invited guests. The Czechoslovak Academy of Sciences played host for the occasion by making available the 250year-old baroque castle, at Liblice, which it has developed as a countryside center for its general scientific functions.

Diversion from the scientific sessions was provided by a recital of violin sonatas played at the castle by P. Hník (Prague), and by trips to Prague to see some of its extraordinary architectural grandeurs and attend various ballet and symphony performances. The farewell banquet was highlighted by many spirited toasts warmly expressing appreciation for the cordial hospitality of the Czechoslovak hosts and the generally gratifying experience enjoyed by all throughout the symposium.

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Kinesics and Paralanguage

The developing study of nonverbal communication was discussed in an Interdisciplinary Work Conference on Paralanguage and Kinesics, held recently in Bloomington, Indiana. The forms of communication principally discussed were body motion and those aspects of speech which are designated paralanguage, rather than language itself. Workers from the fields of psychiatry, psychology, education, cultural anthropology, and linguistics participated.

At each of the five sessions a paper was presented to cover, from the points of view of bibliography and theory, the contributions which the discipline in question may be expected to make to a study of the different modalities of communication. Peter F. Ostwald showed how the clinician must be able to collect all available information about a patient's mental and physical state, including signals which are sometimes culturally patterned and sometimes purely physiological. George F. Mahl, in a paper prepared by himself and Gene Schulze, gave an extensive survey of relevant psychological literature, much of it methodological, and an outline of the potential formulations of extralinguistic research in terms of

theories of development, motivation, adaptation, and characterology. Alfred S. Hayes combined a discussion of the specific development of these two fields, especially the work of George L. Trager and Ray L. Birdwhistell, with an analvsis of possible applications in the field of foreign language teaching. Weston LaBarre discussed some of the many contexts in which anthropologists have handled material related to kinesics and paralanguage, and some of the questions that further research may be expected to answer. In a paper on linguistics, Edward Stankiewicz discussed the problems of emotive language and the ways in which the noncognitive aspects of communication impinge upon and overlap verbal communication.

Because of the present state of development of linguistics, a great part of the discussion centered on the usefulness of the linguistic model in the handling of paralinguistic and kinesic data, and on the difficulty of isolating units for analysis, apart from language proper, and of identifying the level on which they function. However, a developed theory of communication, or semiotics, would have to include communication through touch, smell, and taste as well as through sight and hearing; in the visual mode, at least, two codes would be needed to account for the data, standing in the same relation to one another as language and paralanguage.

The need for a unified, interdisciplinary approach was indicated by the fact that different cultures vary in the extent to which they exploit or rely on any one mode of communication, and the fact that the same observed material may be shown by analysis to belong to different levels of the total system in different societies. Since interaction is a continuous process and communication through such means as posture may be effected over long periods, the tendency, characteristic of linguistics, to study only one party to the communication system, in isolation from his social environment, is partly responsible for the fact that paralinguistic and kinesic theory have been so late in developing.

Similar limitations on observation have characterized psychiatry and psychology. Thus, much of the increased

interest which led to the organization of the conference stems from the work of anthropologists. However, the need for an expanded framework in which to study communication is apparent in all disciplines. On the one hand, a great part even of verbal behavior can be analyzed only in the context of the total interactive communication system, and thus, in a purely linguistic analysis, was often ignored or consigned to footnotes; on the other hand, many data, especially for diagnostic purposes, may be more readily available in nonverbal behavior. if it can be systematically recorded. As for pedagogy, it was felt that encouraging language students to a general imitation of foreign speech and gestures, through moving pictures or informants, is more practical than an analytical approach, provided the language teacher is aware of the importance of paralinguistic and kinesic material. It was strongly recommended that further interdisciplinary seminars be held and that training programs be set up.

A lecture by Margaret Mead in the "Horizons of Knowledge" series was correlated with the conference. She will provide a general overview of the conference in a volume, to be published by Mouton, which will include revised versions of the five papers and transcripts of the discussion. The volume will be edited by Thomas A. Sebeok and Alfred S. Hayes, assisted by Mary Catherine Bateson.

Among the 60 scholars who were present at the conference, held from 17 to 19 May 1962, were Emma M. Birkmaier, representing the National Education Association; Charles A. Ferguson, for the Center for Applied Linguistics; A. Bruce Gaarder, for the Office of Education; John Lotz, for the American Council of Learned Societies; Klaus A. Mueller, for the Associated Colleges of the Midwest; Donald Walsh, for the Modern Language Association; and Harold Wooster, for the Air Force Office of Scientific Research. The conference was sponsored by the Indiana University Research Center in Anthropology, Folklore, and Linguistics, under a contract with the U.S. Office of Education.

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