SOCIAL FACTORS IN SOUND CHANGE: Summary of Moderator's Introduction Einar Haugen, Department of Linguistics, Harvard University, Cambridge, MA 02138, U.S.A.

The papers offered in this symposium may be divided into "the-oretical" and "empirical", even though of course both types of research are represented in all. The papers by Birnbaum, Fónagy, and Malmberg are primarily theoretical, Brink/Lund, Labov, and Peng primarily empirical.

Birnbaum offers for discussion a model of linguistic change originated by Henning Andersen, in which the key word is "abduction", especially applicable to the process of linguistic decoding. Birnbaum is critical of certain aspects of this model, especially its implication that a speech community may be homogeneous or consist of neatly separable generations.

Fónagy is concerned with the idea offered by some that intonation is a non-arbitrary, naturally motivated phenomenon. To disprove this he offers samples from French and Hungarian of how intonations can change their signification over time and become arbitrary expressions associated with particular social groups.

Malmberg takes as his starting point his own earlier studies of the Parisian vowel system, in which he found an "état de langue" which included two systems, a "maximum" and a "minimum" system of vowels between which the speaker could choose. The "minimum" system represented a simplification, which Malmberg attributes primarily to "peripheral" learners of the language, whether they be socially or geographically marginal, i.e. lower class or colonial, the latter exemplified by Spanish in the Americas.

Brink and Lund (here Brink/Lund) have completed a massive study of Copenhagen speech from 1840 to 1955, based on the recorded voices of speakers born between these dates. Their researches have uncovered some 60 phonetic changes (which they call "sound laws") that characterize this period and permit them to classify their speakers into two groups, according to whether they speak "high" or "low" Copenhagen.

Labov's paper sums up some of the conclusions at which he has arrived on the basis of his classic studies of Martha's Vineyard in Massachusetts, the Lower East Side of New York City, and the city of Philadelphia. He has been a pioneer in developing a technique of selecting "social markers" which permit him to place speakers rather accurately on the socioeconomic scale.

Finally, Peng presents a summary of his studies of the linguistic changes in the city of Tsuruoka in Japan, data gathered by his colleague Nomoto in the years 1950 and 1971, in many cases from the same informants. Out of this material he has drawn conclusions that reduce the time span within which one can observe linguistic change even more drastically than Labov: he contends that it is possible to identify linguistic change within a single generation.

Each of these papers brings something to the elucidation of a problem that has baffled linguists ever since the regularity of sound change was firmly established early in the nineteenth century. The causes of sound change were vainly sought in everything from climate to human physiology. Until recently linguists were convinced that change was so slow that it was inaccessible to direct observation. Diachronic linguistics became the study of the past, historical and even paleontological, while a synchronic linguistics sprang up which was based on assumptions of heuristic stability and uniformity, as language might wishfully appear to the prescriptive grammarian.

The Prague School declared that the ideal standard language should possess both stability and elasticity, i.e. it should be flexible enough to change and yet conservative enough to seem unchanging. They did not realize that this paradox could and must apply to every variety of human language; its latest synonym is Labov's expression in describing his concept of language: "orderly heterogeneity". He opposes this to Chomsky's "ideal homogeneity", but in fact his variable rules are a formalization of the concept of "elasticity", while categorial rules reflect "stability". Questions have been raised about the statistical nature of variable rules: how can a speaker know that he is going to use one sound 66% of the time and another the remaining third?

Part of the answer comes from the painstaking analysis by Brink and Lund of the recorded materials from Copenhagen. They have offered no statistics, but in their big book (unfortunately available only in Danish) they have traced from decade to decade how certain changes arose, how speakers vacillated from one to the other form, and how new generations resolved the conflict by choosing one or the other of the alternatives. It is clear that the concept of "choice" with which Malmberg operates has been at work, but it is not clear that it has been a choice between two or more coherent levels of speaking. Even with the masses of data now being accumu-

lated in such studies, including Labov's and Peng's, we are far from knowing why these choices are made, either individually or collectively. Such a study would be an infinite regression going far beyond the realm of linguists' competence, especially if the goal were to construct some kind of predictive model that would tell us what kind of changes the future will bring. Brink/Lund's material shows clearly that at any given point in time there is a great deal of unstructured heterogeneity, vacillation which may either lead to innovation or regression.

Our contributors differ sharply on certain crucial aspects of the problem. Brink/Lund flatly assert that regular "sound changes occur between generations (in our opinion innovations come from children, who - under mutual influence - retain while growing up a few of their originally many deviations from the adult language)". They refer to recordings of the same persons from 30 to 50 years apart in which one could detect virtually no change. Against this Peng claims that the changes passed on are those that young people have developed up to the age of 35, when they communicate them to their children. Against these extreme views we may place Birnbaum's judicious remark that there is a "continuous pattern-setting effect of parents on children, teachers on students, leaders on followers, older on younger playmates and fellow workers, more prestigious on less prestigious...".

There is also some difference of opinion on the role played by social classes and other groups in the activation of change. Labov has found that the upper working or lower middle class leads in changing, while Brink/Lund hold that in general the lower classes of Copenhagen have been in the lead, as being the majority, if not the most prestigious socially. The difference may be more terminological than real, for it is hard to compare the finely graded scale of socioeconomic status developed by Labov with Brink/Lund's linguistic division of the entire population of Copenhagen into two groups, the H-speakers and the L-speakers. On one point all are agreed: that women have more H-features than L-features, though Brink/Lund will not grant that there is a special female sexolect.

Both Peng and Malmberg emphasize that it is not language that changes, but people who change language. This is clear enough when we speak of the adoption of new words or the learning of new dialects and languages, but for phonology the functioning is so automatized and deeply embedded in the subconscious that it has been

difficult to find any clear social causes for specific changes, e.g. Umlaut or the Germanic consonant shift.

I would suggest that we do know a good deal about the causes of sound change, but we have made little progress in predicting its results. But at least we now have techniques and instruments that enable us to catch it on the wing and study it while it is going on. We still have a long way to go before we can learn to control it, if we should ever wish to do so. In this respect we are no worse off than any other social science.