One of the noteworthy features of modern linguistic research has been the growing interest taken in problems of written utterances, contrasted with their spoken counterparts on the one hand and with phonematically transcribed utterances on the other. The latest contribution in which reference is made to these and allied questions is J. Berry's paper read before the Oslo Congress of Linguists (1) held in August 1957. The report registers eleven papers more or less closely connected with the subject-matter of written utterances; it is highly significant that no less than eight of them were published after the end of World War II (and there is a number of other papers which might be added to the list, such as D. Jones's Differences between Spoken and Written Language, issued as a Supplement to Maître Phonétique 1948).

For all this interest, however, many of the problems cannot be said to have been definitely solved, and in some instances they do not even appear to have been adequately formulated. It is for this reason that the present writer has decided to review once more the field he has covered in a number of his earlier papers (some of them written in Czech, and therefore inaccessible to foreign workers in the field). In the following two chapters he presents what he believes to be a modest contribution to the solution of two partial problems which so far do not seem to have been satisfactorily settled. It will be seen that he also revises or modifies some of his earlier conclusions. The first of the two problems, a more general one, discusses the functional hierarchy of spoken and written utterances, the other one, more specific, deals with some important trends ascertainable in the development of Written English.

[For technical reasons, the Irish shape of the OE grapheme ȝ (as well as the ME development of that shape) will be replaced here by its Roman shape; the fricative phonic qualities corresponding to this grapheme will be denoted by the symbols γ (velar) and γ' (palatal). ME long open e-vowel will be written e:, while the letter e: will stand for its long closed counterpart (analogously, o: will be used to denote the long close o-vowel of ME).]

I. ON THE FUNCTIONAL HIERARCHY OF SPOKEN AND WRITTEN UTTERANCES

The fact that a relatively high number of important papers on problems of written English have appeared of late, should not be interpreted in the sense that the general interest in these problems is a matter of relatively recent date. Quite the
contrary is true. The long series of scholars approaching these problems from a new, non-traditional angle, reaches far back into the early 'eighties of the nineteenth century. Already at that time, Jan Baudouin de Courtenay, comparing the graphical system of various Slavonic languages, succeeded in pointing out a number of typical features characterizing each of the examined systems (2). He aptly re­marked that such characteristic features allow of a purely external identification of any concrete Slavonic context of some length as written in this or that particular Slavonic language (in other words, that such identification can be effected even by a person who is totally ignorant of the meaning of the concerned context and of the given language in general). Baudouin's observation concerning the possibility of such purely formal identification is demonstrative not only of his ability to view written utterances as structures *sui generis*, but also — at that time, at least — of his disregard of the correlative relations undoubtedly existing between the written utterances and their spoken counterparts.

Such relations were clearly observed and duly, if occasionally, noted later by a number of other scholars, among whom the names of Henry Bradley and Antonin Frinta should be particularly singled out. Bradley, though strongly critical of the modern "unphonetic spelling" of English, admits that it has "the merit of saving written English from a good many of the ambiguities of the spoken tongue" (3). Bradley has in mind here the well-known instances of the type *write — right — rite — wright* which remain differentiated in written utterances, while in the spoken utter­ances their phonematic make-up, /rait/ in our case, is identical. Some five years later Frinta credited the Czech spelling with an analogous merit. He even went an important step further than Bradley (whose book had obviously been unknown to him) in trying to define the function of spelling in a linguistic community. As he puts it, this function is, "in a way to speak quickly and distinctly to the eyes, so that the due idea can be mobilized without any difficulties" (4).

Leaving aside the fact that what Frinta says about spelling really refers to written utterances, one can hardly be in doubt that his above-quoted statement furnishes an important clue to the solution of some basic problems relating to written utterances, and especially to the relation in which they stand to their spoken counterparts. Unfortunately Frinta, like Bradley, never developed his illuminating remarks into a systematic theory. As a consequence, the vast majority of linguists of the 'twenties and early 'thirties continued to regard "writing" as a kind of imperfect quasi-trans­cription, hopelessly lagging behind scientifically accurate systems of phonetic transcription. Most of them have expressed the belief (still held by many) that at some future date phonetic transcription is bound to replace conventional, traditional writing systems, on the simple ground that such transcription constitutes an infinitely finer, more consistent, and therefore more adequate, means for the fixation of spoken utterances on paper.

The fallacy of such belief will become obvious to him who realizes that the aim of the traditional writing system of language is not identical with that of its phonetic transcription. In one of his papers (5) the present writer hopes to have demonstrated the different aims of the two: while any system of phonetic transcription provides means for an optical recording of the purely acoustic make-up of spoken utterances, the traditional writing system increasingly tends to refer to the meaning directly without necessarily taking a *détour* via the corresponding spoken utterances (6). This specific aim of traditional writing systems was undoubtedly implied by Frinta's statement about the "spelling" speaking quickly and distinctly to the eyes. Such quick functioning is obviously averse to any *détours*, and it can be more safely
achieved, if the reference to meaning is as direct as possible. Clearly, the more direct such reference is, the less dependent an actual written utterance becomes upon its spoken counterpart.

This conclusion appears to have been fully realized, for the first time, by the Ukrainian linguist Agenor Artymovyc. In the early 'thirties of this century, he called the attention of scholars to the systematic character of what he calls Written Language; what is even more important, he claims "writing" (die Schrift) not only to possess a systematic structure, but to be a system which to some extent is independent of Spoken Language. Although in some of his theses Artymovyc undoubtedly went too far (as, e.g., in claiming for Written Language the autonomous status), he should always be remembered as the first scholar who was able to rise above the occasional observations of his predecessors and to view written utterances as systematic entities, governed by their own rules. Prior to Artymovyc, written utterances had been regarded as poor relatives, almost caricatures, of their spoken counterparts; he claims for them the status of respectable, co-equal partners.

Ingenious as Artymovyc's remarks were, they failed to specify the hierarchical relation of spoken and written utterances. We tried to establish these relations in one of our papers; in our opinion Artymovyc failed to realize that the distinction between Written Language in abstracto and concrete written utterances should be formulated as one existing between a norm and its concretizations (or, manifestations). The existence of the written norm in language is amply evidenced by the unpleasant feeling one experiences in reading written utterances primitive in handwriting, in spelling (including punctuation), in the division of the text into paragraphs, or in the use of the space available for writing, etc. This enumeration of some of the primitivisms that can be met with has made it clear that the written norm of language should by no means be identified with its orthography; the facts covered by the concept of written norm considerably outstrip those covered by the concept of orthography. The difference of the two is not merely a quantitative one; essential qualitative differences are involved which will be discussed in the latter part of this chapter.

* * *

The acknowledgement of the existence in language of a written norm besides the spoken norm (whose existence has never been doubted) is of fundamental importance. Seen in its light, our above-mentioned task of formulating the hierarchical relations existing between written and spoken utterances is best shifted to a higher level and restated as a task of formulating the hierarchical relations of the two language norms lying behind those utterances. It is obvious that speakers of cultural communities have a greater or smaller command of each of the two norms and that in their concrete utterances they sometimes make use of the means supplied by the one, but at other times switch over to the means supplied by the other. From this it follows that each of the two norms has its functional justification in the given cultural community. Under these conditions, it is clear that any hierarchic evaluation of the mutual relation of the two norms must be based on the recognition of the functions performed by them. As a consequence of this, two questions appear to be of fundamental importance:

(a) What exactly is the functional justification of each of the two norms?
(b) Does the answer to (a) allow of a functional subordination of one of the two norms to the other?

The answer to (a) has been prompted, to some degree at least, by Bradley and
In some cases written word-forms certainly speak more quickly and more distinctly to the eye than the corresponding spoken forms speak to the ear. In other words, the distinctness of perception of an isolated word form is often provided more efficiently by the means of the written norm than by those of its spoken equivalent. As, however, consumers of written utterances are usually faced with the necessity of perceiving not isolated written words, but more extensive contexts, such as written sentences, paragraphs, pages and even books, it is imperative to view the problem from a broader angle than was the one adopted by Bradley and Frinta. A closer consideration of such longer written utterances reveals that, compared with their spoken counterparts, they prove to be “distinct” to a much higher degree than isolated written words. A concrete example will prove this.

Let us imagine a spoken utterance presenting a lecture which takes exactly one hour to deliver: A written utterance corresponding to it is a short paper comprising some 7 to 8 pages. The information supplied by the lecture and by the paper is virtually identical. There is, however, one important difference in the way in which the concerned information may be obtained from the two sources. In listening to the lecture, the person obtaining the information is bound to follow the speaker step by step, and under normal conditions it is virtually impossible for that person to check any of the previous points of the speaker’s arguments by having their wordings presented again by the speaker. Likewise it is impossible to ‘skip’ some of the passages to come and to get hold of the speaker’s conclusions before he has worked out his way to them through a jungle of arguments and counter-arguments. Whether the listening person likes it or not, he is bound to follow the speaker’s rate of developing the theme; one might also say that he is the speaker’s fellow-prisoner within the dimension of time.

Contrary to this, in reading the equivalent printed paper the person obtaining the information finds himself emancipated from the chains of time, at least to a very high degree. The reading person, that is to say, may go through the paper in a quarter of an hour if his sole purpose is to obtain a very general kind of information about the problems discussed by the writer and about the solutions proposed. Or he may read it in a couple of hours, if he wants his information to be more accurate. Or again, he may study the paper for days (and possibly weeks), if he has embarked on the same problem as the writer and if he wants to check every detailed point of his line of arguments. Clearly the reading person, unlike the listening person, is fairly independent of the dimension of time, as he may quicken or slow down the rate of obtaining information according to the particular purpose he has in mind when obtaining it. Moreover, unlike his listening colleague, he can check any previous passage in the writer’s line of argument whenever he feels it necessary, and he can skip any desired number of the following paragraphs in order to get an idea of the conclusion the writer is aiming at. The above facts may seem somewhat trivial, but it has been considered essential to register them here if the import of written utterances (and consequently, of the written norm of language) is to be realized in full. The conclusion that inevitably follows from those facts is that, as far as quickness and distinctness are concerned, written utterances really rank much higher than their spoken counterparts, and that with the increasing extent of the compared contexts the superiority of the written utterances becomes ever more obvious. It becomes particularly evident when a written utterance grows up to the size of a printed book (10) with a table of contents and possibly also with indexes of words, persons etc. The information presented by such an utterance can be surveyed in a manner so quick and so efficient as cannot be matched by any spoken utterance.
(or series of utterances) of comparable length. In answering our above question (a) one can assert, therefore, that quick and easy surveyability (if one may be pardoned for coining this new term) constitutes a functional feature which may fully justify the existence of the written norm in language, because in matters of surveyability the spoken norm of language cannot supply the language user with means that would serve the purpose with comparable efficiency (11).

Apart from surveyability, the written norm can claim another feature that makes it highly useful and virtually indispensable. This other feature is the documentary, preservable character of written utterances, so strikingly contrasting with the ephemeral, easy-to-be-forgotten character of their spoken counterparts. This feature, which one may perhaps term 'preservability', has been appreciated by men since time immemorial, and in matters of law and in regulating human relations written pacts have always been preferred to oral agreements ("Littera scripta manet"). Most probably it was this very feature which was the most potent stimulus to call the written norm into being.

We have thus ascertained that in at least two functional features (or, perhaps better, in at least two kinds of situations) it is exactly the spoken utterances which are undoubtedly lagging behind their written counterparts. It is, however, high time to listen to the other party in the dispute. It will be only just to admit that in a fairly large number of situations it is the spoken norm of language which supplies the language user with more effective means that can be obtained from its written equivalent. It is a matter of common everyday experience that people find it more convenient to communicate in speaking than in writing. The reason of this is certainly the immediateness of the spoken reaction to the given stimulus: it always takes more time to resort to a written message than to express oneself orally. This immediateness is made possible, among other things, by the readiness of the organs of speech to function in any situation, while the instruments necessary for writing must usually be looked for, or at least taken out of the pocket and adapted for use.

The two outstanding features of spoken utterances appear then to be the immediateness and readiness of the reaction they provide. These features will be particularly appreciated if the stimulus (i.e., the extralinguistic situation upon which the utterance is to react) is felt to be urgent, as, e.g., if the language user wants to warn his partner of some imminent danger. It will have been observed that the stimulus enforcing a reaction by means of a written utterance is usually not very urgent. It should be added, however, that even in situations devoid of urgency language users regularly prefer to avail themselves of reactions based on the spoken norm, not of those based on its written equivalent, unless the requirements of surveyability and/or preservability should decide in favour of the latter. The regular preference of the former is undoubtedly due to reasons of technical order alluded to above (viz., greater readiness of the organs of speech compared with lesser readiness of writing instruments). But the fact of the preference undeniably points to some important theoretical consequences. In its light one is led to regard the spoken norm, and the spoken utterances based on it, as language facts of unmarked order, while the written norm and the written utterances unquestionably belong to the category of marked language phenomena.

The above conclusion already touches upon our question (b), concerning the hierarchic relation of the two norms. Before, however, this other problem is discussed at some length, it appears necessary to point out another important functional distinction which can be observed between the two discussed norms (and, analogously, the two kinds of utterances). This distinction lies in the fact that the spoken
norm has at its disposal primary means not only for expressing the purely communicative component parts (the ‘intellectual content’) of the extralinguistic reality to be communicated, but also for expressing its emotional component parts; the means are, e.g., different patterns of sentence melody, varying rate of speech, differences of timbre in sounds, different degrees of intensity of sentence stress, etc. etc. The written norm, on the other hand, regularly lacks such primary means signalizing emotional component parts. If need is felt to express them (e.g. in books of fiction), this must be done by employing secondary means. Passages written in direct speech are thus often introduced or accompanied by descriptive insertions (sentences or sentence groups) which should evoke the impression of the corresponding primary means found in the spoken norm. (Here belong phrases like He asked bitingly; She said gently and sadly; He cried out stubbornly in a voice of authority; etc.) As a result of their concentration on the purely communicative component parts of the transmitted information, written utterances are especially fitted to serve in those situations in which such concentration upon the ‘intellectual content’ (and, therefore, greatest possible restriction of emotional component parts) appears particularly desirable, e.g. in transmitting highly specialized information on scientific and allied subjects. On the other hand, everyday-life topics, simple narratives and the like, which are always more or less tinged with emotional elements, will be most efficiently conveyed by means of spoken utterances. It is also worth pointing out that concentration on ‘intellectual content’ is carried out most effectively in printed utterances which, unlike their written counterparts, do not allow of direct identification of the author of the utterance from the material make-up of the utterance alone (12), and are therefore “objectivized” to a distinctly higher degree than written utterances.

The facts that have so far been discussed here had served the present writer as a basis on which he built up, more than ten years ago, his definitions of the spoken and the written norms of language (13), without, however, specifying his arguments in detail at that time, as has been done above. It may be found useful to give here what the present writer believes to be the improved version of the two definitions:

**The spoken norm of language is a system of phonically manifestable language elements whose function is to react to a given stimulus (which, as a rule, is an urgent one) in a dynamic way, i.e. in a ready and immediate manner, duly expressing not only the purely communicative but also the emotional aspect of the approach of the reacting language user.**

**The written norm of language is a system of graphically manifestable language elements whose function is to react to a given stimulus (which, as a rule, is not an urgent one) in a static way, i.e. in a preservable and easily surveyable manner, concentrating particularly on the purely communicative aspect of the approach of the reacting language user.**

It will be noticed that the two definitions supply an answer to the above question (a), concerning the functional justification of the two norms of language. Our next task is to find out whether the above conclusions can open the way for answering the above question (b), concerning the hierarchic relation (co-ordination or subordination) of the two norms.

* * *

A foretaste of the answer to our question (b) already emerged above when reference was made to the unmarked character of the spoken norm and the marked character of its written equivalent. This observation, however, should not be interpreted as a functional subordination of the written norm to its spoken counterpart, if subordina-
tion should imply inferiority. Our above analysis of the specific functions of the
two norms must have revealed two things with convincing clearness. One of them
is the fact that in fairly advanced language communities higher cultural and civili-
zational functions (such as virtually all branches of literature and scientific research
work, the operation of State administration, etc.) are simply unthinkable without
continual recourse to written utterances. It is, then, obvious that the development
of a community's higher culture and civilization is unquestionably conditioned by
the existence in its language of a written norm, the vehicle of higher needs and wants
of the community. It would, then, be completely out-of-place to brand the written
norm as an inferior kind of structure. — The other thing that has come to light in
the course of our discussion is even more important. It is the undeniable fact that
in any kind of extralinguistic situations to which the language user finds it necessary
to react, one of the two norms is found to supply much more adequate means than
the other (and possibly the sole means applicable in that kind of situation). One is
thus faced here with something that might almost be called a sort of complementary
distribution of the two norms with respect to different kinds of extralinguistic
situation. The conclusion to be drawn from this fact is that without the co-existing
written norm the spoken norm of language would hardly be able to cope with numer-
ous tasks imposed upon language in fairly advanced cultural communities. Under
these conditions it would seem most unwise to regard as inferior that norm whose
existence alone can guarantee that language will possess means enabling it to cope
with all kinds of extralinguistic situation, and not with some of them only.

Besides, grammatical parallels show clearly that marked and unmarked character
by no means implies superordination or subordination, respectively. The fact, e. g.,
that McD'E progressive tenses must be regarded as marked counterparts of the
simple tenses (14) does not stigmatize the former as functionally inferior to the latter:
there are extralinguistic situations which can only be satisfactorily handled by
making use of a progressive form. Rather one can regard the marked grammatical
form as a kind of superstructure built up on the basis provided by its unmarked
counterpart: the functional raison d'etre of such superstructure appears to be the
reference to a specialized kind of situation (in the case of the progressive form, to
a specific kind of verbal action) which cannot be quite satisfactorily handled by the
corresponding unmarked form. The above functional parallel is most instructive for
the correct understanding of the relations existing between the written and the
spoken norm: it will be readily admitted that the former, too, constitutes a kind of
superstructure over the latter, and that the raison d'etre of the former undeniably
lies in performing specialized functions the means for which cannot be equally well
provided for by the latter. In other words, the question of the hierarchic relation
of the spoken and written norms must not be answered in terms of subordination
or superordination, but in terms of more general or more specialized applicability.

What has just been said is at the same time our answer to the earlier formulated question (b).
A number of objections might be raised against it, the most important of which will be briefly
considered here. Particular attention must be paid to the argument stressing the non-existence
of the written norm in many language communities; in the opinion of those who avail themselves
of this argument, such non-existence furnishes a proof of the dispensability, and so of inferior
status, of the written norm. But the argument is far from convincing; the only thing that can be
said about the language communities lacking the written norm is that so far they have failed
to develop all latent possibilities of language. In other words, if such language communities
dispose with the written norm, this should not be regarded as an example of the ordinary state
of things, but rather as a defective state (in most instances, of course, such defects are only tempo-
rary). The matter can be put still more differently by stating that all languages tend to develop
to an optimum stage at which they will have developed their latent structural possibilities in
full. And it is this optimum stage alone which can furnish the analyst with materials capable of an adequate evaluation of the two discussed norms.

Incidentally, it is worth stressing that this optimum stage cannot be said to have been reached by a language community at the moment when that community was only embarking on its first attempts to record its spoken utterances in writing. As has already been pointed out elsewhere (15), such early attempts (if they have not been imposed upon our languages by expert phoneticians) really constitute hardly more than imperfect, cumbersome quasi-transcriptions, sharing, however, one fundamental feature with genuine phonetic transcriptions. They are, that is to say, manifestations of a system of signs of the second order: they stand in no direct relation to the extralinguistic reality, but only in an indirect one, effected via the spoken utterances (which, in their turn, are manifestations of a system of signs of the first order). Only after some time, when what is commonly called scribal tradition has emerged in the concerned language community, direct links begin to be established between the written utterances and the extralinguistic reality to which they refer, and only then one can speak about the existence in that community of the written norm "in its own right"; it is only then that the optimum stage of the development of the given language has been reached.

Our final answer to the question (b), then, stresses the mutually complementary relation of the two language norms; it classifies one of them as a marked norm and the other as unmarked, but is deeply opposed to branding any of the two norms as inferior (functionally or structurally) to its counterpart co-existing with it in the given community.

* * *

The above answer is by no means of purely theoretical interest; it will also be found to have deep practical significance, if all consequences are duly derived from it, especially from what has been said here about the mutually complementary relation of the two norms of language. Since these norms can only have any sense if they serve the needs of actual communication within the language community, and since this communication is being carried on by individual members of this community, it is obvious that any such member has (or, at least, should have) a good command of the means of both these norms, so that he may be able to switch from one of the norms to the other, according to the situation in which he finds himself placed, and according to the kind of intention with which he reacts to the extralinguistic reality facing him in that situation. If one may venture to coin another new term, one might put the matter briefly by saying that a member of a cultured language community is (or, at least, should be) a 'binormist'.

The binormism of members of cultured communities again entails an important consequence. It is the necessity of a certain parallelism in the structures of the two norms (16); clearly, without an appreciable degree of such parallelism an adequate command of the written norm is bound to be most difficult. In the practice of everyday life this necessity finds its expression in the demands calling for orthographical reforms. Most of the voices calling for them, however, are guilty of oversimplifying the relations existing between the two norms. It is usually demanded that written and spoken utterances should very closely correspond on the lowest level, i.e. that there should be a consistent correspondence of phonemes, which are the basic elements of spoken utterances, and graphemes, which occupy an analogous basically important place in written utterances (17). It is for this reason that voices demanding reforms of traditional spellings usually regard "phoneticization" of such spellings as the only effective remedy that can do away with all their deficiencies. As a matter of fact, what is advocated by such voices is not a 'one-symbol-per-sound' principle but rather what may be called 'phonemicization', i.e. an establishment of consistent correspondence between a particular symbol and a particular phoneme. Undoubtedly
this kind of correspondence seems at first sight to be the most efficient and very easy
to establish. The interesting point is, however, that in by far the greatest number
of language communities the actual correspondence of phonemes and graphemes
falls considerably short of the 'desirable' state of things. Nor can the actual state
of things be simply branded as primitively conservative; rather it can be demon-
strated that exceptions to, and deviations from, the correspondence on the lowest
level can usually be explained by correspondences on the higher levels of the two
norms.

Two such correspondences on higher levels deserve particular attention. In a Czech
paper published some 25 years ago (18), the present writer showed in detail that
most of the points in which Modern Czech conventional spelling violates the 'one-
grapheme-per-phoneme' principle can be easily accounted for by a tendency to
preserve the optical make-up of a morpheme unchanged throughout the paradigm
or in derived forms, even in those situations in which the phonematic make-up of
the morpheme has appreciably changed. Here also belong, among other things,*
Frinta's instances of 'unphonetic' writing (such as let 'the act of flying': led 'ice',
both pronounced [let] ) which he excuses by the function of spelling "to speak quickly
and distinctly to the eyes". It should be observed that the difference of the word-
final graphemes in such spellings helps to preserve the optical make-up of the phoneme
found in the greatest part of the paradigm (see letu, letem, lety etc. as opposed to
ledu, ledem, ledy etc.; note that in these forms the graphematic difference t : d is
also phonematically justified). — In our paper referred to above in Note 5 (the
Czech version of which had been published as early as 1942) an analogous tendency
was demonstrated for English, where again graphematic uniformity of morphemes
is sometimes in sharp contrast with the diversity of their phonematic structures.
See instances like equal, equally — /i:kwal, i:'kwol-iti/; comfort, comfort-able—
/kʌmfət, kʌmf-əbl/; lack-ed, play-ed, want-ed — /la k-t, plaɪ-d, want-id/, etc. etc.
(Similar instances of preserving the graphematic uniformity of morphemes might
be drawn from Russian and some other languages.) All instances of this category
reveal that sometimes a tendency may be observed in languages to underline the
correspondence of morphemes (19) in the spoken and written norm, even if this
underlining is done at the expense of correspondences belonging to the lowest level
of language. It should be emphasized that the fact of correspondences on the morphem-
atic level was also noted, independently of our findings, by the American scholar
D. L. Bolinger (20).

The other type of correspondence on a higher level which deserves registering here
is based on still higher elements of language, viz. upon words (21), spoken and written.
In its purest form this correspondence type would imply the presence in the written
norm of as many symbols as there are words in the corresponding spoken norm.
Needless to say, this purest form of the correspondence can never be found in concrete
language communities. Relatively closest to this purest form is the instance of Chinese
with its 'ideographic' script (although even in Chinese symbols sometimes refer not
to 'ideas' but simply to groups of sounds). The non-existence of this type of correspond-
ence in its purest form is clearly due to technical difficulties which would be connected
with the acquiring of such a writing system by members of the concerned language
community (22). Still, some analogy of the described situation may be found in
those written norms which are otherwise based primarily on the correspondence
of phonemes and graphemes. Thus, in English and in French a fairly high number of
homonymous spoken words may be found which in the written norm are differentiated
by various graphematic make-ups. Here belong Bradley's instances like right — write—
rite—wright, and many others, like sea—see, I—eye etc. (23). It may be convenient to speak here of the assertion of a 'quasi-ideographic' principle (in contrast to the 'ideographic' which may be found asserted, at least to a high degree, in Chinese).

A closer scrutiny of the existing written norms reveals that a vast majority of them embodies a sort of compromise among correspondences based on various language levels. Such compromise can also be ascertained in the written norms of Modern English, Modern Czech, and Modern Russian. In all these languages the correspondence on the lowest level (i.e. of phonemes and graphemes) had undoubtedly furnished the basis on which their written norms came to be built up. In none of these languages, however, was this correspondence free from interference of other factors. In Czech the correspondence on the lowest level has managed to assert itself on a relatively very wide scope, but its operation is sometimes limited by regard paid to correspondences on the level of morphemes (24). In Modern Russian the interference of such correspondences on the morphematic level is still more conspicuous than in Czech. This is due to phonematic differences arising through the operation of dynamic stress but unregistered in writing (see, e.g., Nom. sg. vod-a: Acc. sg. vod-u — phonematically /va'd-a: 'vod u/. In ModE the interference of correspondences on higher levels into the operation of the correspondence on the lowest level is still more powerful than in Russian. This follows not only from the preservation of the graphematic make-up of some morphemes despite changed phonematic circumstances (examples of such preservation were given above), but especially from the above-noted instances of 'quasi-ideographic' writings, so numerous in English and virtually unknown to Russian (25).

A detailed analysis of the written norms of individual languages would most probably reveal that the originally heterogeneous elements composing these norms have become more or less harmonized and co-ordinated in them (26), so that, as a rule, they do not strike the reader as chaotic agglomerations. It is, of course, true that voices demanding the reforms of current orthographic systems might be quoted as very strong arguments to the contrary. But such voices only show that something is wrong with the written norm; they do not necessarily prove that the co-ordination of its various elements has not been carried through. In order to be able to understand such voices one must realize which qualities of the written norm are of personal importance for any language user.

The first of the two qualities, surveyability ("speaking quickly and distinctly to the eyes"), was amply commented upon in the former part of the present paper. The other of the two commented qualities, preservability, does not count in this connection, because preservability is inherent in any kind of written norm, whether the latter is functionally adequate or not. But there is another quality of the written norm which is of particular personal importance to any language user, viz. the easiness or the difficulty with which it affects the person trying to acquire it (at the risk of coining another barbarous neologism, one might term it 'learnability'). A written norm is easily learnable if the correspondences linking it to the corresponding spoken norm are relatively simple, and it is difficult to acquire when these correspondences become too complex. This may again sound like a truism, but there are two consequences that follow from it and which have not always been fully realized. One of them is the non-identity of two things which are often mistakenly identified, viz. of the written norm and traditional orthography (popularly, but by no means exactly, referred to as 'conventional spelling') (27). As has already been pointed out elsewhere (28), orthography is a kind of bridge leading from spoken to written utterances. More exactly, it is a set of precepts enabling the language user to transpose
spoken utterances into written ones. (Conversely, what is popularly called ‘pronunciation’, that means actual reading of printed texts, can be defined as a set of precepts enabling the language user to transpose written utterances into spoken ones.)

The other consequence to be drawn from the above truism is perhaps even more interesting. The two requirements imposed upon the written norm by the needs of the language user (i.e. the requirements of surveyability and ‘learnability’) are often found to be basically contradictory: what suits the needs of the reader is often felt as uncomfortable by the writer, and yet the requirements of both must be satisfied. It appears that the tension arising out of the difference of the two standpoints supplies the main motive for the demands of orthographical reforms especially in cultural language communities of the present-day period in which the growing democratization of culture has been increasingly tending to stress the demands of the writing individual at the expense of his more passive reading colleague. Obviously the task of any orthographic reformer boils down to the task of complying with reasonable requests that want to make a given written norm more learnable, without jeopardizing the other function of that written norm, i.e. its surveyability. In other words, the above-mentioned co-ordination of originally heterogeneous elements of the written norm need not, and most probably should not, be given up in orthographic reforms, although, naturally, too complicated co-ordinations may (and most probably should) be replaced by simpler ones, if external factors make such replacement feasible (29).

The task of the orthographic reformer appears thus particularly difficult in language communities whose written norms reveal a co-ordination that is particularly complex. Such undoubtedly is the case of the written norm of English. This is not only because its basic correspondence on the lowest level is abundantly interfered with by correspondences on the two higher planes, but also because even on the lowest level different ties may be established between graphemes or groups of graphemes on one hand and phonemes or groups of phonemes on the other, according as the former occur in words of domestic or of foreign character (see, e.g., relations like c — /k/; ch — /ʃ/ in domestic words, c — /s/, ch — /k, ʒ/ in foreign words). There can be no doubt that even in English some kind of co-ordination exists, but it is an extremely complex one. The reason of this complexity is well-known: it is mostly due to powerful external influences exercised upon English in the course of its history by languages whose written norms had been built up on correspondences often differing from those found in English. If, in addition to this, it is realized that the complex co-ordination typical of ModE has been sanctioned by long centuries of tradition, one can easily understand that doubts are often expressed as to the possibility of any “spelling reform” in English (30).

It is not the present writer’s intention to approach here the very difficult subject of the English spelling reform. — There is, however, another important issue that emerges from the preceding paragraph, viz. the problem of when and how (and, of course, why) the written norm undergoes changes in relation to its equivalent spoken norm during the development of the language comprising the two. Our Chapter II will undertake a modest attempt at tracing the changing relations of the two norms during the development of English.
II. SOME REMARKS ON THE DEVELOPMENT OF THE WRITTEN NORM IN ENGLISH

The analysis of written norms of concrete languages and of the correspondences binding the written utterances based on such norms to their equivalent spoken utterances may yield many interesting results. Among the most remarkable should be mentioned the fact that the character of such correspondence may change very conspicuously in the course of development of the concerned language. Such changes need not necessarily be due to revolutionary events whose external interference may totally abolish the existing relations between the two kinds of utterances and introduce relations that are quite new (as is commonly known, such thoroughgoing changes occurred in the Turkish language community almost three decades ago). On the contrary, in many language communities such changes result from a continuous, organic development in which no violent breaks of existing scribal traditions can be discovered. The continuity of the tradition of written utterances throughout such development is subject to no doubt, and yet the trend of the whole process can be distinctly traced. Despite all its continuity, the process may be sometimes so radical that the correspondences characterizing its present stage prove to be fundamentally different from those which were characteristic of its earliest ascertainable stages.

Besides, the trends of development established in different language communities often prove to be fairly contradictory. Thus, e.g., the development of the written norm of Czech appears to follow the lines which are manifestly contrary to those followed by the development of the written norm of English. In the former, that is to say, one may observe an ever-increasing tendency to base the written norm upon the correspondence on the lowest level as systematically as possible (exceptions to this correspondence may be accounted for by another tendency directed at the underlining of morphematic correspondences). In the written norm of English, however, one may observe a diametrically opposed trend. It may be defined as an increasing tendency to loosen the very close ties that were originally linking English phonemes and graphemes, and to supplement the correspondence on the lowest level by a relatively high percentage of instances which reveal correspondences based on higher levels of language.

Only a few notes must suffice here to give the reader a very general idea of the basic trend observable in the development of the written norm of Czech. Its earliest stage, the “primitive” one, gave way in the 13th century to a stage employing digraphs (or polygraphs). These may be defined as letter-groups whose task was to refer to those phonemes of the spoken norm which up to the introduction of digraphs (and polygraphs) could not have been adequately recorded in writing because no suitable graphemes had been available for the purpose in the traditional stock of Latin letters. Thus, e.g., \( sz \) and \( cz \) (and a number of others) were used to refer to \( /s/ \) and \( /c/ \), respectively (31); long quantity of vowel phonemes was often denoted by doubling the grapheme of the corresponding vowel, so that, e.g., \( aa \) referred to \( /a:/ \) (32). The following stage, originating in the 15th century, replaced the cumbersome digraphs (and polygraphs) by simple but diacriticized graphemes: at that time, \( sz \) and \( cz \) were supplanted by \( s \) and \( c \) respectively, while long vocalic quantity found its graphical equivalent in the sign of acute placed above the traditional vocalic grapheme (so that, e.g. \( aa \) gave way to \( d \)). This change undeniably contributed to the establishment of a fairly clear relation between phonemes and graphemes. In the next stage, about one century later, this relation was made still clearer by a formal adjustment of one of the two diacritical marks, when the point came to be replaced by a hook; the graphemes so marked have remained characteristic of the Czech written norm ever since. Apart from one important modification that stressed some correspondences on the morphematic level, later periods were to witness only slight adaptations of the outlined system. Virtually all of them have served the purpose of making the correspondences on the lowest level of the two language norms still more consistent (33). As a result of the whole development, the correspondence on the lowest
level may be said to have become by far the most important structural factor of the present-day written norm of Czech; its operation in this norm is only limited, to a degree, by regard paid to some important correspondences on the level of morphemes and by a relatively small number of instances utilizing what has been termed above the 'quasi-ideographic' principle (see above, Chapter I, and particularly Note 25).

The chief concern of this paper is, of course, the development of the written norm of English. It is intended to single out here what the present writer believes to have been the principal points of the whole process, or, to put it metaphorically, the main milestones of the road covered by the written norm of English in the course of its history. Hardly more can be done, considering the present stage of our knowledge of concrete facts. In a number of instances one will be able only to formulate the involved problems, the solution of which will have to be deferred until more detailed information has been obtained on the nature of the correspondences existing between the two compared language norms of English at various stages of its history. The investigation of these points will prove particularly difficult in view of the notoriously smaller stability of the written norm of earlier periods with all its numerous differentiations, regional as well as individual (34). Despite all such difficulties, however, it can be safely asserted that even at the present state of our knowledge the main outlines of the development of the English written norm stand out with relative clearness (35).

* * *

In our attempt to evaluate the situation found in the written norm of Old English (=OE), we will be regularly referring to the Early West Saxon (=EWS) state of things, which had been codified by Henry Sweet long ago and which came to be adopted by most handbooks of OE (36). It is now commonly admitted that the correspondence of the spoken and the written norm in OE was built up on a relatively very close parallelism of phonemes and graphemes, i. e. that it primarily respected the relations binding the smallest functional elements of the lowest levels of the two norms. The validity of this current view may be checked by a brief survey of the situation ascertainable on this lowest level of EWS.

Although the functional opposition of quantity in vowels was not graphically recorded in the EWS written norm (37), in the big majority of instances the parallelism of phonemes and graphemes had been worked out to a surprisingly high degree. Almost thirty years ago, Prof. B. Trnka, the first scholar to approach the OE phonic system from the functional viewpoint, very aptly stressed the fact that one of the most striking "unphonetic" features of OE spelling is, in fact, perfectly legitimate if evaluated by phonematic standards (38). The concerned feature is the presence in the OE written norm of only one grapheme s for two sounds [s, z], and analogously, of f for [f, v]; the use of one grapheme for each of the two pairs of sounds is perfectly justified on the ground that from the functional standpoint the members of each pair constitute combinatory variants ("allophones") of one and the same phoneme. The sound pairs [s/z, f/v] so constitute only two phonemes, /s/ and /f/ respectively; consequently, by using for them the respective graphemes s and f, the OE writing systematically observes the correspondence on the lowest level of the two language norms, spoken and written. Besides, B. Trnka also pointed out the phonematic importance of the fact that the OE letters ã, œ had not been differentiated in their references to the OE sounds [œ, ³], but used promiscuously. This fact proves that from the functional standpoint the two OE sounds had represented optional variants of one and the same grapheme (or, if one prefers the other term, optional allophones).
What has just been said about the relations of $s - /s/, f - /f/, p/\partial - /p/$ refers only to the most conspicuous EWS specimens of correspondence on the lowest level, i.e. of parallelism between phonemes and graphemes. But there are also a number of other specimens of such correspondence. First, the relation $n - /n/$ must be pointed out; it should be noted that the velar nasal $[\gamma]$, constituting a combinatory variant of the phoneme $/n/$ was duly unrecorded by the OE graphical system. Similarly, the phonetic difference of the OE sounds $[\chi]$ and $[h]$ was functionally irrelevant, as both sounds represented combinatory variants of the phoneme $/h/$. As both $[\chi]$ and $[h]$ were recorded by the same EWS grapheme $h$, we are faced with another specimen of consistent correlation on the lowest level, viz. $h - /h/$. And finally, if Quirk and Kuhn are right (see above Note 36), then the digraphs used in EWS to denote "short diphthongs" are phonematically motivated too, being correlative counterparts of the long diphthongs of corresponding qualities (39).

Somewhat more complicated is the question how should be phonematically interpreted the existence of the common grapheme c for two OE explosive sounds, the velar $[k]$ and its palatal counterpart $[k']$. Is it indicative of the allophonic relation of the two sounds? H. Penzl (40) is inclined to answer this question in the negative, but his arguments do not go far enough, as he does not envisage the problem in its full complexity. He is certainly right in pointing out that owing to the operation of the $i$ umlaut the velar sound $[k]$ came to be situated also before the secondary palatal vowels which had only emerged after that operation, viz. before $[e, e; \alpha, \alpha;]$. From the functional standpoint these secondary palatal vowels were undoubtedly identified with the primary palatal vowels $[e; \alpha, \alpha;]$, which could have been preceded only by the palatal consonant $[k']$, not by its velar counterpart $[k]$. The natural conclusion following from this seems to be the separate phonematic status of $[k]$ and $[k']$ since the earliest OE, and Penzl does not hesitate to make this conclusion. But the trouble is that, if we confine our observation to the EWS situations which are covered by Penzl's argument, it is most difficult to discover a pair of words in which $[k]$ and $[k']$ could be found to stand in identical or at least analogous situation.

There appear to be two reasons of this. First, EWS obviously did not possess any evidence of West Gmc $*k$; second, it is well known that the original, primary palatal vowels $e, \alpha, \alpha;$, if preceded by the palatal sound $k'$, regularly appear diphthongized into $ie, ea, \dot{ea}$ (cf. cieres, ceaster, c\'ace). It is, of course, true that the digraphs of the types $ie, ea$ are often explained away as a purely graphical affair. In other words, it is often taken for granted that the letters $i-, e-$ found in them denoted only a palatal pronunciation of the sound referred to by the preceding grapheme. But however widespread this belief may be, it can hardly be regarded as absolutely convincing. As is well known, in Late WS the groups $ie, ea$ in such positions appear to have been replaced by simple units perfectly analogous to those which had replaced $ie, ea$ in those situations in which the originally diphthongal character of such groups cannot be doubted. This would, then, speak rather for the diphthongal quality of the groups in words like cieres, ceaster and the like (41). The parallelism of the developments of the undoubtedly diphthongal $ie, ea$ and the "purely graphical" $ie, ea$ is admitted by Penzl himself. Under such conditions, the only convincing EWS instances of the mutual functional opposition of $[k]$ and $[k']$ are those in which the opposed sounds were followed by a suffix beginning in a velar vowel (see, e.g., drincean — drencean, i.e. /drinkan — drenk'an/; it should be pointed out that Penzl does not refer to instances of this type). As, however, the number of such cases was relatively small, the functional yield of the phonematic opposition of $/k/ - /k'/ must have been rather low.
In the light of these facts, Penzl's conclusion concerning the separate phonematic status of \([k']\), though undoubtedly true, should have been formulated more cautiously, at least for EWS. It will have been noted that except for the oppositions of the type \textit{drincan} — \textit{drencean}, the positional distribution of \([k']\) and \([k]\) is virtually complementary. Obviously, although the phonematic unity of \([k']\) and \([k]\) no longer existed, very many features of spoken EWS were still pointing to it. And it was exactly such features that may have served as a motive for the recording of the two phonemes by one and the same EWS grapheme \(c\), although the phonematic unity of \(\text{/k/}\) and \(\text{/k'/}\) had already been dissolved. It might be argued that in this point the OE way of writing was obviously opposed to the correspondence of phonemes and graphemes, and the argument could not be flatly dismissed. On the other hand, it should not be overlooked that the EWS recording of the two phonemes by one and the same grapheme is based on the principle of their almost complete complementary distribution, which is decidedly a principle playing a highly important part in the phonematic order. It cannot, therefore, be denied that the basic principle underlying the use of one and the same grapheme for \(\text{/k'/}\) and \(\text{/k/}\) is, to some extent at least, based on phonematic considerations.

Moreover, if economical considerations are often adduced as particularly recommending the phonematic orthography, then the EWS way of writing was more economical still: it managed to cover the two phonemes by one grapheme, disposing of the cases in which the two phonemes were mutually opposed by the simple device of the diacritical letter \(e\), indicating the palatal quality of the denoted phoneme (as in \textit{drencean}, \textit{fencean} and the like).

Besides, it should be added that despite its economical device just referred to, the EWS way of writing was by no means insensitive to the changed phonematic situation in the domain of the \([k]\)-sounds. Most certainly it was this changed situation that was responsible for the emergence in the OE system of graphemes of a specialized sign \(\text{k}\) for the velar \(\text{/k/}\), while the non-specialized grapheme \(c\) could, as of old, refer both to the velar and to the palatal phoneme. The same reasons may have called for the existence, in the OE adaptation of the runic alphabet, of two separate symbols, one of which stood for the palatal, the other for the velar, voiceless stop.

Analogous problems face the analyst if he attempts a phonematic evaluation of the EWS sounds \([\gamma, \gamma', g]\). In the prehistoric period these three sounds must have been phonematically equivalent, as all of them had a common ancestor, the PGmc voiced velar fricative sound. It is certainly of importance to find all these three sounds recorded by one common grapheme \(g\). Still, the phonematic unity of these three sounds in EWS has been open to serious doubt. Two arguments are often raised which appear to contradict the phonematic unity of \([\gamma-\gamma']\). The first of them, again, is the fact that the velar fricative could occur before the secondary palatal vowels (see, e. g., pl. \textit{gēs} ‘geese’). But, like in the case of the velar \([k-]\) in analogous positions, it is extremely difficult to find an EWS pair of words in which \([\gamma]\) and \([\gamma']\) could be found to stand in identical or analogous situations. It should be realized, that is, that after the preceding palatal \([\gamma'-\gamma']\) the original, primary palatal vowels \(e, æ, a\) had again been diphthongized into \(ie, ea, \) and \(ēa\), respectively (see instances like \textit{giefan} ‘to give’, \textit{geaf} ‘I gave’, \textit{gēar} ‘year’). The other of the two objections raised against the phonematic unity of \([\gamma-\gamma']\)-\(g\) is, however, more serious. It points out those instances of OE \(\gamma'-\gamma'\) which go back to PGmc \(*j*\) (<IE e. g, \textit{geoc} ‘yoke’, \textit{geong} ‘young’ etc., in which \(-e-\) is supposed to have been a mere graphical item, signalizing the palatal quality of \(\gamma\)). If this explanation of such writings is
correct (and it appears perfectly sound), then one is indeed faced with a situation in
which both \( y' \) and \( y \) could occur (see, e. g. \( geoc \) 'yoke' — \( god \) 'God'), and then the
split of the phoneme \( /y/ \) into \( /y/ \) and \( /y'/ \) can no longer be doubted.

It is, of course, true that one cannot altogether exclude the possibility of the really
diphthongal character of -eo- in such situations, at least in EWS (42). On purely
phonetic grounds, the rise of a glide of the \( i^- \) or \( e^- \) quality between a palatal \([y']\) and
a following velar vowel would be quite commonplace, and so would be the amalgam­
ation of this glide with the following vowel. Phonematically such development would
undoubtedly have been motivated by an effort to integrate the instances of \( y'\text{PGmc }*j- \) into the general pattern of the EWS \( /y'/\)-phoneme. Such an explanation
would, however, be at variance with the future development of words like \( geoc, geong \)
in English (although it should not be forgotten that the ModE standard forms
of these and similar words are prevalently based on Anglian, not WS prototypes) (43).

In any case, it is certainly remarkable that the instances of the type \( geoc, geong \)
had been the only cases contradicting the usual complementary distribution of the
EWS spirants \([y]\) and \([y']\). Like in the above-discussed case of EWS \(/k/ - /k'/\)
here too this fact of almost absolute complementary distribution of our spirant
sounds may account for the smooth functioning of the one single grapheme in its
capacity of a graphical sign used for both. In other words, even after the phonematic
unity of \([y]\) and \([y']\) had been dissolved, the functioning of the EWS grapheme \( g \)
was still based upon a consideration that was essentially phonematic, i. e. upon the
complementary distribution of what was the vast majority of the instances of \([y]\)
and \([y']\).

Like the above-discussed EWS grapheme \( c \), the grapheme \( g \), too, was perfectly
able to cope with those few instances to which the aforesaid complementary distrib­
ution did not apply. In coping with them, it availed itself of the same simple
graphical device which had been so helpful in the case of \( c \), viz. of the diacritical
letter \( e \). It should also be noted that, here again, the use of the single grapheme \( g \)
proved to be even more economical than a strictly phonematic way of writing.

It can be safely said, then, that also the use of the EWS grapheme \( g \) had been
built up, essentially, upon correspondences characterizing the lowest language level.
The high degree of complementary distribution found in the EWS voiced velar
sounds is, besides, also borne out by the mutual relations of the spirant \([y]\) and the
explosive \([g]\); in EWS, the latter was only found in the groups \([gg]\) and \([gg]\), evaluated,
respectively, as \(/ny/ \) and \(/yy/ \). The use of the grapheme \( g \) in such cases was,
therefore, again amply justified by phonematic reasons. It should be pointed out,
however, that in some isolated instances the EWS grapheme \( g \) stands for the palatal
explosive \([g']\) (see, e. g. \( sengean \) ‘to singe’). In such instances, very rare as they are,
the grapheme \( g \) clearly refers to a sound phonematically different from \([g]\), which is
usually denoted by it in the group \( ng \); the phonematic difference is distinctly seen
from oppositions like \([segg'an — singan]\). It will have been noted that in such in­
stances (which remind one of the type \( drencean, pencean \), discussed above), distinctness
of reference had again been provided for by the insertion of the diacritical letter \( -e- \)
signalizing the palatal quality of the explosive sound referred to by the preceding
letter (44).

Clearly, the EWS usage of the grapheme \( g \), although admirably economical as
a whole, had to cope with a certain number of difficulties; for the time being, their
number was relatively small, but it was bound to increase with the increasing number
of changes in the phonematic relations of the concerned sounds. Here, again, it
should be pointed out that already in EWS some phenomena were unequivocally
indicative of the fact that old phonematic relations of the sounds [γ, γ', g] were no longer tenable. Among such phenomena one may recall the above-mentioned circumstance that since the beginnings of the EWS period the velar sound [γ] could be found to stand before palatal vowels (see the above instances of the type gēs). It is also remarkable that in the OE runic alphabet the sounds [γ] and [γ'] were written not by a common symbol, but by two separate symbols, analogous to those which were mentioned above in discussing the problems of EWS c. For all such indications, however, one can safely assert that also the basis underlying the use of the grapheme g can still be found on the lowest language level, i.e. in the parallelism of phonemes and graphemes.

All that has been said here so far testifies to a relatively very high degree of the said parallelism in EWS. A very convincing negative evidence of its importance in EWS can be seen in the circumstance that the number of EWS digraphs (and polygraphs in general) was relatively very small. If by polygraphs we mean letter-groups each of which refers to one single phoneme only, then a detailed examination of the EWS state of things can only lead to the following result: Apart from the letter-groups ea, eo, io, ie which most probably must have, already in EWS, referred to monophones (45), only very few instances of EWS letter-groups can be found which might have claimed the status of digraphs or polygraphs. As a matter of fact, only two such groups can be ascertained, viz. sc and cg. The first of the two, however, was hardly a real digraph in EWS, as it most probably still referred to the phonematic group /sk/, phonetically manifested as [sk'] (46). Thus it appears that, apart from eo, ea, io, and ie, the EWS written norm had only one genuine digraph, viz. cg, whose phonetic value was [g'g'].

In a way, the existence of this digraph in EWS cannot but strike one as somewhat surprising, because the phonetic quality corresponding to it, the palatal [g'g'], was obviously in allophonic relation to the velar [gg]. The former, that is to say, could only occur after a palatal (or palatalized) vowel, while the latter was only admitted to stand after a velar vowel, cp. liocean — doggan, i.e. [lig'g'an — doggan]. How can one account for the registration in writing of this functionally irrelevant phonetic difference? The most probable answer to this question is that the difference must have been very closely associated with that of [g' — g] which, it will be remembered, was functionally relevant in EWS, although the functional yield of that opposition was very low. This explanation will appear more probable if it is realized that the phonetic qualities of [g'g'] and [gg] were really [g'] and [g:], respectively, so that they differed from those of [g'] and [g] only in quantity. Thus the phonetic difference of the two kinds of "geminated" consonants may have been distinctly realized even though objective conditions necessary for their mutual phonematic independence had not yet been created (47).

The above analysis has revealed that the EWS written norm is indeed founded on basically phonematic considerations, i.e. that upon the whole, it remarkably respects the correspondences typical of the lowest level of the spoken and written norms. But this situation was not to last very long. Already during the OE period a number of new digraphs emerged in the WS written norm. Among the first was ie, whose phonetic value was [i, i:]. The rise of this digraph was due to the continued writing by many WS scribes of the letter-group ie even after the diphthongal te had been monophthongized into i (termed "i impurum" by the older generations of Anglicists). The emergence of this digraph may be regarded as a foretoken of the future development of the written norm of English, inasmuch as one is faced here with the first obvious case of a non-exclusive digraph, i.e. of the type which in
ModE is vastly dominant (48). The penetration of non-exclusive digraphs into a concrete written norm naturally results in making the latter less learnable; besides, however — and this is our main concern —, it represents a major deviation from the more or less systematic correspondence found on the lowest level of the written and spoken norms of EWS (49).

The Late OE period saw the rise of additional non-exclusive digraphs, mainly *eo* and *ea*, whose phonic values were to merge, sooner or later, with those of the respective graphemes *e* and *ae*. In the consonantal sphere the ultimate change of */sk'/* into */š/*, coupled with the preservation of traditional writing, resulted in the introduction into the LOE written norm of an additional digraph *sc*. Unlike the new digraphs of the vocalic sphere, *sc* belonged to the category of exclusive digraphs (because there was no other way of recording the LOE phoneme */š/*). But its value for the community was reduced by its ambiguity; in a number of words, especially of Graeco-Latin (and later also of Scandinavian) origin the letter group *sc* had preserved its original phonic value [sk] — see, e.g., words like *scol* ‘school’, *tled-scriptor* ‘annalist’, *scripan* (of Scand. provenance) ‘to get dry’ etc.

It can be said, then, that by the end of the OE period a number of digraphs had become firmly established in the written norm of English; their establishment prepared the soil for a later penetration of further digraphs and, consequently, for a marked decrease in clear reference to correspondences between English graphemes and phonemes.

* * *

In the Middle English period the all-pervading influence of Norman scribal practice could not but lead to profound changes in the written norm of English, even if in some quarters the old tradition of writing made a determined stand against the new practices, and sometimes (as in Orm’s case) even attempted to build up a new graphical system based on traditional elements. By the middle of the 13th century it was to become perfectly clear that the infiltration of Norman graphical elements had been an established fact, even though the penetration did not proceed at equal rate in all regions and did not equally affect all aspects of the written norm.

In the vocalic domain perhaps the most remarkable of the new digraphs of Norman provenance is *ou* (with its variant *ow*, which in some situations was to become very popular). The new digraph *ou*/*ow* was exclusive but not quite unambiguous, because it could denote (especially in its variant form *ow*) also diphthongal pronunciations. The digraph *ea* (at least in part continuing the LOE tradition) denoted the phoneme */e:/*. The closed counterpart of the latter, the phoneme */ɛ/*, was referred to by another new digraph, *ee*; similarly, another new digraph *oo* was provided for the long closed */ɔ/*. For the greatest part of the ME period, these three digraphs were exclusive and unambiguous, but in Late ME they were to lose these qualities, and so again to contribute to the continuous decrease in clear reference to correspondences existing between the lowest levels of the two norms of English.

From the new digraphs (and polygraphs) penetrating into the consonantal domain the most interesting are certainly those which contain the letter *h*. Direct influence of French can be traced in the introduction into English of the digraph *ch* for the phoneme */ʃ/*, and of *th*, which managed to gradually replace the old runic grapheme *p* and its allograph *þ*. Only indirectly was felt the graphical influence of French in the rise of other digraphs containing the letter *h*. Such other digraphs, originating on the English soil, were modelled on the above-described two which had been taken over from French directly. The most important of such home-made digraphs
is obviously \textit{gh}, which replaced the old grapheme \textit{h} in medial and word-final positions (cp. OE \textit{niht} — ME \textit{night}).

The importance of the digraph \textit{gh} lies in the fact that in it the letter \textit{h} acquired an exact, specific diacritical function, viz. to denote the voiceless quality of the sound referred to by the first element of the digraph: \textit{gh} stood for voiceless [\gamma], i.e. for [χ]. (It may be noted, incidentally, that the mutual assimilation of the graphical signs of [\gamma] and [χ] may have been prompted by the circumstance that probably the two sounds had become united in one phoneme in Late WS, and were to remain so until the disappearance of the voiced velar [\gamma] at the close of EME.) This specialization can be regarded as a positive contribution by the English scribes to the upbuilding of the ME written norm. It will be recalled that on the French soil the letter \textit{h} in analogous digraphs had denoted a variety of functions: in the south of France it referred to a palatal pronunciation (\textit{lh} was 'l mouillk', \textit{nh} was equivalent to Modern French \textit{gn}); in Auvergne \textit{gh} referred to [dz], in Picardy, however, to [g] etc. (50). In its new, specialized function, acquired on the English soil, the diacritical letter \textit{h} can be found in a number of other ME (and especially Early ME) digraphs. They are: \textit{lh} for voiceless [L] (51), \textit{rh} for [R], \textit{nh} for [N], and of course \textit{wh} for [W]; this last digraph has admittedly preserved its original phonic value in wide geographical areas up to the present day (thus, e.g., in Northern England, in Scotland, partly also in Northern America etc.).

The above-quoted instances, documenting the rise of digraphs in the English written norm during the ME period, are also indicative of another highly interesting fact, viz. of the tendency aimed at a consistent continentalization of the English graphematic inventory. By this we mean the effort to discard from that inventory all letters and letter shapes which had been unknown to continental (and thus also Norman) scribal practice. This effort results not only in the abandonment of the ligature \textit{s} (which, after all, had lost its raison d'être owing to specific sound changes of Late OE) but also in a number of other events. It is to these other events that the term "continentalization" applies most closely, because they include not only the ME dropping of the old runic symbols for \textit{w} and \textit{ð} (together with \textit{p}) and their replacement by the respective digraphs \textit{mm} and \textit{ih}, but also a consistent adaptation of those Latin letters which up to then had existed in English in their Irish forms only. This concerns particularly the letters \textit{g} and \textit{r}, whose Irish shapes became Romanized. It will have been observed that also the continentalization of the English graphematic inventory had some share in increasing the importance of digraphs in the English written norm.

In the course of the ME period another important factor emerged in the written norm of English which up to that time had been virtually unknown in it, viz. the mute graphemes. Such a mute grapheme was undoubtedly the final letter -\textit{e} which had no direct equivalent in the spoken norm after the final unstressed mixed vowel had been dropped (as is commonly admitted, this must have happened by the year 1400 all over the English territory). In most instances, of course, such mute -\textit{e} has an indirect functional equivalent in the spoken norm, viz. the quantity of the vowel standing in the preceding syllable (52). Where even this indirect functional equivalent is missing (as is live, house, etc.), the only functional motivation of the mute -\textit{e} might be looked for in the signalization of the word-limit (53). It is, then, obvious that the status of the 'mute e' of the latter half of the ME period cannot be identified with the status of the EModE mute graphemes which already possessed undoubted 'quasi-ideographic' functions. Such functions were obviously performed by the mute grapheme \textit{b} in words like debt, doubt, by the graphemes \textit{c} and \textit{u} in victuals etc., all of
which obviously contributed to the speaking of such written words "quickly and distinctly to the eyes" (to recall Frinta's statement discussed above in Chapter One). But even if the ME mute -e cannot be classified as a 'quasi-ideographic' factor in this sense, its emergence in the written norm of English certainly helped prepare the way for the coming of mute graphemes the nature of which was to be genuinely 'quasi-ideographic'.

* * *

A rapid survey of the conditions prevailing in ME has revealed that the parallelism of phonemes and graphemes (or, the correspondence on the lowest level of both language norms), which had been relatively very clear in the EWS period, became somewhat obscured in ME, and that this change was due to the emergence of new digraphs and of the mute grapheme -e. Nevertheless it may be safely asserted that throughout the ME period consistent effort can be traced at a systematic recording of a given phoneme placed in a given situation by a certain, specific graphical means. As a result of this, the ME written norm was hardly able to effect a purely graphical differentiation of homonyms, such as can so frequently be met with in ModE. In other words, the 'quasi-ideographic' principle, which plays such an important part in the written norm of ModE and which stresses correspondences of the written and spoken norms on the level of words, was most probably quite unknown in ME. It should be added, however, that the ME written norm was also lacking another kind of correspondence whose presence is typical of the written norm of ModE, viz. the correspondence on the level of morphemes. If, that is to say, some ME inflectional endings (or, for that matter, morphological suffixes) had the same graphical structure in all written words characterized by such endings of suffixes, then this graphical identity certainly cannot have been motivated by analogous morphematic functions of such endings or suffixes, but purely and simply by an identical phonematic make-up revealed by all such endings or suffixes (54). Thus, e. g., the forms talketh, beggeth, teacheth (or talkes, begges, teaches) had identical endings because in all of them written -eth (or -es, respectively) corresponded to spoken [-θ] (or, respectively, [-as]). Similarly, in the written forms talked, begged, ended the identical structure of the written suffix -ed was solely motivated by the identical structure of the spoken suffix [-d] in the corresponding spoken forms of the three words. When, however, at the close of the 14th century the well-known phonetic changes (55) had brought about the differentiation of the ending [-as] into [-s/-z/-lz] (and, analogously, of the suffix [-ad] into [-t/-d/-id]), while the written forms had been left unchanged, it became obvious that the correspondence of the spoken and written forms no longer rested on the parallelism of phonemes and graphemes composing the given ending (or suffix), but that it had become revaluated so as to be based on the parallelism of the involved spoken and written morphemes conceived as unanalysed wholes.

Undoubtedly the most interesting chapter in the development of the English written norm is the assertion of 'quasi-ideographic' tendencies to which references have been made more than once in the above lines (see especially the concluding pages of Chapter One). At this moment our main concern is the establishment of the date from which the 'quasi-ideographic' tendencies may be said to have begun their operation in the written norm of English. It is open to no doubt that this date will constitute one of the most important turning-points in the whole history of that norm.

A detailed comparison of different changes operating in the ME period leads to the conclusion that the first beginnings of the operation of our principle cannot
have been earlier than the close of the 14th century. At that time the disappearance
of ME palatal $\chi$ (56) in the phonematic structures of words like wright, right, sight
(phonematically, /wri:$t$, ri:$t$, si:$t$/) resulted in the homonymy of these
words with words like write, rite, site, whose phonematic structures must already
have reached the stage of /wri:t, ri:t, si:t/. The written forms of the homonymous
word-pairs, however, continued to be kept apart by their different graphematic
make-ups, and it is most probably exactly these word-pairs that can claim historical
priority as the first instances to have embodied the operation of the 'quasi-ideological'
principle in English, and thus to have established such cases of correspondence of
our two norms as are based primarily on the level of words.

It may be of interest to note that sometimes we are faced with cases of abandonment of such
graphical differentiation; thus the word rite is sometimes recorded as right (the first evidence of
of such “misspelling”, quoted by the Oxford English Dictionary [=OED], goes back to 1590).
It is, however, symptomatic that the development of the English written norm as a whole did
not avail itself of the possibility of merging homophonous pairs also in writing, i. e. to make
them also homographic; on the contrary, the development has always preferred to keep the
written forms apart.

Later on, further instances of ‘quasi-ideographic’ writings are seen to appear in
English. Still in Late ME, the words I and eye, phonematically merged into /i:/ (most
probably pronounced as [ii] at that time), are often kept apart by their different
spellings. — Particularly remarkable is the case of the word-pair foul—fowl, whose
homophous members have become differentiated in writing by the simple means
of utilizing for the purpose the two allographs of the ME digraph ou/ow.

Still, it must be stressed that in the ME period instances of the graphical differentia­
tion of homophones were not particularly numerous, and that, for some time to
come, writers and printers were not very consistent in applying this or that way of
writing to this or that homophone. The word foul, e. g., used to be written either
foule or foule between the 14th and 17th centuries, and similarly, the word now
spelt fowl was often recorded as foul within roughly the same period of time. It was
only in the Early ModE period that instances of the graphical differentiation of
homophones were growing more numerous, and — which is still more important —
that such differentiation was resorted to in a more consistent and more conscious
manner.

It is well-known, e. g., that a number of new homonyms arose in EModE as a con­
sequence of the simplification of some consonantal groups. We want to mention
here only one such phonematic change which is especially instructive, the simpli­
fication of the initial groups kn-, gn-. As is commonly known, both these groups
were reduced into [n-], but their graphical recordings were invariably left unchanged,
with the result that homophonous word-pairs like not—knot, new—knew, night—knight,
and the like, continued to be differentiated by their spellings. A particularly interest­
ing point is that the members of such homophonous pairs were graphically differen­
tiated much more systematically than the members of word-pairs which had
become homophonous in the latter part of ME. Thus, it is certainly remarkable
that the OED does not quote a single instance of evidence for the recording of
words like knot, know without the initial k-, and similarly, not a single instance of
misspelling the words not, no, new with a non-etymological initial k-. Here it is
obvious that one can speak of a conscious, intentional differentiation of homophones
by graphical means.

The consistency of graphical differentiation in some cases must have been furthered
by the relatively very frequent occurrence of the concerned words in concrete con­
texts. It need not be demonstrated that such frequent items have a greater chance of impressing their graphical make-up on the reader's or writer's memory than items of rare occurrence. The validity of this statement is confirmed by one interesting observation which may be obtained from the columns of the OED: where at least one of the homophones had been a word of relatively rare occurrence, the need for a graphical differentiation of the word-pair was much slower in asserting itself. This can be seen, e. g., in the word-pair *die* — *dye*. As the latter member of the pair had been a specialized technical term whose frequency in common, everyday contexts had been very low, graphical differentiation of the two words was not felt as urgent, and was therefore very long delayed. In the LME period both words were written either with -*i-* or with -*y-*. Dr. Samuel Johnson presents both of them under the form *die*, while Joseph Addison prefers the form *dye* for both. According to the OED, the graphical distinction of the two words is "quite recent".

Many more instances could be quoted here of the preservation, in the history of English, of graphical distinction of words the phonic make-ups of which had become identical. Within the narrow limits of the present paper we can only point out some of the phonological changes which greatly contributed to the rise of a number of such homophonous, but not homographic word-pairs. One of the changes had been the ultimate merger of ME *e*: and *è* into *i* in the 17th century, which resulted in the cropping up of word-pairs like *bean* — *been*, *beat* — *beet*, *meet* — *read*, *reed*, *weak* — *week*, *sea* — *see* and a number of others. Also the exceptional development of ME *e*: into *ei* was to give rise to some such pairs, cp. *great* — *grate*, *break* — *brake*. And finally, the coalescence of ME *a* and ME *ai* in ModE [ei] was responsible for the emergence of word-pairs like *lain* — *lane*, *main* — *mane*, *maize* — *maze*, *plait* — *plate*, *maid* — *made* etc. (57).

** * * **

It can be said that after the establishment of the above-described and similar differentiations the English written norm has virtually acquired the structure which is regarded as typical of its present-day stage. It also acquired, at that time, its particular kind of correspondence characterizing the relations between English spoken and written utterances. As was already pointed out above (in Chapter One), this correspondence is still based on the parallelism found on the lowest level of the two norms, i. e. it is the one existing between phonemes and graphemes (or, very frequently, between phonemes and digraphs or polygraphs). This basic parallelism is, however, considerably interfered with by parallelisms and correspondences found on higher levels of the two language norms, viz. on the level of morphemes and particularly words.

It will not be out-of-place to emphasize here the fact that really the correspondence on the lowest level still constitutes the basis on which the English written norm rests, even if this basis has been rendered less distinct than in most other European languages. It will be useful to realize the relatively high percentage of English words, especially monosyllables, in which the parallelism of phonemes and graphemes is virtually complete (see cases like *bet*, *bed*, *dip*, *sit*, *stand*, *gap*, *man* — *men*, *pit* — *pet* — *pat* — *pot* — *put* etc.). Only if due regard is paid to the basic character of this type of correspondence in English it is possible to avoid misleading generalizations and hasty parallels such as are not infrequently met with and which insist upon the similarity of the written norms of English and Chinese (58). Such parallels have a grain of truth in them in so far as they point out the ideographic (or quasi-ideographic) features of both written norms. The parallels might also be defended on the ground
that, like the English, also the Chinese written norm is not consistently ideographic, but represents a synthesis of the ideographic and phonetic principles; in other words, that in some cases the signs of the Chinese script do not refer to specified facts of the extralinguistic situation but to specified phonic realities. For all that, however, there is one difference in principle between the written norms of English and Chinese. It is not so much a difference of levels on which the parallelisms can be found in both languages, as a difference of hierarchy of the parallelisms belonging to those different levels. This hierarchy, it will be observed, is built up in English in a manner totally different from the way it is built up in Chinese. While in English the parallelism of phonemes and graphemes is still the basic factor, and the ideographic (more exactly, quasi-ideographic) principle plays only a secondary part, the hierarchy of these two factors in Chinese is perfectly the opposite one.

On the other hand it must be admitted that even if its sphere of action in English is strictly limited, the quasi-ideographic principle certainly represents a very potent factor there. The importance of the part played by it is mainly evidenced by the above-noted fact that since the opening of the EModE period the graphical differentiation of homophones has obviously been effected quite consciously and with a fair degree of consistency (see instances like not — knot, new — knew etc.). In some instances the differentiation is particularly notable, because it not only proves the consciousness in language-users of the existing quasi-ideographic trends of the written norm, but, in addition to that, reveals the effort on the part of the language-users to utilize the given graphical possibilities for the purpose of establishing new word-pairs whose members, in spite of their homophony, might be differentiated in writing. Two instances of this kind were registered above (foul — fowl, plain — plane). In the final paragraphs of this chapter, we want to present two more instances of such intentional differentiation which reveal some features of interest.

The first homophonous word-pair is son—sun (with phonematic structure /sʌn/ in both cases). As is well known, in OE these two nouns had homophonous stems, but were clearly kept apart by their sets of inflectional endings: sunu 'son' belonged to masculine u-terms, while sunne 'sun' was a feminine n-stem noun. After the reduction, and ultimate loss, of inflexional endings the two words became perfect homophones, so that the possibility of differentiating them graphically must have been particularly welcome. Such possibility was given by the coexistence in ME of two kinds of scribal practice in referring to an /u/-phoneme situated close to /n, m, v, w/ (which were written as n, m, u, uu, respectively). Traditional scribal practice of English rendered such /u/-phoneme by the letter u, while the Anglo-Norman usage, guided by purely technical considerations of graphical clearness, regularly availed itself of the grapheme o in such situations. In the long run, domestic traditional writing held the ground in one of our two words (sun), while the Norman graphical usage penetrated into the other (son). According to the OED, the graphical distinction current in ModE has been evidenced since the 14th century, although, for some time to come, other methods of graphical differentiation were to be tried as well (59). The interesting feature of the case in question is that here the need of graphical differentiation of the two words was felt so strongly as to prevent the mechanical application of a convenient device of writing technique in one of the words, while in the other of the two the application of that device was not interfered with. This may be regarded as a convincing proof that the graphical differentiation of the two words was due here to the conscious, intentional introduction of the 'quasi-ideographic' principle.

The story of the other case of intentional differentiation is somewhat more complex.

29
It concerns the written forms of the ModE words whole, whore (phonematically, /houl, ho:/). The initial wh- of these two words has constituted a serious problem of English phonology, because since their first occurrences in English these words have always had initial h-, not hw-. The most frequently accepted explanation of the written wh- in these words is that it reflects a dialectal pronunciation of these words (with an initial [W-]). This dialectal pronunciation is supposed to have penetrated into literary English in the course of its history and to have left there some traces in the traditional spellings of our two words (and, in the EMcdE period, of some others as well). In the spoken norm of English, however, these dialectal forms are supposed to have disappeared, owing to their replacement by the original h-forms.

The trouble is, however, that the traditional explanation is, at least to some extent, contradicted both by the facts of English dialectology and by the relative chronology of both ME and EModE phonological changes (60). In our opinion, the initial wh- of such words is a purely graphical affair, and can be satisfactorily explained as based on the relation of equivalence that existed in EModE between the phoneme /h/ and the digraph wh. This relation of equivalence emerged in the pronominal forms who, whose, whom when in the latter half of the 15th century the original ð-vowel of these words had passed into û. After this change, that is to say, the pronounced [Wu:, Wu:z, Wu:m] became revaluated into [hu:, hu:z, hu:m]. The revaluation had been motivated physiologically and acoustically (from these two standpoints the combinations [Wu:] and [hu:] could have been virtually identified) as well as phonematically (the ME [W]-sound had manifested a phoneme of a very low functional yield, and as such it soon became subjected to tendencies trying to discard it from the phonematic system). The existence of the relation of equivalence between the phoneme /h/ and the digraph wh is also evidenced by frequent EME spellings with etymologically unmotivated wh- (thus, in the 16th and 17th centuries words like hood, home are frequently written as whood, whome etc.).

One fact deserves to be singled out as particularly remarkable. In a large majority of such words the forms with wh- soon disappeared without leaving any trace of their existence in the written norm of Present Day English; only two words, our whole and whore, have preserved such forms up to now. In the light of our previous observations it appears evident that this preservation was most probably due to the 'quasi-ideographic' function of wh- in such forms. The initial digraph wh- in whole and whore was clearly regarded as a useful graphical feature in as much as it enabled the language user to distinguish these two words very quickly from their homophonous counterparts hole and hoar (in ME, this latter word was frequently written hore). In other words, our two instances may again be regarded as evidence pointing to a case of conscious, intentional utilization in the written norm of another quasi-ideographic element. As has been said above, the emergence of this ideographic element was a necessary consequence of the fact that, aside of the old relation of equivalence existing between the phoneme /h/ and the grapheme h, a new, parallel relation had been established between /h/ and the digraph wh-. Faced with the coexistence of these two parallel relations, the language-users found it only too natural to make use of the duplicity of graphical means for 'quasi-ideographic' purposes.

In concluding our remarks we want to stress once more the fact that we were only able to point out the most important of the milestones which mark the way covered by the written norm of English in the course of its development. Our remarks are, then, subject to being amply supplemented and corrected by further research. They only want to claim the merit of having demonstrated how rewarding the study of the written norm may be even for the historically-minded specialist.
NOTES


(6) The validity of this statement is clearly erced by the well-known fact that there are quite a number of people who can comfortably read and understand texts written in a foreign language without being able to speak that language at all.


(8) In Artymovyč's own words, "daP die Schrift jeder sct. Schrifteprache ein besonderes autonomes System bildet, zum Teil unabhängig von der eigentlichen gesprochenen Sprache" (Fremdw. u. Schrift, p. 114; italics ours).


(10) Printed utterances form a specific sub-category of written utterances (see J. Vachek, *Written Language and Printed Language*, Recueil linguistique de Bratislava 1, 1948, pp. 67—75), but, for the present moment at least, the difference of the two may be disregarded as non-essential; there will be an opportunity to come back to it further below.

(11) The comparison of more extensive spoken and written utterances reveals another notable difference between the two, viz. the monodimensional character of spoken utterances (noted for the first time by F. de Saussure, *Cours de linguistique générale*, Paris 1922, p. 103) as opposed to the regularly polydimensional character of written utterances. Such utterances as fill up more than one written or printed line, are two-dimensional, the longer ones, such as extend over two pages, are three-dimensional. Undoubtedly, the polydimensional character of written utterances essentially contributes to their superiority over their spoken counterparts in matters of quick and efficient surveyability. (A more detailed discussion of this point can be found in J. Vachek's Czech treatise *Psany jazyk a pravopis* [Written Language and Orthography], Čtento jazyce a poesii (Praha) 1, 1942, pp. 231—306, see esp. pp. 242 ff.).

(12) In other words, the author of a written utterance can be identified by his or her handwriting, whereas the printed utterance, effacing the differences of handwritings by the uniformity of printer's types, renders such direct identification impossible. (See also our paper referred to above, Note 10.)

(13) See his papers referred to above, Note 5, p. 87, and the paper quoted in Note 10, p. 67.

It should be noted that in their earlier version the definitions were somewhat inaccurate owing to their use of the terms "spoken language" and "written language"; the present version replaces these terms by the more correct wordings "the spoken norm of language", and "the written norm of language", respectively.
(14) On this point see especially V. Mathesius, On some problems of the systematic analysis of grammar, Travaux du CLP 6, Prague 1936, pp. 95—107 (esp. p. 102).

(15) See our paper referred to above, Note 5, p. 91.

(16) This necessity was duly stressed by J. Berry in his Oslo lecture (see above Note 1) in which he insists that any system of writing should be based "on some attempt at a systematic correlation with the spoken language". He voices this demand, as he puts it, "despite eloquent pleas, especially by Bolinger, Vachek and others, that writing can and should be considered as basically a visual system independent of the vocal-auditory process" (p. 6). Berry overlooks, however, that the same necessity had been emphatically voiced by the present writer in the very two papers which are referred to in Berry's Note 6.

(17) The parallelism of phonemes and graphemes was consistently, if not always quite adequately, developed by E. Pulgram, Phoneme and Grapheme: A Parallel, Word 7, 1951, pp. 15—20.

(18) Josef Vachek, Český pravopis a struktura češtiny (= Czech Spelling and the Structure of Czech), Listy filologické (Prague) 60, 1933, pp. 287—319.

(19) The above instances have also made clear that by the term morpheme is meant here, in accordance with the conception prevailing in linguistics, the smallest utterance element that refers to some meaning and cannot be analysed into smaller elements of the same quality.


(21) By the term word is meant here an utterance element that refers to some meaning and that, acting as one indivisible whole, can more or less freely change its position with regard to other elements of the utterance, or at least can (again acting as one indivisible whole) be separated from those elements by the insertion of some additional, more or less freely interchangeable utterance-element.

(22) It was exactly these difficulties that had acted as a motive for the decision of the Chinese authorities to introduce alphabetic (i.e. more or less phonematic) writing, despite the complications of the Chinese language situation which are most likely to follow the reform. See esp. B. Karlgren, Sound and Symbol in Chinese, Oxford 1925; also M. Swadesh in Science and Society 1952.

(23) See also the interesting remarks by V. Fried, Je reforma anglického pravopisu vůbec možná? (= Is English Spelling Reform Possible?), Časopis pro moderní filologii (Práha) 39, 1957, pp. 257—270; with a summary in English.

(24) More detailed information on the compromise solution found in the written norm of Czech can be obtained from the paper referred to above, Note 18.

(25) Before the orthographic reform of 1917, Russian possessed a very limited number of instances of word-pairs distinguished in writing on the ground of the 'quasi-ideographic' principle, e.g. мир 'peace' — мир 'world', чить 'to eat' — еть 'is', etc. — In Czech the quasi-ideographic principle can be ascertained in a limited number of cases (see, e.g., vtr 'torrent' — vtr 'owl'), phonematically /vtr/ in both instances; бли 'he whitewashes' — бли 'weeds', i.e. бли /, etc.). Cf. B. Havránek, Influence de la fonction de la langue littéraire sur la structure phonologique et grammaticale du toché littéraire, Travaux du CLP 1, 1929, pp. 106—120 (esp. p. 111 f).

(26) The remarkably harmonized, co-ordinated character of the elements entering into the structure of the Czech written norm was discussed in detail in our paper referred to above, Note 18.

(27) It would be most useful if the term 'spelling' could be reserved for only one of the meanings covered by it today: it should refer to individual graphemes, manifesting the written norm, by phonic means available in manifestations of the spoken norm (see, e.g., a /ei/, b /bi:/, c si:/, etc.). An exact functional antipode of spelling so defined can be identified in phonetic (or phonemic) transcription whose task is to refer to individual sounds (or phonemes), manifesting the spoken norm, by graphical means based on manifestations of the written norm. For more details, see our paper quoted above, Note 5; it should be pointed out that some of the arguments found in it have been slightly revised and modified here.

(28) In our paper quoted above, Note 5; it should be pointed out that some of the arguments found in it have been slightly revised and modified here.

(29) Interesting specimens of various kinds of external factors which do not allow of an establishment of (theoretically possible) simpler orthographical systems are mentioned in Berry's paper referred to above, Note 1. — It should be pointed out that Berry, too, takes a fully justified liberal view in admitting exceptions to the rigorous application of the correspondence on the lowest level; he speaks of "a marked trend towards tolerance of synthetic writing systems and away from the illusory concept of the 'pure' phonetic or phonemic transcription" (p. 14). For all these sound observations, Berry's attitude remains more or less pragmatic, lacking the firm ground of linguistic theory. — Incidentally, the above-mentioned tension arising out of the conflicting requirements of the reader and writer only reflects a tension on a higher level, i.e. in the substance of the written norm itself. Its task "to speak quickly and distinctly to the eyes" acts as a centri-
fugal force, making for a conspicuous differentiation of written utterances from their spoken counterparts. On the other hand, the necessity of preserving a fair amount of correspondence between the written and the spoken norm co-existing in the same language community acts as a centripetal force, not allowing the differentiation of the two kinds of utterances to exceed certain limits. 

(30) See V. Fried's paper quoted above, Note 23. 

(31) One of the digraphs going back to this period has survived until the present day, viz. ch, denoting the single phoneme (x). 


(33) For particulars, the reader should be referred to our treatise mentioned above, Note 11 (see esp. pp. 280—288). 

(34) A most valuable discussion of these (and many other) points relating to the written norm of Middle English can be found in A. McIntosh's penetrating paper The Analysis of Written Middle English, Transactions of the Philol. Soc. 1956, pp. 26—55. 

(35) Many facts essential for a correct evaluation of the history of the written norm of English were finely observed and duly registered by Karl Luick in his Historische Grammatik der engl. Sprache (Leipzig 1914—1940), see esp. §§ 52—62. Since, however, Luick did not realize the hierarchic relations of the spoken and the written norm of language, his observations are somewhat scattered in character and suffer from lack of proper perspective. 

(36) In the past 25 years objections have been raised against the subordination to this norm of Late OE writings (see, e. g., C. L. Wrenn, Standard Old English, Transactions of the Philol. Soc. 1933, pp. 63—63). Besides, one of the well established points of the EWS norm was subject to serious doubts, viz. the existence in OE of short diphthongs aside of the long ones (cf. M. Daunt, Old English sound changes reconsidered in relation to scribal tradition and practice, Trans. of the Phil. Soc. 1939, pp. 108—137; see also F. Mosse, Manuel de l'anglais du moyen âge, 1, Vieil anglais, Paris 1945, esp. pp. 41 f. — Objections of the first category are certainly important; our aim, however, is not to unduly generalize the EWS conditions upon Late WS writings, but simply to base our analysis on the earliest ascertainable language norm that became stabilized in the OE language community. — As regards the doubts about the existence of EWS short diphthongs, detailed examination by S. M. Kuhn and R. Quirk (Some Recent Interpretations of Old English Diphthong Spellings, Language 29, 1953, pp. 143—156) has resulted in the conclusion that under the present circumstances there is no reason to abandon the traditional view. (See also their more recent remarks in Language 31, 1955, pp. 390—401, where they convincingly refute the objections raised against their view by R. P. Stockwell and C. W. Barrit, printed in the same vol., pp. 372 ff.). 

(37) The old opinion that the long quantity of vowels was denoted in OE by a diacritical sign resembling the mark of acute accent is no longer tenable now (cf. E. Sievers—K. Brunner Altenlische Grammatik, Halle 1951, p. 12). 

(38) See B. Trnků, Some Remarks on the Phonological Structure of English, Xenia Pragensia E. Kraus sexagenario et J. Janko sexagenario oblata (Prague 1929), pp. 357—364. — A more detailed account of the phonematic structure of OE can be found in B. Trnků's Vybor z literary středoanglické a staraanglické řeči (V Selection from Literary Middle and Old English Literature, An Introduction into Literary History and Grammar, Prague 1941, pp. 61—67. 

(39) To all appearances, EWS long diphthongs had already become monophonematic, while their short counterparts had always been of monophonematic character. For particulars, see J. Vachek, Notes on the Quantitative Correlation of Vowels in the Phonematic Development of English (to be published in Mélanges F. Mosse, Paris). 


(41) Even in instances like streccean, byccean the digraph -ea- may have referred to a genuine short diphthong, such as may easily arise when a clearly palatal consonant is immediately followed by a clearly velar vowel. 

(42) See, e. g., J. Wright—E. M. Wright, In Old English Grammar (Oxford 1925), p. 51 note, who, though very cautiously, admit the possibility that such io, eo... "may have been rising diphthong γ", although they also mention the possibility of the purely graphical nature of i in such cases. 

(43) Some light might be thrown on the question of the phonic value of io, eo in the discussed EWS words by modern dialectal forms of the corresponding area. 

(44) Here, again, one cannot exclude the possibility that the written -ea- really corresponded to a spoken diphthong, due to the amalgamation of a palatal glide and the following velar vowel.
But even under such circumstances the independent phonematic status of \([g']\) is beyond any doubt.

(45) See above, Note 39.

(46) The palatal quality of \([k']\) in this group was externally conditioned, being due to the assimilative power of the preceding \([a]\), and therefore functionally irrelevant.

(47) A somewhat analogous relation can also be ascertained between EWS \([k'k']\) and \([kk]\) (more exactly, between \([k':]\) and \([k:\]\)), both of which were written cc. Unlike their voiced counterparts, these two “geminates” were never differentiated in the EWS writing. The reason of this (not to mention the functional irrelevance of the given difference) may have been the fact that the phonematic conditions in which \([k':]\) and \([k:\]\) had been placed were not so complex as those characterizing \([g':]\) and \([g:\]\). After all, the palatal character of \([k':]\) could be singled out, if this appeared advisable, by the addition of the diacritical vowel \(e\).

(48) The non-exclusiveness of the digraph \(ie\) lies in the fact that the phonemes \(/i,\ \ i:/\) denoted by it need not always be recorded by this digraph, but also by other graphical means (as, e. g., by the grapheme \(t\), and sometimes also \(y\)).

(49) On the other hand, conservative ways of writing can be aptly used for the purpose of archaization. A remarkable analysis of a concrete instance of such use was presented by C. L. Wrenn, *The Value of Spelling as Evidence*, Transactions of the Phil. Soc. 1943, pp. 14—39 (see esp. pp. 19 ff).


(51) For technical reasons voiceless sonants are transcribed here by capital letters (thus, voiceless \(l\) by \([L]\) etc.).

(52) It might be argued that the OE ‘diacritical letter \(e\)’, found in instances like the above-discussed *drencean, sengean*, must have constituted a mute letter of a kind comparable to that of \(-e\) in *make, name* and the like. The OE situation, however, distinctly differed from that of ME in so far as the OE ‘diacritical \(e\)’ was always closely preceded by the letter whose phonematic equivalent it helped to co-determine, while in ME as a rule no such close contact of the final mute \(-e\) and the vocalic grapheme of the preceding syllable can have been established. The OE \(e\), then, forms rather a component of a sort of quasi-digraph (-cc-, -ge- and the like) than a mute grapheme.

(53) Actually it is well-known that a number of early English printers were treating the final mute \(-e\) as an optional signal of that kind. It should only be added, for the particular EMCdE situation, that the eyes to which such written words were due to speak had been accustomed to the Latin forms of the concerned words (debitum, dubitare, victualia), and that, therefore, an assimilation of the English written forms to their Latin “models” was, at that time, in full agreement with the intents and purposes of the written norm.

(54) The given formulation refers to the kind of ME spoken in the Midlands area, and to the period limited by the end of the 14th century.


(57) One such word-pair, *plain — plane*, is of particular interest. Until the 17th century the written form *plane* had been unknown; it was only introduced in that century, under the influence of Lat. *planum*, to refer to the geometrical meaning of the word, which up to that time had also been written as *plain*. Here one is faced again with a very fine specimen of deliberate use of graphematic means for the purpose of semantic differentiation. In this case the semantically motivated graphematic distinction ultimately resulted in the split of one (originally polysemous) word into two.

(58) We mean, of course, the traditional, ideographic written norm of Chinese, not the alphabetic system which is now being introduced.

(59) According to the evidence presented by the OED, by the 17th century the word *sun* used to be written as *son, sone, sonne*; the other member of the pair, *son*, was often recorded as *soon, soone, soonne*, and even *soun(e)* etc. Such writings, common until the 16th century, were obviously meant to denote the vowel -\(u\)-; it is symptomatic that such writings were to disappear after the 16th century, i. e. after the delabialisation of \(u\).

Po krátkém přehledu starších prací majících vztah k danému problému (jejichž autory byli zvláště J. Baudouin de Courtenay, H. Bradley, A. Frinta a A. Artymových) dovozuje autor, že každý z obou druhů promluv v jazyce existujících, tj. promluvy mluvené a psané, má svou vlastní normu. Odpovídá pak na dvě zásadní otázky: 1. Jaké je funkční oprávnění každé z obou norem? 2. Lze ječnu z obou těchto norm funkčně podřadit druhé?

Na otázku první odpovídá tim, že obě normy funkčně diferencují. Funkční zdůvodnění normy psané je v tom, že na daný podnět, zpravidla jíž naléhavý, reaguje způsobem statickým, tj. uchovatelným a snadno přehlednulelým, soustředí jej především na ryzí sdělení mluvčího. Nepro tomu funkční zdůvodnění normy mluvené je v tom, že na daný podnět, zpravidla naléhavý, reaguje způsobem dynamickým, tj. pohotovým a bezprostředním, dává výraz nejen ryzímu sdělení, ale i citové stránce postoje mluvčího.

Na otázku druhou odpovídá autor, že pro normu psanou pokládá za podstatný její rám přiznakový, kdežto norma mluvená má funkční rám bezpřiznakový. To ovšem neznámě podřadění norm y psané pod normu mluvenou. Obě normy se funkčně podivuhodně doplňují a rozdíl mezi nimi lze spíše pojmout jako rozdíl v použitelnosti, daný celkemovu situaci. Použití normy mluvené je indikováno hlavně ve situacích obecnějších, normy psané pak v situacích speciálnějších.

Takový pojetý vztah obou norem vede nepochybně k závěru, že každý mluvčí kulturního jazykového společenství je svého druhu „binormistou“, tj. více nebo méně ovládá obě normy a v případě potřeby dohazuje mezi obě normy. Z toho plyne požadavek jisté korespondence v struktuře obou norem. Nemusí to však být shoda na nejnížší úrovni (mezi fonémy a grafémy). Zpravidla do této shody základní zahrávají shody na úrovních vyšších, zvláště morfematické a slovní.

Psané normy angličtiny, češtiny a ruštiny jsou vesměs založeny na korespondenci na nejnížší úrovni, avšak ve všech těchto psaných normách lze zjistit interference schůd na úrovních vyšších. Největší interference je v angličtině, to tak jak na úrovni morfematické (srov. play-ed, end-ed), tak zvláště na úrovni slovní (srov. right — write — write — rite), kde lze mluvit o tzv. quasi-ideografickém principu. V češtině a ruštině se interference projevuje měrou mnohem skrovnější; významnější jsou jen interference vycházející z úrovni morfematičké, kdežto princíp quasi-ideografický se v češtině projevuje již poměrně málo, v ruštině pak vůbec nikoli.

Snahy usilující o tzv. reformu pravopisu jsou motivovány hlavně příliš složitým systémem korespondencí mezi oběma jazykovými normami; takový systém lze zjistit právě v angličtině.

**II. Několik poznámek k vývoji anglické psané normy**

Rám korespondenci mezi oběma jazykovými normami se v průběhu vývoje jazyka může značně měnit. Tak např. v češtině se projevuje stále vzrůstající tendence uplatnit co nejdůslednější korespondenci na nejnížší úrovni jazyka (mezi fonémy a grafémy). Výjimky z této korespondence, ostatně neetné, padají na vrub korespondenci na úrovni morfematické. Naproti tomu v angličtině se vývoj ubíral cestou právě opačnou, tj. od poměrně velmi důsledného paralelismu na nejnížší úrovni (tj. mezi fonémy a grafémy), jaký nacházíme v rané západní saštině, až k stavu novoanglickému, který je charakterizován pouze všeobecnou shodou na této nejnížší úrovni.
a poměrně značnou interferenci shod na úrovni vyšší, jednak morfematické, jednak, a to hlavně, na úrovni slov.


První takové případy sahají nepochybně do konce 14. století (srov. dvojice, j. write — wright, sight — site atp.), po nichž pak následovala dlouhá řada jiných případů, v nichž byly homofonní slovní dvojice rozlišeny různým způsobem grafické podoby. (Do téže doby, konce 14. stol., lze klást i prvé případy uplatnění morfatického principu v anglické psané norme: graficky paralelismus typu walked — begged — ended mohl být tehdy zdůvodněn už pouze morfaticky, nikoli fonematicky.)

Autor pak probírá podrobněji některé zvláštně zajímavé případy působení ideografického principu v angličtině a zdůrazňuje zvláště takové z nich, v nichž lze zcela nepochybně zjistit úmyslné a záměrné úsilí o to, aby bylo grafických možností v dané době v psané normě existujících využito ke quasi-ideografickému rozlišení dalších homofonních slovních dvojic (tak např. foul — fowl, son — sur., plain — plane a zvláště whole — hole).
РЕЗЮМЕ
Две главы о письменном английском языке

I. О функциональной иерархии языковых высказываний устных и письменных

После краткого обзора ранее написанных работ, относящихся к данной проблеме (их авторами были в особенности Бодуэн де Куртене, Г. Гредья, А. Фринга и А. Артымович) автор заключает, что каждый из обоих видов высказываний, существующих в языке, т. е. устных и письменных, имеет свою собственную норму. Затем он дает ответ на два основных вопроса: 1. Каково обоснование каждой из обеих норм в функциональном отношении? 2. Возможно ли одну из этих норм функционально подчинить другой?

На первый вопрос автор отвечает, дифференцируя обе нормы в отношении их функций. Функциональное обоснование письменной нормы в том, что на данный импульс, как правило, не особенно настоятельный, она отзывается статически, т. е. способом, позволяющим фиксировать данное проявление и делающим его легко обозримым, сопредельчиваясь часто на сообщении говорящего. Напротив того, функциональное обоснование устной нормы в том, что она на данный импульс, как правило, настоятельный, отзывается динамически, т. е. с мгновенной готовностью и непосредственно, позволяя выразить не только сообщение, но и эмоциональную сторону отношения говорящего к сообщению.

На второй вопрос автор отвечает, что для письменной нормы он считает существенным ее признаковый характер, между тем как устная норма имеет безпризнаковый характер. Обе нормы удивительно дополняют друг друга в функциональном отношении и разнятся между ними можно понимать скорее как отличие, касающееся их применимости, данного общей ситуацией речи. Устная норма предназначена главным образом для более общих ситуаций, а письменная норма для более специальных ситуаций.

Такое понимание взаимоотношения обеих норм приводит, без всякого сомнения, к заключению, что каждый говорящий — представитель определенной культурной языковой общности — является своего рода „бивномным“, т. е. он более или менее владеет обеими нормами и в случае необходимости умеет переключаться с одной на другую. Из этого вытекает требование определенного соответствия структуры обеих норм. Необходимо это должно быть соответствие на низшем уровне (между отдельными фонемами и графемами). Как правило, к этому основному соответству приступает соответствие в высших областях, особенно в морфематической и лексической.

Письменные нормы английского, чешского и русского языков полностью основаны на соответствии на низшем уровне, однако во всех этих письменных нормах возможно установить интерференции соответствий в высших областях. Сильнейшими являются эти интерференции в английском, а именно как в морфематической области (сравн. lack ed, play-ed, end ed), так и, в особенности, в лексической области (сравн. right w ite-wright-rite), где можно говорить о т. н. квазигеографическом принципе. В чешском и, особенно, в русском, эти интерференции проявляются в гораздо меньшей степени; более значительной только интерференции, относящиеся к морфематической области, между тем как квазигеографический принцип проявляется в чешском относительно редко, в русском же он вообще отсутствует.

Стремление к т. н. реформе правописания мотивируется, главным образом, слишком сложной системой соответствий между обеими языковыми нормами. Такую систему возможно установить как раз в английском.
II. Несколько замечаний относительно развития английской письменной нормы

Характер соответствий между обеими языковыми нормами может в процессе развития языка значительным образом меняться. Так напр., в чешском языке проявляется все возрастающая тенденция осуществлять возможно более последовательное соответствие на нижнем уровне языка (между фонемами и графемами). Исключения из этого соответствия, впрочем немногочисленные, касаются соответствий в морфемическом слое. Наоборот, в английском языке направление развития было как раз противоположное, т. е. от относительно весьма последовательной параллельности на нижнем уровне (т. е. между фонемами и графемами), какую мы находим в древнейшем западносаксонском языке, к современному состоянию английского языка, который характеризуется только общим соответствием на этом нижнем уровне и относительно значительной интерференцией соответствий на высшем уровне, с одной стороны в морфемической области, с другой стороны — и прежде всего — в лексической области.

Автор затем делает попытку определить важнейшие факторы, которые обусловляли этот процесс развития и характеризовали его главные этапы. По мнению автора это были главным образом следующие факторы: 1. Проникание сочетаний букв, которые в английскую письменную норму попадают после норманского завоевания, хотя, конечно, в известной степени почва для них была приготовлена некоторыми изменениями, которые произошли в письменной норме позднего этапа развития древнеанглийского языка. 2. Последовательная континентализация запаса графем среднеанглийской письменной нормы, т. е. исчезновение тех букв или же письменных форм, которых в письменной континентальной традиции, особенно в нормано-французской, не было. 3. Возникновение т. н. немой графемы -е, которая — хотя и еще сама не служила квазиидеографическим целям — готовила почву для других, более многочисленных немых графем, которые в английскую письменную норму провинили в ранний период новоанглийской письменной и значительно способствовали появлению квазиидеографических тенденций в английском языке. 4. Появление первых случаев, в которых можно уже прочно установить наличие квазиидеографических тенденций.

Верные такие случаи относятся несомненно к концу 14 века (ср. напр. пары write — wright, sight — site итп.); после них следует длинный ряд других случаев, в которых омофонные пары слов отличались по своему графическому облику. (К тому же времени, к концу 14 века, можно относить и первые случаи осуществления морфемического принципа в письменной английской норме. Графический параллелизм типа walk-ed — begged — ended мог быть тогда обоснован уже только морфемически, а не фонематически.)

Затем автор занимается более подробно некоторыми особенно интересными случаями осуществления идеографического принципа в английском и подчеркивает такие из них, в которых можно, без всяких сомнений, установить осознанное и преднамеренное стремление к тому, чтобы использовать эти графические возможности в данное время в письменной норме для квазиидеографической дифференциации омофонных пар слов (так напр. foul — fowl, son — sun, plain — plane, и, особенно, whole — hole).

Перевод: С. Жажа