THE GRAPHEME

A graphemics parallel in every way to phonemics is rendered infeasible by several familiar considerations, such as (i) the partial dependence of graphies on phonemic form, (ii) the fact that graphic systems are of many different kinds, while all phonemic systems are of essentially the same kind, (iii) the relative artificiality of graphic systems.

One consequence of the first consideration is that the term *allograph* is ambiguous. According to one linguist[1], "the graphic shape of an allograph is dependent on its graphic surroundings". On the other hand according to the authors[2] of a recent study of Old English graphies in relation to phonemics, two graphs are allographs of the same grapheme if they represent the same phoneme, whether or not they stand in relations of complementary distribution, as they confess that the two "allographs" with which they are concerned do not (despite a general tendency in this direction). Presumably also for them, graphic resemblance would not count as a criterion; for instance the two forms of Greek sigma would be regarded as allographs whether or not one held there to be some similarity.

The first use of *allograph* is parallel to the use of *allophone*, while the second is more nearly parallel to the use of *allomorph*. Indeed it would be exactly parallel if (i) the identification of allomorphs is held to be a semantic rather than a purely distributional procedure, and (ii) phonemics is regarded as the "semantics" of graphemics. But this of course will not do. There is nothing for which morphemes "stand" in the way that letters stand for sounds, as morphemes are normally used. (There is indeed a set of morphemes which are exceptional in normally "standing for" something: namely the names of letters, which may stand either for letters or for sounds, and as abbreviations also for words. But such morphemes are semantically marginal.)

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1 Ernst Pulgram, "Phoneme and Grapheme: a Parallel", *Word* 7, 15.

2 R. S. Stockwell and C. W. Barritt, *Some Old English Graphemic-Phonemic Correspondences*, (Washington 1951).

But the same consideration has also another consequence. We should not be interested, for its own sake, in the distribution of phonemes if this were normally dependent on written language: for then it would suffice to study the distribution of graphs and to record that oral speech followed the same pattern. This would answer to the method of excluding from the normal material for phonemic analysis that part of the vocabulary which is notoriously under graphic influence, e.g. proper names and especially surnames. Even linguists who would include these as ordinary material through a reluctance to leaving any part of the investigated utterances out, would draw the line at *foreign* proper names. It is true that the objection would be based not on graphic motivation but rather on derivation from a different language-system. But this objection would then remain invalid if the pronunciation of the foreign proper names was based on the spelling of these names and not on their phonemic form in the other system. Actually the objection to taking in foreign material and the objection to taking in graphically motivated material, despite the fact that some linguists might allow the former without allowing the latter, have one and the same source. All *exterior* influence disqualifies, to some extent, the status of a unit — whether this is the influence of another language system, or the influence of another level within the same language. (What is called the "artificiality" of graphic systems may be treated as another form of "exterior influence" — it is difficult to take too seriously a convention which is subject to the whims of a minister of education or a rich spelling-reformer. Phonemics is a subject apart by virtue of the fact that the opportunities for interference are far more restricted.)

Hence *in so far as* spelling is influenced by its representative function, it is not a matter of "graphemics" at all. A pure graphemics would study the conventional relations between graphies; e.g. the relation of *q* and *u* in English such that the former is invariably followed by the latter. Whereas the fact that *p* never follows *f* would have no graphemic interest; it would be parallel to the fact that the morpheme "snow" never follows the morpheme "green", which is not due to a distributional convention but rather to the fact that there is no occasion for the sequence. In either case, if occasion arose, the sequence would be used. (Experiments could readily be devised to call forth the sequence, without interfering with linguistic conventions.)

Up to the present point we have spoken as though the nearest equivalent on the graphic level to the phoneme is the letter. All

writers on the subject seem to have assumed this. Yet once the question is raised. the assumption is easily seen to be wrong.

By definition the phoneme cannot contain smaller distinctive features unless these are simultaneous. The corresponding graphic unit should equally have no smaller features except such as are spatially superimposed. But letters are normally distinguished from each other by features (dots, curves etc.) located in different positions, these positions themselves being relevant (e.g. b/d). Hence it is, for instance, the bar and loop of *b* and *d*, not these whole letters, that answer to phonemes. (In *b* and *p* the vertical dimension is used; instinctively one feels that there is something like "simultaneity" here; but the instinct derives of course just from the fact that the linear sequence of letters is horizontal. A Chinaman might have the opposite "instinct".)

An equivalent to the simultaneous features of the phoneme is rare on the graphic level, but not impossible. The best example is probably the distinction of *thin* and *thick* in the Pittman shorthand system. It matters little that this system is "artificial", since this is a general property of graphs as opposed to phones. But if one asks for an example from a "natural" language, the distinction of small and capital letters will serve. The only reason for not putting it first, is that it bears some resemblance to the phonemic feature of "prominence", which is regarded as prosodic rather than inherent.

Hence what one is at first sight inclined to look on as a "feature" turns out to be the equivalent (very roughly) of the phoneme. And the letter, which one took to be the equivalent (very roughly) of the phoneme, turns out to be more similar — to the morpheme. This conclusion was vaguely anticipated above, and will be returned to immediately. But it may be added that the graphic *word* also has similarities to the spoken *sentence* (spacing resp. pause). In other words the graphic categories, as compared with the phonic categories are shifted each time one unit along the hierarchy. It was a mistake to suppose that they occupied the same position in the hierarchy as the units they stand for.

The letter, we have said, answers to the morpheme; it is the "minimal meaningful unit" in the graphic form, though its meaning consists in its rendering of phonemes, immediately, not in its share in expressing ordinary linguistic meaning, which it does via the in themselves meaningless phonemes. Of course in traditional writing-systems individual letters do not always represent phonemes; but

than, neither do individual morphemes always have a meaning. It is merely a general characteristic that they should have. Just as no "phonemic meaning" can be attributed to the individual letters *e* and *a* in English *read,* so also no meaning can be attributed to the individual morphemes in fossilised groups. (True, one might refuse to analyse the group into morphemes when one cannot attribute meanings to them individually; but a parallel example in which two ostensive letters are taken to be a single letter is given below.)

At the same time it must be stressed that graphemics is not important in the *same* way as phonemics.

The important questions in matters of graphy are historical, practical or aesthetic, not questions of synchronic analysis. It is to be hoped that nobody will ever write a paper on "One Grapheme or Two?", for the answer in each individual case is within wide limits up to the printing-house or the private writer. (Compilers of Czech dictionaries[3] choose to treat *ch* as a single letter, and since a dictionary is also a text, in some sense they thereby *make* it a single letter.) At the same time the second consideration leaves open the possibility that a graphematic analysis might be far more serious a task for one system than for another.

The renewed interest in the graphic side of language is in itself welcome. But the idea should not be encouraged that we have just another "substance" of language, which should be submitted to the same processes of analysis[4] as the "phonic substance". And if the methods of phonemics cannot simply be transferred to the graphic level, the notion, prevalent in some circles, that they will finally be transferable to non-linguistic planes of culture (e.g. that social events will be sliced up into their component "behaviouremes" by application of the principles of intrinsic similarity and complementary distribution) should be recognised for what it is.

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3 It might be objected that a dictionary is a meta-text rather than a normal text. But this is its function only in relation to semantics; obviously it could not be used along with normal texts in a semantic study; but since it is not in any sense *about* graphemes, the graphic conventions it uses belong with other graphic conventions.

4 Hjelmslev's ideas on the subject have been put into practice by H. Spang-Hannsen in a study for the Copenhagen Circle.