

Robert Turgeon. 1995 *About Language*. Boston: Houghton Mifflin Company

The Origin of Language

Charles Barber

In the following selection from his book *The Story of Speech and Language*, Charles Barber reviews the many theories about how language originated. Because language began in prehistory, all discussion of its origin relies on educated guesswork. Barber, a professor at the University of Leeds (England), thus proceeds cautiously as he guides us through this "realm of more or less plausible speculation," in which ideas seem as conflicting as they are illuminating.

JOURNAL PROMPT *Sometime in the early history of the evolution of the human species, language didn't exist as we know it. Imagine how the development of human language began.*

- 1 We are profoundly ignorant about the origins of language, and have to content ourselves with more or less plausible speculations. We do not even know for certain when language arose, but it seems likely that it goes back to the earliest history of man, perhaps half a million years. We have no direct evidence, but it seems probable that speech arose at the same time as tool making and the earliest forms of specifically human cooperation. In the great Ice Ages of the Pleistocene period, our earliest human ancestors established the Old Stone Age culture; they made flint tools, and later tools of bone, ivory, and antler; they made fire and cooked their food; they hunted big game, often by methods that called for considerable cooperation and coordination. As their material culture gradually improved, they became artists, and made carvings and engravings on bones and pebbles, and wonderful paintings of animals on the walls of caves. It is difficult to believe that the makers of these Palaeolithic cultures lacked the power of speech. It is a long step, admittedly, from the earliest flint weapons to the splendid art of the late Old Stone Age: the first crude flints date back perhaps to 500,000 B.C., while the finest achievements of Old Stone Age man are later than 100,000 B.C.; and in this period we can envisage a corresponding development of language, from the most primitive and limited language of the earliest human groups to a fully developed language in the flowering time of Old Stone Age culture.

Evidence about the Origins of Language

- 2 How did language arise in the first place? There are many theories about this, based on various types of indirect evidence, such as the language of children, the language of primitive societies, the kinds of changes that have taken place in languages in the course of recorded history, the behavior of higher animals like chimpanzees, and the behavior of people suffering from speech defects. These types of evidence may provide us with useful pointers, but they all suffer from limitations, and must be treated with caution.

- 3 When we consider the language of children we have to remember that their situation is quite different from that of our earliest human ancestors, because the child is growing up in an environment where there is already a fully developed language, and is surrounded by adults who use that language and are teaching it to him. For example, it has been shown that the earliest words used by children are mainly the names of things and people ("Doll," "Spoon," "Mummy"); but this does not prove that the earliest words of primitive man were also the names of things and people. When the child learns the name of an object, he may then use it to express his wishes or demands: "Doll!" often means "Give me my doll!" or "I've dropped my doll: pick it up for me!"; the child is using language to get things done, and it is almost an accident of adult teaching that the words used to formulate the child's demands are mainly nouns, instead of words like "Bring!"; "Pick up!"; and so on.
- 4 One thing that we can perhaps learn from the small child is the kind of articulated utterance that comes easiest to a human being before he has learned the sound system of one particular language. The first articulate word pronounced by a child is often something like *da, ma, na, ba, ga*, or *wa*. The vowel is most commonly a short *a* sound; and the consonant a nasal or a plosive. Nearly always, these early "words" consist of a consonant followed by a vowel or of a sequence of syllables of this type (*dadada*, etc.). When the child attempts to copy words used by adults, he at first tends to produce words of this form, so that "grandfather" may be rendered as *gaga*, "thank you" as *tata*, and "water" as *wawa*. This explains why, in so many languages, the nursery words for mother and father are *mama* or *dada* or *baba* or something similar; there is no magic inner connection between the idea of parenthood and words of this form; these just happen to be the first articulated sounds that the child makes, and the proud parent attributes a suitable meaning to them. Such words may also have been the first utterances of primitive man, though hardly with this meaning.
- 5 The languages of primitive peoples, and the history of languages in literate times, may throw some light on the origin of language by suggesting what elements in it are the most archaic. But again we have to be careful, because the language of the most primitive people living today is still a very ancient and sophisticated one, with half a million years of history behind it; and the earliest written records can take us back only a few thousand years. It is probable, of course, that in early times language changed more slowly than in historical times. The whole history of human culture has been one of an accelerating rate of change: it took man about half a million years to develop through the Old Stone Age to the higher material culture of the Middle and New Stone ages, but a mere 5,000 years or so for these to give way to the Bronze Age, and perhaps 1,000 for the Bronze Age to develop into the Iron Age; and since the Industrial Revolution, the pace has become dizzying. It is perhaps arguable that the rate of change in language has been parallel to that in material culture, and in that case the gap of half a million years between the origin of language and the first written records becomes a little less daunting. It remains daunting enough, however, and we must obviously be careful in theorizing about the remote past.
- 6 Still, we may be able to pick up some hints. For example, it is noticeable among primitive peoples how closely their languages are adapted to their material needs: in Eskimo, there is no single word for "snow," but a whole series of words for "new

fallen snow," "hard snow," and so on; and in general a primitive people tends to have words for the specific things that are materially important to it (like the particular birds or plants that it eats), and to lump together other things (like birds or plants that it does not eat) under some generic expression. We may also find some evidence about the types of word and the types of expression which are oldest: there is a good deal to suggest that words of command (like "Give!" "Strike!") are very archaic, since in the earliest known forms of many languages these imperative forms are identical with the simple stem of the verb, without any special ending added. Compare, for example, Latin *dic* ("say!") with *dicit* ("he says"), *dicunt* ("they say"), or *dicere* ("to say"); the form used for giving a command is the shortest, the most elementary. Some of the personal pronouns, like *me*, also seem to be very archaic, and so do vocatives (the forms of words used in addressing people).

7 A study of the higher animals can help us by suggesting what man was like in the prelinguistic stage, immediately before he became man. The expressive noises, signals, and gestures of the higher apes show us what man started from in his creation of language; but they cannot show us how he created language, for it is man alone who has broken through the use of symbols: the apes, however expressive their signals may be, remain on the other side of language. Apes, of course, have smaller brains than men; and man's development, as part of his adaptive evolution, of a larger and more complex brain than any other creature was undoubtedly a prerequisite for the emergence of language.

8 The last source of evidence, the behavior of people suffering from speech defects, is probably the least helpful. The condition which has especially been referred to is *aphasia*, in which the power of speech is wholly or partially lost, often as a result of a brain injury. In recovering from aphasia, the patient to some extent repeats the process gone through by a child in learning to speak for the first time, and some psychologists have suggested that he also repeats the history of the human race in inventing language. It is difficult, however, to see the grounds for this belief; since language, though it uses inherited biological skills and aptitudes, is not itself a biological inheritance but a cultural one; and the kind of prehistory of language which has been constructed on evidence of this kind is not a very convincing one.

9 Emphasis on one type of evidence or another has led to rather different theories of the origin of language. Different authors, too, seem to mean different things when they talk about the origin of language: some are thinking especially of the pre-language situation, and of the basic human skills and equipment that were a prerequisite for the invention of language; others are thinking more of the actual situations in which the first truly linguistic utterances took place; others again are thinking of the very early stages of language after its invention, and the ways in which it expanded its resources.

The Bow-wow Theory

10 One theory is that primitive language was an imitation of natural sounds, such as the cries of animals. This has been called the bow-wow theory. Supporters of the theory point to the large number of words in any language which are, it seems, directly

imitative of natural sounds—words like *quack*, *cuckoo*, *peewit*. They add that many other words show a kind of “sound symbolism,” enacting in sound whatever it is that they denote; examples of such words in English would be *splash*, *sludge*, *slush*, *grumble*, *grunt*, *bump*, and *sneeze*. It is certainly plausible to believe that a primitive hunter, wishing to tell his companions what kind of game he had found, may have imitated in gesture and sound whatever kind of animal it was—horse, or elephant, or quail; and this may well have played a part in the development of vocal symbols.

This theory, however, does not explain how language obtained its articulated structure. When we invent an imitative word like *whizzbang* or *crump*, we use an already existing language system, with its vowels and consonants, its laws of word structure, and so on, and we make our imitative word conform to this pattern. But man in the prelinguistic stage had no such language system, and his imitation of a horse or an elephant would simply be a whinnying or trumpeting sound, without the articulation characteristic of speech. Imitation of this kind may explain part of the primitive vocabulary, and it may have played a part in the transition from expressive cry to vocal symbol, but it cannot by itself account satisfactorily for the rise of language.

Moreover, we probably deceive ourselves about the extent and importance of sound symbolism in language. Because of our intimate knowledge of our language since our early years, and the way it is bound up with our whole emotional and intellectual life, the words that we use inevitably seem appropriate to what they mean, simply by constant association. It may be retorted that some groups of sounds really are appropriate to certain meanings, and this is shown by their occurrence in a number of words of similar meaning: for example, in English we find initial *fl*- in a number of words connected with fire and light (e.g., *flame*, *flare*, *flash*) and in an even larger number of words connected with a flying or waving kind of motion (e.g., *flail*, *flap*, *flaunt*, *flay*, *flicker*, *flog*, *fluctuate*, *flurry*, *flutter*). But it is difficult to see any inherent appropriateness in the *fl*- sound for expressing ideas of flame or flickering motion: the sense of appropriateness surely arises from the fact that it occurs in all these words, not vice versa. And once a group of words like this exists in the language, new words may be coined on the same model (as perhaps happened with *flash* and *flap*), and words of similar form may develop new meanings on analogy with the members of the group (as has perhaps happened with *flourish*). But there are many other words in English which begin with *fl*-, which have nothing to do with flames or flickering, and yet which by long familiarity sound equally appropriate to their meanings, like *flange*, *flank*, *flannel*, *flask*, *flat*, *flesh*, *flimsy*, *flinch*, *flock*, and so on. It is noticeable that, when you learn a foreign language, the words that strike you as particularly appropriate in sound (or, sometimes, as grotesquely inappropriate) are very often ones that do not strike a native speaker in this way.

The Pooh-pooh Theory

- A second theory of the origins of language has been called the pooh-pooh theory. This argues that language arose from instinctive emotional cries, expressive for example of pain or joy. On this view, the earliest linguistic utterances were interjections, simple exclamations expressive of some emotional state. This theory, it seems

to me, suggests some of the material which language may have used, rather than the process by which it arose. The theory does nothing to explain the articulated nature of language, and it does little to bridge the gap between expressive cry and symbol. We can, indeed, imagine how, by association, an emotional cry may have become a signal: a cry of fear or of pain, for example, could easily become a signal which warned the group of danger; but this level has already been reached by the higher animals, which react to signals of this kind; the further step from trigger stimulus to symbol must also be explained. And the theory does not suggest any motivation for this development; a tremendous task like the creation of language would surely have been undertaken only under the pressure of man's needs.

The Ding-dong Theory

- A third theory is the so-called nativistic theory, nicknamed the ding-dong theory. This begins from a fact we have already noticed, namely, that there is an apparently mysterious harmony between sound and sense in a language. On this basis, the theory argues that primitive man had a peculiar instinctive faculty, by which every external impression that he received was given vocal expression. Every sensory impression was like the striking of a bell, producing a corresponding utterance. The trouble with this theory is that it explains nothing: it merely describes the facts in a different terminology, and so is only a pseudoscientific theory.

The Yo-he-ho Theory

- A fourth theory, put forward by the nineteenth-century scholar Noiré, has been called the yo-he-ho theory. This envisages language arising from the noises made by a group of men engaged in joint labor or effort—moving a tree trunk, lifting a rock. We all know from experience that, while performing work of this kind, we make involuntary vocal noises. While exerting powerful muscular effort we trap the breath in our lungs by tightly closing the glottis (the vocal cords); in the intervals of relaxation between the bursts of effort, we open the glottis and release the air, making various grunting and groaning noises in the process; since a stop is released, these noises often contain a consonantal sound as well as a vowel. Vocal noises of this kind might then develop into words meaning such things as "heave!", "rest!", "lift!" This theory has two great virtues: it gives a plausible explanation for the origin of the consonant-vowel structure of language, and it envisages the origin of language in a situation involving human cooperation, with adequate motivation. It also envisages the earliest speech utterances in commands, and we have already seen that there is some linguistic evidence for the antiquity of such imperative forms. Against the theory, it has been argued that it postulates too advanced a form of social cooperation: language, it is argued, would be necessary *before* men could embark on the kind of complex communal labor that the theory demands. I am not sure that this objection is very compelling: we must surely envisage language and cooperative human labor arising *simultaneously*, each making the other possible; they would continually react on one another, so that there would be a progressive development

from the simplest utterances and acts of cooperation to the most complex speech and division of labor.

- 16 A variant of the theory has recently been elaborated by A. S. Diamond. He agrees that the first articulated words were commands, uttered simultaneously with the execution of violent arm movements, but argues that all the evidence shows that the most primitive words did not mean such things as "Haul!" but rather such things as "Strike!"; "Cut!"; "Break!"; he therefore envisages the rise of language in requests for assistance from one man to another in situations where maximum bodily effort was required. He does not speculate on the exact nature of these situations, but presumably they might be such things as tool making, the breaking off of tree branches, and the killing of animals during hunting. Such things might occur at a more primitive stage of human society than the communal heaving suggested by Noizé.

The Gesture Theory

- 17 A fifth theory of the origins of language takes the view that gesture language preceded speech. Supporters of this theory point to the extensive use of gestures by animals of many different kinds, and the highly developed systems of gesture used by some primitive peoples. One of the popular examples is the sign language—formerly used by the Indians of North America; this was an elaborate system of gestures which was used for negotiations between tribes that spoke different languages. It is certainly true that speech and gesture are closely intertwined; the centers in the brain which control hand movements are closely linked with those that control the vocal organs, and it seems highly probable that speech and gesture grew up together. This does not prove, however, that gesture came *first*. And, while it is true that animals use gestures, it is also true that they use cries: the chimpanzee makes signals and expresses its feelings both by bodily movements and by vocal noises, and the same was probably true of early man.
- 18 An extreme form of the gesture theory argues that speech arose very late (round about 3500 B.C.) and was derived from early pictorial writing; this writing itself, it is argued, was derived from gesture language. I must say that I find this incredible. We are asked to believe that man lacked speech right through the Old and New Stone ages, and did not develop it until the time of the city civilizations of the early Bronze Age. But it is difficult to believe that man could have built up the elaborate cultural apparatus of the New Stone Age (agriculture, pottery, weaving, house building, religious burial) without the aid of speech; for a gesture language, however highly developed, has grave disadvantages compared with a spoken language. To use a gesture language you have to have your hands free; but as soon as man becomes a tool maker and a craftsman his hands cease to be free; and the times when primitive man needed to communicate most urgently must have been precisely the times when, he had a tool or a weapon in his hand. It is in fact arguable that it was just this preoccupation of man's hands with tools and weapons that led to the increased importance of vocal language compared with gestures; and this would support the view that spoken language goes right back to the beginning of man's career as tool maker. Gesture, too, has the disadvantage that it cannot be used in the dark, or when

the users are separated by obstructions like trees—a serious disadvantage for a hunting band, which would surely develop hunting calls and similar cries. Nor can a gesture be used to attract the attention of somebody who is looking in another direction, and so it has very limited value as a warning of the approach of danger. None of these disadvantages of gesture can prove that early man had a spoken language, but they do suggest that he had very powerful motives for creating one.

- 9 A more attractive version of the gesture theory is the *mouth gesture* theory, which was strongly argued by Sir Richard Paget and has recently been supported by an Icelandic professor, Alexander Jóhannesson. Paget argues that primitive man at first communicated by gestures; as his intelligence and technique developed he needed more exact gestures, but at the same time found that his eyes and hands were more occupied by his arts and crafts. But the gestures of the hands were unconsciously copied by movements of the tongue, lips, and mouth; and when the man was unable to go on gesturing with his hands because of their other uses, the mouth gestures continued without them, and he discovered that if air was blown through the mouth or nose the gesture became audible as whispered speech; if he simultaneously sang or roared or grunted, he produced voiced speech. To support his theory of the sympathetic movements of the speech organs, Paget quotes a passage from Darwin's book *The Expression of the Emotions*:

There are other actions which are commonly performed under certain circumstances independently of habit, and which seem to be due to imitation or some kind of sympathy. Thus, persons cutting anything with a pair of scissors may be seen to move their jaws simultaneously with the blades of the scissors. Children learning to write often twist about their tongue as their fingers move, in a ridiculous fashion!

- 10 Language was thus produced by a sort of pantomime, the tongue and lips mimicking the movements of the hands in a gesture. As an elementary example, Paget takes the movement of the mouth, tongue, and jaws as in eating, as a gesture sign meaning "eat." If, while making this sign, we blow air through the vocal cavities and switch on voice, we produce the sounds *mnyum mnyum* or *mnya mnya*, which, Paget says, would be universally understood. Similarly, the action of sucking a liquid in small quantities into the mouth produces words like *sip* or *sup*. Paget goes on to analyze large numbers of words in terms of mouth gestures of this kind, and this work has been continued by Jóhannesson, who has examined large numbers of the basic words of the earliest known languages. Some of these analyses strike me as fanciful, and there are times when one feels that, with sufficient ingenuity, any movement of the tongue could be construed as a gesture representing anything one liked. Nevertheless, the theory has considerable plausibility, and must be taken seriously. It has the merit of accounting for the articulated nature of speech, and of giving an explanation for the way the linkage was effected between sound and meaning.

The Musical Theory

- 1 A sixth theory sees the origin of language in song, or at any rate sees speech and music as emerging from something earlier that included both. This theory was put

forward by the great Danish linguist Otto Jespersen. He thought that the bow-wow, pooh-pooh, and yo-he-ho theories could all explain the origins of parts of language; but that none of them could explain the whole of it. His own method was to trace the history of language backwards, to see what the long-term trends were, and then to assume that these same trends had existed since the beginning of language. By this means he arrived at the view that primitive language consisted of very long words, full of difficult jaw-breaking sounds; that it used tone and pitch more than later languages, and a wider range of musical intervals; and that it was more passionate and more musical than later languages. Earlier still, language was a kind of song without words; it was not communicative, but merely expressive; the earliest language was not matter-of-fact or practical, but poetic and emotional, and love in particular was the most powerful emotion for eliciting outbursts of music and song. "Language," he writes, "was born in the courting days of mankind; the first utterances of speech I fancy to myself like something between the nightly love-lyrics of puss under the tiles and the melodious love-songs of the nightingale." A romantic picture.

- 22 It may be doubted, however, whether the trends in language are as constant and universal as Jespersen thinks. His theory assumes that the same kinds of general change have taken place in all languages throughout their history. But we know nothing of languages before the Bronze Age; even if there has been a universal trend in language since the beginnings of Bronze Age civilization (which is by no means certain), it does not follow that the same trend occurred in the Old Stone Age, when man's circumstances were entirely different. Moreover, we have a historical knowledge of relatively few of the world's languages: of the two thousand languages spoken today, only a handful have records going back to the pre-Christian era.

The Contact Theory

- 23 Finally, mention may be made of the contact theory, which has recently been advanced by G. Révész, a former professor of psychology at Amsterdam. He sees language as arising through man's instinctive need for contact with his fellows, and he works out a series of stages by which language may have developed. First comes the contact sound, which is not communicative, but merely expresses the individual's need for contact with his fellows; such as the noises made by gregarious animals. Next comes the cry, which is communicative, but which is directed to the environment generally, not to an individual; examples are mating calls and the cries of young nestlings in danger. Then there is the call, which differs from the cry in being directed to an individual; it is the demand for the satisfaction of some desire, and is found in domestic animals (begging) and speechless infants (crying for their mother); the call is seen as the starting point for both music and language. Finally comes the word, which has a symbolic function and is found only in man. Révész thinks that the earliest speech was an "imperative language," consisting only of commands; this later developed into mature human language, which contains also statements and questions. Révész's sequence of stages is carefully worked out, and is made very plausible. He does not, however, explain how human language came to be articulated; and he places undue emphasis on the instinctive need for contact as a motive

for the invention of language, while rather neglecting the urgent practical motives in cooperative labor which must surely have impelled early man.

The Probabilities

- 24 What are we to make of this welter of theories? It is plain that no finality is possible at present, and that it is merely a matter of weighing the probabilities. It seems to me that we should attach great weight to the question of motivation in the origin of language, since such a great intellectual achievement would hardly have been possible except under the pressure of definite needs. Since the basic function of language is to influence the behavior of our fellow men, this would favor theories that emphasize the origins of language in situations of social cooperation: such for example are the yo-he-ho theory and Diamond's variant of it. However, other theories, such as the bow-wow theory and the mouth gesture theory, can also be adapted to views of this kind. In the second place, I think we should attach great importance to the articulatedness of language, as seen for example in its vowel and consonant structure; and it seems to me the weakness of many theories that they do nothing to explain this structure; the theories that come off best on this count are the yo-he-ho theory and the mouth gesture theory. But at present we cannot reach absolute certainty.
- 25 We must also remain in doubt about the nature of the earliest language, and we do not even know if there was one original language or whether language was invented independently at several different times and places. Jespersen, we have seen, postulates a primitive language that was musical and passionate; he believes that it was very irregular; that it dealt with the concrete and particular rather than the abstract and general; that it contained very long words full of difficult combinations of sounds; and indeed that the earliest utterances consisted of whole sentences rather than single words. Somewhat similar views have been advanced by investigators who have attached great significance to the babbling stages of child speech. But Révész thinks that the earliest language consisted solely of commands; so does Diamond, who argues that these were single words and had the structure consonant-vowel-consonant-vowel (like *bada* or *taka*). The bow-wow theory, on the other hand, demands a primitive language full of imitative sounds like the howling of wolves or the trumpeting of elephants. In the absence of certainty about the origins of language, we must obviously lack certainty about the form which that language took (though the kind of language envisaged by Révész or Diamond seems more plausible than that envisaged by Jespersen).
- 26 Inevitably we remain in the realm of more or less plausible speculation as long as we are dealing with a period which has left us no record of its language. [Only when] we reach periods in which writing was practiced [are we] on much firmer ground.

Questions on Content

1. How can the language of children be used as indirect evidence to explain how language evolved in the first place? How can the languages of primitive peoples be used for this

purpose? The language of higher animals? The language of people with speech defects?

2. What is meant by *imperative language*? How does this concept help to explain one possible origin of language?
3. What is aphasia, and how is it related to language development?

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4. Barber has this to say about the yo-he-ho theory: "It also envisages the earliest speech utterances as commands, and we have already seen that there is some linguistic evidence for the antiquity of such imperative forms" (paragraph 15). What is his linguistic evidence?

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5. How does the quotation from Darwin (paragraph 19) support the theory that language was first produced as a sort of pantomime?
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Questions on Structure and Style

6. How is Barber's presentation organized? How do the section titles help to simplify the presentation?
7. Consider the author's language. For what audience is he writing? How can you tell?
8. How does Barber inject his own opinions into his discussion? Is this method effective, or does it detract from the objectivity you expect in a discussion of such a topic?
9. Discuss the use of transitions in the first nine paragraphs.
10. What does the last section, "The Probabilities," allow the author to do?

Assignments

1. Choose one of the theories about the origin of language, and in a paragraph, explain why you consider it believable or unbelievable. Be sure to cite specific reasons for your opinion.
2. Observe a child who is acquiring language. In an essay, discuss how the child's experiences can help explain the origin of language.

3. Barber points out that "the expressive noises, signals, and gestures of the higher apes show us what man started from in his creation of language" (paragraph 7).
 - A. Observe the gestures and body language of people in similar situations, such as two candidates for the same office, two teachers, or two news broadcasters. In an essay, compare how the two people express themselves non-verbally.
 - B. Observe the different ways in which people greet each other, perhaps in a cafeteria, classroom, or office. Do you notice any patterns in the gestures and body language used by people of different age groups, genders, or social positions? Discuss your findings in an essay.