Linguistics 2: Language and Society

Assignment 3

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Problem Statement:

Finding a correspondence between the use of [snan] or [chan] (meaning: a bath or a shower) among native speakers of Bengali in Kolkata who are above thirty years of age, and their level of education. [chan] is actually a consonantal simplification of [snan] which is the word form for a 'bath' or 'shower' in standard Bengali (Kolkata dialect) having Sanskrit origins. The linguistic variable here is the use of the consonantal sound [sn] or [ch] and the social variable is the highest level of education attained by the person. I consider 3 classes for highest level of education:

1) Attended School till the 5th standard
2) Attended school till the 12th standard
3) Attended college.

The hypothesis being that a class of higher level of education will have a higher percentage of speakers using the [sn] sound, I record speech data from my subjects. Any native speaker of Bengali who is over thirty years of age is a valid subject. I am not really concerned about the person's gender and I hypothesize that gender will not play a major role in the choice of [sn] or [ch]. My sampling of subjects will consist of people residing and working in Kolkata. Note that, we are only trying to capture the variation within the dialect of Bengali spoken in Kolkata.

I will have a sample size of roughly nine hundred speakers with almost similar magnitudes of speakers belonging to each of the three social brackets based on the highest level of education attained by the person. This sample size having about three hundred speakers from each category should be a good platform to generalize for the population size with sufficient accuracy. My sampling will be randomized and I shall avoid interviewing more than a handful of people with similar social and educational backgrounds. This will promote some divergence in my data set. If we have proper classification ratios for the entire population, we can calculate our final results based on the weighted average of obtained results for various social groups based on the class cardinality ratio. However, this can be too much to ask for in India since this kind of data is not properly documented and the records maintained by the local authorities are usually erroneous and misguiding. Therefore, we adopt a basic approach initially, involving simple computation of percentages and we achieve a distribution in the sample set, similar to the one in the population by considering a randomized sample.

My method of collection will be a bit tedious. But it is not too complex and is worth the effort. I will show a two minute highly paced up video clip having small snippets of various events such as the sun setting, a baby panda sleeping, a dog barking, a bell dangling, a little boy taking a shower, a black panther, a blue rose, etc. I will ask the subject to list as many events as possible in thirty seconds. The time constraint will be sufficient to bring out the casual

speech of the person as he/she will be actively involved in recalling the events and not on formalizing his/her speech. The little boy taking a shower will be the only human element in the entire video clip and should psychologically stand out in the viewer's mind. Note that we are not stopping after thirty seconds though; we continue to observe and record the response. Also note that the fact that the data is being recorded is not disclosed to the subject. This might seem rude but it is necessary. This isn't illegal as I am not sharing the data in any form. The record is maintained such that if we need the data for analyzing something else in future, we do not have to go conduct the experiment all over again. The only binary factor we note down is the use of the form [sn] or [ch] while the speaker mentions the fact that he/she saw a boy taking a shower.

This interview method basically simulates a game which shifts the focus from language use to recalling observed events in a highly constrained time frame giving us instant, unornamental, completely informal, casual response from our speakers. The video clip will be carefully constructed. A few seconds of each snippet and then a follow up snippet showing the same event. For example, suppose we show a baby panda sleeping at 0:30 for 4 seconds, we show it again for 3 seconds at 1:27 let's say, such that it gets properly embedded in the viewer's mind. We include the boy's bathing snippet towards the very end (say at 1:40 for 5.5 seconds). This should give us some psychological advantage in enhancing the number of events shown in the video which the user can recall correctly, and his/her recalling the fact that he/she saw a boy bathing. We can also play a sound file of continuously repeated heartbeats in the background during the evaluation phase to enhance the fact that the time constraint is valid and the subject should hurry up in order to list all the events he/she witnessed.

The binary variable involving the use of [sn] or [ch] will be noted corresponding to a particular person with his/her highest attained level of education (which has 3 values) obtained as a list. This method is clearly the sanest data pre-processing to perform in the given scenario and has no apparent drawbacks. We will also enumerate the number of people using [sn], in each bracket of "highest level of education attained". We therefore have 6 figures to consider:

n1: number of speakers who have attended school till the 5th standard and used [sn]
n2: number of speakers who have attended school till the 12th standard and used [sn]
n3: number of speakers who have attended college and used [sn]
T1: Total number of speakers in the sample who have attended school till the 5th standard
T2: Total number of speakers in the sample who have attended school till the 12th standard
T3: Total number of speakers in the sample who have attended college.

We compute the corresponding percentages as:

Pi = ((ni / Ti) x 100) %   for i = 1, 2 and 3.

A lot of interesting cases can arise from this data and we have to analyze and interpret them accordingly. We have the following facts about the problem at our disposal:

1) [chan] is colloquially used by people in conversation while [snan] is the standard word form to express the thought of taking a bath or a shower in Bengali. Many speakers of Bengali

do use [snan] and not [chan] in everyday conversation and they seem to be the people who are literate and know how to read and write Bengali.

2) [snan] is the word form which is used in Bengali text. In most pieces of Bengali literature (apart from some recent works in which the writer uses some direct speech), [snan] is the used form while [chan] is almost never used anywhere. Thus, there seems to be some sort of superiority such that [snan] emerges as the "more correct" word form referring to bath or shower in standardized Bengali.

3) However, [chan] is used by a far greater number of people than [snan] is, in daily conversation. This is partly due to the fact that the [ch] consonant sound is much easier to pronounce than [sn]. [ch] emerged as a consonantal simplification of [sn].

4) Some people do use [chan] in formal as well as informal conversation but when they are asked which is the correct form, they answer that its [snan]. Most people seem to use both the forms in their speech and there does not exist a clear demarcation as to when or where they use a particular form. The usages are more or less in free variation for most speakers of Bengali (this can also be verified experimentally by interviewing a sufficient number of native speakers of the language).

Therefore, we would expect that P1 > P2 > P3 such that the amount of use of [sn] correlates with degree of formal education attained by the native speaker. However, this is just an estimate based on trivial observation and intuition, and has no scientific basis. We need sufficient data to establish this result. A different relation between the Pi's might call for a different conclusion and has to be addressed accordingly.

Once we have the information about the percentages P1, P2 and P3; and we come to a particular conclusion, we can extend our study and our problem statement to include a division among age groups within a particular class based on highest level of education obtained. This will provide us with further statistics on the direction in which the shift is taking place in terms of the use of [sn] and [ch]. Intuitively, there seems to be a shift towards the use of [ch] and exclusion of [sn] in speech by Bengali speakers and this can be formally verified as a consequence of our experiment.

This study raises questions on the validity of language purism and the extent to which it promotes a shift in a particular direction while considering a particular linguistic parameter of a language. The fact that languages change over time due to consonantal simplification is well observed and documented in other languages of the world. English is a fine example of this. Evolution of a language based on ease of use, and the corresponding shift which usually ends up in the extinction of one form (while the other form takes over in both the written and the spoken forms of the language) is a phenomenon which is currently taking place for Bengali and the shift direction is pretty apparent. Therefore, this study will provide us relevant insights into larger issues in social and psychological linguistics and can be generalized further to obtain intuition about similar phenomena in other languages of the world.