

Language—the Creator’s gift

1. The uniqueness of human speech

Graham Jackman

The ability to communicate through spoken words is unique to human beings and is a powerful evidence for Creation. This first article of a three-part series presents some of the unique features of human speech.

“THE SOCIETY does not accept papers on either the origin of language or the invention of a universal language” (founding statute of the Linguistic Society of Paris, 1866). This decision was taken because “any theories on the origin of language were by their very nature so speculative that they should no longer be discussed at its meetings”,¹ and, as Michael C. Corballis comments, “Somehow this seems to have held, with the odd leak, for more than a century, but in the last decade or so the floodgates have opened”.² Recent years have indeed seen a wide range of essentially speculative theories propounded to attempt to explain the mystery of the origin of human speech and language. The very proliferation of theories indicates the absence of consensus and of any conclusive or even convincing theory.

As in every other branch of science, the underlying assumption of all this speculation and theorising is that human speech and language evolved through ‘natural selection’, the interaction between random genetic mutation and changes in external circumstances. In other words, they are assumed to be a product of the broader process of evolution, which is held to be the source of all living forms.

That the case for this assumption, at least as far as language is concerned, is far from being proved, is illustrated by Corballis’ further observation:

“Even so, the dichotomy between the Cartesian view that language is unique to humans and can only be explained by some miraculous event, and Darwinian notions of continuity between humans and other animals, with incremental change through natural selection, remains as stark as ever”.

A Divine creation

Perhaps we should first remind ourselves exactly what the alternative explanation, the “miraculous event”, is. The Biblical account in Genesis 1 and 2, the one explanation excluded

a priori by most linguists, declares:

- that man is a separate creation of God;
- that he is set apart from other animals, and that his calling and destiny is to rule over the rest of the natural world on behalf of the Creator: “Let us make man in our image, in our likeness, and let them rule over the fish of the sea . . . and over all the creatures . . .” (Gen. 1:26, NIV);
- that he was created with unique gifts and capacities—“in our image, in our likeness”—which would enable him to respond to the Creator and to enter into conscious relations with Him;
- that, from the first, those relations depended on speech, with the Creator expressing His will through commandments, which the man was able to understand: “And the LORD God commanded the man, saying, ‘You may freely eat of every tree of the garden; but of the tree of the knowledge of good and evil you shall not eat, for in the day that you eat of it you shall die’” (2:16,17, RSV);
- that it is the power of speech that distinguishes men from the rest of the animal kingdom. This is confirmed when the man is allowed to name the other animals: “out of the ground the LORD God formed every beast of the field

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1. Heinrich Hock & Brian D. Joseph, *Language History, Language Change, and Language Relationship: An Introduction to Historical and Comparative Linguistics*, Berlin, 1996.
 2. Michael C. Corballis, “Folie à Deux”, *Lingua ex Machina: Reconciling Darwin and Chomsky with the Human Brain*, William H. Calvin and Derek Bickerton, in *American Scientist Online*, Sept.-Oct. 2000.

and every bird of the air, and brought them to the man to see what he would call them; and whatever the man called every living creature, that was its name" (v. 19, RSV). The ability to name the other animals is indicative of man's unique powers, which qualify him to exercise the responsibility for the animal kingdom given to him by the Creator.

Language, on this account, is not the product of a blind evolutionary process but a Divinely given capacity that, more than all other differences, distinguishes *Homo sapiens* from the rest of the animal kingdom.

Which of these views of human language is the more plausible? In these articles we shall first consider the features of human speech that distinguish it from other communication systems in the natural world, and the way in which human beings acquire language. Then we shall ask whether any of the theories developed to explain the origin of language on a naturalistic, that is, evolutionary, basis represents a credible alternative to the Biblical account.

A unique human faculty

Many linguists, including some of the most reputable, acknowledge the uniqueness of hu-

man speech. Perhaps the most famous linguist of the last half-century, Noam Chomsky, though himself believing that language evolved, writes as follows:

"The human faculty of language seems to be a true 'species property', varying little among humans and without significant analogue elsewhere . . . There is no serious reason today to challenge the Cartesian view that the ability to use linguistic signs to express freely-formed thoughts marks 'the true distinction between man and animal' . . .";³

"There is reason to believe that humans have a specialised 'organ' dedicated to the use and interpretation of language, call it 'the faculty of language'".⁴

Another leading figure in contemporary linguistics, David Crystal, puts it like this:

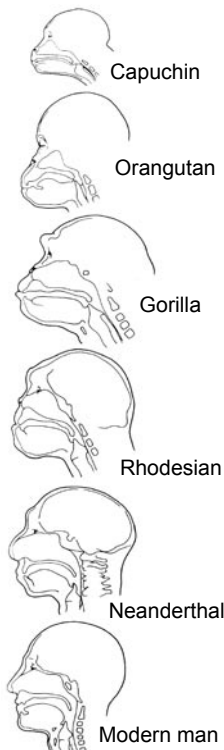
"the gap between human language and the communication systems of the nearest primates remains vast, and there is no sign of a language-like increase in communicative skills as one moves from lower to higher mammals".⁵

The gap between human speech and the various communication systems observed in the animal world is vast. In part it is a matter of physiology; humans are able to produce a much wider range of sounds, with more subtle distinctions and differences, because of their special vocal equipment. The lower position of the larynx, and the resultant longer vocal tract, as shown in the diagram on the left⁶ (produced, it will be observed, on the basis of evolutionary assumptions), make humans capable of a far wider diversity of utterances than the animals deemed to be 'closest' to them:

"In this respect humans are unique among air-breathing vertebrates: because our tongue and larynx lie so low in our neck and our pharynx is so long, we can turn our tongue and vocal tract into a huge variety of different, sound-altering lengths and shapes—the prerequisite of speech".⁷

Primate vocal tracts

The vocal tracts of primates are very different from those of modern man. They have long, flat, thin tongues with less room to move. The larynx is higher, with little sign of a pharynx. There is no evidence of ability to change the configurations of the vocal tract to produce the range of sounds required in speech.



3. Noam Chomsky, *New Horizons in the Study of Language and Mind*, Cambridge, 2000, p. 3.
4. *Ibid.*, p. 168.
5. David Crystal, *The Cambridge Encyclopedia of Language*, second edition, Cambridge, 1997, p. 293.
6. Reproduced from *The Cambridge Encyclopedia of Language*, second edition, p. 292. Originally from V. E. Negus, *The Comparative Anatomy and Physiology of the Larynx*, New York, 1949.
7. Anne Karpf, *The Human Voice*, London/New York, 2006.

	Bee dancing	Stickleback courtship	Western meadowlark	Gibbon calls	Language	Instrumental music
The vocal-auditory channel	no	no	yes	yes	yes	auditory, not vocal
Broadcast transmission and directional reception	yes	yes	yes	yes	yes	yes
Rapid fading	?	?	yes	yes, repeated	yes	yes
Interchangeability	limited	no	?	yes	yes	?
Total feedback	?	no	yes	yes	yes	yes
Specialisation	?	in part	yes?	yes	yes	yes
Semanticity	yes	no	in part?	yes	yes	no (in general)
Arbitrariness	no		if semantic, yes	yes	yes	
Discreteness	no	?	?	yes	yes	in part
Displacement	yes, always		?	no	yes, often	
Productivity	yes	no	?	no	yes	yes
Traditional transmission	probably not	no?	?	?	yes	yes
Duality of patterning	no		?	no	yes	

Features of human speech

However, far more is involved in speech than simple physiology. The [table](#), taken from *The Cambridge Encyclopaedia of Language*,⁸ sets the features of human speech (here denoted as ‘language’) against a range of other communication systems. While the terminology may be unfamiliar or confusing, one observes immediately the repeated ‘yes’ for human speech and the ‘no’ or question mark in most categories for the other systems. Some of these categories merit further exploration.

Productivity means that the speaker is able to produce utterances which may never have been uttered before; human speakers routinely say things that no one has said before them because they have mastered a complex semantic and structural system which makes such open-endedness possible. Their potential range of utterances is not confined, as with animals, to a preformed repertoire of signals used to alert their fellows to, for example, the existence of a food supply or an imminent danger. There is, formally at least, no limit to what a human speaker may say.

Displacement refers to the ability to speak of that which is not immediately present before the speaker or listener. Human beings are able to recall people, places, and events remote in time or place, or things still future, or mere possibilities—or even the purely imaginary, unreal and fantastic.

Stimulus freedom (a recognised distinctive feature of human speech, not mentioned in the table though it may be regarded as a subset of **Productivity**) means that the speaker’s utterance is not predetermined by the stimulus. In the animal kingdom one signal may evoke a programmed response, chosen from a small stock of possibilities. In the human world there is no telling what the response to a question or observation may be; this is one of the primary sources of comedy. Thus, if I ask, for example, “How do you like my new hair style?”, I have to be prepared for anything!

Arbitrariness denotes the fact that there is, usually, no necessary link between sound and meaning.⁹ Thus, for example, there is little resemblance between English ‘sky’, German ‘Himmel’, French ‘ciel’ and Czech ‘nebe’ to refer to the same universally known phenomenon.

Traditional transmission is a reference to one of the most vital and significant features of human speech: human beings are not born with speech already, as it were, ‘installed’ (to use a

term from the world of computers). Language has to be learned or acquired, and this takes place *only* through contact and intercourse with other speakers. Unlike the young of most animal species, human children are born completely helpless and therefore totally dependent; and this is a condition that continues for several years. One may speculate that such a long period of dependence is necessary for children to acquire the vital mastery of language; while they might otherwise benefit by being born more fully developed, this long period is required for the highly complex system of human language to be learned through intimate contact with a number of adult speakers. As an aside, we might point out that the learning can take place *only* through human interaction; language will *not* be acquired from television. The importance of intensive and regular contact, especially between mother and child, in the acquisition of language cannot be overemphasised.

Duality of patterning describes one of the most essential features of speech. Speech does not consist of discrete sound units, each with a single meaning; if that were the case, we should effectively need an entirely different set of sounds for each word. Rather, the words used in any language are made of *phonemes*, a relatively small number of units of sound—about forty in the case of English—which can be combined in an almost infinite number of ways to form the hundreds of thousands of words in any given language. Thus from the three phonemes *c*, *a* and *t* we make the familiar word ‘cat’. However, the same three phonemes can also make the words ‘act’, ‘tact’, ‘tack’ and ‘tacked’. If we add a further phoneme, *p*, we can make many more words: ‘pap’, ‘tap’, ‘cap’, ‘pat’, ‘pact’, ‘tapped’, ‘packed’, ‘capped’, for example. This amazing flexibility, which makes human speech capable of its range and variety, contrasts markedly with the communication systems found in the animal world, where as a rule a single utterance has only a single, fixed meaning.

An extraordinary phenomenon

Language is a faculty which we usually treat simply as the medium with which to speak of

8. *Op. cit.*, p. 401. Originally from C. F. Hockett, “The Origin of Speech”, *Scientific American*, 203, 88-96.
9. Though poets sometimes use the device of *onomatopoeia* to make the words’ sound suggest their content; for example, the well-known line from Alfred Noyes’ “The Highwayman”: “Over the cobbles he clattered and clashed in the dark inn-yard”.

other things. But when our attention is directed to the medium itself, we begin to appreciate just how extraordinary it is—and how remarkable it is that we alone in the entire animal kingdom are blessed with it. To repeat Chomsky's words, quoted earlier, "The human faculty of language

seems to be a true 'species property', varying little among humans and without significant analogue elsewhere". When we consider how language is acquired, as we hope to do in our next article, the phenomenon becomes more remarkable still.

([To be continued](#))

Zacchaeus

"Sinner" or "son of Abraham"?*

Stanley Bayliss

THE OPENING VERSES of Luke 19 reveal two opposing opinions of Zacchaeus. As seen by his countrymen, the Jews, Zacchaeus was the publican, the extortioner, the collaborator with Rome and a "sinner". In the eyes of Jesus Christ, however, Zacchaeus was a true "son of Abraham". It is both interesting and profitable to examine the evidence leading to each viewpoint.

The publican

The name Zacchaeus would suggest a Hebrew national, since it means 'pure' or 'righteous'. The term 'publicans', although used frequently in the AV, is never a translation of the word *publicani*, but always of the word *telōnēs*. The term *publicani* only strictly applies to the direct farmers of taxes from the government, being taken from the inexact rendering of the Vulgate.¹ The publicans were the tax collectors of the Roman civil power. The taxes were farmed by the rich Roman citizens of the Equestrian Order, or sometimes by a joint-stock company at Rome, who had agents in the provinces to arrange the actual collection from the people.

These agents divided the country into districts, which were separately offered by public competition to be 'farmed' by the highest bidder. The buyer was usually required to pay the purchase money (either wholly or by instalments) in advance, but he was duly at liberty to recoup himself. He was usually a native of the country, and, well knowing its resources and the temper of its people, he used his knowledge and his power to extort as much as possible for his own profit. In this he was supported by the Equestrian Order at Rome, who carried out most oppressive decrees in the Senate against defaulters.

Such were the tax-gatherers (AV 'publicans'); universally despised, branded as plunderers and beasts of prey, and coupled with the vilest and most contemptible characters. Moreover, because much of the tax was an *ad valorem*² duty on property and produce, which the 'publican' gauged, there was ample opportunity for unjust exaction. The question, "Is it *lawful* for us to give tribute unto Caesar, or no?" (Lk. 20:22), was ever rife, and to the Jews such subordination was a peculiar sting, for they liked to pride themselves as being "Abraham's seed, and . . . never in bondage to any man" (Jno. 8:33).

It is no wonder, then, that the 'publicans' were regarded as traitors to their country and to their God; and even our Lord classed them with evil men, although his general denunciation of 'publicans' proves that a *general* denunciation of a *class* by him does not necessarily mean that *individuals* will be rejected. Zacchaeus was "rich", in the words of the inspired record (Lk. 19:2), whilst those mentioned at the end of the previous chapter (as having become followers of the Master) were poor men. Luke tells us, nevertheless, how anxious was Zacchaeus to see Jesus, and that, being short of stature, he climbed a sycamore tree for the purpose.

Let us summarise the obstacles in the way of Zacchaeus:

* First published March 1948.

1. The Vulgate is a Latin translation of the Bible, made in the fourth century, which became the Bible of the Roman Catholic Church. It had a considerable influence upon the formation of the AV.—*T.B.*
2. This Latin expression means, according to *Collins English Dictionary*, "in proportion to the estimated value of the goods taxed".—*T.B.*