Reductionism vs. Functionalism

Should physiology ever progress to a point where it can demonstrate psychology -- which I greatly doubt -- it would derive many a ray of light for this phenomenon, though it might also divide it in individual, excessively small, and obtuse filaments. (pp. 87-88)

Neuroanatomical Basis of the Evolution of Language

And thus I note that the less human nature is akin to an animal species, the more the two differ in their nervous structures, the less shall we find the natural language of that animal species comprehensible to us. We, as animals of the earth, understand the animal of the earth better than the creature of the waters; and on the earth, the herd animal better than the creature of the forest; and among the herd animals, those best that stand closest to us.... The rule remains that this language of nature is a group language for the members of that species among themselves. And thus man too has a language of nature all his own. (p. 89)

Remnant Human Vocalizations vs. Speech

That man has such a language, has it originally and in common with the animals, is nowadays evident, to be sure, more through certain remains than through full-fledged manifestations. (p. 88)

In all aboriginal languages, vestiges of these sounds of nature are still to be heard, though, to be sure, they are not the principal fiber of human speech. They are not the roots as such; they are the sap that enlivens the roots of language. (p. 91)

In so far as we may call these immediate sounds of sensation language, I do indeed find their origin most natural. It is not only not superhuman but obviously animal in origin: The natural law of a mechanism endowed with feelings.

But I cannot conceal my amazement that philosophers -- people, that is, who look for clear concepts -- ever conceived of the idea that the origin of human language might be explained from these outcries of the emotions: for is not this obviously something quite different? (p. 99)

Discontinuity and the Biological/Genetic Basis of Language

In man everything is in the greatest disproportion -- his senses and his needs, his powers and the sphere of endeavor awaiting him, his organs and his language. — We must be missing a certain intermediate link to calculate such disparate parts in the proportion.

Were we to find that link, by all analogy in nature it would make good man’s loss and be peculiarly his, be the distinctive character of his race: and all reason and all fairness would
require that we regard what we have found as what it is, a gift of nature, no less essential to him than instinct to the animals.

And were we to find in that distinctive character the cause of those wants and precisely in the area of these wants -- at the bottom of his great deprivation of artifactive drives -- the germ of a corresponding replacement: then this fitting accord would be a genetic proof that here lies the true direction of mankind and that the human species stands above the animals not by stages of more or of less but in kind.

And were we to find in this new-found distinctive character of mankind possibly even the necessary genetic cause of the origin of a language for this new kind of being, as we found in the instincts of the animals the immediate causes of a language for each species, then we have reached our goal. In that case language would become as essential to man as it is essential that he is man. (p. 108)

It is the unique positive power of thought which, associated with a particular organization of the body, is called reason in man as in the animal it turns into an artifactive skill; which in man is called freedom and turns in the animal into instinct. The difference is not one of degree nor one of a supplementary endowment with powers; it lies in a totally distinct orientation and evolution of all powers. (p. 110)

**Nativism**

Parents never teach their children language without the latter, by themselves, inventing language along with them: Parents merely draw their children’s attention to differences between things by means of certain verbal signs, and consequently they do not replace, but only facilitate and promote for them, the use of reason through language. (p. 121)

**Mental Representation and Symbolic Capacity**

As the human soul can recall no abstraction from the realm of the spirits to which it did not advance through opportunities and arousals of the senses, so no language has an abstract term to which it was not led through tone and feeling. And the more original a language, the fewer its abstractions and the more numerous its feelings. (p. 155)

If animal sensuousness and the animal’s limitation to a single point were omitted, another creature would have come into being, one whose positive powers expressed themselves in a vaster realm, after a finer organization, with greater light; one which in separation and in freedom does not achieve only knowledge, follow its will, and pursue its work, but which also knows that it achieves its work. This creature is man, and this entire disposition of his nature...we shall call reflection. (p. 112)

Man manifests reflection when the force of his soul acts in such freedom that, in the vast ocean of sensations which permeates it through all the channels of the senses, it can, if I may say so, single out one wave, arrest it, concentrate its attention on it, and be conscious of being attentive. He manifests reflection when, confronted with the vast hovering dream of images which pass by his senses, he can collect himself into a moment of wakefulness and dwell at will on one image, can observe it clearly and more calmly, and can select in it distinguishing marks for
himself and so that he will know that this object is this and not another. He thus manifests reflection if he is able not only to recognize all characteristics vividly or clearly but if he can also recognize and acknowledge to himself one or several of them as distinguishing characteristics. The first act of this acknowledgment results in a clear concept; it is the first judgment of the soul -- and through what did this acknowledgment occur? Through a distinguishing mark which he had to single out and which, as a distinguishing mark for reflection, struck him clearly. Well, then! Let us acclaim him with shouts of eureka! This first distinguishing mark, as it appeared in his reflection, was a work of the soul! With it human language was invented! (pp. 115-116)

The sound of bleating perceived by a human soul as the distinguishing mark of the sheep became, by virtue of this reflection, the name of the sheep, even if his tongue had never tried to stammer it. He recognized the sheep by its bleating: This was a conceived sign through which the soul clearly remembered an idea -- and what is that other than a word? And what is the entire human language other than a collection of such words? Even if the occasion were never to arise for him that he should want or be able to transmit this idea to another being, and thus to bleat out with his lips this distinguishing mark of reflection for another, his soul -- as it were -- bleated within when it selected this sound as a sign of recollection, and it bleated again as it recognized the sound by its sign. Language has been invented! Invented as naturally and to man as necessarily as man was man. (pp. 117-118)

**Vocal Tract Theories of Language Evolution**

Most of those who have written about the origin of language did not look for it here which is the only place where it could be found. And many have therefore been in the throes of innumerable dark doubts as to whether it might be found anywhere within the human soul. It has been looked for in the superior articulation of the organs of speech. As if every orangutan with precisely the same organs had invented a language. It has been looked for in the sounds of passion. As though it were not true that all animals have these sounds and as though any animal had invented language from them. It has been assumed to be a basic principle that man wants to imitate nature and hence also nature’s sounds. As though such a blind inclination had any room for thought. As though the ape with precisely this inclination, or the blackbird which is so well able to mimic sounds, had invented a language. Most, finally, have assumed a mere convention, an agreement, and against this Rousseau has spoken the most vehemently, for what an obscure and involved term is this, a natural agreement of language? (p. 118)

**Protolanguage**

The human race in its childhood formed language for itself precisely as it is stammered by the immature: it is the babbling vocabulary of the nursery. Where does it survive in the mouth of the adult? (p. 135)