

SCIENCE & MYTHOLOGY

The Unicorn

Anthony G Wheeler

Do Unicorns exist? Have Unicorns ever existed?

These may seem like simple questions, questions to which the answers are well known. Nevertheless, they are not. We cannot select our answers from just 'yes' or 'no'. The answers have been sought for hundreds of years, and even now the answers are not simple.

'Science' strictly means 'knowledge'. Major methods of 'knowing' are intuition, authority, rationalism, personal experience and science. 'Science' as we usually use the term is the study of accumulated knowledge, and how it was produced using the principles of replication, and trial by experiment. It is science's scepticism about existing knowledge that drives our need for replication, and for trial by experiment.

How does science contribute to our knowledge of Unicorns? How have these other methods of knowing contributed, and when there was conflict - which type of knowledge dominated?

As for the answers, the mythical, magical Unicorns never have existed. Though natural one-horned animals (without magical powers) have existed (the rhinoceros), top-horned animals have been inadequately described and mis-interpreted as Unicorns, and two-horned animals may well have been made into Unicorn-like one-horned animals.

The Unicorn Myth

Of all the fabulous beasts, the Unicorn is special in that it is very beautiful, and in that it has no interest in man.

The Unicorn is the composite of power and purity, force and love, of strength and righteousness. Bigger than a horse, as powerful as an ox, and armed with a single horn over a

metre long, it is a noble beast that symbolizes true and deep love. The single horn is bright and sharp, so sharp that it pierces flesh with ease. And the Unicorn is coloured: a pure white body with the horn black, white and crimson from bottom to top.

The Unicorn is a noble creature, living alone with no need of man. They live far away, in deserts and solitary on the tops of mountains. The Unicorn is powerful, too powerful for any man to hunt. (If a lion meets a Unicorn, the lion runs for the nearest tree for safety.) If desperately outnumbered and cornered, the Unicorn will leap from a cliff to land impaled upon its horn - unharmed, to then run away to safety. But the Unicorn may be taken by trickery and guile. Use a pure lady, young and innocent. A virgin is recommended. Dress her with care and seat her in a pretty glade and wait: a sweet song may help.

The Unicorn is a creature of love. The Unicorn is too powerful for man, but is enchanted by a woman's capacity for love. The Unicorn passing by a virgin or young maiden cannot help but pause, to approach, to lay quietly with his head resting lightly in the lady's lap. Sing soft, sing low.

Your Unicorn is now vulnerable, your Unicorn may now be attacked. But do not aim to capture him,

because no man can restrain such power. All you may do is take his life. As he lies gentle and quiet, without warning thrust in your sword with all your strength. And again, and again. You may yet fail, and the beast may still escape. But you may just succeed, you may still the savage heart, the strong limbs, the beauty and the glory.

The horn is magic, destroying all poison. Place your food or drink into a cup made from the horn and however poisoned



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it may have been it will now be safe to eat. Or add a sliver of horn to your drink to purify. Just place a horn on the table and any poison nearby will make the horn 'sweat'. A little horn ground and taken (called 'sugar of the horn') will even cure sickness. Beat and boil the horn in wine and your teeth will be made white and clear.

*The Unicorn is noble;
He keeps him safe and high
Upon a narrow path and steep
Climbing to the sky;
And there no man can take him,
He scorns the hunter's dart
And only a virgin's magic power
Shall tame his haughty heart.*

A medieval German folk-song.

The Chinese Unicorn

'Science' is associated with western democracies. But the lack of science is not so restricted. On the other side of the world the Chinese had their Unicorn too. The Chinese Unicorn, the *k'i-lin*, is a most significant animal, the foremost of all the 360 animals on earth. The Unicorn has the body of a deer, the tail of an ox, the hooves of a horse, and a short, fleshy horn and five-coloured coat.

The Chinese Unicorn is so gentle that it takes care when walking not to tread on the tiniest of creatures, and will not eat even grass choosing rather only dead plants. To harm such a peaceful beast is naturally most serious; even to just come across a dead Unicorn is unlucky.

The Chinese Unicorn lives a thousand years, and is a good omen. One of four magical propitious animals (with the Dragon, Phoenix and Tortoise) the Unicorn's appearance foretells the birth of an honourable ruler.

Apparently in the 13th century one of the Emperor Ghengis Khan's armies was turned back from its path of conquest by a chio-tuan, a variant of the Chinese Unicorn, announcing "It is time for your master to return to his own land."

The source of the Unicorn myth

It all started with the Talmud, where a great ox with one horn was the lead animal in Adam's herd, and was Adam's first sacrifice to God. Come the flood the poor Unicorn's huge size meant that there was no room for it to join Noah's refugees in the Ark, and the Unicorn had to swim along behind occasionally resting the tip of its horn on the Ark.

This loss of the Unicorn in Noah's flood is the theme for a song, though the cause of its demise here is tardiness rather than immense size:

*Then Noah looked out, through the driving rain,
but the Unicorns were hiding, playing silly games,
they were kicking and a-splishing, while the rain was
pouring,
oh them foolish Unicorns.*

1970's Pop song

Christians found the idea of the Unicorns' extinction in the flood repugnant. Extinction itself was considered blasphemy - no all-powerful God would allow one of His creations to be lost. The myth was established and given substance by Ctesias, a travelling, writing Greek physician; he went as court physician to Persia in 416 BCE Ctesias described an Indian animal as being larger than a horse and white, with a dark red head and dark blue eyes. A single horn

450 mm long came from the forehead: the bottom pure white, the upper part sharp and crimson and the middle black. And this horn, either powdered or made into a cup, protected from poisons, convulsions and epilepsy. This animal sounds mainly like the Asian rhinoceros, with part Indian wild ass, part Tibetan antelope, and a lot of imagination and gullibility. Indeed it the sort of account we would expect from second-, third-, and more, hand accounts of traveler's tales, each re-teller eager to

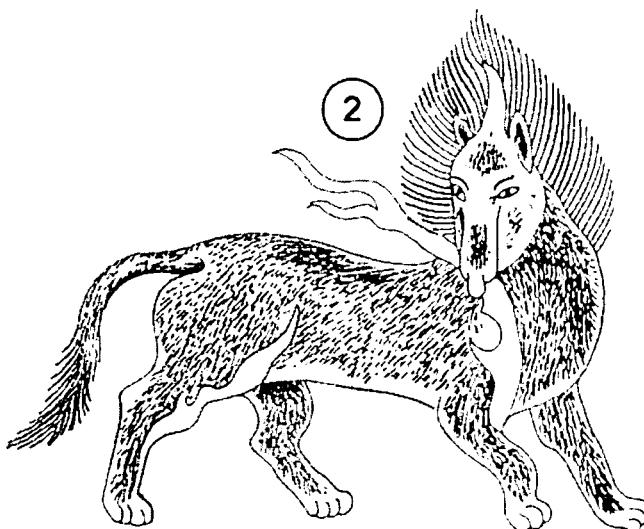
impress others of the wonders they have seen.

The authority of the Bible

On several occasions when writing in the Old Testament about the strong and un-tamable wild ox the authors had used the Hebrew word for *re'em* or oxen. But the Jews of Alexandria translating these books into Greek (in about 250 BCE) substituted the Greek word *monokeros*, or one-horn. In Latin this became *unicornis*, (*unus* meaning one, *cornu* meaning horn). In English unicorn. The dominant English translation of the Bible, the Authorised (King James) Version of 1611, widely used by the Protestant Churches, continued the use of 'unicorn'. Dr Martinus Luther in Germany wrote of the einhorn. (The Revised Standard Version of the Bible has re-introduced "wild ox".)

"God brought them out of Egypt: he [Israel] hath as it were the strength of a unicorn." (*Numbers 23:22*)

"But my horn shalt thou exalt like the horn of a unicorn: I



shall be anointed with fresh oil." (*Psalm 92:10*)

"Will the unicorn be willing to serve thee, or abide by thy crib? Canst thou bind the unicorn with his band in the furrow? Or will he harrow the valleys after thee?" (*Job 39:9-10*)

This mis-translation was due to the Alexandrian's ignorance of the wild ox (from which modern domestic cattle have descended), in their time having been hunted to rarity, but knowledge of the Indian single-horned rhinoceros. Also the influence of early Assyrian and Persian artistic style where oxen were pictured only in profile, with only a single horn visible, contributed to the mis-interpretation. The original authors and editors of the Bible had no intention of implying that the re'em had a single horn, as demonstrated by their use of the plural horns in "the horns of the unicorns" (*Deuteronomy 33:17*); they were just inadequately describing an animal that was so familiar to the original authors and readers that no description was needed or given, and having trouble with an appropriate translation for its name.

Now the wild ox was massive - nearly seven foot tall with tremendous strength and ferocity. And these attributes came to be associated with the mis-translated Unicorn. And especially so when the wild ox became extinct in the 16th century.

Personal experience of travelers

Early descriptions, some by eyewitnesses and others based on hearsay, of the Indian rhinoceros bolstered belief in the Unicorn. One of the best and most accurate is from Pliny the Elder: "The Orsaean Indians hunt an exceedingly wild beast called monoceros, which has a stag's head, an elephant's feet, and a boar's tail. The rest of the body is like that of a horse. It makes a deep lowing noise, and one black horn two cubits long projects from the middle of the forehead. This animal, they say, cannot be taken alive."

Marco Polo, the explorer of Asia, wrote in 1298: "There are wild elephants in the country and numerous unicorns which are very nearly as big." Marco's 'Unicorn' was actually the rhinoceros, an animal new to Europeans. The single-horned rhinoceros certainly fit this usual description of the Unicorn as far as power goes, and the rhinoceros is the only animal with a central horn. Though of course the rhinoceros' horn is no where near as long as a metre or so, and the colour is wrong. In fact the rhinoceros was a great disappointment for Unicorn-hunters, being greatly ugly and unattractive in its habits. Again from Marco Polo: "They delight in living in mire and mud. It is a hideous beast to look at, and in no way like what we think and say in our countries, namely a beast that lets itself be taken in the lap of a virgin. Indeed, I assure you that it is quite the opposite of what we say it is."

Similar stories from many travelers were compiled by

Charles Gould into his *Mythical Monsters* (1886). The number of accounts of Unicorns suggests that maybe the Unicorn is real, but the discrepancies between these accounts argue that they could not be based on the same, common animal. Gould suggested that possibly the animals described were recently extinct, with the descriptions having been corrupted by poor memories and errors in their re-telling. Another possibility offered was that the Unicorns had been produced by crosses, or hybrids, between horses and deer, producing the variety. And thirdly, Gould acknowledged the contribution of "embroidery of fancy, designed to enrich and adorn an article esteemed rare and valuable".

The authority of the New Testament

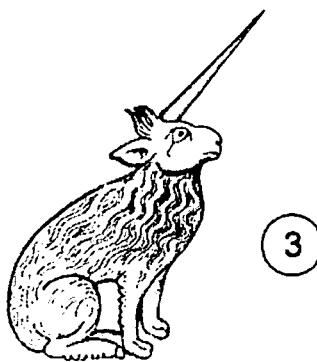
The authority of the Christian Bible was enough to inspire belief in the Unicorn as a real animal. (For a few, then as now, the Bible is taken as literally true and infallible.) This belief was strengthened in the middle-ages by the European Christian tradition of the Bestiaries: natural histories written to glorify God, to reveal His purpose in His created animals. The Bestiaries portrayed the Unicorn as small and very fleet with a great shyness of man, and fascination with the beauty and love of maidens.

We also have the symbolic representation of Jesus Christ as the Unicorn. Many times the scene of a Unicorn (Jesus Christ), small (humble) and with a single horn (the unity of God), resting his head (the Incarnation) in the lap of a virgin (Mary) and about to be killed (the Passion) by a hunter (the Holy Ghost) was exploited. Alternatively this pretty picture is an allegory for sex to some. Says Willy Ley: "After all, what is white, dark at the base, and tipped with red, and loses its power in the lap of a virgin?"

With such Biblical and Church authority supporting the personal experience of traveler's anecdotes the Unicorn was accepted as real throughout the middle ages. Edward Topsell's 16th century *Histories of Beasts* bases its argument for the existence of Unicorns on a quotation from the Bible and the literal truth of the Bible: "Likewise, in many other places of Scripture, we will have to traduce [slander, misrepresent] God, Himself, if there is no unicorn in the world."

Elaboration by rationalism

Also popular, from 3000 BCE to the present day, has been the motif of a lion and a Unicorn fighting. This has been explained as representing the overthrow of an older matriarchal moon-worshipping society (the Unicorn) by a patriarchal sun-worshipping society (the lion). Or alternatively, the succession of spring (with the vernal equinox in the zodiacal sign of Taurus) by summer (with the summer



solstice in Leo). The variety of shapes of the Unicorns in these illustrations, as though bulls, antelopes and goats had been the models for different artists, suggests the lack of real Unicorns on which to base the artwork, or even as the basis for a consensus as to what animal a Unicorn resembles most.

British Knights returning from the Crusades brought back tales of sightings of wild antelopes native to the middle east. These antelopes have their paired horns set so close together so that they appear as a single horn when seen from the side. With the horn itself as a souvenir (one fine example is still to be seen at the abbey of St. Denis, and another in King Edward's collection at Buckingham Palace), and copies of local art showing the animals in profile, the idea of a single-horned (Unicorn) animal was not far removed. Supported by the authority of the Bible, these crude sketches and memories of glimpsed sightings became part of British heraldry.

The Unicorn features on the crest badges of the Scottish clans of Cunningham, Stewart of Appin, Ramsay and Oliphant & Melville (and as a supporter for the arms of the City of Bristol). When Scotland was united with England & Wales in 1603 one of the two Unicorns from the Scottish royal arms joined the English lion (displacing the Welsh dragon) on the new British coat of arms, and is still there today, complete with collar and chain tethering the Unicorn (symbolism for England's domination of Scotland). (You can still see these arms, complete with lion and chained Unicorn, on older government buildings in Australian cities.) This parochial (English) nationalism persists in the nursery rhyme:

*The Lion and the Unicorn were fighting for the crown,
The Lion beat the Unicorn all around the town.*

This may have been inspired by this older account by Spenser in his Faerie Queen:

*Like as the lyon, whose imperial powre
A proud rebellious unicorn defyes,
T'avoide the rash assault and wrathful stowre
Of his fiers foe, him to a tree applies.
And when him running in full course he spyes
He slips aside; the whiles that furious beast
His precious horne, sought of his enimyes,
Strikes in the stroke, ne thence can be released,
But to the victor yields a bounteous feast.*

Intuitive belief in the medical benefits of the horn

The Unicorn has been based variously on the bull, antelope, goat and horse, with solid or cloven hooves. In Moslem countries it was often represented as a dog or wolf. Although the body varies so, the horn is relatively standardised as long, straight and slender, with spiral markings. This suggests that while the artists' model for the body varied, the horn was inspired for all by the same structure: the slender, straight tooth of a male narwhal! (The rhinoceros' horn has a wider base, is shorter, and slightly curved.)

The narwhal is an aquatic mammal (an air-breathing relative of the whales) living in the bitter cold arctic seas. From time to time a dead narwhal would be carried south by the currents to be washed up on some Scandinavian or British beach. Any local rustic finding such a carcass could hardly miss the opportunity for cash rewards: cut the tusk free and *voila* - one rare Unicorn horn for sale.

Narwhal horns were rare, but there were just enough to keep the legend going. The rarity of the horns must have added to their allure. Certainly they were greatly valued for their prestige, for their medicinal powers, for their anti-poison properties. Not surprisingly only kings and princes could afford

even a little one. The king of Denmark in 1600 was so very rich and powerful that he sat on no less than a throne built of Unicorn horns.

The Unicorn horn was known as the 'alicorn' (thereby avoiding the repetitious name). Many different horns, from black bucks, other antelopes, and so on, were passed off as alicorns wherever a profit could be made. The 'true' alicorn, known as *unicornum verum*, was found in the ground. These are actually the enduring tusks of long-dead mammoths, and were greatly prized (until doctors and patients lost their faith). The false alicorn, *unicornum falsum*, from the narwhal and available in larger quantities, was strictly distinguished in northern Europe.

The value of the Unicorn horn lay not just in its rarity, beauty or mystical associations, but in its reputed medicinal potency. St. Hildegard in the 12th century first ascribed magical medicinal properties to the Unicorn. These powers were later transferred from the animal's body to its unique horn. It was the treatment of choice for epilepsy, impotence, barrenness, worms, the plague, smallpox, and other diverse ills.

The Unicorn horn turned bad to good: eat a little finely-powdered horn and almost any disease would be cured, or



fashion a cup from the horn and any poison in your drink will be neutralised. (Other incorruptible materials, like gold and ivory, also had these supposed magical wholesome attributes.) As to the price of a Unicorn horn, some valued it weight for weight as equal to gold. Others valued it at ten times their weight in gold. In Shakespeare's time one then at Windsor Castle was valued at £10,000. With value comes crime. Apparently in 1303 a monk in Westminster stole a Unicorn horn. To deter repetitions, King Edward I ordered the monk's entire skin to be separated and tacked to the wall near where the theft had occurred.

Of course any medicine containing Unicorn horn would be expensive. But then the very expense of a medicine was proof of its value. A husband could hardly begrudge his sick wife the benefits of Unicorn horn-medicine, even if they did both suspect that recovery and the Unicorn's horn medicine were unrelated, just coincidence. And if the medicine didn't work, never mind - it is always worth trying, just in case. The expense of the medicine proved the husband's love, the wife's value. As we've already found, the Unicorn was love.

In China the Unicorn was the Asian single-horned rhinoceros, and the rhinoceros' horn was greatly treasured. The rhinoceros' horn is still believed to have some of these properties today. Not so much for its medicinal properties as for its aphrodisiac powers. Indeed, the desire for the aphrodisiac properties of the rhinoceros' horn, and the willingness to buy it for exorbitant amounts of money, is a major incentive for the illegal hunting threatening the continued survival of the species. Fortunately the dishonest substitution of African rhinoceros' horn (this species has two horns) as the real thing has relieved the pressure on its Asian cousin - an example of dishonesty producing a more desirable outcome!

Intuitive belief in the Unicorn

We have then the personal experience of travelers, the authority of the Bible, and rational argument producing support from other areas such as the zodiac. What is the individual left with other than intuition? Do you believe in the Unicorn or not? Lewis Carroll parodied the power of intuitive belief in *Through the Looking-Glass*.

"...and he [the Unicorn] was going on, when his eye happened to fall upon Alice: he turned round instantly, and stood for some time looking at her with an air of deepest disgust. 'What - is - this?' he said at last. 'This is a child!' Haigha replied eagerly... 'We only found it today. It's as large as life, and twice as natural!' 'I always thought they were fabulous monsters!' said the Unicorn. 'Is it alive?' 'It can talk,' said Haigha solemnly. The Unicorn looked dreamily at Alice, and said. 'Talk child.' Alice could not help her lips curling into a smile as she began: 'Do you know, I always thought Unicorns were fabulous monsters, too? I never saw one alive before!' 'Well, now that we have seen each other,' said the Unicorn, 'if you'll believe in me, I'll believe in you. Is that a bargain?' 'Yes, if you like,' said Alice."

Science: test the medical claims

In the 17th century medical sceptics (led by sceptical Renaissance Italians) doubted the pharmaceutical value of the Unicorn's horn. With the placebo effect recognised as the 'cause' of many claimed cures, doubt entered. With the seeds of doubt, doctors and their patients lost their faith. Without faith, the Unicorn's horn was valueless. Serious books established this opinion and its use declined. Powdered Unicorn's horn had been included in the British Pharmacopoeia for nearly a hundred years, from 1651 to 1741, but was omitted from the 1746 edition. (Of all the benefits of science that I would like my students to learn, an understanding of the placebo effect would probably be more personally valuable to them throughout their lives than any other in these days of rampant pseudomedicines.)

Science: repeat the observations

The reality of the animal diminished as the continents were explored without the Unicorn's home being discovered. The explanation of the mystery of the Unicorn's horn began with the realisation that Columbus' West Indies, and America, are not India, and the subsequent search for the North-West passage to India. Those brave sailors exploring the northern Atlantic and Arctic oceans saw the living narwhal, and their descriptions exposed the narwhal's tusk as the major source of the Unicorn's horn. At about the same time the past existence of mammoths as the source of *unicornum verum* was being appreciated.

Disbelief in the Unicorn spread slowly. The recognition of the narwhal did much damage to the legend. And the exploration of the dark continents left less and less land for the mythical beast to survive in. The fundamentalist believers in the infallible Bible clung to the Unicorn rather than accept that any word in the Bible may be wrong. Nevertheless, the Unicorn's decline was well underway by 1700, though disbelief in the medicinal powers of the Unicorn's horn took a little longer.

Scientific deduction

In 1827 Baron Cuvier, a prominent and respected zoologist, declared that a Unicorn is biologically impossible. His reason was that in all cloven-hoofed animals the separate bones making up the skull meet and fuse in the middle of the forehead: this junction is called a 'suture'. (It is the gap between these forming skull bones that gives the newborn baby its 'soft spot' in the centre of its skull.) Because the bony horns of cattle, goats, and others, grow out from the skull bones, and because such an outgrowth could not arise from a suture, Cuvier declared the single-horned animal impossible. (The rhinoceros does not count here because its horn is not bone, but very densely compacted hair.)

Scientific deduction tested by experiment

Cuvier was wrong, however, about how the horn grows. Horns do not grow out from the skull bones. Instead they grow from

a 'horn bud' in the soft tissue covering the skull bones. The horn grows from this bud forward to form the horn, and backward to fuse with the skull bones behind. With this pattern of growth the type of skull bone behind the horn bud, suture-line or not, may not be important; maybe the growing horn will fuse just as well with sutured bones as in the middle of the bone.

Dr W. Franklin Dove working at the University of Maine tested this possibility in 1933. Dove anaesthetised a day-old Ayrshire bull-calf, removed its two horn buds, and reinserted the horn buds together in the centre of the forehead over the suture. Instead of the pair of curved horns typical of Ayrshires, this animal grew a single, very straight horn, curving slightly upwards at its tip. And, this horn was pale gray at its base and black at its tip. The similarity to the ancient descriptions of mythical Unicorns was uncanny.

Unknown to Dove a few years earlier Dr Odell Shepard had described the production of 'Unicorns' by a similar operation by African Dinkas and Karrirs using cattle, and by Nepalese using sheep. One of their reasons for doing this was apparently to mark the leaders of their herds. Maybe they had made Unicorns? And maybe some of these animals had been traded to Europe where they had inspired the descriptions by the ancients such as Pliny?

In 1984 the USA's Ringling Brothers Circus exhibited four goats with single, central horns as 'living Unicorns'. These may have been animals created surgically by Dove's method. Animal Rights activists protested.

Conclusion

We have seen how personal experience, intuition, rationalism and authority had all contributed to the Unicorn myth. And how then sceptical, un-trusting science, with its need for the repetition of observations, its ability to deduce, and its ability to test claims and deductions by experiment, has reduced the myth of splendid magical animals to man-made leaders of the herd.

Of all the ways of 'knowing', of personal experience, intuition, rationalism, authority and science, only science tests its knowledge. Only with science is the unreliable knowledge discarded and the reliable knowledge conserved. Science has been criticised for its production of false concepts, and for its delays in discarding its false concepts, but then only science does test its concepts, and only science does discard those found to be false.

If you started reading this article thinking it to be an explanation of the Unicorn myth, you were right. But this article is also a demonstration of the power of scepticism through science to produce reliable knowledge. No other way of knowing has this same power.

The lack of any reality to the mythical Unicorns has been so evident for some that they have used the Unicorn as the epitome of an idealistic animal "totally insulated from all exogenous rhythms", as a stand-in for the "null" hypothesis; hence its appearance in a 1957 research paper "Biological

Clock in the Unicorn".

Is then the final fate of the Unicorn? To have been reduced to a classical non-animal for the use of theoretical biologists? Never mind, the solitary power of this beautiful animal with its unbridled love of innocence continues in our myths.

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Illustrations

1: Unicorn (from Fridolf Johnson, "Unicorn", Mythical Beasts Coloring Book, 1976 Dover (New York, NY) 0-486-23353-7, p 28).

2: Chinese Unicorn, ink on paper (from Richard Huber, Treasury of Fantastic and Mythological Creatures, 1981 Dover (New York) 0-486-24174-2, p 93).

3: Unicorn from a 13th-century French illuminated manuscript (from Richard Huber, Treasury of Fantastic and Mythological Creatures, 1981 Dover (New York) 0-486-24174-2, p 28).

4: Unicorn from the British royal coat of arms, 1693 (note the collar; the chain has been omitted) (from Richard Huber, Treasury of Fantastic and Mythological Creatures, 1981 Dover (New York) 0-486-24174-2, p 28).

Many others are available from the sources listed. ■

rarely peaceful - most of the African colonies, Yugoslavia and Indo-China are examples, so why should the break-up of the Soviet Union be singled out as an exception? In many instances the old master is replaced by a totalitarian government constituted of those with the most muscle or supported by their previous master's vested business interests. Exceptions to Bergin's prediction are the Baltic States, the Balkans, Czechoslovakia and Poland, the latter close to being accepted as a member of NATO. From Bergin's perspective, writing for Marianologists, atheism equates with evil.

5. The stage will be set for the rise of a new Nazi empire ... this empire will quickly embrace many countries in Western Europe, notably Germany, France and the Scandinavian countries. *Apart from the odd neo-Nazi skirmish, more of a protest against the influx of refugees rather than a rising spectre of the third Reich, I don't hold out much hope for that one.*

6. Israel, surrounded by Arab hatred will be under extreme pressure to destroy its enemies by means of its nuclear missiles.

Israel showed extreme forbearance during the Gulf war when it had a legitimate excuse to do exactly that. Since then notable advances have been made by both Israel and the Arabs to secure an agreement under which all can peacefully co-exist.

7. Australia will follow America's example and adopt a specifically Christian Constitution.

As America has yet to set the example we don't have one to follow.

8. The tremendous global upheaval, beginning in 1992, will culminate in the fulfilment of the Apocalyptic prophecies about the end times.

Yeah, yeah, yeah. Just add it to the list!

9. A massive world-wide confrontation between good and evil is foreshadowed in many of the prophets of the Old Testament. It is to come at the end of the ages.

None out of nine Robert, good show old man. After 6000 years the prophets still haven't scored a hit, and I suggest that those who make a living out of trying to scare the living daylights out of people had better watch out when the time does come - if there is a just God they might just be the ones who end up stoking the fires!

About our Authors

Richard Buchhorn, from Brisbane, trained as a Catholic priest and is now very involved in issues concerning the welfare of Aborigines.

Vince Butler, a member of the Victorian committee, is a computer programmer and shows an unhealthy interest in public opinion polls.

Glenn Capuano is a member of the Victorian committee and is a student. His interest in computer networks is attested by his article, but causes great distress to his friends.

Shane Delphine, yet another member of the Victorian committee, is a law graduate and an economics student. This seems to be a very dangerous combination.

Harry Edwards is not a member of the Victorian committee, which pleases them no end. He is the National Secretary and inveterate overseas traveller. If he was the Treasurer, we would be worried.

Brynn Hibbert is the Professor of Analytical Chemistry at the University of New South Wales. When not scanning the Sydney Harbour Tunnel for pollution he grows fractals and writes computer programs.

Steve Hynes is a journalist who was transferred recently from the sanity of Warrnambool to the strangeness of England. This may have been accomplished by a UFO.

Peter Johnson, our canny cartoonist, is from Adelaide and would prefer that we didn't make any cracks about the paranormality of his home town.

Adam Joseph is a member of the Victorian committee (not another one), in fact he is its President. When not stomping across coals, Adam is a broadcaster and producer of radio and television programmes.

Paul Kaufmann is a retired public servant who lives in Canberra (if you can call that living). He is a writer and has an interest in scientific issues.

Dr Colin Keay is president of the Hunter Region Skeptics and has recently retired as Professor of Physics at Newcastle University. He believes this may give him time to relax. Some hope!

David Lewis is a high school teacher from Queensland. Despite what may be thought, he does not smoke. He sometimes fumes.

Dr Steve Roberts, Victorian committee Vice President, (is there no end to them?) is an amateur astronomer and professional computer security expert.

Alan Towsey, retired headmaster and linguist, has news for Colin Keay about retirement.

Dr Tony Wheeler is a high school science teacher from central Queensland. He is surrounded by creationists, but carries on regardless.

Barry Williams is responsible for all those Victorians being represented in this issue. The Vic Comm complained that too many stories in *the Skeptic* originated in Sydney, so BW asked them what they had written lately. Shame forced a response, the results of which are evident in the magazine.



the Skeptic

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seeking the evidence



Unicorns
Cannibalism
Facilitated Communication

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From the President

The hardest thing about producing each issue of *the Skeptic* is thinking what to write in this column. Sometimes a matter arises that makes it obvious what to write about, and that is the case with this issue. However this matter more properly concerns me under my other hat as editor and I have addressed it on page 5.

So I am stuck for an idea. I know what, why don't I leave all the rest blank and you write your own 'guest' editorial in the available space in your own copy of the magazine.

Barry Williams