# WRITTEN in STONE 

A JOURNEY THROUGH THE STONE AGE AND THE ORIGINS OF MODERN LANGUAGE

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## Bha, to speak

If you have something worth saying, say it out loud. The Neolithic word for speaking has the sense of a proclamation - when a man spoke, others listened. In English, the word that comes closest to this meaning is banns, the announcement of a wedding that must be read three times.

In modern English, a ban is a prohibition, but in the Old Germanic languages, a ban was a call that went out to everyone, a summons to convene or to fight. That's why banal means something that everyone does. To abandon someone is to leave them beyond reach of the ban, and to banish them is to send them so far away that they couldn't hear even if you called.

In Ancient Greek, the sound was softened. Pbeme meant a voice and $p$ basis was speech - so a euphemism is literally a good word, though a mealy-mouthed one. Blasphemy is speaking against the gods, which might provoke the gods to strike you dumb with aphasia, the loss of speech.

A clear voice in Greek was phone, which gives us phonetics, the symbols that record vocal sounds. If prehistoric man had developed a system of phonetics, we would have a much clearer idea of the grammar that strung these early words together but history starts when civilisations begin writing things down, which is why the Stone Age tribes of the steppes were prehistoric in the first place.

Thanks to phone we have the telephone, which enables 'speaking at a distance', and the gramophone, which began as the phonogram but was preceded by the phonograpb, literally meaning
a clearly written voice. Early gramophone records used to split symphonies onto six or eight discs; nowadays, you can cram 1,000 symphonies onto a mobile phone.

Alexander Graham Bell's device changed the world; at least, one of them did. He also developed the photophone, which used light to transmit sounds. Bell called it his greatest invention; the public was sceptical, and in 1880 The New York Times asked sardonically: 'Does Prof. Bell intend to connect Boston and Cambridge with a line of sunbeams hung on telegraph posts, and, if so, what diameter are the sunbeams to be? Will it be necessary to insulate them against the weather?' Though his invention was the forerunner of wireless radio, scientists couldn't find a reliable way to send messages on sunrays. The clouds kept getting in the way.

The Roman word for speaking was fantem; the past tense, spoken, was fatum. It's obvious that Fate is the voice of destiny, but more unexpected is the derivation of infant, a child too young to speak - and infantry, the common soldiery who fight the battles but have no say in the strategy or politics of war: 'Theirs not to reason why.' Not everything can be expressed in words, of course: some things are ineffable.
'Let us now praise famous men': that syllable $f a$ talks its way into all sorts of concepts. A word before the main speech is a preface. A chap who is easy to speak to is affable. A story that speaks for itself is a fable, and a man confesses his sins by speaking them.

A bandit isn't likely to confess, but then his etymology is a bit more obscure. He might be banned; on the other hand, he might be part of a band, and that comes from bhand - the original Indo-European word meaning to bind.

Thatched roofs are made with bundles of straw, but grass and branches can also be woven together by bending them. The strip of cloth that ties the bundle is a riband or a ribbon. Knot a ribbon round your head and it's a bandana; tie it around a wound and it's a bandage. Wind one round your waist and you have a cummerbund.

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With a soft ' $f$ ' sound, bhand is the root of all faith, which binds us together, and federation, which is a bundle of states or countries all tied up with ribbon ... or red tape.


## Dik, to point to

When the Colombian novelist Gabriel García Márquez created the fictional village of Macomba in his masterpiece One Hundred Years of Solitude, he imagined it at first as a collection of mud huts on a riverbank: 'The world was so recent that many things lacked names, and in order to indicate them it was necessary to point.'

For the original speakers of Indo-European, that is how their universe was. They pointed, and made up names, and in many cases those names have stuck for 8,000 years. But even the act of pointing had to have a word: dik. In our civilised era, it's rude to point, so we say indicate.

We point with our fingers but we also count with them that's why digit has a double meaning. Toes are digits too: that
linguistic quirk carries a strong suggestion that our ancestors used to count on their feet as well as their hands. The paradox is that digital machines don't count in tens but in twos, using the binary system of 1 s and 0 s .

The Gothic word for a foxglove was fingerbut, meaning a hat for your finger. The Romans called it digitalis, which is the name that the eighteenth-century physician William Withering gave to the heart medicine he extracted from foxgloves after noticing that herbal cures containing the plant helped patients who suffered from dropsy. People tend not to get dropsy nowadays, but that isn't due solely to the effectiveness of digitalis: it's also because doctors now call it oedema, or swelling of the extremities caused by congestive heart disease.

Digitation is pointing things out, but when a conjuror misdirects his audience, then - hey presto! You get prestidigitation. Preste is French for nimble.

A dictum is a saying, an opinion set down as an aphorism, and a dictery is a witticism. The dictionary of Dr Johnson was full of both. Anything beyond the description of words is indicible. And the one thing a dictionary doesn't need is an index. (How is index a dik word? Well, it's Latin, and the plural is indices.)

The composer Frederick Delius dictated his compositions after he went blind from the effects of syphilis. Delius was a ferociously short-tempered man, and behaved like a dictator to his young assistant, Eric Fenby, who ended up nursing the old man through his final illness - an awkward predicament. Fenby's faint consolation, apart from having a hand in several great pieces of music (one, Fantastic Dance, is dedicated to him), was that he had to cope with only one tyrant: it is rare to find a gathering of dictators, but when it does happen, there's a word for it - a dictature.

To point something out before it happens is to predict it, to countersay something is to contradict it and to lay charges against a suspect is to indict him - it's pronounced 'indite' because the Middle English word was enditen, to write down.

After that comes either vindication or a verdict. The evidence will be examined by a member of the judiciary, who will adjudicate or judge the case without prejudice.

A blessing is a benediction; a curse is a malediction; a mumble is bad diction. That's enough to make anyone vindictive, from the Latin vindicta ... which in Italian became vendetta. The Latin vindicare was pronounced venchier in Old French - a useful word in the Middle Ages and one that the English adopted eagerly. We used it with a vengeance in vengeful, avenge and revenge.

Another Latin word, predicare, meant to proclaim or declare, to issue an edict. It became prescher in Old French, which is where our preacher comes from. It is likely that teacher is derived in a similar way: the Latin dicere is to say, which became zeikban in Old High German and teikn in Old Norse. By the time it reached Middle English, the dialect of the Chaucer era, it was pronounced techen.

If you want to say something in song, that's a ditty. If you want to say it again, that's ditto. We could go on forever with this, because it's addictive.

## 执

## Es, to exist

Everything that is must exist. 'I think, therefore I am,' said the philosopher Rene Descartes, and so he was, but Neolithic man had reached that conclusion millennia before him. That's why es had a double meaning - to be, and to be true.

In Latin, to be was esse, an essential verb. Ancient wisdom held that the universe was composed of four elements - earth, wind, fire and water - but some mystics claimed there had to be something binding and vivifying them all, a life force, a godhead ... a fifth essence. The Greeks believed it was the air that the gods breathed, permeating all matter. Fifth was quinta, so metaphysicians spoke of the quintessence. Victorian scientists believed it was an invisible substance that transmitted light and radio waves, and called it the ether. These days, physicists use the word quintessence to cover some unknown sort of dark energy that drives the accelerating expansion of the universe.

Ether isn't there, of course. It is entirely absent. $A b$ in Latin means away, so ab-esse gives us absence. The opposite is to be right in the middle of things, or inter-esse, which is an
interesting thought. Einstein said that compound interest was the 'greatest mathematical wonder of all time' and 'the eighth wonder of the world ... He that understands it, earns it. He that doesn't, pays it.' Don't be fooled by his wit: Albert was clever with equations but terrible with cash. To afford a divorce from his first wife, he had to promise her every penny of the Nobel prize money that he hadn't even won yet.

For complex reasons of Latin grammar, prae-esse, which means before being, becomes praesens when it's a participle. (A participle is a verb that is pretending to be a noun, such as a 'happening' ... as opposed to a participator, which is anyone who loves to join in and is generally a bit of a party animal.)

Praesens means the present, the here and now. Presently doesn't; it means soon, all in good time; at least that will give us a chance to make ourselves presentable. Presence can be impressive demeanour and charismatic presentation. The presence-chamber of a palace was the grand reception room where the king met ambassadors and representatives of the people - not so that they could be presented to him, but so they could be admitted into his august presence. On the other hand, a presence can be something ethereal: an incorporeal being that hovers on the edge of the senses. And in a spookily confusing way, a presension doesn't even derive from the present: it's a foreboding, a pre-sense of what hasn't yet happened.

Then there is pro-esse, to be in favour of something, which survives in English as prowess. To make the word easier to say, it gained a consonant, became prodesse and turned into prosper as well as proud. Pride goes before a fall, because it's one of the deadly sins - and $\sin$ is an es word too. Esse, to be, equates to sinfulness: thanks to Adam and that apple, our mere existence is a state of original sin.

The Greek word for existence is ontos. It gives us entity. Ontology is the study of being. The ontological argument is a theoretical proof of the existence of God: the very fact that we're here and capable of imagining a supreme deity means that there
has to be one. Untology, logically, ought to be the opposite, the study of unbeing and atheism, but it isn't.

Ontologically, existence is truth, because anything that is is truly real. If that doesn't make immediate sense, say it slowly, like a tranced-out hippy ... truly real, man. Es is truth, or sooth. Forsooth means truly, though it always was a sarcastic word, and a sootbsayer is a charlatan who foretells the future. But a soothfast man is loyal and truthful, and to soothe was originally to prove a fact. It came to mean the opposite, convincing people that a falsehood was actually true, and by extension sootbing became flattery and cajoling - which is how it came to mean mitigating pain and calming the nerves.

Because ontos was existence, the connected word eteos meant reality, and etumon was the true or literal meaning of a word. And that is your actual etymology.


Gn , to beget

In the beginning, there was either Genesis or genes, depending on your views about human origins. What is certain is that the Indo-European root $\mathbf{g n}$ has generated hundreds of words about creation - far more than can be examined here.
Take the three dozen words ending with -genesis as a suffix: there's oogenesis, the process by which an egg is formed, and schizogenesis, which is reproduction by splitting in two like an amoeba, and palingenesis, which literally means born again - palin means again in Ancient Greek: hence, a palindrome is a word that reads the same backwards and forwards, such as eve or rotor (but not Bolton. As Monty Python's John Cleese told Michael Palin, 'A palindrome of Bolton would be Notlob ... it don't work!')

There are even more words that simply end in -gen. Allergens produce allergies, ballucinogens produce hallucinations and gasogens produce gases ... but the exception to the rule is hydrogen, which produces water, not hydras. When everything produced is the same, it's homogeneous.
In the Book of Genesis, Adam begat Seth and Seth begat Enos, and that was the genealogy of mankind ... it's bad luck on Seth, who is everybody's ancestor, that he's overshadowed by his more famous brothers, Cain and Abel. The British aristocracy had the same problem with primogeniture: the oldest son inherits the title, even if he's a degenerate, while the younger ones are pushed to the side. The original meaning of gentle was the firstborn: in Latin, gentilis meant from a respectable family, and gentil was an Old French word that survives in English as genteel. A gentleman was a son of good breeding, a member of
the gentry. A lady, strictly speaking, doesn't have to be wellborn, so long as she's good at baking bread: the word is derived from the. Old English blaef-diger, meaning loaf-kneader.

In general (from the Latin genus, a group of things), gn starts everything. It's in our genetics, which come from our progenitors; even our gender is proclaimed by our genitals. Pregnancy, progeny, congenital, indigenous: gn is regenerated whenever language plays the Generation Game.

But it goes far beyond that. Our genius is the spirit that attends each one of us from birth - it is rarely intellectual, and much more likely to influence our moods, desires and destiny. Far more of us have a genius, say, for idleness or gluttony than for cinema, which is why for every great movie there are 20 bad ones in the same genre.

In French, gens are people, so gens d'armes are men-at-arms - and gendarmes are policemen. The Latin gens means a clan, and the word was adopted in Hebrew. That's why non-Jews are Gentiles: they are foreigners, not part of the group.

Ingenuous is a gn word: in gens is within the clan, and so trustworthy, frank and honest. An ingenue in the theatre is an artless, innocent girl. Ingenuity is another gn word, signifying a native wit bred in the bone. But genuine is a wholly unrelated word. Like genuflect, it's all about the knee. The Roman word for a knee was genu, and genuinus meant that certainty a father feels when he sits his own son on his knee. It takes an expert to identify what's authentic, but everyone possesses a natural instinct for the genuine article.

As with gnats and gnus, the ' $g$ ' in front of the ' $n$ ' is sometimes silent. That's why gnaive and gnatal are not the accepted spellings, and why the angels didn't sing 'Gnoel Gnoel' at the Gnativity; they are all gn words, though. The ' $g$ 'disappears in nation, native, nature and innate, but it stays stubbornly in place at the end of benign, even though we don't pronounce it. Benign used to mean well born, and malign was the opposite - the ' g ' makes itself heard in benignant and malignant.

That errant ' g ' comes and goes in words based on the Greek gnosis, meaning cognition - the higher thoughts that are born in the mind. Agnostics use the ' g ', for example, but gnostics don't; prognosis and diagnosis do, and knowledge doesn't. The verb to know has two senses: it can mean mental comprehension but also sexual familiarity. 'Adam knew his wife, Eve, and she conceived' ... and we're back to Genesis.

## 5

## Kwi, to live

To get the first fact over with quickly: quick doesn't only mean fast. Its original meaning was alive, and it's that sense which we invoke when we talk about being cut to the quick - right to the heart and down to the soul. The quick is also the tender skin at the base of the fingernail, the place where the cuticle stops and living flesh starts. In pregnancy, quickening is the stage when the unborn child first starts to kick.
'He shall come to judge the quick and the dead,' warns the Book of Common Prayer, and that implies that everyone, living and dead, will face the heavenly accounting procedures. The phrase became a favourite of cowboy pulp novelists, who took it to mean that there were two kinds of gunfighters ... Louis L'Amour, the biggest-selling Western writer ever (200 million copies and rising) named one of his novels The Quick and the Dead; it was also the title of a cowboy movie with Sharon Stone in 1996.

When a dry stream quickened, it began to flow; quick coals were burning; a quick mind was lively; a quick disposition was hasty and hot-tempered - and it was not until the mid-1500s that quick came to mean rapid or swift.

The greatest quick-change performer ever was Leopoldo

Fregoli, a Victorian music artiste who could swap costumes so fast that he had to allow journalists backstage to prove his act was not done with identical twins. He could run off one side of the stage in the rags of a street musician and, in the time it took him to emerge on the other side, be transformed into a drag act wearing full lace and bustle. A rare delusional condition called Fregoli syndrome is named after him: sufferers believe that various people are really one and the same, cunningly disguised.

In Latin, the 'w' sound is hardened, and kwi became 'vi'. Vivus meant life, and in Romance countries (that is, former Roman colonies where Latin was spoken) a shout of viva still means long live. Viva voce meant by word of mouth. Anything that can support life is viable. Living creatures can be nurtured in a vivarium, which nowadays are glass cases where colonies of fish or insects are bred for study. The Romans used vivaria to fatten up fish and fowl, right up to the moment when they landed fresh on the table.

Some snakes lay eggs; others give birth to live young, which is called viviparation. That's where vipers get their name from. Viper is also a name for the lowest kind of human being - but not because snakes crawl in the dust. And it's not a vivid allusion to the snake's poisonous fangs, or to the story of Adam and Eve. A viper was believed in the sixteenth century to be the most malignant of all creatures, because it was said to kill its own mother at birth by eating its way out of her body.

A vivandier makes his living selling victuals to the army. If he's a Shetlander, he might supply vivda, which is meat dried in the air without being salted; most Scots would prefer vivers, the dialect name for general provisions and eatables. However you label it, food is vital; we need it to survive. And if you're half dead, aquae vitae, the water of life (what the Scots call whisky), will revive you.

In Ancient Greece, kwi hardened to a 'guei' sound; su-gueiyes meant living well. The goddess of health was Hygeia, whose name itself is bygienic. She is usually depicted as a young woman
with a live snake in one hand and a goblet in the other - sometimes the snake is drinking from the cup. Whether it's a viper, and whether it's whisky, the classicists cannot say.

Perhaps ironically, life is not derived from vivus but from the Germanic root liv, which comes from the Indo-European word lip - to be sticky. To the early farmers, life was something to cling to, like glue. Fat is also sticky, which is why lipoma are fatty tumours and liposuction is a quick way to lose weight by vacuuming fat away. Perhaps that's why diets never work for long - etymologically speaking, fat is a fact of life.

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## Ma , mother

If this book arrived from Amazon, be grateful it was only the postman who brought it. A visit from the warrior women dubbed Amazonides by the Ancient Greeks was a terrifying business, whether it was plunder they wanted or something else. Three thousand years ago, this all-female tribe that farmed and hunted on the banks of the Thermodon, in modern-day Ukraine, went annually in search of men. Some they enslaved, but most they bedded and, quite often, killed. The morning after the night before could be a nasty business with an Amazonian girlfriend. When their babies were born, all the boys were strangled; the girls were taught to read, plough and fight, and when they reached puberty their right breasts were burned off, the better to hurl a javelin or fire a bow. That's why the Greeks called them a-mazos, meaning without a breast.

In 1542 ad, the conquistador Francisco de Orellana was exploring the rainforests of Brazil when he was attacked by a party of long-haired, bow-wielding natives ululating in highpitched shrieks. He escaped, but by the time he returned to Spain, the tale had grown; Orellana's stories usually did, since a good yarn helped him secure investment for future expeditions. He told the Spanish emperor Charles V that the South American jungle was ruled by warrior women ... and that's why the river and the 5.5 m square kilometres ( 2.1 square miles) of forest surrounding it are known as Amazonia. Nearly half a millennium later, a Seattle businessman launched an online shop from his garage, and because he wanted a brand name that began with an ' $A$ ' and sounded big, he called it Amazon.

Ma meant mother 8,000 years ago, because the sound evoked a baby's cry. Both the Romans and the Greeks called their mothers mamma; the English upper classes say mama, the French say maman and the Irish get back to basics with ma. An Indian wet nurse is an amab.

Prehistoric man regarded the sky as father of humankind and the earth as mother. The Tatars, a nomadic people who have lived north of the Black Sea for at least 1,500 years, call the earth mama. Sometimes they dug up skeletons or even whole corpses, preserved in peat or permafrost, of huge creatures that they called mammonts - 'the monsters that burrow in the earth'. French explorers misheard the word, and that's where mammoths came from.
The Ancient Greek for mother is meter, and the mother city Athens was their metropolis. A metroscope was a tool for listening to a child in the womb; a metrotome was a surgical tool used in Caesarian sections. Anything to do with the metropole was naturally metropolitan, including a city's underground railway or Metro.
In Latin, mater is mother, but not all mothers - only the kindly, nurturing, maternal types. All mammals suckle their young, but motherbood is more complicated for human females: first comes matrimony, next the marital bed and then the maternity dress, as a baby grows in the matrix or womb. A married woman with experience of childbirth is a matron. To matriculate usually means to have your name inserted in the rolls of your college or alma mater, but matriculation can also mean to adopt a child.
To the Greeks, Mother Nature was Demeter; at her annual festival it was the custom for her devotees to whip themselves with the bark of trees. The bark was symbolic of how the life force, anchored in the trunk of the tree, reached out every spring through the branches and twigs to its tips, and put out buds. The tree is the mother of its own leaves - the mater and the material. All life, according to the materialist viewpoint, is merely matter. Anything immaterial, of course, doesn't matter.

The Roman word for wood is materia. In Portuguese, the word is similar but slightly more nasal, which is why the thickly wooded archipelago of islands north of Tenerife, and the sweet strong wine that is casked there, are called Madeira.

Motber's ruin, in the nineteenth century, was gin, whereas mother's milk was brandy. Mother's blessing was laudanum, a mixture of brandy and tincture of opium. In the 1960s, mother's little belper was the tranquiliser Miltown, a dangerously addictive muscle relaxant, or perhaps the sedative Valium ... as well as the title of a top-ten hit in 1966 for the Rolling Stones.

Numerare in Latin was to count. As well as numeral, it gives us supernumerary, which used to mean left over or surplus to numbers; these days, thanks to a touch of bureaucratic legerdemain, it means an employee who is not, strictly speaking, on the books but who can be called into action when required ... one of many anomalies in the modern office. Nummary is dealing in coins, because numismatics is the study of money.

The Greek nemein means to distribute. Never slow when it came to handouts, the medieval English turned that into nimel, to take - though they had to be nimble to get anything. That was shortened to the slang nym, a thief. His nimbles were his light fingers. If the city guards laid hold of him, he'd met his Nemesis: she was the goddess of vengeance who distributed men's fates. Like a dark angel, Nemesis had wings so that she could swoop down to mete out justice all the faster. One of her duties was to defend the memory of the dead from insults. Some accounts say that Nemesis, and not Leda, was the real mother of Helen of Troy ... but that was probably a misnomer.

The past tense of nimel is nume, which means taken. Take away all feeling and we're left numb. A numb band, in Dickens's London, was a clumsy oaf. Numskull is such a stupid word that it has lost its own 'b'. What a dimwit ... a real numby ... not deserving of any other name.

## B Numbers

Early Indo-European speakers counted in tens, as we do. Their names for numbers have changed little as new lan-
guages evolved: look how similar the French un deux troix or the German ein zwei drei are to oino dwoyh trih. That suggests Neolithic man understood the concept of an abstract number system, in which ten could mean ten horses, or ten humans, or ten anything. It would be thousands of years, however, before Indian mathematicians started to write down the decimal system, and so took the credit for inventing it. When counting was first invented, very early in the Stone Age, man probably counted in fours, at least up to twelve that's why eleven and twelve have their unique names, whereas thirteen, fourteen and so on are really three-and-ten, four-and-ten, etc. According to this theory, we counted on our fingers (not using our thumbs) up to eight, and then began again, which explains why newn, the word for nine, is also the word for new ... and why novem, the Latin nine, is so much like novel.

## x-oino

One is one and all alone, which is another way of saying lonely. If you have just one apple, you have an apple; the indefinite article in English was always 'an' until about 1200 AD , when it was shortened to $a$ in front of words that began with a consonant. If you eat the apple, of course, you'll have none - you won't have any. And if the apple wasn't yours in the first place, you'll have to atone for your theft: atone is a contraction, meaning to reconcile or put things at one. You'll only do that the once. In Latin, one is unus, which gives us unity, the universe, unisex hairdressers and the unicycle.

## 2-dwoyh

Two is double, though it's also written as twain - and twain ten is twenty. The Greeks made it $d i$, which is why anything cut in two is divided; the Latin prefix changed ' d ' to ' b ', making $b i$, which gives us bisected. We can thank the Greeks for diverse,
different and diploma (which originally meant a paper folded double; see plak). The Romans, on the other hand, gave us bipeds, bigamy and binary numbers. Computers measure information in bits, which is an elision of binary digit. The Latin for two retained the ' d ', though: it was duo, as in duplicate, duplicitous and dubious, meaning in two minds.

## 3-trih

Three is the trinity, the triangle and the triple word score. It becomes thirteen and thirty, and - as Frankie Howerd used to say - 'nay, thrice nay!' In Latin, trih became ter, as in tercentenary, which is the 300th anniversary, and tercet, or three lines of poetry with one rhyme. Roman falconers believed the third egg in a nest would always hatch a male chick, which is why tercel means a male hawk. The Norse word for a third part of any land, from a field to a country, was a thriding. Yorkshire, which was governed by the Danes 1,200 years ago, was divided into North Thriding, East Thriding and South Thriding. The words were run together, until the county consisted of three ridings, which has nothing to do with horses.

## 4-kwetwor

At first kwetwor looks little like four, but it is a lot like tetra (the Greek four was tettera) and quite a lot like quad (the Latin four was quattuor). Quarters are fourth parts but also the lodgings of soldiers or the cabins of sailors; to be given quarter was a stay of execution, but quartering was hacking the arms and legs from a victim. A tetrapolis is a region containing four cities, each ruled by a tetrarch; a tetraglot speaks four languages; a tetralogy is a set of four plays, three tragic and the last a satire; a tetrapod is an animal with four feet (unlike a tripod, which is a camera stand). In Old English, anything divided into quarters consisted of feorthungs, which became farthings: in pre-decimal coinage, a
farthing was a tiny coin, much smaller than the old penny hence the penny-fartbing, a bicycle with one huge front wheel and one miniature wheel behind.

## 5-penke

It's hard to see the connection straight away between penke and five, even when the ' p ' shifts to ' f . But 'fenke' is very like finger, and of course there are five of them (counting the thumb) on each hand. It's obvious where the Romans got their quinque, written as V. In a quincunx, five objects are arranged in a square, four at the corners and one at the centre, like the spots on dice. Quentin was traditionally the name of a fifth son, and the quinquagesima were the fifty days before Easter. The Greek five was pente, which gives us the five-sided US government building, the fiftieth day after Easter, the first five books of the Bible and a Roman slave galley with fifty oars - Pentagon, Pentecost, Pentateuch and penteconter.

## 6-sweks

Noon, the sixth hour after sunrise, in Latin is the sexta bora, when Mediterranean folk sensibly choose to have a siesta. The Roman sex (we politely pronounce it as six) gives us sextant, an astronomical tool that can measure angles of up to 60 degrees; semester, which now means an academic term but originally referred to sex menstris or six months; and the Sistine Chapel, so called because it was Pope Sixtus IV who began building at the Vatican palace in 1473. Six in Greek was bex, and a bexagram is a six-pointed star - a favourite symbol of witches, who could use it to put a hex on victims. Insects, being six-footed, are categorised as bexapods.

## 7-septm

September, unhelpfully, is the ninth month of the year; it used to
be the seventh, until Augustus Caesar inserted a couple of extras ... August, named after himself, and July, after his predecessor Julius. A river that splits and flows into seven branches is septemfluous; the Nile is a famous example, the River Lea on the Essex border a lesser one. The seven stars of the Plough in astronomy are the septentrions, because septem triones is Latin for the seven plough-oxen. The Greek hepta gives us beptarch, the seventh king. A beptad is a group of seven things, such as days in a week, and anything divided into seven parts is beptamerous. Logically, if you were 'heptamorous', you'd have sex once a week, but English isn't logical and the word doesn't exist.

## 8 -okto

Eight comes from the Old English eabta, which comes from the Old Saxon abto, that is still some distance from the original okto. The Greeks and the Romans, on the other hand, didn't change it at all, which is why the octopus has eight legs, the octangle has eight sides, an octastyle building has eight columns and octogamy is having eight wives. An octave is a full musical scale of eight notes, but it is also an ecclesiastical word meaning an eight-day festival, and the name of a wine cask that holds an eighth of a pipe, which is 105 gallons (about 477 litres), or two hogsheads. Simple mathematics will tell you that this means there are four octaves to a hogshead. Yma Sumac, known as the Peruvian songbird, became famous in the 1950s for her four-octave vocal range; she claimed to be an Inca princess, and wore spectacular headdresses, though never an actual hogshead. In South America, there's a rat-like rodent called the octodon, because it has eight teeth.

## 9-newn

If you're dressed up to the nines, you are in your finest clothes perhaps a reference to an eighteenth-century proverb, that'nine tailors make a man'. Nineteen was the average age of US con-
scripts fighting in the Vietnam War, according to the intoned lyrics of a number-one hit by Paul Hardcastle in 1985. The Australian butcherbird, a sort of magpie, is known as the ninekiller because it catches insects and small lizards and impales them on thorns to impress its mate, often nine at a time. Nona bora, the church service traditionally held at 3 pm or the ninth hour after dawn, was moved back to midday in the Dark Ages. Confusingly, 12 o'clock became non and then noon.

## ro - dekmt

Decem is the Latin ten: hence decimal, decade and decimate, which was the Roman punishment of slaughtering every tenth soldier in a legion that had mutinied or shown cowardice. A decuria was ten men, and by the Middle Ages in England a dicker was ten fleeces or hides; dickering was bartering, perhaps trying to get an extra one thrown in for free. A decima was a tenth part, which is why anyone who looked like they could afford to give a starving man ten cents during the Depression of the 1930s was begged, 'Brother, can you spare a dime?' The Ten Commandments are sometimes referred to as the Decalogue, and the hundred tales written down by Boccaccio in the fourteenth century and supposedly told by ten people over ten days are the Decameron.

## 100-kentm

Philologists, who study language, divide Indo-European tongues into two groups: the ones that have a soft 's' name for 100 such as satem in Sanskrit, and the hard ' k ' languages that include Latin with centem. It's typical of philologists to pick a key word that makes a useless example because, although the Romans said 'kentem' with a hard ' $k$ ', it arrived in English as centem with a soft 's' in words like century, percentage and centigrade. The Greeks made matters worse by changing kentm to bekaton - that's why a bectare is 100 ares, an 'are' being 100
square metres. A hectograph was an early carbon-paper device, invented in 1869, which could print multiple copies, though the name was an advertising gimmick: it couldn't manage 100 at a time. A becatomb, now meaning the sacrifice of many victims, was once the slaughter of 100 oxen to appease the gods.

## II

## Rud, red

TThe first painters used ochre, an iron-rich earth that was
mixed with saliva and animal fat before it was applied to cave walls. Some of the most ancient, depicting men, horses and bison, at the Chauvet caves in southern France, are over 30,000 years old. Ochre can vary from yellow to brown, but it is predominantly red - the most important colour in the Stone Age world.

Red is the colour of life and death, of blood, meat and the rising sun. Ruddy faces are signs of a rude constitution, because they attest to good circulation.

Rude usually means coarse, or ill-mannered. In the sixteenth century, a rudesby was an insolent, brawling troublemaker, whereas a rudas was a foul-mouthed drunken old woman. To be rumbustious is to be boisterous and boozed up - it's a punning mix of robustious and rum. Rude can also mean robustly healthy, but its original meaning was half-finished, because it comes from the Latin rudis, meaning raw - like red meat. Robustus in Latin was strength, sometimes in the sense of being hard as oakwood: the oak was roboreus, because of the hardness of its timber. To corroborate a story means to stiffen and strengthen it, literally to 'confirm' it. A roborant is a strengthening, invigorat-. ing medicine or tonic.

In Russian, rabota means hard work; in Old Slavic, it signified slavery. Robot in Greek, and robota in Ukrainian, is forced labour. It's the word that Czech playwright Karel Capek was playing with when he invented robots for his 1921 play $R U R$. Capek's storyline, about sentient metal humanoids that tire of being servants and decide to rule the world instead, has been part of the rubric (that is, the laws) of science fiction for a century. In Rome, the laws were the rubric, because they were written in red ochre. In today's civil service, rubric is red writing, highlighting a heading or passage.

A red letter is an important piece of news; a scarlet letter, on the other hand, was the brand that Hester Prynne, the heroine of Nathaniel Hawthorne's novel, was forced to wear on her dress - a bright red 'A' for adultery. Red is the colour of shame, because it's the colour of blushing - the involuntary flush of blood to the face. The fear of blushing is erytbrophobia, from erytbros, the Greek for red.

Rubeus is the Latin word for crimson red, and so rubescence is another term for blushing. The French took rubeus and turned it into rouge, a fine powder made from dried safflower petals that rubified the cheeks and lips. To raddle your face was to paint it red. It's a common mistake to think that being raddled is to be worn out by excess and self-indulgence; it simply means to be badly and brazenly made up, like an elderly woman of low repute.

Rubella is German measles, which causes a bright red rash, and rubeola are the red pimples in measles and smallpox. A rubefacient is an ointment that causes a rash when you rub it in - again, rub goes back to the idea of red meat, because vigorous rubbing will chafe the flesh till it is raw.

Rubor is any kind of redness, and rubification is heating a substance till it glows red. Oxidation can also turn some metals red, with rust. Russus is another Latin word for red - the rosy, russet shade. Rutilus is yet another, a golden red, and rufus is one more, a more ginger colour. William II, the son of William the

Conqueror, was nicknamed William Rufus because of his red face. Squat and strong, with a pot belly, he never married and took little trouble to hide his homosexuality. He had a rudimentary sense of humour - his idea of a joke was emptying a chamberpot over his brother from a balcony. The incident sparked three years of civil war.

A rosarium in Latin was a rose garden, called a rosery in English. This flowery title was taken for Tudor prayer books, especially the Rosary of Our Lady, which contained a set of devotions or repeated prayers. To help the pious keep count, 165 beads strung on a thread is a rosary, and 55 beads make a lesser rosary.

Roseate means ruby-red, whereas a rosette is a knotted bunch of ribbons like a rose. We know ribbons were once always red, because the Old Germanic word is ruban.

Ruddle is an ochre, used by farmers for marking their sheep and by house-proud Victorians for polishing out the scuffmarks on their stone doorsteps. A rowan tree has red berries - rowan seems a long way from rud, but in Norse it was raun, and before that rugn-its name might literally mean red one.

The root word rud has survived unchanged into English as the name for a deep-bodied freshwater fish with red fins and tail - the rudd.


Tote to readers of an anxious disposition: some of the ideas here are gory, brutish and quite distressing ...
Mr Spock started the trend in Star Trek, with the Vulcan
nerve pinch, a martial-arts technique that rendered a victim unconscious with one tweak to the base of the neck. He also patented the Vulcan death grip, with the heel of the hand to the base of the nose, inducing an instant coma. Action heroes such as Jason Bourne and Jack Bauer took it a stage further with the 'military neck break' - a quick twist of the head that was silently lethal. But what no leading man ever does is to wrap his fingers around a minion's neck and slowly squeeze the life out of him. Only a villainous seven-foot henchman would ever do that. For one thing, it requires callousness, even sadism. And for another, strangling demands great strength.

Death by strangulation was a form of ritual killing in prehistoric times. The mummified corpse of an Iron Age man was found in peat bogs on the Jutland Peninsula in Denmark in 1946: at first it was assumed he was a recent murder victim, because his corpse was so well preserved. In fact, he had been dead for 2,400 years - strangled by a thin length of string.

The rope around the neck was not generally used for killing, however. The Greek strangale means a halter, of the kind still used in Mediterranean countries to lead donkeys. For early farmers, a noose was probably an effective method for subduing and taming wild horses, or even dogs - in much the same way that the gauchos of the Wild West used the lasso to round up steers.

The basic implication of streg is that something is pressing hard against flesh. In Rome, where the citizens loved baths but had not invented soap, a bone scraper like a window-cleaner's squeegee was used to sluice sweat away: it was called a strigil.

The Latin word stringere means to draw tight. In English, stringent rules are rigorously binding, and astringent cleansers make the pores close up - much better than dragging a strigil over your face. The opposite of stringere was distringere, to draw things apart and separate them. That's where the concept of districts comes from. But being pulled to pieces is an upsetting experience, and distringere is also the basis of distress.

In Old French, stringere became estraindre, or streynan in medieval English, meaning to draw something tight, such as a bowstring. That's why an athlete strains every fibre - until he pulls a muscle, which is also called a strain.

When a prisoner was bound in ancient times, he was restrained (from restringere, or bound back) and placed under constraints (from constringere, or bound together). He might also be blindfolded: in Latin, that is praestringere oculos, which literally means to bind the eyes beforehand. That came to refer to blinding, by having the eyes gouged out or burned away with red-hot coals, and this in turn gave rise to a ghoulishly comic word - praestigiousus. It meant blindingly brilliant, like the sun or, indeed, a red-hot coal. That's where we get prestigious and prestige from.

Sleight of hand can also dazzle the eye, if the conjuror is clever enough. A magician's tricks were called prestigiae, which gives us prestidigitation. Hey presto!

Early Indo-European had a related word, snar, which translates as to pull tight. Its meaning has barely changed with snare. In northern Europe it lost the 's' and became narwa in Old High German, which means a scar - where a wound was pulled tight with needle and thread. That's the origin of narrow. The Old German narke is related, meaning numbness - the way a limb loses its feeling when it is tightly bound with a tourniquet. Narke became narcotic, a medieval word meaning any substance that induces sleep or unconsciousness. Narcosis is a state of drugged insensibility, which is much better than a tourniquet if someone is about to sew up a gaping wound.

Snar became neuron in Greek, which originally meant a tendon but that is now a cell in the brain that transmits information along a string of other cells. The plural of neuron is neura, which is why people of a nervous disposition are said to be neurotic. Which, after all that bloodshed, you would be entitled to be.

