THE CONCEPTS OF PRONUNCIATION AND SPELLING AND THEIR CONNEXION WITH NATURAL SPEECH

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ABSTRACT

The distinction between technical scientific concepts and ordinary, non-technical concepts of everyday language is explained and it is claimed that the content of a non-technical concept of everyday language can in principle not be reconstructed by means of a formal definition within a formal theory or calculus since the content of a concept is its use in the contexts where it belongs. In view of this fact linguistic theories and technological models of natural speech are found to suffer from intrinsic difficulties. Empirical studies of pronunciation and spelling seem to offer better promise for Phonetics.

PHILOSOPHICAL POINT OF DEPARTURE

A philosophical point central to the reasoning in this paper is the distinction between technical scientific concepts on one hand and ordinary, non-technical concepts of everyday language, on the other hand. *Technical scientific* concepts are explicitly defined concepts with formally regulated uses in some technical calculus or scientific theory, while *non-technical concepts* are simply the uses of words in the common praxis of ordinary language.

I should like to emphasise the radical difference between these two types of concept. Specifically the content of a concept of ordinary language can not be explicated by means of a formal construction of a technical scientific concept [1]. The formally constructed concepts of *phoneme*, for instance, which occur in many contemporary linguistic theories of phonology do not explicate what is meant in the parlance of ordinary language by a speech sound. The linguistic concepts of phoneme are *different* concepts than the ordinary language concept of a speech sound, the difference consisting in their essentially different forms of use - technical *versus* non-technical, respectively. This difference implies that the contents of the two kinds of concept become qualitatively different, the contents being the uses of the concepts in the contexts where they belong.

The same may be said about the 'speech' concepts of contemporary speech technology. The outputs of a speech synthesiser of a text-to-speech system, for example, are *not* speech sounds in the same sense that the speech of a living human being can be said in ordinary language parlance to consist of speech sounds.

The reason is the technical-theoretical setting of almost all modern concepts of speech research which rests on advanced applications of the theories of physical acoustics, of digital signal processing, and of other related areas of modern speech engineering. This setting or context make the relevant technical concepts alien to everyday experience.

These conceptual differences go to show that the 'speech' generated by linguistic phonology and by speech technology is not speech in the sense known to the user of ordinary language but that it is something radically different. Possibly this radically different matter may be given important uses in *some* circumstances of practical life. E. g. it may sometimes replace the use of real speech.

PRONUNCIATION AND SPELLING

The concepts of pronunciation and spelling are non-technical concepts of ordinary language that we learn to use in connexion with our learning to read and write in childhood [2]. In essence this learning consists in developing the ability to project the orthographic representation of speech on spoken utterances, i. e., it involves learning *to hear* spoken utterances as strings of sentences consisting of words with a definite spelling in the letters of the alphabet.

Concepts such as *sentence, word, syllable, vowel, consonant, stress,* and suchlike are consequently non-technical in their most common forms of use. Of course, these terms are also taken up in the science of linguistics where they are given technical uses by means of stipulative definitions and formalised modes of reasoning. Further technical uses may be given to them in speech technology. Their most immediate (least mediate) connexion with natural speech is however found in their ordinary language uses [3].

REFERENCES

[1] S. Stenlund *Language and Philosophical Problems*, Part I, Routledge 1990.
[2] C. Liberg *Learning to Read and Write*, RUUL 20, 1990, Doctoral Dissertation, Uppsala University, Department of Linguistics.
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