Language and linguistics

RESEARCH ON THE MECHANICAL RECOGNITION OF SPEECH

71–177 Pulliam, Robert. The mechanical recognition of speech: prospects for use in the teaching of languages. *ERIC Clearinghouse for Linguistics Bulletin* (Washington, DC), 18 (1970), 1–7.

In 1928 a 'vocoder' was produced which could separate a voice signal electrically into its component sound frequencies. This led to the hope of building a machine which could recognize spoken phonemes and formulate speech synthetically. The following years brought a deeper understanding of the complexity of language and of the speech signal but not until 1968 was there any noticeable success. The research for this is of interest to teachers because it offers the hope of more effective teaching machines which will be able to recognize and evaluate a student's spoken response. [An explanation is given of what speech recognition is.] Two projects are now known to exist using automatic speech recognition as part of an instructional system, one of which should be ready for demonstration within a year. When it is sufficiently developed, automatic speech recognition should make teaching machines more effective and humane. [Bibliography.]

ABL ELX

SEMANTICS

71–178 Brink, Lars. Semantic boundary lines in languages and their influence on our cognition of the surrounding world. *Acta Linguistica Hafniensia* (Copenhagen), **13**, 1 (1970), 45–74.

This paper is an analysis of a number of arguments put forward by various authors to the effect that linguistic phenomena in our mother

tongue influence our mental life and our cognition of the surrounding world – that language influences, constrains thought. These arguments are refuted. Subsequently the author himself advances other arguments to the same effect, but tries to formulate with greater precision this crucial linguistic-philosophic problem, maintaining that the statement 'language constrains thought' may either mean 'certain linguistic phenomena must *necessarily* lead all people to a certain cognition of the surrounding world' or 'certain linguistic phenomena have, *as a matter of fact*, led certain people (possibly all people) to a certain cognition of the surrounding world and will probably continue to do so'. The author's arguments to the effect that language constrains thought are only valid in the latter sense. The author denies that language constrains thought in the former sense. [Summary reproduced by kind permission of the author and the editors of *Acta Linguistica Hafniensia*.]　　　　**ADB ADF**

BILINGUALISM

71–179　Macnamara, John. Comparative studies of reading and problem solving in two languages. *TESOL Quarterly* (Washington, DC), **4**, 2 (1970), 107–16.

The author describes a series of investigations, carried out with bilingual subjects in Ireland and Montreal, to establish whether there is a demonstrable difference between grasp of the one language and grasp of the other, and if so, in what the difference consists. It was found that there is such a difference, the effects of which are demonstrated by tests of problem-solving ability and by tests analysing reading skills. The slower rate of reading in the weaker language allows the reader no time for thinking about what he has read.

AFG ASP

71–180 Titone, Renzo. Aspetti psicologici del bilinguismo. [Psychological aspects of bilingualism.] *Scuola e Lingue Moderne* (Modena), **8**, 5 (1970). 147–50 and **8**, 6 (1970), 179–82.

True bilingualism (equi- or ambi-lingualism), common in young children, involves two parallel but distinct codes of verbal behaviour in one neuropsychological system, for instance facility in code-switching without need of translation, and thought connected directly to expression in either language. Despite its high incidence and the increasing need for bilingualism in modern life, little is known of the effect of individual bilingualism on personality or of the means by which it is achieved. Studies to date comprise parents' biographies of their children, studies where socio-economic or acculturation factors play a part, and investigations into the intellectual and scholastic benefit of bilingualism in monolingual and bilingual groups. Mocaer's study of 1905 marks the beginning, and the problems can be resolved under three heads: (1) the co-existence of two linguistic systems (first defined by Ervin and Osgood; the two systems can remain separate on both phonetic and semantic levels in *coordinate* bilingualism, or can fuse, usually on the semantic level, in *compound* bilingualism, the latter admitting of the interference phenomena both structural and extra-linguistic which have been most fully studied by Weinreich); (2) the effect of bilingualism on the intelligence of the young child or adolescent (pre-war studies led to contradictory conclusions, but more recent work points to the advantages the bilingual child has over the monolingual in general linguistic development, concept formation and mental flexibility); (3) effects of bilingualism on other aspects of personality: emotions, character, behaviour etc. (Personality problems, for instance family harmony, seem to derive from bicultural rather than bilingual causes.) Co-ordinate bilingualism is most easily achieved if the languages are learned in distinct cultural situations.

Pointers are generally towards the advantages of bilingualism and the advisability of beginning second language learning between the ages of four and eight for optimum results. **AFR AGR**

LANGUAGE IN AFRICA

71–181   Welmers, William E. Language change and language relationships in Africa. *Language Sciences* (Bloomington, Indiana), 12 (1970), 1–8.

Some internal changes in languages are not systematic and apart from written records these changes are unrecoverable and may obscure relationships. External influences are also non-systematic, and critics of Greenberg's classification of African languages complain that he ignored certain aspects of language history, particularly external influence, and also some internal changes. The lexical stock of a language may have a mixed background but the genetic relationships will still be visible in the structure. Africa has known the phenomenon of a substantial group of people moving into a new linguistic environment and adopting a new language. Such a community may retain its ethnic identity for generations and there will be a period of bilingualism, but the community gradually conforms to the new language and there will be scarcely any contamination of the new language by the old. [Examples from West African languages.] The possibility of the appearance of new creole languages sufficient to distort the reconstruction of language relationships is considered negligible and genetic relations posited by Greenberg are considered to be still valid. [Bibliography.]

960 AD

71–182   Topan, Farouk. What is national literature? *Language Association of Tanzania Bulletin* (Dar es Salaam), **2**, 2 (1970), 11–13.

Kiswahili is the national language of both Tanzania and Kenya. Literature written in this language could therefore be said to be the national literature of both countries. Some countries, such as Uganda, have not yet agreed on the adoption of a national language and here one might speak of literature written in *a* national language. It has to be remembered that national boundaries in East Africa are recent and much literature existed before they were drawn. Like much else in newly-formed societies, literature is something to be built up or

144

perhaps less self-consciously left to create itself. At present 'national' literature has no past but its future purpose, function and development can be considered.

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