

Reading, Writing, and Phonology

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The author discusses the relation of conventional English orthography to the sound structure of the language, showing that this relation is much closer than is ordinarily assumed. She points out that many of the non-phonetic aspects of English spelling are motivated rather than arbitrary, in that they correspond to a level of representation within the phonological system of the language which is deeper than the phonetic level. Finally she considers the implications of this view of the orthography for reading and spelling.

The inconsistencies of English spelling are often a source of regret to the reading teacher and to those concerned with reading in general. Because English spelling is frequently not phonetic, because of the large number of words which are lacking in grapheme-phoneme correspondence, it is often concluded that the orthography is irregular and a relatively poor system for representing the spoken language. While it is true that English spelling in many instances is deficient as a phonetic transcription of the spoken language, it does not necessarily follow that it is therefore a poor system of representation. This paper discusses a far more positive view of English orthography which has emerged from recent work in phonological theory within the framework of transformational grammar.

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① *nominal al*

In *The Sound Pattern of English*¹ Chomsky and Halle demonstrate a variety of ways in which the relation of conventional English orthography to the sound structure of the language is much closer than is ordinarily assumed. Simply stated, the conventional spelling of words corresponds more closely to an underlying abstract level of representation within the sound system of the language, than it does to the surface phonetic form that the words assume in the spoken language. Phonological theory, as presented in *The Sound Pattern of English*, incorporates such an abstract level of representation of words and describes the general rules by which these abstract underlying forms are converted into particular phonetic realizations. English spelling corresponds fairly well to these abstract underlying forms rather than to their phonetic realizations. When viewed in its correspondence to this underlying form, English spelling does not appear as arbitrary or irregular as purely phonetic criteria might indicate. Indeed, from this viewpoint, conventional orthography is seen in its essentials as a "near optimal system for representing the spoken language."² In this paper I will attempt to clarify this notion of abstract underlying form, to show its place and function within a grammar of English, and to explain its relation to the spoken language. I will also speculate briefly on the possible relevance of this view of the orthography to reading, the teaching of reading, and the teaching of spelling.

The motivation for postulating an abstract form of words which underlies their phonetic form is roughly as follows. One aspect of writing a grammar for a language is deciding how words are to be represented in the grammar's dictionary, or lexicon. This essentially means deciding on a spelling for each word, what I will call "lexical spelling." One way, obviously, would be to proceed according to pronunciation and use a phonetic transcription, or the type of broad phonetic transcription that is often termed a phonemic transcription. (Those who regret the frequent lack of grapheme-phoneme correspondence in English spelling seem to be looking for just this in the orthography.)

At first glance, this phonetic approach would seem to be the simplest and certainly the most direct way of proceeding. However, the attempt to incorporate into the grammar a spelling system so closely tied to the pronunciation of English immediately runs into trouble. There are numerous reasons why. Let me give one example here. In English, words undergo pronunciation shifts when suffixes

are added to them: ural, sane-sanity. They have to receive two pairs constituting a set with [ey] for the word which certain suffixes

Now these [ey]—[a] lar occurrences. This takes place under specificity. It is in fact an instance which speakers of English producing and understanding which govern the [ey] tions, such as the [iy] tion, the [ay]—[i] alternation in [o]—[a]

Word pairs such as speakers of the language fore, when designing the for the vowel, and the shared vowel to produce nunciations of the word abstract representation dictable according to ge

This dual feature, or tion, is a highly desirable the lexical spelling *ditional* are not different words. They are differenture this sameness, in spite course this sameness is raphy in the examples long-short vowel altern ventional orthography offers the advantage of is masked by surface ph

¹ N. Chomsky and M. Halle, *The Sound Pattern of English* (New York: Harper and Row, 1968).

² N. Chomsky, "Phonology and Reading," in *Basic Studies in Reading*, edited by Levin and Williams (New York: Harper and Row, in press).