propositions can stand in relationships of entailment (implication). Compare the technical uses and the typically **less** precise popular uses of terms such as *mass* and *weight*.

Other such cases involve politically ‘hot’ terms such as *sexist* and *racist*. In 2016, Babar Mustafa, welfare and diversity officer at Goldsmiths College, London, was accused of sexism and racism for asking white men not to attend a students’ union meeting intended for ethnic minority and ‘non-binary’ women (against a background of disagreement about the desirability of ‘safe spaces’ at the college where at least some opinions could not be challenged). In response, Mustafa released a video stating that she did not consider her words to be sexist or racist, and that she was in fact

incapable of being discriminatory, because of her own gender and ethnicity. This, she explained, was because the terms *racism* and *sexism* ‘describe structures of privilege based on race and gender’. Women of colour and/or ‘non-binary’ gender could not be racist or sexist as they do not stand to benefit from any such structure which actually prevails. ‘In order for our actions to have been deemed racist or sexist, the current system would have to be one which enables only women and people of colour to benefit economically and socially on such a large scale and to the systematic exclusion of white people and men who for the past 400 years would have had to have been subjected to colonisation. Reverse racism and reverse sexism are not real.’

However, it is quite obvious that members of **any** gender or ethnic group can think, speak and behave in a racist or sexist manner in the normal senses of these terms. In Hong Kong in the 1980s (then still a British colony), white male university lecturers such as me (obviously possessing a degree of institutional power) were repeatedly described by local Chinese people by means of the racist term *gwai-lo* (‘devil-man’), and (for example) seats next to us were sometimes left vacant even on crowded buses, with looks of disdain or worse. Mustafa does have a valid historical point regarding power structures, gender and ethnicity; but here she is tendentiously using the key words in a much more restricted sense than is usual, so as to rule out *ab initio* any such criticism of her or of other members of the groups to which she belongs.

Mustafa also defended her clearly racist (and aggressive) use of the #killallwhitemen hashtag and the term *white trash* on her Twitter account as ‘in-jokes and ways that many people in the queer feminist community express ourselves’. But of course anyone could offer the same defence of gratuitously offensive usage directed at any group whatsoever.

On the Mustafa case, see *note 1*. The phenomenon in question is not

new. In the 1970s I knew (slightly!) a woman at Oxford who hated all men on principle because of abuse which had been perpetrated on her by one truly awful man. Some of her associates told me that this was justified and that women simply could not be regarded as sexist, whatever the appearances.

In ‘Hong Kong English’ it (popular) is sometimes used to mean simply ‘widespread’, even of very unwelcome conditions, as in AIDS is very popular in Africa!

Another polysemous word is *popular*, used of (say) an author: a) ‘popular as a person’ versus b) ‘much read and admired as a writer’. One of my Oxford classmates almost fell foul of this during his college admission interview. One of the interviewing tutors, who until then had appeared to be asleep on the table, suddenly reared up and asked him if he thought that the Greek historian Thucydides had been ‘popular’. Thinking that sense (a) was intended and remembering a story that Thucydides had been murdered, he replied ‘No’. The tutor, who (as it now became clear) had meant the word in sense (b), responded ‘But didn’t he influence Sallust?’ (a Roman historian of four centuries later). Realising his error, my friend composed himself and came out with the brilliant line ‘Popularity is one thing, influence another’. The tutor was apparently satisfied with this; he grunted ‘Suppose you’re right!’ and promptly slumped back on the table!

Of course, *popular* has a further polysemous range of meanings, notably including ‘non-technical’, used of discussions of matters which do have technical aspects. And in ‘Hong Kong English’ (nobody’s first language) it is sometimes used to mean simply ‘widespread’, even of very unwelcome conditions, as in *AIDS is very popular in Africa!*

Words and structure: cave ‘art’ and emojis

Last time I discussed the historian Ronald Hutton’s tentative suggestion to the effect that some petroglyphic (carved) or petrographic (painted) displays normally identified as pre-historic ‘rock art’ (and of such dates that they would generally be regarded as very much earlier than written language) may in fact convey linguistic meanings or the like. It is now apparent that Hutton’s view is part of a more general shift in thought on these matters going back at least seven years in various manifestations and involving the notion that some of the symbols found on cave walls could be ‘the very first attempts by Man [*sic*] to write’. The signs in question cover a span of 25,000 years, from 35,000 to 10,000 years BP, and a range of sites. Leading researchers are palaeo-anthropologists Genevieve von Petzinger and April Nowell. A recent discussion of the claims can be found in *New Scientist* 9/11/16 (*note 2*).

The key point in the new discoveries is the presence of 26 particular signs, drawn in the same style, which appear again and again at different sites (mainly in France). Some of these are abstract (dots, lines, circles, triangles, ‘squiggles’, etc.), but others are more pictorial in nature. And some of these less abstract symbols are apparently used to indicate a larger object which incorporates the object directly depicted (‘synecdoche’, as in *head* for [*head of*] *cattle in a hundred head*); for example, a representation of a mammoth tusk seems to have been used to indicate an entire mammoth, or a mammoth hunt – or perhaps even to have another specific meaning which might have nothing to do, in literal terms, with the notion of a mammoth (this would be even more ‘advanced’). This appears to indicate that early humans were working towards the use of abstract symbols representing concrete entities rather than realistic pictures, as in (most) written language. Furthermore, certain signs repeatedly appear in pairs, suggesting quasi-linguistic structure (compare the

doubling of nouns in Malay, written Egyptian etc. to indicate plurality or intensification); at one site, four different pairs of identical signs in succession are observed.

Obviously there is a considerable amount of extrapolation involved here; it is to be hoped that further work will lead to more definite conclusions. Of course, the earliest **known** written languages are much more recently dated than these signs and the probable origins of spoken language. And, while these new observations do seem to show that some sets of prehistoric non-pictorial symbols on cave walls were more sophisticated in semantic terms than was formerly thought, these recent attempts to re-classify them (even if tentatively) as genuinely linguistic are treated with reserve by linguists themselves. In particular, the fact that some particular (sets of) symbols are very similar across a range of sites at a time when travel was very slow might suggest that these particular (sets of) symbols, at any rate, were not linguistic (associated with specific languages) but rather semasiographic, equivalent to, say, traffic-lights and relating to archetypes (if these exist) or simply to shared (near-species-uniform or at least regionally uniform) analyses of experiences (as may have been the case with the much later Indus Valley Script). A specific spoken (or signed) language *per se* would probably not have been so widely shared at that time.

More importantly, the focus on words as opposed to grammar – which is typical of non-linguists writing on such matters (and on others; see below) – leaves out of consideration the key ‘design features’ of human language: grammatical and other structural features. A system which involved words (where linguistic structure proper is at a minimum – and where the pronunciations corresponding with logographic symbols are sometimes not shared at all even where meanings **are** shared, as with written Chinese) but did **not** involve grammar would not be considered linguistic by linguists (though it might be **pre**-linguistic). If

spoken language as we know it existed at that time, such a writing system would not be anything like a proper representation of the language (though it might still be useful at a semasiographic level). So, as in many non-specialist discussions of communication systems, the scope of the word *language* may have been improperly widened here. (Of course, this is not to say that these findings are without significance, nor that the achievements of these very ancient peoples were not impressive.)

Some commentators have identified the emoji system as a language, comparing its contemporary ‘success’ with the stagnation of genuine invented languages such as Esperanto...

It might be suggested that the systems of cave markings represented a written ‘language’ altogether dissociated from the (irrecoverably lost) spoken language of the day and perhaps **thereby** lacking in grammatical structure, etc. Readers of my review in this forum of the science-fiction movie *Arrival* may recall that in that work one very striking feature of the alien communication system involves the major dissociation between spoken and written forms. The writing system is not based upon the specific structures of spoken usage as is normal in human language (even in logographic systems such as Chinese writing). Still less is it grounded in the ‘morphophonology’ (words and sounds) of the spoken alien language. But, as becomes clear from analysis, it is also a highly articulated linguistic system, albeit a separate one; it is not a series of word-level forms unarticulated by grammar or the like. And in any event no case of such utter dissociation is known in human language (except where signed languages not associated with the written languages also learned by their users are concerned) – still less one where either speech/signing or strictly

linguistic writing could be characterised as genuinely **unstructured** and made up only of words.

There are various other manifestations of the ‘amateur-linguist’ tendency to focus excessively on vocabulary, which in each language forms a vast, largely unstructured set and is much easier for non-linguists to understand than grammar or other structural linguistic features. I have referred several times to this tendency in various contexts (fringe historical comparative linguistics, amateur dialectology, the learning of linguistics, etc.) Another example involves recent discussion of the currently popular emoji symbols which were developed some six years ago and are used especially in texting. Some commentators have identified the emoji system as a language, comparing its contemporary ‘success’ with the stagnation of genuine invented languages such as Esperanto (the only such language at all well known to non-linguists, out of the very many which have existed - *note 3*). But at present ‘Emoji’ consists almost entirely of ideographic symbols with word-level meanings, with no explicit grammar; it is semasiographic and cross-linguistic rather than linguistic. The commentator just cited admits that no one actually speaks ‘Emoji’, and that it does not have a grammatical system, but argues that a lack of native speakers does not necessarily matter (although **nativeness** is not really the point here; Esperanto began with no native speakers and still has very few) and that not being a spoken tongue is ‘perfect’ for the internet age, where on-screen text predominates (but all ‘normal’ languages are – or once were – spoken or signed as well as written). He quotes the linguist Vyvyan Evans as acknowledging that ‘Emoji’ does have ‘language-like properties’; and it is true that the more it is used, the more such properties it will develop. But to call ‘Emoji’ a language **now** is premature, and the idea that it **is** a language reflects the misleading lay

focus upon words rather than structures.

Fun things

Two issues ago I referred to the movie *The Dead Poets Society*, in which a book informs students that the worth of a poem may be calculated by multiplying the significance of its intended message by the poet's degree of success in communicating this message (and displaying the result as a rectangle). It occurs to me that this is parallel with the scoring systems in use in some sports where aesthetic judgments are involved. For instance, in Olympic diving a competitor's score is arrived at by multiplying the assessed difficulty of a given dive-type by the diver's judged degree of success in performing the dive. Thus a very difficult dive performed only fairly

well might beat an easy dive done to perfection. Etc.

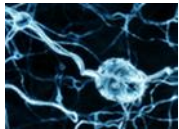
I have been engaged in a discussion of the English possessive apostrophe in the columns of the excellent (if low-budget) journal *Investigator Magazine*, published in Port Adelaide (South Australia) – a forum for religious believers, agnostics, atheists, upholders of non-mainstream theories and skeptics to exchange their ideas. The exchange began when an editorial issue arose as to how the expression *Girls' School* (etc.) should be punctuated. One of the more amusing cases of this kind involves expressions such as *one of the directors' wives*. A little thought will make it apparent that in a monogamous society this must mean 'one of the women who are married to the [various] directors', and that the

possessive-plural final apostrophe is thus standard. The homophonous alternative *one of the director's wives* would imply that the sole director has more than one wife. It is said that a woman once (a while ago!) diffidently asked a man sharing her train compartment if he minded if she smoked. 'Madam, if you smoke I shall vomit!' 'How dare you talk to me like that?! I am one of the directors' wives!' 'Madam, I do not care if you are the director's **only** wife!'

Notes

1. <http://tinyurl.com/y9jzakwj>
2. Available through <http://tinyurl.com/zvobj2z>
3. See for example <http://tinyurl.com/yagny2lm>

REVIEWS AND COMMENTARIES



NANO: THE NEW QUANTUM?

Niall Taylor

Niall Taylor is a veterinary surgeon and member of ASKE. He and fellow vet Alex Gough are authors of 'No Way to Treat a Friend': 'Lifting the lid on complementary and alternative veterinary medicine' due out in Autumn 2017 (5M Publishing Ltd, Benchmark House, 8 Smithy Wood Drive, Sheffield (<http://5mpublishing.com/home/publishing/>)).

There is a trend among homeopaths nowadays (among the veterinary fraternity at least) to claim it is nanotechnology which lies behind the mechanism of action for homeopathy. Such claims maintain that homeopathic medicines retain their base ingredients even at extreme dilutions, in the form of silicate coated nanoparticles and seem to be based on a few related papers from a single institute (the Indian Institute of Technology) and sharing a common author. At least one of these papers is available online (Chikramane, 2010).

In this paper the authors purchased homeopathic remedies from a local Indian street market which they then dried and analysed using Electron Microscopy and Atomic Emission

Spectroscopy.

This revealed that quantities of the ingredients from which the remedies had originally been manufactured – namely gold, silver, platinum, copper, tin, and up to 4000pg/ml of zinc – were still present and at similar concentrations regardless of the level of dilution. They also reported a related study which had previously found iron and mercury residues at even higher concentrations in other remedies.

Rather than doing what most of us would have done at that point and contacting the local trading standards authorities to report a manufacturing fault, or possible adulteration, the authors instead appeared delighted, describing the fragments they had found as *nanoparticles* and publishing

their results as a positive finding, and a likely explanation for how homeopathy works. Apparently in the world of homeopathy heavy metal contamination is regarded as a good thing.

What would be interesting to know now is if these findings are true of metal-based remedies, what about those made from say lymph from smallpox sores (*variolinum*) or other, smaller viruses, or prions, which are in common use – should the regulatory authorities be informed there is a likelihood of viral particles being present in homeopathic and isopathic preparations?

It has been pointed out many times by homeopaths that those who haven't received sufficient indoctrination

cannot be expected to fully comprehend homeopathy so we will have to take it on trust that consumption of quantities of heavy metals and possibly a variety of infectious agents are of benefit to the *vital force*, that elusive spiritual entity which is the stock in trade for homeopaths. After all, this is hardly any more far-fetched an idea than the rest of the concepts which supposedly underlie homeopathy.

And if these nanoparticles are somehow responsible for homeopathy's claimed successes, presumably we can look forward to enlightenment as to how (as homeopaths claim) the potency of homeopathic remedies increase with successive dilutions if they rely on the presence of physical ingredients for their effect? Do these nanoparticles increase in numbers in circumstances where the concentration of every other substance in the known universe would fall (in which case could this be a commercially viable means of producing gold?) or do they instead manage to remain in the remedy despite the best efforts of the homeopathic pharmacy to dilute them out of existence, somehow becoming stronger in the process – how does a nanoparticle become stronger anyway?

We can also anticipate hearing how nanoparticles manage to form from some of the other, more insubstantial, ingredients employed in homeopathic remedies – the 'imponderables' –

which are readily available from online suppliers – storms (*Tempesta*) and shipwrecks (*Naufragium Helvetia*) for instance, or light from the planet Venus (*Venus Stella Errans*). And what about anti-matter (*Positronium*), would that have to be encased in anti-silicone in order to exert its effect while avoiding a cataclysmic release of explosive energy (along the lines of a Star Trek-style warp-core breach)? Who knows, we may even finally learn by what means nano-particles of portions of dead bees (*Apis mel*) manage to relieve the symptoms of pruritus when taken orally.

Professor Harald Walach ... made the quite categorical statement, 'homeopathy is effective in a non-local way: it acts by magically activating connectedness...'

Over the years in the media we have seen much claimed in the name of homeopathy. Hundreds of papers have been presented allegedly supporting the idea homeopathy works, none of which has done anything of the sort; there have been claims homeopathy can cure cancer while the concurrent involvement of pharmaceuticals noted for their anti-cancer properties is concealed (RationalVetMed, 2017); now we have a supposed mechanism for homeopathy which seems to hinge

on mundane contaminants even the authors of the study admit in all likelihood arose during the manufacturing process.

In light of the unlikely nature of all this would it be too much to hope that homeopathic apologists might concede the struggle to prove homeopathy in the material world is lost and, rather than rejecting magic as an explanation, might consider embracing it as homeopathic researcher Professor Harald Walach did some time ago when he made the quite categorical statement, 'homeopathy is effective in a non-local way: it acts by magically activating connectedness...' (Walach, 2000).

That at least has a refreshing honesty about it.

References

- Chikramane, P.S., Suresh, A.K., Bellare, J.R. and Kane, S.G. (2010) 'Extreme homeopathic dilutions retain starting materials: A nanoparticulate perspective'. *Homeopathy*, **99**, 231–242.
- Walach, H. (2000) Magic of signs: A non-local interpretation of homeopathy. *British Homeopathic Journal*, **89**, 127-140.
- RationalVetMed (2017) 'A cure for cancer?' *RationalVetMed.net*, 24 May [Blog]. Available at <https://rationalvetmed.net/2017/05/24/a-cure-for-cancer/> (Accessed 24 May 2017).

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MARK'S BOOKSHELF

Mark Newbrook



The Kingdom Of Speech

Tom Wolfe

Jonathan Cape, London, 2016, pp 185)

Tom Wolfe is another non-linguist (albeit a well-published and obviously well-read person) who has joined in the ongoing public discussion about the nature and significance of human language and specifically about

'linguistic nativism'. Wolfe is known for his iconoclasm, often expressed in a belligerent and indeed a sarcastic tone, and for his view that he himself is readily able to solve problems regarded by the learned as especially complex and difficult. Here he turns his spotlight on the origins of language and on two leading scholars of the last

two centuries, Charles Darwin and Noam Chomsky.

For my own earlier contributions on linguistic nativism, see in particular my review of *The Language Myth: Why Language is not an Instinct* (Vyvyan Evans, 2014) in *The Skeptical Intelligencer* 18:2 (2015), pp 7-11. I add here the point that over the last few years various sources have discussed

specific languages which appear to provide counter-examples to parts of the Chomskyan nativist theory of an innate species-specific and species-uniform ‘language acquisition device’. One such case involves a novel language developed in the 20th Century by deaf people in Israel, which supposedly has a very simple (but expressive) grammar; the linguist Mark Aronoff is quoted as believing that the structure of this language suggests that the innate human capacity for language is **not** uniquely human but is rooted in deeper biological properties shared across species. See *New Scientist*, 5/10/16 (*note 1*). In contrast, some other non-nativist linguists hold that the relevant enabling capabilities may well be (in part) species-specific but are not specifically linguistic.

Other cases of this general type involve specific languages which appear to infringe some of the set of abstract ‘language universals’ espoused by Chomsky and his allies as part of their nativist stance. (In this context, Chomsky has even suggested that there is, essentially, only one human language! Wolfe mentions this on p 89.) Perhaps the best known example of this kind involves the work of Daniel Everett, who concluded that some of the most basic Chomskyan ‘universals’ are falsified by Pirahã, a tribal language of Brazil with a most unusual set of structures. For a partly popular treatment of these matters, see Everett’s *Don’t Sleep, There are Snakes: Life and Language in the Amazonian Jungle* (2008). Wolfe discusses Everett’s ideas and Chomskyan rejoinders to them in Chapters V and VI. He naturally prefers Everett to Chomsky, but he exaggerates the differences between them. Everett acknowledges that even Pirahã shares many basic features with other languages, and he and other non-Chomskians do not suggest that language cannot be seen as a product of evolution (see below). And in fact Wolfe’s own objections to contemporary linguistics run considerably deeper (again, see below).

Wolfe’s book has already been reviewed very critically, notably (*note 2*) by Jerry A. Coyne, Professor Emeritus in the Department of Ecology and Evolution at the University of Chicago and the author of various scientific and skeptical works. My own assessment of the book overlaps to a considerable degree with Coyne’s.

No adequate evidence or argumentation is presented for mnemonics having been the origin of language.

Wolfe discusses the linguistic issues in the context of human evolution. On p 3 he cites an article in *Frontiers in Psychology*, 7/5/14 titled ‘The Mystery of Language Evolution’, where Chomsky (not for the first time) and seven other scholars identified by Wolfe as evolutionists announce that they have no specific explanation for the origin of human language. Of course, non-nativist linguists, whose work is largely ignored by Chomskians, are typically more optimistic about this issue, regarding human language as an evolutionary development (admittedly poorly understood at present) out of pre-human conceptual and communicative systems. There is, of course, a large literature on animal communication systems, attempts to teach animals aspects of human language, and the implications for the evolution of human language and for Chomsky’s theory of species-specificity (Wolfe summarises this material very briefly on pp 152-155). But Wolfe himself goes in another direction, taking the view (announced forthrightly on p 5!) that ‘speech’ (spoken language, not mere phonation as in parrots and such) is not only unique to humans but is 95% of what distinguishes us from other animals, and (agreeing here with arguably less judicious extreme Chomskians such as the creationist Mark Baker) **denying** that it is partly a product of biological evolution.

In fact, Wolfe adopts an exaggeratedly negative assessment of evolutionary theory more generally. He argues, quite wrongly, that it is not a scientific hypothesis, because no observation could falsify it and it yields no predictions. This stance appears so naïvely misguided that it is difficult to take Wolfe seriously on such issues.

Wolfe begins (pp 6-65) with a summary of the development of evolutionary and anthropological theory in the 19th Century in which he is highly critical of Darwin in particular. He notes (pp 19-20) that early evolutionists had no account of language – but of course they were hindered by the nascent state of the discipline of linguistics. In Chapter III Wolfe moves on to the early contact between evolutionary theory and the growing discipline of historical linguistics. He makes some useful points here, although his account of Morris Swadesh’s maverick work on ‘glottochronology’ (pp 81-84) rather overstates both the persuasiveness of that material and its subsequent influence. He next discusses Chomsky (Chapter IV) and then, as noted, Everett.

In fact, it is not until pp 160-169 (the last ten pages of his actual text!) that Wolfe finally gets around to making his own proposal for the origins of language. He sees it as an **artefact** rather than as a product of evolution, and by extension as the basis of other cultural artefacts (p 167). Now of course linguists (contrary to what Wolfe implies on p 159) will cheerfully admit that **some** features of any language are indeed artefacts – more or less consciously developed for specific purposes. But this analysis cannot possibly apply to language(s) as a whole, especially given the very largely unconscious nature of most of the processes involved in native speech. And in particular Wolfe’s specific account of language as having originated as a **mnemonic device**, devised to help us remember objects and facts and thus to plan action, appears altogether unpersuasive. Only

small amounts of the material constituting a given language could possibly have arisen in this way. This is not to say that language itself may not have been crucial in facilitating group actions in early times (this is why some scholars believe that members of *Homo erectus* must have had language of some kind in order to have planned the sea journeys which they apparently undertook). But no adequate evidence or argumentation is presented for mnemonics having been the **origin** of language. In particular, Wolfe's focus, like that of most non-linguists looking into linguistic matters, is heavily upon **words** rather than structures, and words alone cannot constitute a language (see for instance p 167; note my recent material in this forum regarding this common error).

And at no point does Wolfe display adequate understanding of some of the most important defining characteristics of human language, such as 'double articulation' (morphemes versus phonemes). Neither does he engage with Robert Penrock's adroit defence of evolution with a focus upon language in *Tower of Babel: The Evidence against the New Creationism* (1999). Despite his obvious intelligence, he is plainly out of his depth here.

Notes

1. The article is available at <http://tinyurl.com/yanve2b4>
2. <http://tinyurl.com/yaknegtf>

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The Development of the Greek Language

Wendy Moleas

Bristol Classical Press, 1989, 2004,
pp 118

My excuses for commenting upon such an old book about a language with which few readers will be closely familiar are (a) that I myself have only just become aware of it (through meeting the author in quite a different context) and (b) that it illustrates very well some important points relating to books of this kind written for non-experts by writers who know the language in question very well and are

in no way 'fringe' but who themselves lack expertise in key relevant disciplines.

The most important general point to be made about Moleas is that she does not know linguistics – but nevertheless undertook a project of a type for which a good knowledge of historical and general linguistics (and indeed historical sociolinguistics) is essential. To her credit, a large percentage of the specific linguistic facts which she presents are correct (if not always clearly expressed; see below), and she consulted linguists in both Greece and England and read linguistic treatments of Greek while working on the book; but this has not prevented a range of infelicities. To be fair, it must be acknowledged that other language-oriented topic-areas, notably the study of literature, are also relevant to such projects, and Moleas appears rather more at home in dealing (very usefully) with these matters. Like George Thompson (*The Greek Language*, 1960, etc.) she has also become much more proficient in Modern Greek than are most scholars of Ancient Greek, and is thus better equipped than most to offer an overall perspective on the entire 3,500-year known history of the language; but again see below.

She fails to acknowledge that the Ancient Greek origin of a word does not guarantee that it still retains its ancient meaning – or other features.

An initial problem arises from the quixotic decision not to transliterate the numerous Greek passages in the text into Roman script (or IPAA-based phonemics). The publisher's online 'blurb' announces that 'for those with no Greek the ... translations of the extracts serve[s] as an introduction to the Greeks and their language', and the translations are naturally essential for such readers (of course, those who **can** read Greek hardly need them, except to elucidate any specific words which

they do not know); but readers without Greek will surely feel bewildered and handicapped by having no idea of how the original should be pronounced. (Of course, a decision to add transliterated versions would have involved decisions as to how each Greek letter should be rendered in each phase of the language, and more crucially would have lengthened the book considerably.)

The book has received critical comment; see for instance the review of the 2004 revised edition by George Hinge (*note 1*). Hinge's most salient complaint is that Moleas – lacking linguistic expertise, wanting to regard Greek as one language with a long history, and (understandably) concerned to encourage students of Ancient, Hellenistic and New Testament Greek to turn to the modern language as she herself did – emphasises the similarities between its historical stages rather than the differences, to the point of distortion. Although (as in the case of Latin and its Romance 'offspring') some later features appear to have already been present in spoken Hellenistic Greek and in informal or less educated writing of that period, I myself would endorse this assessment, particularly where *dhimotiki* ('normal' Modern Greek) as opposed to the now dated classicising *katharevousa* variety is concerned.

Moleas does present the dramatic reduction of the phoneme system; for example, the modern phoneme /i/ corresponds with eight different Classical Greek vowel phonemes, all still spelled differently in words which survive in Modern Greek (because of the influence of Classical Greek, Greek spelling is very conservative, though **some** general changes **have** occurred over the centuries). She also presents other large phonological changes, such as the fact that diphthong-final /u/ has become a consonant, /f/ or /v/, after some vowels. But she does not adequately acknowledge the **effect** of such major changes on linguistically-untutored learners moving between the old and the new varieties. And at the

crucial level of grammar she downplays large changes such as the loss of two key constructions involving the definite article ('the'), the replacement of almost all infinitive and participial clauses with very differently structured finite subordinate clauses ('that ...'), the loss of the verb-less structure Complement-Subject as in *leukos ho hippos* ('white the horse' = 'the horse is white'), etc., etc. Even where vocabulary is concerned, she fails to acknowledge that the Ancient Greek origin of a word does not guarantee that it still retains its ancient meaning – or other features.

As Hinge and I agree, Moleas' treatment of the crucial earlier period is also itself too brief, and in places it is obscure (inadequately explained), naïvely expressed and/or sloppy (for instance where she discusses the crucial matter of vowel-gradation and other alternations applying to stem-forms).

Moleas responded to Hinge's review (*note 2*) complaining that the reviewer 'took only the viewpoint of the linguistic specialist and [who] ignored large sections of [the book]'. It is indeed fair to say that Hinge, who himself appears more interested in the earlier history of Greek, mentions only very briefly the strengths of the book where it deals with more recent matters, especially literature. However, as I have noted, the subject-matter is by definition mainly linguistic in nature; and although Moleas herself obviously has a good knowledge of Greek (all periods) she clearly does not know linguistics well enough to give a truly authoritative account of what has happened to the language over the millennia which can be treated as reliable by students who are not themselves equipped to interpret or check her statements.

Another, grosser example of the phenomenon illustrated here involves Maori teaching books written without the benefit of linguistics which inform learners that (for example) Maori has no plural ending for nouns because it lacks the sound [s]!

Notes

- 1.<http://bmcr.brynmawr.edu/2004/2004-12-13.html>
- 2.<http://bmcr.brynmawr.edu/2005/2005-08-27.html>

Flat Earth Meets Tesla: A Primer in Paired, Inverted Worlds Cosmology

Laurel Federbush

Self-published, 2015, pp 38

It is hard to know whether to interpret this book as seriously intended; I will assume here that it **is** so intended. Laurel Federbush is a professional harpist with a PhD in Musical Arts from the University of Michigan; she has worked on simplifying difficult harp parts and now seeks to 'simplify the universe'. Federbush is a devotee of the 'genius' maverick scientist Nikola Tesla (1856-1943), whose ideas are implicated in her theory.

Like some other fringe astronomers and other such thinkers, Federbush proclaims that contemporary teachings about the universe, including the notion of a spherical Earth in orbit around the Sun, are grounded not in genuine understanding but in traditional Eurasian myths (and to a degree in drug-induced visions); these myths were adopted uncritically by Greek and then by Renaissance/Enlightenment scholars, and are now defended at all costs by the intellectual establishment. In fact, she argues, there is no good reason to accept these ideas. The 'laws of physics' which appear to support them and to exclude alternative models such as her own were invented as part of this pseudo-intellectual exercise.

Instead, Federbush herself puts forward a rival cosmology, according to which the earth consists of two flat, thin pancake-like planes back to back (like Patrick Moore's analogy for a spiral galaxy!); we live on one side and at present know only what can be seen from that side. The other side may well be similar to our side but of course 'upside down' from our point of view; it may or may not be possible to reach it (she invokes 'Hollow Earth' stories in support of the view that contact may have occurred in the past).

Federbush invokes the 'scalar electromagnetic wave' theory. Scalar waves restore some aspects of Maxwell's equations abandoned by mainstream physics in the 19th Century. Tesla accepted them as genuine, at least for a time, and they have been endorsed by various proponents of 'free energy'. Federbush holds that (conveniently!) they can penetrate any obstacle, lose no energy as they travel, can affect mental activity, are 'unbounded by time' and do not reduce the energy of the body which emits them. Our Sun (very small and close to Earth, as in most recent 'flat-earth' models) emits them and will continue to do so indefinitely; the same applies to another similar sun on the other side of the Earth, and the Moon on each side (also small) receives the scalar waves of the sun on the other side after they pass through the Earth. A protective 'Tesla Shield' made up of globes of energy around the Earth is created and maintained by the interaction between the pair of waves. The stars and planets are merely luminous points on the globes. (It is not made clear why each Sun does not broadcast its waves to the Moon on the **same** side.)

As will be gathered, Federbush is very concerned with simplicity, and invokes Ockham's Razor in her support; she claims that her model of the universe is superior because it is simpler (as well as fitting together very well). But of course she is ignoring the large amount of evidence in support of the standard view and the virtual absence of evidence favouring her own model; Ockham's Razor applies directly only where rival theories are supported by approximately **similar** amounts of evidence. And her arguments to the effect that the standard model requires objects to behave in unexpected ways do not hold up.

The best thing that can be said of Federbush's book is that it is rather amusing.

ANNOUNCEMENTS

SKEPTICISM, SCIENCE AND RATIONALITY (GENERAL)

Sense About Science

<http://www.senseaboutscience.org/>
Tracey Brown, director of Sense About Science, has been awarded the OBE in recognition of her services to science. 'Making Sense of Nuclear': A new public guide from @senseaboutsci: <http://senseaboutscience.org/activities/making-sense-of-nuclear/>

Good Thinking Society

<http://goodthinkingsociety.org/>
Make sure that you are on the Good Thinking's Newsletter email list by signing up at:

<http://tinyurl.com/jp6au72>

See the Charity Commission's document 'The use and promotion of complementary and alternative medicine: making decisions about charitable status' at:

<http://tinyurl.com/kthjgvr>

See also: 'The regulator of charities in the UK, the Charity Commission, is undertaking a consultation into how it should approach registering charities that promote so-called Complementary and Alternative Medicine (CAM).'

<http://tinyurl.com/y7h4jhg5>

'NHS Enfield CCG (*is*) now reconsidering its funding for homeopathy, with a public consultation that closes on June 30th – and it's time once again for the skeptical, science and medical communities to have their say. You can respond to the CCG via their online survey, which is open to everyone, even if you are not a resident of Enfield':

<http://www.smartsurvey.co.uk/s/Adherencetoevidencebasedmedicine/>

Advertising Standards Authority

'The Advertising Standards Authority (ASA) welcomes the publication in full of Dame Janet Paraskeva's independent audit of our performance

against our Commitment to Good Regulation.'

<http://tinyurl.com/ycgcty3m>

Unreliable news

From the New York Public Relations website: 'The Breaking News Consumer's Handbook. Rather than counting on news outlets to get it right, we're looking at the other end. Below are some tips for how, in the wake of a big, tragic story, you can sort good information from bad. We've even made a handy, printable PDF that you can tape to your wall the next time you encounter a big news event.'

<http://www.wnyc.org/story/breaking-news-consumers-handbook-pdf/>

Plus: Rumour and 'alternative facts' surrounding the case of Dr Dao, and his 're-accommodation' by United Airlines.

<http://tinyurl.com/ydaodlzs>

Introduction to Parapsychology

This eleven-week online course, designed and led by Prof Caroline Watt of the Koestler Parapsychology Unit at the University of Edinburgh, involves contributions from the world's leading parapsychologists and skeptics. Registration is now open for the next course commencing 4th September 2017. Last booking date 28th August. The course will run again commencing 9th April and September 2018.

<https://koestlerunit.wordpress.com/online-course/>

Websites of general interest

'Conatus News is an online blogging news platform started by grassroots activists giving progressive voices centre stage.' Features include climate change, Scientology, and an interview with Andrew Copson of Humanists UK. See the full listing at:

<http://tinyurl.com/yclb7n4h>

And: 'Giving unevicenced beliefs perpetuated by misinformation, tradition, dogma, delusion, fraud and indoctrination the respect they duly deserve since 2008.' Blogsite of

Crispian Jago founding member of the Hampshire Skeptics Society and Winchester Skeptics.

<http://crispian-jago.blogspot.co.uk/>

The John Maddox Prize

The John Maddox Prize recognises the work of individuals who promote sound science and evidence on a matter of public interest, facing difficulty or hostility in doing so. Nominations are now open for the 2017 prize (deadline July 31st). The winner of prize receives £2000, and an announcement of the winner is published in Nature. The award is presented each year at a reception in November.

<http://senseaboutscience.org/activities/maddox-nominations/>

Science publications

'Is the staggeringly profitable business of scientific publishing bad for science? It is an industry like no other, with profit margins to rival Google – and it was created by one of Britain's most notorious tycoons: Robert Maxwell.'

<http://tinyurl.com/yclbugcp>

See also 'The European Scene' (on measuring research output).

MEDICINE

The Nightingale Collaboration

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

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

Evidence-based medicine

Pay a visit to the 'Science-based Medicine website' where there are lots of recent articles, too numerous to mention here.

<https://sciencebasedmedicine.org/>

Also: 'This website has been created as a voice of reason in response to the substantial amount of uncritical media coverage currently being given to alternative medicine.'

<http://www.ebm-first.com/>

Debunking false health claims

Gid M-K, 'Health Nerd, Epidemiologist, Blogger. Huffpost Contributor'.

<https://medium.com/@gidmk>

Meanwhile: New study finds trading standards close to breaking point trying to regulate misleading marketing claims on healthcare products:

<http://tinyurl.com/yakg658u>

Plus: 'We must play our part for the ASA to do its job. The advertising watchdog needs resource to continue its work as its remit widens - Google and Facebook's commitment is at least a good start.'

<http://www.campaignlive.co.uk/article/play-part-asa-its-job/1431524>

And from the *Independent* in June: 'Last weekend, Gwyneth Paltrow's Goop held a wellness summit in Los Angeles. But, unsurprisingly given the unconventional medical advice dished out by "experts" affiliated with the wellness and lifestyle site, doctors have been swift to condemn anything that doesn't quite stack up. And one point from the expo caught Dr Jen Gunter's eye: the claim that magnesium could be taken instead of antibiotics to treat various illnesses.'

<http://tinyurl.com/ybs6ncwf>

Homeopathy

'This review summarises 12-month prevalence of homeopathy use from surveys conducted in eleven countries (USA, UK, Australia, Israel, Canada, Switzerland, Norway, Germany, South Korea, Japan and Singapore). Each year a small but significant percentage of these general populations use homeopathy. This includes visits to homeopaths as well as purchase of over-the-counter homeopathic medicines.'

[http://www.homeopathyjournal.net/article/S1475-4916\(17\)30023-1/abstract](http://www.homeopathyjournal.net/article/S1475-4916(17)30023-1/abstract)
and

<http://tinyurl.com/yczddmqn>

Responding to concerns that NHS England's plans to stop prescribing some medicines as part of cost-cutting measures, but still spends £4 million on homeopathic medicine, Simon Stevens,

chief executive of NHS England, told BBC Radio 4's Today programme on 31.3.17 that homeopathic medicine is 'placebo at best' and it is 'absurd' for doctors to prescribe it.

<http://tinyurl.com/y87rlktf>

The Society of Homeopathy has now complained to the BBC about its 'consistent line across all of its platforms of opposition to, and disparagement of, Homeopathy.' During the interview 'following wide-ranging discussion of issues around the future of the NHS, Sarah Montague suddenly threw in a question about the amount spent on Homeopathy within the NHS, evidently catching Mr Stevens unaware. She appeared to be pushing him to agree with her viewpoint, that Homeopathic remedies are at best placebo and that it is absurd they can be prescribed within the NHS. ...This was one of only a number of programmes in which the BBC seemed to show a biased attitude towards Homeopathy, which may be the result of relying too heavily on a small number of "experts", who openly and persistently campaign against complementary and alternative medicine.'

<http://tinyurl.com/yd6avrsc>

And in the USA 'the FDA has requested the recall of a preparation for baby teething problems sold by a homeopathic company in a letter it is stated: 'The Food and Drug Administration (FDA) is requesting that you immediately initiate a recall of all lots of Hyland's Baby Teething Tablets and Hyland's Baby Nighttime Teething Tablets, within expiry. This request is based on FDA's inspection of your facility in Los Angeles, CA beginning September 20, 2016, and analytical findings of belladonna alkaloids in the Standard Homeopathic Company products that vary widely from the claimed content This variability in belladonna alkaloid concentrations indicates a fundamental lack of control over the content of toxic chemicals in your drugs.'

<http://tinyurl.com/ybt4wzs5>

Meanwhile: 'A rigorous systematic review and meta-analysis focused on randomised controlled trials (RCTs) of non-individualised homeopathic treatment has not previously been reported. We tested the null hypothesis that the main outcome of treatment using a non-individualised (standardised) homeopathic medicine is indistinguishable from that of placebo. An additional aim was to quantify any condition-specific effects of non-individualised homeopathic treatment.....The quality of the body of evidence is low. A meta-analysis of all extractable data leads to rejection of our null hypothesis, but analysis of a small sub-group of reliable evidence does not support that rejection. Reliable evidence is lacking in condition-specific meta-analyses, precluding relevant conclusions. Better designed and more rigorous RCTs are needed in order to develop an evidence base that can decisively provide reliable effect estimates of non-individualised homeopathic treatment.'

(*Why don't we just call it a day?* – Ed.)
<https://www.ncbi.nlm.nih.gov/pubmed/28340607>

'Complaint upheld against homeopath who said she could treat symptoms of autism.'

<http://tinyurl.com/ya4w4bzb>

And good news from the Litfield Medical Centre in Clifton, Bristol: 'Barriers to patient referrals are threatening the NHS Homeopathic Service, leading to a decrease in appointments and those who are referred to us'

<http://portlandcentrehealthcare.co.uk/news-homeopathic-service-barriers/>

Veterinary homeopathy

'A woman who allowed her cat's flesh to rot down to the bone after attempting to treat an abscess with homeopathic remedies has been banned from keeping animals for life. Maria Ringblom, 66, of St James, Beaminster, in Dorset admitted causing unnecessary suffering to her cat, Tiger, when she appeared at Weymouth Magistrates Court on 3 April.'

<http://tinyurl.com/ycgcty3m>

Cancer quackery

Robert O. Young could be heading for jail after taking a plea deal this week in which he admitted illegally treating patients at his luxury Valley Center ranch. ‘The 65-year-old Young is the author of several books including the bestselling “The pH Miracle: Balance Your Diet, Reclaim Your Health,” which was first published in 2002 and later translated into more than 18 languages. His work is based on the theory that acidity in the body is the cause of disease, and that an alkaline diet is the answer.’

<http://tinyurl.com/ybe98mkb>

Meanwhile ‘The failure of the Texas Medical Board: Houston cancer quack Stanislaw Burzynski is back in business.’

<http://tinyurl.com/y8lytdmy>

Also: ‘The U.S. Food and Drug Administration is warning people to avoid more than 60 products sold on the internet that claim the power to treat, cure or prevent cancer. These creams, pills and teas are not tested or approved by the FDA, which calls them a “cruel trick.” Some have ingredients that can interact dangerously with prescription drugs.’

<http://tinyurl.com/yauxhxx6>

Plus: ‘Following a Moroccan TV report on the use of camel urine as a cure for cancer, Moroccan oncologist Dr. Tashjin Said rejected the claims, saying that “camel urine is urine” and not meant for human consumption. A camel farmer interviewed in the report, which aired on February 6, recommended drinking up to a litre of camel urine to fight cancer and other abdominal diseases’.

<http://tinyurl.com/ybmo7d5d>

And: Cancer patients are risking their health as a result of fad diets.

<http://tinyurl.com/y7cv3gpy>

Meanwhile: An advertising watchdog has upheld a complaint against two websites run by a nutritional therapist that offered advice on a high-fat, low-carbohydrate diet for cancer patients.

<http://www.irishhealth.com/article.html?id=25793>

Also on the positive side: ‘eBay removes listings for dangerous cancer “cure” after investigation by Good Thinking’.

<http://tinyurl.com/ya8obt58>

See ‘Always Look On The Bright Side of Death’ by cancer sufferer Crispian Jago (especially Chapter 17: The Ladybird Book of Extremely Tedious Oncological Platitudes):

<http://rationalcancer.blogspot.co.uk/p/c-over.html>

Naturopathic medicine

In the USA, ‘Naturopaths are in damage control mode over the death of a naturopathic patient due to turmeric infusion, even as they lobby state legislatures for licensing and practice expansion.’

<http://tinyurl.com/y94vc8al>

See also: ‘Naturopathic doctor Kim Kelly gave an intravenous injection of curcumin that killed Jade Erick, 30, who sought “natural” treatment for eczema. Her death sparked outrage across the country, while naturopathic doctors scrambled to defend this senseless treatment. Now, details about Kelly’s practice and the faulty regulation of naturopathic doctors in California raise questions about whether Erick could have been alive’.

<http://tinyurl.com/ycqh7yxx>

‘Aerobic oxygen’

UKIP’s national organiser for Wales, Andrew Haigh, has a website selling ‘Aerobic Oxygen’ for consumption; tests reveal it to be a powerful chemical similar to oven cleaner.

<http://tinyurl.com/y75dlezh>

Also see the following blog on ‘aerobic oxygen’ in veterinary practice:

<https://rationalvetmed.net/2017/04/30/drink-up-now-you-can-breathe-easy/>

Anti-vaccination

Dublin screening of anti-vaccine film sparks protests.

<http://tinyurl.com/ya2zpk3h>

and

<http://tinyurl.com/ybs6cetr>

‘Why this vaxed v. unvaxed study is not valid: Update: Study retracted AGAIN’:

<http://tinyurl.com/yc69e73c>

And measles is spreading across Europe wherever immunisation coverage has dropped, the World Health Organization is warning.

<http://www.bbc.co.uk/news/health-39419976>

Plus: Minnesota’s worst measles outbreak in decades.

<http://tinyurl.com/ya9t588q>

Autism

Also: ‘One of Britain’s largest children’s charities has been directing families towards alternative medicine practitioners who claim that vaccines are toxic and have prescribed autistic children unproven treatments such as £2,600 foot baths.’

A full copy of this article, which appeared in the *Times* on 23.6.17, can be found at:

<http://tinyurl.com/y77rx6xg>

‘Outlandish therapies’ exploit families of autistic children. Misinformation about autism leaves many at risk from ‘purveyors of snake oil’.

<http://tinyurl.com/ybl6jv9u>

Anti-LGBT prejudice

‘A small anti-LGBT group called the “American College of Pediatricians (ACP)” created a name that is easily confused with the AAP (American Academy of Pediatrics), the largest pediatrics organization in the country (USA). It is disturbing that news organizations and physicians are citing the “ACP” as a reputable source. The ACP is a small group of physicians that left the AAP after the AAP released a 2002 policy statement explaining that gay parents pose no risk to adopted children.’

<http://tinyurl.com/y6u2vpgh>

Allergy

‘The ASA and CAP have seen marketers offer a variety of products and therapies to either “treat” or “relieve the symptoms of” hay fever and associated conditions.’ Some guidelines follow.

<http://tinyurl.com/ybuwpzrg>

And: According to a survey by the Food Standards Agency, more than a fifth of the population think they are intolerant or allergic to cow’s milk

(rising to 46% of people aged 16 to 24). Experts have warned of the adverse effects of unnecessary dietary restriction.

<http://tinyurl.com/yczofu6m>

Also: ‘While many people believe they may be allergic to penicillin, few actually are. The consequences may be serious.

<https://sciencebasedmedicine.org/a-closer-look-at-penicillin-allergies/>

Supplements

‘Supplements don’t work: Why we should all stop wasting our time.’

<http://tinyurl.com/y9c5efmz>

Detox

‘Detox programs are created with one goal: make money. I am not generalizing here. I’ve helped create detox programs at more than one clinic. In each instance, the decisions to include specific detox supplements, protein powder shakes, or therapies were based on profit margins.’

<https://www.naturopathicdiaries.com/the-right-detox/>

Fitness trackers

Scientists put seven consumer devices through their paces, comparing their data with gold-standard laboratory measurements: ‘We were pleasantly surprised at how well the heart rate did At the same time we were unpleasantly surprised at how poor the calorie estimates were for the devices – they were really all over the map.’

<http://tinyurl.com/yapatfdp>

PSYCHOLOGY AND PSYCHIATRY

Human decision making

‘This is the age of big data. We are constantly in quest of more numbers and more complex algorithms to crunch them. We seem to believe that this will solve most of the world’s problems - in economy, society and even our personal lives.....Can we? Gerd Gigerenzer, a sixty nine year

German psychologist who has been studying how humans make decisions for most of his career, doesn’t think so. In the real world, rules of thumb not only work well, they also perform better than complex models, he says. We shouldn’t turn our noses up on heuristics, we should embrace them.’

<http://www.foundingfuel.com/article/gigerenzers-simple-rules/>

Critical thinking

‘A new study confirms what we suspected – you can’t just correct misinformation with information, you have to expose the tactics of deception so people can recognize them for themselves.’

<https://sciencebasedmedicine.org/inoculating-against-misinformation/>

Occupational psychology

At the Future Work Centre website: ‘Our mission is to make work better for everyone, now and in the future. We want to examine what evidence there is for the advice that people and organisations are offered about work. And we want to know whether that advice works. Put simply, we want to find out what works, in what way, and for whom.’

‘EvidenceBITES is a webinar series where we provide bite-sized learning opportunities for all. We shine an evidence-based spotlight on topical HR issues and debates, provide practical advice to help you think more systematically and explore how evidence-based practice can help you make better decisions. The webinars are free to attend, and will also be recorded and made available on our website.’

<http://www.futureworkcentre.com/who-we-are/>

<http://www.futureworkcentre.com/kc/evidence-based-practice/>

<http://www.futureworkcentre.com/evidencebites/>

Social psychology

‘Was the “crisis” in social psychology really that bad? Have things improved? Part One: the researchers’ perspective.’

<http://tinyurl.com/y786r8pe>

Satanic child abuse

‘Nearly two years after the state’s highest criminal court overturned the child sexual abuse convictions for day care owners Dan and Fran Keller, Travis County District Attorney Margaret Moore will file court documents Tuesday declaring them “actually innocent” under the law and dropping pending charges against them.’

<http://tinyurl.com/ydcem3q5>

Tarot cards

‘The truth about tarot - Whether divining ancient wisdoms or elevating the art of cold reading, tarot is a form of therapy, much like psychoanalysis.’

<http://tinyurl.com/yakpyu72>

RELIGION

Blasphemy

Jakarta’s Christian governor has been jailed for two years after being found guilty of committing blasphemy, ‘capping a saga seen as a test of religious tolerance in the world’s most populous Muslim-majority nation’.

<http://tinyurl.com/y9s3mvld>

‘Spiritual science’

Be Reasonable: Episode #042 – Sean Clarke: ‘Joining Marsh this episode is Sean Clarke from the Spiritual Science Research Foundation in India.’

‘Never have I heard more Codswallop, Crackpottery and Crap’ (Comment)

<http://tinyurl.com/y99pu2um>

POLITICS AND PUBLIC POLICY

20 mph speed restrictions

Do 20 mph speed restrictions reduce accidents? Ask for Evidence examines this question.

<http://tinyurl.com/ya6cuwx5>

UPCOMING EVENTS

From Michael Marshall: 'I know SitP groups often take speakers out for a meal before their talk - if you do, could you consider booking via ChariTable Bookings? If you make your booking via this site/app, the app will give £1 to the Good Thinking Society for each person eating with you, and it costs you nothing extra. Of course, if you want to use it for any meals you book in your real life too, we'd really appreciate it!

<https://charitablebookings.org/charity/144996>

QED

Question, Explore, Discover.

'QED is a two-day science and skepticism convention taking place at the Mercure Piccadilly Hotel in Manchester from the 14th-15th October 2017. Fantastic speakers from the worlds of science and entertainment will be joining us for a weekend celebration of science, reason and critical thinking.'

<https://qedcon.org/>

THE ANOMALISTIC PSYCHOLOGY RESEARCH UNIT AT GOLDSMITH'S COLLEGE LONDON

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

Chris French has organised an exciting programme of seminars for this

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

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

<http://www.gold.ac.uk/apru/email-network/>

or

<http://www.twitter.com/ChrisCFrench>

or

<http://feeds.feedburner.com/apru>

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://www.skeptic.org.uk/pub/>

<https://twitter.com/SITP?refsrc=email>

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://ex-muslim.org.uk/2017/05/may-semb-update-iwant2bfree/>

17TH EUROPEAN SKEPTICS CONGRESS

See 'European Scene' earlier.

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

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

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

LOGIC AND INTUITION: ANSWER

Leaves on trees

The answer to the first part of the puzzle is that the statement is, strictly speaking, false. If there are N trees they could have every number of leaves on them from zero to $(N-1)$. However if every tree has at least one leaf then the statement is True.

Bedrooms in hotels

The answer to the second part of the puzzle is that the statement is true. A hotel must have at least one bedroom to be a hotel.

How many puzzles do we solve together?

Finally, in the admittedly unlikely event that there is no overlap beyond

chance in the puzzles we manage to solve independently, then together we would expect to solve $5/6$ of all such puzzles. (I solve one third of the one quarter of puzzles you fail to solve or, equivalently, you solve three quarters of the two thirds of puzzles I fail to solve.)

THE ASSOCIATION FOR SKEPTICAL ENQUIRY (ASKE)

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

About ASKE

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

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

m.heap@sheffield.ac.uk

email: aske1@talktalk.net;
website: <<http://www.aske-skeptics.org.uk>>