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REPORTED SIGHTINGS OF UNUSUAL CREATURES

Edited by Michael Heap

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EDITORIAL

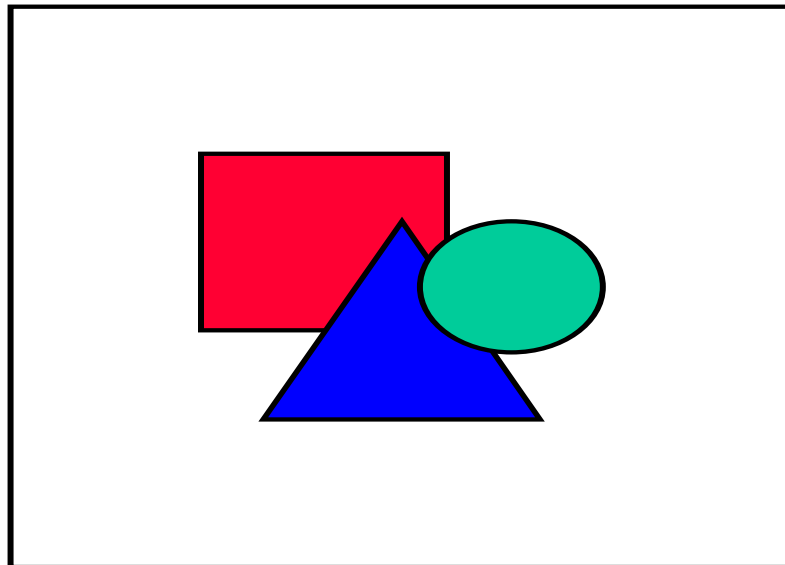
Michael Heap

This issue of the *Skeptical Intelligencer* is devoted to reported sightings of unusual creatures. In the first article I define the subject area and approach it from the standpoint of my own speciality, psychology, rather than zoology, a discipline in which I have no particular expertise. For this reason I find reported sightings of big cats in the UK (there are similar accounts in other countries) of special interest.

I am very grateful to Mark Newbrook, David Sealy, Charles Paxton and Bruce Spittle for their contributions. Mark approaches the subject from his own field, namely linguistics. The other authors' contributions reflect their own areas of expertise or special interest.

Following these contributions I make some additional comments and include in this article a letter I have received from David Sealy 'in defence of Cryptozoology'.

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New Zealand Stamp depicting the Giant Moa, which despite being extinct for hundreds of years is still occasionally 'sighted' in parts of that country (see 'Sightings of the Moa', this issue)

ARTICLES

REPORTED SIGHTINGS OF UNUSUAL CREATURES

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Defining the Territory

This issue of the *Skeptical Intelligencer* contains papers concerning 'reported sightings of unusual creatures'. 'Unusual sightings' covers a wide range of phenomena of interest to skeptics and includes reports of such things as fairies and elves, angels, ghosts and spirits, extraterrestrial beings, and even Elvis. These claims demand the attention of skeptics usually because a significant number of people accept their veracity despite the lack of any good evidence and despite the fact that their existence would contradict our present understanding and knowledge of the world and would have extraordinary consequences for it.

By 'creatures' here is meant non-human animals, living wild, and presumed to be of terrestrial origin. 'Reported sightings' refers to written or oral accounts by anyone (experts in various fields such as zoology or anthropology, or members of the public) and sometimes the production of material evidence such as films, photographs, drawings, sound recordings, casts of tracks, and animals that are believed to have been attacked and sometimes killed by the creature in question.

The creature whose existence is being claimed may be considered unusual for one or more reasons. For example, there may be strong or overwhelming evidence that it has been extinct for many years. An example of

this is the claim that the many sightings of the Loch Ness monster suggest that a colony of plesiosaurs inhabits this and other inland waters, even though these creatures are thought to have been extinct for over 60 million years. Alternatively, the claimed sighting may be of an extraordinary and unrecognised species such as sasquatch or yeti. Other reported sightings are deemed 'unusual' because, although the animal itself is a known extant species, it is not regarded as being indigenous to the area which it is reportedly inhabiting or as being able to survive in the conditions that prevail there. Reported sightings of large cats such as panthers and lynxes in the UK (and in other countries) are examples of such.

The Skeptical Interest

The above collection of defining attributes of 'reported sightings of unusual creatures' does not in itself suggest that our chosen subject should be of any particular interest to skeptics other than those working in the relevant academic disciplines. No doubt mainstream zoologists, for example, conduct research and have debates and fierce disagreements concerning the existence of species, their habitat and distribution and so on, without all of this becoming a matter of fascination for the media or the general public.

I have no claim to any special expertise in this field, which I understand is known as 'cryptozoology'. Nevertheless it does appear to be one to which knowledgeable individuals from a range of disciplines are able to make a significant contribution – e.g. zoologists, palaeontologists, anthropologists, historians, psychologists and archaeologists.

Reports of Big Cat Sightings

Reported sightings of big cats in the UK have been widespread and frequent for many years. According to the British Big Cat Society (BBCS; see note 1) there was a record number of 1,077 recorded sightings in 2002. These were from every quarter of Great Britain. According to the BBCS this may represent only between one-third and one-half of all sightings. Although such animals have been caught or killed, it appears very rare for such sightings to be thus verified.

A contemporary example is that of the frequent sightings of at least two large cats in the Bushmills-Ballycastle area of North Antrim. Several sheep carcasses are thought to be the result of killings by these animals. According to the Ulster Society for the Prevention of Cruelty to Animals these two cats are believed to be one of four on the loose in Northern Ireland. At least one of these cats, thought to be a puma, is reported to have escaped from a North Antrim safari park. Again, however, extensive police searches have been fruitless. In the author's own locality (South Yorkshire, Humberside and the East Midlands) big cat sightings are frequently reported. It was recently announced on the local television news that someone may have shot the most recently reported big cat in response to an offer of prize money in a shooting magazine. However, to my knowledge there have been

no recent captures or discoveries of the dead bodies of such animals.

If the number of sightings is commensurate with the actual number of large cats on the loose then we obviously have an interesting and important, not to say extraordinary, phenomenon. Even so, the claim that sightings of alien wild animals roaming the countryside (and sometimes urban areas) are occasionally authentic does not run contrary to rational thinking or scientific knowledge and therefore does not immediately warrant the attention of skeptics. There are plausible explanations that do not dispute the authenticity of the sightings. These include escapes from safari parks or private collections or the deliberate release of the animals by owners who can no longer keep them or, so it has been reported, who wish to hunt them down for amusement. However, it appears that the frequency and ubiquity of such sightings are out of all proportion to direct evidence of their existence (i.e. dead or alive captures). 'Big cat' enthusiasts assert that this anomaly is explained by the innate secretiveness and evasiveness of these animals, which enable them to avoid capture. Whether such an assertion has any credence should be left to the true experts on big cats. However, many □ceptics will find this all too reminiscent of sightings of non-existent phenomena such as ghosts, extraterrestrial aircraft and aliens, *mythical* monsters and so on. Hence an explanation is required that goes beyond the flat assertion that 'they are all out there'. Also of interest to □ceptics are some of the more unusual interpretations that are occasionally offered to account for the proliferation of reports of big cat sightings.

The Psychology of Reported Sightings of Unusual Creatures

When the phenomenon of reported sightings of unusual creatures is studied from the perspective of my own discipline, namely psychology, several characteristics stand out in addition to the disproportionate imbalance between sightings and hard evidence.

Firstly, so far as public interest is concerned, the 'unusual creatures' reported tend to be large and even monstrous and frequently menacing or dangerous. In the UK, for example, we have big cats, huge black dogs, aquatic monsters and man-like beasts. By contrast, as I thumb through popular books on 'unexplained phenomena' or newspapers cuttings on sightings of unusual creatures, I find little mention of reports of antelopes, zebras, monkeys, racoons, etc. Similarly, the creatures in question are imbued with mystery and in some cases mythology, even when, as in the case of big cat sightings, prosaic explanations are offered for their presence such as those mentioned above. This characteristic is evident in the titles of books and other literature – cf. *Mystery Cats of the World* (by Karl P.N. Shuker), *Mystery Cats of Devon and Cornwall* (by Chris Moiser), *They Stalk by Night* (by Nigel Brierley), and *The British Big Cat Mystery* (website www.panther.org.uk). Once a phenomenon is labelled a 'mystery' it tends to remain so even when plausible and mundane explanations are available – viz. the Loch Ness monster, 'Teggie' (in Bala Lake), 'Morgawr' (the Cornish sea monster) the Surrey Puma, the Beast of Bodmin, the Fen Tiger, the Big Grey Man of the Cairngorms, and the Grey King of Snowdonia.

Also of interest to psychologists and skeptics generally are the explanations offered for the alleged sightings. These explanations

are based on certain assumptions, some of which are more likely than others. For example, in the absence of evidence in the form of the dead or alive capture of the creature in question, many feel it appropriate to adhere to the null hypothesis, namely that there is no 'unusual creature', and therefore the alleged sightings are misperceptions or hoaxes. With so many sightings, this account requires the assumption that people are easily deceived, easily deceive themselves, and are rather predisposed to deceive others.

I believe it is generally the case that most people underestimate the extent to which all three of these assumptions are valid. As a psychologist, I have no such problem accepting these assumptions, neither do I think have most skeptics, given the widespread deception that characterises reports of many unusual and paranormal phenomena. Hence, for example, we should not be too impressed by announcements of record numbers of sightings when, at the same time, people are being encouraged on websites and by other means to send in forms that document their own sightings.

Neither am I too impressed when the authenticity of sightings is supported by references to the personal qualities of the observer (e.g. 'Daffyd Evans is a down-to-earth, no-nonsense Welshman, not given to flights of fancy, but what he saw that cold December night.....'). Daffyd Evans may be a Welshman, but so long as he is an ordinary human being, one characteristic he will undoubtedly possess is the capacity to misperceive and be deceived (*see note 2*). The same goes for sightings reported by experts: a couple of years ago an unusual sighting in Nottinghamshire was supported by the statement made by the observer, 'I am a

vet and I know the difference between a panther and a dog!

I have, in fact, long suspected that a paradox exists concerning claims of unusual sightings namely that the greater the possible mistake, the more we refuse to admit that we may have made one (*see note 3*). For example, we may easily admit that what we have reported as a deer swimming in a loch could in fact have been a floating log than if we claim to have seen an aquatic monster: 'I know a log when I see one!' we may be inclined to protest. This is an idea that could be investigated experimentally.

The mind of the hoaxer

While the reasons for misperceptions and misconceptions have been widely studied, it seems that less attention has been paid to the reasons why people deliberately deceive. What motivates people to perpetrate hoaxes? Again those who are familiar with the skeptical literature on unusual and paranormal claims will be all too aware of the readiness whereby people will deliberately resort to deception and fraud. The most notorious of hoaxes occur in the form of faked evidence (e.g. the 'surgeon's photograph' in the case of the Loch Ness monster, the film of Big Foot, the photographs of the Cottingley fairies, and the many crop circles; also we must not forget the case of 'Piltown Man').

Human nature is such that there is no reason to suppose that such hoaxing does not also extend to the simple announcement of entirely fabricated claims of sightings and encounters. I am sure that the reasons why people perpetrate hoaxes are many and varied.

Rational arguments for the authenticity of some 'big cat' sightings

None of this is to say that there is no evidence to support the claim that there is a plesiosaur in Loch Ness or other Scottish lochs or that big cats are loose in many parts of the UK. Skeptics are often in error when they proclaim, 'There is not a shred of evidence for (*some extraordinary assertion*)'. Usually there is indeed evidence and, in the case of claims about big cat, plausible reasons are available to support their authenticity. This may be so, even if the evidence in the form of reported sightings may be insufficient to persuade, while the rational explanations – the accidental or deliberate letting loose of such creatures, etc. – may not turn out to be correct. (And judging the plausibility of the latter is the province of experts, amongst which I am not numbered).

For my own part I see no reason why large cats should not occasionally escape or be released into the wild. Knowing what we do about human nature, it is entirely conceivable that these rare creatures and the public interest and excitement that they arouse are sufficient to account for the extraordinary ubiquity of this phenomenon. But that is not to say that this is the sole explanation.

It may, for example, have been the case that a puma- or panther-like creature was once let loose in the Surrey countryside or on the wilds of Bodmin Moor and initial reported sightings were authentic. Thus, sufficient impetus was created for the transformation of fact into fiction and even myth, all subsequent beliefs and claims being without foundation. In other words, at one time there was really something in 'it' but now, the frequently reported sightings and other evidence do not require that there is anything in 'it' at all. But for that reason alone, 'it' is still an intriguing phenomenon.

Stronger claims

As I earlier stated, some explanations require more far-reaching assumptions than others. In the case of big cat sightings, for example, some assert that far from being solitary creatures, these animals belong to small breeding populations. Once more I defer to experts in zoology to provide an opinion on such theories.

The lure of mystery

There is nothing, so it appears to me, mysterious about the interpretations so far offered for big cat sightings. Even more ambitious, however, is the claim by enthusiastic writers such as Di Francis (see *note 4*) that reported sightings are evidence that at least some big cats are not only from breeding populations but that these are indigenous and have lived in this country for hundreds and thousands of years. Again I defer to animal experts to give a definitive opinion on this matter. In my own untutored opinion it appears that when we move towards such accounts we are moving too far away from the available evidence.

Yet it is, and always has been, a characteristic of human nature to create mysteries around natural phenomena, either those that we have not fully explained by existing knowledge or when existing knowledge is deemed insufficient by enough people. Hence we may explain, for example, crop circles mundanely as the work of humans or mysteriously as the work of strange forces, extraterrestrials, some hidden intelligence and so on. (At one time the true nature of rainbows was not understood and they were endowed with mystery or religious meaning – e.g. a reminder from God of the Great Flood).

Likewise some consider that the mysterious big cats that we keep seeing will

never be caught – they are not like the average big cat. More mysterious yet is the belief that they are in fact ghosts of creatures that once roamed the land thousands of years ago.

Conclusions

The phenomenon of reported sightings of unusual creatures interests me for several reasons. Firstly it illustrates many aspects of the more general set of phenomena that interest skeptics. Secondly, as I stated at the beginning of this article, experts from a range of disciplines can make a contribution to the debate as well as lay persons with their own experiences of life. If it turns out that a lake somewhere eventually yields a monster or a breeding colony of big cats is finally prove to be on the loose on Exmoor or Bodmin Moor then the world is thereby a more interesting and exciting place. But if nothing at all is there, we do not simply pack up and go home; it is still fascinating that so many sane and sensible people truly believe that they did see an unusual creature and it is a challenge for us to understand why.

Notes

1 www.britishbigcats.org; another website to visit is www.ukbigcats.co.uk

2 See my article 'Psychopathology and beliefs in anomalous phenomena', *The Skeptical Intelligencer*, 2001, Vol. 4, 5-14.

3 *ibid*

4 *The Big Cat Country* by Di Francis, David & Charles Publishers, 1983

CRYPTOZOOLOGY AND LINGUISTICS

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Introduction

There may not seem to be much connection between these two areas of scholarship. However, as a general (and skeptical) linguist who is also a critical cryptozoology enthusiast, I note that there are at least two areas where the two fields overlap.

1. Linguistic Forms used in Discussing Cryptids

Much can be learned about the views taken by local communities on individual cryptids by examining the role these purported creatures play in folklore, world-views and so on (see, e.g., Bayanov, 1982; Colarusso, 1983). An important aspect of this concerns the linguistic forms (and discourse patterns) used in discussing them. For instance, the names of cryptids may be classifiable in terms of gender-like systems which divide nouns into classes. Some languages distinguish in this way between nouns referring to humans, animals, specific groups of animals, spiritual beings (and groups thereof), natural phenomena, etc. Ways of marking such distinctions through linguistic form include:

(a) lexically complex names where one stem indicates the class, parallel with English *-man* (*postman* etc) or *-fish* (*catfish* etc);

(b) affixes marking class, parallel with English *-ess* ('female'; natural gender) or affixes in languages like Italian marking grammatical gender, eg Italian *-a* (feminine)

vs *-o* (masculine) as in *zia* 'aunt' vs *zio* 'uncle';

(c) 'concord' between nouns on the one hand and verbs, adjectives etc on the other, which is triggered by the class membership of the noun even where that is anomalously marked or not otherwise marked;

(d) class-marked pronouns parallel with English *he/she* as opposed to *it*;

(e) specific forms used in other circumstances to refer to other entities of known types; the extension of such a form to a cryptid suggests likening of the two entities (although often this could be 'metaphorical'). One example of this is the local-language (human) occupational term translated as 'surveyor', reported by a source cited in Shackley (1983) as applied to an apparently near-human sasquatch-like entity in Siberia.

Linguistic evidence demonstrates, for instance, that the Hopi – in whose language nouns referring to animals take a distinctive plural marking – regard clouds as animals (or at least once regarded clouds as animals: their thought may have altered while this aspect of the grammar of Hopi has not, just as the Germans no longer think of the Sun as female and the Moon as male).

In the same way, one can examine terms used in languages that have such systems (and many do) for cryptids such as the sasquatch/bigfoot of North America, the duende and the sisimite of Belize. Each of

these might thereby be identified as being perceived as an animal (generally or of a given type), a human (of an unusual type), a supernatural being, etc. It is notable, for instance, that several sasquatch-like cryptids are referred to by names such as Indonesian/Malay *orang* or Chinese *ren* ('person') + a specifying term (but on the other hand so is the *orang utan*, suggesting that scientists might re-classify some such cryptids if they were confirmed). Similarly, there are English terms such as *owl-man* and the older *green-man*, *woodwose* etc, containing *man* or older synonyms and again suggesting that these specific cryptids are at least near-human.

In more focused work, the etymology of the Maori animal-name *waitoreke* was analysed by Becker (1985) and Colarusso (1988), with the former suggesting that the name refers to a mythological creature and the latter that this is a real animal but a mammal rather than a reptile as is often imagined. Becker's work is well researched, but his linguistic conceptualisation and argumentation is at times strange (although the relevant specific conclusions might still be valid for other reasons). Colarusso's linguistics is more standard and authoritative, but given the absence of a specimen, photograph or detailed scientific description it is (naturally) still not altogether clear that he is correct. In the same vein, there has been considerable discussion (e.g. Joyner, 1984; Groves, 1986) of the etymology of the words *yahoo* and *yowie*, used to refer to sasquatch-like cryptids in Australia. However, so far even the better work of this kind has been carried out mainly by anthropologists with an interest in linguistics rather than by professional linguists.

Of course, traditional stories and other overt comments can add to information of this kind. For instance, sasquatch reporters often stress the idea that the creature 'feels' human-like; there are also direct reports of cryptids using language, a trait normally considered to be confined to humans (see below). But the evidence of linguistic forms has the advantage of relating to largely unconscious ideas which may reflect general cultural notions more accurately than the claims or views of individuals. As noted, it may relate to belief systems now superseded; but these are still of great interest as reflecting traditional thought (rather than modern beliefs possibly 'contaminated' by contact with other cultures, notably those of colonisers with non-local religious and scientific ideas).

At a more basic level, the very existence of local names for unidentified species – maybe now extinct or at least rare – is at least an indication of possible cryptids. Bauer & Russell (1987) proposed that another, otherwise mysterious Maori animal-name, *kawekaweau*, refers to the giant gecko *hoplodactylus delcourti*, which is known only from very few specimens. Walters (1996) presented a list of 60 Tahitian bird-names (and some derivatives), many of which appear (at least *prima facie*) to refer to species not recognised by zoologists. But of course it is often possible that some of the creatures referred to are only mythological/legendary or have been the subject of far-reaching folk-zoological re-analysis since their extinction.

In addition, linguistic attention can be turned upon terms used in the languages of contemporary scholarship for individual cryptids or for the whole sub-discipline (or its aspects). For instance, decisions on the

names given to cryptids – whether these be borrowed from locally relevant languages, coined in the language of scholarship (most often English) or coined as scientific names from Latin and/or Greek morphemes – have linguistic and sociolinguistic implications, intended or not. Such implications may also vary for different users and readers.

One type of example involves the bestowing of a scientific name upon a cryptid. Whether or not this is officially sanctioned by the bodies empowered in this respect, the use of such a name adds an ‘aura’ of scientific respectability. Peter Scott’s unauthorised *nessiteras rhombopteryx* sounds much more ‘recognised’ and zoologically respectable than *Loch Ness Monster* (even though *teras* is the Greek for ‘monster’; after all, most readers would not know that). On the other hand, the use of a name such as *mokele-mbembe* taken from a local language (even if sometimes in an Anglicised form) suggests that the cryptid is recognised as a genuine animal by the relevant communities, not only by ‘eccentric westerners’; this again adds a degree of conviction.

On a broader front, there has been much debate in cryptozoological circles about the term *cryptozoology* itself. Heuvelmans (1982) prompted an intense discussion on this theme, in which philosophy of science issues became salient, as well as issues concerning the nature and development of folklore more generally.

2. Claims of (Pre-/Quasi-)Linguistic Behaviour in Cryptids

Some reports suggest that some cryptids – usually, for obvious reasons, human-like ones – themselves manifest linguistic or near-linguistic behaviour. The issues which arise here must be considered in the context of the

large and complex debate about non-human animals’ communication systems and linguistic abilities/potential (including assessment of the results of attempts to teach elements of human language to animals). This larger debate also involves some rather un-human-like animals such as grey parrots, dolphins and baleen whales.

Among the relevant reports are some (not among the most scholarly) that attribute telepathic and associated linguistic powers to sasquatches (e.g. Woods, 1997). But there are also more sober reports of what could be pre-linguistic behaviour involving these cryptids, e.g. Greenwell et al. (1998) and Shackley (1983). Shackley also summarises reports of apparently pre-linguistic behaviour and/or attempts at communication with humans in rudimentary human language among the alleged humanoid Almas of the Caucasus and Mongolia (but not among Himalayan yeti or the Chinese *yeren*). In Belizean folklore, the duende – unlike the sisimite – is explicitly described as able to speak (see Sanborne, 1992). So far, however, there are no data on any of these cases which might be suitable for analysis.

3. Other Issues

There are also some other linguistic issues which intrude more peripherally into cryptozoology, e.g. the non-standard and rather mystical notion of ‘lexi-linking’ invoked by ‘Doc’ Shields (1990, etc).

Conclusion

All in all, there seems to be more scope for interdisciplinary work of this kind than might have been expected!

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TRAILING THE DEVIL

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'It Ain't Necessarily So'

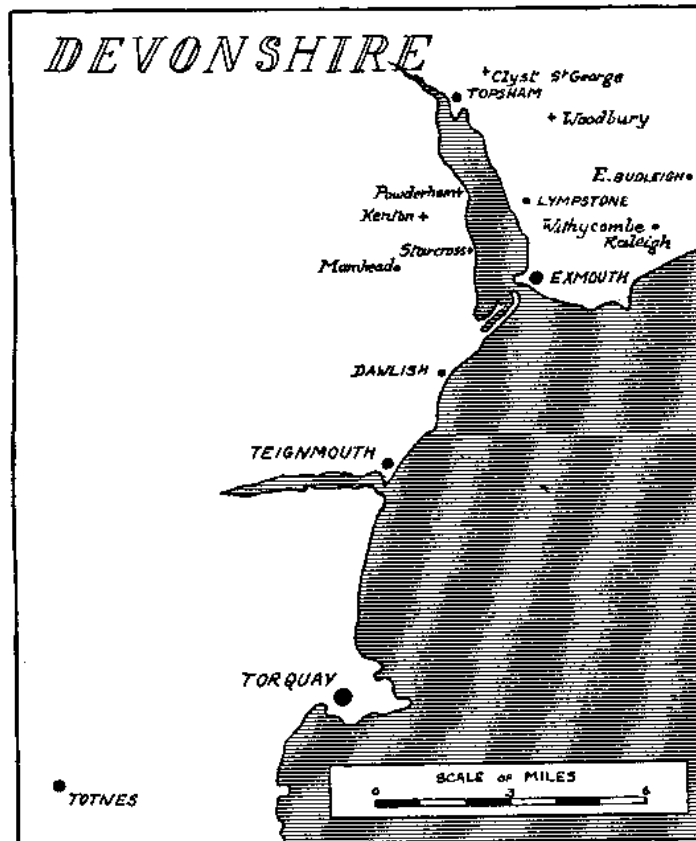
(Title of song from *Porgy and Bess* (1935) by George & Ira Gershwin)

The above song title could make a suitable motto for the skeptical movement, and its tune a suitable anthem – particularly when the words of the apparent 'spiritual' (sung by Paul Robeson) are taken into account. The Case of

the Devil's Hoof-Marks is a case in point. It is one of the most well-known, most enduring, and now best understood, instances of 'cryptozoological' misunderstanding in Britain. It is one of the hardest perennials in the

armoury of the credulous (see note 1) still persistently trotted out (to mix metaphors). Although conclusively explained as long ago as 1965 (see below), it still features in almost every compilation of the 'unexplained'. For it to remain unexplained, of course, is much better for the commercial success of such works, as well as being the easier line to take, requiring very little original research. The authors are certainly not going to do the required homework to debunk something on which their case, that 'there are more things ...', is based. That is too much to expect, as well as being against their commercial interests. The task is left to the skeptics (us), and for that reason I feel another airing of the facts in this case is in order.

In January/February 1996 the otherwise admirable Joe Nickell (whose contributions I always read with pleasure and enlightenment), author of the regular feature the *Investigative Files* in the *Skeptical Inquirer*, sadly missed a beat with his article on *The Devil's Footprints* (pp.16–18). While maintaining a properly skeptical attitude, he had, I fear, not done all his homework and could not come up with an acceptable explanation, although he provides an excellent summary. For this (literally) hoary perennial case of cryptozoology had already been completely solved and explained as long ago as 1965, in an article in a British wildlife magazine. This key omission apart, however, Nickell gives us a very useful reference list.



Sketch-map showing the localities in which the 'Devil's Hoof-marks' were observed, February 8th 1855. From Gould, 1937, p.3 (simplified from Gould, 1928, p.15)

It all began, as anyone with any interest in the subject must know by now, back on February 8th 1855, in the region of Devon between Totnes and East Budleigh, including Torquay and Exmouth (see map, copied from Gould; see also *note 2*). There had been a fall of snow that night, an unusual occurrence in the area. On February 16th, *The Times* published the following account (also taken from Gould):

EXTRAORDINARY OCCURRENCE

Considerable sensation has been evoked in the towns of Topsham, Lympstone, Exmouth, Teignmouth, and Dawlish, in the south of Devon, in consequence of the discovery of a vast number of foot-tracks of a most strange and mysterious description. The superstitious go so far as to believe that they are the marks of Satan himself; and that great excitement has been produced among all classes may be judged from the fact that the subject has been descanted on from the pulpit.

It appears that on Thursday night last there was a very heavy fall of snow in the neighbourhood of Exeter and the south of Devon. On the following morning, the inhabitants of the above towns were surprised at discovering the tracks of some strange and mysterious animal, endowed with the power of ubiquity, as the foot-prints were to be seen in all kinds of inaccessible places – on the tops of houses and narrow walls, in gardens and courtyards enclosed by high walls and palings, as well as in open fields. There was hardly a garden in Lympstone where the foot-prints were not observed.

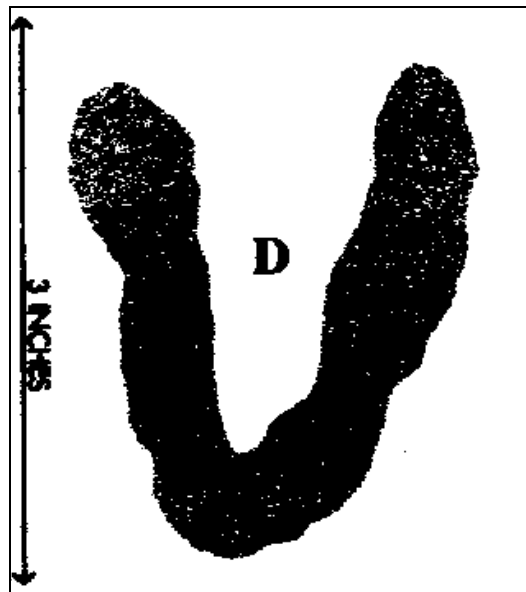
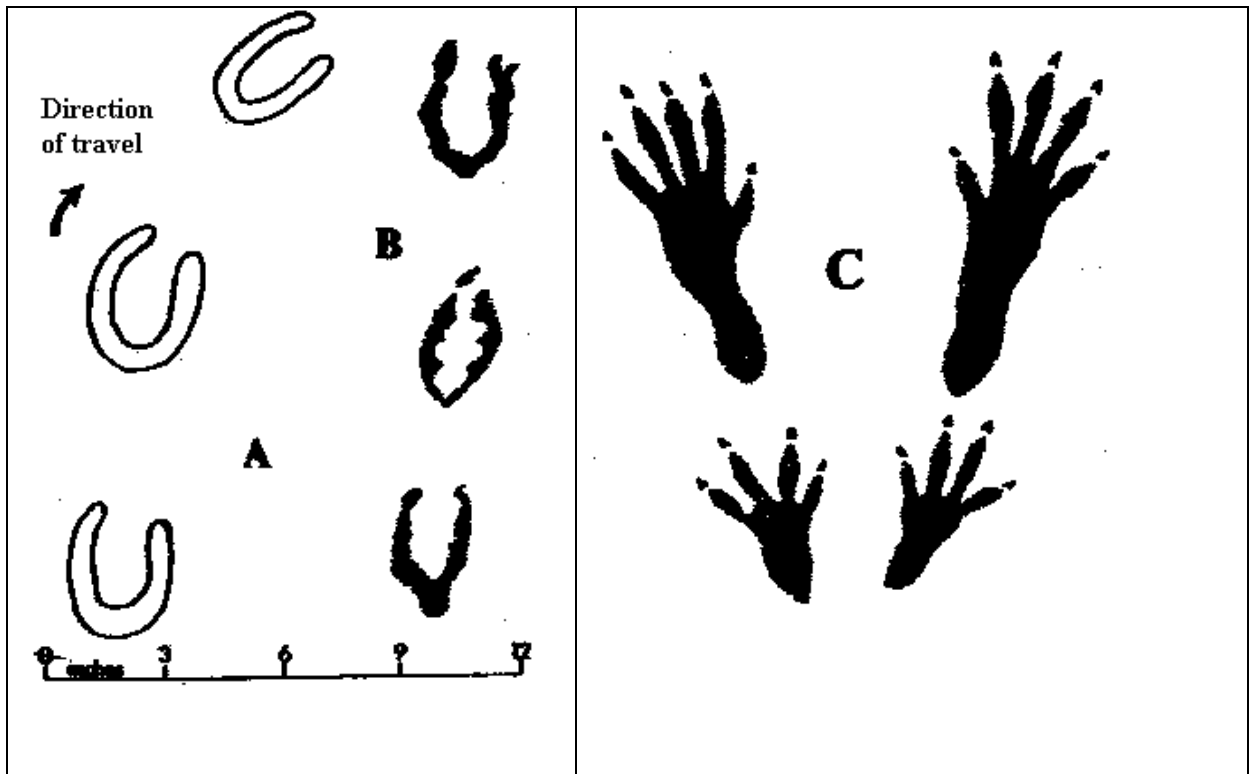
The track appeared more like that of a biped than a quadruped, and the steps were generally eight inches in advance of

each other. The impressions of the feet closely resembled that of a donkey's shoe, and measured from an inch and a half to (in some instances) two and a half inches across. Here and there it appeared as if cloven, but in the generality of the steps the shoe was continuous, and, from the snow in the centre remaining entire, merely showing the outer crest of the foot, it must have been convex. (See note 3)

The creature seems to have approached the doors of several houses and then to have retreated, but no one has been able to discover the standing or resting point of this mysterious visitor. On Sunday last the Rev. Mr. Musgrave alluded to the subject in his sermon, and suggested the possibility of the foot-prints being those of a kangaroo; but this could scarcely have been the case, as they were found on both sides of the estuary of the Exe.

At present it remains a mystery, and many superstitious people in the above towns are actually afraid to go outside their doors after night.

I first knew of this fascinating story as a schoolboy, back in about 1948, when for the first time I read Lt/Cdr Rupert T. Gould's books *Oddities* and *Enigmas*. The first chapter of *Oddities* is devoted to it (see *note 4*). He begins with the above quotation, and follows it with extensive further quotations from contemporary sources, chiefly the *Illustrated London News*. These fill in a lot of germane detail and (with a few exceptions) indulge in much of the highly credulous and superstitious speculation which provided the fuel for the popular myth (see *note 5*). I would refer the interested skeptic to Gould's book itself as well as the items in Nickell's reference list.



Figures from Leutscher (1965), p.209. Scale of inches. **A**, part of drawing (inverted) made by 'South Devon', published in *Illustrated London News*, Feb. 24th 1855, and given by Gould (1928) as Fig. 2. **B**, whole drawing (similarly inverted) made by 'G.M.M.', *I.L.N.*, March 3rd 1855, Gould (1928) Fig. 3. **C**. Wood mouse tracks, seldom seen as clearly. **D**. Tracks as they appear in soft snow. Leutscher also provides a colour photograph of wood mice tracks seen in snow in Epping Forest.

The exceptions include a letter to the *ILN* from the eminent naturalist (and opponent of Darwin), the opinionated Sir Richard Owen: while remaining fittingly skeptical of supernatural explanations he thought, improbably enough, the tracks had been made by badgers (more than one). Another exception is discussed below.

The late Alfred Leutscher was, in 1964, senior Guide Lecturer at the British Museum (Natural History), South Kensington, now called the Natural History Museum. He was interested in many things, and was an acknowledged expert on animal tracks in snow, of which he had a large collection of photographs. In that year he published, in the wildlife magazine *Animals* (now sadly defunct) an illustrated article (*Tell-tale Tracks*: vol.3 no.11, pp.297–299) on the subject. At the time he had never heard about the ‘Devil’s hoof marks’. I was then a relatively junior curator in the Palaeontology (fossils) department, but on seeing Leutscher’s article I dared to draw the great man’s attention to Gould’s book. The response was immediate: he quickly identified the tracks as those of the common nocturnal wood mouse *Apodemus sylvaticus* (hundreds of them), hopping across the unaccustomed snow, and published photographs (1965: *The Devil’s Hoof-marks: Animals*, vol.6 no.8, pp.208–209) proving the point. He also addressed the Zoological Society of London on the theory (see note 6). Leutscher wrote:

Other trails which are made in a straight line are those of an animal which hops. All four feet land in a bunch, in a leap-frog action, so that the hind tracks are leading. When this happens in a soft medium like snow, especially when it begins to melt, the tracks become blurred and run together. The result is a ‘U’ or ‘V-shaped’ impression. Examples of such

leap-frog hoppers among British animals are the hare, rabbit, squirrel, rat, and mouse.

The drawing submitted by ‘South Devon’ shows a trail of clear hoof prints, each an exact facsimile, as if made by some tiny animal whose feet were shod. Such clear and regular prints seldom occur, since irregularities in the ground or snow cause variations in size and shape. One is tempted to think that the observer in this instance did not draw what he actually saw, but rather what he wanted to see – the hoof-marks of Satan. This is understandable, since a common human failing in most of us is to let a preconceived notion mar our judgement.

*Another drawing which I examined, by a correspondent signed ‘GMM’, has given me a clue to a possible solution to this mystery. It shows a carefully drawn set of tracks, each of irregular shape, and roughly ‘V-shaped’ in contour. This is precisely what a small hopping animal would produce in snow, and there is only one British animal small enough to fit the Devon trails – the wood mouse (*Apodemus sylvaticus*).*

*It was during a search for snow tracks in Epping Forest, in the severe winter of 1962–3, that I came across dozens of trails of the wood mouse, each consisting of small ‘V-shaped’ marks regularly spaced out and conforming to the measurements which were given a hundred years ago. When I found them I was totally unaware of their significance (*Animals*, 18th February 1964).*

In the intense cold and silence of the forest, what could have been a better setting for the return of the mysterious Devon visitor. In this case, however, the mischievous little rodents were playing the Devil at his own game!

However, it is now thought the majority of the tracks were those of the yellow-necked mouse *A. flavicollis*, a similar species relatively recently introduced to Britain. It is of more local distribution than *A. sylvaticus*, and although seldom seen because it is secretive and nocturnal, it is common where it is found and a better jumper and climber.

Of course, the direction of the tracks had been wrongly interpreted originally: the open end of the 'horseshoe' impression is towards the *front*, leading, and the animal is hopping and landing on all four feet together. Brown (1982), cited by Nickell, says that the Rev. H.T. Ellacombe observed cases where '... the marks ... appeared sporadically, e.g. suddenly in the middle of a field, with a flurry surrounding them ...', which might have been interpreted as the unknown 'devil' being capable of flight, and alighting from the air! But this, as we now know, is reading the track in reverse: it *ends* (not begins) with a flurry. One ill-fated mouse has been picked up by, most probably, an owl.

The other exception mentioned above is the contemporary observer Thomas Fox, who in the *Illustrated London News* suggested, with diagram (reproduced by Gould as his Fig. 4), that the tracks, or some of them, were made by a leaping rat. He was certainly on the right lines, though disregarded by most subsequent commentators, and it must be true that not *all* the tracks were made by a single creature, or even by a single species. For no one observer had (or could have) examined all the tracks, and therefore their accepted general *uniformity* has been greatly exaggerated.

To me the most puzzling aspect of the whole affair is a point emphasized by Gould (*Oddities* 2, p.20):

We can be quite certain ... that (the tracks) were most unusual – that nothing like them had ever been seen in living memory. It is therefore indisputable that they were not made by any common, well-known (R.T.G. emphasis) creatures. If such had been the case ... they would have been seen in Devonshire every winter. Instead of being a nine-days' wonder ... they would have been looked upon as a perfectly familiar sight, not worth a second glance.

The wood mice are cryptic and nocturnal, and are seldom seen, even in places where they are common, by diurnal, unobservant Man – even countrymen. Their tracks would not have been noted. And we are told the overnight snowfall of February 8th 1855 was very unusual, though some accounts call it 'thick', others 'thin'. The thickness doubtless varied from place to place, and in any case if one is unfamiliar with snow, how thick is 'thick'? No one measured it. For our purpose it does not matter, but that it was unfamiliar does matter. At that time the British Isles were just entering on the 'little ice age' (see note 7), a period of colder winters, and many places especially in the south and west were experiencing notable snowfall for the first time in a generation. As Nickell concludes, 'only the concept of contagion seems capable of explaining the overall case' (p.18). That is, that when any theory, no matter how bizarre but which seems to explain the known facts, gains popular acceptance, then any additional 'facts' are observed with a bias tending to make them more closely fit the theory. The Devil was heartily believed in by the country folk of Devon in the mid-19th century. And how much more thrilling it was, and how gratifying to a local sense of self-importance, to be singled out for a visit by *him* than by mere prosaic

mice! One believes what one wants to believe, especially when the press, then as now, feeds belief with selective and biased reporting. The ultimate value of this case, then, is as an early example of the harm the press can do by distortion of the truth. The result is a mare's nest.

Soon after Nickell's 1996 article appeared, I wrote to the *Skeptical Inquirer* in the same vein as, but at rather less length than, the present contribution. My letter was not published: indeed it may never have been received, as I did not even get an acknowledgement. But I have had help from many people: in particular I would like to thank Robert Thompson, Jonathan Betts, Andy Currant and Joyce Pope.

Notes

1 In English we seem to lack a noun bearing the same relation to credulous as skeptic does to skeptical. I would suggest **credule** as the needed word (the opposite of skeptic), a credulous person. From the French adjective *crédule*, credulous. As the Red Queen said to Alice in Lewis Carroll's *Through the Looking Glass* (end of Chapter 2), 'Speak French when you ca'n't think of the English for a thing'.

2 Lt/Cdr Rupert Thomas Gould, RN (1890–1948) was in my youth, and remains, one of my heroes. He served as an assistant in the Hydrographer's Office, responsible for the production of Admiralty charts. He was a cryptozoologist before that term existed. Not only did he write extensively about unknown animals and other unexplained happenings, he was one of the first to do so in a properly scientific, and skeptical, manner. He gave no support to any supernatural explanations (unlike the unrelated Sabine Baring-Gould). His books are classics of their kind, and although (as in *The Loch Ness Monster*, the first scientific study of the subject) he may have come to what we now regard as a wrong conclusion, his methodology cannot be

faulted. He also enjoyed fame as one of the twentieth century's greatest horologist, and was the first to restore and set going at the same time all of the first four of Harrison's marine chronometers. He was a well-remembered voice, along with Professor Joad, on the BBC Brains Trust. I like to think of him as 'the Master of the Footnote' – readers of *Oddities and Enigmas* will see why! He died suddenly of a heart attack while still working on a revised edition of *The Marine Chronometer*.

Short bibliography: *The Marine Chronometer* 1923, facsimile reprints 1960 on Jeremiah Horrox, *Astronomer* 1923*. *The Ross Deep Geographical Journal* 1924. *The Sea Serpent* 1926*. *Oddities* 1928, 2nd edn slightly revised 1944. *Enigmas* 1929, 2nd edn extensively revised and with omissions and additions 1945. *The Case for the Sea-Serpent* 1930. *The Loch Ness Monster and Others* 1934. *Captain Cook* 1935. *A Book of Marvels* (rehashing 7 *Oddities/Enigmas* items, including *The Devil's Hoof-marks*; revised illustrations) 1937. *The Stargazer Talks* (record of broadcast talks 1934 on, incl. *The Devil's Hoof-marks* with a new illustration) 1944. *Communications Old and New* n.d., c.1942. *The Story of the Typewriter* (recension of one of *The Stargazer Talks*) 1949. *John Harrison and his Timekeepers* (reprinted from *The Mariner's Mirror* 1935) 1958. *More Oddities and Enigmas* (slightly magnified reprint of *The Stargazer Talks*) 1973. A number of other scattered short papers in, e.g., *The Mariner's Mirror*, *The Horological Journal*, *The Geographical Journal*, *The Nautical Magazine*. Technical papers for the Royal Navy, not issued to the public. Obituary with portrait *Horological Journal* Oct. 1948 p.594, Nov. 1948 pp.655–6. See also *Who Was Who* for 1941-50. (*These titles are numbers LXXV and LXXX respectively, in *The Sette of Odd Volumes*, privately published)

3 Read 'concave' – R.T.G. footnote

4 This was one of Gould's favourite cases, and he got a lot of mileage out of it, with subsequent

editions and recensions. See *Oddities* I:13, II:9, *Marvels*:1, *Stargazer*:14.

5 'Merely corroborative detail, intended to give artistic verisimilitude to an otherwise bald and unconvincing narrative' – W.S. Gilbert, *The Mikado* (1885).

6 He did not mention my name, but I no longer care ...

7 From which we are just emerging. Our present perception of global warming may be in reality no more than this.

THE DANGERS OF OVER-RATIONALISATION, OR GIANT SQUIDS ARE RED HERRINGS

Charles G.M. Paxton

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Introduction

Both cryptozoologists and skeptics alike search for naturalistic explanations of historical accounts of fantastic animals. But such an approach has dangers. Accounts of animals in old texts may have more cultural origins than zoological ones (e.g. Meurger, 1988, 1999; Baxter, 1998) and there may be a danger of oversimplifying a complex phenomenon. A convenient explanation is found, the mystery is solved and the world moves on. But the given explanation may not actually adequately explain the phenomena under study. Giant squid (*Architeuthis* sp.) have been used as just such a convenient rationalisation for accounts of sea monsters. The giant squid has been used to explain away the kraken (which 'everyone' knows was a giant squid); a strange 'sea monk' reported in the Renaissance natural histories (which the describer of the giant squid thought was a giant squid); and the great sea serpent (which are giant squids cruising the world's seas with their tentacles

sticking out of the water). All of these propositions can be shown to be unlikely (albeit not impossible) given the wider historical context of the accounts under consideration and the little that is known of the biology of the giant squid.

What do we Know about Giant Squid?

Architeuthis sp. are thought to be midwater predators upon smaller squid, fish and other animals (reviewed by Ellis, 1998; Roper & Boss, 1982). They occur worldwide up to quite high latitudes (Ellis, 1998, Table p. 257). Giant squid are also themselves prey. Juvenile giant squid are taken on by such fishes as the large midwater predator *Alepisaurus* and a variety of other animals (Ellis 1998; in addition, elephant seals - *Mirounga* sp. - Antonelis *et al.*, 1994). As adults they are only known to be consumed by the sperm whale (*Physeter catodon*) (e.g. Clarke, 1980). Presumably sperm whales cannot eat the very largest squid as the whales generally swallow their food whole and it is

difficult to imagine even the biggest bull sperm whales taking a 55ft long *Architeuthis*. Strangely, as far as I am aware, no one has addressed the interesting question of exactly how large a squid a sperm whale could swallow.

As *Architeuthis* has rarely (if at all) been authentically seen in healthy condition at sea, science knows almost nothing of its behaviour in the wild. Conclusions can only be inferred from what is known of its physiology and morphology. Opinion differs as to its lifestyle. Whilst some marine biologists suggest it is a strong active hunting predator, others think it is a passively drifting predator with weak musculature, without the nervous wherewithal to actively hunt (Ellis, 1998). It has the largest eyes of any animal (Anon, 1998), which seems incompatible with the idea of its being a passive predator. The longest authenticated specimen measured 57ft (Ellis, 1998). Most accounts of *Architeuthis* imply that they are solitary although there have been purported sightings of a large school of giant squid (Ellis, 1998, pp. 240 & 248).

We can also, on less sturdy grounds, make hypotheses about its behaviour and physiology based on what we know of other squid species. It almost certainly cannot tolerate low salinities; almost all known squids cannot regulate their own bodies' salinity and therefore have a narrow toleration of salinity fluctuations (Withers, 1992; Boyle, 1991). It also means that in common with *almost* all other ten-armed cephalopods (the family of octopuses, squids and nautiluses) it carries its tentacles (the two longer arms) within the rest of its arms (Woods, personal communication, 2003). They do not protrude, except while grabbing prey.

***Architeuthis* as a Sea Serpent**

The latter two conclusions (if they are correct) immediately undermine two hypotheses concerning the possibility of giant squid being mistaken for other animal forms. Firstly, giant squid cannot exist in freshwaters as was proposed for Loch Ness by Shiels (1984) or, for example, in the Baltic where there is reduced salinity. Therefore they are unlikely to be a source of freshwater monster accounts. Secondly, they are unlikely to cruise the world's oceans with their tentacles sticking out of the water, looking in profile like the archetypical sea serpent. Even if they do stick their tentacles beyond the other eight arms (some deep water squids do this, so it is not wholly improbable) they might, if the weak *Architeuthis* lobby is correct, lack the musculature to carry their arms for any length of time into the air (although I have come across no references that specifically address the question of the strength and stamina found in the arms and tentacles of *Architeuthis*). Further, I know of no accounts of smaller squid placing both their tentacles out of their water unsupported for any length of time (one tentacle by itself is obviously useless for grabbing prey). Nor are there any accounts of squid grabbing airborne prey.

Incidentally, at this point it is as well to question the belief that squids attack ships because they think it is their enemy, the sperm whale. No animal will actively hunt down and attack its predators. This is a sure way to extinction. There is no more reason to expect squid to attack sperm whales than gazelles to hunt down and attack lions.

Although the 'giant squid tentacle as sea serpent neck' theory is often mentioned in popular books (e.g. Miller et al., 1977), most interpretations of giant squids as sea serpents have not in fact used this posture at all. The

earliest use of the giant squid to explain the sea serpent that I can find comes from 1883 by Henry Lee in his booklet *Sea Monsters Unmasked*. Lee explicitly mentioned the characteristics of a giant squid that could give rise to a sea serpent interpretation by a reference to an actual sighting of a sea serpent in 1845 reported to the Archdeacon of Molde! The giant squid is 'a long marine animal', with 'two fins near the forefront of the body' which moves in apparent undulations(?), it 'boils the water', the body is 'round and of a dark colour' and it disturbs the water behind it (i.e. behind its direction of movement). Of course the giant squid does have these characteristics but then so do just about all other large marine animals.

Lee interpreted a number of famous sea serpent cases as giant squids including the most famous sea serpent of all, the creature seen by the crew of H.M.S. *Daedalus* in the South Atlantic in 1848. The *Daedalus* was *en route* to St. Helena at 5 o'clock in the afternoon on the 6th August 1848 when at lat. 24°44'S, long. 9°22'E she encountered a sea serpent:

On our intention being called to the object it was discovered to be an enormous serpent, with head and shoulders kept about four feet constantly above the surface of the sea, and as nearly as we could approximate by comparing it with the length of what our main-topsail yard would show in the water, there was at very least 60 feet of the animal à fleur d'eau, no portion of which was, to our perception, used in propelling it through the water, either by vertical or horizontal undulation. It passed rapidly, but so close under our lee quarter, that had it been a man of my acquaintance, I should have easily recognised his features with the naked eye; and it did not, either in approaching the ship or

after it had passed our wake, deviate in the slightest degree from its course to the S.W., which it held on at the pace of from 12 to 15 miles per hour. Apparently on some determined purpose.

The diameter of the sea serpent was about 15 or 16 inches behind the head, which was, without any doubt, that of a snake, and it was never, during the 20 minutes that it continued in the sight of a our glasses, once below the surface of the water; its colour was a dark brown, with yellowish white about the throat. It had no fins, but something like a mane of horse, or rather a bunch of seaweed, washed about its back. It was seen by the quartermaster, the boatswain's mate and the man at the wheel, in addition to myself and officers above mentioned.

I am having a drawing of the serpent made from a sketch taken immediately after it was seen, which I hope to have ready for transmission to my Lords Commissioners of the Admiralty by to-morrow's post.

I have, &c.

Peter M'Quhae, Captain. (Letter to the Admiralty reprinted in the *Times* 14.10.1848)

Lee's explanation of this serpent is unconvincing (as he partially conceded) because the crew got so close as to see the head in some detail and presumably they would have seen the distinct tentacles and eye of a squid. The *Daedalus* serpent was countershaded (darker on top, fading below) however, which is compatible with a slightly lightening of the colour known to occur on the ventral surface of *Architeuthis*. There is only one feature that is shared by the *Daedalus* serpent and a squid, the presence of a fin. But even this feature on the dorsal surface of the seen animal, is irreconcilable with the terminal mantle fin of a squid. Arguments that invoke

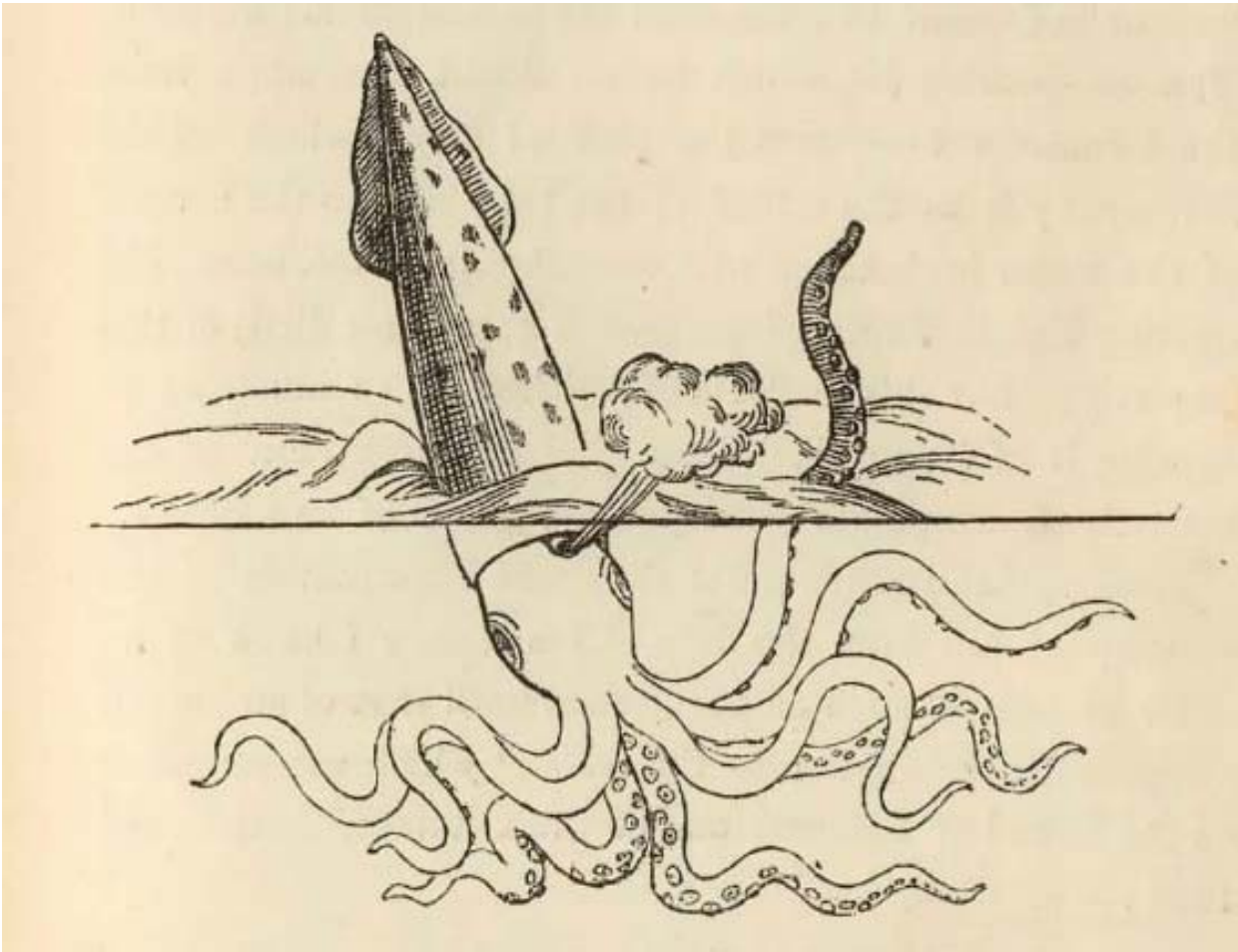


Figure 1

Lee's (1883) reconstruction of the Egede animal as a giant squid.
In fact *Architeuthis* has semicircular fins.

the fact that the *Daedalus* animal was long and thin and hence(?) squid-like once more have to preclude a number of other long and thin animals that would, if anything, be even more likely to appear serpentine on the surface (e.g. cetaceans, sharks or oarfishes, a genus of strange serpent like bony fishes). Exactly the same argument can be advanced for squid explanations (proposed by Ellis, 1998) for a sea serpent seen from H.M.S. *Plumper* in December 1848 (see also Heuvelmans, 1968) and a sea serpent seen by a Mr. Von Ferry reported by Pontoppidan (1752-1753, 1755).

The next sea serpent sighting invoked

as a giant squid sighting is perhaps the most convincing of all. The captain of the barque *Pauline* saw a white sea serpent wrapped around a sperm whale struggling at the surface. It seems quite plausible that in fact the captain saw a sight almost as rare as a sea serpent: a sperm whale feeding on its favourite food – large, if not giant, squid, with the latter's arms or tentacles wrapped around the former.

Another famous account of a sea serpent that Lee suggested was in fact a giant squid was the account of Egede (P. Egede, 1741; H. Egede, 1741, 1745) of an animal seen off the coast of Greenland in 1734:

But none of them have been seen by us, or any of our Time, that I could hear, save for that most dreadful Monster, that shewed itself upon the Surface of the Water in the Year 1734, off our New Colony in 64 Degrees. This Monster was of so huge a Size, that coming out of the Water, its Head reached as high as the Mast-Head; its Body was as bulky as the Ship, and three or four times as long. It had a long pointed Snout, and spouted like a Whale-fish; great broad Paws, and the body seem covered in Shell-Work, its Skin was very rugged and uneven. The under Part of its Body was shaped like an enormous huge Serpent, and when it dived again under Water, it plunged backwards into the Sea, and so raised its Tail aloft, which seemed a whole Ship's Length distant from the from the bulkiest part of the Body. (Egede, 1741)

These accounts have recently been reviewed by Paxton *et al.* (in press) and Thomas (1996). Thomas (1996) suggested the Egede serpent was a zeuglodont whale (an extinct primitive form of whale) whereas Paxton *et al.* (in press) suggest it was a right, humpback or grey whale.

Lee (1883) suggested that the Egede serpent was a squid (Figure 1) in some distress upon the surface of the water, a thesis that has received recent support from Ellis (1998). Despite the occurrence of *Architeuthis* sp. at high northern latitudes (Ellis, 1998), again neither multiple appendages (apart from the two flippers) nor the prominent eyes nor the burgundy/maroon/crimson of a giant squid are recorded. One account does say the eyes glowed like red fire, but *Architeuthis* is not known to have glowing red eyes, although interestingly a possible early description of a giant squid (a 'prickly fish' mentioned in Magnus, 1555) does also have this

characteristic. One primary account refers to the animal as 'blowing like a whale' and Lee suggested that the whale-like blow could be water coming out of the siphon. But why not assume parsimoniously that the Egede animal is indeed a whale rather than invoking a mode of behaviour that has not been seen in *Architeuthis*? Nor have living (albeit moribund) *Architeuthis* been seen rearing out of the water. Further, the supposed posture (Figure 1) suggested by Lee needed for the squid to appear as the Egede animal would seem incompatible with a giant squid whose centre of gravity would presumably be somewhere in the mantle cavity. If the mantle was full of air then the posture could occur but then the animal would not have been able to submerge. The Egede animal was observed to submerge several times (P. Egede 1741).

The final sighting that is mentioned as a possible squid sighting is that seen from the Earl of Crawford's yacht *Valhalla* in 1905. Here we have several accounts of an encounter with a serpent by two naturalists, E.G.B. Meade-Waldo and M.J. Nichol (Nichol, 1909):

At 10.15a.m. on Thursday, December 7, 1905 when in lat. 7°14'S., long. 34°25'W., in a depth of from 322 to 1340 fathoms, Meade-Waldo and I saw a most extraordinary creature about 100 yards from the ship and moving in the same direction, but very much slower than we were going. At first, all that we could see was a dorsal fin about four feet long sticking up about two feet from the water; this fin was of a brownish-black colour and much resembled a gigantic piece of ribbon seaweed. Below the water we could indistinctly see a very large brownish-black patch but we could not make out the shape of the creature. Every now and then the fin

entirely disappeared below the water. Suddenly an eel-like neck about six-feet long and of the thickness of a man's thigh, having the head shaped like that of a turtle, appeared in front of the fin. This head and neck, which were of the same colour above as the fin, but of a silvery white below, lashed up the water with a curious wriggling movement. After this it was so far astern of us that we could make out nothing else.

Again the description is not obviously reconcilable with a squid (apart from being long and thin) which has to be placed sideways (with the mantle fin uppermost) in the water to match the description. Again it seems doubtful that a squid would not have been recognised especially by two zoologists even though they were at a distance (see below).

At the *considerable* risk of presenting a circular argument, there is not one first-hand account of an initially unidentified sea monster which mentions any of the distinctive diagnostic characteristics of a large cephalopod - i.e. multiple appendages and prominent eyes. Admittedly from a distance a squid at the surface may not look like a squid (there are no data on this) but in the cases given above the animal was seen in reasonably close proximity (*Daedalus*) or reared out of the water (the Egede sighting). Even in the *Pauline* case, whilst the animal could be a giant squid (but see Paxton *et al.* (in press) for an alternative explanation), no diagnostic characteristics are given. Only the *Valhalla* sighting was seen at a distance (Meade-Waldo had to use binoculars). Further if the natural colour of *Architeuthis* is maroon then this distinctive colour has not been reported either. It is not that some of these sightings could *not* be giant squid but that any general features that could be ascribed to a

giant squid could equally, if not better, apply to other animals.

***Architeuthis* as Kraken prior to the 19th Century**

It is now popularly assumed that the giant squid was the basis of the Scandinavian sea monster, the kraken. Indeed the two terms are now used almost synonymously. This theory really developed from Pontoppidan's (1752-1753, 1755) descriptions in his *Natural History of Norway* by way of Pierre Denys de Monfort's *Histoire Naturelle de Mollusques*. Pontoppidan himself thought his kraken was 'of the Polype, or of the Starfish kind'. Pontoppidan further describes an account of a young kraken as an animal with 'extended long arms and antennae'. However Pontoppidan was by no means wholly convinced by his favoured explanation of a 'polype' and pointed out that some people thought that the young of the kraken was the Medusa's Head, *Gorgonocephalus*, a brittle star (a type of starfish)!

The squid explanation was given its most modern form in English by Heuvelmans (1968) in his book '*In the Wake of the Sea Serpents*'. Heuvelmans arguably created a slightly distorted historiography of the kraken, blurring distinct accounts of sea monsters into a single history. It also should be mentioned that there are *no* first hand accounts of an encounter with a sea creature explicitly described by the witnesses as a 'kraken' known to me.

The cephalopodan explanation for the kraken was attacked by Meurger (1999) who pointed out that an Italian traveller to the north, Francesco Negri (1623-1698) had described an animal called the *sciu-crac* 'which is a fish of enormous size...Its shape is round and flat, fitted with numerous horns or arms...some say

the sciu-crac may grow to a whale's size.' Meurger argued that this was almost identical to Pontoppidan's description and pointed out that one of the words that Pontoppidan said was used for this creature was *krabben*, the crab (see etymological note below), so the animal is being portrayed is an enormous crab not a squid (although presumably this explanation must also have occurred to Pontoppidan). Further he found that Franz Paullinus (1643-1711) in two works of 1706 (*Observationes Medico-physicae*) and 1709 (*Philosophische Lust-Stunden*) also described northern Scandinavian reports of a giant crab-like monster which ascends to the surface and attacks boats with its claws. Meurger (1999) speculated that there was a connection between the crab-like kraken and the ubiquitous island monster of the Greek *Physiologus* and the European Latin and vernacular bestiaries. This animal, in so far as it can be said to have a zoological basis, was a turtle or a whale (Paxton, in preparation). Hence there are no morphological or historical grounds to link the pre-Pontoppidan kraken with a cephalopod.

In fact we can firmly link the kraken to the medieval island monster. Hans Egede (1741, 1745) of sea-serpent fame says that the word *kracken* was used by Norwegian fisherman for exactly the same monster described by Icelanders as the *hafgufa*. Egede, incidentally, thought the kraken fabulous. The name *hafgufa* can itself be followed back to the 14th century Scandinavian wonderbook the *Speculum Regale* ('The Royal Looking Glass') arguably one of the finest non-fictional works of the Middle Ages. Here an island-like monster is given the name *hafgufa*. This animal in turn is an almost identical description of the island monster of the bestiaries, the *Aspidochelone*,

an animal which can possibly be traced back to the Babylonian Talmud (Coulter, 1926, Cook, 1919) and in a separate(?) fictional lineage turns up in the tales of St. Brendan and of Sinbad in the *1001 Nights* (Paxton, in preparation).

Thus the history of the kraken is considerably more complicated than that of a blurred account of a giant squid or octopus. More research needs to be undertaken in this area.

The Giant Squid as a 'Sea Monk'

Another sea monster that has been interpreted as a giant squid has been the 'sea monk' washed up on the coast of Denmark in 1546 (Paxton & Holland, in press). It was described and illustrated in a number of mid-16th century natural histories. The giant squid attribution was made by Johannes Japetus Steenstrup (the 19th century describer of *Architeuthis*). Steenstrup (1980) compared the illustrations of the sea monk to an *Architeuthis*, shaped not as in life but in morphology like the far smaller squid genus *Loligo*, presumably because Steenstrup had no whole body material by which to make a comparison. However Steenstrup's identification forced him to ignore the fact that all the detailed commentaries referred to the animal as scaled, a feature irreconcilable with a squid, giant or otherwise. A good case on morphological, etymological and historical grounds can be made that the sea monk was in fact an angelshark *Squatina squatina* (Paxton & Holland, in press).

Discussion

Given the lack of specific characteristics to diagnose the above monster accounts as giant squid, why have giant squids been so readily taken as the source of sea monster tales and sightings? No quantitative evidence is

available to answer this question, so it is necessary to rely on anecdote and speculation.

A re-occurrent characteristic of cryptozoological interpretations of early natural historical texts has been a failure to consider sources both fully and in their wider context. The author himself is guilty of this in that I have been unable to systematically consider one important potential source for this article, Denys de Monfort's (1802) *Histoire Naturelle de Mollusques* which is almost certainly an important text in understanding the transition of jellyfish-like kraken to squid-like kraken. Further, I have not yet looked at the works of Negri, Paullinus and a number of other early relevant texts.

Similarly Egede's (1741, 1745) comment on the kraken has been overlooked by scholars who have tended to consider excerpts from the poor 1745 English translation of Egede rather than that book in its entirety, despite its importance to the history of sea monsters. We can infer, for example, exactly which species of whale the Egedes were familiar with and *those that they were not* and this has very important implications for interpretations of the Egede accounts of the sea monster seen in 1734 (Paxton et al. in press).

Giant squid are comparatively new. They were only formerly described by science in the 1850s. This does not mean, as perhaps suggested by Heuvelmans (1968), they were not accepted by science. No less a person than Joseph Banks, the personification of the scientific establishment in early 19th century England found (and ate!) giant cephalopod material (not in fact *Architeuthis*) whilst on Captain Cook's 1768-1771 voyage around the world. Belief in the existence of giant cephalopods did not place a natural

philosopher beyond the scientific pale prior to 1860 but just on the ultimately winning side of a very low-key scientific debate. Again, the history of the recognition of giant squids by science is a field that requires more research.

Nonetheless, their large size, rarity and comparative morphological difference from the average backboned giant animals made *Architeuthis* an ideal choice as an unusual suspect for sightings of unknown animals. Further, the lack of knowledge concerning their biology meant that such speculation was safe and convincing.

Perhaps the other reason why people may have so readily accepted the giant squid explanation is that investigators' ease with a solid prosaic explanation blinded them to its weaknesses. For nearly 150 years Steenstrup's *Loligo* representation of a giant squid went unchallenged in the scientific literature. The danger to those, the present author included, who have a tendency to explain away strange sightings is readily apparent. The devil really is in the detail. We must pay attention to the detailed, diagnostic features of sightings, be it of monster, ghost or UFO, and compare them to all possible animals or phenomena that may occur in the environment under consideration. This means we must devote as much, if not more, time to considering known explanations as to considering unknown ones and think about all of our explanations equally critically whether monster, giant squid or whale or alien spacecraft, secret military aircraft or private helicopter.

Etymological Notes

Both Meurger (1999) and Ellis (1998) state that *Kraken* is the plural of *Krake* in Norwegian, the latter being the original name of the Kraken. This is not the case. For example *Krabben* is

not the Norwegian (Boksmål) for 'crawlers' or 'crabs'. Norwegian suffixes the article to the noun: therefore *Krabe* means 'a crab', *Krabben* means 'the crab', *Krabber* is 'crabs' and *Krabbene* is 'the crabs', likewise *Krake*, *Kraken*, *Kraker* and *Krakerne*. The modern Danish equivalents would be *Krake*, *Kraken*, *Kraker* and *Krakerne* owing (I think) to the slightly different formation of the definitive plural.

The first mention of kraken in English (as 'kracken') is Egede (1745) not Pontoppidan (1755) as stated in the *Oxford English Dictionary*.

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SIGHTINGS OF THE MOA

Introduction by Michael Heap

The following information has been gleaned from three websites ('The Gibson Group', <www.gibson.co.nz>; 'The Kiwi Conservation Club', <www.kcc.org.nz>; and 'Jules', <www.jules.org>).

Moa are an extinct type of bird of which there were 11 species at the last count. They were ratites. Other ratites include ostrich, emu, cassowary, rhea, and kiwi. The biggest moa was the Giant Moa (*Dinornis giganteus*). It was taller than three metres and weighed about 250 kilograms. The smallest moa species was a little bigger than a turkey, about half a metre tall. Moa once roamed in massive numbers throughout New Zealand. Most lived in forest, not grassland. With no natural predators the moa led a carefree existence until the arrival of man. Some land was cleared by the Maori, which would have killed the moa directly or reduced its habitat. But the

main reason the moa became extinct was hunting: they were eaten to extinction, along with other bird species. Scientists believe that moa were extinct by 1500 and that no white person ever saw a moa alive. However, there are stories that would have us believe that there were a few moa left in New Zealand when Captain Cook and his men arrived in 1769. There have even been tales told during the 1900s that there are still moa roaming around in New Zealand forests.

The following are two reports of such sightings:

It was in 1880, when I was seven years old, that I first saw the large bird that I now think must have been some kind of moa. I remember it distinctly. It was lying on the sand under the flax which grows on the edge of the bush inside the sand hills on the sea shore.

(As told by Alice McKenzie; from the Kiwi Conservation Club website).

In January 1993, three hikers in New Zealand's Craigieburn Range (west of the city of Christchurch) reportedly saw a roughly 6 foot tall flightless bird. They saw it at a distance of approximately 115 to 130 feet for about 30 seconds and managed to take a grainy photo before it ran off into the forest. They believe it was a moa.....The three hikers explored the spot where the bird was seen and photographed what they believed were tracks it had left. They kept the sighting to themselves for two days until the 35mm film was developed and they could make an official report to the Department of Conservation (DOC). The witnesses were apparently credible and the agency seemed impressed, making tentative plans for fieldwork in the sighting area. Although the DOC had developed a theoretical management plan for moa several years earlier, like true bureaucrats, they did no fieldwork to follow up the report. No one went to the site before rain washed away possible evidence such as footprints, dung, or feathers. Three days after

the report was filed, five days after the sighting, the report was made public.....There was an ensuing media circus, false allegations of one of the hikers being a practical joker were levied and serious scientific interest dried up.

Independent photographic analysis by the Department of Electrical and Electronic Engineering at the University of Canterbury in Christchurch shows promising results. The analysis confirmed the approximate size and distance by the hikers. The image was blurry, but three-dimensional – a silhouette cut-out and a model of a moa had been ruled out. There had been speculation that an emu or ostrich (both large and non-native birds) could have caused the sighting, but neither is large enough and no escaped emus or ostriches are known on the island. The analysis also ruled out four-legged animals such as red deer (introduced from Europe) or a llama (possibly escaped). The conclusions were: it was a bird, a very large bird with a thickly feathered "neck" area. Photo analysis of the negative produced no further details.....For more details on the sighting, consult International Society of Cryptozoology Newsletter, Vol. 11, No. 4 (from the 'Jules' website

Moa Sighting Claims Update by Bruce Spittle

Bruce Spittle is a Senior Lecturer in the Department of Psychological Medicine at the Dunedin School of Medicine, New Zealand. He is a Fellow of the Royal Australian and New Zealand College of Psychiatrists. <spittle@es.co.nz>

Widespread interest was aroused by the claim by Paddy Freaney, Sam Waby, and Rochelle Rafferty that a moa had been sighted near the Harper River, Craigieburn Forest Park, New Zealand on 20 January 1993 (see above). Attention was then drawn to an entry in the intentions book at the nearby Bealey Hut, dated 19 May 1992, by Franz Christianssen

and Hulga Umbreit, Germany, in which surprise was expressed that two moa had been sighted in the Harper Valley.

A decade later, in 2003, the situation is that no further moa sighting claims have been made and the generally held view is that the sighting claim was most likely a hoax. It is considered highly improbable that a large bird

such as a moa could survive unnoticed for so long in a forest park that attracts large numbers of visitors. Andrew Reynolds and Jeremy Martin, students at Canterbury University, Christchurch, admitted they had made the hut book entry about sighting two moa as 'a bit of fun'.

A new computer model of the date of moa extinction by Christchurch scientists Richard Holdaway and Christopher Jacomb (reported in *Science* 2000, **287**, 2250-2254)

suggests the date of moa extinction to be even earlier than previously thought, about 1400 for the South Island and 1350 for the North Island.

The trio that reported the original sighting still stand by their claim. No definitive evidence has emerged to support or refute their views. A book, *Moa Mystery: An Account of Moa Sighting Claims in New Zealand* is being written by Bruce Spittle to bring together the information about past claims and more detail about the Craigieburn claim.

FINAL THOUGHTS

Michael Heap

From *The Independent on Sunday*, 21.12.03:

Hoaxes are on the rise

Xtreme Radio in Cleveland, Ohio had a new contest. They told listeners they were tying a helium balloons to various objects and people had to guess how many people had to guess how many were required to make them float. One was a cat. All of a sudden, from a corner of the studio, came a voice: "Grab him, grab him! Somebody help me. Oh my God, you guys – he's flying away! Look out the window. Oh my God, he's higher than the parking garage..." It was, of course, all make believe. But more than 100 listeners rang emergency services to report a cat flying over the city.

From the small collection of papers in this issue, it is evident that the study of 'reported sightings of unusual creatures' draws upon a wide range of human knowledge and expertise. In all cases it seems that 'extraordinary claims require extraordinary'

evidence' is very apposite. But why? Why demand 'proof' when someone announces that he has just seen a panther in an English field when we would willingly believe him if his claimed sighting was of a sheep dog? After all, even in the latter case he may be mistaken.

One answer is that unusual claims, almost by definition, have far-reaching consequences for what we know and understand about the world, what we predict will happen, and what action we take in view of the claim in question. Before we commit ourselves to all of this we need to be convinced that there is good justification for doing so. To be a 'doubting Thomas' makes perfect sense.

Hence we can afford to be wrong when we accept our friend's claim to have seen a sheep dog without conducting any further investigation but not his claim to have seen a panther (even granting for the fact that falsely

rejecting his claim also has serious consequences).

Some claims are so unusual that they contradict everything we already know about the matter in question and we justifiably reply, 'That's impossible!' For example, suppose someone told me that she had seen John Smith running in a marathon race, whereas my knowledge of John Smith is that he is hemiplegic owing to a car accident and for many years has been confined to a wheelchair. The claim is therefore highly improbable from my knowledge of the world relating to John Smith, physical disability, etc. If I accept the claim then I have to come up with an explanation or interpretation that not only accounts for the observation in question but *all previous observations* I have made that are of relevance. My knowledge of the world is that, for example, two people can closely resemble one another, that people may be

misidentify others, and that people deliberately tell falsehoods for one reason or another. These understandings are not inconsistent with all my existing understanding of John Smith, physical disability, etc. and hence, there is no need for me to drastically revise the latter without additional evidence.

These principles operate at every level, from ordinary day-to-day interactions with the world to the highest levels of science and scholarship. They reveal one of the implicit assertions of scepticism, namely that reliable knowledge of the world, or what we may otherwise call 'truth' is not easy to acquire.

The little snippet at the beginning of this piece may be of relevance to social scientists but not, I suspect, zoology, even to what is termed 'cryptozoology'. In the following letter, David Sealy argues that the latter represents a proper field of scientific enquiry and not a 'pseudoscience'.

In Defence of Cryptozoology by D.L.F. Sealy

Dear Sir,

Cryptozoology – the study of reports of animals which are not officially "known to science" – is not a pseudoscience; it is a real science, though a fringe one. Cryptozoologists are genuine scientists, who use the methods of science on the information available to them, though it may often be scant, dubious or even downright false. It is not of consequence that their subject matter loses its interest for them – as cryptozoologists, that is, but not as zoologists, who are often the same people – as soon as actual specimens become available for study.

It is hubris to suppose, as some 19th century academic zoologists did, that there were very few, if any, new species to discover. Absence of evidence is not evidence of absence. Every year hundreds of new species of living animals are in fact discovered, named and described by zoologists. (I am not speaking of fossils here, but this observation is even more true of palaeontologists). Mostly they are insects or creatures even more obscure (protozoa, &c.), and never come to the notice of the general public. But occasionally a large 'proper' animal which can be kept in a zoo, a vertebrate or even a primate, is newly discovered. In the 20th century we call to mind the okapi and the golden tamarin (marmoset); in the mid-19th the

gorilla. It is inconceivable that there are not still other species of large animals, shy, cryptic and rare, which remain to be discovered and described, particularly in the ocean depths (“denizens of the deep”).

It is thus also inconceivable that there should not be occasional valid and true reports of the sighting of such animals. They cannot be dismissed out of hand. It is these reports which form the material on which cryptozoologists work. But it is equally true that there are many reports which are imagined, misconstrued, or plain hoaxes (for the sake of public attention) mingled with this material, which have to be sorted out.

Contributors to the late lamented *Journal of Cryptozoology*, and earlier workers in the field, such as Rupert Gould and Bernard Huevelmans, made it their business to subject reports of “unknown” animals to a proper scientific scrutiny. They are hardly the less scientists for doing so, even if in some cases they were deceived. Some reports can be dismissed as lies or old wives’ tales, some

vindicated as genuine reports of real animals (well known or ‘new to science’), but the majority remain as non-proven, awaiting further evidence or even the discovery of actual specimens (preferably still alive, of course). Among these there are probably many reports of species which have once been seen alive by man, but are now extinct. Many others, too, are doubtless on the verge of extinction.

The justification of cryptozoology is to find out what we can before it is too late, and perhaps bring some of these fascinating creatures back from the brink of oblivion. There would of course be absolutely no justification in shooting the last remaining breeding pair of such a species, for the sake of providing type specimens in a museum! Conservation is all.

Yours faithfully,

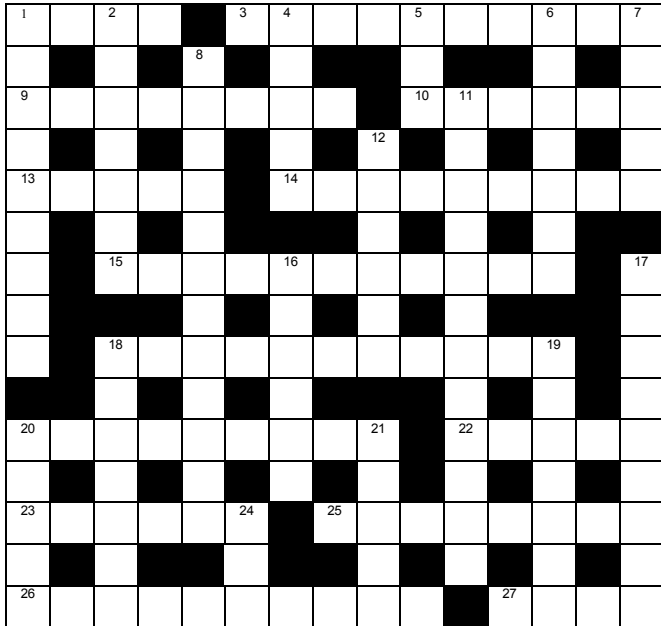
D.L.F. Sealy

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SPECIAL FEATURES by 'Skepticus'

Crossword for Skeptics

The sender of the first completed crossword opened on Sunday February 29th will be offered free membership for 2005. Send your solutions to Michael Heap's address given in the inside cover.



Across

- 1 Take a taxi back to hospital and see a quack doctor (4)
 3 New Age's needing a little gravity in order to bear fruit (10)
 9 Early biblical writing has nothing, by reasoned argument, to do with the science of life (8)
 10 What fear may do to one can be hot stuff (6)
 13 It's a fair chance a little number ends as it should have started (5)
 14 Just like Geller: goes wild about his critic... (9)
 15 ...and now he's in bad odour, depressed, and making heavy weather of it (7,4)
 18 It's happened earlier, before the Church made an impression (11)
 20 When science takes on one intent on retribution it can be very cleansing (9)
 22 Part of the body that features in the chiropractors' odd anatomical system (5)

- 23 In one's heart is the true creator (6)
 25 It's all humbug, but what Sheldrake says meets with royal affirmation... (8)
 26 ...and this too? In a way, yes, and there's nothing in it! (10)
 27 Astrologers begin in unsavoury conditions and remain there (4)

Down

- 1 Hidden messages in the scriptures: i.e. cobbled nonsense (5,4)
 2 End in good spirits, near enough (5,2)
 4 Uri's out of order. No good feeling sorry! (5)
 5 Any country, in short, has a great metropolis (1,1,1)
 6 Strip. Founder of pseudo-science has nothing on! (7)
 7 In experimenting with ESP one meets with resistance on the part of the Church (5)
 8 Conditions in which 11 is not relevant? (12)
 11 What sounds important to a doctor comes to nothing and it's not involved in measurements concerning liquid forces (12)
 12 The beginnings of 'Nessie', given in a story that creates some confusion (6)
 16 One has, at the present time, a good point to make concerning an apocalyptic era (3,3)
 17 The nature of dual sexuality confuses Donny and Gary (9)
 18 Cool cat is heard with this ghostly apparition (7)
 19 With the least illumination, skated erratically across the river (7)
 20 Begin softly, be quiet, keep mum, and break up into little pieces! (5)
 21 Crude or superficial contribution to a thoroughly skeptical journal (5)
 24 Advice for one loitering with intent, so to speak (3)

THE FRONTIERS OF SCIENCE

A One-Act Play

- Dramatis Personae** Professor Klion, Chairman of the Planetary Research Council of Planet Krypton
Professor Xena of the Krypton Academy of Science
Professor Gyron of the Department of Astrophysics at the University of Krypton
Mr. Dinos of the Kryptonian Institute for Public Affairs
Miss Quanto, secretary to Professor Klion
Professor Palidos of the Centre for Interstellar Communication
Dr. Nuto of the Academy of Intragalactic Studies
- Scene** A committee room at the Planetary Research Council of Planet Krypton. Professors Klion, Xena, and Gyron and Mr. Dinos are seated.

- Prof. Klion Well, I think we are all present now, so I should like to declare this meeting of the Kryptonian Planetary Research Council open. We have a new member whom, as Chair of this committee, I should like to formally introduce. Let us welcome Professor Xena of the Krypton Academy of Science.
- Prof. Gyron Welcome to the meeting Professor Xena. I am Professor Gyron of the University of Krypton's Department of Astrophysics.
- Mr. Dinos And I am Mr. Dinos representing the Kryptonian Institute for Public Affairs.
- Prof. Xena I am very pleased to meet you.
- Prof. Klion Now let's get down to business. The first research grant application we have to consider is that of Professor Palidos of the Centre for Interstellar Communication.

- Prof. Gyron Ah yes. An expedition to Planet Earth.
- Prof. Xena This appears to be a very ambitious project. They are asking for 10 million Krypton dollars.
- Mr. Dinos Yes, and I had a great deal of difficulty understanding the whole point of this expedition. Surely there are more pressing needs on the Planet Krypton?
- Prof. Klion I am well aware of your skeptical attitude concerning scientific research Mr. Dinos, but I must ask you to approach this grant application objectively. We don't want a repetition of what happened at our last meeting, do we? (*glares at Mr. Dinos*).
- Prof. Gyron Perhaps we should invite Professor Palidos in now and ask him to take us through his research proposal.
- Prof. Klion Yes, that sounds like a good idea. All agreed?
- Prof. Gyron
Mr. Dinos
Prof. Xena } Yes
- Prof. Klion (*presses intercom*) Miss Quanto, please send Professor Palidos in.
- (*Door opens. Miss Quanto shows Professor Palidos in who sits down in front of the committee.*)
- Prof. Klion Good afternoon, Professor Palidos. I am Professor Klion and this is Professor Xena, Professor Gyron, and Mr. Dinos.
- Prof. Palidos Good afternoon
- Prof. Gyron
Mr. Dinos
Prof. Xena } Good afternoon
- Prof. Klion Now, Professor Palidos, we have studied your research application. I see that you and your colleagues wish to travel to Planet Earth. You have asked for a grant of 10 million dollars.
- Prof. Palidos That's correct sir. This is part of our research investigation into intelligent life on Earth.
- Prof. Gyron Ah yes, I recall now your previous expeditions to Earth. Perhaps you could remind the committee of these?
- Prof. Palidos Yes, we have made several visits to Planet Earth in our spacecrafts. The research has been most revealing. Our early visits were funded by this committee and we are of course very grateful.
- Prof. Xena Perhaps you could tell us about the aims of this research and what you discovered.
- Prof. Palidos Well, as I said, we made several visits to Earth. You may not be aware, but it had already been established prior to our visits that Planet Earth is inhabited by humanoid.
- Mr. Dinos I would be most interested to hear what was the outcome of your early interactions with these humanoid creatures.

- Prof. Palidos There weren't any.
- Mr. Dinos I beg your pardon?
- Prof. Palidos There weren't any. That was the whole point of the project. We went to Earth with the intention of not being seen by any living creature and then coming all the way back
- Mr. Dinos You spent millions of dollars of other people's money travelling billions of miles to a distant planet just so that any sentient beings there would not see you?
- Prof. Palidos Yes. It's –
- Prof. Klion I am sorry about this, Professor Palidos. Mr. Dinos may I remind you of the importance of objectivity in science. You are not here to pass comments on the merits or otherwise of Professor Palidos's previous research (*turns to Professor Palidos*). Most importantly, Professor Palidos, were you successful in your aims?
- Prof. Palidos I believe we were very successful. I should point out that this is a very competitive field of research. Scientists from several other planets have been funded to travel to Earth with the purpose of not being seen by any life forms there.
- Prof. Xena And have these research projects being as successful as yours?
- Prof. Palidos We believe they haven't.
- Prof. Klion
Prof. Gyron
Prof. Xena } (*smiling and nodding their heads*) Ah! Very good! (*etc.*).
- Prof. Palidos Our monitoring of the Earth's primitive electromagnetic communications systems reveal that some humanoids there have sighted several visiting spaceships from other planets. The Earthlings call them 'UFOs' or 'Unidentified Flying Objects'. However, fortunately for our scientists, others have assumed a state of complete denial; they are known on Earth as 'skeptics'.
- Prof. Klion Ah yes (*glares at Mr. Dinos*). We are familiar with skeptics on Planet Krypton. May I congratulate you on the outcome of your early research, Professor Palidos.
- Prof. Palidos Thank you.
- Prof. Gyron To what do you owe your success at escaping detection, Professor Palidos?
- Prof. Palidos We go to places where nobody else would think of visiting.
- Prof. Gyron Such as?
- Prof. Palidos Lancashire. It's a small place on an island called Britain.
- Prof. Klion Have you conducted any further research on your visits to the Planet Earth?
- Prof. Palidos Yes. Some time ago we went on an expedition with the aim of knocking over a policeman in Lancashire.
- Mr. Dinos You travelled billions of miles in order to knock over a policeman in Lancashire?

- Prof. Palidos Yes.
- Mr. Dinos Why did you travel billions of miles to knock over a policeman in Lancashire?
- Prof. Palidos Nobody had ever done it before. It was important that we were the first.
- Prof. Klion Very commendable, Professor Palidos. I think you have a question Professor Xena?
- Prof. Xena Thank you Professor Klion. I am sorry Professor Palidos but can you explain to me what a policeman is?
- Prof. Palidos Certainly. It is an Earthling who wears a blue uniform and tries to stop other Earthlings misbehaving themselves or otherwise having a good time.
- Prof. Gyron And how do Earthlings in Lancashire misbehave themselves or have a good time?
- Prof. Palidos Well, one thing they do is that at night-time they congregate in special buildings and drink copious quantities of a brown liquid, and then they all laugh and fall about. Then they start punching and kicking each other, at which point several policemen arrive and try to stop them.
- Mr. Dinos Professor Palidos, are you absolutely sure there are intelligent forms of life in Lancashire?
- Prof. Palidos Yes, according to the most generous criteria.
- Prof. Klion Professor Palidos, you were saying that the purpose of one of your expeditions to Lancashire was to knock over a policeman – presumably without any other Earthlings seeing this?
- Prof. Palidos Yes.
- Prof. Klion Was your research successful?
- Prof. Palidos It was indeed. We succeeded in knocking over a policeman in Lancashire.
- Prof. Klion
Prof. Gyron
Prof. Xena } Well done! Congratulations!
- Mr. Dinos I am very sorry, but isn't there an ethical issue here? Surely the Ethics Committee would not support the funding of an assault on another sentient being, even a policeman from Lancashire?
- Prof. Palidos We most certainly did have ethical approval. Perhaps you are unaware that the Krypton Council for Ethical Science only concerns itself with the welfare of Kryptonians insofar as scientific experimentation is concerned.
- Prof. Klion Quite right, Professor Palidos. I am surprised that you are not cognisant of that fact, Mr. Dinos. How would our scientists manage to do any research at all if we all entertained such anthropomorphic sentiments that presume non-Kryptonians to experience pain and suffering in the same manner as Kryptonians?
- Prof. Xena Professor Palidos, once you knocked over the policeman, did you return to Krypton?

- Prof. Palidos Not right away. First, we took the policeman into our spacecraft to have a further look at him.
- Prof. Gyron He was unconscious throughout the examination?
- Prof. Palidos Actually, he came round for a brief period.
- Prof. Klion Did he attempt to communicate?
- Prof. Palidos Yes, he looked up and uttered the following words (*sorts through documents and reads from one paper*). 'Ee, 'ecky-thump! What's th'owd lass bin puttin' in mi butties this time?'
- Prof. Klion What on Earth does that mean!?
- Mr. Dinos More to the point, what on *Krypton* does it mean?
- Prof. Palidos We haven't the faintest idea. Our linguistics experts have yet to come up with any plausible translation that relates to the circumstances in which this being found himself.
- Prof. Klion Professor Palidos, please encourage your colleagues to persevere in their efforts. It may be that this creature, however primitive, was attempting to communicate something of profound significance to the people of Krypton.
- Prof. Palidos Thank you, Professor Klion. We have just received an extension of our research grant to continue our investigations into this matter.
- Prof. Klion Excellent! Perhaps we should move on to your current request for funding, Professor Palidos. I wonder if you could summarise your research proposal for us?
- Prof. Palidos Certainly, Professor Klion. We are applying for a research grant to support an expedition to Planet Earth in order to put little bits of metal into the skin of a number of Earthlings.
- Mr. Dinos You are asking for 10 million Kryptonian dollars to travel billions of miles to Planet Earth to put little bits of metal into the skin of several Earthlings.
- Prof. Palidos That is absolutely correct, Mr. Dinos.
- Mr. Dinos And no doubt your aim is to accomplish this without any of these or any other Earthlings seeing you?
- Prof. Palidos Of course!
- Mr. Dinos And what will you do when you have done this?
- Prof. Palidos Well, we will come all the way back again.
- Mr. Dinos And why are you doing this?
- Prof. Palidos Well, obviously –
- Mr. Dinos - No, don't tell me. It's because it's never been done before!
- Prof. Palidos Absolutely!

Prof. Klion Mr. Dinos, I have had occasion to remind you several times of your unhelpful skeptical remarks on this committee. Please do not compel me to administer any more reprimands. Professor Palidos, I am sorry about this.

Prof. Palidos Do not mention it, Professor Klion.

Prof. Gyron Professor Palidos, are there any scientists from other planets who have put little bits of metal into Earthlings?

Prof. Palidos Not yet. However, we understand that scientists from Planet Upsilon are also working on this. I must impress upon you how important it is for us to keep ahead in this field.

Prof. Klion I think we have heard enough by now –

Mr. Dinos *(aside)* Well, I certainly have!

Prof. Klion *(glaring at Mr. Dinos)* Thank you, Mr. Dinos. As I was saying Professor Palidos, I think we have heard enough of your proposals to be able to come to a decision about your application for funding. Have you any further questions Professor Gyron?

Prof. Gyron No, Professor Klion, except Professor Palidos, to congratulate you and your colleagues on your research programme. It is due to the selfless efforts of scientists such as yourself that Krypton is in the forefront of other planets in the pursuit of science and in rolling back the frontiers of knowledge for the benefit of all.

Prof. Xena Yes, I second that, Professor Palidos. You and your colleagues are shining a beacon of light into the darkness of ignorance. I am sure that all Kryptonians will applaud your efforts to advance our understanding of the universe and further the cause of the brotherhood and sisterhood of all humanoids, regardless of their planet, their solar system, or their galaxy *(blows nose loudly)*.

Prof. Klion Mr. Dinos? - Oh dear! Mr. Dinos appears to have fallen asleep.

(Professor Klion and Professor Palidos stand up.)

Prof. Klion Well, Professor Palidos, I am sure the Council will look favourably on your application. You will no doubt be hearing from us very soon.

Prof. Palidos And I thank you and the committee for your kind consideration.

Prof. Klion }
Prof. Gyron } Goodbye! *(Mr. Dinos is still asleep)*
Prof. Xena }

(Professor Palidos exits)

Prof. Klion Now then, colleagues, we have one more application to consider. This is in fact a preliminary application without prior documentation. You may recall that such applications are generally a matter of urgency and our purpose is to advise the applicants of the likelihood that their application will be favourably considered. As time is pressing I suggest we allow the applicant to put her case without further ado.

Prof. Gyron }
Prof. Xena } Yes, that's fine *(Mr. Dinos is still asleep)*

Prof. Klion Let me see (*rifles through documents*). Ah yes, Dr. Nuto of the Academy of Intragalactic Studies. (*via intercom*) Miss Quanto, we are now ready to see Dr. Nuto.

(*Door opens. Miss Quanto shows in Dr. Nuto who sits down in front of the committee.*)

Prof. Klion Good afternoon, Dr. Nuto. I am Professor Klion and this is Professor Xena, Professor Gyron, and (*in a louder voice*) Mr. Dinos.

(*Mr. Dinos wakes up*)

Prof. Gyron }
Mr. Dinos } Good afternoon
Prof. Xena }

Dr. Nuto Good afternoon. (*takes a seat*)

Prof. Klion Now Dr. Nuto, perhaps you would like to outline your research proposal.

Dr. Nuto Thank you Professor Klion. The research we wish to conduct involves an expedition to Planet Earth.

Mr. Dinos Sorry, I missed that. Did you say Planet Earth?

Dr. Nuto Yes, indeed. Planet Earth is in a solar system in our own galaxy, 100 light years away.

Mr. Dinos I suppose on your proposed expedition, for reasons best known to yourself you will make every effort to avoid being detected by any living creature on Planet Earth.

Prof. Klion This is quite intolerable, Mr. Dinos. Your skepticism is once again most unhelpful. I suggest that if you can't make a useful contribution then you remain silent. (*turns to Dr. Nuto*) I do apologise Dr. Nuto. Incidentally, you are not by any chance related to Professor Nuto, the Director of the Academy of Intragalactic Studies?

Dr. Nuto Yes, Professor Nuto is my husband.

Prof. Klion }
Prof. Gyron } Wonderful! Delightful!
Prof. Xena }

Mr. Dinos (*aside*) Oh gawd! Not Nutty Nuto!

Prof. Klion (*in grovelling manner*) Professor Nuto is indeed one of our most distinguished scientists.

Mr. Dinos (*aside*) Yes, and he'll have your guts for garters if you turn down this application.

Prof. Klion I'm sorry, did you wish to say something, Mr. Dinos?

Mr. Dinos Yes, Dr. Nuto. Where on Planet Earth are you intending to do your research?

Dr. Nuto My colleagues and I will visit the island of Britain. More specifically our research will be conducted in a place called Wiltshire.

Prof. Xena What is the reason for you choosing this particular place?

- Dr. Nuto It is especially noted for its extensive fields of corn.
- Mr. Dinos Corn? Wait a minute? Don't tell me! Let me guess! You are going to travel billions of miles to this place, land your spaceship in the middle of a field of corn, flattening it all into a big circle, and then fly off again without being seen.
- Prof. Klion Really, this is the limit, Mr. Dinos. I will not tolerate attempts to ridicule any applicant. I suggest you leave this meeting forthwith. There is absolutely no place for your kind of skepticism in science.
- Mr. Dinos No problem (*collects documents together and puts them in briefcase*). I am off to join the Kryptonian Association for Skeptical Enquiry. It's about time this whole business of scientific research is exposed for the scam that it is. Good afternoon ladies and gentlemen (*exits, slamming the door*).
- Prof. Klion (*grovelling*) I must apologise most humbly, Dr. Nuto. I am afraid that skeptics like Mr. Dinos are managing to infiltrate some of our most esteemed and venerable scientific councils. The very foundations of academic and scientific freedom and objectivity are at stake.
- Dr. Nuto I quite understand, Professor Klion. Only last week my husband was chairing a committee looking into what can be done about this matter.
- Prof. Klion Perhaps you would like to continue summarising your research proposal, Dr. Nuto?
- Dr. Nuto Certainly. Our research project is to fly to the Planet Earth to the place known as Wiltshire on the island of Britain. We shall land in a field of corn, flattening the crop down into a circle, and then fly off again without, we hope, being sighted.
- Prof. Klion
Prof. Gyron
Prof. Xena } (*long pause*) Mmm, really, I see (*etc.*)
- Dr. Nuto This project is of some urgency. My husband has received a report that scientists from other planets are also intending to a project of this kind. It is vital that we stay ahead of the field.
- Prof. Klion (*enthusiastically*) Oh of course! Of course! This sounds, if I may say so, a very innovative proposal.
- Prof. Gyron
Prof. Xena } (*enthusiastically*) Indeed, yes, very interesting!
- Prof. Klion So, let us consider what are the likely resource implications of your proposed expedition. Let's see, you are travelling to Planet Earth – how many of your colleagues will be accompanying you?..... (*voices fade*)

CURTAIN

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VISIONS OF THE YEAR 2004

By

The Grand Oracle of the Pentacles

Events of the year 2003 yet again provided us with conclusive evidence of the Grand Oracle's astonishing prescient abilities (see last year's *Skeptical Intelligencer*). Once more the Editor has received her prophecies for the year ahead, based on her visions during the dying minutes of the 2003. However, the Editor understands that (all too typical of skeptics) some readers have been over-taxed by the allegorical quality of the Grand Oracle's prophecies. Therefore, to assist the less imaginative reader, the Editor, with the gracious permission of the Grand Oracle herself, has provided his own interpretations of the visions. Of course these are only guesses and the Grand Oracle, wishes to point out that only the events themselves, when they occur, will reveal the true meaning of the mysterious visions. Also, as usual, the Grand Oracle wishes readers to bear in mind that her predictive powers do not operate strictly in accordance with the solar year and some of her visions may extend into 2005.....

THE VISIONS

*The pastures of the Northern Isles bloom,
While those behind the curtains
Bide their time; likewise the gambler.*

*Two bulls in one stable! The newcomer
sharpens his horns.
The other stumbles early, but louder are
his bellows in the shortening days.
Where is the third?*

The roar of the crowd is silenced.

The great chieftains finally awake.

THE INTERPRETATIONS

It will be a good year for the UK economy with rising growth. House prices will stabilise or fall slightly. There will be only modest gains in the stock market.

2004 will see the return of the traditional two-party system in the UK, with the Liberal-Democrats fading. Michael Howard will excel as Leader of the Opposition. Tony Blair will have a bad start but by the end of the year his position will be looking stronger.

For the UK, 2004 will be a poor year for sporting achievements.

2004 will be the year when the real seriousness of climatic change will be explicitly acknowledged by world leaders.

Few tears are shed for D and G.

There will be serious droughts in England and Wales.

*Intruders in the garden make one strike.
Strife again in the land of the mountains
Under the scorching sun.*

There will be one serious act of terrorism in England. In summer there will be renewed terrorist activity in Afghanistan.

*One of royal blood waves goodbye.
The kingdom mourns an old chief
Across the great water too.
There, just in time, the door of the great
house closes.*

A member of a royal family will cease participating at public events. An ex-prime Minister of the UK will no longer be with us, likewise a former US president. President Bush will secure a narrow victory for a second term.

*In a green land the lion and the jackal
Share their pastures.
While, where Phoenix rose, the eagle lies
mortally wounded.*

In Ulster, Sinn Fein and the Democratic Unionist Party will work together for the peace process'. In Germany, Gerhard Shroeder will be removed as leader (or be on the point of being removed)

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THE ASSOCIATION FOR SKEPTICAL ENQUIRY

ASKE is an association of people who support the following aims and principles:

- 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.

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