

LAGS WORKING PAPERS, THIRD SERIES (1985)

INTRODUCTION

A Matrix for Word Geography

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INTRODUCTION: A MATRIX FOR WORD GEOGRAPHY

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These seven papers contribute to a matrix for word study, a formal approach to conventional linguistic geography. They frame the central editorial problems and summarize a descriptive method that extends from writing to mapping. From those perspectives, the papers restate familiar goals in the context of present-day technology. Without violation to the aims of Aasen, Wenker, Gilliéron, Jaberg, Jud, and Kurath, the LAGS Project introduced the tape recorder, camera, and computer as essential tools of its research and used them in classical linguistic geography.

These papers extend the implications of those mechanical resources to a public data base--the field records that the protocols index in the Basic Materials (1981). Published with the LAGS concordance, these papers offer a bridge between the basic and descriptive materials of the atlas. As the concordance records an exhaustive conversion of protocol data, from narrow phonetics to conventional orthographics, these essays explain the form and function of writing systems and the composition of computer mapping through a graphic plotter grid. These editorial issues put the descriptive work in focus and suggest the appropriate domain of traditional linguistic geography.

Although never explicitly stated by the pioneers of this discipline, their work invariably functioned with effectiveness at the level of the phonological word. Gilliéron's method requires direct interviewing, without which the investigation could not reach illiterate folk speakers. But the field worker, asking the questions and recording responses on the spot, could elicit and transcribe little information beyond the practical limits of the

phonological word. Experienced American atlas field workers, for example, recognize the difficulties while investigating the usage of these dependent clauses:

he's the man) who/that/what/ \emptyset (owns the orchard;
he's the boy) whose/that's/what's/ \emptyset (father is rich.

Such items suggest the problem of gathering systematically contrastive syntactic information with that method. And, for those reasons, traditional atlas study has always focused on the words. In all of the American projects, phonology, morphology, and lexical interpretations begin and end with the phonological word. No one has yet produced a convincing regional or social isogloss based on syntactic data gathered through conventional atlas research.

During the past several decades, however, other American linguists have demonstrated ways to investigate syntax from tape-recorded texts. As suggested elsewhere, the newfound resource brings with it large editorial responsibilities and introduces philological problems that sociolinguists tend to overlook. Because the LAGS program is a transitional atlas, one that seeks traditional goals with the tools of modern technology, its method accepts the limitations of classical atlas research and takes the phonological word as its maximum unit of systematic analysis.

That restriction makes possible a descriptive chain that extends from the systematic (deductive) phonetics of distinctive features analysis through several phonic levels to conventional orthographics. Although other writing systems are occasionally used in LAGS description, the primary codes are these: systematic phonetics (S), impressionistic phonetics (I), unitary phonemics (U), automatics (A), and orthographics (O). In this research, these are understood as links in a bilateral, interdependent, descriptive chain:

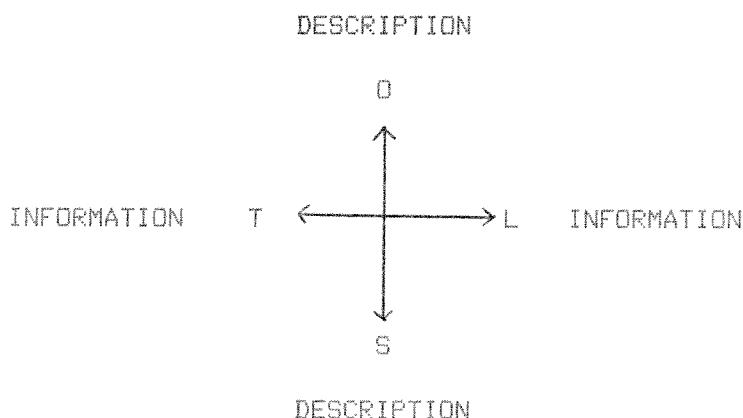
O \times A \times U \times I \times S

Working Papers #1-2 explain the interrelationships and implications of these five codes.

As a tool of analysis, that descriptive chain overlays an informational chain to form a matrix for word study. The data base extends from the tape/text (T), through the protocols (P), into the concordance (C), and finally to the maps (M) and legendry (L):

$$T \times P \times C \times M \times L$$

This figure suggests the relationships of study implicit in these chains:



Working Papers #3-4 explain the composition and uses of the graphic plotter grid. This tool provides a technique for mapping every item recorded in files in any combination that might prove useful in the investigation of regional and social patterns. As an extension of the box grid of the Dialect Survey of Rural Georgia, the programs for the graphic plotter grid offer onscreen or printed maps, and these help to chart the course of the editorial work. Upon completion of LAGS research, the core materials will be reproduced on a set of diskettes. A single packet of 10 double-sided, double-density, 40 track, soft-sectored diskettes will accommodate all necessary personal data files, 225 linguistic files, and an operations disk. As an electronic atlas in microform, the tool has the capacity to produce hundreds of thousands of different maps in a simple and inexpensive program.

Working Papers #5-6 explain microcomputer programs for phonology and vocabulary in terms of legendry composition. The phonological evidence proceeds from the survey in deductive phonetics, where distinctive features are identified and where phonological units are classified according to those features. The description terminates in the contrastive orthography of the Automatic Book Code (ABC), where unitary phonemics are realized intuitively (automatically) in a code suitable for legendry (book) composition and where the conventional orthographies of that book are linked with phonic writing. The lexical evidence extends the generalizations of Working Paper #1 to the composition of legendry entries. As suggested in the discussion of ABC, the principal resource of the alphabet is its application to word geography. The code gives a phonological dimension to word geography and helps to distinguish social and regional distribution of a common lexical form, as, for example, in French *harp*, the incidence of <i> and <e> in the first element and of <a(r)>, <ar>, and <or> in the second.

Working Paper #7 summarizes the applications of the microcomputer in the LAGS editorial work. The composition of files, maps, and indexes suggests the range of the work. These include phonological, grammatical, and lexical features drawn from the protocols, the concordance, and the survey in deductive phonetics. Taken together, the examples illustrate the self-imposed limits of a research program that aims at complete, consistent, and simple description on its own terms.