Assignment 3

PROBLEM STATEMENT : Pronunciation of [ə] phoneme by bilingual speakers of Bengali and Hindi living in Hindi speaking belt.

One of the distinct phonemic difference between Hindi and Bengali, is that in Hindi the role of the vowel [ə] which is implicit in each consonant is played by [ɔ] in Bengali. Over the years, native speakers of Bengali have moved out of their native place and settled in different parts of the primarily Hindi speaking belt of India. According to my hypothesis, people who have been using Hindi formally over the years, will show a distinction in their pronunciations of [ə] and [ɔ] though they might have never formally learnt Hindi. Also the percentage of [ə] spoken in it's correct position as [ɔ] will be more for people who have stayed in regions for a short period of time will be low. Their speech will also be compared against people living in Bengal and speaking Hindi to make a relativistic comparison.

The linguistic variable in the problem statement is the usage of the phoneme [ə] while the social variable is the speech community to which the person belongs.

The Speaker Sample :

The informants will be divided into 5 categories, about 30 from each major category. The 5 categories would be as follows :

I. Native speakers of Bengali, who haven't learnt Hindi formally, living in the Hindi speaking belt for 5 years.

II. Native speakers of Bengali, who haven't learnt Hindi formally, living in the Hindi speaking belt for 10 years.

III. Native speakers of Bengali, who haven't learnt Hindi formally, living in the Hindi speaking belt for over 10 years.

IV. Native speakers of Bengali, who haven't learnt Hindi formally, living in non-metropolitan Bengal since birth and can understand Hindi.

V. Native speakers of Bengali, who haven't learnt Hindi formally, living in metropolitan Bengal since birth but can understand Hindi.

The categories will be further divided into 3 subcategories. Each subcategory having speakers belonging to the age groups

I. less than 21 years of age

II. 21 – 50 years of age

III. over 50 years of age

The age groups are chosen so as to represent the young, the middle-aged and the old. Here we also want to control the factor that the newer generation might show better performance in their usages of their [ə]. Also the last two major categories of subjects is ə control to compare between people living in their native places vs people living in Hindi speaking regions and whether increased interaction with the Hindi speaking community is the reason for the increase in performance in the usage of [ə].

Procedure for Data Collection :

The data need not be collected in the natural environment of the speakers. It can be collected in a controlled environment like in a laboratory in the form of a questionnaire or an interview of about 15 minutes. The data will be recorded for annotation later.

A sample questionnaire could/may include asking the person to translate a set of sentences given in Bengali into Hindi verbally. Also a general interview of the informant in Hindi asking questions whose answers would most probably have the phoneme as it is particularly present in each and every Hindi word and very common in day to day conversations.

The collected data will be recorded using audio recorders for annotations later as very minute differences between the phones [ə] and [ɔ] might be difficult to differentiate in the first attempt as the possibility of some of the subjects using a more anterior variety of [ɔ] which is neither proper [ə] or [ɔ] but a middle variety as a substitute for both.

Analysis of Data Collected

We can then analyse the data taking the last two categories as our base case and then finding the percentage of error in their speech. Also we must remember that in careful speech, the percentage is possible to drop. So during data collection, the subjects must not know why they are being interviewed. The total percentage of usage by each group can be calculated by counting the occurrences of [ɔ] in it’s incorrect positions. We can do this for all the 150 subjects. We can then plot the data into a histogram for a better visual representation and draw conclusions out of it.