

## SIMULATION OF PHONOLOGIES

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The object of this presentation is to indicate the existence of a computer system that uses phonological rules as a basis for applying rules to data. This system, PHONOL, can be used by researchers who wish to develop and test a system of phonological rules for a given language.

The main advantage of this tool is that, while it applies rules, the phonologist is not required to learn how to write computer programs. Due to the precision, simplicity and rapidity of PHONOL, the phonologist is enabled to attend to the application of his theoretical knowledge to his chosen problem.

To use PHONOL, the researcher submits a set of rules and a set of base forms to the computer. For each base form PHONOL produces a derived phonetic form, and lists the names of any rules which have applied.

Given results, the researcher would typically change rules or data as needed, and repeat the process in an attempt to produce a consistent set of rules that can account for a representative corpus.

Some secondary aspects of PHONOL are to be noted in this presentation, three of which are:

- (1) the production of all phonetic variants obtainable from a base form, given that one or more rules is optional;
- (2) the automatic checking of phonetic forms against the results expected by the phonologist;
- (3) the use of diverse notational systems (IPA, etc.) based on the printed results produced by PHONOL.