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OF MODERN ENGLISH

Chapter One

PERIPHERAL ELEMENTS IN THE STRUCTURE
OF LANGUAGE

The structural conception of language is primarily based on the assumption that no element of language can be adequately comprehended and evaluated unless its relations to the other elements of the same language are duly realized and specified. It is obvious, e. g., that the preterite tense in the ModE system of tenses occupies a more closely delimited place than used to be occupied by its Old English opposite number, the OE preterite tense. This clearly follows from the fact that in OE the preterite was the only tense category applicable to verbal action taking place in the past, while in ModE there are no fewer than three (or even six) tense categories that are applicable to such action: apart from the preterite tense itself, there is the pre-present and the pre-preterite (and possibly the progressive forms of each of these three tenses). Besides, in OE the preterite tense could be opposed to only one other tense (the present), while its ModE descendant may be contrasted with no fewer than five other tenses (apart from the above-mentioned pre-present and pre-preterite also with the present, the future, and the pre-future). If, moreover, the progressive forms are added to the set of ModE tense forms, then the number of tenses with which the simple preterite can be contrasted will rise to as many as eleven (including the progressive preterite).

The validity of the above-noted primary assumption of the structural conception of language is now hardly questioned by any serious student of language. Comparison of isolated facts of different languages, facts divorced from their systematic context, is now hardly attempted by anyone who is in touch both with the living reality of language and with the general trend of modern scientific thought. But, as has been aptly noted by F. DANEŠ,(1) some other misconception of the structural approach to facts of language can be met with at times, viz. the mistaken belief that language constitutes a closed system, with all its elements perfectly and equally firmly integrated in it. As Daneš duly points out, this mistaken assumption, confronted with the reality of language reflecting no such closed system, may lead to some erroneous conclusions. Some scholars go so far as to deny the validity of the structural conception of language altogether, others try to do justice to the structural conception of language by adapting the facts of the linguistic reality so as to make

them more compliant to the (more or less) pre-established harmony of the language system. (2) Neither of these two ways can, of course, be approved of; they must be branded as wrong because the basic assumption underlying them of a closed system of language is untenable. It has often been asserted, and concretely demonstrated, that language is not a closed but an open system. In general terms, this thesis was voiced, e. g. by B. HAVRÁNEK and K. HORÁLEK. (3) In more concrete terms, the thesis was again demonstrated by DANEŠ who duly pointed out that, e. g., between Modern German compounds and derived words there is no strict limit but a zone of transitional cases which cannot be convincingly classed with either of the two polar word-formative types (e. g., *das Schulwesen, kugelförmig*, etc.) but rather constitute a sort of diffuse periphery lying between the two categories. Similarly, in Czech morphology the second element of the indicative preterite (*přišel jsem* 'I came'), traditionally interpreted as an auxiliary verb (*jsem* 'I am'), by some of its features ranks as a kind of separable affix; (4) here, too, one clearly has to do with a sort of peripheral phenomenon, which cannot be safely placed into the one or the other polar category.

In the phonic plane of language, the idea of peripheral elements was pregnantly voiced by ANDRÉ MARTINET, though he did not use the term 'peripheral' himself. In his *Économie*, he drew a distinct line between what he calls fully integrated, and non-fully integrated phonemes (*phonèmes pleinement × non pleinement intégrés*). As non-fully integrated he denotes such a phoneme as is not linked by oppositions of its distinctive features to a larger number of other phonemes co-existing with it in the same system of phonemes. Thus, e. g., ModE /t/ is fully integrated, being opposed to /d/ (as voiceless vs. voiced), to /θ/ (as discontinuous to continuant), to /p/ (as acute to grave) etc. In Chapter Two of the present treatise it is shown that the ModE phoneme /h/ is entirely isolated in the ModE phonematic pattern of consonants, as it does not enter into direct opposition to any other phoneme of that pattern. In MARTINET's terms, the ModE /h/-phoneme is a non-fully integrated element of the phonological system; in the terminology proposed here above, one might denote it as a peripheral item of that system.

It is, however, not only the non-full integration of a phoneme that may impart it peripheral character. As undoubtedly peripheral rank also those phonemes which are not fully utilized by the system of language on account of their slight functional yield. This means that a phoneme of the kind can only be functionally utilized in a very limited number of word-positions, or, that it actually functions only in a very limited number of words in which it is opposed to its nearest partner in the system. An example of the former type of the slight functional load of a phoneme is supplied by the ModE phoneme /ŋ/ which can occur only in post-vocalic positions at the end of a morpheme; the latter type of the slight functional load is exemplified by the Modern Czech phoneme /f/ which is functionally opposed to its nearest partner /v/ only in very few concrete instances of synchronically indigenous words (see, e. g., *zoufati* 'despair': *zouvati* 'take off one's shoes'), (5) or by ModE /ž/ which only in very rare instances functionally contrasts with /š/, its nearest partner in the ModE phonematic pattern (e. g., in *fission* /fišn/: *vision* /vižn/). As the sole *raison d'être* of the elements of the system of language is to contribute to the communicative function, (6) there can be little doubt that those language elements whose communicative functioning is, from the quantitative viewpoint, ostensibly limited, must be evaluated as peripheral elements of their language systems.

For more than a decade, the present writer has been examining the ModE phonematic system from the viewpoints here indicated. In a number of his papers he tried

to demonstrate some of the non-fully integrated ModE phonemes and to point out how the existing state of things has come into being, and what consequences that state of things may perhaps have for the future stages of the phonematic development of English. By taking up the indicated line of research, the present writer intended not only to make manifest his conviction (identical with that held by the Prague group since its early beginnings) (7) that no insurmountable barriers exist between synchrony and diachrony in language, but especially to show that the examination of peripheral items of language is sometimes capable of throwing into relief some of the trends and tendencies deeply influencing both the synchronic functioning of the system of language and its historical development. The present treatise attempts to give a synthetic survey of all those facts which in the said papers were envisaged more or less in isolation. The papers were thoroughly revised, and two or three new ones were included. It is hoped that at least some of them, presented here as chapters of a larger whole, may not only clarify a number of aspects of the basic problem, the status of the peripheral phonemes in language, but, in addition to this, suggest some new ways of solving some of the old, hitherto unsatisfactorily handled, problems of the historical development of the phonic level of English.

THE ELIMINATION OF THE MODERN ENGLISH /h/-PHONEME (8)

I. One of the basic concepts of general phonology is the so-called functional yield of the phoneme. (9) As already noted, this term points at the well-known fact that the various phonemes of a given language are utilized to a varying degree. Thus, some phonemes are found in the most varied positions within the word (such as ModE /t/ in words like *tea, try, stand, pretty, let*), while others occur in a limited number of positions (such as ModE /w/, which stands only in a few kinds of environment within the word, viz. at the beginning of the word-stem before a vowel as in *well* or between a preceding consonant and a following vowel as is *dwell, switch,* but may not occur either at the end of the word stem or medially except for the above-mentioned position). (10) Finally, still other phonemes are found only in a single position within the word (such as ModE /h/ which can stand only at the beginning of word stems, before vowels or semivowels, cf. *hat, huge, ahead*). In phonological terms, the ModE phoneme /t/ has a high functional yield, whereas the functional yield of ModE /h/ is very low, one might almost say, minimal.

If one analyses the situation of ModE /h/ from the historical perspective, one soon notices that in earlier periods of the language it possessed a much higher functional yield. In E[arly] O[ld] E[nglish] (11) the sound [h] could occur not only at the beginning of the word (as in *hāt, hīeran*), but in word-final positions as well (cf. *nēah, þurh*); besides, in word-initial positions [h] could, at that time, be followed not only by a vowel or semivowel but also by a consonant, unlike in ModE (we find not only *hwā*, but also *hræfen, hnutu, hlūd*); (12) word-medially it was commonly found before a voiceless consonant (as in *nihtes, bohte, þōhte*), and for some time it even maintained itself word-medially before a vowel (*wlōhum, furhun*, cf. K. LUICK, *Hist. Gr.* § 656). It must of course be added that in some positions this EOE phoneme was implemented by [χ]; such was certainly the case in word-final positions and word-medially before

a consonant (that is, in words of the type *nēah, purh, nihtes,* and the like). Both sounds, [h] and [χ], were of course clearly variants (allophones) of the same phoneme, as can incidentally be seen from OE spelling, which is known for its phonematic consistency in some other ways as well. (13) The basic variant of the OE phoneme was here undoubtedly [h], despite the fact that the "historical primacy" belongs to [χ] (as is well known, historical considerations do not play a decisive part in assessing synchronistic values), because it is exactly the OE [h]-sound that occurs in the position of the maximum differentiation of OE phonemes. (14)

In this connection, some light may be thrown at one of the interesting problems of OE historical phonology. When in the 8th century word-medial intervocalic [h] became lost as a result of contraction, (15) this opened the gate to a far-reaching phonematic revaluation of the OE sounds [h] and [χ]. This change, that is, removed one of the situations in which the distinctive opposition $h : ȝ$ could be manifested (cf. *wlōhum — plōȝum*). A second such situation existed in word-final positions, where, however, the change $ȝ > h$ had been evidenced since the earliest documents (cf. *ȝenōh* from orig. *ȝenōȝ*). Finally, the third such situation where the opposition between [ȝ] and [h] had been distinctive was in word-initial positions, both before back vowels (cf. *hātan — ȝāt*) and before consonants (such as *hrēam — ȝrēat*). The cancelling out of this last possibility took place during the OE period (according to H. C. WYLD not later than around 1000, but perhaps even much earlier), when a fricative *ȝ-* was replaced by an explosive *g-*. In view of this cancellation of all possibilities of the distinctive functioning of the opposition of [h] versus [ȝ], one conclusion might seem inescapable, viz. that during the OE period the sounds [h/χ] and [ȝ] were phonematically merged into a single unit, just as had happened earlier to the sounds [f/b], [p/d], and [s/z]. The phonemeatic merger of [h/χ] with [ȝ] would thus have been a further manifestation of the OE tendency pointed out by B. TRNKA (*From Germ.*, pp. 139ff) in the direction of the dephonologization of the opposition of voice in Prim. Gmc. fricatives and the phonologization of the stop—fricative opposition which originally was devoid of any distinctive value.

Nevertheless, it is worth mentioning that the OE spelling, which usually mirrors the OE phonological situation very faithfully, regularly distinguished the sounds [h/χ] and [ȝ] by employing different symbols for their graphical representation, viz. *h* and *ȝ*. This graphical usage should warn the phonemicist not to identify phonematically the OE sounds [h/χ] and [ȝ] before all aspects of the problem have been duly considered. In addition to this, the employment by OE spelling of one and the same symbol *ȝ* for two phonetically very distinct sounds, the velar [ȝ] and the palatal [ȝ̇], suggests a relatively close phonological proximity of [ȝ] to [ȝ̇], and, of course, to [g], for which OE spelling uses the same symbol as for [ȝ] and [ȝ̇]. This proximity is due to the fact that, by and large, one can establish remarkable complementary distribution among the three OE sounds [g], [ȝ] and [ȝ̇]: each of them usually occurs in those positions in which neither of the other two can occur (cf. *gān : ȝ̇iest, daȝas : dæȝ̇es, cǣȝ̇ : dāȝ* etc.). This high amount of complementary distribution of the three sounds is of course due to their origin from one common ancestor, the Prim. Gmc. voiced velar fricative. Still, already in EOE *ȝ* and *ȝ̇* must have become phonematically separated, as is shown by those instances of OE *ȝ̇-* which go back to Prim. Gmc. **j-* (< IE. **i̯*), e. g. *ȝ̇eoc* 'yoke', *ȝ̇eong* 'young' etc., in which *-e-* was undoubtedly a mere graphical item signalling the palatal quality of [ȝ̇-]. The presence in OE of words of this type provided the language with oppositions of words like *ȝ̇eoc* [jok] — *ȝod* [ȝod], later [god], which unmistakably prove the separate phonematic status of /ȝ̇/, distinct from /ȝ/. One can, therefore, assert the phonematic

unity of the OE sounds [g] and [ʒ] only, excluding [ʝ] from the number of allophones of the phoneme so established. As soon as the word-initial [ʒ] standing before back vowels was changed into the stop [g], it was clearly this [g] that acquired the status of the principal variant (or, main allophone) of the $g/ʒ$-phoneme, in view of the fact that it occupied the position of the maximum differentiation of OE phonemes. And it was exactly this shift that was to loosen, in this particular case, the phonematic ties otherwise binding together the voiced and voiceless fricative sounds of OE: the $g/ʒ$-phoneme was brought into a closer systematic relation with the corresponding voiceless stop phoneme /k/.

· It should be noted, besides, that the links binding [χ] to [ʒ] must have been loosened much earlier, in the pre-OE period: it must strike one as remarkable that, unlike the intervocalic [f, þ, s], the intervocalic [χ] was not changed into its voiced counterpart [ʒ], but that it disappeared and thus made possible the contraction of the adjacent vowels (e. g. *fōχan > fōn, *seoχan > sēon). The reason of this striking development is not difficult to find: in intervocalic positions the sound [χ] was becoming gradually assimilated to its vocalic environment. The first stage of the assimilating process consisted in shifting the fricative voiceless articulation from the region of the velum to that of the glottis, which considerably reduced the consonantal friction, so typical of the articulation of [χ]. Thus the [χ]-sound changed into voiceless [h], whose articulation — except for voice — was identical with that of the adjacent vowel. (16) The second stage of the assimilating process, then, consisted in the voicing of this [h]; in view of what has been said here about its quality, it will be easily understood that in becoming voiced the articulation of [h] was automatically changed into a vocalic articulation, qualitatively identical with that of the adjacent vowel (or diphthong), from which it differed only by being non-syllabic. As a consequence of this, the newly arisen non-syllabic vowel became absorbed by the adjacent syllabic vowel that was qualitatively identical with it: seohan > seoȝan, fōhan > fōȝan, eahu > eaȝu etc. (17) The immediate vicinity of the qualitatively identical non-syllabic and syllabic articulation naturally resulted in the absorption of the former by the latter (seoȝan > seoan, fōȝan > fōan, eaȝu > eau). The hiatus combinations thus created were abolished by vocalic contraction in which the stressed vowel or diphthong absorbed its unstressed neighbour; if the absorbing vowel or diphthong was short, the process of absorption was coupled with compensatory lengthening, making good for the loss of the mora of the unstressed syllable (seoan > sēon, eau > ēa, but fōan > fōn).

The lesson to be drawn from the above development is that already in EOE the [χ]-sound was not treated in a manner quite parallel to that of [f, s, θ]. It may be surmised that this lack of full parallelism was due to the transfer of the status of main allophone of the $h/χ$-phoneme from [χ] to [h]. It should be recalled that an analogous shift also took place in the phoneme /ʒ/ where the status of the main allophone was transferred from [ʒ] to [g]. In future, the ties of two phonemes, /ʒ/ and /h-χ/, were only maintained through their subsidiary allophones [ʒ] and [χ], which, at that, were incapable of direct opposition, not occurring in identical environments. The main allophones of the two phonemes, [g] and [h], resulting from two clearly divergent processes of development (ʒ > g, χ > h), had become phonically so distant that they were no longer kept together by any common distinctive features. This fact is clearly demonstrative of the loosening of the phonological tie formerly binding /ʒ/ and /χ/. At the same time it gives a satisfactory explanation of the OE spelling practice, using different graphical symbols for each of the two phonemes, and so drawing a distinct line between their mutual phonological relation and the

mutual relations of the other fricative sounds [f — b], [þ — d], and [s — z], where for each sound-pair one graphical symbol was found sufficient.

II. The above analysis has revealed that at the end of the OE period the functional yield of the phoneme /h/ was markedly smaller than it had been at the beginning of that period. (18) Let us now follow the changes in the functional yield of /h/ in the further development of English. We will here confine ourselves generally to the central dialects from which the present-day Southern English standard was to develop. In the beginning of the M[iddle] E[nglish] period the functional yield of the phoneme /h/ became limited still further. At that time were cancelled the initial phonematic clusters hr-, hl-, hn- and hw- which, by way of [R, L, N, W], sooner or later were tó change to [r, l, n, w] (cf. OE hræfen, hlūd, hnutu, hwīl — ModE raven, loud, nut, while [wail]). The phonematic evaluation of the sounds arisen from the lost clusters will temporarily be left aside; it will be attempted further below. For the time being, we will confine ourselves to the consequences of the loss of the clusters for the phonematic status of ME /h/. In classical ME, this phoneme may be found in three positions of occurrence only: at the beginning of the word-stem before a vowel (as in haven, high), in word-final positions mainly after a vowel (cf. though, enough; the majority of instances with a preceding consonant, as in the word that in OE was þurh, was cancelled out by the insertion of transitional vowels before the [h] or by other means, v. ModE through, thorough, furrow, etc.), and finally in the word-medial position after a vowel and, at the same time, before a consonant (as in the type thoughte).

It should further be noted that the status of ME /h/ was becoming even more shaky for another reason. It has been demonstrated above that the phonological tie originally binding together OE [χ] and [ʒ] was conspicuously loosened after the acquirement by the allophones [h] and [g] of the status of the main allophones of the phonemes /h/ and /ʒ/. A further proof of the growing phonological isolation of /h/ in the system of ME consonant phonemes is supplied by the disappearance of the voiced velar fricative [ʒ] from the language in the middle of the 13th century (cf. EME folʒen > ME folwen, ModE follow). This disappearance, it should be pointed out, definitely cancelled the close phonological relationship that until then had existed between the fricatives [χ] and [ʒ] since the Prim. Gmc. period: the ME phoneme /g/, having lost its subsidiary allophone [ʒ], through which it had been closely related to [χ], the subsidiary allophone of the phoneme /h/, was to be completely cut off from the last-mentioned phoneme ever since. It is also worth noting that, as a rule, ME orthography clearly differentiates between [h] and [χ] by spelling them as h and gh, respectively; perhaps one can see in this fact the loosening of another phonological tie until then existing in the language, viz. the loosening of the allophonic relationship between the two sounds (although it certainly cannot have been completely abolished in classical ME). The circumstances of the disappearance of [ʒ] will be taken up again further below; in the meantime, let us continue to follow the fate of the phoneme /h/ in the development of English.

In the transition from the ME to the EModE period one can observe a tendency in the pattern of ME consonants aiming at the loss of [χ], the subsidiary allophone of the phoneme /h/. At first, from the end of the 14th century, this loss affected the palatal sub-variant [χ'] (niχ't > nīt, ModE [nait], orthographically still night); shortly thereafter, from the 15th century, also the velar [χ] becomes discarded (as in bouχte, lauχ, ModE [bɔːt, laːf], orthographically still bought, laugh). As is well known, the result of this loss was dual: either f or Ø (cf. LUICK, Hist. Gr., § 512f). This loss was obviously connected with the increasing isolation, and general weakening

of the status, of the phoneme /h/ in the system of ME consonants, as has been discussed above. The initial *h-* did, however, remain preserved, but its position in the system was of necessity even more unstable than before, because after the loss of all the other allophones (i. e. after the disappearance of the types *wlōhum, nēah, niht, bohte*) the initial *h-* was left as the only remaining representative of a phoneme which once had had a considerable functional yield. Besides, the phoneme /h/, after the loss of [χ] and [ʒ], became conspicuously isolated in the English phonematic pattern, in which, while it still had [χ] as its main allophone, it used to be fairly well integrated (especially by its relations to /k/ and /ʒ/). Let it be remarked in passing that the loss of [χ/χ'] in Late ME will be discussed in some detail further below. Here our main interest is centred on the surviving [h]-sound, found in word-initial positions before vowels and, less frequently, semivowels. (19)

The minimal functional yield of the phoneme /h/ was to have some consequences for its further historical development. It is well known that in present-day substandard English, which is the safest indicator of the developmental tendencies of the language, this initial [h-] has virtually no phonematic value left: where it is still found, it is no longer regarded as a phoneme but as a signal of emotional emphasis. That this is so, is clearly shown by the frequent presence of such [h-] in words in which it has no etymological justification. Thus, e. g., in most popular dialects (including the Cockney of London) words corresponding to the standard forms *air* and *hair* may both be pronounced either with the initial [h-] or without it; the former pronunciation signals emotional emphasis, the latter, on the other hand, is untinted by any emotional factors. Undoubtedly, it is this functional distinction which lies at the bottom of the well known Cockney phenomenon, popularly termed 'dropping one's *h*'s' (the term is by no means a lucky one, as it does not refer to the 'wrong insertion of one's *h*'s', just as important as their dropping — cf. JESPERSEN'S well-known example *the 'air on your 'ead : the hair of the hatmosphere*). (20)

According to LUICK's estimate, the initial *h-* was beginning to be lost in the 15th century, in some areas perhaps still earlier. This timing clearly points to a connection with the loss of χ in the transition from ME to EModE. Interesting is also LUICK's formulation of the conditions under which *h* was lost in the English dialects south of the Humber. It was not dropped after a pause — i. e., primarily, sentence-initially — and sentence-medially it was preserved after a vowel (thus, *my house — this 'ouse*). It appears from this formulation that in the concerned English dialects the [h]-sound combines the emotional function with that of a signal of the beginning of the word; to put it differently, that it functionally belongs to two different spheres of language, viz. to phonostylistics and to sentence phonology.

In the Southern British standard there is of course a special situation. Here [h-] is maintained under the pressure of the orthoepic norm stabilized by the schools, language authorities and the mechanics of cultural life (the theatre and the cinema, more recently radio and television, performances and lectures of all kinds, including ecclesiastical sermons, the important influence exercised upon spoken utterances by the written norm of the language, etc. etc.). In the lexical stratum of synchronically foreign words, (21) the [h]-sound can here and there be found even within the word-stem (cf. the more bookish expression *vehicular* [vi: 'hikjulə], as over *vehicle* [vi: ikl]), which is unknown in words belonging to the native lexical stratum. All this clearly reveals that in the present-day Southern English standard the phoneme /h/ is no longer productive; it lacks organic "vitality" and is only maintained partly because of the inertia of the tradition, and partly because it may serve the purposes of stylistic differentiation. In the latter function [h-] acts as a signal of a "more elevated"

style (it is exactly for this reason that substandard speakers are so intent on using it correctly), i. e. of bookishness, abstractness, of non-conversational style. The phoneme /h/ — which, as we know, has a minimal functional yield in ModE, and which at the same time is virtually isolated in its phonematic pattern — is thus shifted to the very periphery of that pattern; its position in the system strikingly contrasts with those of the full-fledged phonemes of the language.

There can be little doubt that insufficient functional utilization of an element of language may lead to its dropping from the productive pattern of the language. The operation of economic factors in language has long been an accepted fact on the higher levels (lexical, morphological and syntactic); A. MARTINET has unmistakably demonstrated their operation also on the basic, phonic level of language. (22) It indeed appears highly probable, *à priori*, that a phoneme characterized by a very small functional yield becomes too expensive a component for the language to make it worth keeping it alive. Apart from this quantitative fact, however, there is a qualitative fact, already noted above, which may very substantially contribute to the ousting of a phoneme on to the periphery of the given phonological system. This fact, for the first time pointed out and specified by MARTINET, is the above-mentioned slight integration of the given phoneme in its system, i. e. the fact that hardly any phonemes can be found in that system to which the given phoneme would be directly opposed (by direct opposition is meant here the opposition of two phonemes differing from one another in one distinctive feature only). Viewed from this angle, the present-day ModE /h/ is indeed integrated most unsatisfactorily: it is not a member of any grouping of phonemes based on mutual oppositions, (23) such as are, e. g., the following ModE groupings:

$$
\begin{array}{ccccc}
/p/ - /f/ & /t/ - /\theta/ & /\check{c}/ - /\check{s}/ & /k/ & /s/ \\
| \quad \quad | & | \quad \quad | & | \quad \quad | & | & | \\
/b/ - /v/ & /d/ - /\eth/ & /d\check{z}/ - /\check{z}/ & /g/ & /z/
\end{array}
$$

It is of course true that ModE has another laryngal sound, the explosive [ʔ] (the 'glottal stop'), but this sound does not rank as a phoneme in the S[outhern] E[nglish] S[tandard]: its sole function is to signal the beginning of a word or word-basis (and even in this function it occurs rather rarely). As it is, then, impossible to oppose ModE [h] and [ʔ] as items of one and the same functional category, it is clear that the ModE phoneme /h/ not only has a very slight functional yield but that, moreover, its integration in the system of ModE consonant phonemes virtually amounts to nil. This isolated position in the phonematic pattern is certainly one of the most potent factors that can account for the peripheral status of the ModE /h/-phoneme and that substantially contributes to the trend aimed at the elimination of that phoneme from the ModE phonematic pattern.

III. The above rough sketch of the decline of the English phoneme /h/ can be made more graphic if some of the points of the whole process are considered in some detail.

The first of such points is concerned with the voiceless sounds [R, L, N, W] that arose from the OE clusters *hr-, hl-, hn-, hw-*. In ME these voiceless sounds were spelled as *rh-, lh-, nh-, wh-*, where the symbol *h* marked only the devoicing of the consonant in question. (24) The process by which these sounds came about is quite clear: according to H. C. WYLD (*SHE*, § 91), as early as in OE progressive assimilation led in the clusters *hr-, hn-, hw-* to a voiceless pronunciation of the second members of these clusters (i. e., to [hR, hL, hN, hW]). (25) The voiceless sounds which had come abóut by this change remained of course allophonic variants of the voiced /r, l, n, w/, about like the Czech voiceless [Ř] is phonematically one with the voiced [ř] (cf. *tŘi, keŘ — dři, řepa*). In the beginning of the ME period then the first member of these clusters, the [h], becomes silent as part of the general simplification of English initial consonant clusters. This put voiceless [R, L, N, W] in the word-initial position before a vowel (see inst. like *Raven, Lud, Nute*

Wil). It is commonly known that before the EME period was over, i. e. in the 12th century, (26) three of these voiceless sonants, [R, L, N] were to be replaced by their voiced conterparts [r, l, n] (cf. the ModE forms of the above words *raven, loud, nut*).

This development can be easily accounted for if one realizes that such voiceless sonants had, for the brief period of their existence in English, the status of independent phonemes (this is evidenced by oppositions like *Raveṅ — rather, Lūd — lūs, Nut — nū*, etc.). As, however, their occurrences in concrete contexts were limited to one word-position only, i. e. to the beginning of a stem morpheme (with the additional qualification that they could stand only in pre-vocalic, not in pre-consonantal positions), their functional utilization was again very slight, and consequently they, too, must have been evaluated as peripheral phonemes of the language. This peripheral status obviously led to the early elimination of the three items from the phonematic pattern of English. It should be noted that, contrary to the case of ModE /h/, the peripheral status of /R, L, N/, and their consequent elimination from the language, appears to have been motivated solely by quantitative, not by qualitative reasons. The very fact that the three phonemes were eliminated at a time shows that, unlike the ModE /h/, none of them could really be isolated in the phonematic pattern. (27)

The second point of our outline of the decline of English /h/ to be analyzed here more fully is the elimination of the ME ꝫ-sound in the first half of the 13th century. It has been shown above that in classical OE the sound [ʒ] was phonematically identical with its corresponding stop consonant [g], and that the latter sound constituted the main allophone of the common phoneme. (As noted above, the palatal ꝫ-sound had acquired a separate phonematic status already in the PrimGmc period.) Already in EME, however, also the subsidiary allophone of the phoneme /g/, i. e. the [ʒ]-sound, must have been established as a separate phoneme. Evidence of this is supplied by early domesticated Scandinavian and Norman loan-words which were to introduce the [g]-sound into a series of new word-medial positions that, until then, had been an exclusive domain of [z] (cf. words like *cog, eager, eagle*); besides, in North East Midland the elimination of geminate consonants that — according to H. KURATH, *Loss* — had taken place there by 1200 must have had an analogous effect (see, e. g., ME *doge, froge* < OE *dogga, frogga*). Thus, the phoneme /ʒ/ came into existence.

It might have been possible, theoretically, to link it functionally with /h/ with which it was in complementary distribution within the word-stem. But such a solution would have been in conflict with the general tendency of the EME period to phonologize the opposition of voice between fricatives, a tendency which was again very effectively supported by the influx of Romance vocabulary that soon was to became domesticated (see inst. like *fine — vine, seal — zeal*). The only correct phonematic evaluation of the EME ꝫ then appears to be that it was a separate phoneme, but again one with minimal functional yield (it occurred only word-medially before a vowel or a sonant phoneme). Thus it, too, ranked as a sort of peripheral phoneme, a sumptuous item of the system, with a very low ability to survive. Its disappearance from the language in the first half of the 13th century can be regarded as another piece of evidence of the very unstable status of peripheral phonemes in language. The low-yield /z/-phoneme came to be replaced by /w/ whose implementation was acoustically close to that of /ɀ/ and which was perfectly able to take over the tasks of the eliminated phoneme, especially since the tasks had been relatively very restricted.

The third and last point that deserves to be analyzed here in some detail is the fate of ME χ in its further development. One should distinguish here the velar χ, which between the 15th and 17th centuries either disappears completely or is replaced by *f*, and its palatal sub-variant χ', which is on its way to being dropped even earlier (probably from as early as the end of the 14th century). The loss of the palatal sub-variant χ' shall be discussed first.

From OE times on, χ' had existed in words of the type *niht, mihte*. It is generally assumed that in EME a semivocalic glide *i̯* developed in such words, so that they were pronounced something like *nii̯χ't, mii̯χ'tə*. The further development is generally considered to have consisted in the contraction of *ii̯* to *ī*, and the subsequent loss of χ'. While the assumption of the contraction of *ii̯* > *ī* is well substantiated by acoustic and articulatory experience, the loss of χ' has, to our knowledge, so far not been satisfactorily accounted for. The reason for the said change can only be ascertained if a correct phonological evaluation is found of the involved phonetic changes. It must be kept in mind that, viewed from both the articulatory and acoustic standpoint, the sound [χ'] (in the IPA transcription, [ç]) is very close to the sound [j], from which it differs only by the absence of voice. Further, the glide [i̯], such as arose between EME *i* and χ' in *niht, mihte*, is likewise articulatorily and acoustically very close to [j], from which it differs only by the absence of friction. It may, indeed, be taken for granted that the Early ME sounds *i̯/i̯/j̯* were allophones of one and the same phoneme. (28) When Early ME χ' and *i̯* began to occur in immediate vicinity, evidently voice assimilation of χ' to the preceding *i̯* took place, which entailed the

phonological transfer of the sound χ' from the range of the phoneme /h/ to that of the $i/\dot{\imath}$-phoneme. This change was probably first effected in the inflected forms like *nihte, nihtes* where the syllabic limit safely separated the χ'-sound from the voiceless t (which otherwise could have influenced the χ' to preserve its voicelessness), and only then was transferred, through analogy, to the nominative singular and other forms characterized by the absence of an ending. It was not until the above-described assimilation — and the obvious simplification of $-\dot{\imath}\dot{\imath}- > -\dot{\imath}-$ — had been effected that the contractions of the type $ni\dot{\imath}t > nit$ could occur. — In the indicated manner, then, the ME phoneme /h/ became deprived of an additional allophone χ'; after the completion of the process, the only two left allophones of the phoneme were to be h- and $-\chi(-)$.

In phonematically evaluating the further development of the ME velar fricative χ (as in *taughte, rough*, phonetically [ta$\upsilon\chi$te, ru:χ]) one must again consider the general situation of this χ in the phonematic pattern of LME. One must realize the importance of the fact that after the disappearance of Early ME /$\mathfrak{z}$/, the phoneme /h/ remains almost the only (29) voiceless phoneme without a voiced counterpart in the system. Its two remaining variants h and χ are articulatorily fairly remote from each other, which cannot but lead to the loosening of the bonds of phonematic unity thus far existing between them. (30) With this loosening is undoubtedly connected the technical fact that ME spelling is beginning to note these two variants differently *(h — gh)*. Thus, the groundwork was laid in the ME system of consonants for a phonological revaluation of the voiceless χ-sound. How, then, did this revaluation materialize?

K. LUICK has very appropriately pointed out (*Hist. Gr.*, § 513, Note 3) that one must keep in mind the presence of a $\underset{\cdot}{u}$-like element invariably preceding ME χ; this element originated in Early ME from a $\underset{\cdot}{u}$-glide arising between χ and a preceding back vowel. Consequently, in interpreting the history of ME χ, one must use this $\underset{\cdot}{u}\chi$ as a starting point. In this cluster, LUICK says, there arises "ein durch die $\underset{\cdot}{u}$-Stellung geführter Hauch", a sort of h^{u}. This qualification has much to commend it, but it misses the most essential point, viz. that this χ^{u} (this notation is preferable to LUICK's h^{u}) had evidently started to be revaluated to W, i. e. voiceless [w], just as the above-discussed χ' had been revaluated to ç, i. e. J (voiceless [j]). Obviously, the sound χ in the cluster $-\underset{\cdot}{u}\chi$- (or rather $-\underset{\cdot}{u}\chi^{u}$-) differs from $-\underset{\cdot}{u}$- only by its voiceless and fricative articulation, but shares labialization with it, having obtained it by assimilation. The relationship of $-\underset{\cdot}{u}$- to this χ^{u} is thus in essence the same as that of $-\dot{\imath}$- to χ', as discussed above, and thus the development in words of the type *tauχte* was obviously parallel to that in the palatal region of words like *miχ'te*. The sound χ^{u}, here already conceived as W, became assimilated to the preceding $\underset{\cdot}{u}$, so that a $-\underset{\cdot}{u}\underset{\cdot}{u}$- arose, which was immediately simplified to $-\underset{\cdot}{u}$-. Thus the sound χ^{u} was transferred from the range of the phoneme /h/ to that of the $u/\underset{\cdot}{u}$-phoneme, and the phoneme /h/, which had already been considerably weakened before, became deprived of an additional position of occurrence in English words. From them on, it was to be reduced to a single position of occurrence, viz. to word-initial, where its last surviving allophone [h] has managed to maintain itself — with the above-noted great difficulty — until the present day.

The parallel between the fates of χ and χ' is of course not complete. The fates of χ and χ' were exactly alike only where χ occurred word-medially before a consonant (mainly t): there the χ by the above-described assimilation and phonematic revaluation was to disappear without leaving any trace of its former existence (just as had been the case, in all positions, with the sound χ'). But in words where the χ — more exactly, χ^{u} — occurred in absolute word-final positions (as in *rough*, pronounced [ru:χ^{u}]) the development in the southern area was, as a rule, quite different. Its essence was that the phonologically revaluated W was there not assimilated to the $-\underset{\cdot}{u}$- but remained a voiceless spirant. Since the phoneme W, however, was already on the point of disappearance from the SES (if it had not been lost altogether), another voiceless fricative phoneme had to be substituted for it, whose implementation would be as close as possible to W. The phoneme f/ was selected for the purpose, and has survived in words of the type to this day.

IV. The survey of the eliminating process to which the phoneme /h/ has been subjected in the development of English should be followed by a discussion of the causes of that process. The above analysis has convincingly shown that substantially the process of elimination is traceable to native English forces. Still, some influence of foreign factors, especially of the structure of French, cannot *à priori* be dismissed as wholly non-existent. Such an influence, naturally, may have been of a secondary order: it may have merely acted as a catalyzer, accelerating and developing more effectively the operation of the tendency sprung from native sources. (31) A safe and definite answer to the question whether such secondary influence of French really was of any assistance in the process of eliminating the /h/-phoneme cannot

be given, of course, at the present, still inadequate state of our knowledge of the phonological development of English. There are, however, some indications that appear to speak in favour of the assumption of the possibility of such influence. Two of them will be briefly pointed out here.

First, it should be observed that at the period of the highest influence of French upon English (the period dating from the latter half of the 13th century), the French phonematic pattern contained a voiceless laryngal phoneme /h/, whose occurrence was limited to the beginning of stem-morphemes; at the same time, it could only be followed by a vowel, not by a consonant. The lexical items containing the phoneme were German loan-words that had become fully domesticated in French (such as *hareng* 'herring', *hêtre* 'beech', etc.). On the other hand, no velar fricative of the χ- or ʒ-type existed in French at that period. If these facts are duly considered it will be certainly found striking that the positional distribution of the sounds h and χ in 13th century French was perfectly identical with the one that was to become characteristic of English in the centuries to come. It almost seems as if 13th century French had set up for the two sounds a model distribution which was to be reached by English in the course of its future development.

The other indication, no less interesting, can be drawn from the history of continental West Germanic languages. These languages shared with English the first changes that were to launch the tendency restricting the functional use of the phoneme χ (e. g., the change of word-initial and intervocalic χ to h; disappearance of intervocalic -h- and the ensuing contraction of the vowels originally bordering on it). Later on, however, the operation of the tendency became considerably slowed down in continental West Germanic languages, so that, e. g., in the present-day standard of Modern High German the positional distribution of the sounds h and χ is roughly identical with the one characteristic of English of the middle of the 14th century. As the contact between German and French in the course of their developments was undoubtedly less close than that between English and French, it might be assumed that in the decisive moments of its history German was less exposed to French influence than English. This assumption appears to lead to a hypothesis that the more conservative development of the German phonematic pattern in the discussed point might be accounted for by the absence of the secondary, accelerating influence of French. Should this hypothesis prove correct, the situation in German would indirectly support the theory of potential secondary, accelerating influence exercised by French upon the eliminating process affecting the English /h/-phoneme.

Yet, for all these suggestive indications, stress should again be laid on the necessity of a thorough-going examination of the phonological development of English (and French) during the critical period; before this pre-requisite is fulfilled, no final solution of the problem of the French share in the studied process can be presented. Further, it must again be stressed most emphatically that the roots of the whole eliminating process are undoubtedly native. One cannot easily overlook the fact that at the time when the French influence began to be appreciably felt in English, the eliminating tendency had already reached the most advanced stage in that language, if compared with other West Germanic languages.

V. In discussing the above-noted eliminating tendency one must not leave unanswered one question of principle, viz. the question of the motive that called it into being. Why, one might ask, is the place of the slightly burdened phonemes in their language systems so unsteady?

The answer to the above question is not very difficult to find. Admittedly, all human activity is done for some purpose. Language, being primarily a system of

vocal means serving the mutual communication of the members of a certain community, cannot be exempt from this general rule. On the lexical and grammatical level of language the existence of basic purposefulness is subject to no doubt; it is unmistakably reflected in the orderly arrangement of the items of those levels, and all instances of irregularity or inconsistency, however numerous they may be, are evaluated merely as "exceptions that prove the rule". On the grammatical level the orderly arrangement is reflected in the very fact of the grammatical system with its morphological paradigms and syntactic sentence patterns; on the lexical level the presence of the purposeful order is evidenced, among other things, by the virtual non-existence of real synonyms, by semantic differentiation of word doublets that have arisen out of one and the same word-from (instances of such doublets are, e. g., English *shade — shadow, also — as;* German *Reiter — Ritter,* Czech *město* 'town' — *místo* 'place', etc.).

The purposeful arrangement of the phonic level of language is less conspicuous but the fact of its existence cannot be reasonably doubted, even if again one must allow for some percentage of irregularities or inconsistencies (in short, for some peripheral items of the system). One has only to notice the numerical limitation of the inventories of phonemes in individual languages (as a rule, the number of phonemes in a language does not exceed three dozen) to be able to assess the immensity of the load to be carried by the set. The various combinations of these two or three dozen phonemes are not only faced with the task of providing words, phrases and sentences needed for common, every-day mutual understanding; they must also be up to fulfilling more difficult and more responsible duties, viz. those of expressing the finest, most complex and most differentiated distinctions of both argumentative and aesthetic thinking. The immensity of the burden to be carried by one and any item of the phonematic set necessarily calls for an adequate equipment of these items for the fulfilment of their manifold and difficult tasks.

First, all the items (i. e. all phonemes) must be clearly differentiated from one another; here lies the reason of the more or less symmetric arrangement of phonemes regularly met with in phonematic patterns of concrete languages. It appears, however, that yet another consequence of the immense burdening of the phonematic set must be taken into account, viz. an effort to prevent instances of too disproportionate burdening of individual phonemes composing the set. This tendency asserts itself mostly in the negative, that is to say, it sees to the elimination of those instances which most strikingly oppose it. Some instances of its operation have been analyzed in the present chapter. (32) Besides, stress should be laid on another fact, to be discussed in some detail in Chapter Three, viz. that the operation of the eliminating tendency appears to be duly co-ordinated not only with the structural requirements of the concerned phonematic pattern but with the needs and wants of virtually all levels and sub-systems of the given language.

It is to be hoped that the above exposition has revealed clearly enough that the operation of the established eliminating tendency cannot be held for a kind of immanentist, self-explaining process taking place in a self-contained language system. On the contrary, it is a manifestation of a purposeful activity of the given language community, using its language intentionally as a system of means designed, above all, for mutual communication. The fact that, as a rule, the operation of the tendency is unconscious detracts nothing from its purposefulness. Quite a number of admirably purposeful human activities have become unconscious owing to their absolute mechanization (e. g., breathing, walking, etc.). It is precisely the task of scientific research to discover and interpret the hidden regularities of such purposively func-

tioning mechanisms. Our above analysis has tried to detect some such regularities characteristic of the mechanism of language.

VI. There is another objection that might be voiced against the results of the above analysis. It might be argued that our theory, attempting to trace the roots of the eliminating tendency, gives due consideration to the inner motives of the process, i. e. to the inner situation obtaining in the given language system, but that its regard to the outer motivation of the process, i. e. to the history of the community who are bearers and users of the language, has been indicated in vague and general terms only. In our opinion, however, also this objection can be squarely met. It must be realized that the outer history of the given language community does not affect all sub-systems of the community's language with equal intensity and immediacy. It is commonly accepted that the outer events experienced by the concerned community are most intensely and most immediately reflected on the lexical level, which reacts to all changes, whether they are of economic, social or cultural character, in a very quick and most sensitive manner. The other language levels, the grammatical and the phonic, are much slower in reacting to such changes, and as a rule their reactions are not immediate. This can be said especially about the phonic level: it appears that its correlation with the outer life of the community is usually confined to the obligation of putting at the community's disposal basic phonematic materials shaped so as to be utilizable for communicative purposes to the best possible advantage. In other words, the items of basic phonematic materials must be clearly differentiated from one another, and the degrees of their respective utilization should not be strikingly disproportionate; if these requirements are duly attended to, the higher language levels (the grammatical and the lexical) will function smoothly and efficiently. Occasionally, it is true, the phonic level can be more profoundly affected by the outer events of the community's life, but in all probability even in such cases the intervention of the outer factors can only be indirect. A concrete example will show what is implied by this general statement.

The history of ME reveals that the voiced fricatives v, z, which in OE had only been allophones of the respective phonemes /f/ and /s/, acquired the status of separate phonemes. This change of their status was promoted, among other things, (33) by the penetration into, and domestication in, English of a certain number of French expressions in which the sounds v and z occurred in word-positions up to then reserved for f and s only. After this domestication English came to possess word-pairs like *fin* — *vin* 'fine' — vine', *sēli*(-) — *zēl* 'blessed — zeal', giving unmistakable evidence of the phonematic status of /v/ and /z/. Here one clearly has to do with a kind of correlation between the structure of the English phonic level and the outer history of the English-speaking community, because the penetration of French words into the English vocabulary was a necessary consequence of the Norman Conquest and especially of the (considerably later) gradual amalgamation of the native and Franco-Norman populations. As already stated, however, the correlation is again of indirect character because the change in the phonematic pattern was promoted, among other things, by foreign additions to vocabulary, in other words, *via* the changes affecting the lexical level (the latter changes, in their turn, had been directly brought about by the intervention of outer events). In this context, it may be useful to recall FR. ENGELS (34) who deservedly ridiculed the supposition of a direct causal link between the outer events experienced by a given community and the sound-changes in the community's language.

It appears, then, that the requirement of paying due regard to the outer motivation of phonological processes (including our eliminating tendency) can be duly met by taking into consideration the above-analyzed indirect correlations undoubtedly existing between the changes in the phonic plane and the outer events experienced by the community. To take up our eliminating tendency again, it will have been noted that our discussion of the gradual abolishment of the /h/-phoneme has satisfactorily respected the above-said requirement. It will be recalled that the possibility has been taken into account of some secondary share of French in the advancement of the eliminating process, which — as we put it — may have been accelerated by the influence of French. — It should again be stressed that the influence in this case may have been only indirect and negative at that: if it was really present, it consisted in the fact that the sounds h and χ in French loanwords were absent from some of the positions in which they could still be found in English words. As has been pointed out earlier here, the validity of the assumption of French influence, if only an indirect one, will have to be tested by further research. The point we are making here is that by taking into account the possibility of such influence we acquit ourselves of the possible reproof of overlooking the outer motivation of the eliminating process.

VII. The last point to be mentioned in connection with the abolishment of the English /h/-phoneme is the different motivation of the earlier and the later stages

of the eliminating process. While the earlier stages were obviously prompted by the purely physiological effort to facilitate the smooth functioning of the organs of articulation, the later stages must be regarded as manifestations of the tendency directed towards the gradual elimination of the phoneme that had become peripheral in its phonematic pattern. A brief comparative survey of the two periods of stages will make this distinction clear.

The period of the earlier stages includes the pre-historic and the OE changes, except the changes of the type $hR > R$ (if the last-mentioned type was really an OE, not a ME, affair). The changes belonging here were: (1) the change of the word-initial Prim. Gmc. *χ- into *h- (35), (2) the distinctly later change of the intervocalic *-χ- into *-h- (36), (3) the loss of this intervocalic -h- followed by the contraction of the adjacent vowels; (4) the changes of -χs- into -ks-, as in *weahsan* > *weaxan*; (5) the loss of h in forms like *hēahne* > *hēanne* (and, possibly, in *feorhes* > *fēores*, if this change really took place at all, cf. QUIRK — WRENN, *OEG*, § 189); and (6) the changes of clusters of the type $hr > hR$ (but not the changes of the type $hR > R$). All these changes with the exception of (4) consisted in the assimilation of the fricative articulation of χ to the articulation of the neighbouring vowel or sonant. In (4) one is faced with a case of dissimilation, which again is physiologically motivated.

On the other hand, the changes belonging to the later period (starting with $hR > R$, $hl > L$, $hn > N$, $hw > W$) can hardly be regarded as due solely to physiological causes. The changes just mentioned cannot be fully accounted for as due to assimilation followed by the loss of acoustically indistinct h-; as a matter of fact, the analogously built clusters *fl-*, *pl-*, *pr-* were not assimilated at all. Therefore, the elimination of the h-clusters must have sprung from deeper roots. Most probably, the reason of the changes should be looked for in what appears to be specific of these clusters and what thus distinguished them from the analogously built clusters unaffected by the changes. The specific feature common to all the eliminated clusters was clearly the phoneme /h/, constituting a component part of each of them. It so appears that the changes are most adequately explained if they are taken for the first of the manifestations of the tendency directed towards the gradual elimination of the insufficiently utilized h/χ-phoneme which at that time was already beginning to be evaluated as a peripheral item of the phonematic pattern. This evaluation must have been considerably furthered by the rapid decline of the /ʒ/-phoneme, for a short time a correlative partner of /h/χ/, but already greatly restricted in its positional distribution and doomed to disappear from the phonematic pattern very shortly. After the ultimate loss of /ʒ/, in the first half of the 13th century, the tendency driving towards the elimination of the peripheral /h/-phoneme must have struck firm roots in the language.

This conclusion is not necessarily contradicted by the fact that also the changes restricting the existence of /h/ after 1200 were to result in facilitating articulation, i. e. proved to be in accordance with the physiological tendencies of the organs of speech. The principal difference between the changes prior to, and following, 1200 is that the former took place independently of the needs and wants of the language system with which, for the time being, they did not interfere. But as soon as the position of the /h/-phoneme had become palpably weakened, and been driven towards the periphery of the phonematic pattern, it must have become an affair of the whole language system which had to derive all necessary consequences from the situation and to duly react to it. That such reaction was to make due use of the physiological mechanism of speech organs was only natural and inevitable. But the physiological motivation was here only an instrument of deeper motives, springing

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from the needs and wants of the language system. That this was indeed so is indirectly proved by the situation in O[ld] H[igh] G[erman].

There the physiological situation of prevocalic *h-* was substantially the same as in English, but the inner, deeper motivation tending to the elimination of *h-* was missing, and thus no elimination of prevocalic *h-* has ever taken place. It should be recalled that the first stages of the eliminating process, analogous to those found in English, can be found also in OHG. Although the intervocalic *-h-* (pronounced as a laryngal sound) had not yet been dropped in OHG, the OHG clusters *hr-*, *hl-*, *hn-* and *hw-* had been subjected to simplification since the 9th century, and also the OHG group *-χs-* became assimilated to *-ss-*, though before a consonant only. The weakening of the position of the *h/χ*-phoneme in the phonematic pattern of OHG was also furthered by a radical positional restriction of the ꝣ-sound, the voiced counterpart of *χ*. The High German development of the ꝣ-sound was to be more radical than the English development: the ꝣ-sound, in PrimGmc. the main allophone of the ꝣ/g-phoneme, (37) in OHG appears to have been ousted from virtually all its positions by the *g*-sound, originally a mere subsidiary allophone. Thus in OHG, too, the correlative relation formerly existing between the phonemes /ꝣ/ and /h/χ/ became cancelled. Under these circumstances, the prospects of the OHG phoneme *h/χ* did not seem particularly bright; but its situation became consolidated thanks to the operation of an opposite tendency, attempting to restore the full functional capacity of *h/χ*. The operation of this other tendency had been prepared by the results of the "second" (i. e., High German) consonant shift, in the course of which the Prim.Gmc. word-medial intervocalic *-k-* passed into OHG *-χχ-*, which, later on, became simplified into *-χ-*. Thus a fairly high number of additional words containing the *χ*-sound emerged in the language and the scope of the OHG *h/χ*-phoneme became notably widened.

In this connection it is interesting to note that after the simplification of *-χχ- > -χ-* the High German language was faced with the possibility of a phonematic split of the *h/χ*-phoneme into two separate phonemes, /h/ and /χ/. The possibility was prompted by word-pairs like *rauchen — rauhen, kriechen — ziehen, Zeichen — verzeihen*, etc. The language, however, did not avail itself of this possibility; the split was forestalled by the ultimate loss of the intervocalic *-h-*. The reason why the possibility of enriching the German phonematic pattern by a new item was made use of was probably the very slight degree of functional utilization of the prospective new phonematic opposition.

In the present chapter we hope to have shown, at least in general and rough outlines, how a language may handle the problem of a peripheral phoneme which is found to be increasingly inadequate from the functional viewpoint. Further chapters will show that other solutions may be possible and that, in some instances, no immediate solution may be at hand, and the peripheral phoneme may thus remain a sore point of the system.

Chapter Three

THE EARLY MIDDLE ENGLISH /J/ AND THE PERSONAL PRONOUN *SHE* (38)

I. In Chapter Two we proposed a theory pointing out the part played by the quantitative aspect of phonic phenomena in the development of language. A number of cases were pointed out in which one may observe a distinct tendency to discard from the language such phonemes as are utilized only to a very slight extent, and thus prove to be peripheral items of that language, having no solid foothold in its phonematic system. It was shown that the said tendency can account for the loss of EME voiceless phonemes /R, L, N/ (going back to OE clusters *hr-*, *hl-* and *hn-*, respectively) which soon became substituted by the phonemes standing closest to them in the EME phonematic system, i. e. by the respective voiced phonemes /r, l/, and /n/. For this reason, OE words of the types *hræfen, hlūd, hnutu* are represented in ModE by the corresponding forms *raven, loud, nut* (the EME forms of the words were *Raven, Lūd,* and *Nute*).

We also hope to have demonstrated the fact that our theory of the tendency trying to discard slightly utilized peripheral phonemes can throw some new light on a number of moot points still found in the phonological development of English. The present chapter wants to submit another case of evidence for the thesis urging that the above-mentioned theory may enable us to óbtain a clearer insight into the concrete problems of language development. The case to be dealt with is that of the ModE personal pronoun *she*, the history of which has not yet been satisfactorily explained in all its points.

Of all the EME forms of our pronoun, those of the East Midland dialects will serve as the starting point of our discussion, because the dialects of that area were to afford a basis on which the S[outhern] E[nglish] S[tandard] of the present day was to develop. As is generally known, the EME forms of the feminine personal pronoun in that area are commonly denoted in grammars as ʒhǭ, ʒhę̄, alternating sometimes with ʒǭ, ʒę̄. The scribes of the period display a rich variety of spellings, among the most common being ʒho, ʒeo, hyo, ʒe, ǥe, ǥhe, ǥhye, etc. The phonic values lying behind these writings appear to have been [ço:, çe:], with the alternatives [jo:, je:]. As to their origin, the forms ʒhǭ, ʒhę̄ are traced back, by common consent, to the OE pronominal form *hēo*, and possibly also to the accusative form *hīe*, which, owing to its gradual replacement in the accusative function by the dative form *hire*, was free to be utilized in other functions. The ultimate victory of the form ending in -ę̄ should obviously be attributed to the influence of the masculine form of the same pronoun, i. e. hę̄. It is generally taken for granted that in the whole process leading from *hēo* to çǭ (or, respectively, from *hīe* to çę̄) the first step must have been the shift of balance in the falling diphtong ēǫ (or, respectively, īe). The shift was probably due to loss of stress (see K. LUICK, *Hist. Gr.*, §§ 266, 360) and resulted in the formation of the rising diphtong i̯ō (or i̯ē, respectively). In the pronominal forms hi̯ō, hi̯ē, the initial hę̯-/hi̯- "melted into a voiceless χ̓'" (K. LUICK, o. c., § 705), i. e. into [ç].

The above-described mutual relation of OE *hēo/hīe* and EME ʒhǭ/ʒhę̄ is so obvious as to be generally accepted. Much less clear, however, is the relation existing between the ModE form *she* and the EME ʒhǭ/ʒhę̄, and scholars widely disagree on this point. Quite a number of them, beginning with L. MORSBACH in the late 'eighties (*Ursprung*, p. 121), refuse to admit a direct descent of the ME form schę̄, the predecessor of ModE *she*, from the EME form ʒhǭ/ʒhę̄. In their opinion, schę̄ goes back to the OE demonstrative pronoun *sēo* (the stages of the process being sēǫ > sę̄ǫ > si̯ō > schǭ); -ę̄ is again explained as due to the influence of the masc. form hę̄. As a typical representative of the scholars holding this view we may mention H. BRADLEY, who expressly rejects the possibility of explaining the form *she* from OE *hēo/hīe* (see the NED, Oxford, s. v. *She*).

Only a minority of scholars have regarded the ME [š-] in schę̄ as a direct continuation of EME [ç]. The first to do so was G. SARRAZIN almost seventy years ago (*Ursprung*, pp. 330f.). SARRAZIN's view was endorsed, though in a slightly modified form, by K. LUICK (*Hist. Gr.*, § 705), in whose opinion the [š-] of schę̄ is to be taken for a sound substituting the earlier [ç-], at least in the East Midland dialects. It is worth noting that LUICK speaks not of an organic sound change of [ç] to [š], but of a substitution (he calls the [š]-sound an "Ersatzlaut"). LUICK's cautious wording was probably prompted by the same fact that had led other scholars to the downright rejection of any possibility of the change of [ç > š] — viz. by the virtually total absence of any other evidence for the change. (39) So much, then, for the traditional views voiced on the problem of origin of the ModE form *she*.

II. In our opinion, the problems connected with the rise of the form *she* can be

somewhat elucidated by applying to them our above-mentioned theory, to the effect that slightly utilized peripheral phonemes tend to be discarded in the course of language development. The following paragraphs are intended to show that, seen in the light of this theory, SARRAZIN's and LUICK's views appear to be truer to facts than the views held by MORSBACH and BRADLEY. Even SARRAZIN and LUICK, however, have not succeeded to penetrate to the very core of the problem.

First of all it should be observed that the rise of the EME [ç]-sound in ȝhǭ/ȝhę̄, admittedly going back to the earlier *hjǭ < hęǭ < hēǫ* (or *hję̄ < hįē < hīę*, respectively), is in perfect agreement with what is known of the rise of the EME voiceless sonant sounds [R, L, N, W], going back, in their turn, to the respective OE clusters *hr-, hl-, hn-,* and *hw-*: the same kind of progressive assimilation, with the subsequent loss of *h-*, was at play in the development of both *hj* and of all the other enumerated clusters. (40) The EME sound [ç] also shared with the EME sounds [R, L, N, W] the status of a separate phoneme marked by a very slight degree of functional utilization, so that its peripheral character is again obvious. Its degree of utilization was even smaller in the case of the /ç/-phoneme (or, better, /J/-phoneme) than in the cases of the phonemes /R, L, N/, and /W/: the only East Midland pair in which the difference of [ç — j] (phonematically, /J — j/) was associated with the difference of meanings was EME ȝhę̄ — ȝę̄ 'she — you', whereas each of the other parallel phonematic differences, viz. /R — r/, /L — l/, /N — n/ and /W — w/, was responsible for analogous differences of meanings in a greater (though relatively also very small) number of word-pairs.

Another point deserves to be noted: the established phonetic and phonematic parallelism of /J/ and /R, L, N, W/ seems to be reflected also in the written norm of EME. The spelling ȝh for [ç] is no doubt closely parallel to the spellings of the type *rh, lh, nh, wh,* commonly interpreted as graphical representations of the sounds [R, L, N, W]; the letter *h* in such digraphs was obviously a mere diacritical mark indicating the voiceless quality of the sound denoted by the letter preceding *h*. (41)

The phonematic parallelism established here between the EME /J/ and the other voiceless sonant phonemes /R, L, N/, and /W/ is suggestive of like parallelism of their ultimate fates. In Chapter Two it was shown in detail how the slightly utilized EME phonemes /R, L, N/ were soon discarded from the phonematic system of their period, and replaced by the voiced phonemes /r, l, n/ standing closest to them in the system; to some extent, the phoneme /W/ followed the same course of development. (42) Thus it is only natural that one expects the slightly utilized EME phoneme /J/ to meet an analogous fate. In other words, one expects it to be soon discarded from the phonematic pattern of EME and to be replaced by its voiced counterpart /j/. The expectation appears to be justified by the spellings of ȝo, ȝe, found in some EME writings of East Midland origin; Luick himself believes that these spellings may point to the presence of the voiced [j]-sound (he does not, however, realize the phonematic importance of the supposed change of [ç] to [j]).

The interesting point is that, although the voicing of [ç] appears to have been an obvious kind of solution of the problem connected with the EME slightly utilized /J/-phoneme, it was by no means the only possible way leading out of the difficulties. As a matter of fact, the present-day forms of the word in English, whether in the literary standards or in dialects, have all adopted solutions widely different from the simple voicing of [ç]. The most interesting kinds of solution will be analyzed below; that adopted by the East Midland dialects will be taken up first. This kind of solution, replacing /J/ by /š/, is of special interest for us, because it has become typical of the SES of the present day.

To do full justice to the East Mdl. solution, one has to realize that in the process of discarding the phoneme /J/, apart from voicing, another course was open, non-existent in the process of discarding the other voiceless sonant phonemes, /R, L/, and /N/. The peculiar course is due to the fact that in losing its voice, the sonant [j] — unlike [r, l, n] — acquires a distinctly fricative character, completely unknown to the voiced [j]-sound (whose semivocalic character has more than once been commented upon) (43) and much more vaguely felt in the voiceless sonant sounds [R, L, N] (44). In passing, it should be observed that a similar fricative character is also typical of the voiceless sonant [W].

It was exactly this fricative character of [ç] which provided the other possibility of substitution when the process directed at the elimination of the /J/-phoneme had become imminent: the slightly utilized phoneme /J/ could either be replaced by the corresponding voiced phoneme /j/ or by a voiceless fricative phoneme resembling /J/ rather closely from the acoustic viewpoint. There can be no doubt that in EME the only voiceless fricative substitute of the kind could be the phoneme /š/, and thus the East Mdl. form ʒhẹ came to be replaced by schẹ [še:]. It is worth pointing out that the dialects of north-eastern Scotland effected an analogous substitution of the /W/-phoneme by the voiceless spirant phoneme /f/, which was qualified for the substitution by its close acoustic similarity to /W/. — On the other hand, the EME voiceless sonant phonemes /R, L, N/ had, in their time, no acoustically similar spirants standing close to them in the system, and so they could be replaced only by their corresponding voiced phonematic counterparts.

The decision as to which of the two possible substitutions would replace the slightly utilized /J/-phoneme was prompted by the needs of the EME language system; the needs, in their turn, were determined by one of the principal tasks of language, viz. that of being the instrument of mutual understanding among the members of the given language community. Viewed in this light, the substitution of /J/ by its voiced counterpart /j/ would obviously have impaired the functioning of EME in one of its principal tasks: the choice of /j/ as a substituting phoneme would have resulted in a formal coalescence of two important EME pronominal forms, ʒhẹ 'she' and ʒẹ 'you' (the respective OE sources of the words being hēo/hīe and ʒē). Thus the replacement of /J/ by /j/ was doomed to remain a mere theoretical possibility. — There was, naturally, another alternative: the two forms ʒhẹ and ʒẹ might have been differentiated by making use of the EME form ʒhǫ, which would have been clearly distinguished from ʒẹ even if its initial /J/-phoneme had been replaced by the voiced /j/. But the tendency to extend the ending -ẹ to the feminine pronoun appears to have been very strong in the East Mdl. area, and so the two forms ʒhẹ and ʒẹ could only be kept apart from each other by a difference in the initial consonant phonemes. No doubt, it was this fact that ultimately decided for /š/ as a substituting phoneme for the discarded /J/.

III. The penetration of š- into the East Mdl. dialectal form schẹ was also very closely connected with two interesting features characterizing the grammatical system of the dialects at that period. The first of the two was characteristic of the whole of ME, but especially of the dialects of East Midlands. It was the gradual loosening of the band until then tying up all the existing forms of the personal pronoun of the 3rd person by means of an identical phonematic beginning. The band had been in existence since the prehistoric period and is clearly revealed by the OE forms hē — hēo — hit, pl. hīe/hī. Apart from the phonematic differentiation of the masc. /h-/ and the feminine /J-/, dating from EME and later made even more conspicuous by a further differentiation into /h- : š-/, it is to be noted that in the course of the ME

period there occurred two other changes which greatly contributed to the loosening of the band. First, the unstressed neuter form *it* was gradually becoming generalized in stressed positions, ousting the old form *hit*, the initial phoneme of which had been identical with the initial phoneme found in other gender forms. Second — and this was even more important — the East Mdl. old plural form, going back to OE *hīe/hī* and by its initial phoneme still closely bound to the other gender forms of the pronoun, was becoming completely ousted by the form *þei* of Scandinavian origin.

Our theory of the important part played in the development of the forms of the EME pronoun *hẹ̄* by the phonematic differentiation of their beginnings is strikingly borne out by an interesting fact known from the historical dialectology of English. J. WRIGHT and E. M. WRIGHT (*EMEG*, § 375) pointed out the ME feminine form of the 3rd pers. sg. *hǭ*, commonly found in West Mdls, and in some parts of the south-western area (in the modern dialects the form is reflected by *u, ū*). How can the form be explained? The WRIGHTS simply say that the element *j*, originally present in *hjǭ*, 'entirely disappeared'. It would be, however, very difficult, both phonetically and phonematically, to account for such process of disappearance. If otherwise in all EME clusters of the type '*h* plus sonant sound' it was the first element that was invariably dropped (after having exercised some influence on its neighbour), why should exactly the opposite kind of change, the dropping of the second element, have occurred in the West Mdl. and south-western areas? It certainly appears more probable that the development *hj* of the cluster *hj* in the said areas conformed to the usual pattern of development typical of the *h*-clusters all over the English territory. (45) If this was so, then the West Mdl. form *hǭ* calls for an explanation different from the one supplied by the WRIGHTS. Needless to say, the explanation to be given must fully conform to what we know of the general phonematic situation of the sound [ç] in EME.

In our opinion, the truly adequate explanation of the West Mdl. form *hǭ* may follow from the fact that from the purely phonetic point of view the initial sound of *ȝhǭ*, i. e. [ç], was perfectly equivalent to the third sound of words like *night, right*, pronounced [niçt, riçt]. (46) The functional value of this latter [ç]-sound was, naturally, quite different from that of the former: the [ç]-sound in *night, right* obviously had no independent phonematic status but was a combinatory variant of the phoneme /h/ known from words like *hẹ̄, taughte* (phonetically, [heː, tauχtə]). In the difficulties arising from the slight functional utilization of the phoneme /J/ found in the words *ȝhǭ/ȝhẹ̄*, the purely accidental phonic coincidence of the [ç]-sounds in *ȝhẹ̄* and *night* may have given impulse to a singular and highly original way leading out of the phonematic impasse.

The adopted solution consisted in the assignment of the lately arisen sound [ç] in *ȝhǭ/ȝhẹ̄*, on the grounds of its physiological and acoustic affinity to the older [ç] in *night* and *right*, to the old-established phoneme /h/. By this assignment the [ç]-sound in *ȝhǭ/ȝhẹ̄* came to be evaluated as a positional variant of the /h/-phoneme. There was only one weak spot in the adopted solution: the sound [ç] in *ȝhǭ/ȝhẹ̄*, if regarded as a variant of /h/, was evidently misplaced, as the position it occupied in the two words had been reserved for another of the phoneme's variants, viz. for [h], which alone was authorized to stand initially before vowels. This anomaly was cancelled by replacing the sound [ç] in the two words by the positionally pertinent variant [h]. In our opinion, this is the only adequate explanation of the emergence of the West Mdl. fem. pronoun *hǭ* in EME (and there is hardly any doubt that the feminine *hẹ̄*-form, also mentioned by the WRIGHTS and found in the South Mdl. area and in the South in the period extending as late as the 15th century, should be

accounted for analogously). It will have been noticed that the dialectal phonematic revaluation just outlined also managed to solve the given phonematic problem, viz. the dismissal of the peripheral slightly utilized /J/-phoneme, though by means entirely different from those employed in the East Mdl. area.

On the other hand it cannot be overlooked that the West Mdl. (or, respectively, South Mdl. and Southern) solution clearly presented a less radical, and therefore less satisfactory, way of dealing with the problem than the procedure adopted in East Mdls, where /J/ was substituted by /š/. This criticism applies especially to the southern solution in which the admission of $h\bar{e}$ into the feminine gender totally effaced the distinction formerly found between the masc. and fem. forms of the pronoun. (Later on, the distinction was reintroduced — at least in the literary documents of the area — by the spreading of the form $sch\bar{e}$, which was forcing its way from the East Mdl. area.) — Moreover, it should be observed that the West Mdl. (and also the South Mdl. and Southern) solution appears to have been rather deficient when tested by the general tendencies of the English phonematic development: in a sense, it may even be regarded as a retrograde step. One cannot close one's eyes, that is to say, to the fact that the solution amounted to the restoration of the otherwise receding /h/-phoneme in those forms in which it had already been eliminated by the rise of the /J/-phoneme. And yet, in the said dialectal areas this rather deficient phonematic solution was found preferable to the more radical solution of the East Mdl. type. How can the half-hearted attitude of the dialects of the said areas be accounted for?

In trying to supply an answer to this question one cannot fail to observe an interesting feature, common to all three dialectal areas which refrained from the radical solution typical of East Midlands. The feature consisted in the continued firmness of the band uniting the forms of the personal pronoun of the 3rd pers. with an identical phonematic beginning. In our opinion, the dialects of the three areas were barred from accepting the more radical solution exactly on account of the fact that the band referred to had still been too strong in them. Naturally, the firmness of the band was not felt with equal intensity in all EME dialects. Its different degrees, ascertainable in different EME dialectal areas, are reflected especially by the conditions prevailing there in the plural form of the pronoun $h\bar{e}$. The data supplied on this point by the WRIGHTS (*EMEG*, § 376) are most instructive. In East Mdl. the penetration of the form $p\bar{e}i$ had started in the 12th century (Orm, writing very shortly after 1200, knew no other form), so that at the time when the solution of the phonematic problem of [ç] was becoming imminent the phonemic band tying up the pronominal forms had already been considerably loosened. The solution may have been effected as early as the middle of the 12th century (if one may trust the writing $sc\bar{æ}$, found several times in the Peterborough Chronicle and dating approximately from 1140).

In opposition to this, the penetration of the form $p\bar{e}i$ in West Mdls., in South Mdls., and in the South was definitely slower. Whereas in the East Mdl.dialects it had been generalized 'by the early part of the fourteenth century' (the WRIGHTS, l. c.), its generalization in the South Mdls. was of a distinctly later date (to quote the WRIGHTS again, it had 'become general... before the middle of the fourteenth century'), and in the West Mdls. and in the South the process was slower still (according to the dating given by the WRIGHTS, the form $p\bar{e}i$ was to become universal in the West Mdls. 'by the second half of the fourteenth century', and in the South, including Kent, 'during the fifteenth century'). Thus it appears obvious that in the three last-mentioned dialectal areas the systems of the personal pronouns had not provided

the conditions essential for the replacement of the phoneme /J/ by /š/, so that the only feasible solution was the more conservative replacement of /J/ by /h/.

The validity of the above theory is borne out by the EME state of things typical of the Northern area. There the form *schọ* was established very firmly: literary records present evidence for it since the close of the 13th century, so that in the popular dialects of the area it must have existed even earlier. And it is certainly no chance that in the Northern dialects the plural form *þẹi* had been common since the beginning of the ME period. Incidentally, one should notice the fact that in the Northern area the EME forms of the masculine and the feminine had been most effectively differentiated: they differ not only in the initial consonant phonemes, but also in the vowel phonemes following them *(hẹ — schọ)*. — The penetration of *š* in the northern form *schọ* was most probably furthered by sandhi cases of the type *beres hjọ* (see H. LINDKVIST, *Origin*, pp. 1ff). Such cases, however, can hardly be regarded as solely responsible for the ultimate victory of *š*-in Northern *schọ* — the context of the change is too complicated to allow of an oversimplifying approach of the kind.

So much, then, can be said about the first of the two important points of the grammatical system that appear to be closely connected with the penetration of forms of the type *schọ/schẹ* into the East Mdl. dialects, i. e. about the loosening of the phonematic band originally tying up the forms of the personal pronoun *hẹ*. (Incidentally, it should be noted that the said loosening represented only the first stage of a long process aimed at the cancellation in English of gender as a grammatical category; the process seems to have been completed in American English, see R. A. HALL, JR, *Sex Reference*, pp. 170 ff.)

The other of the two points is no less important. It concerns the OE demonstrative pronoun *sēo*, regarded by many as the ultimate source of the ModE personal pronoun *she*. From the phonetic point of view, little can be said against the theory of the development leading from the OE *sēo* to ModE [ši:] (though SARRAZIN, l. c., appears to have some doubts on this point). From the morphological standpoint, too, there can hardly be any objection to the possibility of explaining the form of a personal pronoun from what used to be a demonstrative pronominal form (see cases like OScand. *þeir* and OHG. *siu* which in the course of their developments became revaluated into personal pronouns, the ModE *they* and ModHG *sie*, respectively). Still, there can be no doubt that whenever this is reasonably possible, such kind of explanation of a personal pronominal form should be adopted as can refer the form again to the form of a personal pronoun, found in the earlier stage of the language in question. It is taken for granted, of course, that the explanation must be both feasible phonologically, and in full conformity with all the facts to be explained. Perhaps it is not too bold to assume that the explanation submitted here above does not fall short of the requirements just stated.

On the other hand, there can be no doubt that the old demonstrative pronoun *sēo* did contribute, in a way, to the process of firmly establishing the form *schẹ* in EME; the contribution, however, was of a negative character. It is commonly known that the OE demonstrative pronoun *sēo*, and its masculine partner *sē*, were not to survive in ME: for the most part (47) their functions were taken over by the (then ultimately crystallizing) definite article *þẹ*, whose initial *þ*- was of course due to the analogical levelling exerted by other case forms. From this practically complete disappearance of the form *sēo* (48) it is sometimes concluded that the form *sēo*, and especially its developments *sjō > šọ*, could be utilized for another purpose, viz. for expressing the feminine personal pronoun of the 3rd person. We believe, however, that the conclusion to be drawn from the premisses is rather a different one: as the form *sēo* (and its developments *sjō > šọ*) had not survived in EME, there was nothing to prevent the substitution of /š/ for /J/ in EME. If, that is to say, the form *sēo* (or its developments

$sj\bar{o} > \check{s}\phi$) had been preserved there in its original status, the substitution of /š/ for /J/ would probably have not been effected for fear of homonymy that might have arisen between the demonstrative $sch\phi < s\bar{e}o$ and the new personal $sch\phi < \phi\bar{o} < h\bar{e}o$. Thus it may be said that by its very disappearance the old demonstrative pronoun $s\bar{e}o$ had cleared the way for the definite establishment of the phoneme /š-/ in the feminine personal pronoun.

IV. In this concluding section another important point should be emphasized. All that has been laid down in the preceding sections of the present chapter amounts to the ascertainment of a thoroughly organic character of the substitution of /š/ for /J/ in East Mdl. dialects. There was nothing fortuitous or purely mechanical in the substitution; on the contrary, the substitution was a natural consequence of harmonious co-operation of the phonematic, phonetic and morphological factors that had been at work in the said area in the EME period. The phonematic factor, primarily responsible for the change, was the very slight functional utilization of the EME phoneme /J/. This factor, however, only indicated the necessity of discarding the phoneme /J/: the manner of the elimination was abundantly co-determined by other factors. The phonetic factor that contributed to the solution of the problem was the close physiological and acoustic similarity of the sounds [š] and [ç]. The morphological factor, in its turn, was the structural re-arrangement of the system of English demonstrative pronouns: This re-arrangement had made the way clear for the desired phonematic solution, and was well under way in the 12th century, having already resulted in the cancellation of the demonstrative $s\bar{e}/s\bar{e}o$, a potential homonym of the personal pronoun $sch\phi/sch\rlap{.}e$. — Moreover, it should be noted that the re-arrangement of the EME system of demonstrative pronouns also involved the ultimate crystallization of the definite article; this fact reveals that even some, though scanty, amount of influence of syntactical factors can be discovered in the process of substituting /š/ for /J/. Last but not least, it will be found useful to recall the fact that to a certain degree the choice of the phoneme substituting for /J/ was influenced by the effort to avoid a new pair of homonyms in the language (the words threatened by homonymy were $\mathfrak{z}h\rlap{.}e$ and $\mathfrak{z}\bar{e}$). If this was so, then the substituting process was not entirely uninfluenced even by the lexical plane of the language.

Our use of the term 'substitution' is thus obviously characterized by consociations profoundly different from those attaching to K. LUICK's use of the term 'Lautersatz'. In our usage, the term does not imply a mechanical replacement of one sound by another, on the ground of mere physiological and acoustic likeness or similarity. It rather refers to a change co-determined by the tendencies of development proper to practically all language levels: the phonetic, phonematic, morphological, syntactic, and (to some extent) even lexical. The problem of the substitution for the peripheral /J/-phoneme concerned all the enumerated levels, though not all of them with equal urgency, and the needs of all the levels (or, of all the sub-systems of the language) were remarkably harmonized in the solution ultimately adopted.

Our investigation has revealed, beyond all doubt, that even a narrowly delimited problem such as the phonological development of the NE form *she* cannot fail to reflect the striking co-ordination of all language levels as well as the delicate interplay of mutual influence exerted by all and any of the sub-systems included in the language system taken as a whole. But an ascertainment of this kind would contain only a part of the whole truth: one should not lose sight of the fact that behind the tendencies proper to each of the language levels (or, sub-systems) one common cause may be disclosed. The common cause is the need of a more and more efficient fulfilment by language of its basic task, i. e. to serve as means of mutual understanding

among the members of the given language community. This need is furthered both by the increasing differentiation of the means standing at the disposal of language (such as, in our case, the re-arrangement of the system of demonstrative pronouns, the rise of the articles) and, occasionally at least, by the elimination of such means of language as are insufficiently utilized (such as, e. g., the EME phonemes /R, L, N, J/).

Incidentally, it should be realized that an impulse for the improved functioning of language in the above-said basic task may be sometimes due to factors of purely mechanical order, as are, e. g., those connected with the mechanism of the organs of speech. A careful examination of the process affecting the OE form *hēo* reveals that in some of its stages mechanical factors of the kind have indeed interfered. The contribution afforded by the mechanical factors will be evident from the following two paragraphs, briefly outlining the whole process.

The opening stage of the examined development, i. e. the shift of balance in the diphthong *(hēǫ > hęō)*, was undoubtedly motivated by the needs of the syntactical level of the language, i. e. by the loss of sentence stress in less important sentence elements. The following stage of the process — which should not be overlooked — consisted in the generalization of the form *hęō* (or the form developed from it), which succeeded in completely ousting the older form *hēǫ* (or, again, its developments). Also this stage was clearly motivated intrinsically, i. e. by the need that the means of language should serve its basic task, referred to above, with the maximum reliability and unambiguousness. This requirement could not be adequately fulfilled by the form *hēǫ*, which was to become monophthongized into *hö* as early as the close of the OE period, and in the course of the 12th century was bound to be delabialized into *hē*. Obviously the generalization of the form developing the OE *hēǫ* would have greatly impaired the functional reliability of the means standing at the disposal of the language in the EME period: the forms of the masculine and feminine genders of the pronoun *hē* would have fallen together and thus become indistinguishable. (49)

While the process of the generalization of *hęō* was taking place, two more changes occurred, viz. *hęō > hjō > çō*. Unlike the changes described in the preceding paragraph, the motive of the development just referred to was of purely mechanical order; the change was entirely due to the mechanical, physiological rules governing the activities of the organs of speech *quâ* bodily organs. The result of the latter of the two changes, the form *çō*, was found to be inconsistent with the above-mentioned basic task of language: the sound [ç], phonematically evaluated as /J/, proved to be an uneconomic, peripheral element of the English phonematic pattern on account of the very slight degree of its utilization by the English language for functional purposes. It need not be stressed that we are faced here with a nice specimen of the type of situation theoretically formulated above: in this case, that is to say, the impulse for the improved functioning of language was the necessity to face the difficulties that had arisen by the operation of a factor of purely mechanical order. The way in which the English language system coped with the difficult situation has been followed up by the present chapter. It has been observed that the way out of the difficulties was found under due consideration of the needs of all the partial sub-systems of the language. (50)

Chapter Four

THE PHONEMATIC VALUES OF THE ENGLISH
W H-S O U N D S (51)

I. The voiceless pronunciation of the digraph *wh-* is admittedly an outstanding phonetic feature of the northernmost part of England as well as of the greater part of Scotland, and of practically the whole of Ireland and of the USA. The voiceless [W] of the said areas is strictly opposed to the Southern English voiced [w], common, as is widely known, in the overwhelming majority (52) of words beginning in *wh-*, such as *what, where, which, white, wheel*, and the like. It is equally known, however, that the pronunciation with the voiceless element is also found, though as a minority phenomenon, in the SES (although the dialects of the southern area, as well as those

of the Midlands, appear to have the voiced [w]-sound throughout). It is exactly this minority phenomenon of the SES pronunciation that shall have most of our attention in the opening sections of the present chapter.

It is worth pointing out that the phoneticians of English are far from being unanimous in describing the pronunciation of this SES minority type of *wh*. Some scholars identify it with the voiceless sound [W] — thus, e. g., HENRY SWEET (*Elementarbuch*, p. 17) and JOSEPH WRIGHT, who says expressly: „*hw* is a voiceless *w*" (EDG, p. 6; see also his well-known historical grammars). Similarly, in the item *Wh* in the Oxford N[ew] E[nglish] D[ictionary] the sound is clearly evaluated, from the phonetic point of view, as [W]. — On the other hand, some scholars record also the pronunciation [hw] by the side of [W], stressing the fact that the two kinds of pronunciation cannot be easily distinguished from one another. Thus OTTO JESPERSEN (*Lehrbuch*, p. 101), who even regards the pronunciation [hw] as more frequent than [W]. A similar statement can be found in the writings of DANIEL JONES (*Outline*, § 810). — In their *PDAE*, J. S. KENYON and TH. A. KNOTT use the transcription "hw", but they frankly admit (p. XXI) that scholars disagree as to the phonetic value to be attributed to these symbols, the alternative possibilities being [W] and [hw]. — In the introductory phonetic chapter written for Webster's Dictionary (2nd ed., Springfield 1947) by J. S. KENYON, the source of the difficulties connected with the exact delimitation of the two phonetic phenomena, [W] and [hw], is convincingly laid down (pp. XXX—XXXI): it should be remembered that "[h] always takes the mouth position of a following sound", and therefore, "it will be evident that the difference between [hw] and the voiceless [W] is, that in [hw] there is a glottal friction... and in [W] there is a labial friction, the organs being otherwise in the same position." To this it may only be added that also the acoustic effects of the two phonetic phenomena are so closely similar that delimiting them must necessarily prove to be an arduous task.

Thus there can be no doubt that we have to reckon with two variants of the *wh*-pronunciation, viz. with [W] and [hw], the latter being probably the more frequent of the two (it also has a subvariant [hW] which, however, need not be considered separately, being functionally identical with [hw]). An experimental phonetic examination of the difference, lying outside the scope of our possibilities, would naturally be most desirable, but the existence of the difference in the SES can be regarded as an established fact on the ground of the observations listed above (to which others might be added).

One point should be of some interest: the variant [hw] or [hW] was usually left unnoticed by those scholars who specialized in historical phonology (H. SWEET, J. WRIGHT, and also K. LUICK, whose *Hist. Gr.* never so much as mentions the existence of [hw] in the SES). This can be explained by the fact that the phonological development of OE *hw* was, to a high degree, parallel to that of OE *hr, hl, hn* — exactly as the latter groups were simplified in EME into the voiceless sounds *R, L, N*, so OE *hw* resulted in EME *W*. As the existence of [W] in ModE was thus justified by the considerations of historical grammar, one can hardly be astonished at the neglect by historically-minded scholars of the variant [hw], expecially in view of its extreme physiological and acoustic similarity to [W].

After the establishment of the two variants of the *wh*-pronunciation in the SES we are faced with the problem of the mutual phonematic relation of the two variants. The problem is not rendered unimportant by the minority character of both variants in the said standard: not to mention the fact that the voiceless pronunciation of *wh*-occurs as a majority type in some other standards of English, it is beyond any doubt

that a reliable phonematic theory is bound to give a satisfactory interpretation of all phonic facts, however limited their occurrence and usage may be.

II. The usual phonematic interpretation of the *wh*-sound is that it constitutes a separate phoneme in the phonematic system of those speakers who are using the sound. As a proof of this, pairs of words are quoted like *witch-which, ware-where* [wič—Wič, weə—Weə] etc. It appears, however, that the phonematic situation is more complicated than might be thought at first sight. The analysis given in the following paragraphs may supply some evidence for this.

Some light may be thrown on our problem by a closer view of the phonematic development that led to the rise of the sound [W] in English, and of the wider context of this development. First of all, let us consider the development of OE consonant groups *hr, hl, hn* which — as has already been noted above — resemble the group *hw* very closely. It is well known that the sounds *R, L, N*, which had developed from these groups, implemented separate phonemes. As has been pointed out here above (Chapter Two), these phonemes were characterized by a very low degree of functional yield, and as a result of this, they soon became eliminated and replaced by the phonemes most closely related to them, i. e. by /r, l/, and /n/, respectively (53) (cp. OE *hræfen* > EME *Raven* > NE [reivn] etc.; for particulars, see above, Chapter Two). This development, aimed at a cancellation of the phonic opposition "voice — lack of voice" in liquid and nasal sounds, clearly reveals a tendency characteristic of English in all its varieties, i. e. in all its literary standards and in all its dialects: in none of the said varieties, as far as we know, the opposition "voice — lack of voice" in liquids and nasals is made use of for phonematic purposes (i. e. for the differentiation of meanings of words).

Considered in the light of this general aversion to the utilization of voice differences in English liquids and nasals, the development of the OE group *hw* reveals some most interesting features. It has been pointed out above that the development of OE *hw* was parallel, to a certain degree, to that of the groups *hr, hl, hn*. Some amount of such parallelism can be expected on the ground of the relationship existing in a number of languages between *w* on the one hand and the liquids and nasals on the other. The relationship is due partly to the physiological and acoustic qualities of the sounds, partly to the analogous possibilities of combining all the said sounds into clusters with other sounds of the given language. It was certainly due to no mere chance that linguistic theoreticians coined, many years ago, the well-known common term of "sonant sound", applicable to liquids and nasals, as well as to the *u̯*- and *i̯*-sounds. (54) In the following lines we shall be using this term consistently in the meaning just alluded to.

To go back to our main subject: we have observed that the development of the OE group *hw* followed, upon the whole, the same lines as that of the OE groups *hr, hl, hn*. It should be added that it followed them with some delay, and only within a part of the English-speaking territory. First, as regards the factor of time, the change of OE *hw* > EME *W* was most probably contemporaneous with the EME changes of *hr* > *R, hl* > *L*, and *hn* > *N*. But the further stage of development, viz. *R* > *r*, *L* > *l*, *N* > *n*, accomplished by the end of the 13th century (in Kent, by the 14th), was not parallelled by the analogous change of *W* > *w* until some centuries later. The change probably took place by the end of 15th century in the dialects, but its penetration into the SES was a slow process the accomplishment of which was hardly earlier than the latter half of the 18th century (see, e. g. LUICK, *Hist. Gr.*, § 792, H. C. WYLD, *SHE*, § 286). Second, as regards the factor of space, it is commonly known that the change of *W* to *w* was limited to England (except the northernmost

part of the territory) whereas Scotland, Ireland and Northern America were practically unaffected by it; on the contrary, the changes of $R > r, L > l, N > n$ spread over the whole of the English-speaking territory.

The delay in the change of $W > w$ may be accounted for by the signalling function performed by the phoneme W in English, where it characterized an important, though little, group of interrogatives (the pronouns and adverbs of the type *who, what, which, when, where, why*). (55) Most probably it is the very same function in this small, but very important and very frequent, group of words that is responsible for the success with which some outward factors (school, the written norm of English) work at the maintenance — sometimes, perhaps, even at the restitution — of this minority type of the SES pronunciation. The success is really most astonishing (56) in view of the undeniable fact that W — if the status of an independent phoneme should be granted to it — would obviously represent a phoneme with a very slight functional yield, that is to say, a phoneme of the type most likely to be eliminated in language systems (and the change of $W > w$ that occurred on a great part of the English-speaking territory must certainly be regarded as an eliminating process prompted by such reasons).

The above-said facts lead to the realization of a highly problematic character of the SES [W] from the phonematic point of view — [W] being the only case in English in which differences of voice in sonant sounds would be utilized for phonematic purposes. Thus, the SES supposed W-phoneme would be clearly revealed as an anomalous phonematic fact; still, it undoubtedly has an established place in the system of English sound values. This is shown, among other things, by the fact that, to judge by the evidence of linguists and phoneticians, the pronunciation [W] is not marked by any tinge of vulgarity. On the contrary, it is often regarded as socially more valuable than the majority type [w]. This evaluation is closely connected with the practice of quite a number of English schools which prefer the voiceless pronunciation in the words beginning in *wh-* — a practice which appears to have deeply influenced the evaluation of [W] in the SES community at large. (57)

Obviously, we are faced with the problem of confronting, and possibly reconciling, the structural anomaly of the supposed phoneme W with its apparently well-established position in the system of values of the SES. Of course, the anomalous character of the supposed phoneme W could be attributed to the complex context of civilization in which all great cultural languages are necessarily placed and which may often lead to the presence of some anomalies in the language systems examined. But one must always be extremely careful not to reduce to the imperfections of the system of language what in reality is due to some kind of deficiency of the investigator's working methods. In other words, we should reconsider the possibility of some other phonematic interpretation of the SES [W]-sound.

In our opinion, the possibility of such new interpretation is suggested by the fact of co-existence of the variant pronunciations [W] and [hw], referred to in the opening paragraphs of this chapter. There can be no doubt that [W] must be regarded, in the SES, as the older of the two variants. That the present-day SES [hw] is not a continuation of the OE *hw* is amply proved by the very coexistence of [W] which itself goes back to OE *hw*. One might suppose that the SES [hw] constitutes an element of Northern origin, inorganically transferred to the Southern phonetic system. But even if this were so, the secondary character of [hw] would be beyond discussion. Besides, the penetration of the cluster [hw] from the North would not have been possible if there had not been favourable phonematic conditions for its acceptance in the SES. However this may be — and it is equally well possible that

the cluster [hw] originated on the southern soil —, [hw] certainly appears to possess a more dynamic, progressive character than [W] (see JESPERSEN's observation, referred to in Section I, concerning the greater frequency of [hw] as opposed to [W]).

As a matter of fact, there exists one good reason for regarding the variant [hw] as a more progressive type of the two. It should be realized that by substituting [hw] for [W] the SES successfully abolishes the anomaly pointed out above, viz. the existence of a sonant phoneme in which the opposition "voice — lack of voice" is utilized — in strict contradiction to the tendency universal in English — for phonematic purposes. By the said substitution the phoneme /W/ was, of course, replaced by a biphonematic group /h + w/. It is worth while pointing out that another substitution of analogous character can be ascertained in Present Day English, viz. that of the Welsh [L]-sound (written *Ll*- in a number of place-names), which is often replaced by the group [θl]), (58) the acoustic effect of which resembles that of [L] just as closely as the corresponding effect of [hw] resembles that of [W]. It will be noted that the ultimate aim served by the substitution of [θl] for [L] is also to eliminate a voiceless sonant, which class has been repeatedly stamped here as contrary to English phonematic structure (and, consequently, to English articulation habits).

III. Another point — one of fundamental importance — should be raised in this connection. The substitution of [hw] for [W] was obviously made possible by the existence in English of an analogously built-up cluster [hj], (59) which of course represents a biphonematic group /h + j/ and whose latter element [j], being a sonant sound, constituted a perfect phonetic and phonematic parallel to the second element of [hw]. Thus the phonematic group /hw/ was re-introduced into English, and became an organic counterpart of the group /hj/ on which it was most probably modelled. The existence of the cluster [hj] thus helped to maintain, in one of the variants of the SES, the voiceless element in the pronunciation of the digraph *wh*, and consequently to preserve there (60) a characteristic phonic feature marking off an important, though little, group of interrogative words. (61) We may go even further and say that it was the very existence of the phonematic group /hj/ that prevented the universal accomplishment of the voicing of [W] to [w] in the EModE period. In our opinion, the incompleteness of elimination of the anomalous /W/-phoneme in the SES can only be accounted for by the fact that the voiceless /W/-phoneme had obtained an important support during the period of the offensive of the voiced /w/-phoneme; the support was given by the existence of the cluster [hw], phonematically interpreted as /h + w/. It should be borne in mind that the phonematic group /hw/ was perfectly acceptable to the English phonematic pattern, as it was in no way opposed to the above-said tendency (violated by the anomalous /W/-phoneme) urging that the opposition "voice — lack of voice" should not be phonematically utilized in the category of sonant sounds.

At this point, a remark on a matter of principle appears to be essential. Very often the maintenance of the [W]-sound in the SES has been attributed solely to the stubborn obstinacy of those speakers who "take pride in their voiceless pronunciation" (62) or simply to the influence of spelling. It would be, of course, unwise to ignore the influence of such volitional or external factors which must certainly be acknowledged and taken into account in explaining the development of language. But it is beyond doubt that such factors can only assert themselves successfully if the structure of the given language system provides certain necessary pre-requisites indispensable for the operation of such volitional or external factors (63) (see also what has been said above of the possibility of the cluster [hw] having penetrated from the northern area). In our concrete case, one such pre-requisite was the continued

signalling function of [W] in the interrogative words (although this function was certainly somewhat less pronounced in EModE than in the former periods); another, the presence in the system of English phonic values of the cluster [hw], unaffected by the above-mentioned aversion of English to voiceless sonant phonemes. The weakening of the signalling function of the voiceless *wh*-element (64) is certainly responsible for the fact that the majority of the SES speakers replaced, in the long run, the voiceless /W/-phoneme by its voiced counterpart /w/. Still, a minority of speakers kept clinging to the signalling function of *wh*-, and the continued operation of this function was rendered possible in the SES variety used by these speakers by the emergence of the cluster [hw], as noted above. And let us stress again that the necessary presupposition for the emergence of [hw] in the SES had been created by the rise of the analogously built cluster [hj] referred to above.

Coming back now to the discussion of the cluster [hj] we are faced with two important questions. One of them concerns the dating of the emergence of that cluster in English and the ascertaining of the factors responsible for its appearance. The other question is why the cluster [hj], in strict contrast to all other English clusters containing the initial [h]-sound, managed to survive in English and to resist the process of elimination that had swept away the analogously built EME clusters *hr, hl, hn,* and *hw.*

The first question presents little difficulty. As is commonly known, most cases of the cluster [hj] go back to a former ME *hi*- followed by -*u*. The majority of the words containing it are, naturally, of foreign origin; they are partly proper names (of the type *Hubert, Hume*), partly words borrowed from Norman or French (such as *huge, human*), and — last but not least — learned words coined on, or adapted to, Graeco-Latin models (e. g. *humanism, humus, heuristic,* and the like). A minority (65) of the words containing the initial [hj-] goes back to native sources (*hue* < OE. *hīw*, in a certain type of pronunciation also *hear, here,* and words derived from them). Most of the words, as said above, contained the ME group *hiu*-; the diphthong *iu̯* contained in it can be traced back to three sources: the Anglo-Norman *ū* (for which it was a substitution), the OE *iw*, and finally the ME diphtongs *e̯u̯* and *e̩u̯*. It is generally agreed that the phonological development of English reached the stage of *i̯ū* in the 16th century (except the cases of *iu̯* going back to *e̩u* where the process leading to *i̯ū* is believed to have been much slower). (66) These data enable us to fix, with approximate reliability, the time of the emergence of the cluster [hj] in the history of English — it must have come into existence in the 16th century. It is also to be recalled that the vast majority of words containing the group *hiu*- were expressions of French, Norman or Graeco-Latin descent, in which the initial *h*- had long been a purely graphical item until the influence of the New Learning period revived it as an actually pronounced sound. In view of this fact we can positively assert that the cluster [hj] had not become firmly established in English before the middle of the 16th century (67). It is only to be pointed out once more that this date furnishes us with an important *terminus a quo* for the introduction into English of the cluster [hw], removing the structural troubles connected with the phonematic evaluation of [W]: in all probability, the cluster [hw] had not emerged in English before the latter half of the 16th century.

Let us now turn to the other of our two questions, viz. how the cluster [hj] has managed to survive until the present day and thus to escape the eliminating tendencies that did away, more or less systematically, with all the other *h*-clusters in the development of English. Here it must be stated that the pronunciation of some SES speakers really reveals the operation of the eliminating tendency even in this case:

such speakers replace the usual [hj]-cluster by the sound [ç] (the "ich-Laut"). According to D. JONES (*Outline*, p. 157), the variant pronunciation [ç], "used by many", may be found in all words containing [hj-], e. g. [çu:dž, çu:mʾən], and even [çə:], by the side of [hju:dž, hju:mən, hjə:] – the latter word meaning both *hear* and *here*.

The change of [hj] to [ç] is, of course, a close phonetic parallel to the earlier changes of OE *hr, hl, hn* and *hw*, to EME *R, L, N*, and *W*, respectively. If this is so, then one naturally expects to find the analogy carried a step further, and looks for the next stage of the development, viz. for the voicing of [ç] to [j]. This stage, however, does not seem to have ever been reached in the case of [ç]. It is true that D. JONES registers a variant pronunciation with [j-] in the word *humour* and its derivatives (stigmatizing it, however, as "old-fashioned"), and that the same pronunciation variant of the word was listed, at the very beginning of our century (in 1901) by the Oxford NED. But the [j]-sound in the word *humour* cannot be due to the change of [ç] > [j] : the word is spelt as *umour, umor* as early as 1380 (see the *NED* s. v. *humour*), i. e. in the period when the pronunciation with initial *h-* in a word of Romance origin is utterly inconceivable. The spelling obviously reflects the pronunciation *iumər* (*iu* substituting for French long *ü*). Thus the [j] in the modern pronunciation [ju:mə] must be of very old origin and has nothing to do with the supposed voicing of [ç] in the SES. (68)

Having established the existence of [ç] in a certain variety of the SES, we find ourselves again faced with our old problem: that of a peripheral phoneme, characterized by slight functional yield, and – which is especially important – by its utilization of the opposition "voice – lack of voice" in a sonant phoneme for functional purposes. (The phonematic character of the sound [ç] in that variety is proved by pairs of words like [çu: — ju:, çə: — jə:], spelt *hew — you, hear/here — year*, etc.) Why does this anomalous phoneme (one might also denote it as /J/) not become eliminated, as have been /R, L, N/, and – to some extent, at least – also /W/?

The immediate cause of the maintenance of [ç] might perhaps be looked for in the influence of spelling, always pointing to the presence of the voiceless element in pronunciation by the graphical sign *h*. But the basic cause of the fact lies undoubtedly deeper. In our opinion, it may be found in the fairly uniform semantic character of all the words set off by the initial [ç]-sound: for the overwhelming part, they are words of bookish, often abstract character, and they always stand far off the common stock of words of every-day intercourse. Even the words *hear* and *here*, in the pronunciation [çə:], do not necessarily constitute an exception to this rule, as one might be tempted to think. In the word *hear* the pronunciation using the [ç]-sound seems to be most common in the interjectional sense, fairly remote from the original verbal meaning of the word; in the expression *here*, again, one should recall the long series of its adverbial compounds of the type *hereafter, hereto, herewith* etc., which are definitely of bookish and archaic nature and in which – if we may trust our observation – the pronunciation employing [ç] appears to be most common.

It might be argued that what we have said of the bookish and archaic character of the words beginning in [ç-] applies *eo ipso* also to their forms beginning in [hj], as the cases of occurrence of [ç] exactly coincide with those of [hj]. To this it may be answered that the coincidence is certainly an undeniable fact but there undoubtedly exists a distinct difference of meaning between the forms containing [hj] and the corresponding [ç]-forms: in the latter, the bookish and abstract character of the words appears to be underlined and brought to special notice. Thus the difference between [ç] and [hj] appears to be motivated, in the long run, by differences of style – in our opinion, the choice of the one or the other variant depends on whether the speaker

does or does not want to stress the bookish, non-colloquial character of the words concerned. (69)

If the above analysis of the [hj]- and [ç]-forms is true, then the solution of the phonematic problem of [ç] is fairly obvious. From the functional point of view, the sound [ç] is clearly a stylistic variant of [hj]. And as the cluster [hj] represents a group of two phonemes, /h + j/, there can hardly be any doubt that the marked stylistic variant of the cluster, the sound [ç], though simple from the phonetic point of view, must be interpreted phonematically in an analogous manner, i. e. as a manifestation of two successive phonemes, /hj/.

From the above lines it follows with sufficient clearness that the suggested evaluation is fully compatible (and indeed, the only one that is compatible) with all the characteristic features observed in the SES [ç]: its very slight functional yield, its absolute positional equivalence to the cluster [hj], and its peculiar stylistic colouring. It should be added that the suggested interpretation also furnishes a satisfactory explanation of the curious fact that the sound [ç] is maintained in English although it apparently contradicts the tendency of English not to phonematically utilize the opposition of "voice — lack of voice" in the sonant sounds. If, that is, the suggested evaluation is true, then, from the phonematic point of view, the phonetic opposition of [ç — j] simply represents a case of opposing /hj/ — /j/, and cannot thus be placed on the same level with the EME phonematic oppositions of /R — r/, /L — l/, /N — n/, and /W — w/. For this reason, the sound [ç] remained unaffected by the tendency that had successfully eliminated [R, L, N], and — to some extent at least — also [W].

IV. The phonemic analysis of the SES [ç], sketched in the preceding section, can yield a clue for a proper phonematic evaluation of the sound [W] in one of the varieties of the SES. It has been suggested above that the phonematic evaluation of the SES [W] as a slightly utilized /W/-phoneme should be reconsidered. The evaluation was, of course, perfectly correct, and the only one imaginable, in the EME period. It will be remembered that a theory was proposed in the above lines that the ModE cluster [hw], co-existing with the sound [W] in one of the SES varieties, was introduced into the language in an effort to get out of the difficulties connected with the phonematic evaluation of [W]: by the introduction of the cluster the peripheral phoneme /W/ came to be substituted for by the phonematically unobjectionable group of phonemes /h + w/. The said theory threw some light on the relation of the sound [W] and the cluster [hw] from the genetic, diachronistic viewpoint. But the genetic evaluation of the said relation has to be supplemented by an evaluation undertaken from a synchronistic point of view, the more so that the [W]-sound did not disappear from the SES phonic system, as might have been expected after the rise of the substitution group [hw]. Thus we must try to find out the manner in which the present-day speaker of the given variety of the SES correlates the two phonic facts from the functional viewpoint. Needless to say, the present-day speaker is wholly ignorant of the historical sequence of the two facts as well as of the reasons that led to the rise of the more recent of the two. Thus the synchronistic evaluation of the two facts may not coincide with the one established by the investigation done on diachronistic lines.

Very little effort is needed for finding out that the physiological and acoustic relation of [W] and [hw] is exactly parallel to the one existing between [ç] and [hj]. It is only natural to ask whether analogous parallelism of the two relations may not be discovered on the phonematic level as well. This would imply that [W] constitutes a mere variant of the cluster [hw], and is thus to be interpreted biphonematically. Let us see then whether the parallel can really be drawn.

It has been shown earlier in this chapter that the acknowledgement of independent phonematic status of the SES [W]-sound is impeded, first, by the slight functional yield of the sound (this fact alone, however, could be discussed away in terms of quantitative phonology), and, secondly, by the supposed utilization, contrary to English phonematic tendencies, of the opposition "voice — lack of voice" in sonants for phonematic purposes (the latter objection is especially important, as it adds qualitative limitations to the quantitative ones, advanced by the former). It will be remembered that the same two objections made us sceptical towards the possibility of interpreting the English sound [ç] as an independent phoneme. The ultimate conclusion of the biphonematic value of [ç], however, was suggested to us by two additional facts: by the co-existence in time and place, in the same standard and in the same word units, of [ç] and [hj], and — last but not least — by a specific stylistic colour attached to all the word-units containing the sound [ç]. In attacking the problem of the phonematic evaluation of the SES [W] it will be, therefore, certainly most useful to find out how the sound [W] responds if tested by the two additional criteria that have proved so helpful in interpreting the sound [ç].

It has already been observed that the SES [W] agrees with [ç] in its response to the first of the two tests: it is characterized by the coexistence in place and time of a cluster of two sounds, viz. [hw], in the same word units. But in the case of [W] the situation is slightly more complicated than in that of [ç]. The co-existence of [W] and [hw], that is to say, is typical not of the SES as a whole but only of one of its varieties, spoken, of course, by quite a number of individuals (though they form only a minority of the speakers, the majority pronunciation being [w]). But this difference in the circumstances of occurence of [ç] and [W] does not concern a matter of principle — the narrower limits within which the co-existence is found cannot exercise any influence on the qualitative character of the co-existence itself, which is clearly identical in [W] and [ç]. It should be noted that the co-existence of [W] and [hw] is absolutely regular — this feature marks it off from two other kinds of correspondence, equally ascertainable in the SES, viz. from [w] — [W], and from [w] — [hw]. These two kinds, that is, occur in some words only (there are no cases of correspondence like [wel — Wel, wiš — Wiš] or [wel — hwel, wiš — hwiš]), and besides, the members of the pair [w — W] (or [w — hw], respectively) are not strictly comparable because they are not found in one and the same variety of the SES). (70) — It may be concluded, therefore, that the application of the test of co-existence supports the theory of the phonematic parallelism existing between the SES [ç] and [W].

How does the [W]-sound respond to the other criterion, the stylistic one? Is it possible to find here, too, an analogy of the facts ascertained above in examining the sound [ç], to the effect that the usage of [W] would be regularly associated with some typical stylistic flavour of the word-forms containing the sound? — It appears, again, that the question can be answered in the affirmative. The scholars who have observed the SES sound [W] and the conditions of its usage in some detail are unanimous in stating that the sound appears to be imposed on the ModE pronunciation, so to speak, from above — by the influence of school, spelling and other institutional factors. It has been shown here above that according to the *NED* the pronunciation [W] should be attributed to "social or educational tradition" or to "preference for what is considered a careful or correct pronunciation". According to the *CED*, "hw" (by which is meant [W], in conformity with the common transcription practice of OUP dictionaries) is pronounced "by purists in pronunciation". In W. RIPMAN's opinion (*Sounds* p.39), [W] is "taught by professors of elocution,

and is therefore commonly heard at recitals and also at amateur theatricals". D. JONES (*Outline*, § 810) registers the fact that in the South of England the pronunciation of [W] or [hw] is taught in many schools. And finally, O. JESPERSEN (*Lehrbuch*, p. 101) observes that the difference between the voiced and voiceless pronunciation of *wh* "is artificially preserved in many schools...". (71) All the above statements clearly point to the fact that the pronunciation of [W] is regarded — at least in the SES — as somewhat affected or artificial. If this is so, then there can be no doubt that the SES sound [W] is characterized by a specific stylistic flavour, not dissimilar to that found in [ç]: one might denote it as "intended artificialness" not very far remote from the bookish, abstract, and therefore equally affected, flavour of [ç]. Thus the phonematic parallelism or the SES sounds [ç] and [W] appears to be complete, so that the SES [W] can be regarded, from the point of view of present-day speakers, as a stylistically motivated variant of the phonematic group /hw/. We have to do here with a very interesting case of phonematic revaluation: Being, from the historical point of view, undoubtedly older than ModE [hw] (and so originally a primary phenomenon), [W] became revaluated, in the context of the whole SES phonematic system, into a stylistic variant of [hw], and thus came to be regarded as a phenomenon of secondary order.

One moot point, of course, cannot be ultimately decided here, viz. whether the stylistic flavour of "intended artificialness", established above for [W], attaches also to the cluster [hw], as appears to follow from the statements — not quite clear, it is true — of some phoneticians (see what has been said above on the lack of clearness ascertainable in some statements made by JESPERSEN and JONES). It should be found out whether the stylistic flavour, admittedly typical of [W], is not mistakenly generalized for [hw]. Such generalization could be easily accounted for, in view of the close physiological and acoustic similarity of [W] and [hw]. But even in the case that the stylistic flavour established for [W] is also characteristic of [hw], the biphonematic evaluation of [W] remains valid. In that case the analogy existing between [ç] and [W] appears to be even closer: As in the case of the phonematic group /hj/, the analogous group /hw/ would serve as a signal of artificial character of the word form concerned; the use of the variant [W] would underline the artificial character and bring it to special notice. (72) The only difference between the phonematic situations of the SES clusters /hj/ and /hw/ would lie in the fact that the occurrence of the cluster /hw/ is limited to a certain variety of the SES, whereas cluster /hj/ is common throughout the standard, without any limitations. (73)

It is hardly necessary to add that the evaluation of [W] as a stylistic variant of the phonematic group /hw/ removes all phonematic troubles connected with the supposed existence of a functionally utilized opposition "voice — lack of voice" in an English sonant sound: from the phonematic viewpoint, the phonetic opposition of [W — w] has to be interpreted as /hw — w/. One other point, however, should be noticed in this connection: Our theory of a special stylistic function of the SES sounds [ç] and [W] is borne out by the fact that the co-existence in this standard of [ç] and [hj] has not resulted in suppressing one of the members of the pair and in replacing it by the other member (the same, naturally, applies to the members of the pair [W] — [hw]). The continued existence of both members of the pairs points to the fact that both are functionally indispensable, i. e. that each of them is specialized from the functional point of view. It is obvious that no difference can be ascertained between the [W-] and [hw-] forms of words (or, respectively, between the [ç-] and [hj-] forms) in their functions of reference to the facts of the outside world — and thus their only *raison d'être* can consist in the difference of stylistic approach to

those identical facts. It has been shown above that this theoretical deduction is amply corroborated by concrete language experience.

It should be added that our phonematic evaluation of the SES [ç] and [W] also complies with the old maxim "entia non sunt multiplicanda": it succeeds in interpreting the given facts without unduly increasing the number of the principles of explanation, and — which should be stressed particularly — the restricted number of the explanatory principles is in full conformity with the true nature of the facts to be explained, and has not been arrived at by unnaturally and forcefully distorting the nature of such facts.

There is, however, one rather important objection that could be raised against the evaluation of [ç] and [W] submitted here. Is this interpretation not contradictory to what has been ascertained in Chapter Two here above, viz. that the English phoneme /h/χ/ is clearly a receding element of the language, being gradually ousted from most positions of its occurrence in the course of the development of English? One can hardly close one's eyes to the fact that the changes of EME $hw > W$ and EModE $hj > ç$ must have been closely connected with the general tendency aiming at the elimination of the phoneme /h/ in English: can we ignore the tendency and phonematically evaluate the sounds [ç] and [W] as combinations preserving the receding phoneme /h/?

The fundamental importance of the question is beyond doubt, yet we believe it can be answered in the affirmative. It has to be admitted, of course, that in the SES — in which we are mainly interested here — the occurrence of the phoneme /h/ has been limited to one, and one only, type of place in the word (to the prevocalic position at the beginning of a stem-morpheme). But it should also be recalled that, at least in the SES, the /h/-phoneme clings to this last of its strongholds with unfailing firmness and perseverance. Besides, the existence in the SES of words with the initial cluster [hj-] and — at least in one of its varieties — with the analogous cluster [hw-], is simply indicative of the fact that the sound [h] is fairly well established in the SES not only before vowels but, if somewhat less firmly, also before the semivowels [j] and [w]. (74) If then the clusters [hj] and [hw] are phonetic facts fairly common in the SES, there appears to be no reasonable ground for denying the existence of the corresponding phonematic groups /hj/ and /hw/. And the existence of these phonematic groups can certainly be also inferred in the cases of the sounds [ç] and [W], which clearly constitute mere stylistic variants of [hj] and [hw] respectively, as has been shown above on the ground of their consistent co-existence with, and their distinct stylistic differentiation from, the clusters in question.

In the Midland and Southern dialects, of course, the situation might be different. It has been pointed out here in Chapter Two that in those dialects the sound [h] is not so much a matter of word-phonology as rather that of phonostylistic and sentence phonology. For this reason, the establishing of [ç] and [W] in the status of independent phonemes might conform much better with the general structural patterns of such dialects than it does with the pattern of the SES. But the interesting point is that in those very dialects the sound [W] is evidently unknown (at the close of the ME period it was replaced there by [w], cf. LUICK, *Hist. Gr.*, § 792), and there is no mention either, at least not in WRIGHT's standard description of Modern English dialects, of the existence of [ç] in those regions. Thus the existence of /W/ and /ç/ as separate phonemes does not seem very probable even in the Midland and Southern dialects. (75)

V. The theory set forth in the preceding four sections of this chapter may, in our opinion, throw some new light on a number of smaller but hardly unimportant points of English historical

phonology. They concern the developments of the ModE expressions of the types *who* and *whole*: in this and the following sections we want to discuss the involved problems at some length.

As is commonly known, the ModE pronominal form *who*, with its case forms *whose*, *whom*, and the derived expressions of the type *whoever*, goes back to OE *hwā*, but the *hw-* is reflected in all the expressions not by the usual correspondence [W] (or [hw]) but by the simple sound [h], the ModE forms of the words being [huː, huːz, huːm, huːˈevə]. The unusual development leading to [h-] is commonly explained by the disappearance of post-consonantal *w* before *ū* in LME or EModE, thus *hwū > hū* (see J. WRIGHT—E. M. WRIGHT, *EHNEG*, § 181; K. LUICK, *Hist. Gr.*, § 773b). At the first sight, this explanation appears natural and sound: the dropping of *w* before an *u*-vowel occurred several times in the history of English (for the first time in the prehistoric period when **hwū > OE hū* 'how'; then in the West Saxon dialect of OE when *cwucu > cucu* 'quick'; similarly in ME when *swuch > such*, etc.). But despite all that, the explanation is not true to facts. Those who give it overlook the important fact that in the LME and EModE periods one has not to do with a cluster *hw* but with a simple [W]-sound. It is astonishing that this fact was overlooked by the very scholars who were, otherwise, well aware that the sound [W] had existed since the EME period (WRIGHT, *EHNEG*, § 284, and even LUICK, *Hist. Gr.*, § 704). If, however, the existence of [W] is taken for granted in ME, then the change under consideration is that of *W > h*, and cannot be placed on the same level with the earlier droppings of *w* as recalled above.

It is fair to state that the qualitative difference existing between the change of *W > h* and the earlier droppings of *w* had been realized a long time ago by a scholar intersted in the problem of the phonic development of ModE *who*. As early as 1897, GEORGE HEMPL (JEGPh 1, pp. 29ff.) voiced his own conception of the sound-change discussed here, and in this point his insight into the matter was incomparably deeper than the traditional one. In his opinion, in the words of the type *who* "the difference between the voiceless *wh* (i. e. [W], J. V.) and the *ū* was more noticeable than the similarity was, and this led to the neglect of the lip-rounding of *wh*; which thus became an *h* with more or less of the tongue position of the following vowel, as usual with initial *h*". In other words, the tongue position of the sound [W] had already been more or less the same as that of the following *ū*-vowel, so that only the neglect of labialization was needed to effect its change into [h]. (76) HEMPL's clever observation received, a decade later, a sympathetic commentary (at least on the point under discussion) of J. MANSION (Herrigs Archiv, vol. 120, p. 158ff.), and as far as we know, it has not been refuted ever since. It appears to have met a worse fate — one of becoming half-forgotten. LUICK quotes it only for its vocalic implications, and though he registers the short article of MANSION's, he fails to derive any consequences from either of the two papers in his own handling of the consonantal problem of *hw*.

HEMPL's observations of 1897 were certainly ingenious, but nowadays they call for some revision from the phonematic standpoint. One fact should be pointed out: the articulation of LME *W* before *ū* was undoubtedly a typical specimen of a sound that may be denoted as potentially ambiguous (or, better, ambivalent) from the phonematic point of view, i. e. as one that can be evaluated, with practically equal right, in either of the two alternative phonematic ways — the alternatives being, in this particular case, the LME phonemes /W/ and /h/. There is, as a matter of fact, one point that should not be overlooked in this connection (and that actually was overlooked by both HEMPL and MANSION): the agreement in the positions of the articulatory organs of [h] and the immediately following vowel does not concern the tongue only but all supraglottal organs, including the lips. (77) This has, naturally, very important implications: if the phonic fact [W] is immediately followed by the vowel [uː], with which it practically agrees in the positions of all supraglottal organs, then from the phonematic standpoint it can represent a combinatory variant of the /h/-phoneme just as well as the low-yield /W/-phoneme — the more so that the very slight acoustic difference actually existing between the sound [h] and [W] immediately followed by the vowel [uː] is virtually unnoticeable. (78) From this it follows that the phonematic revaluation of the sound [W] as /h/ is by no means dependent on the loss of labialization, as might be inferred from HEMPL's words; the labialization before the vowel [uː] is, admittedly, a commonly known feature of the [h]-sound even to-day.

If one recalls the comparatively very slight functional yield of the /W/-phoneme in LME, there cannot be any doubt of the obvious tendency aimed at its elimination. Thus the said revaluation of [W] as /h/ appears to be only one of the many manifestations of that tendency. As for the dating of the revaluation, the *terminus a quo* is certainly to be seen in the narrowing of ME *ǭ* to *ū*, the change forming a part of the well-known Great Vowel Shift at the end of the LME period (according to K. LUICK's estimate *ǭ* was narrowed to *ū* at the end of the 15th century). The *terminus ad quem* should be dependent on the date of the change of [W] to [w] in the SES: obviously the [W] in *who* (and other words of the type) must have been already evaluated as /h/ when the change of *W > w* was taking place — otherwise its initial [W]-sound would have also been replaced by [w-]. The

trouble with establishing the *terminus ad quem*, is, however, that the change of $W > w$ infiltrates into the SES very slowly and in a gradual manner. The infiltration period extends, roughly, from the end of the 15th century to the latter half of the 18th, so that — theoretically speaking — the revaluation of /Wū/ as /hū/ may have occurred at any time within that period.

Fortunately, there is some evidence for the fact that the revaluation occurred most probably in the former half of the 16th century. If, that is to say, the revaluation was called forth by the tendency aimed at the elimination of the peripheral phoneme /W/, then it is obvious that the revaluation must have been earlier than the substitution for /W/ of the phonemic group /hw/ (which must be placed into the latter half of 16th century, see above, section III of the present chapter). The result of the substitution, as shown above, was the vindication of the place of [W] in the system of the SES phonic values: it became evaluated as a stylistically conditioned variant of a biphonematic group /h + w/, and thus ceased being regarded as a peripheral item of the phonematic pattern.

Besides, it should also be noted that the substituting group [hw] is not — and most probably has never been — found in the expressions of the type *who*. This, again, clearly points to the fact that before the substitution began to assert itself, the initial consonant of the word *who* (and other expressions of the type) had come to be evaluated phonematically as /h/.

To this it might be objected that the form *hwū may have existed in the earlier periods and that its non-existence in the present-day standard may be simply due to the subsequent dropping of *w* before homorganic *ū*. But even if the possibility of such development is taken into account, our theory concerning the early phonematic evaluation of [W-] in *who* as /h-/ remains valid. If, that is to say, the initial sound of *who* had really been identified phonematically as /W/, then the alternating cluster [hw] would undoubtedly have been preserved in that word in spite of the physiological tendencies aimed at its elimination, owing to the influence exercised in the same variety of the SES by the other interrogative words beginning in [W/hw-] (such as *what, which, where, why*). As is well known, historians of languages have registered not a few cases in which the pressure of the grammatical system or of semantic affinity prevailed over the tendencies of physiological order. From the development of English one can quote, e. g., the cases of ME *swum* and EModE *swoop*, in which *w* was preserved — despite physiological tendencies — owing to the influence of ME *swim* and EModE *sweep*, respectively. The non-existence of a form *hwū affords a clear proof of the fact that no pressure was exercised by the group of words of the type *what, which* etc. upon the phonetic form of *who*, in other words, that the form *who* became separated from the other interrogative words at a very early period. This separation made itself felt, undoubtedly, also in the early phonematic revaluation of the initial [W-] in *who* as /h-/.

Further, the hypothesis that the [hw]-cluster never turned up in this word in EModE (or, if it ever did turn up, was very rapidly discarded), is supported by the following consideration: The existence of the cluster [hw] in the word *who*, even if extending for a very short period, would have inevitably led to the reinforcement of the phonematic evaluation of the initial sound in *who* as /W/. Moreover, this reinforced evaluation would undoubtedly have contributed to the preservation of the subvariant *hwū. And, last but not least, the continued phonematic evaluation of [W] in *who* as /W/ (supported by the said co-existence of the cluster [hw] in that word) would have resulted, not very long after, in the change of $W > w$ in the majority SES pronunciation of *who*, i. e. to the rise of the form *wu:, actually quite unknown to the SES: as is commonly known, all speakers of the main variety use the all-standard form [hu:]). Thus it may be said that even a short-lived existence of the cluster [hw] in the EModE word-form *who* appears to be most improbable. This again points to the revaluation of [W] as /h/ having occurred before the change of $W > w$ was well under way (probably again, in the latter half of the 16th century).

One more question might be raised: Why was the phoneme /W/ in *who* not prevented from being revaluated as /h/ by its signal-like character in words of interrogative character? It cannot be denied, indeed, that in revaluating its [W] as /h/ the pronoun *who* seceded from the interrogative group (containing the expressions of the type *what, which*, etc.), and thus brought about its weakening. To some extent, an answer to this question was suggested above in Note 64. Besides, it should be observed that after the revaluation of the initial [W]-sound as /h/ the words of the type *who* became more closely attached to the interrogative adverb *how*, so that they cannot be regarded as wholly isolated among all the other words of interrogative meaning.

Another interesting fact is worth registering in this connection. The non-existence of the form *hwū in the variety of the SES in which the two subvariants [W/hw] are otherwise preserved gives ample support to our theory concerning the mutual relation of the two phonic facts from the synchronistic point of view. It will be remembered that we have denoted the cluster [hw] as a primary phenomenon, whereas the simple sound [W] has been qualified here as a stylistically motivated variant of the said cluster, in short, as a phenomenon of secondary order. The validity of the theory is shown by the following consideration: From the purely physiological and acoustic

standpoint the initial sound of the SES forms [Wǫt, Wič] etc. is practically identical with the initial sound of SES [hu:] (for a slight difference existing between the two sounds but practically negligible, see above, Note 78). But the phonematic evaluation is different in each of the two cases. The reason of the difference is that in their variety of the SES the word-forms of the one category always co-exist with word-forms containing the cluster [hw] (such as [hwǫt, hwič] etc.) whereas the word forms of the other category, i. e. [hu:] and the like, stand alone deprived of such background.

The respective presence or absence of the background is essential for the phonematic interpretation of the word-forms of the two categories. In the one, [W] is confronted with [hw] and thus evaluated as a biphonematic fact; in the other, no such confrontation is possible, and thus no biphonematic evaluation can be thought of. Furthermore, the difference in the backgrounds is largely responsible for the presence or absence of the 'peripheral feeling' attached to the phonic fact in question: in the one category, the co-existence of [W] and [hw] is inevitably reminiscent of the sonant character of the [W]-sound; in the other, the sound [h], though physiologically and acoustically almost indistinguishable from the [W]-sound of the first category, has no sonant associations on account of the lack of any coexisting [hw]-forms. In the one category, the natural consequence of the said difference is the feeling of inadequateness of a monophonematic interpretation of [W] owing to the aversion of English to the functional utilization of the opposition "voice — lack of voice" (consequently, a monophonematic interpretation would establish a 'peripheral' phoneme); in the other category, the consequence is the absence of such feeling. The result following from all the enumerated differences can only be, on the one hand, the biphonematic evaluation of [W], necessarily accompanied by the assessment of the secondary character of [W] as opposed to [hw], and, on the other hand, the monophonematic evaluation of [h], the primary character of which is beyond doubt; the physiological and acoustic similarity of [h] in [hu:] to [W] is easily accounted for by the influence of the following [u:]-vowel whose lip-and-tongue position the preceding [h]-sound must necessarily anticipate.

So much for the lesson that can be drawn from our above theory (outlined in Sections I to IV of the present chapter) for a better understanding of the phonological development of the ModE pronominal form *who* and other words of the type. No less interesting are the conclusions that follow from the application of our theory to the phonological development of ModE *whole* (OE *hāl*) and some other expressions beginning in ModE *wh-* [h-].

VI. As is commonly known, the ModE words *whole* and *whore* share with the ModE form *who* the same relation of the initial sound and the initial digraph corresponding to it, viz. [h-]: *wh-*. The analogy is limited, however, to ModE forms: unlike ModE *who*, the words *whole* and *whore* never had an initial *hw-*cluster in OE — they began in *h-* (*hāl, hōre*), in exact conformity with the ModE forms [houl, hɔ:] descended from them. The digraph *wh-* in the modern spelling of these words is commonly accounted for by dialectal influence. It is believed that in LME the (then crystalizing) SES absorbed some dialect forms, presumably of south-western origin, in which the original *h-* had been changed into *wh-* (for the present moment we will leave aside the question of the phonic value of this *wh-*). As is commonly accepted, in the spoken norm of the SES these dialectal *wh-*forms were later ousted again by the aboriginal *h-*forms, but in the written norm the traditional *wh-*spellings of the two words still linger on. (79) The remarkable thing is that LME and EModE texts contain *wh-*spellings also in other words beginning in etymological *h-*, in which the present day spelling has *h-* throughout; the initial *h-* in such words is regularly followed by vowel sounds going back to ME *ǭ, ǫ*. The Oxford *NED* registers such LME or EModE spellings with *wh-* in the words *home, hot, hoar, holy;* later on, also in *hole, hood,* and *hoard.* (80) — In this connection it should be noted that in some regions most of these words have dialectal forms beginning in [w-] which presumably goes back to an earlier *wh-*. The widest territory is covered by such dialectal forms in the cases of *whole* and *home* (WRIGHT's *EDD* registers them in the area extending from Yorkshire to Sommerset): on the other hand, in the cases of *hood* and *whore* such dialectal forms are wholly non-existent.

The origin of the south-western dialectal *wh-* in such words was discussed at some length by K. LUICK (*Hist. Gr.* § 345.1). He shows that in the south-western area

of England the initial sounds $\bar{\varrho}$-, $\bar{\varrho}$- were diphthongized, in the latter half of the 14th century, into $u\bar{\varrho}$- or $u\bar{\varrho}$- respectively, written as *wo* (e. g. $\bar{\varrho}n$ "one" $> w\bar{\varrho}n$, $\bar{\varrho}ther > w\bar{\varrho}$-*ther*), and that the change also occurred when the vowel $\bar{\varrho}$-, $\bar{\varrho}$- was preceded by *h*-(thus $h\bar{\varrho}l > wh\bar{\varrho}l$, $h\bar{\varrho}re > wh\bar{\varrho}re$). LUICK also points out (o. c., § 435.2) that at the same time and in approximately the same area an analogous diphtongization occurred in the initial vowels $\bar{\varrho}$-, $\bar{\varrho}$- (or $h\bar{\varrho}$-, $h\bar{\varrho}$-); the results of the change were $i\bar{\varrho}$- or $i\bar{\varrho}$-, respectively (regularly written with $\bar{\jmath}$-, y- in both cases). It should be added that $h\bar{\varrho}$- and $h\bar{\varrho}$-gave the same results as $\bar{\varrho}$- and $\bar{\varrho}$-, respectively. This is shown by LUICK's examples $\bar{\jmath}\bar{\varrho}r$ 'ear', $\bar{\jmath}\bar{\varrho}l$, $\bar{\jmath}\bar{\varrho}l$ 'eel' — $\bar{\jmath}\bar{\varrho}le$ 'health', $\bar{\jmath}\bar{\varrho}rb$ 'herb'; (81) no such evidence is adduced for the original $h\bar{\varrho}$-.

Luick's explanation met with what may be called general acceptance. Still, it hardly explains all features of the process in a satisfactory manner. Thus, e. g., the question may be raised why the diphtongization occurs, of all consonants, only after *h*-, and otherwise only at the beginning of a word? Another point is: if at the time of the change the digraph *wh* had the phonic value of [W] (as must be held in view of what has been shown in the previous sections of this chapter), can one really suppose that the first components of the diphtongs $u\bar{\varrho}$-, $u\bar{\varrho}$- were merged with the initial [h]-sound so as to produce the voiceless sonant [W] as a result? Clearly, the process is worth closer investigation than it has received so far.

While inspecting and examining the situations in which the described diphthongizations occurred, one grows increasingly conscious of the obvious conclusion following from them: The diphthongization evidently concerned only those $\bar{o}$- and $\bar{e}$-vowels which were situated in the absolute word-initial. The cases in which the vowels were diphthongized after a preceding *h*-sound should be explained, in our opinion, by the fact that the *h*-sound in such words was already in the process of disappearing in some syntactical positions (especially in words not heavily stressed). This assumption is well compatible with the accepted chronology of LME and EModE: according to LUICK's estimate, the initial *h*- was dropped "in the period beginning with the 15th century, and in some areas perhaps even somewhat earlier" — it will be remembered that, by the same authority, the diphthongizations are placed into the latter half of the 14th century. In the forms that had lost *h*- in certain syntactical situations, $\bar{\varrho}$- and $\bar{\varrho}$- came to stand initially and may thus have been duly diphthongized (e. g. $h\bar{\varrho}l > \bar{\varrho}l > w\bar{\varrho}l$, $h\bar{\varrho}l > \bar{\varrho}l > \bar{\jmath}\bar{\varrho}l$). The co-existence of the word-forms $h\bar{\varrho}l$ and $w\bar{\varrho}l$, each of which was legitimate in some syntactical situations, most probably gave rise to a contaminated form $hw\bar{\varrho}l$ (similarly, coexisting words $h\bar{\varrho}l$ and $\bar{\jmath}\bar{\varrho}l$ were probably contaminated into $hj\bar{\varrho}l$). A contamination of that type was close at hand because English nouns — like the nouns of most IE languages — do not admit of alternations of initial consonants, and an alternation of the kind was certainly present in cases like $h\bar{\varrho}l/w\bar{\varrho}l$, $h\bar{\varrho}l/\bar{\jmath}\bar{\varrho}l$. It should also be noted that in the latter half of the 14th century the situation was not yet ripe for the [h-] sound to be regarded as a phenomenon of phonostylistics and syntactical phonology (as is undoubtedly the case in the vast majority of the present-day English dialects of the Midland and Southern areas). In the latter half of the 14th century, [h] was still an undoubted phenomenon of word-phonology: this is proved by the fact of its co-existence, at that time, with the allophone [χ] (and possibly even [χ'], see here above, Chapter Two).

In consequence of the above-said contamination, the south-western dialectal area had been enriched by new clusters hu-, hi-, which, being immediately followed by a vowel, changed automatically into hw-, hj-. It should be kept in mind that this happened during the latter half of the 14th century. At that time, however, clusters of the kind were unknown in the English language. It is well known that the OE *hw*

had passed over into *W* in the 13th century at the latest, and that the new cluster *hw* was not to appear before the latter half of the 16th century (see section III of the present chapter). Similarly, the EME cluster *hj* had been unknown in English since its elimination in the pronoun *hēo* > *ʒhǭ* > *schǭ* (82) — the only form in which it had occurred in East Midlands —, and the new cluster *hj* was not to become firmly established in English before the middle of the 16th century (see here above, section III). For this reason, the south-western dialectal clusters could find no foothold in the system of English phonic values of the latter half of the 14th century and were accordingly substituted for by the values standing as close to them as possible in the phonemic system of that period. In the case of *hw* the substituting value was *W*, while the cluster *hj* came to be replaced by *j*. (83)

So much for the origin of the south-western dialectal forms of the types *whǭl* and *ʒęl*. The forms soon began to infiltrate into the (then crystallizing) SES and there they were faced with the necessity of asserting themselves against the old-established forms *hǭl* and *hęl* (or *hęlth*). The dialectal forms soon proved to be the weaker party in the contest, and they ultimately succumbed to the old-established forms. In the case of the type *hǭl*, the result of the fight was probably brought about by the general trend of development characterizing the ME phoneme /W/. It should be noted that the new generations of dialect speakers coming into London from the south-western area (and even from other areas except the northernmost part of England) after the beginning of the 15th century could not give any support to the [W]-pronunciation, as they had already replaced their *W*- by *w*-, in a number of words still present in modern English dialects of the said areas (see WRIGHT's *EDD*). Obviously, the new [w]-sound differed profoundly from the sound [h-], an old-established feature of the discussed SES type, and it did so much more conspicuously than the former [W-], found in the pronunciation of the previous generation of dialect speakers; thus [w] could scarcely avoid being branded as vulgar, an therefore being barred from standard use. — In the case of the word *hęl*, the initial *h*- most probably prevailed owing to the support it obtained from the expressions *health* and *healthy*, the stem-vowels of which had been short since LOE and thus were never affected by the above described diphthongization and the development following it. (84)

In our opinion, the above remarks lead inevitably to the conclusion that, in the latter half of the 16th century, the SES forms of the type *whole* must have already been a matter of purely graphical order, no longer reflecting the actual pronunciation of the period. It will be remembered that the said period was characterized by the spread of the new cluster [hw], acting as substitute for the slightly charged /W/-phoneme (incidentally, there is no evidence that this substitution should have affected the words of the type *whole*). In other words, 16th century spellings like *wholy, whole, whoord* (standing, respectively, for *holy, hole, hoard*) furnish no conclusive evidence of a contemporary pronunciation of [W-] in the words thus spelt. (85) One should not overlook an important fact, so far unnoticed (to our knowledge) by historians of English: the LME change of *ǭ* > *ū* and the subsequent phonematic revaluation of [W] into /h/ in the words of the type *who* had given rise to a new correspondence of graphical and phonic facts in the said word-type, viz. *wh*/[h]. The existence of this correspondence, found in a small but common group of words of fairly high frequency, was to play an interesting part in the history of the English written norm. The importance of the correspondence is amply borne out by some points concerning the EModE expressions *whore* and *whood* which will occupy us in the following paragraph.

The word *whore*, going back to ME *hǭre* < OE *hōre*, has proved to be an enigma to

English dialect research. J. WRIGHT had to admit the fact that the word has no [w]-forms in present-day English dialects. (86) The fact is really surprising: such [w]-forms are known to constitute regular developments of the former south-western (and other) dialectal [W]-forms which in their own time had penetrated into the SES and of which, by general consent, the present-day reader is still reminded by the digraph *wh-* in the spellings of some of the concerned words. Analogous absence of dialectal forms containing [w-] is characteristic of the expression *hood*, often spelt as *whood* in the 16th century (for concrete data, see the *NED*). In our opinion, the two words *whore* and *hood* were never really affected by the change of $h > W$ at all, either in the standard language or in the dialects. (87) The standard spellings of the types *whore* and *whood* (or the like), frequent in the 16th century, can be satisfactorily explained as applications to two further cases of the above-mentioned 16th century correspondence, established between the digraph *wh-* and the sound [h-].

Obviously, the new applications were effected after the stem-vowel $\bar{\varrho}$ of the two words had been changed into $\bar{u}$, i. e. when the words came to be pronounced as [hu:r, hu:d]. Needless to say, in this phonic form they were most susceptible to becoming the object of the said correspondence: the equation of the type [hū:hūd, hūr] = *who : whood, whore* sounds certainly convincing. And it is hardly due to a mere chance that evidence for the *wh-*spellings in the two words *whore* and *hood* is not found before the 16th century (see the *NED*): it is exactly in that century that the change of $\bar{\varrho} > \bar{u}$ must have become a well-established fact.

The existence of spellings like *whore* and *whood* had, however, further consequences. It must have contributed to the EModE strengthening of the band tying up the spoken form *hǭl* with the written form *whole*. As has been shown above, the spelling *whole* was originally substantiated by the pronunciation [Wōl], penetrating into the SES from the south-western dialects. Later on, however, it lost that support owing to the change of $W > w$ in the said dialectal area. If, then, the spelling *whole* was to survive, it had to be brought into some kind of relation to the prevailing pronunciation of the word concerned, i. e. to [hǭl], later [hōl]. This could only be achieved by extending the above-described correspondence *wh*/[h] to other cases than those in which [h] was followed by [u:]. The extension did take place, and was effected on the basis of graphical analogy. It will have been noticed that in all those cases in which the correspondence had so far been ascertained, the digraph *wh-* was followed by the letter *o* (*who, whose, whom, whoever...*, *whore, whood*); as the graphical sequence in the word *whole* was identical, the correspondence of *wh*/[h] was extended to it as well, and thus the band tying up the spoken form *hǭl* and the written form *whole* obtained its badly needed reassurance. Needless to say, the extension also covers other EModE cases in which the written *who-* was associated with spoken *hǭ-*, such as *whom, whote, whole, wholy, whoord* (NE *home, hot, hole, holy, hoard*) etc., and in which the former existence of the dialectal [W]-sound appears to be more or less established by the evidence of ModE dialects (on this point, see the *NED*, s. v. *Wh*, and WRIGHT's *EDD*). (88)

It should be stressed that the extension of the above-described correspondence of *wh*/[h] is in full agreement with the general trend of development of the English written norm in the EModE period. Admittedly, the band of systematic correspond-ence between phonemes and letters had been so much loosened in the 16th century that no striking anomaly can have been found in the lately established correspondence of *wh*/[h]. Moreover, it should not be overlooked that, in that very period, the English written norm begins to reveal some ideographic tendencies (see, e. g., the words *right* — *write* which were then already distinguished from each other alone by means

of writing: their spoken forms had fallen together under the homophonous structure [rɔit]). One can, therefore, take for granted that the English written norm readily embraced the opportunity of putting down the phoneme /h/ in two alternative ways — *h* and *wh* —; the norm obtained thus a new means enabling it to distinguish, optically at least, words that were identical (or almost identical) from the phonematic point of view. The ideographic nature of the distinction is clearly seen in cases like *hole* — *whole*, EModE *hore* (i. e. hoar) — *whore*. The preservation up to the present day of exactly the two spellings *whole* and *whore*, while all other *wh*-spellings in the words of the type had been abandoned, is certainly a highly instructive fact. (89)

It is hoped that the above chapter has demonstrated another remarkable procedure in which language may handle peripheral phonemes that have emerged in it in the course of its development: it may not be found necessary to discard them from the pattern altogether, but to revaluate them phonematically and/or to. use them as special stylistic allophones. This solution, already foreshadowed by what was said about the phonostylistic function of Present Day Cockney [h] in Chapter Two here above, at the same times reveals the remarkable economy characteristic of the system of language, which does not mechanically abolish peripheral items of its system if they can be utilized for the purpose of differentiation on the marked, stylistic level.

THE PROBLEM OF THE PHONEMATIC STATUS OF THE MODERN ENGLISH [ŋ]-SOUND (90)

I. In explaining the difference between the phoneme and the speech-sound, it has become customary for many writers to adduce the ModE nasal consonants [n] and [ŋ] as particularly clear and convincing instances of speech-sounds possessing the status of separate phonemes in that language, while in some other languages (such as Italian, Spanish, Czech, Hungarian, etc.) analogous nasal consonants constitute mere variants of one and the same phoneme. (91) As is commonly known, in these latter languages the velar [ŋ] only occurs before the velar consonants [k, g], to the exclusion of the alveodental [n] which never occurs in such positions, while in ModE both [n] and [ŋ] can be found in perfectly identical environments and, consequently, can differentiate word-meanings.

Although the above phonematic interpretation of ModE [ŋ] has been endorsed by a vast majority of scholars, a closer analysis of the ModE phonematic situation cannot fail to reveal that the real value of [ŋ] within the ModE phonematic pattern remains a kind of problem. The problem was first envisaged, as early as in 1925, by EDWARD SAPIR (92) who very aptly pointed out a number of reasons which should make a phonemicist think twice before he subscribes to the traditional interpretation. In view of their basic importance, SAPIR's arguments deserve to be quoted here in full. Speaking of "English sound patterning" (i. e., of the phonematic interpretation) of ModE [ŋ] he says (p. 49):

> "In spite of what phoneticians tell us about this sound (*b : m* as *d : n* as *g : ŋ*), no naïve English-speaking person can be made to feel in his bones that it belongs to a single series with *m* and *n*. Psychologically it cannot be grouped with them because, unlike them, it is not a freely movable consonant (three are no words beginning with *ŋ*). It still feels like *ng*, however little it sounds like it. The relation *ant : and = sink : sing* is psychologically as well as historic-

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ally correct. Orthography is by no means solely responsible for the "*ng* feeling" of η. Cases like -*ŋg*- in *finger* and *anger* do not disprove the reality of this feeling, for there is in English a pattern equivalence of -*ng*- : -*ŋ* and -*nd*- : -*nd*. What cases like *singer* with -η- indicate is not so much a pattern difference -*ng*- : -η-, which is not to be construed as analogous to -*nd*- : -*n*- (e. g. *window* : *winnow*), as an analogical treatment of medial elements in terms of their final form (*singer* : *sing* like *cutter* : *cut*)."

If Sapir's observations are divested of their psychological garb, they will be found to refer, first of all, to a very important feature of ModE [η], i. e. to what we might call, in terms more common today, its limited functional yield (and its limited positional distribution). As a matter of fact, there is only one incontestable position in which [η] can be found to function as what appears to be a phoneme, viz. that at the end of a morpheme (that position is exemplified by the commonly known instances of the type [sin : siη, sin-ə, siη-ə]). In all other positions in which [η] occurs in ModE it might be explained away as an allophone of the phoneme /n/ (see instances like [iηk, tæηk, fiηgə, æηgə]). (93)

The other illuminating observation that phonematic analysis owes to E. SAPIR is his suggestion that, phonematically, ModE [-η] should be associated rather with [ηg] than with [n]. Should this suggestion prove correct, one would have to interpret the sound [-η] as an implementation of a biphonematic group, viz. of /ng/. On the other hand, the [-η-]-sound of words like *finger, anger* should not, in this view, be phonematically identified with the final [-η] of *sing, sing-er:* while the latter implements the whole of the phonematic group of /ng/, the former would manifest no more than its first half, viz. /n/. Of equal phonematic value would be, of course, the [η]-sounds of words like *ink, tank*. The phonematic structures of the discussed words would be, then, /sing, sing-ə; fiŋə, æŋgə, ink, tænk/.

It cannot indeed be denied that a number of facts appear to support the biphonematic interpretation of [-η]. First, this interpretation would do away with the strikingly uneven distribution of the supposedly parallel phonemes /m, n, η/. Second, it would make unnecessary for the morphological analyst of English to establish the highly exceptional, and therefore improbable, suffixal morphemes /-gə/ and /-gist/ for the comparatives *longer, stronger* and, respectively, superlatives *longest, strongest*. In terms of SAPIR's interpretation, the comparison of these adjectives is effected by adding to the stem the ordinary suffixes /-ə/ and /-ist/, found in the overwhelming majority of English comparatives and superlatives: /long : long-ə, long-ist; strong : strong-ə, strong-ist/. Even historical considerations (i. e. the rise of ModE [-η] from Late Middle English -*ng*), though much less important, cannot be wholly overlooked — some attention will be paid to them later on.

On the other hand, of course, one cannot close one's eyes to the objections that may be raised to the biphonematic interpretation of ModE [-η]. First, some methodological misgivings are always associated with a biphonematic interpretation of what is, from the phonetic viewpoint, an unquestionably single speech sound. Although in some circumstances such an interpretation may be found necessary, (94) it should always be resorted to with utmost caution. Second, analogous doubts regularly accompany those phonematic interpretations which involve the attribution of different phonematic values to one and the same speech-sound placed in different kinds of phonematic environment (such, indeed, would be the case of ModE [η] in words like [iηk] and [siη], which would have to be interpreted, respectively, as /n/ and /ng/). Here again, utmost caution appears to be indicated: as in any other branch of research work, the validity of the disputed interpretation depends on whether or not it may prove capable of covering all involved facts, and of giving a better account of them than that provided by the rival interpretation.

Conformity with the involved facts is, indeed, the most essential touch-stone of SAPIR's biphonematic interpretations of ModE [ŋ]: it might be criticized, that is to say, not only on the two above-mentioned general grounds of methodological character, but also on grounds that sound much more concrete, i. e. because some facts of the ModE phonic structure appear to contradict it. It is these facts, therefore, that call for some comment.

As one of such concrete arguments might be quoted here the well-known fact that ModE [ŋ] and [ŋg] can indeed be found in analogous phonetic environments, i. e. in the middle of words (see word-pairs like [fiŋgə : siŋə]). Such instances, however, are easily explained away as due to differences in morphological structure. SAPIR himself, in the above-quoted paper of 1925, very aptly attributes the occurrence of [ŋ] in [siŋə] to the high degree of independence enjoyed by the ModE suffix -er forming nouns of agents. As a result of this independence, the last phoneme of the preceding stem morpheme follows the same distributional rules as apply to a phoneme standing in the word-final position. As is well known, morphematic limits are often underlined in languages by specific distributional features (N. S. TRUBETZKOY's theory of "Grenzsignale" furnishes rich evidence of the fact). (95) Consequently, word-pairs of the type [fiŋgə : siŋə] cannot invalidate Sapir's interpretation of ModE [ŋ] as /ng/.

Still, differences in morphematic structure cannot easily explain away all concrete arguments contradicting SAPIR's theory. A notorious case that cannot be glibly dismissed on the above grounds is the ModE word-pair *longer* [lɔŋgə] (comparative of *long*) : [lɔŋə] (the noun of agent derived from the verb *to long*). (96) Here one is faced with two words of parallel morphematic structure and, at the same time, clearly differentiated from the semantic viewpoint. The semantic difference is associated with the phonic difference: the phonic feature keeping apart the two words (and thus obviously responsible for their semantic non-identity) is the presence vs. the absence of the sound [g] after [ŋ]. If the criterion of commutation is strictly adhered to, only one conclusion can be drawn from the above opposition, viz. that the speech-sound [g], ranking undoubtedly as a phoneme, by its very absence in the word [lɔŋə] establishes beyond any doubt the phonematic status of ModE [ŋ]. Besides, if [ŋ] can be functionally opposed to [ŋg], it appears impossible to propose the functional identity of the two (such identity is indeed implied by SAPIR's thesis, see the word-pair [lɔŋə : lɔŋgə], to be interpreted, in Sapir's terms, as /long-ə:longə/).

But the most important point is that, unlike in the case of word-pairs like [fiŋgə : siŋə], the misgivings aroused by the word-pair [lɔŋgə : lɔŋə] cannot be disputed away by considerations of morphematic structure. It is obvious, that is to say, that the morphematic structures of the two words are perfectly parallel (unless one is prepared to establish the above-mentioned highly improbable comparative morpheme /-gə/). It would appear, therefore, that Sapir's interpretation of ModE [ŋ] as /ng/ can hardly be squared with the existence of the two discussed forms.

Still, the chances of the biphonematic interpretation are not so hopeless as one might be tempted to suppose. SAPIR himself was not wholly ignorant of the danger which the comparative forms of the type *stronger*, *longer* (pointed out to him by L. BLOOMFIELD) constituted for his theory. He faced the trouble by his suggestion that the comparative morpheme /-ə/ contrasts with the "agentive" /-ə/ which, as he puts it, "allows the adjective to keep its radical form in -*ng-*" (*Sound Patterns*, p. 49 footnote). SAPIR's remark does not develop the contrast any further; it appears that the reference to it was only annexed to the footnote while the paper was already in print. We may try, however, to follow his argument to its logical conclusion and infer that the comparative -*er* does not enjoy such a degree of independence in ModE

as the homophonous "agentive" -er. If this is so, it may be argued that the biphone-matic group /ng/ standing before the comparative morpheme is implemented in the same way as when placed inside the morpheme, i. e. as [ŋg]. This suggestion cannot be flatly dismissed: it indeed appears that some ModE affixes (especially the word-formative ones) are more independent, and more easily separable, from their word-bases than others (especially than those which serve rather grammatical than word-formative purposes). (97) Also some of TRUBETZKOY's materials seem to favour the suggestion that the degree of cohesion of the stem and the affixes may vary according to the kind of the affix concerned.

Further examination, of course, is needed to prove or disprove the theory that the comparative suffix may not enjoy such a degree of independence as the homo-phonous agentive suffix. It appears that, unlike some ModE affixes (such as -ish, -able, -'s, pre-, anti-, etc.), neither of the two can ever be joined to a word-group. On the other hand, the fact that the comparative suffix -er does not imply the change of the word-category of the basic word, while the agentive -er necessarily does so, might speak for the greater cohesion of the comparative -er with its stem morpheme. It is also worth pointing out that the comparative (and superlative) suffixes can only be joined to a primary adjective, not to a secondary one (e. g. to one that owes its adjectival status to conversion, e. g. *paper profits, a stand-up collar, his after years*); this, too, might be regarded as evidence for the relatively close link joining the comparative suffix -er to the stem of the primary adjective. But, for all this evidence, the whole question certainly calls for further examination.

The above analysis may not have quite convincingly proved the biphonematic status of the ModE [ŋ]-sound but it will have certainly shown that such biphonematic interpretation is tenable. Besides, it will also have revealed that, whatever the actual functional value of ModE [ŋ] may be, its ascertainment is rendered most difficult by the complexity of the facts to be accounted for. In other words, in this particular point the phonematic system of ModE does not appear to be sufficiently clear. It has been shown above that a number of cogent reasons advocate the interpretation of ModE [ŋ] in terms of a biphonematic group /ng/. On the other hand, it is obvious that the cogency of such an interpretation is being outweighed by a number of factors which appear to be opposed to it.

Such factors have been implicitly referred to here above in our reference to a double methodological misgiving usually experienced by the students of the functional aspect of speech-sounds: first, the misgiving associated with a biphonematic inter-pretation of a manifestly single speech-sound, and second, the misgiving accompany-ing the attribution of different phonematic values to one and the same speech-sound placed in different kinds of phonematic environment. These misgivings originate not only in the saying "Omne verum simplex", which is an old-established maxim of all scientific methodology, but also in what we know of the actual functioning of language systems considered as wholes. In Chapter Two here above we attempted to show that the numerically limited inventory of the phonemes of language (usually not exceeding three dozen), faced with the gigantic task of expressing all communicative needs of the given language community, has to be adequately equipped for the task. This means that the phonemes of the language must be well-spaced and distinctly kept apart, otherwise the functioning of the higher planes of language (grammatical, lexical, etc.) is bound to be less smooth and the efficiency of the language as a means of communication palpably reduced.

In Chapters Two, Three, and Four we also believe to have furnished some evidence for the operation of a number of tendencies aimed at doing away with some of the

peripheral points of the phonematic pattern of English, and so at making that system less complicated and, consequently, more efficient. (98) Such tendencies, then, may serve as indicators of the presence of such peripheral points in the system of phonemes of ModE. It may be of some interest, therefore, to see whether any such tendencies can be found operating with regard to the ModE [ŋ]-sound. A reliable answer to this question can only be obtained if the whole of the history of the [ŋ]-sound in English is briefly surveyed, as far as it can be established on the ground of what we know about the history of the phonic plane of English.

II. It is generally admitted that in Old English the sound [ŋ] had no phonematic status, being only an allophone of the phoneme /n/, whose fundamental variant was an alveodental sound. The [ŋ]-sound was used in OE "to the exclusion of [n] before [k] and [g]" (D. JONES, *Phoneme*, § 731), i. e. its place in the OE phonematic system was perfectly parallel to that occupied by [ɲ] in the systems of Italian, Spanish, Czech and Hungarian. At that time, the final -*ng* was probably pronounced as [ŋg] (cf. D. JONES, l. c.). The fundamental revaluation of the English [ŋ]-sound was not to take place until the latter half of the Middle English period, when the word-final groups -*mb*, -*nd*, -*ng* were simplified into [-m, -n], and [-ŋ], respectively. (99)

The changes resulted in the emergence of oppositions like [sin : siŋ, θin : θiŋ, ræn : ræŋ, tʌn : tʌŋ], etc. At the first sight, such oppositions seem to furnish clear evidence of the acquirement by [ŋ] of phonematic status. This inference might also be supported by the fact that the alleged new Late ME (or, Early ModE) phoneme would have perfectly fitted in with the phonematic structure of the concerned section of the English consonantal system. The newly arisen phoneme, that is, would have remarkably filled the gap ("case vide", to use A. MARTINET's term, see *Économie,* pp. 80 f.) that, until then, had existed in that system:

$$/p/ — /t/ — /k/$$
$$/b/ — /d/ — /g/$$
$$/m/ — /n/ — \emptyset$$

It was obviously this congruity of [ŋ] with the general phonematic pattern of English that had led so many scholars to ascribing that sound the status of a phoneme within that pattern. (100) Still, from the very beginning of its existence in the language the alleged new phoneme was distinctly marked off from all other phonemes of the above-schematized section — and particularly from the other two nasal consonant phonemes — by its limited possibilities of distribution (as already noted above, the occurrence of [ŋ] as a genuinely functional phonic item of English is virtually confined to ends of stem-morphemes). There can hardly be any doubt that this quantitative limitation, coupled with the above-discussed close link obviously existing between [ŋ] and [ŋg], from the very beginning considerably obscured the position of the alleged new phoneme in the phonematic system of English. It can be taken for granted, that is, that the combined influence of all the enumerated factors (101) still suggested the possibility of interpreting the sound [ŋ] as an implementation of the biphonematic group /ng/. On the other hand, the congruity of [ŋ] with the English pattern of consonant phonemes, in which it was able to fill the "case vide", constituted a positive factor working for the definite establishment of [ŋ] as an independent phoneme in the language. It appears that these two kinds of factors (and, consequently, the two opposed possibilities of phonematic interpretation) have been in conflict since the time of the phonetic change of -ŋg > -ŋ, and that even today, at least in the SES, the conflict cannot be said to have been quite definitely settled.

It is only in view of this lasting conflict that one can give a satisfactory account of a number of later changes that concerned the *ng*-sound in some way or another. These changes will now have our attention.

III. The change of [-ŋg-] into [-ŋ-] in words like *singer, singing* can, in our opinion, be regarded as an attempt to increase those positions in which the [ŋ]-sound was allowed to occur, and thus as an attempt to consolidate the position of [ŋ] as an independent phoneme of English. Even though the position of [ŋ] in such words was, in principle, of the same kind as in the basic word *sing* (in both words [ŋ] was placed at the end of a morpheme), the very fact that [ŋ] was to emerge there for the first time inside a word before a sound other than [k] or [g] was of some significance. By their purely phonetic make-up such words might have served as potential models encouraging the rise of other words containing a non-final [ŋ] which was not motivated by the following [k] or [g] and whose existence, at the same time, could not be accounted for by the immediately following morphematic limit. The interesting point is, however, that hardly any words of the latter kind are found to emerge in the literary standard. As exceptional instances of the kind might be quoted two words in which [ŋg] > [ŋ] before the following [l], viz. *England* and *English* which may be pronounced either with [-ŋgl-] or with [-ŋl-]. (102) But even these two cases can hardly furnish very substantial evidence of the positional expansion of [ŋ]. Not to speak of the fact that the [ŋ] in these two words regularly corresponds to [ŋg] in the pronunciation of other speakers of the standard language (in other "idiolects", as is sometimes said), the existence of [ŋ] in the word *England* is clearly due to the association of this word with words like *Scotland, Finland, Netherlands,* etc. This association is responsible for the treatment of the syllable *-land* as a separate morpheme; consequently, the *ng* immediately preceding that morpheme is treated in the manner typical of such positions, i. e., it is pronounced as [ŋ]. In the word *English* the pronunciation containing [-ŋl-] is clearly due to the analogy of the pronunciation [iŋlənd]. As the morphematic motive for the pronunciation of [ŋ] is here missing, this word may really be regarded as evidence, however isolated, for the positional expansion of [ŋ] in ModE. Even here, however, the value of this evidence is rather reduced by the co-existing pronunciation type [iŋgliš], found in other idiolects and following the standard phonematic pattern.

In this connection, it should be added that DOBSON (op. cit., pp. 971—973) points out a large number of instances of words originally containing the group [ŋg] + consonant in which [g] became duly lost and, consequently, the [ŋ]-sound, no longer motivated by the following velar consonant, became introduced into the middle of the word (see, e. g., *amongst, kingdom, length, strength,* etc.). One might be tempted to interpret this introduction as evidence of the consolidation of the phonematic status of [ŋ]; such evidence, however, cannot be taken for convincing. For all the (relatively infrequent) vacillations of EModE pronunciation registered by DOBSON from the writings of early orthoepists and grammarians, it is obvious that in present-day standard language all the quoted words conform to the common structural pattern of ModE: [ŋ] is pronounced in such words when it is separated from the following consonant by a morphematic limit (e. g., *among-st, king-dom, leng-th, streng-th, bring-s, belong-ed,* etc.), while [ŋg] is found in those words in which such a morphematic limit is missing (see, e. g., *angry, angle, anguish,* etc.). As far as can be seen, the only exceptions to this pattern in present-day standard language are exactly the variant pronunciations [iŋlənd] and [iŋliš], commented upon in the preceding paragraph.

Our above observations should not be understood as a refutation of DOBSON's thesis that in the 14th century the cluster [ŋg], if followed by an additional consonant, was regularly simplified into [ŋ], while, if followed by a vowel, the same cluster was preserved unimpaired. DOBSON's conclusion, drawn from a detailed, painstaking analysis of a vast amount of sources, may be perfectly sound (and the same may be said of his thesis that, at the moment of the sound change, morphological analogy played no decisive part in establishing either [ŋ] or [ŋg] as the result of the process). It can even be supposed that the simplification of [ŋg] before a consonant into [ŋ] was actually prompted by the tendency aimed at consolidating the position of [ŋ] as an independent

phoneme of the language, and that the vacillations between [ŋ] and [ŋg], which emerge from DOBSON's analysis of his Early ModE sources, may be regarded as manifestations of that tendency. Yet the situation in the present-day SES distinctly reveals that, in the long run, the tendency failed to achieve its purpose. The main factor counteracting that tendency was clearly the need to signal morphematic limits: by its exclusive occurrence at the end of morphemes the [ŋ]-sound (not followed by [g]) was found to be eminently suited for such signalling. In our opinion, it was for this reason that [ŋ] was to be introduced into forms like *sing-er, sing-ing*, etc., and that, on the contrary, [ŋg] was to become the ultimate norm in forms like *angry, angle, anguish*, etc. (103)

All in all, it appears that the rules of the distribution of [ŋ]: [ŋg] in to-day's standard pronunciation can — except for the case of the variant pronunciation of the word *English* — be fully stated in terms of the morphematic structure of the words containing them. As has been shown above (p. 48f.), the same can be said about the semantically differentiated word pair [lɔŋə]: [lɔŋgə]; it appears that the structural difference existing between the two members of this word-pair can again (though less easily) be accounted for in morphematic terms. — Under the circumstances, it is hardly an exaggeration to say that the tendency aimed at consolidating the position of (ŋ] as an independent English phoneme has made very little headway, at least in the SES.

Incidentally, in some of the local dialects [*ŋ*] seems to have been more successful in its expansion at the expense of [ŋg]. Both HORN—LEHNERT (p. 837) and DOBSON (p. 973) point to phenomena of this kind, ascertainable in Scotland, Northern and Southern England. It is, however, again rather doubtful whether even this expansion constituted any real consolidation of the phonematic status of [ŋ] in these dialects. It is interesting to learn from D. JONES (*Phoneme*, § 631) that, e. g., "[ŋg] and [ŋ] form a variphone in the speech of Midland districts of England (Birmingham, Chester, etc.)", i. e. that many English speakers of this area use [ŋ] and [ŋg] promiscuously — indeed, as D. JONES points out, such speakers "cannot hear the difference between [ŋ] and [ŋg] nor can they make the difference at will" (l. c.). From the phonematic point-of-view the [ŋ]-sound in the pronunciation of such speakers cannot be classified as an independent phoneme, but again rather as an implementation of the biphonematic group /ng/, in the quality of what might be called its free variant. It will have to be found out whether the sound [ŋ] of the local dialects referred to above does not, in fact, constitute an analogous variphone of [ŋg]. Obviously, the phonematic status of the non-final [ŋ]-sound could only be admitted in those dialects if instances of the variphonic relation between such [ŋ] and [ŋg] were not universal in them, i. e. if at least some instances of the opposition of [ŋ] and (morphematically homogeneous) [ŋg] could be detected in them.

IV. Our above examination has revealed, then, that the development of English between the 14th century and the present-day period did not substantially contribute to the consolidation of the phonematic status of [ŋ], although the existence in the Early ModE period of some tendencies aimed at that goal can hardly be denied. It is now time to give a brief survey of the operation of the opposite tendency, which was directed at clearing the moot point of the English phonematic system in an altogether different manner. Far from consolidating the position of [ŋ], this other tendency attacked exactly that phonic fact which had yielded the most powerful evidence for the phonematic status of EModE [ŋ], viz. the existence of [ŋ] at the end of morphemes. It is clear that if [ŋ] in these positions could have been abolished, the case of the supposed /ŋ/-phoneme would have been unmistakably decided in the negative, because the instances of [ŋ] in all other positions might be easily explained away as implementations of the phoneme /n/.

It is, in our opinion, only by the operation of this tendency that a satisfactory account can be given of the well-known Early ModE change of the unstressed [iŋ] > [in] (in some dialects, especially in the North, the change occurred as early as in Late ME). (104) Purely phonetic attempts trying to account for this change "by later assimilation of [ŋ] to a dental articulation under the influence of the

preceding high-front vowel" (DOBSON, p. 590) are clearly inconvincing. It seems obvious that the *raison d'être* of the change of the unstressed [-iŋ] > [-in] was to manifestly express the persisting functional interpretation of [ŋ] as a combinatory variant of the /n/-phoneme: after the following /g/ had become lost, the use of the velar allophone of /n/ was no longer indicated, and therefore that allophone became duly replaced by the main allophone of the /n/-phoneme, i. e. by the alveo-dental nasal.

Undoubtedly, an objection might be raised to our above phonematic interpretation of the change of the unstressed [-iŋ] > [-in]: why, it may be asked, was the change confined to the unstressed positions and did not affect the stressed [-iŋ] as well? But the answer to this question is not difficult to find. Leaving aside for the moment the question of the phonematic relation of [-ŋ] and [-n] in stressed syllables, it is hardly necessary to prove that a fairly large amount of new homonyms would arise in English if the latter sound were to be replaced by the former (see, e. g., word-pairs like *thin : thing, sin : sing, kin : king, win : wing, ban : bang, fan : fang, ran : rang, run : rung, sun : sung, ton : tongue*, etc.), while the change of the unstressed [iŋ > -in] only added a very small number of such instances (see word-pairs like *coffin : coughing, coming : cumin, jerking : jerkin*). It will besides be noticed that at least one half of the last-mentioned six words are items of relatively very low frequency in language utterances of every-day communication, while the frequency of most of the words constituting the former group (*thin : thing*, etc.) is relatively high. Under these conditions one can hardly be astonished to find that the language was not particularly disposed to give up the phonic distinction of [-ŋ] and [-n] in stressed syllables in which it had proved so useful. It was certainly for this reason that after the loss of [g] (105) the [ŋ]-sound, up to that time a positional allophone of the /n/-phoneme, was not automatically replaced by [n], its main allophone. As a matter of fact, the non-replacement of [ŋ] by [n] after the loss of the following [g] appears to speak most convincingly for the acquirement of phonematic status by the [ŋ]-sound. How, then, could this acknowledgement of the phonematic status of [-ŋ] in stressed syllables be reconciled with the effort to deny its phonematic status in unstressed syllables?

In order to answer this question satisfactorily, one should realize that by the change of the unstressed [-iŋ] > [-in] the positions in which the supposed /n/-phoneme was allowed to occur were again substantially reduced. Before the said change the functionally independent (i. e., not motivated by the following [k] or [g]) [ŋ]-sound already could occur in one position only, i. e. at the end of morpheme, but after the said change its possibilities of occurrence were to be reduced even more strictly, by adding the condition that the concerned morpheme must be a stressed one. (106) This drastic decrease of the functional load of the supposed /ŋ/-phoneme must necessarily have become reflected in a palpable weakening of the postition of /ŋ/ within the phonematic pattern of EModE. If, in addition to this, one recalls the possibility of interpreting the functionally independent [ŋ]-sound as a biphonematic group /ng/ (see above, Section I of this chapter), it will become evident that the change of the unstressed [-iŋ] > [-in] must have considerably increased the probability of that biphonematic interpretation. Indeed, had the change of the unstressed [-iŋ] > [-in] taken deeper roots in the standard language (as it actually did in the dialects), it would have most probably played a decisive part in the process definitely discarding /ŋ/ as a phoneme. (107)

But, as is commonly known, the change was not to take deeper roots. The effort of the orthoepists succeeded in restoring the pronunciation of the unstressed [-iŋ]

in the standard language by the end of the 17th century, although the vulgar (and partly also the conservative aristocratic) pronunciation have preserved the [-in] until the present-day period (cf. LUICK, *Hist. Gr.*, p. 1045; HORN—LEHNERT, *LL*, p. 845). Seen from the phonematic angle, the revival of the unstressed [-iŋ] turned the tables again: by restoring some of the lost ground previously lost by the functionally independent [ŋ]-sound, it also restored the chances of the /ŋ/-phoneme gaining a more solid foothold in English, without, of course, securing this foothold definitely.

The restitution of unstressed [-iŋ] in the standard language calls for another remark, of more general character. On the face of it, the successful intervention of the orthoepists might strike one as inorganic or even destructive, because it invalidated the impending solution of an urgent phonematic problem, i. e., it made impossible the abolishment of a slightly charged, peripheral phoneme. Still, a closer look at the systemic situation of EModE will reveal that the restoration of [ŋ] in the suffix *-ing* could only be effected because the EModE phonematic system had contained an important structural pre-requisite that was to make that restoration possible. This pre-requisite had again been the "full integration" of the phoneme [ŋ]. Its full integration is clearly seen from our above scheme (p. 50), revealing that the rise of the phoneme /ŋ/ did, in its time, fill a "case vide" in the English phonematic system, and that the abolishment of that phoneme would re-establish this "case vide" again.

Although the position of /ŋ/ in the ModE phonematic pattern has thus been markedly reinforced, it can hardly be said to be particularly firm: in view of its very slight degree of functional utilization, /ŋ/ continues to be evaluated as a peripheral phoneme of the language, and its continued existence in the phonematic pattern is still threatened by the above-discussed alternative, biphonematic evaluation. By way of contrast, this diagnosis is borne out by the situation of /ŋ/ in popular dialects, in which the process aimed at the abolishment of the phonematic status of /ŋ/ has reached a fairly advanced stage. In these dialects the factor of the full integration of /ŋ/ alone, uncoupled with the external factor of the impact of orthoepists, has proved to be too weak to enforce an intervention in the phonematic pattern: unlike in the standard language, its potential preservative capacity has never become actualized.

Chapter Six

THE DECLINE OF THE MODERN ENGLISH /r/ (108)

I. In Chapter Two we submitted some evidence for the theory that a slight functional yield of a peripheral phoneme may act as a motive for its ultimate elimination from the given phonematic system. The tendency aiming at such elimination was demonstrated there on a number of concrete instances drawn from the development of English (see, especially, the all but complete elimination of the /h/-phoneme in ModE, the disappearance from ME of the voiced velar spirant phoneme /ʒ/, the abandonment by EME of the voiceless sonant phonemes /R, L, N/ and — last but not least — /J/, etc.). It was also duly stressed there that the operation of the quantitative factors asserting themselves in such eliminating processes is always closely co-ordinated with the operation of factors of qualitative order, and that noteworthy co-ordination can also be ascertained between the operation of phonic

factors of both orders on the one hand and the needs and wants of higher language levels, grammatical and lexical, on the other (a striking instance of the latter kind of co-operation was examined in Chapter Three).

The most typical of the discussed issues was certainly that of the English phoneme /h/ which in present-day sub-standard English has been almost discarded as a phoneme because its only surviving manifestation, the word-initial prevocalic [h]-sound, is evaluated rather as a stylistic means signalling emphasis than as a means used for distinctive purposes. Even though the present-day SES is much more conservative and does not go the length of the road covered by its sub-standard species, there can be no serious doubt that the trend of the phonematic development of /h/ in the former does not substantially differ from the trend established in the latter.

A closer look at the phonematic history of English will reveal that the case of the /h/-phoneme does not stand isolated. In the present chapter we want to discuss another case of a phoneme whose functional yield has become gradually reduced to such a degree that the preservation of its phonematic status in the future development of English is beginning to be felt questionable. This other phoneme is the SES /r/ which, as is commonly known, can occur only in prevocalic positions and before semivowels, (109) in striking contrast to its ancestor, the OE phoneme /r/ which could also occur in a number of other word-positions from which, however, it was to become barred later on. Thus the OE /r/ could be found before consonants (see, e. g. *hierde, heorte, wiersa,* etc.), in word-final positions before a pause (such as in *feor, þǣr, æcer*), in gemination *(cierran, steorra)*, and in some word-initial clusters inadmissible in ModE (cf. *hræfen, wrītan*). As is commonly known, in all such word-positions the SES /r/-phoneme was to become eliminated sooner or later, with the result that the functional yield of the present-day /r/-phoneme is much smaller than used to be that of its OE ancestor.

Some of the eliminations go back to a relatively early period. As the earliest of all might be denoted the prehistoric change of the syllabic *r*-sound into the sequence $i + r$, later reduced to $e + r$ (see instances like *æcer, hider, mēder,* etc., analysed by K. LUICK, *Hist. Gr.,* § 317—20). Here the insertion of the svarabhakti vowel clearly led to the elimination of pre-OE /r/ in one of its positions of occurrence, and so to a slight decrease of its functional yield; yet it appears that in such positions the syllabic *r*-sound was often restored by morphological analogy (see LUICK, l. c.). Under these circumstances, the first really undoubted step clearly reducing the functional load of the English phoneme /r/ was to take place only somewhat later, in the historical period of the language. It was the familiar change of the cluster *hr* into voiceless *R* which may have taken place already in OE or in EME at the latest. Later in the ME period, but again relatively early, came the abolition of the geminated *-rr-* (most probably it should be ascribed to the close of the 14th century). (110) Throughout the ME period, however, the English /r/-phoneme managed to uphold most of its word-positions and, as is generally known, in some instances its postvocalic variant influenced the preceding vowel sound to a non-insignificant degree.

The said influence reached its highest point by the lowering of preceding vowels (as in LME *er > ar*) and by the emergence of the svarabhakti mixed vowel between the vowels (especially the long ones) and *r* in the latter half of the 15th century (K. LUICK, *Hist. Gr.,* § 505f.). These developments naturally raise the question of the phonetic character of the English *r*-sound throughout the development of English. At present we will confine our attention to the phonetic character of the LME non-prevocalic *r*, because it is exactly this variant of *r* which is concerned in the above-said two developments. It seems probable that this LME non-prevocalic *r*

was an inverted fricative sound. Positive evidence of this is submitted by the state of things observable in the N[orthern] E[nglish] and G[eneral] A[merican] standards of English, while negative evidence is supplied by the situation existing in the Scottish standard. (111)

One might be tempted to suppose with E. SIEVERS (112) that the OE *r* (or at least its non-prevocalic variant) was also an inverted·sound, as it too exercised notable influence on the vowels preceding it (see especially the changes commonly labelled as breaking). It is interesting to note, however, that most experts in OE disagree with SIEVERS on this point. H. SWEET, H. C. WYLD K. LUICK and E. J. DOBSON (113) are unanimous in assuming the trilled articulation of the OE *r*-sound. Dobson has rightly insisted, following the earlier hints by BÜLBRING and LUICK, on the necessity of distinguishing the "rounding influence of *r*" under which heading the OE breaking undoubtedly belongs from the other two processes for which *r* was responsible, viz. the "lowering influence" and the development of the ə-glide before *r*. Dobson asserts that the rounding influence is "due to the lip-protrusion which accompanies the articulation of the consonant... and may operate at any time in the history of English" (l. c.). This assumption appears perfectly sound; it accounts for the absence of breaking by *r* both in short back vowels (which, already possessing a labial quality, could not take on labial glide) and in long vowels generally (in which, owing to their bimoric quantity, (114) the final labial glide could not become conspicuous and therefore did not transcend the limits of a purely incidental, functionally non-essential phenomenon). To sum up, the influence of OE non-prevocalic *r* on the preceding vowels cannot be regarded as equivalent to the influence exercised on the preceding vowels by the ME and EModE non-prevocalic *r*; consequently, there is no reason to postulate a phonetic identity (or close proximity) of the two.

The rise of the glide ə between the vowel and the non-prevocalic *r*-sound prepared the ground for a further, very radical reduction of the functional load of the English /r/-phoneme. The ə-sound, that is to say, was ready to take over most of the distinctive functions of the following *r*-sound, and in view of its vocalic character, ensuring high audibility as well as easy articulation, it turned out to be, even on purely material grounds, more eligible for these functions than the consonantal sound which until then had only been propped by it. As a result, the consonant *r* became dropped in the above-specified positions; (115) the phonematic consequence of this was not only the elimination of the /r/-phoneme from a vast number of the words originally containing it but also the rise of a new vowel phoneme /ə/ (for particulars, see further below, Chapter Eight).

After the above-described reductions of its functional load, the present-day SES phoneme /r/ can occur only in prevocalic positions. From this it follows that the only consonant clusters in which it may participate are the word-initial ones, and that /r/ always constitutes the last element of such clusters. After the LME change of *wr*-into *r*- (see HORN—LEHNERT, *LL*, § 486) the structure of the remaining clusters is fairly monotonous, presenting in principle two types only, viz. " (*s* +) muta + *r*" (i. e. *pr, br, spr; tr, dr, str; kr, gr, skr*), and "voiceless fricative other than *s* + *r*" (i. e. *fr, θr, šr*). On the other hand, the number of clusters remains relatively high. It might appear, therefore, that despite the many reductions of occurrence pointed out above, a fairly high number of the possibilities of occurrence has been left to our /r/-phoneme and that, under such circumstances, one should think twice before one places it (as we have done in the opening paragraphs of the present paper) into the same category as the phoneme /h/ whose possibilities of occurrence in the SES have become incomparably more limited.

At first sight such conclusion seems sound indeed; there can be no doubt whatever that compared with the /h/-phoneme the SES phoneme /r/ is holding firmer ground. And yet, a closer examination of its manifestations in SES cannot fail to reveal unmistakable signs pointing to the fact that the position of /r/ in the SES phonematic system has been appreciably shaken and that the phoneme /r/ is beginning to be

felt in the phonematic pattern as another peripheral item. There are at least three symptoms indicating such diagnosis; each of them will be briefly discussed here.

II. The first symptom are the familiar cases of the so-called "linking *r*". As is generally known, the SES word-final postvocalic *r* is not dropped if it is immediately followed by a word beginning in a vowel (note the well-known differences [its hiə — hiər it iz; its *fa*: — its *fa*: rə'wei] and the like). The *r*-sound emerging in such sandhi situations is synchronically evaluated as a means preventing hiatus contact of the two vowels bordering on *r*. That such evaluation of the linking *r* is really present is evidenced by the familiar instances of the so-called "intrusive *r*", i. e. of such cases of the hiatus *r*-sound as are etymologically illegitimate, in other words, of those cases in which the emergence of *r* is motivated exclusively by the phonematic structure of its context (note again the often quoted instances of the type [indiər ofis, ðə lo:r əv ðə lænd] etc.). (116) A thing to be particularly noted is the almost universal use of this hiatus *r* by people of all classes, educated and uneducated alike (this was stressed especially by A. LLOYD JAMES, quoted by HORN—LEHNERT, l. c.); (117) this may certainly be taken as evidence that such universal use is conditioned by the structural situation of the SES phonematic system.

The main aspect of that structural situation may be summed up by stating that such an inserted *r*-sound is a fact of syntactic phonology, not of word-phonology, like the SES *r*-sound in words of the type *red, crab, spring*, etc. Clearly, despite the phonetic identifiability of the hiatus and non-hiatus *r*-sounds, their phonematic evaluation must be basically different. As the hiatus *r*-sound is not indispensable for conveying the meaning of the word to which it is attached, its main function is rather to clearly delimit that word from the following word-unit within the sentence. (118) Obviously, the delimiting, non-distinctive function of the one category of the *r*-sounds cannot fail to affect the other, distinctively functioning category of the *r*-sounds, whose situation in the SES phonematic system is consequently felt as less clear than the situation of those phonemes which do not possess such homophonous non-distinctive counterparts. On the other hand, the distinctive function performed by the *r*-sounds in words of the type *red, crab, spring* necessarily affects the evaluation of those *r*-sounds which are non-distinctive: the distinctive functional capacity of the sound, evidenced by the cases of the former type, will of necessity appear somewhat frustrated if employed for "merely" delimitative purposes.

To put the thing differently, the functional ambiguity of the SES *r*-sound must necessarily lead to some uncertainty about the exact status of the phoneme /r/ in the SES phonematic pattern. And it is exactly this uncertainty that may be responsible for the peculiar development which, according to the English phoneticians (see, e. g., D. JONES, *Outline*, § 758, and *EEPD*, p. xxv), has been of late rapidly spreading in the pronunciation of the younger generation, viz. for a complete abandonment of the linking *r* (and of course for the non-introduction of the intrusive *r*). This development, that is to say, may be accounted for most conveniently as an attempt to restrict the use of the phoneme /r/ to the exclusive performance of its distinctive functions, and to disengage it from the functions of non-distinctive, purely delimitative character. (119) Conversely, the above-discussed very strong tendency to employ the linking and intrusive *r*-sounds might be accounted for as evidence for an opposite attempt, aimed at restricting the use of the phoneme /r/ to the exclusive performance of delimitative, non-distinctive functions. (Under this assumption, the instances in which *r* serves distinctive purposes, as in *red, crab, spring*, must be disposed of in the manner referred to below in the discussion of our symptom No. 3.)

The above analysis of the first of our symptoms, viz. of the linking *r* and the

phenomena connected with it, will have revealed with sufficient clearness that the position of the phoneme /r/ in the phonematic pattern of the SES is far from clear and firm, despite the fact that after so many reductions of its functional yield the phoneme has managed to preserve what at first sight appears to be a fairly high number of the possibilities of occurrence. That even these possibilities of occurrence are not invulnerable will be shown by an examination of the second and third of our symptoms, to which we are now turning our attention.

The symptom No. 2 concerns the present-day SES word-initial clusters /tr-/ and /dr-/. As is commonly·admitted, in the articulation of each of these clusters its two component sounds have been welded together so intimately as to produce something that, from the purely phonetic standpoint, must be regarded as an affricate sound. As is well known, both clusters are classified as affricates by the English phonetic authorities (see, e. g., D. JONES, *Outline*, § 628, 631). It is of course true that in the SES pronunciation the affricates [tr, dr] are always kept apart from their nearest articulatory analogues, the respective affricates [tš, dž], from which — in spite of their acoustic similarity — they can always be distinguished by their ability to tolerate the insertion of an off-glide between their two component parts (so that one can pronounce [t-ri:, d-rai], while a pronunciation like [t-šin, d-žæm] is inadmissible). In the Cockney dialect of London, however, the situation is different: there the affricates [tr], [dr] sound so very much like [tš], [dž] that word-pairs like *train* and *chain, drove* and *Jove* become virtual homonyms. (120) This fact may serve as evidence of the ambition of the affricate phonemes /tš, dž/ to replace the clusters /tr, dr/.

It might be objected, naturally, that the attainment by Cockney of this stage of development cannot be taken as conclusive evidence for the phonematic situation existing in the SES. And yet, such evidence may be regarded as amply justified. It has been pointed out more than once (121) that popular dialects, free from the conserving influence imposed upon the standard language by civilizational factors (such as schools, theatrical and cinema performances, broadcasts, lectures, sermons, etc.), can manifest the tendencies of development characteristic of the given language system more openly and more reliably than the literary standard. What may be regarded as particularly illuminating, are some phenomena observable in children's speech: they reveal that in the common colloquial style the SES children speakers are often unable to tell the affricate [tr-] from [tš-], and similarly [dr-] from [dž-]. (122) One can conclude, therefore, that in the present-day SES a more or less clear tendency has been taking shape, aimed at the ultimate elimination of the phonematic clusters /tr-/ and /dr-/ by way of their replacement by the respective affricate phonemes /tš/ and /dž/. Although the tendency has not yet progressed very far, the existence of the forces putting it through can hardly be a matter of doubt.

While the symptom No. 2 revealed a tendency working for the elimination of two of the clusters containing /r/, the tendency No. 3, to be discussed now, disposes of virtually all occurrence possibilities of that phoneme, whether standing alone or participating in consonantal clusters. Phonetically its operation is displayed by a notable labialization of the articulation of *r*. This labialization was recorded in the 'thirties by D. JONES, and IDA C. WARD mentions it as a peculiarity of the younger generation. (123) But it must have been quite frequent already in the 19th century (see below evidence of this drawn from the writers of that period). The participation of the lips in the articulation may become so strong as to shift the articulation of the tongue-tip (which in any case is often very weak) into the background. The result then is that both acoustically and physiologically the sound, as HORN and LEHNERT

put it, "makes the impression of a *w*-sound." This impression is borne out by the way in which writers recording such pronunciation put down the sound — they invariably use the letter *w* for the purpose (HORN and LEHNERT, *LL*, § 440, quote writings by various authors, starting from Dickens and Thackeray; e. g. *wough, wail, fwont, dwiver, notowious, Fwedewick, vewy wong*, etc.).

On the ground of such spellings, and which is still more important, on the ground of the acoustic impression which was the motive leading to such spellings, one is led to conclude that the labialized pronunciation of the *r*-sound, and the ensuing replacement of that sound by what is identified as *w*, must reflect deeper changes in the phonematic system of those speakers who have adopted this new way of pronunciation. It appears that such speakers are resorting to a radical measure capable of disposing, at a single blow, of the above-noted functional ambiguity sticking to the present-day SES /r/-phoneme. Such speakers, that is, replace the /r/-phoneme in all its remaining positions by the /w/-phoneme, thus bringing about the phonematic merger of the two. — Another important point deserves to be noted: none of the phonetic authorities registers an analogous labialization of the linking and intrusive *r*-sounds. In phonological terms this means that the non-distinctive *r* is not merged with *w* but that it continues to perform its delimiting function; in other words, the *r*-sound is thus entirely relegated to the status of a non-phonematic delimitative signal.

A number of interesting features can be observed in the possible phonematic merger of /r/ and /w/. Three of them will be singled out here. First, it is certainly no chance that the same kind of merger can occasionally be found in the Eastern regions of the USA (according to the statement by H. KURATH, quoted by HORN—LEHNERT), in which the *r*-sound is characterized by the same functional ambiguity as in the SES. Identical causes appear to have led to identical results. In the G[eneral] A[merican] variety, on the other hand, no such merger is evidenced, clearly because GA does not know linking and intrusive *r*'s and therefore the functional ambiguity of the phoneme /r/ does not exist there. In GA, as is well known, the consonantal *r*-sound (the inverted [ɹ]) and the vocalic inverted [ɚ] undoubtedly constitute allophones of one and the same phoneme.

The second feature, duly noted by HORN and LEHNERT again, though in a different context, is the very fact of a labializing process occurring in the present-day period, otherwise characterized by the very opposite tendences of articulation. As is well known, reduced activity of the lips has been regarded as one of the most outstanding features of the English "Artikulationsbasis" (cf. JESPERSEN, *Lehrbuch*, p. 245) and a number of very important sound-changes, traceable throughout the history of English, have a common denominator exactly in the weakening of labial articulation. The emergence in this context of a strong labializing process can hardly be due to a chance: the motives that have brought it about could not have been of a purely mechanical character — rather they may have been prompted by the needs and wants of the system of language, in this particular case by the functional ambiguity of the phoneme /r/ and by an effort to do away with it.

The third feature is the remarkable ability of the SES phonemes /r/ and /w/ to be subjected to the merger. A closer examination of the distributional rules of the two phonemes reveals that they share relatively few positions of occurrence. Thus, /w/ is found extremely rarely in intervocalic positions and it is quite unknown in the initial clusters of the type pC, bC, fC, and šC (where C means a consonant), while /r/ is common in all such situations. On the other hand, /r/ never occurs in initial clusters of the type sC- in which /w/ is commonly found. Consequently there is no danger of

an excessive number of homonyms arising from the phonematic merger of /r/ and /w/. And in those relatively very few instances in which new homonyms are bound to arise (see, e. g., *red — wed, ring — wing*) the sentence context might enable the listener to identify the intended meaning without any major difficulty. In other words, the phonemes /r/ and /w/ are, to a relatively high degree, complementary with regard to the word-positions in which they occur. This fact is able to throw some additional light on the possibility of the phonematic merger of our two phonemes. It might prove to be beneficial not only to /r/ but to /w/ as well, because it supplies the latter with a number of new positions in which it might occur or, to put the thing differently, because it promises to increase the functional yield of the /w/-phoneme and so to make that phoneme a more efficient component part of the phonematic system of the SES. Undoubtedly, by increasing its efficiency, the /w/-phoneme might obtain a firmer footing in the phonematic pattern than it has had so far (124) (see also Note 132).

To our above analysis it might be objected that our phonematic interpretation of the "labialized r" cannot reflect the actual evaluation of that sound by the speakers using it, since such speakers cannot disengage themselves from the powerful influence of the written norm of the language, in which the *r*-sound, whether labialized or not, has invariably one and the same optical counterpart, the grapheme *r*. To this it should be answered that we are deeply aware of the more or less close correspondence which is bound to tie up the spoken and the written norm in any language community (for more details concerning this correspondence, see J. VACHEK, *Two Chapters*, pp. 14—17). We are also ready to admit, expecially in cultured communities, some amount of influence exercised by the structure of the written norm upon the structure of the spoken norm (125) and even, though to a more limited extent, upon the development of the latter. In our opinion, it is probably this latter influence — together with the influence of other civilizational factors — which has so far prevented the merger of the phonemes /r/ and /w/ from spreading all over the SES speaking community. And yet, for all these concessions, we consider it imperative not to lose sight of the fact that, for all their mutual influence, the spoken and the written norm constitute two separate systems and that the evolution of either of them is primarily motivated by its own structural laws (although, of course, it would be quite wrong and unduly immanentist to rule out the possibility of the secondary factors — like those of the written norm, and of a number of external structures, linguistic and extra-linguistic — intervening in that evolution). (126)

In other words, despite the discrepancy arising in the spoken and written norms of those speakers who in their utterances have merged /r/ and /w/ but in their written utterances continue keeping apart the graphematic correlates of the two phonemes, we have no choice but to admit that the phonematic merger may really take place in the spoken norm of such language users. After all, cases of continued graphematic distinction which is no longer justified by a distinction on the level of phonemes are abundantly found in the development of languages of cultured speaking communities. It is true that a large majority of such discrepancies must be alloted to the domain of vowels, but a number of them may be registered also in the consonantal domain (see, e. g., the case of Polish: there the digraph *rz* continues to be employed although the phoneme /ř/ corresponding to it has long been abolished, having been merged with /ž/ and, in other situations, with /š/). To sum up, the continued usage of the grapheme *r* in the present-day SES cannot be used as argument against our theory of the possible phonematic merger of /r/ and /w/ in the language system of some SES speakers.

III. The analysis of our three symptoms has' clearly ascertained that the position

of the phoneme /r/ in the phonematic system of the present-day SES is by no means firm and that one can even detect a number of tendencies working for its elimination from that system. In other words, /r/, too, ranks as a peripheral phoneme in the SES. Viewed in the light of such tendencies, the entire history of the /r/-phoneme, traced from the earliest OE down to the present day, appears to take on the shape of a gradual decline, effected by successive stages. The fact of such declining process is found the more remarkable since in the pre-OE period the functional load of the /r/-phoneme had been markedly increased by the familiar West Germanic change of $*z > r$. (127) This being so, it is only natural that the historian of the language is expected to lay down the motives that have called the eliminating process into being.

In Section II of the present chapter we submitted a theory accounting for the latest stages of the eliminating process partly by the reduced functional load of the phoneme /r/ and, especially, by the tendency to put an end to the functional ambiguity of that phoneme in present-day SES. Now it remains to find out the motives lying behind the opening stages of the eliminating process.

It will be recalled that the opening two changes that definitely started the process were those of OE (or EME) *hr-* into voiceless *R-* and the ME simplification of the geminate *-rr-* into *-r-*. The motivation of the first of the two changes is clearly seen from the fact that by the side of the process of $hr > R$- we also find parallel processes of $hl- > L$-, $hn- > N$-, and $hw- > W$-. As has been shown above, Chapter II, these four changes must have been motivated by the tendency striving after the elimination of the initial /h/-phoneme, common to all the eliminated clusters. The change, therefore, though depriving the phoneme /r/ of one of its positions of occurrence, was not primarily directed against it. Furthermore, the fact that at the period of these changes no tendency existed in the language against the phoneme /r/ *quâ* /r/, is clearly demonstrated by the fact that the newly arisen voiceless phoneme /R/, whose functional yield was very slight, was soon to become voiced and so merged with the voiced /r/-phoneme (for particulars, see again Chapter II). The prestige of /r/ became thus somewhat strengthened, although the number of the occurrence positions of that phoneme (its "distributional capacity", as we might call it) was to remain definitely reduced by one important item, viz. by that of /hr/.

The elimination of the phoneme /r/ in gemination, that probably took place at the close of the 14th century, tells virtually the same story as the elimination of the cluster /hr/. As is clearly seen from the convincing analysis given by H. KURATH *(Loss)*, the elimination of the geminate /rr/ and of all other ME geminate consonant phonemes was by no means directed against the phoneme /r/ (or, for that matter, against any other ME consonant phoneme) but was the natural outcome of a different complex of changes, which started with the lengthening of short vowels in open syllables, and was closely connected with the loss of vowels in syllables lacking stress. Obviously, here again no specific tendency directed against the phoneme /r/ *quâ* /r/ can be detected yet.

Under these circumstances it appears clear that a really radical intervention in the distributional capacity of the English /r/-phoneme was not to take place before the close of the 15th century in colloquial speech (in the SES even much later); as is commonly admitted, it was only at that time that the *r*-sound was to become dropped in non-prevocalic positions. The data undoubtedly look very late, but one should not lose sight of an important circumstance to which attention was directed above in Section I: as a matter of fact, the dropping of non-prevocalic *r*-sounds in Southern English had been prepared earlier by the development of a purely phonetic ə-glide between the *r*-sound and the vowel preceding it. It was also pointed out above that

after some time this glide was to prove capable of taking over virtually all functions of the following *r*-sound, and so to contribute most effectively to its elimination. It is obvious then that the rise of the phonetic ə-glide, which dates back to about the latter half of the 15th century, was an event which was to prove decisive for the future development of SES non-prevocalic *r*-sounds. The question of why the glide emerged in English at the time indicated is therefore essential for a correct estimate of the forces which were at work in setting the scene for the future decline of the /r/-phoneme.

Although not all aspects of the phonic situation in ME (and especially LME) have been established satisfactorily by now, one thing seems clear beyond any doubt: the rise of the ə-glide cannot have taken place while the non-prevocalic *r*-sound was still articulated as a trilled consonant — this follows not only from physiological considerations but is strikingly borne out by the situation in the Scottish standard in which the non-prevocalic *r*-sound has preserved its trilled pronunciation by now and in which the gliding sound between this *r* and the preceding vowel is unknown. One can certainly agree with DOBSON (see above, Note 9) when he connects the lowering influence of *r* on the preceding vowel (and, in the long run, the rise of the ə-glide as well) with the change in the articulation of the *r*-sound from a trill to a fricative. As to the character of this fricative, most plausible seems to be the assumption voiced by LUICK and more recently by HORN and LEHNERT, holding the non-prevocalic *r*-sound which was to enable the ə-glide to arise for a sound of an inverted articulation. On this assumption, the rise of the glide would not only conform to physiological considerations but, in addition to this, would be in perfect agreement with the well-known GA and Northern English development of non-prevocalic /r/. (128)

Whatever may have been the place of articulation of the LME non-prevocalic *r*, one thing appears certain: the abandonment of the trilled manner of articulation was to prove an important turning-point in the development of the SES /r/-phoneme. Various kinds of evidence, such as are adduced by LUICK, HORN—LEHNERT, and DOBSON, reveal that in non-prevocalic positions this turning-point must have been reached relatively early (by about the middle of the 15th century). Before a vowel, especially in word initial positions, the trilled articulation was to hold on much longer (as is generally known, Ben Jonson heard the initial *r* "sounded firme" as late as the beginning of the EModE period), and the character of the fricative that was to develop in the initial word-positions is still a matter of discussion. (129)

Speaking in purely phonetic terms, the background of the change from the trill to the fricative is comparatively easy to see: the change is one of the numerous manifestations of articulatory relaxation, characteristic of the phonic development of English. The same principle may account for the fact that non-prevocalic *r*, placed in a position of relatively weak intensity of articulation, was to give up its trills earlier than the prevocalic *r*, whose intensity of articulation was comparatively very strong (cf. HORN—LEHNERT, *LL*, § 431). From the linguistic standpoint one should add that the word-initial positions also prove to be more important semantically than the word-final, and especially than the word-central positions, (130) so that the endurance of the non-prevocalic *r*-sounds was not likely to be propped up by semantic factors either. On the other hand, the word-initial *r*-sound (and the *r*-sound participating in word-initial clusters) had a relatively high degree of endurance also because it was propped up by a high amount of semantic relevancy.

We should like to make a point of stressing this remarkable instance of harmony of form and function (i. e. of physiologico-acoustic and semantic factors) in the development of language. Many, though certainly by no means all, impulses to phonic changes in language undoubtedly come from

physiological quarters (the well-known principle of the economy of articulation playing here a highly important part). But the realization of such impulses is liable to the control of the semantic factors: only such physiological impulses can be effected as do not stand in open contradiction to the basic function of language, i. e. that of being an instrument of mutual communication. (131) It should only be added here that the articulatory weakening of *r*, consisting in the change of a trill into a fricative, was by no means contradictory to the needs of semantic clarity — as long as a phoneme becomes manifested in an audible, discernible way, the manner of its articulation is not particularly relevant. Only when that manner of articulation is about to become inaudible or indistinctive, the needs of semantic clarity may be jeopardized. At such moments semantic factors may be mobilized to intervene either by preventing the elimination of the threatened phoneme from being carried out or by enforcing such phonic change as may restore the endangered functional efficiency of the concerned phoneme. Incidentally, the labialization of the present-day SES prevocalic *r*-sound, analyzed above in Section II as a process primarily intended to do away with the functional ambiguity of the SES /r/, may have been partly prompted also by the small acoustic distinctness of the prevocalic *r*-sound, which sometimes loses its fricative character altogether and becomes replaced by something like a non-syllabic mixed vowel [ə] (cf. D. JONES, *Outline*, § 797).

IV. It is time to summarize, as briefly as possible, the provisional findings of the above analysis. It has been ascertained that the process reducing the functional load of the English phoneme /r/ started by two early changes (OE *hr-* > *R-* and ME *-rr-* > *-r-*) which in themselves were not directed against the phoneme /r/ as such. It has been further found that the LME and EModE wholesale elimination of the non-prevocalic *r*-sound was only an ultimate consequence of the change of articulation of the *r*-sound from a trill into a fricative. Even this wholesale elimination, therefore, had not been primarily directed against the /r/-phoneme *quâ* /r/-phoneme. Still, it resulted in reducing the functional load of the /r/-phoneme so radically as to call forth some tendencies aimed at the elimination of the phoneme whose highly reduced distributional capacity seemed no longer a satisfactory guarantee of its being efficiently utilized. It is, then, only after the wholesale elimination of the non-prevocalic *r* that quantitative factors may have entered into the process of the decline of our phoneme. Still, the above analysis has clearly revealed that it would be a mistake to make these quantitative factors exclusively responsible for the operation of the tendencies that attack the phoneme in the present-day SES. As in the case of the SES phoneme /h/, here too the activity of the quantitative factors is co-ordinated, and indeed closely and inseparably interwoven, with that of the qualitative factors.

One such qualitative factor was singled out in Section II, viz. the functional ambiguity of the SES sound resulting from its use partly in the distinctive, and partly in the non-distinctive, delimitative function. That this ambiguity is really in the play, is convincingly shown by the fact that two of the three present-day tendencies attacking the phoneme are obviously concerned with the abolition of that ambiguity, and that, either separately or jointly, they succeed in attaining that aim. As has been shown above, one of the tendencies, if consistently put through, would result in restricting the *r*-sound to its distinctive use, while the consistent application of the other tendency would entail the use of *r* for exclusively delimitative purposes.

There is, however, another important qualitative factor that essentially contributes to the decline of the SES /r/-phoneme and that probably adds much vigour to the tendencies attacking the remaining strongholds of that phoneme. As in the case of the phoneme /h/, discussed above in Chapter Two, this other factor is the structural isolation of the /r/-phoneme in the SES phonematic pattern. (132) In other words, there is no SES phoneme with which /r/ could enter into a kind of direct phonematic opposition. Before the change of the trilled articulation into the fricative, the *r*-sound had a related counterpart in the English phonematic system, viz. the phoneme /l/.

The feature common to these two phonemes was their common membership in the group of liquids. As was convincingly shown by R. JAKOBSON (133), the link uniting the category of liquid consonants is the existence of a partial obstruction placed in the way of the air-current emitted from the lungs to pass through the organs of speech. In the case of a trilled *r*, the flow of the air-current through the speech organs is intermittent, i. e. the above-said obstruction is effected in terms of time; in the case of the *l*-sounds, only one part of the passage (usually the central) is closed to the air-current while the remaining parts are open, i. e. the partial obstruction is effected in terms of space.

After the English /r/-phoneme had become manifested by a fricative, the link joining it to the /l/-phoneme became severed and the isolation of /r/ in the phonematic system of English became an established fact. Although the phoneme /r/ thus came to be manifested by a fricative sound, it was not to enter into phonematic relation with any of the other fricative phonemes. The peripheral character of /r/ became thus very prominent — in MARTINET's terminology, /r/ became a non-integrated item of the phonematic pattern. Under these circumstances two courses were open to the English /r/-phoneme: either to become merged with some of the older fricative phonemes of English (as was shown above, such course was adopted by the Polish /ř/-phoneme which, after losing its trilled character, coalesced with the phoneme /ž/ or, in some specified positions, with /š/) or to dissociate itself phonetically from the fricative group and seek new possibilities of getting out from its structural isolation. Each of the two ways was tried in the SES area, though none of them with systematic consistency. An attempt to follow the first way seems to be indicated in the pronunciation of those speakers who allow their initial clusters *tr-* and *dr-* to be sounded like [tš-] and [dž-], respectively. This, however, must be denoted as a speech habit which has not penetrated into the standard pronunciation on an appreciable scale; besides, this type of the elimination of /r/ is confined to the two above-said initial clusters, leaving the /r/ of other word-positions and other clusters entirely intact.

The other of the two ways has had a wider positional application, although by no means all speakers of the SES standard have adopted it. Those who have, pronounce the *r*-sound without any audible friction, rather like a non-syllabic mixed vowel (cf. D. JONES, *Outline*, § 796). Such manifestation of the /r/-phoneme may reflect the tendency to establish a phonematic merger of such non-syllabic [ə̯] with the syllabic [ə] of unstressed syllables. (134) Such a tendency, however, is bound to fail in the SES for two reasons. First, the non-syllabic [ə̯] followed by a vowel is found to be very unexpressive both acoustically and physiologically (cf. HORN—LEHNERT, *LL* § 440), and so it is often felt necessary to replace the non-syllabic [ə̯] by a sound that would be more distinct in the above-said respects. This leads either to the restoration of the fricative *r* or to the labialization of [ə̯], resulting, as has been seen in the present chapter, ultimately in [w]. Second, the syllabic unstressed [ə] does not show any signs of inclination for a phonematic union with the too unstable non-syllabic [ə̯]; it reveals a much greater propensity to a phonematic merger with the vowel-phoneme /ʌ/ (see below, Chapter Eight).

To sum up, not even the abandonment of its fricative manifestation can help the present-day SES /r/-phoneme to get out from its structural phonematic isolation (and to get shifted from the periphery of the phonematic pattern closer towards its centre), as long as it sticks to its non-labialized character. The position of the /r/-phoneme in the SES phonematic system is thus confirmed to be perceptibly shaken; it undoubtedly constitutes one of the sore points of the system, one of its peripheral items, and this qualitative fact certainly adds some vigour to the above-enumerated

tendencies, quantitative and qualitative alike, attacking the position of the /r/-phoneme in the SES of today.

The survey of the history of the English /r/-phoneme sketched in the above pages necessarily had to confine itself to the roughest outlines of the examined process. Even so, it may be hoped that the survey has revealed something of the delicate network of the structure exposed to the process and of the variety of forces, both qualitative and quantitative, that have participated in shaping it. It may have also demonstrated the presence of such peripheral items in the phonematic pattern as cannot have been satisfactorily handled yet, although their existence has become an obvious fact. In this respect, the case of the SES /r/-phoneme somewhat resembles that of the SES /ŋ/, discussed above in Chapter Five.

<div align="center">Chapter Seven</div>

THE PHONEMATIC RELATION OF MODERN ENGLISH [i] AND [j]

I. In many languages, the mutual relation of the sounds [i] and [j] presents some interesting features, if analyzed from the phonological viewpoint. The articulatory relationship of the two sounds is obvious especially in those language communities in which [j] is not pronounced as a marked fricative sound but, rather as a semivowel. As is commonly known, the semivocalic pronunciation of [j] is found both in Czech and in English, while in some other languages, such as in Russian or German, one is faced with the fricative type of [j]. In languages of the former category the only really outstanding difference between [i] and [j] is that of their function within the syllable: while [i] functions as a syllabic nucleus, [j] never performs such function. This kind of difference is, of course, of paramount importance for the prosodic system of language; from the phonological point-of-view, however, it is much less significant. Above all, it should be noted that the said kind of difference cannot preclude the phonematic identification of [i] and [j], unless other arguments can be presented contradicting such identification. To prove this, one need only recall the instance of Czech and Slovak pairs of sounds which, from the articulatory viewpoint, are as close as Czech and Slovak [i] and [j], viz. of the syllabic [r̥] and non-syllabic [r]. These two sounds — and analogously, [l̥] and [l] (and in Czech also [m̥] and [m]) — constitute allophones of one and the same phoneme /r/ (or, respectively, /l/ and /m/), despite their different functions in the syllable. In estimating the phonematic relation of the members of such pairs, the decisive factor is clearly the complementary distribution of the members of such pairs in concrete contexts: as the syllabic [r̥] (or, [l̥], [m̥]) never occurs in those environments in which the non-syllabic [r] (or, respectively, [l] or [m]) can be found, the functional utilization of the difference existing between the two members of the pairs proves to be impossible, and thus no other choice is left for phonematic research than the admission that the members of such pairs constitute allophones of one and the same phoneme /r/ (or, respectively, /l/, /m/).

If that is so, one cannot exclude, à priori, the possibility of the phonematic identification of the sounds [i] and [j], at least in some languages. As noted above, such identification can only be precluded if convincing arguments can be put forward contradicting this identification. It has been admitted that as an argument of the

kind may be accepted the incompatibility of such phonematic identification with the laws that govern the grouping of phonemes in that language. If, e.g., a language does not admit of the existence of geminated phonemes in its contexts, the phonematic identification of [i] and [j] is not feasible in case that instances of such gemination are implied by such identification. Some thirty years ago, the present writer, following the line of thought introduced by some leading members of the Prague group, attempted to show that it is exactly this kind of incompatibility that renders the phonematic identification of the St[andar]d Cz[ech] sounds [i] and [j] unacceptable, though the existence in Czech of some tendencies working towards this phonematic identification cannot be overlooked. (135) The operation of such tendencies has progressed even further in Std. Sl[ovak], though our conclusion presented in our 1933 paper, asserting the phonematic unity of Std. Slovak [i] and [j], now appears to have been perhaps carried rather too far.

In our above-quoted paper it was pointed out that sound-groups like [ij], [ji] (which one would have to interpret as /ii/, should one accept the phonematic identity of [i] and [j]) need not necessarily invalidate the suggested allophonic interpretation of [i] and [j], even if the concerned language does not admit of geminated phonemes in its contexts. If, that is to say, such sound-groups are split by morphematic limits, no real gemination of phonemes takes place (see, e.g., instances like /vi-jel/ 'he drove out', /ši-je/ 'he sews', /kraj-i/ 'to the region', which, confronted with /jel/ 'he drove', /ši:t/ 'to sew', /kraj/ 'region', clearly reveal the accidental nature of the groupings /ij/, /ji/; such groupings do not contradict the rule of inadmissibility of geminated consonants in Cz. any more than groupings like /ss/, /dd/ and the like in instances like /ros-sudek/ 'verdict', /pod-dat/ 'subdue', confronted with their basic words /soudit/ 'to judge', /da:t/ 'to give, to place'. Only such geminated phonemes as are found inside one and the same morpheme can really contradict the rules governing the grouping of phonemes in Cz., and thus invalidate the phonematic identification of the Cz. sounds [i] and [j]. Instances of the kind are, e.g., Cz. words like *jiný, kyj*, in which no morphematic limit exists between [i] and [j]. It is interesting to note that in Std. Sl. most of the words of this category have either abolished the groups [ji, ij] or have disappeared from the language altogether (cf. Cz. *jiný, jistý* — Sl. *iný, istý*, Cz. *kyj* — Sl. *obuch*, etc.). It is also remarkable that Std. Sl. has abolished the consonantal [j] in word-initial preconsonantal positions — Cz. words like *jdu, jméno, jsem* being matched by Sl. words *idem, meno, som* and the like. (Other words of the category have again been dropped from the language altogether, cf. Cz. *jho* — Sl. *bremeno*.) Still, a very limited number of words containing morphematically homogeneous sound groups [ij] persists in Slovak — e.g. *zmija, šija* —, and it is such words that make the phonematic identification of Std. Slovak [i] and [j] not feasible. (136)

After this very brief survey of the situation in Std. Cz. and Std. Sl. it may be of some interest to analyze the phonematic relation of the analogous sounds of the SES (most of our observations will, probably, apply to other standards of ModE as well), the more so that, as noted above, the SES [j]-sound resembles its Std. Cz. and Std. Sl. counterparts in that its articulation is rather a semivocalic than a fricative one. In addition to this, another important analogy can be ascertained between Std. Cz. and Std. Sl. on the one hand and Std. E. on the other. Like the two Slavonic languages, StdE does not admit any geminated phonemes within the limits of one and the same morpheme. Consequently, the presence of morphematically homogeneous soundgroups [ji] or [ij] in StdE could be taken for a decisive proof of the independent phonematic status of the StdE sounds [i] and [j], and, *vice versa*, the absence of such groups might be regarded as evidence for the classification of [i] and [j] as allophones of one and the same phoneme.

Close study of the StdE stock of words reveals that no words can be detected in it that would contain such morphematically homogeneous sound-groups. As a matter of fact, the consonant [j] can be found in StdE only before a vowel, not in post-vocalic positions. (137) In other words, of the two above mentioned sound-groups [ij] and [ji] only the latter can be taken into consideration. It is certainly remarkable that no

words beginning in /ji-/ can be found in the SES; (138) there are certainly a number of words beginning in /ji:-/, but these do not contradict the phonematic identification of [i] and [j], because StdE [i:] (or, rather, [ɪi]) and [i] belong to separate phonemes, and only the latter of the two is phonematically closely related to [j]. The absence of the initial /ji-/ in StdE is more remarkable still if one realizes that in OE (particularly in its West Saxon version) the said group was by no means rare — see instances like ȝif, ȝift, ȝinian, ȝit etc. (139) In addition to this, OE possessed also the phonematic group /ij/, found mostly in word-final positions (see especially adjectives like hāl-iȝ, hungr-iȝ, pyrst-iȝ, etc.). It will be noted that here, too, the group /ij/ was morphematically homogeneous; this fact furnishes clear evidence of the separate phonematic status of the OE sounds [i] and [j], evidence which would remain conclusive even if it might be proved that the OE word-initial group ȝi- did not, in fact, represent [ji-] (see above, Note 139).

In the course of the history of English the above-mentioned phonematic groups /ji-/ and /-ij/ were gradually discarded, so that no trace has been left of them in present-day SES. The ways of discarding have been various, according to circumstances, as may be seen from the confrontation of OE and SES word-forms: ȝif — if, ȝit — yet, ȝift — gift, hāliȝ — holy. In some instances the said phonematic combinations /ji-/ and /-ij/ were abolished by a commonplace sound change, in others by the generalization of the unstressed form in all positions, in others again by the replacement of the indigenous word-form by its Scandinavian variety. The common denominator of all such different changes was, however, the abolishment of exactly those sound combinations that were standing in the way of the phonematic merger of the so far independent phonemes /i/ and /j/.

The change that had taken place in the phonematic evaluation of the mutual relation of the sounds [i] and [j] after the close of the OE period is remarkably reflected in the English system of writting. The spellings with ȝ gradually cede to spellings containing i or its graphical doublet y. Although the graphical changes were due to the operation of external factors (viz. to the replacement of the OE scribal conventions by those used by the Norman scribes), one can hardly overlook the fact that the shift from the old to the new practice very aptly underlined the new phonematic allegiance of the sound [j] to the phoneme /i/ and its phonematic withdrawal from the phoneme /ȝ/ with which it had been rather closely allied since prehistoric times. — In this context, it may also be useful to point out that the ultimate disapperance of the phoneme /ȝ/ in Early ME and the unsuccessful attempt at the establishment of the voiceless [j]-sound as a phoneme in the same period (140) must have contributed, at least to a degree, to making the way clear for the phonematic merger of ME [i] and [j].

The assumption of the separate phonematic status of OE [i] and [j] can throw some new light on a number of OE variant forms of the well-known type nerian/nerȝean/ neriȝean. The etymological identity of this verb with Goth. nasjan clearly shows that the verb was originally a disyllable, so that, of all the existing spellings, the form nerȝean appears to be most "acceptable" from the phonematic viewpoint, reflecting most adequately the phonematic structure /nerjan/. The immediate vicinity of the two sonants [r] and [j] led to the emergence of the transitory sound that ultimately developed into the "full" vowel [i]. While the spelling nerian is ambiguous, as it can reflect either the form with or without [i], the graphical form neriȝean quite unmistakably represents the phonematic structure containing /i/, viz. /nerijan/. As the morphematic limit was placed after the consonant [r] (cf. oppositions like /ner-jan/ : /ner-e-de/), the sound group [ij] must have been again morphematically homogeneous and

thus, again, may be regarded as evidence of the separate phonematic status of OE /i/ and /j/. Indeed, one can perhaps say that it had been exactly this separate status of OE /i/ and /j/ that made possible the emergence of the transitory sound between [r] and [j] and, particularly, its ultimate development into the full vowel [i]: the separate phonematic status of OE /i/ and /j/, evidenced by the existence in OE of morphematically homogeneous groups /ji/ and /ij/, had clearly provided the necessary pre-requisite for the rise of another phonematic group of the same kind. (Analogous new groups of the kind arose in forms like *heriẓes* < *herẓes. heriẓeas* < *herẓas* etc., registered by standard OE grammars.) (141)

In this connection it will be useful to recall that if in the SES the vowel [i] becomes placed before another, unstressed vowel, this contact never results in the rise of the hiatus [j]-sound, and, consequently, in the emergence of the sound-group [ij]. As is well known, the unstressed group [i] + [ə] becomes regularly contracted into [jə], not enlarged into *[ijə] — see instances like *opinion* [o'pinjən], *Kenya* [ki:njə], *courteous* [kɔ:tjəs] and many others. If the basis of the word ends in [-r], no contraction takes place, but no insertion of the hiatus [j]-sound can be seen either — see cases like *furious* [fjuəriəs], *variant* [vɛəriənt] etc. All these facts are in perfect harmony with the above-stated allophonic relationship of the SES sounds [i] and [j], as such relation does not admit of the existence of morphematically homogeneous groups [ji] or [ij] in a language lacking morphematically homogeneous geminated phonemes.

Here again one should note that in analogous situations StdCz presents an altogether different picture than the SES. As has been repeatedly shown by Czech scholars, (142) the Czech language invariably inserts the hiatus sound [j] between the [i] and a following vowel forming a part of a suffix or ending — compare, e.g., the above-quoted StdE form *Kenya* [ki:njə] with StdCz analogously structured words like *harmonie* 'harmony', *agónie* 'agony', *Bolivie* 'Bolivia', *Kolumbie* 'Columbia' etc. etc. (all of them ending in [-iẹ] in pronunciation). The actual phonematic, not merely phonetic, existence of [j] in such words is evidenced, among other things, by the forms of the acc. sg. ending in *-ii* [-iji] in which [j] distinctly asserts itself, despite the difficulties its pronunciation has to face in the vicinity of the two closed palatal vowels. Further, the morphematically homogeneous character of the group /ij/ in such words can be demonstrated by the existence of the adjectives derived from some of these nouns, e.g. *bolivij-ský* 'Bolivian', *kolumbij-ský* 'Columbian': such forms prove that the nouns from which they are derived must be morphematically structured as /boli:vij-e/, /kolumbij-e/. On the grounds of what has been said above it appears highly probable that the insertion of the Czech hiatus sound [j], and especially its subsequent phonematic evaluation as /j/, was rendered possible by the separate phonematic status of /i/ and /j/, admitting of morphematically homogeneous phonematic groups /ij/ and /ji/.

In view of the fact that the evaluation of the phonematic relation of [i] and [j] is also dependent upon the presence (or, as the case may be, absence) of geminated phonemes in the concerned language, one might question the adequateness of our above phonematic interpretation of the OE sounds *i* and *j*. It might be objected, that is to say, that OE knew geminated consonant phonemes (or, more exactly, that the OE phonological system possessed a quantitative correlation of consonant phonemes) — see instances like *etan — settan, niman — swimman* etc. In words like *settan, swimman* the morphematic limit was manifestly placed before the infinitival ending *-an*, so that the morphematic homogeneity of *-tt-* and *-mm-* is obvious and the existence of the quantitative correlation of consonants in OE cannot be doubted. Under such circumstances, one might argue, the existence in OE of the morphematically homogeneous groups *ẓi* and *iẓ* need not guarantee the separate phonematic status of OE *i* and *ẓ*: the said groups, so one might insist, should more appropriately be regarded as implementations of the geminated phoneme /ii/. This type of interpretation might be further propped up by the positional complementari-

ness of the implementations of the supposed geminated /ii/: in word-initial positions (and at the beginning of stem-morphemes) it is manifested by [ji-], while in word-final (or morpheme-final) positions by [-ij].

For all the apparent persuasiveness of such arguments, closer scrutiny of the circumstances of occurrence of the OE sounds *i* and *j* will reveal some fundamental differences between the groups *ʒi-* and *-iʒ* on the one hand, and *-tt-* or *-mm-* on the other. Apart from the fact that OE *m* or *t* in the groups *-mm-* or *-tt-* never functions as a syllabic nucleus, (143) while *i* in the groups *ʒi-*, *-iʒ* does so, there is an important difference between the positional distribution of the members of the two groups. While the members of the groups *ʒi*, *iʒ* very frequently occur at the beginning (or, respectively, at the end) of a word of morpheme, the geminates like *tt*, *mm̂* etc. are never found in word-initial (or morpheme-initial) positions, and thus obviously cannot be placed on exactly the same level as *ʒi* or *iʒ*. Besides, as already noted, the "geminated" consonants are, in fact, long consonants (their adequate phonematic transcription would be rather /t:/, /m:/ and the like, than /tt/, /mm/ etc.), and therefore their exact phonological counterpart is rather /i:/ than /ij/ or /ji/. In this connection, it may be found useful to realize that in OE instances of functional opposition existed between /i:/ and /ji/, see, e.g., *īs — ʒif*. (144) In view of all these facts, it appears that the separate phonematic status of the OE sounds [i] and [j] may be regarded as fairly certain.

In has been shown above that OE and the SES markedly differ in their phonematic evaluations of the mutual relation of their sounds [i] and [j]. The phonematic merger of OE /i/ and /j/ could only take place after the /ji/- and /ij/-combinations had become discarded. As already noted, the changes which led to the abolishment of such combinations, were multiform and various, but they had one point in common: all of them contributed to the phonematic merger of /i/ and /j/ in one phoneme. The resulting phoneme, with its two allophones, one a vowel, another a consonant, has come to occupy a singular, remarkable place in the phonematic pattern of the SES: it serves as a link of its two sub-systems, the vocalic and the consonantal one. At the same time, the *i/j*-phoneme has come to be, in a sense, a peripheral element of both those sub-systems, as it does not entirely belong to any of the two. Still, its fundamental allophone clearly belongs to the vocalic subsystem, because, being a "checked" vowel, it is linked in that sub-system to its "free" counterpart, the "free", slightly diphthongized /ĭi/.

If the trend during the development of English was clearly directed at the phonematic merger of [i] and [j], it may be asked what had been the trend of development in the pre-OE period. A comparison of OE and Gothic, reflecting an older stage of development, reveals that although in Gothic the sounds [i] and [j] often alternated according as they were placed in preconsonantal or prevocalic positions (cf. *sunjus — suniwē, hari — harjis*), and although no counterparts of the OE groups *ʒi-* and *iʒ* were found in Goth. (which did not palatalize the velar *ʒ*-sound in palatal surroundings, see OE *ʒift* — Goth. *gift*, OE *siʒe* — Goth. *sigis*, cf. also *maniʒ* — Goth. *manags*), still a number of Gothic words containing *-ij-* can be found whose OE equivalents have abolished that group. Such is the case, e.g., of Goth. *frijōnds* — OE *frīond*, *frēond*, Goth. *prija* — OE *prīo*, *prēo* etc.; it will be noticed that the loss of intervocalic *-j-* was followed in OE by a contraction of the adjoining vowels into a diphthong. It thus appears that some trend directed at the phonematic merger of the phonemes /i/ and /j/ may have already existed in EOE, but that the trend could not assert itself as fully as it did later on, after the OE period was over.

The reason why the above-said trend could not progress very far was that its opera-

tion had been hampered by the results of another sound-change that had occurred before the opening of the OE period. The concerned sound-change was the palatalization of the voiced velar fricative ʒ into the corresponding palatal fricative ǯ (= [j]) in the vicinity of an originally palatal vowel — see, e.g., ʒift > ǯift, dæʒ > dæǯ, maniʒ > maniǯ, etc. This change resulted in the rise of a number of the sound-groups ǯi- and -iǯ, which propped up the endangered separate phonematic status of the OE phonemes /i/ and /j/, and it was not until such groups were again cancelled that the phonematic merger of English /i/ and /j/ could be taken up again and brought to a satisfactory conclusion. ·

Although it is hardly possible to say something very definite about the phonological systems of languages of remote prehistoric periods, it appears probable that in Primitive Indo-European the sounds *i and *i̯ (the ancestor of Prim. Germanic *j) were allophonic variants of one and the same phoneme. This conclusion appears indicated by the distribution of the two sounds, which was obivously complementary: *i̯ could only occur when preceded and/or followed by a vowel, while *i was found in all other positions. Even the IE word-initial fricative *i̯-, which in some languages is reflected differently from *i̯- (cf. Greek ζυγόν: Lat. iugum) could be easily adjusted to the above distributional pattern, as it only occurred before vowels — and the identity of reflections of *j- and *i̯- in most IE languages is in harmony with the suggestion that such adjustment really did take place. Thus it appears that the beginnings of the real phonematic split of the *i/i̯-phoneme into two separate phonemes, /i/ and /j/, were an affair of the Primitive Germanic period, in which a fairly large number of morphematically homogeneous combinations of i + j emerged (see the above-quoted Gothic forms frijōnds, þrija, not to speak of instances like *bijōn- 'bee', *frija- 'free' etc.). As, however, no initial *ji- or final *-ij-groups seem to have existed in Prim. Gmc., the split does not seem to have been effected with absolute consistency.This inconsistency may have been at the bottom of the above-mentioned pre-OE trend aimed at restoring the phonematic unity of /i/ and /j/, but unsuccessful owing to the great invasion of the OE language by the ǯi- and -iǯ-combinations resulting from the palatalization of ʒ in the vicinity of a palatal vowel. (145)

The above remarks, trying to throw some light on the mutual phonematic relation of English [i] and [j] are necessarily incomplete, and a more thorough-going investigation will be needed to do justice to all aspects of this relation. For all their provisional character, however, they may have succeded in pointing out three interesting items. First, the fact that the examined phonematic relation underwent a substantial change in the course of the history of English. Second —and this is perhaps even more important — it may have underlined the fact that the members of the vocalic and the consonantal phonematic sub-systems are contacted not only in concrete contexts (where their contrasting qualities are amply utilized in building up syllables) (146) but that important contacts may exist between them in the very phonological system uniting them both: there may exist phonemes belonging to both these sub-systems at a time, and thus linking the two sub-systems together. Finally, our analysis may have brought home the fact that peripheral items can be found not only in the phonological system taken as a whole but also in the sub-systems of which the phonological system as a whole is composed. Such peripheral phenomena are most frequently found in what some American scholars call sonorants, (147) and a closer examination of them might reveal more interesting features contributing to the comparative typology of the examined languages. (148) Our conclusion represents, naturally, only a modest beginning of such examination.

Similarly, it is hardly possible to do more than to point out here an interesting analogy between the preservation of the clear phonematic limit between /i/ and /j/ in Czech (and, though to a lesser degree, in Slovak) and the clear delimitation existing in these languages between individual word classes and morphological categories in general. On the other hand, in ModE the phonematic merger of /i/ and /j/, resulting from the abolishment of the clear limits between the two phonemes, appears to be strikingly paralleled by the abolishment of clear limits between word classes

(and morphological categories cf. J. VACHEK, *Anal. Trend*, p. 21 pass.). The fact is the more striking as in OE, where the phonemes /i/ and /j/ were still kept separate, also the mutual delimitation of word classes was much stricter than it is at present. A closer examination of the suggested parallelism must, of course, be left over to subsequent research.

THE MODERN ENGLISH 'SHORT MIXED VOWEL' AS A PHONEMATIC PROBLEM (149)

I. The short (150) mixed vowel [ə] of the SES constitutes a highly interesting problem if considered from the phonematic viewpoint. As is commonly known, the distribution of that vowel is characterized by particular unevenness. In stressed syllables it can occur only if preceded by [i, u, ɛ], and, individually, also by [ɔ], so that its occurrence in such positions is comparatively very rare; on the other hand, in unstressed syllables [ə] ranks as the first vowel in regard to frequency. Statistical analyses (151) have even shown its prevalence over the other vowels found in unstressed syllables to be so overwhelming that it is sufficient to ensure the short mixed vowel the leading place in the frequency list of all SES vowels, whether stressed or unstressed.

The recalled facts are easily explained as results of the well-known sound changes characterizing the development of ModE from its earliest periods down to our days (especially of the reductions of vowels in unstressed syllables and of the influence of the consonant [r] on the preceding long vowels). It is, however, far less easy to interpret the same facts in phonematic terms; indeed, it can hardly be thought exaggerated if the phonematic evaluation of the ModE short mixed vowel is denoted here as one of the most arduous tasks the student of English phonic structure has to face.

The uneven distribution of the ə-vowel in ModE syllables has led students of phonology to the formulation of a number of interpretations of that vowel; some of the most important will be discussed here at some length. The manner of interpreting is of course closely linked with the manner in which some other items of the English system of vowels are evaluated, and thus our discussion will sometimes have to consider broader issues than that of [ə] alone.

Some scholars, taking for granted the gliding nature of the SES ə-diphthongs, interpret all such SES diphthongs as monophonemes. (152) Viewed in this light, the cases of the short mixed vowel in stressed syllables readily become disposed of, and with them also the fact of the uneven distribution of the SES ə-vowel in stressed and unstressed syllables. The SES ə-vowel is thus relegated to the exclusive status of a reduced vowel and comes to be regarded as an intrinsic affair of the phonematic inventory of unstressed syllables. At first sight, the said interpretation seems to be recommended by the alleged gliding character of the SES centring diphthongs. But the gliding character of those diphthongs as wholes can hardly be considered definitely proved; more probably it is the mixed vowel alone to which the gliding articulation can be ascribed with certainty. (153) And even if the gliding nature of the centring diphthongs were proved beyond any doubt, this would by no means guarantee the validity of their monophonematic evaluation. It has been aptly stressed that all monophonematic diphthongs are gliding sounds but that this statement cannot be

reversed, i.e. that not all gliding diphthongs must necessarily be evaluated as monophonemes (TRUBETZKOY, *Grundzüge, p.* 51).

In the cases of the SES centring diphthongs the improbability of their mono-phonematic interpretation is clearly proved by a number of facts, such as by the almost complete absence of articulatory and acoustic oscillation in the starting and ending points of the diphthongs (the oscillation is manifest in the *i-* and *u-*diphthongs, whose monophonematic value in the SES cannot be reasonably doubted). (154) Moreover, the qualitative identification of the initial and final points of the diphthongs with the individual short vowels existing in the language presents no appreciable difficulties in the ə-diphthongs ([iə] = [i + ə], etc.), while in the *i-* and *u-*diphthongs serious obstacles must be faced in an attempt at an identification of the kind (thus, e.g., the supposed first elements of [ai, au] can be identified neither with [æ] nor with [ʌ], the only two vowels eligible for the purpose).

Finally it has been noted (155) that most of the SES centring diphthongs tend to become eliminated from the language. As is well known, the diphthong [ɔə] has been replaced by [ɔ:] in the pronunciation of the greatest part of SES speakers. It is equally well-known that in many instances [uə] is giving way to [ɔ:] (see cases like *cure, endure, poor, sure,* etc.). Instances of the elimination of [iə], though less numerous than in the case of [uə], can also be quoted (pronunciations of the words *year, here/hear* as [jə:] and [hjə:], respectively, are admittedly widespread). (156) Of all the four centring diphthongs existing in the SES, only [ɛə] appears unaffected by the elimin-ating tendency just referred to.

In this connection, one point deserves to be noted. All the above-mentioned elimi-ating processes unmistakably produce one and the same result: they do away with the cases of [ə] found in stressed syllables. As we have pointed out elsewhere (*Inter-pretation,* p. 132), this can hardly be due to mere chance: all the processes appear to be reducible to one and the same motive, i.e. they appear to tend towards the relegation of the ə-vowel to unstressed syllables alone. If this is so, an important conclusion appears unavoidable: the element [ə] of any SES centring diphthong is clearly recognized as forming a constituent part of such a diphthong. The acceptance of this conclusion naturally implies also the recognition of the separate status of the first component parts of the concerned diphthongs, i.e. of [i-, u-, æ-] and [ɔ], respectively. In our opinion, the probability of the said conclusion is strongly upheld (157) by the two qualities of the centring diphthongs to which attention has been called above, viz. by the almost complete absence of articulatory and acoustic oscillation of their starting and ending points, and by the very easy manner in which the initial and final points of the centring diphthongs can be identified with the individual short vowels existing in the SES. All these facts taken together seem to speak conclusively for the biphonematic status of the centring diphthongs, and to disprove the validity of their suggested monophonematic interpretation.

If one accepts the thesis of the biphonematic character of the centring diphthongs and of the tendency aimed at their elimination in the SES, one must consistently acknowledge that in principle the short mixed vowel of the SES is indeed an affair of unstressed syllables, as the instances of [ə] found in stressed syllables represent recessive features of the system (one might almost say, historical survivals).

Our attention must therefore be directed mainly to the ə-vowel of unstressed syllables and its phonematic interpretation. Here it should be recalled, first of all, that the SES [ə] in such syllables is regularly opposed only to [i] or to zero (cf. [ək'sept : ik'sept, trævl̩ : trævlə]). It is well known, that from the distributional point-of-view the two vowels, [i] and [ə], are not on the same footing. The former is

abundantly found also in stressed syllables; although there is a marked articulatory and acoustic difference between the SES stressed and unstressed [i]-vowel, it can hardly be doubted that the two vowels represent one and the same phoneme. On the other hand, the SES unstressed ə-vowel has no adequate stressed counterpart with which it could be phonematically associated; the recessive character of the ə-vowel in the SES centring diphthongs has been already noted, and no other SES vowel found in stressed syllables appears to commend itself for an unmistakable phonematic identification with the unstressed ə-vowel. Ascribing the unstressed [ə] as an allophone to the stressed 'long' [əː] would be unjustifiable in view of the parallel, and obvious, allophonic relation of the stressed [i] and unstressed [i]: it is among the 'short', not among the 'long' vowels that the allophonic partner of the unstressed [ə] is to be sought. But exactly these 'short' stressed vowels of the SES seem little suited for such partnership on account of the articulatory and acoustic dissimilarity of any of them to the unstressed [ə].

It should be noted that in the short history of attempts at a phonematic interpretation of the unstressed ə-vowel we repeatedly come across phonematic identifications of the vowels [ʌ] and [ə]. To mention only some such attempts, as early as in the 'thirties this kind of interpretation was offered by KEMP MALONE, (158) in the early 'forties it was again submitted, though on a distinctly different methodological basis, by G. L. TRAGER and B. BLOCH. (159) It is worth noting that interpretations of this type are usually proposed by speakers using other standards than the SES — most frequently they are advocated by the Americans. This fact is not difficult to account for: in the pronunciation of American speakers the vowels [ʌ] and [ə] virtually coincide in quality In the SES, however, the articulatory and acoustic qualities of [ʌ] and [ə], taken by themselves, can hardly justify a phonematic identification of the two vowels, as the two vowels represent two distinctly separate entities there. (160)

In our opinion, the phonematic identification of the SES vowels [ʌ] and [ə] is also hampered by the well-known facts of alternation caused by stress. Admittedly, the unstressed ə-vowel alternates with a number of SES stressed vowels and diphthongs. An alternation of [æ/ə] may be found in instances like ˈman — manˈ, ˈcan — canˈ, etc.; analogous types of alternations are [u/ə] in ˈfully — ˈhopefully, etc., [ɔ/ə] in ˈoffice — ofˈficial, etc., [ɛ/ə] in ˈthem — them etc., [ʌ/ə] in ˈsuburb — subˈurban, ˈbut — but, etc. Diphthongs alternate with [ə] in instances like [ei/ə], as in ˈable — ˈcomfortable, or [ou/ə], as in ˈprotest — proˈtest and the like. It should be realized that, if the phonematic evaluation of the SES ə-vowel as an allophone of /ʌ/ should find acceptance, all the enumerated types of alternation would have to be phonematically interpreted as containing the phoneme [ʌ] in the quality of the unstressed partner. The phonematic evaluation of the types would then result in the establishment of the following pattern: æ/ʌ, u/ʌ, ɔ/ʌ, ɛ/ʌ, and — ʌ/ʌ! (To this might be added the cases of ei/ʌ and ou/ʌ, established on the ground of those instances in which diphthongs alternate with [ə].)

Even a casual examination of the pattern will reveal the striking inconsistency to which the discussed phonematic interpretation of [ə] is bound to lead if applied to the situation found in the SES. (161) The alternation type [ʌ/ə] becomes unduly separated from the rest of the enumerated alternation types. And yet it cannot be reasonably doubted that the mutual relation of the sounds [ʌ] and [ə] in the SES pair is that of a full vowel opposed to a distinctly different reduced vowel, in other words, that it is clearly analogous to the mutual relation found in the other alternating pairs, and that it thus calls for an analogous phonematic interpretation. In our opinion,

the only phonematic interpretation paying due respect to the described analogy of the concerned SES alternation types is the one that gives up all attempt at the assigning of [ə], in the quality of an allophone, to some vocalic phoneme occurring in stressed syllables, i.e. an interpretation that provides for independent phonematic status of the SES [ə].

II. It would be unwise to pretend that all phonematic problems can be solved by choosing the indicated solution. On the contrary, some new problems emerge, but they can be handled effectively if viewed form the proper angle and in the due context. One such problem must be particularly considered: if the SES [ə] is acknowledged as a separate phoneme (whose occurrence, it will be remembered, is virtually restricted to unstressed syllables), this evaluation appears to be contradictory to L. BLOOMFIELD's thesis that the independent phonematic status of [ə] is incompatible with the distinctive part played by stress in ModE (cf. B. BLOCH, *Overlapping*, pp. 281 ff.). If, that is to say, stress alone is responsible for semantic differences between words whose phonematic structures can be interpreted as parallel, then all qualitative vocalic features occurring only in unstressed syllables must be taken for mere concomitant consequences of the operation of stress, and thus must not be regarded as phonematic in themselves. This might be the case of Russian instances of the type *plʌ'ču* (I pay) — *'plaču* (I weep), in which [ʌ] is evaluated as an allophone of /a/, or of English cases like *im'pɔ:t* — *'impɔːt*, in which the unstressed [i], though distinctly different in quality from its stressed counterpart ['i], is nevertheless phonematically identified with it. And even in those instances in which such an exclusively unstressed vowel of reduced quality cannot be phonematically classed together with the stressed vowel alternating with it, it should be functionally identifiable with some other vowel common in stressed syllables. Such is, e.g., the case of Russian *gəlʌ'va* — *'goləvu*, in which the [ə] of *gə-* is phonematically assigned to the stressed [a], (162) though it alternates with [o]; similarly, the unstressed *i*-vowel in SES *pri'zent* is identified with the stressed ['i], in spite of its alternation with the stressed [ɛ] in SES *'preznt*.

If BLOOMFIELD's theory is true — and from the theoretical viewpoint it appears basically sound — how can our establishment of the SES /ə/ as a separate phoneme be reconciled with it?

In our opinion, the reconciliation is easily obtained, if one evaluates the SES /ə/ as an interesting case of anomaly present in the SES pattern of vowel phonemes. The peripheral character of the SES /ə/ is clearly reflected in the incongruity of /i/ and /ə/, the only two vowel phonemes regularly found in unstressed syllables of the SES. While unstressed [i] can be phonematically assigned to the 'short' /i/-phoneme of the stressed syllables, in the case of [ə], as has been shown above, no such assignment can be qualified as particularly successful. Our above developments have shown how little convincing force attaches to the theory suggesting the possibility of identifying phonematically the SES vowels [ʌ] and [ə]. Thus, if all circumstances, of both qualitative and distributional order, are duly taken into account, one conclusion appears sound. There is only one stressed vowel of the SES which might, on safe theoretical grounds, claim the phonematic subordination of unstressed [ə]: it is the ə-vowel found in biphonematic centring dipthongs. But the above-established tendency, aimed at the elimination of most types of ə-diphthongs from the SES, revealed the recessive character of this diphthongal category in the SES. As a consequence of this, the unstressed ə-vowel of the SES is being increasingly deprived of its only chance of finding a stressed vocalic partner to which it could be assigned as an allophone. In other words, the unstressed ə-vowel finds itself increasingly isolated

in the phonematic pattern of the SES vowels, and its chances of securing in that pattern an adequate place, compatible with what has been said above of the distinctive function of stress in English, seem to be slimmer than ever. Thus, the anomalous position of the unstressed ə-vowel in the SES appears to stand out with particular clearness.

III. It will be of some interest to inquire into the origins of the phonematic status of the SES short ə-vowel. Detailed consideration of the phonological development of English will reveal that the SES [ə] must have acquired the status of a phoneme after the emergence of the short mixed vowel in stressed syllables, i.e. some time in the 17th century. At that time the former ME *u* must have reached the position of an unrounded ə-vowel, (163) so that it can have become phonematically associated with the cases of ə that had been in existence in unstressed syllables for at least one century (and probably much longer); before the emergence of the stressed ə-vowel, these unstressed instances of the mixed vowel must have been regarded as allophones of some of the short stressed vowels, most probably /e/ (cf. LUICK, *Hist. Gr.*, §§ 589 ff.).

Owing to a specific situation characterizing the EModE vocalic pattern, the SES stressed ə-vowel was further shifted to [ʌ] (this change most probably occurred at the beginning of the 18th century). (164) It is interesting to note that the accomplishment of that change was not seconded by a parallel change in the unstressed syllables. This lack of parallelism can be accounted for by two reasons. First, the neutral (i.e. mid-mixed wide) quality of the original vowel may have been found more suitable for an unstressed, reduced alternant sound which was to occur in opposition to a number of full, unreduced vowels of different qualities. Second, and this was probably even more important, the change of ə > ʌ in unstressed syllables may have soon become unnecessary on account of the emergence in stressed syllables of another kind of ə-vowel to which the unstressed ə-vowel could be assigned as an allophone. This new specimen of mixed vowel, found in centring diphthongs, appears to have existed in English since the end of the 15th century (cf. LUICK, *op. cit.*, § 505), but obviously had not acquired the status of a separate phoneme in the SES before the latter half of the 18th century, in the course of which the consonant *r*, originally following diphthongs of that kind, was to become ultimately dropped. (165) Until that time the SES element [ə] had been hardly more than a transitory sound, naturally arising between the long vowel and the following [r] (whose EModE articulation had most probably been an inverted one). (166) Thus for a time, the unstressed ə-vowel consolidated its position in the phonematic pattern. But this position was newer particularly strong, as the occurrence of the ə-vowel in stressed syllables was limited to centring diphthongs only. One might even say that in order to maintain its phonematic status, the SES ə-vowel of the stressed syllables needed the support of the unstressed ə-vowel almost as much as the latter needed the support of the former. The above-noted SES tendency, increasingly striving at the elimination of centring diphthongs, is responsible for the fact that, viewed phonematically, the SES unstressed ə-vowel is constantly losing ground, and confronted with the structure of the present-day SES phonematic system, already begins to loom as a kind of anomaly, in other words, as a peripheral element of the pattern. (167)

The presence of such cases of anomaly in the phonematic systems of modern cultural languages can hardly surprise anyone who is aware that such systems are regularly subjected to the operation of powerful factors retarding the process of development. As already noted, practically all cultural and civilizational institutions (such as schools, theatres, films, broadcast, sermons, talks etc.) work in this direction, and their retarding influence will be especially strong in those language communities

in which some sort of fixed orthoepic norm became established at a relatively early period. It is well known that precisely this happened in Southern England where, as early as in the 17th century, the culture of the spoken word came to be regarded as one of the qualifications indispensable for those claiming social respectability. The retardation due to this factor will naturally be reflected with particular clearness in the phonic plane of the cultured language; the tendencies operating in that plane will sometimes appear almost halted. It may even happen at times, as a consequence of this, that such elements will be found in the phonic plane as will appear as survivals, whose continued existence in the system does not conform very well to the latter's general tenor, and which can only be qualified within that system as anomalous peripheral elements. (A number of other elements of the kind were demonstrated in the preceding chapters of the present paper.)

It is worth pointing out, however, that despite the powerful influence of such retarding factors, tendencies counteracting this influence can usually be discerned with sufficient clearness, although in a number of cases the strong pressure exercised by cultural and civilizational institutions does not allow such counteracting tendencies to achieve the goals they are aimed at.

IV. In the case of the peripheral phoneme /ə/ an interesting tendency of that kind can be observed in the SES. A number of scholars (168) have noted that in the pronunciation of some SES speakers the final, unstressed [ə] is often replaced by [ʌ], and an analogous change has been observed in the ə-vowel of the centring diphthongs [iə, ɛə]. From the phonematic viewpoint, such changes can only be interpreted as a remarkable attempt to remove the obstacles that have so far prevented the phonematic identification of the SES vowels [ə] and [ʌ]. It will be admitted, first of all, that the mentioned tendency undoubtedly brings the vowels [ə] and [ʌ] into allophonic relation, if only in unstressed syllables. The establishment of this relation is able to bridge the articulatory and acoustic gap that has so far existed between the two vowels and constituted one of the main reasons standing in the way of their phonematic coordination: The qualitative identity of the stressed ʌ-vowel and the unstressed allophone [ə] may facilitate their phonematic identification while the allophonic relation existing between the unstressed [ə] and [ʌ] may guarantee that also the unstressed ə-vowel, like the unstressed [ʌ], may be phonemically assigned to the stressed ʌ-vowel as its allophone without any hesitation. The assignment might be rendered particularly easy by the fact that the above-mentioned tendency also aims at discarding the ə-element from centring diphthongs, replacing it again, at least in some instances, by the ʌ-element. Thus the tendency not only strives for the closest phonematic coordination of the SES ə- and ʌ-vowels in both stressed and unstressed positions, but at the same time remarkably conforms to the trend (noted earlier in this paper) directed towards the elimination of the ə-vowel from the stressed syllables of the SES.

It will have been observed that the operation of the tendency described in the preceding paragraph is obviously aimed at the elimination of the systemic anomaly attaching to the SES phoneme /ə/. The described changes, that is to say, tend to abolish the incongruity so far existing between the SES unstressed vowels [i] and [ə]: if the tendency should prevail, either of these two vowels would constitute an allophone of some other vocalic phoneme found in the stressed syllables.

The above analysis of the phonematic situation found in the SES appears to be corroborated by facts concerning the restressing of the reduced ə-vowel. Some scholars (169) have noted that in the speech of actors and reciters [ə] becomes restressed into [ʌ] even in those words in which [ə] was due to the reduction of some

other stressed vowel phoneme. Thus words like [əv, frəm, ənd] are pronounced as [ʌv, frʌm, ʌnd], and even the indefinite article [ə] is stressed into [ʌ]. This fact may justly be quoted in support of the theory of the incipient phonematic fusion of the SES vowels [ə] and [ʌ]; it will be recalled that L. V. SHCHERBA availed himself of a similar argument when interpreting the Russian sounds [ə] and [ʌ] (as in [gəlʌˈva]) as allophones ("ottenki") of the a-phoneme on the ground that in singing the only acceptable pronunciation of the quoted Russian word is [ga-la-va] (*Glasnye*, p. 95).

An interesting variant of the above-discussed problem of the phonematic value of unstressed vowels may be observed in American English. There, of course, the phonematic situation of such vowels distinctly differs from that found in the SES. As noted earlier in this chapter, the acoustic and articulatory resemblance of the vowels [ʌ] and [ə] in the G[eneral] A[merican] type of pronunciation (the type which is both most widespread and most typical) is so close that the phonematic identity of the two vowels is commonly taken for granted. On the other hand, the unstressed ɪ-vowel and its stressed counterpart ˈɪ differ much more perceptibly in GA than the corresponding *i*-vowels of the SES. According to J. S. KENYON, the GA unaccented ɪ-vowel is sometimes pronounced as low as [ɛ], especially in non-final positions, such as in *limit, added, roses, goodness*. (170) Under these circumstances it may be inferred that, from the phonematic viewpoint, the GA unstressed [ɪ] occupies a much less clearly delimited position in the GA pattern of vowel phonemes than its SES counterpart in the vocalic pattern of the SES. And in view of the fact that the phonematically less clearly delimited I-vowel alternates with a number of stressed vowels of full, unreduced qualitites (with [I] in *haˈbitual — ˈhabit*, with [i] in *ˈmeter — therˈmometer*, with [ɛ] in *ˈpresent — preˈsent*, with [e(I)] in *ˈday — ˈSunday*, with [aI] in *ˈmy — myˈself*, etc.) one may even be tempted to regard this GA unstressed ɪ-vowel as an item that is becoming phonematically separated from its stressed counterpart, and in consequence, gradually acquiring the character of an anomalous, peripheral item within the GA vocalic pattern of phonemes. If this phonematic analysis of the GA situation is correct, then the position of the unstressed [I] in GA may be denoted as one that is clearly akin to the position of unstressed [ə] in the SES.

The probability of the suggested phonematic analysis appears to be strikingly borne out by new developments registered in the pronunciation of the New York City dialect. According to the observation of ALLAN F. HUBBEL, (171) this dialect reveals a distinct tendency aimed at merging the two unstressed vowels into one phoneme. The operation of the tendency, as described by HUBBELL, can be ascertained from the fact that in some situations, such as before [k, ŋ], the vowel [I] tends to prevail over [ə]; in others again, such as before [m, l], the vowel [ə] predominates. As a result of this process, words like *accept* and *except* are said to be becoming homonymous. In other positions (172) there appears to be free interchange of [I] and [ə] (this refers particularly to vowels found in inflexional endings, as in *raises, colleges*, etc.).

The observation recorded by HUBBELL is certainly of first-rate importance, and due phonématic consequences should be derived from it. HUBBELL himself attempts to do so in the following statement: "In the New York dialect the assignment of schwa-like vowels [i.e. of reduced vowels of the ə-type, J. V.] to the vocalic phoneme of *luck* and *fun*, and of unstressed [i]-like vowels to the vocalic phoneme of *lick* and *fin* obviously will not do. The phonematic facts are far better explained and more simply set forth if we conceive of a separate phonemic category in which all stressed-vowel oppositions are suspended." (L. c., p. 110.) At first sight, the quoted conclusion appears ingeniously apt to explain the particular phonematic situation that has developed (or rather, has been developing) in the dialect of New York City. It has the disadvantage, however, of being opposed to L. BLOOMFIELD's thesis urging that an independent phonematic status of unstressed vowels is incompatible with the distinctive part played by stress in ModE. (173)

In our opinion, the phonematic lesson to be drawn from HUBBELL's phonematic findings is a different one, and appears to be prompted by the analogous SES situation whose phonematic analysis has been presented above. Viewed in the light of the SES analogy, it appears obvious that the changes registered by HUBBELL tend to abolish (or, possibly, to forestall) the systemic anomaly found (or, possibly, soon to be found) in GA, viz. the independent phonematic status of the unstressed I-vowel. The New York City dialect tends to eliminate the said anomaly by its attempt to revaluate the unstressed I-vowel into an allophone of the ʌ/ə-phoneme. If the tendency has not yet asserted itself on a large scale in other varieties of GA, this may be safely explained by the fact that the lowering of the unstressed I-vowel, though undoubtedly fairly well advanced, has not yet progressed everywhere far enough to necessitate its definite phonematic separation from the stressed [I], and to ensure the establishment of its own, independent phonematic status.
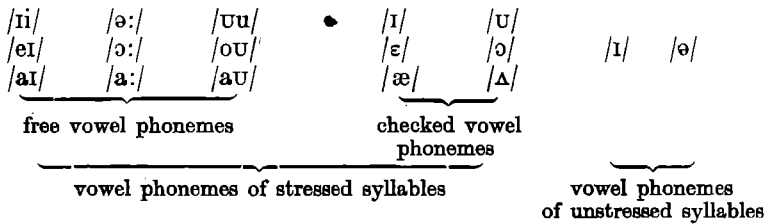
Our above developments will have shown that instances of peripheral phonemes can also be detected in the vocalic section of the phonematic pattern of language. Another instance of such anomalous point taken from the vocalic section of the ModE phonematic pattern will be discussed in the following chapter.

THE PLACE OF [ɔɪ] IN THE MODERN ENGLISH PHONEMATIC PATTERN (174)

I. Before discussing the place of [ɔɪ] in the ModE pattern of phonemes, it is necessary to say a few words about the structure of the pattern of long vowels and diphthongs in ModE.

The Prague group has produced two interpretations of the phonematic status of SES vowels and diphthongs, viz. B. TRNKA's and our own (the first of the two in *Analysis*, p. 14, the other in *Interpretation*, p. 133). Although the phonematic systematization of the English vowels differs with the two authors, both of them fully agree in evaluating both diphthongs and long vowels as single phonemes, not as clusters of two. Our own interpretation (to which, for practical reasons, we must confine our remarks here) can be schematized as follows:

/ɪi/	/ə:/	/ʊu/	•	/ɪ/	/ʊ/			
/eɪ/	/ɔ:/	/oʊ/		/ɛ/	/ɔ/		/ɪ/	/ə/
/aɪ/	/a:/	/aʊ/		/æ/	/ʌ/			

free vowel phonemes   checked vowel phonemes

vowel phonemes of stressed syllables   vowel phonemes of unstressed syllables

+ /ɔɪ/ standing outside the system.

As is well known, the ModE free vowels have often been interpreted as biphonematic clusters, i.e. as groups of the type /a + j/, /a + w/ etc. The champions of this kind of interpretation were B. BLOCH and G. L. TRAGER *(Syll. Phon.)*; in a somewhat modified form, the interpretation was popularized, ten years later, by G. L. TRAGER and H. L. SMITH, Jr *(Outline)*, and it has become accepted by most American scholars, especially those adopting the descriptivist approach of the Yale group. (175) It is thus essential to justify our monophonematic interpretation before the problem of the phonematic value of [ɔɪ] can be attacked.

In Bloch and Trager's conception, the English *i*-diphthongs [aɪ, eɪ, ɔɪ] represent phonematic clusters /aj, ej, oj/; (176) similarly, the *u*-diphthongs [aʊ, oʊ] are interpreted as /aw, əw/. To this are added the "long" [i:] and [u:], evaluated, respectively, as /ij, uw/.

The above descriptivist interpretation is, in principle, based on facts of positional distribution. There are only three types of stressed monosyllables in ModE, [bit], [bi:t], and [bi:], while the type *[bi] does not occur. The type [bi:], lacking its short counterpart, is thus structurally isolated, representing the only kind of stressed open

syllable. While the Prague group accounts for this fact by considering the free vowels ([i:, u:], etc.) as unmarked members of the opposition /i — i:/, and the checked vowels (such as [ɪ, ʊ], etc.) as marked members of that opposition, (177) the descriptivists take a different course. They are convinced that the isolation of the type [bi:] is a proof of the fact that the openness of this syllable is merely a matter of phonetic implementation. In their opinion, this syllabic type is phonematically just as closed as any other ModE monosyllable. Therefore, [bi:] becomes interpreted as /bij/, the more so that some speakers lightly diphthongize such an [i:]. The same applies, mutatis mutandis, to [u:], interpreted by the Americans as /uw/, and, of course, to all *i*- and *u*-diphthongs, as noted above. (We will not discuss here the descriptivist interpretation of the centring diphthongs, such as [iə]; our interpretation of such diphthongs is given here above, Chapter Eight.)

It must be admitted that the descriptivist interpretation of the ModE *i*- and *u*-diphthongs satisfies the requirement of complementary distribution, because the ModE consonant [j] and the *i*-glide occur in mutually exclusive word-positions. As the descriptivists regard the criterion of complementary distribution as decisive, their procedure, from their own point-of-view, is perfectly legitimate. It is questionable, however, whether the distributionist criterion alone can guarantee an adequate diagnosis of the structural make-up of the whole phonematic pattern (on this point, see TRUBETZKOY, *Grundzüge*, p. 218 f.) and especially of the synchronous tendencies operating in that pattern at the given time. For this purpose, it is essential to take into consideration also other criteria, especially the phonetic make-up of the implementations of the supposed phonemes or phonematic clusters. As early as some fifteen years ago (in our paper *Yaleská škola*) we made a point of stressing the fact that the criterion of distribution can in the first place be applied only because the sounds with the given distribution reveal such phonetic similarities that these very similarities lead the analyst to apply to them the distributional criterion.

Seen from this angle, the biphonematic interpretation of the ModE *i*- and *u*-diphthongs appears to be questionable. As these diphthongs as wholes are quite obviously gliding sounds, it may be a matter of serious doubt whether it is proper to split phonematically what is phonetically an undoubted single unit (cf. J. VACHEK, *Interpretation*, p. 100 ff.). The difficulties are even greater where the phonetic distance between the beginning and the end of the diphthong is markedly great, as in [ei, ou], or even [ai, au]. As is commonly known, in these diphthongs the off-glide not only does not reach the degree of [-j, -w], but actually stops at the degrees of [e, o] (if not, for [ai, au], at still lower degrees), the phonematic assignment of which to consonantal [j] or [w] is, of course, highly problematic. Add to this, moreover, very important qualitative differences between the beginning of the diphthong and the corresponding short vowel to be considered for phonematic assignment. This applies not only to the diphthongs [ei] and [ou], the beginnings of which are much more closed than the single [ɛ, ɔ], but mainly to [ai], which again has a more open beginning than the single [æ] or [ʌ], which alone might be eligible for phonematic indentification with it.

One should also note that ModE *i*- and *u*-diphthongs, if placed before a following vowel, resolutely defy any dissociation into their supposed component parts (while, e.g., Czech diphthongs of the type [ai] regularly become dissociated into heterosyllabic [a] + [j] etc. in such positions, cf. sg. [kraj] 'region' — pl. [kra-je] 'regions'). It is well known that the English *i*- and *u*-diphthongs in such positions, notably before [ə] of the following syllable, prefer to reduce the quality of their final stages to such dissociation (note the commonly known "reduction of triphthongs" in words like

fire, tower and the like). This fact, too, is much better squared with the monophonematic than with the biphonematic interpretation.

The objections to the biphonematic status of the ModE *i*- and *u*-dipthongs are also grounded in the structural disagreement of the consequences following from the biphonematic interpretation with what has been ascertained as general rules governing the phonematic structure of ModE words. If, that is, the biphonematic interpretation were correct, the number of examples with final consonant clusters would considerably increase. Notable are especially cases like [bi:st, maind], etc., where according to the biphonematic interpretation one has to do with a final three-consonant cluster. It is, however, commonly known that words with such clusters are very rare in ModE. B. TRNKA in his statistical materials comprising 5616 mono- and disyllabic words (*Analysis*, esp. pp. 91, 153, 168) found only 17 examples with final three-consonant clusters, i.e., not quite one-third of one per cent. The considerable increase in this number, if we accept the descriptivist approach to our diphthongs, is shown by the following: in Trnka's material there is a total of 19 word types with final two-consonant clusters. Of these 19 types for two only, viz. *abb* and *babb* (where *a* designates any vowel, *b* any consonant), more than one-sixth of the examples would have to be deleted (79 out of 461) and transferred, in line with the descriptivist interpretation, to the types with final three-consonant clusters. This transfer alone would increase the number of examples with final three-consonant clusters almost sixfold (i.e., from 17 to 96. Thus, also considerations of the structuring of phonemes within the word appear to contradict the biphonematic interpretation. (178)

Another well-known type of the descriptivist biphonematic interpretation which calls for some comment here is that of /ah/ for [a:], /oh/ for [ɔ:], and the like (in some instances, /h/ is even said to be implemented by the mixed vowel, so that /ih, uh/ interprets [iə], [uə]). This procedure is, of course, quite in line with BLOCH and TRAGER'S postulate that the existence of monosyllables with open syllables is inadmissible in English, but at the same time it is in blatant discord with facts. We leave aside the inconsistency with which the postvocalic /h/ is used once to denote the long quantity (more exactly, the unchecked duration) of the vocalic quality being articulated at the moment, at other time, however, to denote a vocalic quality different from the one that has been articulated at the moment. We will concentrate here on the interpretation of 'length' as an implementation of the phoneme /h/.

BLOCH and TRAGER support their thesis by pointing out that in the English pronunciation [h] occurs only before a vowel, not after it, so that the distributional criterion is satisfied. They also remark — conformably with the European phonetic tradition, see here above, Chapter Two — that ModE (voiceless) [h] before a vowel can actually be considered a voiceless beginning of the articulation of the following vowel. Consequently, /h/ after a vowel, so they urge, is manifested as the continuation of the articulation of the preceding vowel. To this should be objected that this is a voiced continuation and that such a distribution of variants by voice is hardly known in English. It is true that the SES phoneme /r/ has a voiceless as well as a voiced variant, but the former never occurs initially, but only under the influence of the preceding paired voiceless phoneme (cf. *try — drỹ*). The greatest stumbling block to BLOCH and TRAGER'S interpretation is, however, that in the assumed phonematic group of the type /ah/ the two phonemes, unlike as they are, are phonetically manifested by exactly the same kind of articulation, which appears to be contrary to the methodological pre-requisites of phonematic analysis. If this objection should be faced by saying that, e.g., /h/ in /ah/ is not meant to symbolize another [a], but the fact of the prolonged articulation itself, then one would have to do here with a case of co-existence of two phonematic components, qualitative and quantitative. Such a case, however, cannot be phonematically interpreted as two phonemes in succession, but as a case of simultaneous occurrence of two phonematic elements (a segmental and suprasegmental one, to use terms common in American linguistics).

Even in this case, then, the use of the /h/-theory would not be feasible. Apart from all this, of course, one should not forget that the actual opposition between a 'short' and 'long' ModE vowel (both in the SES and in General American) in not one of quantity, but one of contact. Clearly, the interpretation using /h/ for symbolizing the latter type of opposition lacks even that feeble kind of factual support which could be claimed by those who still believe in the existence of the really quantitative opposition in English vowels.

Only a few major features of the descriptivist interpretation of ModE free vowels could be mentioned here, but even so our analysis may have convincingly shown that the BLOCH—TRAGER evaluation is less true to facts than the evaluations that have come out earlier from the Prague group. If the descriptivist interpretation is at first sight seductively simple, it should not be overlooked that this simplicity has been achieved at the cost of assumptions that not only are not simple, but on the contrary rather contrived. Some of the facts pointed out in the present chapter (Note 178) even reveal that this artificial simplicity is able to misrepresent the tendencies existing in the language system at a given period. Analogous misrepresentation is entailed by the employment of /h/ for the purpose of phonematically interpreting some of the ModE vowels and diphthongs. Such interpretation, that is, is able to obscure the fact that the /h/-phoneme has been subject to gradual elimination in the SES phonematic pattern. The inadequacy of the criticized interpretation is again best seen in those phonematic descriptions of Cockney in which the descriptivist framework has been employed (see E. SIVERTSEN, *CPhon*, who consistently interprets Cockney long vowels and centring diphthongs with the help of /h/, although the /h/-phoneme is, in fact, non-existent in that dialect; cf. J. D. O'CONNOR, *rev. S.*, MPh 1962, and J. VACHEK, *Phon. Cock.*). (179)

II. Having cleared the reasons underlying our above-outlined phonematic interpretation of the SES vowels, we may proceed to discuss the phonematic value of the diphthong [ɔɪ] which, as was shown above, we have placed outside the pattern of the ModE vowel phonemes. The reasons for allotting this special place to [ɔɪ] are obvious. First, unlike the other SES *i*-diphthongs, it lacks any symmetric partner among the *u*-diphthongs of the language (cf. contrasts [ɪi — ʊu], [eɪ — oʊ], [aɪ — aʊ]; as an opposite number of [ɔɪ] would be needed an item like *[ɛʊ], which, however, does not occur in the language. Next, the beginning and end of [ɔɪ] do not reveal such marked oscillation in quality as, e.g., [aɪ] and [aʊ]. — Also on other language levels [ɔɪ] markedly differs from the other *i*- and *u*-diphthongs: as B. TRNKA has pointed out, it is never employed for morphonological alternation, as other *i*- and *u*-diphthongs are (see, e.g., [faɪnd — faʊnd], [eɪbl — -əbl], [groʊ — gruu], etc.), and on the lexical level it is mostly employed in words of foreign character (of French or, exceptionally, Dutch origin). For all these reasons, the diphthong [ɔɪ] appears to rank as a peripheral item of the phonematic pattern of ModE.

It is interesting to note that, unlike some other peripheral items of the phonematic pattern of English, the diphthong [ɔɪ] subsists in the language, despite its lack of a partner among the *u*-diphthongs of the language (see above). (180) Its maintenance in the language can most probably be attributed to its peculiar stylistic function: it helps to differentiate, as clearly as possible, synchronically foreign words from those which were synchronically domestic. (181) This need is indicated in English with particular urgency, in view of the outstanding stylistic part played in English by synchronically foreign lexical items since the ME period (cf. A. C. BAUGH, *History*, esp. p. 230 f.).

Examined from the diachronistic viewpoint, ModE [ɔɪ] goes back, mostly, to

a double source, viz. to the ME diphthongs *ui* (in words like *joint, point*) and *ǫi* (as in *choice, joy*). While the latter source presents nothing of particular interest, the former source calls for some comment. From the beginning of the EModE period, the first component part of *ui* was developing on lines strictly parallel to those followed by the development of the EModE short *u*-sound (cf. LUICK, *Hist. Gr.*, § 544). Thus the diphthong *ui* gradually passed on to *ǒi, əi*; this latter stage is still evidenced for the middle of the 18th century. The poets of the 17th and 18th centuries often rhyme word-pairs such as *joins — refines*. The latter member of the pair originally contained ME *ī* which, as is commonly known, became gradually diphthongized into ıi > *ei* > *əi* > *ai* within the so-called Great Vowel Shift. The stage *əi* was reached in the course of the 17th century, so that at that period (and well into the 18th century) word-pairs like *refines — joins* made perfect rhymes. Under these circumstances, one might have expected the diphthongal *əi* of words like *joint, point* to develop into *ai*, along with the *əi* that had been traced back to ME *ī*. The ultimate merger of what were originally the ME sounds *ī* and *ui* really did take place in a number of dialects but not in the standard language. On the contrary, in words of the type *joint, point* one can note, from the middle of the 18th century onwards, the penetration of the diphthong [ɔi] which has remained characteristic of the SES pronunciation of such words until the present day.

This unexpected turn of development is generally attributed to the influence of spelling (182); as is well known, both the word-type *joint, point*, and the word-type *choice, joy* had contained in their written forms the digraph *oi/oy* since the ME take-over of these words from Norman French. There is no reason why this explanation should be refuted; and yet, it contains only a part of the truth, not the whole of it. It is worth noting that the said explanation leaves one aspect of the process unaccounted for: why is it that the impact of the written norm upon its spoken counterpart has come to assert itself in this particular type of words, while in some other word-types in which the written *o* also corresponded to the spoken *ə* no such impact can be observed? — See, e.g., words like *come, done, love*, pronounced in ME as [kum, dun, luv], in the 17th century as [kəm, dən, ləv], in the SES as [kʌm, dʌn, lʌv]. No trace of the influence of the written *o* upon the pronunciation can be established here. How can one account, then, for the difference of development in the two word-types?

In attempting to answer this question one should realize that the impact of the written norm of language upon its spoken counterpart is only a specific instance of a more general phenomenon, viz. of the influence of external factors of the development of the system of language. The interventions of such external factors are, of course, qualitatively different from the internal changes taking place within the structure of the spoken norm. As, however, these internal changes often appear to be motivated by the structural needs and wants of the system of language, a hypothesis may emerge to the effect that also the intervention of the written norm may be somehow connected with the structural situation obtaining in the system. In other words, one should ask whether the penetration of the spelling pronunciation in words like *joint, point* may not have been motivated by the structural needs and wants of the corresponding spoken norm. (183)

To give an adequate answer to the above question, one should recall the above-noted specific stylistic value of ModE [ɔi], signalizing the synchronically foreign character of the words containing it. (184) The diphthong [ɔi] must have been felt as such a signal ever since the EME period when the diphthong *ǫi* (and *ui*!) emerged in English in greater numbers in loanwords of Norman French origin. It was already

pointed out that in writing both these diphthongs were recorded by one and the same digraph, viz. *oi/oy*. When words containing the ME *ui* reached the stage of *əi*, a concrete possibility arose of the definite merger of what originally had been ME *ī* and ME *ui*. It should be realized that such phonematic merger would have deprived the words of the type *joint, point* of their signal of foreign character, i.e. words of that type would have become virtually domesticated. This domestication would have drastically separated such words from those lexical items of French origin which had contained the diphthong *ǫi* (also a signal of synchronically foreign character) and were to preserve that diphthong also in the future (such as *choice, joy*). One may thus conclude that in EModE a tendency came in force counteracting the possibility of domestication of words like *joint, point;* this tendency may have been aimed at strengthening the' lexico-stylistic links joining the words of that type with those of the type *choice, joy*, equally felt as synchronically foreign, by the introduction of *ǫi* into the words of the former type. There can be no doubt that the diphthong *ǫi*, an outstanding and, on account of its structural assymetry, also a very striking phonematic item of the language, was eminently fitted for the purpose of underlining the synchronically foreign character common to both discussed word-categories. (185)

It appears, then, that the 18th century spoken norm of English readily conformed to the external influence of its corresponding written norm because the intervention of the latter was found acceptable by, and even beneficial to, the structural needs and wants of the former, whose two lexical strata, so important for stylistic purposes, could in future be delimited and differentiated more effectively than before. This functional conception of our problem can, at the same time, satisfactorily account for the absence of assertion of an analogous spelling pronunciation in the above noted instances of the type *come, done, love*, whose 17th century structure also opposed written *o* to spoken [ə]. It will be easily seen that in instances of this type there were no structural pre-requisites for the assertion of the spelling pronunciation. First, words like *come, done, love* do not belong to the synchronically foreign, but to the synchronically domestic lexical stratum which, being an unmarked member of the opposition 'foreign — domestic', needs no specific phonic signal to mark it off from the rest of the vocabulary. Second, the phoneme /ɔ/, which might have benefited from the penetration of spelling pronunciation in *come, done, love*, has never been characteristic of this or that lexical stratum of English. It frequently occurs in both the opposed lexical strata and thus, unlike the diphthong /ɔɪ/, it is not fitted to act as a phonic signal characterizing any of the two.

It appears, then, that the circumstances accompanying the penetration of the spelling pronunciation [ɔɪ] in words like *joint, point*, fully confirm the validity of the above-quoted thesis of B. HAVRÁNEK. (186) At the same time, the results of the above analysis satisfactorily account for the fact that ModE [ɔɪ], though undoubtedly a peripheral element of the phonematic pattern, has secured a solid foothold in the language. Endowed with a specific stylistic function, it may safely preserve its anomalous characteristic features because it is exactly through these features that its stylistic function may be effectively performed (187).

III. The case of /ɔɪ/ is the last in the series of English peripheral phonemes analyzed in the present treatise. Our analysis has revealed that despite their anomalous character the examined peripheral phonemes are by no means devoid of interest. On the contrary, the manner in which the given phonematic pattern reacts to the presence of such elements included in its structure, is indicative of a number of trends and tendencies of the pattern which would hardly be so conspicuous in the absence of such peripheral phonemes. The ways in which the pattern reacts is, of

course, different according to circumstances. Sometimes the phoneme is entirely eliminated (see EME /J/, /R/), at other times the system appears to be driving towards the elimination of such a phoneme (this appears to be the case of the SES /h/) or its fusion with some other phoneme or phonematic group (evidenced, it seems, in the cases of /ə/, /r/, and /ŋ/). Of particular interest are those cases in which a peripheral phoneme is maintained at the cost of its stylistic revaluation: it ranks as a foreignism, underlining in a word its membership of a stylistically marked lexical stratum. The instances of the SES phonematic clusters /hj/ and /hw/, alternatively pronounced as [hJ, hW] and [J, W], respectively, combine the two last-named procedures: in both of them the voiceless sonant (even if actually pronounced like [W, J]) has been phonematically revaluated into /hj, hw/, and the cluster has been endowed with a specific stylistic function, viz. with the signalization of a marked stylistic approach that is perhaps best denoted as "intended artificialness."

However different the solutions may be in each of the examined cases, one point regularly recurs in them: each of the solutions strives for some kind of co-ordination of the peripheral phonematic element with the structural laws obtaining in the given phonematic pattern. Though the co-ordination is not always easy to reach (and in some instances does not appear to be within reach yet, cf. the case of /ŋ/), the existence of the forces driving for such co-ordination cannot be reasonably doubted.

(1) See his contribution to the Erfurt discussion on the problems of sign and system in language (Zeichen u. Syst. II, p. 62).

(2) At times, even a scholar of such reputation and renown as N. S. TRUBETZKOY indulged in such adaptations (see, e.g., J. VACHEK, *Interpretation*, pp. 97 f., where some such adaptations of diphthongal phenomena are analyzed).

(3) See, e.g., B. HAVRÁNEK's concluding address of the Prague conference on the study of living languages (VPSJ, pp. 281—289) and K. HORÁLEK's paper read at the same conference (VPSJ, pp. 13—17); cf. also J. VACHEK's remarks pronounced in the same context (VPSJ, pp. 58—67). — By the term "a closed system" is meant here, of course, a system all elements of which are closely linked to a greater number of other elements in the same system, not a self-contained system divorced from the situation, as the term was interpreted, even though in another connection, by A. REICHLING (*Principles*, pp. 16). We are, of course, in full agreement with REICHLING as regards the inadmissibility of such divorcement; we maintain, however, that even if this kind of divorce is avoided, this in itself cannot guarantee an adequate conception of language as an open system (i.e. as a system that is not self-contained).

(4) Cf. F. KOPEČNÝ, *Povaha*.

(5) In foreignisms and in the emotive word-stock /f/ is found, of course, very frequently; such instances of /f/ can often be functionally contrasted with instances of /v/ in the synchronically indigenous words (see, e.g., *frak* 'frock-coat': *vrak* 'wreckage', *flákat* 'to flink about (emot.)': *vlákat* 'to lure in', etc.). Such instances, however, cannot be used as evidence for the amount of the functional load of the opposition /f/ : /v/, because the contrasted items belong to different stylistic levels.

(6) Communicative in the widest sense of that word, including also the communication of the emotive and volitional aspects of the extra-linguistic reality.

(7) See especially R. JAKOBSON, *Remarques*, pp. 13 f.

(8) The basic ideas of this chapter were presented in our Czech paper *Foném h/χ* (see Bibliography), of which this is an entirely new version, incorporating, among other things, also some of the conclusions of another of our papers, *Interplay* (see Bibl.). In editing the English text, partial use was made of the English translation of our original Czech paper, kindly placed at our disposal by Prof. P. L. GARVIN, whose courtesy is hereby gratefully acknowledged. — For technical reasons, the symbols [R, L, N, W, J] are used for voiceless [r, l, n, w, j], respectively.

(9) In French, *rendement fonctionnel d'un phonème*. This term, originally coined by V. MATHESIUS, has been translated into English as *functional load* or *functional yield*; for a discussion of the relative merits of the two English terms, see J. VACHEK, *À propos*, p. 75 f.

(10) It will be shown in Chapter Nine here below that we cannot endorse the American descriptivist interpretation of ModE *i*- and *u*-diphthongs as biphonematic groups of the type "vowel + + /j/" (or, respectively, "vowel + /w/"), and that the interpretation of ModE long vowels of the type [a:, ɔ:] and the like as /ah, oh/ etc. is equally unacceptable to us.

(11) When referring to OE, we regularly mean its West Saxon variant, but our conclusions are most probably applicable to all variants of the language.

(12) The phonematic status of ModE [hw] will be discussed further below, Chapter Four.

(13) This consistency was pointed out, as early as in 1929, by B. TRNKA, *Remarks*, pp. 357 ff.; for a more detailed analysis of this set of problems see J. VACHEK, *Two Chapters*, pp. 18 ff.

(14) For the meaning of this term, see J. VACHEK, *Dictionnaire*, s. v. *Position de la différenciation maximum des phonèmes*.

(15) Some remarkable phonological aspects of this change will be discussed here further below.

(16) Phoneticians have repeatedly pointed out that the English voiceless laryngal [h] always anticipates that position of speech-organs which is typical of the following vowel. According to E. SIEVERS (*Grundzüge*, p. 83), the first to notice the fact was W. D. WHITNEY. In our times, the point was very ably discussed by the late E. DIETH (*Vademekum*, p. 101f.); recently, reference to it can be found in D. JONES's *Outline* (§§ 777—8).

(17) The existence in EOE of the quantitative correlation of vowels which can be taken for granted (see J. VACHEK, *Anal. Trend*, p. 45) excludes the possibility of the correlation of contact (in. E. SIEVERS' terminology, "stark" *vs.* "schwach geschnittener Akzent") in OE vowels. Under these circumstances, it appears virtually certain that the EOE newly-arisen non-syllabic vowel acquired the quality of the following, not of the preceding syllabic vowel.

(18) The yield had also been reduced by changes of the types *hēahne > hēanne*, and *feorhes, wealhes > fēores, wēales* (for more comment on these chan ges see J. VACHEK, *Interplay*

footnote 37), not to speak of the already prehistoric dissimilation of -χs- > -ks- (as in *weaxan*).

(19) The phonematic problems of English /h/ followed by semivocalic /j/ or /h/ will be discussed in some detail further below (Chapters Three and Four).

(20) O. JESPERSEN, *Lehrbuch*, p. 98; W. HORN—M. LEHNERT, *LL*, pp. 864—882.

(21) On this point, see V. MATHESIUS, *Sprachgut*.

(22) See his *Économie*, published in 1955; his penetrating observation and far-reaching vistas supply a most encouraging and convincing frame for our own findings (much more modest in scope and in their theoretical background), going back to 1952; see our paper Foném *h/χ*, published more than a decade ago.

(23) In TRUBETZKOY's terminology such groupings are referred to as "Kórrelationsbündel" (see *Grundzüge*, p. 78).

(24) The use of the symbol *h* was prompted here by the Norman scribal tradition; as is well known, the spelling *wh-* has survived in English to this day, though of course for another phonic value in the British Standard — the original value is still maintained in Northern England and partly in the North American standard.

(25) In the opinion of R. QUIRK—C. L. WRENN (*OEG*, § 21) and A. CAMPBELL (*OEG*, § 461) the stages [R, L, N, W] were already reached in LOE, while K. LUICK (*Hist. Gr.*, § 704 believes that they did not emerge before EME.

(26) In LUICK's opinion (*Hist. Gr.*, § 707), the vacillation in spelling between *rh* and *r* and the like in the 12th century reflects the struggle between a historical and a "phonetic" spelling. This should mean that as early as that time the change *R > r* should have been accomplished (except in Kent).

(27) The fact is the more remarkable that the fourth of the EME voiceless sonants [W] managed to escape, at least temporarily, the above-stated eliminating tendency. As, however, the case of [W] reveals some specific features, its detailed analysis is given further below (Chapter Four).

(28) Cf. further below, Chapter Seven.

(29) The only other phoneme of the type was the ME /š/ which, however, was to obtain its voiced counterpart /ž/ in the near future. It should also be noted that /š/ differed profoundly from /h/ by its very steady position in the system, and so the need for its voiced partner was much more pressing than the need of the declining phoneme /h/.

(30) On the ground of this articulatory remoteness some scholars even go so far as to deny any, possibility of the allophonic relationship between χ and *h*. For the LOE and EME periods, however, such relationship is advocated not only by the complementary distribution of the two sounds but also by the scribal practice, employing one symbol *h* for both (though in EME some differentiation begins to be assert itself, see below).

(31) Compare with this the commonly admitted accelerating influence of French upon the process of re-building the 'synthetical' grammatical system of OE into the 'analytical' system of ME (cf. e.g., F. MOSEÉ, *Esquisse*, p. 97; A. C. BAUGH, *History*, p. 200).

(32) In some instances, however, the operation of the tendency may result not in the elimination of a slightly utilized phoneme but in the restoration of its full functional capacity. This may be done by strengthening the position of the phoneme in various ways, such as by sound changes, domestication of loan-words, etc. (see, e.g., the strengthening of the position of the slightly utilized Gmc. *ē²*-vowel in OE through changes of palatal umlaut, emphatic lengthening of *e*, etc.).

(33) See especially the ME elimination of long consonants, discussed by KURATH, *Loss*.

(34) See K. MARX—F. ENGELS, *AB*, p. 503.

(35) The change most probably took place in the prehistory of individual Germanic languages; J. JANKO (*Lautwert*, p. 60—61) puts it into Primitive Western Germanic; in his opinion, in Gothic and Northern Germanic it must have occurred even earlier. Here it should be observed that the opinion of STOCKWELL and BARRIT (*Digraphs*, p. 388) urging that both the initial and the final *h* of *hēah* were "voiceless spirants of the [χ-] or [ç-] type" is clearly at variance with obvious phonetic and historical evidence (see KUHN and QUIRK, *Reply*, p. 393).

(36) This change must have preceded the OE "breaking" of palatal vowels in words like *eoh*, *eahu* etc.; diphthongizations of palatal vowels implied by this change can easily be explained as due to the influence of the following χ, but hardly to that of the following *h*. It should be realized, that is to say, that as for the articulatory situation in the oral cavity, the voiceless *h*-sound is characterized by no specific position of its own of the tongue, lips, etc., but shares the position of these organs typical of the preceding (or, respectively, following) vowel, as in *eoh* (or, respectively, *eahu*).

(37) For the phonological relations of Prim. Gmc. consonants see B. TRNKA, *From Germ.*, pp. 139 ff.

(38) The present chapter is a revised version of our paper *She* (see Bibl.).

(39) Two proper names are sometimes believed to furnish such evidence. They are the geographical names *Shetland* (Islands) and *Shapinsha* (an island in the Orkney group), which correspond to the Scandinavian forms *Hjaltland* and *Hjalpandisøy*; respectively (see SARRAZIN, l. c.). But in these words we have to do, most probably, with the phenomenon of substitution for an unusual phonematic fact found in a foreign word, not with a sound change in the proper sense of the word. — A. H. SMITH *(Some Place-names)* quotes three additional Northern English place-names, *Shap, Shawn Rigg*, and *Shipton*, in which *Sh-* also appears to go back to *hjĕ < hĕa-* or *hĕo-*. In these cases the shift of balance in the diphthong (such as *hĕa > hẹä̀*), essential for the rise of the cluster *hj-* — and also for its subsequent change into ç̣ to be finally substituted for by *š* —, may have been due to Scandinavian influence. Thus the *Sh-*forms of these place-names may represent original Scandinavian variants of domestic *H-*forms; one would have to do here again with phenomena of substitution rather than with real sound changes. (On the general aspect of the problem of foreign influence, see Note 50 below; here the present writer wants to note his acknowledgement to Prof. L. ZATOČIL and Dr. J. FIRBAS, the discussion with whom have considerably helped him to clear the problem.) A. H. SMITH also maintains the view that ME *schọ̄/schẹ̄* should be traced back to EME *hẹ̄o*, but fails to envisage the problem in all its complexity.

(40) It should also be noted that the cluster [hj], known from ModE words like *huge, human* etc., was to not emerge in English before the middle of the 16th century. Thus the EME cluster [hj], finding no support in the phonematic system of its period, had only one course open — that of being changed into [ç]. Some aspects of the phonematic problem of [hj] in ModE will be dealt with further below (Chapter Four).

(41) Needless to say, we are not losing sight of the fact that, following the pattern set by French, the EME letter *h* indicated not only voicelessness but also other modifications of the sound denoted by the preceding letter (see, e.g., the digraphs *ch, th*, and also *gh* which was spreading at the expense of older, more consistent ʒh). But it is certainly worth noting that after the letters denoting the sonant sounds the use of the letter *h* appears to be have been invariably associated with the indication of voicelessness. It is therefore highly probable that in the digraph ʒh (where ʒ stood for [j]), the function of the letter *h* is to interpreted analogously. Consequently LUICK's suggestion that the symbol ʒ also stands for the "palatal χ" does not seem particularly convincing.

(42) A closer analysis of the problems connected with the EME /W/-phoneme and its further development is presented further below (Chapter Four).

(43) Thus, e.g., D. JONES *(Outline,* § 818) contrasts the English semivowel [j] to the German [j], which is a distinctly fricative sound. — The semivocalic character of English [j] is in no way contradicted by the EModE assibilation phenomena of the types [tj > tš, dj > dž] (in words like *nature, vendure*). It will be easily understood that in articulating [j] immediately after the sounds [t, d] the tongue, following the principle of economy of articulation, takes up the position closer to the alveoli than in the absolute beginning of a word. In this manner, the sound [j] acquires more of the fricative character than is usually the case, and is therefore more susceptible of being assibilated.

(44) It should be understood that we are speaking here not of the fricative [r]-sound, common in the present-day SES, but of the "trilled [r]", which appears to have been common, in prevocalic positions at least, both in OE and in ME. Here we follow the opinions of H. SWEET *(HES,* § 506-7), H. C. WYLD *(SHE,* p. 34), and K. BÜLBRING *(Ae. Eltb.,* p. 185). On the other hand, K. BRUNNER *(Ae. Gr.,* p. 149) believes that the OE *r* was a cerebral sound. The theory, evidently based on the phenomena of "breaking", can be true at most of the sound *r* in a set of preconsonantal positions, certainly not of the prevocalic *r* in the absolute beginning of a word. Finally, it is worth pointing out that K. LUICK *(Hist. Gr.,* § 143) explains the facts of "breaking" without assuming the cerebral articulation of the OE *r*-sound. He only supposes that the back part of the tongue blade was somewhat raised, possibly to the accompaniment of labialization. — Needless to say, the phonematic character of EModE *r* is a separate problem the solution of which is not necessarily dependent on the answer to the question of the phonetic character of OE *r*.

(45) K. LUICK, too, is of the opinion that in southern and western EME *họ̄* the first component of the diphthong ẹọ̄ was dropped ("wurde abgeworfen"); he puts this loss of ẹ on one level with cases like OE *sẹowan* > EME *sʒwen*, OE *cẹõsan* > EME *chọsen*, etc. There was, however, a profound difference between the group *hj* which had arisen in *hẹõ*, and the groups *sj, k'j*, which had emerged in *sẹõwian, cẹõsan*. In the groups *sj, k'j* — whatever the phonematic value of *k'* may have been in OE — the former of the two component sounds was physiologically and acoustically more conspicuous than the latter: thus the mutual influence of the

two components resulted in the absorption of the latter by the former, which, naturally, may have somewhat modified the pronunciation of the absorbing sound (if any modification of the kind was feasible, see below). In this way the group *sj* passed into a palatalized sound *s'*, which would have necessarily acquired the status of a separate but very slightly utilized phoneme, and therefore was promptly substituted by *s*. — The case of the group *k'j* was somewhat different: its former component had been palatal before, and thus it could not have been affected by the palatalizing influence of the latter element *j*. Still, one could hardly say that the element *j* "was dropped" in that group — rather it was absorbed by *k'*. (Incidentally, changes of the type ӡᴇoc > *yok*, ӡᴇāra > *yǫre* could be commented analogously.) — On the other hand, the group *hj* was of profoundly different character, as the physiologically and acoustically more conspicuous of its elements proved to be the latter of the two, i.e. *j* : it is commonly known that in pronouncing the ModE sound [h], the superglottal organs (esp. the tongue and the lips) simply anticipate the positions to be taken by them in the articulation of the following vowel (see above, p. 11). Undoubtedly, the OE and EME initial sound *h*-must have had like character before vowels, and certainly also before the semivocalic *j*. This articulatory dependence of *h* on the following vowel (or semivowel) shows unmistakably that in the cluster *hj* the mutual influence of its two component elements must have resulted in the absorption of the former by the latter: the position of the articulatory organs typical of *j* was preserved but owing to the influence of *h* the absorbing sound lost its voice, and thus the outcome of the process was [ç]. — To sum up, the supposed change of *heǒ* > *hǭ* cannot be justified by changes of the type *sᴇowian* > *sᴑwen*, *ceōsan* > *chǭsen*; the form *hǭ* must be accounted for differently, with due consideration of both the phonetic and the phonematic issues involved. An attempt at an explanation of the type will be presented in the following lines.

(46) Incidentally, this phonetic equivalence may have lain at the bottom of the scribal practice that extended the use of the digraph ӡ*h* so as to cover words like *niӡht*, *riӡht*. The digraph had originally denoted the velar fricative sound χ (as in *tauӡhte*) and also the initial voiceless *j*-sound in ӡ*hē* (see above, Note 41). The extension was made more feasible by the fact of the variant relation, then clearly existing between the sounds χ and ç, both of which had belonged to one and the same phoneme since OE, and even earlier periods (see here above, Chapter Two).

(47) Some of the functions, however, came to be taken over by the new demonstrative pronoun *that*, which was built up on the basis of the original neuter form of the OE pronoun *sē*.

(48) On the process of this disappearance, see interesting comment by H. C. WYLD (*SHE*, p. 222 f.). It reveals that the old feminine demonstrative form *sēo* had become completely extinct in the East Mdl. records by the middle of the 12th century. From about the same period dates the first available evidence for the East Mdl. form *schē* (written *scæ*) in the Peterborough Chronicle. Though the evidence is not accepted by some scholars, it is very difficult to find any other explanation for the spelling, reoccurring five times in the text (SARRAZIN, l. c., tries to do so, but with very little success).

(49) The validity of our above thesis is borne out by the fact that in the 14th century some West Mdl. areas presented our pronoun under the form *hǭ* (written *hue*, see the WRIGHTS, l. c.). This form was a regular development of OE *hēo*, which apparently had not been ousted by *heǒ* in those areas, unlike in East Midlands. In our opinion, the absence of the ousting process can only be explained by the fact that in the concerned areas no danger of homonymy of the masculine and feminine forms of the pronoun was imminent (and was not to become so for some time to come). The absence of the danger, again, was due to the fact that in those areas ō̇ was to keep its labialized character up to the end of the 14th century (in some places even to a later date, see the WRIGHTS, l. c., § 65; K. LUICK, *Hist. Gr.*, § 357).

(50) It has been suggested by some scholars that the penetration of the EME form *schē* may have been due, at least in part, to the influence of the Scandinavian form *sjá*. The sceptical attitude of most scholars towards this possibility appears fully justified (see SARRAZIN, l. c., LUICK, l. c.). Rather, one might admit some participation of Scandinavian influence in bringing about the shift of balance in the diphthongs *ēǫ*, *ēǫ* > *ǫā*, *ǫō* (see above, Note 39); it will be remembered that the shift was an essential condition for the rise of the cluster *hj*- in the pronominal form). But even if the operation of the foreign factor were to be admitted to have played some part in the process, its influence could have asserted itself only in so far as it was in agreement with the needs of the English language system as a whole. (On the absorption of foreign elements into the grammatical system of language see V. N. YARTSEVA, *O vnutr. zak.*, pp. 193—205). YARTSEVA urges that only such foreign elements are admitted into the grammatical structure of language, as are not contradictory to its structure. — In our opinion, the thesis applies to the phonic aspect of language with equal validity. — Inciden-

(51) This chapter is a revised version of our paper on *WH-Sounds* (see Bibliography).

(52) Except, of course, words of emotional or onomatopoeic character, such as Southern English *whew, whoo,* in which [W] or [h] alone is heard, or *whoop,* commonly containing [h]; in such cases the absence of [w] is motivated by the special semantic character of the words concerned. Exceptions of other types (such as *who* and *whole*) will be discussed further below.

(53) It is well worth pointing out that already HENRY SWEET was aware of the connection existing between the early disappearance of the *R, L, N* and the fact of their minimum positional occurrence (he did not see, however, the functional aspect of the problem). In his *Engl. Gram.,* I, p. 262 he says: "The change of *hr* (i.e. *R,* J. V.) to *r,* etc. was not a phonetic weakening, but was a process of levelling, the few words beginning with *hr,* etc. being absorbed, as it were, into the much larger group of words beginning with the voiced sounds."

(54) See, e.g., J. MAROUZEAU, *Lexique,* s. v. *Sonante.*

(55) Again, it is worth recalling that H. SWEET accounted for the endurance of [W] by its occurrence in this type of words. He believed, however, that the decisive factor was the fact of frequency of such words (see his *Engl. Gram.* I, p. 262). Thus SWEET reduced the process to a purely mechanical application of facts of the quantitative order, overlooking the importance of the semantic link uniting all the words concerned.

(56) SWEET's conviction of 1888, however, that the pronunciation of [W] would become general in the SES within one generation's time, has never been borne out by the actual development of English.

(57) See the item *Wh* in the NED in which [W] is denoted as a pronunciation of "a large proportion of educated speakers in England, either from social or educational tradition, or from a preference for what is considered a careful or correct pronunciation."

(58) Apart from this, of course, it may be substituted for by the voiced [l]-sound. The substitution by means of [θl] is registered by D. JONES, *EEPD,* in the following proper names: *Llanberis, Llandilo, Llandovery, Llandrindod Wells, Llandudno, Llanfair, Llanfairchefan, Llanelly, Llangatock, Llangollen, Llanrwst, Llanuwchllyn, Llewellyn* and *Llywelyn*; it is not noted, however, in the domesticated name *Lloyd,* in which [L] seems to have been by now universally replaced by [l].

(59) Known from words like *huge, human, hew,* but also from the interjection *hear*! and some other cases to be discussed below.

(60) With one exception that will be dealt with later in the present chapter.

(61) There was, of course, another factor that co-operated in preserving the pronunciation with the voiceless element, viz. the spelling. Owing to its influence the said pronunciation type has been maintained also in those words which lay outside the limits of the interrogative group (such as *white, whistle,* etc.).

(62) H. C. WYLD, *HMCE*[2], p. 312.

(63) Cf. YARTSEVA's thesis referred to above, Note 50.

(64) This was due partly to the fact that the interrogative clauses in EModE came to be characterized by some additional features, absent or not so pregnant in the earlier periods (such as the use of the auxiliary *do,* the marked word-order), and partly to the fact that the interrogative words beginning in *wh-* were acquiring other functions (especially the relative).

(65) A numerical analysis of the material contained in D. JONES's *EEPD* gives the following results: Out of the total number of 59 words, there are 16 proper names, 8 words of Romance origin, 17 words of the Graeco-Latin type, and 18 home-words (out of which number, however, 14 are derivatives of *here* or *hear,* so that the actual number of basic home-words beginning in [hj] shrinks to four: *hear, here, hew* and *hue*).

(66) In the word-type *hear, here* the cluster [hj] cannot have been of earlier origin than the cluster [hj] going back to *hi-* before *-u*; probably it arose somewhat later. Its rise in the word-type *hear/here* presupposes a shift of balance in the centring diphthong [iə], which again presupposes the rise of the centring diphthongs themselves, i.e. the acquirement of the status of phoneme by the original transitory sound [ə] before [r]. It is highly improbable that all the stages of this long process should have been accomplished before the end of the 16th century (possibly they extended far into the 17th).

(67) In the earlier history of English we come across an isolated emergence of the [hj]-cluster in the EME forms of the fem. personal pronoun *ʒhǭ, ʒhę̄* which developed into [ç] but soon became eliminated, being a peripheral element of the EME phonematic system. On this interesting episode of the phonematic development of English see above, Chapter Three.

(68) Let us note, in passing, that in the Northern American standard (where the pronunciation of [ç] is witnessed by C. K. THOMAS, *Introduction* p. 102) the pronunciation with [j] exists —

according to KENYON and KNOTT's *PDAE* — in three words, *huge*, *human*, and *humor* (and, of course, in the derivatives of the last-mentioned). Here, too, the initial [j]-sound is most probably of old origin.

(69) As far as we were able to find out, phonetic literature does not distinguish between [hj] and [ç] from the stylistic point-of-view. — The problem of the phonematic evaluation of the sounds [ç] and [W] was dealt with by A. COHEN, *Phonemes*. Our own discussion of the problem exposes COHEN's solution as rather inadequate in the case of [ç] and quite erroneous in the case of [W] (see also G. L. TRAGER's comment in Language 29, 1953, pp. 564 ff.). The phonematic interpretation of [W] given by B. BLOCH and G. L. TRAGER in their *Outline*, p. 42 — and also, incidentally, by L. BLOOMFIELD in his *Language*, p. 131 — is correct but does not take into consideration all aspects of the problem, both synchronistic and diachronistic.

(70) It may be of some interest that, in the domain of the [j]-sound, a rather distant analogy of such irregular correspondence types may be found in the completely isolated case of [ç — j] (or [hj — j]), occurring in the forms [çu:mə — ju:mə] (or [hju:mə — ju:mə]), see above p. 35. In this case, of course, the old-fashioned pronunciation with [j] would represent the "minority type" of pronunciation. Needless to say, apart from this isolated pair of word-forms no other cases of such correspondence can be ascertained in the SES.

(71) Here it is necessary to point out the fact that O. JESPERREN, though well aware of the co-existence of [W] and [hw], does not always distinguish them quite systematically in his references, placing them on the same level in many respects. (The same is true, to some extent at least, of D. JONES.) For this reason it is difficult to say whether the above remark of O. Jespersen's refers to [W] or [hw] or both. The insufficient distinction is probably due to the fact that the scholars regarded the difference of the two phonic facts as semantically negligible. Still, if the arguments developed here are true, they should be carefully kept apart on account of the important functional implications of the difference.

(72) If this is the true account of facts, then the stylistically unmarked counterpart of [W] and [hw] would be, of course, [w] — one would have to do here with a tripartite relation of

$$[w] \Big\langle \begin{matrix} [W] \\ | \\ [hw] \end{matrix}$$.

(73) Except, of course, for the isolated case of the old-fashioned pronunciation [ju:mə], discussed above.

(74) In this connection, it is well worth pointing out D. JONES's classification of the ModE sounds [j] and [w] as semivowels (see his *Outline*, §§ 801, 813, 818).

(75) An analysis of the conditions prevailing in the area north of the Humber lies outside the scope of the present chapter. Still, it may be noted that the regular preservation of [W] (and [hw]?) in those dialects appears to go hand in hand with the preservation of [h-] which is never "dropped" in that area (see LUICK, *Hist. Gr.*, §§ 790, 792). For the special development of [W] in the north-east of Scotland (where [W] became changed into [f]) see here above, Chapter Three.

(76) The agreement in the tongue position between the sound [h] and the vowel immediately following it in speech has been pointed out here above, Note 16.

(77) This has been duly emphasized by E. KRUISINGA (*Handbook*, p. 32) who speaks expressly about "the tongue and lips" and, later on, of "the superglottal organs" in general.

(78) The acoustic difference is due to a slight difference in the degree of opening of the glottis: in [W] it is slightly wider than in [h]. JESPERSEN in his *Lehrbuch* (p. 92 ff.), distinguished the two positions by his formulas ε3 and ε2, respectively.

(79) See, e. g., the item *Wh* in the *NED*.

(80) According to the data supplied by the *NED*, the earliest evidence of such spelling is found for the word *home* (dating from cca 1420); of 15th century origin are also the spellings with *wh-* of the words *hot* and *hoar*; the *wh-*spellings of the other items enumerated above date from the 16th century. — The earliest evidence of the *wh-*spelling in *whole* goes back to cca 1420, the word *whore* has been spelt with *wh-* since the 16th century.

(81) Incidentally, this last piece of evidence is not well chosen — the initial *h-* in the word *herb* was a purely graphical fact until the 16th century, when it was introduced into the pronunciation by the theorists of the New Learning period.

(82) See here above, Chapter Three.

(83) There is also a possibility of an alternative explanation of the process; the clusters [hw] and [hj] may have automatically developed into [W] and [ç] respectively (such changes would be closely analogous to those which had taken place in the OE clusters *hr*, *hl*, *hn*, and *hw* — see here above, section II). Of the resulting sounds, [W] was preserved, as the phoneme /W/ was fairly common to the language of that period. On the other hand, the

sound [ç], having no phonematic value in the language, was soon substituted for by the value standing closest to it, i.e. by the phoneme /j/.

(84) Of the other words of this type — their number is rather scarce —, only *herb* is worth mentioning: its *h-*, of course, was introduced into the pronunciation much later by external factors (see above, Note 81).

(85) If there really were cases of [W-] in the 16th century pronunciation of such words (though this is very unlikely), then the [W]-sound in them did not reflect the former south-western dialectal sound, but was simply due to the more recent — and passing — influence of spelling.

(86) See J. WRIGHT—E. M. WRIGHT, *EHNEG* § 284. WRIGHT's statement, however, is tinged with some hesitation; he urges that, after all, "it is reasonable to suppose that it (i.e. the form *whore*), like *whole*, is an old dialect form".

(87) In other words, the above-described contamination of the sandhi types $h\rho l$ — $w\rho l$, common in the south-western dialects, never really occurred in the two words. A careful examination of all cases quoted by LUICK and other authorities shows that the diphthongizations of ρ-/$h\rho$- and $\bar{e}$-/$h\bar{e}$- into $w\bar{\rho}$-/$wh\bar{\rho}$- and $y\bar{e}$-/$y\bar{e}$-, respectively, can only apply to the open $\bar{e}$ and $\bar{\rho}$-vowel cases, not to those in which closed $\bar{\rho}$- and $\bar{e}$-vowels were concerned. It has been noted above that no safe case of $h\bar{e}$- could be noted by Luick; further, forms like $\dddot{,}\bar{e}l$, $\dddot{,}\bar{e}ven$ were unknown in the south-western area. Of the cases of $w\bar{\rho}$-, only $w\bar{\rho}ther$ is worth considering, which, however, certainly owes its *w-* to the analogy of $w\jmath n$, not to the operation of a sound change.

(88) Still, one cannot rule out the possibility that some of the above mentioned spellings may be based on the correspondence *wh*/[h] alone, that is to say that the dialectal [W]-sound never penetrated into such words either in LME or in EModE. The possibility should be taken into account especially in the cases of those words whose *wh*-spellings go no further back than the 16th century.

(89) The distinctive function played by the *wh*-spelling in the two words was duly stressed by K. LUICK, *Hist. Gr.*, § 435.1. — The whole complex of the problems connected with the development of the written norm of English was discussed by J. VACHEK, *Two Chapters*.

(90) The present chapter is a thoroughly revised version of our paper *ModE /ŋ/-Sound* (see Bibl.).

(91) See, e.g., D. JONES, *Phoneme*, §§ 75, 116.

(92) E. SAPIR, *Sound Patterns*, pp. 37—51.

(93) This allophonic interpretation would also hold good for the very few instances of word-initial [ŋ] that can be found in manifestly foreign proper names, such as *Ngami* [ŋgami] and *Ngkrumah* [ŋkrumə].

(94) See, e.g., the case of ModE [W], phonematically interpreted as /hw/ (see here above, Chapter Four).

(95) N. S. TRUBETZKOY, *Grundzüge*, pp. 242 ff.

(96) The latter word has a fairly long history in English: the earliest of its occurrences registered by the *NED* goes back to 1435.

(97) This subject is developed in some detail by J. VACHEK, *Anal. Trend*, p. 24 f.

(98) For other manifestations of such tendencies see further below, Chapters Seven and Eight.

(99) In D. JONES' opinion, this change took place in the 14th century; similarly K. LUICK, *Hist. Gr.*, pp. 1035 ff.; E. J. DOBSON, *Engl. Pron.*, pp 963 ff. places the change into the 14th century in vulgar London English, while in the standard speech, in his view, the [-ŋg] was maintained until the late 16th century.

(100) So far this interpretation has been backed not only by D. JONES and E. J. DOBSON but also by all members of the Prague group who have dealt with the problem (V. MATHESIUS, B. TRNKA, J. VACHEK, and others).

(101) Together with the spelling *-ng*, of course. But the influence of the written norm would hardly have been of any moment, if it had not acted in the same direction as the above-described strong tendencies operating in the spoken norm of the language.

(102) See D. JONES, *EEPD*; W. HORN—M. LEHNERT, *LL*, p. 839, point out that the pronunciation of these two words with [-ŋl-] was already registered by Gill in 1619. Cf. also E. J. DOBSON, *Engl. Pron.*, p. 972.

(103) The reasons given by DOBSON (p. 972) for the presence of [ŋg] in such words are not always convincing. Thus, e. g., in *anguish* the presence of [g] is explained as due to the fact that [gw] may function in English as an initial group, like in *Gwen*. This latter word, however, is manifestly a foreign element in the English word stock, in which the initial [gw-] is otherwise unknown. Besides, in words like *angle* the presence of [ŋg] is accounted for by DOBSON as due to the common replacement of the syllabic [l] by [əl], so that the group [ŋg] then becomes intervocalic. Yet the pronunciation with [əl], characteristic of a *lento* style of speech, and occurring therefore rather rarely in common communication, can hardly be

(104) The most detailed discussion of the change is given by HORN—LEHNERT, pp. 839—847; see also LUICK, pp. 1044—1046, and DOBSON, pp. 950—951.

(105) The purely phonetic history of that loss was very aptly described by LUICK, Hist. Gr., p. 1038.

(106) It is certainly remarkable that the unstressed prefixes and sometimes even the stressed ones), such as *in-*, *un-*, *con-*, etc., regularly preserve their [-n] in pronunciation, even if the initial consonant of the following stem morpheme is [k-] or [g-] (a small number of exceptions may, of course, be found; see D. JONES, *EEPD*).

(107) Another dialectal change may be quoted here which reveals another attempt at undermining the phonematic status of EModE /ŋ/. It was the change of the stressed [-iŋ] > [-iŋk] (phonematically, /-iŋk-/). But the geographical scope of the change was only a limited one (cf. HORN—LEHNERT, *LL*, p. 847).

(108) The main theses of this chapter were published in our paper *Decline* (see Bibliography), of which a revised version is here presented.

(109) See, e.g., D. JONES, *Outline*, § 755.

(110) Cf. the penetrating remarks by H. KURATH, *Loss*.

(111) See K. LUICK, *Hist. Gr.*, § 567. According to W. HORN—M. LEHNERT, *LL*, § 430, the EModE *r* was "ein zurückgebogener Laut." — Most recently, E. J. DOBSON, *Engl. Pron.*, p. 724, is inclined to ascribe the lowering influence exercised by *r* on the preceding vowels to "a change in the nature of the consonant, from point-trilled to a variety of the PresE point fricative", leaving aside the question of whether there was any inverted articulation about this fricative or not. Still, in the following lines DOBSON endorses D. JONES's statement concerning the equivalence of the frictionless continuant variety of *r* to a weakly pronounced "retroflex [ə]"; he opines that the mutual resemblance of the two sounds can account for the rise of the ə-glide before *r*. It is perhaps not too bold to argue that this endorsement shows that DOBSON's opinion does not necessarily contradict here the theses voiced by LUICK and HORN—LEHNERT. DOBSON may be perfectly right in attributing the specific influence of ME and EModE non-prevocalic *r* upon the preceding vowels to the essential fact that such *r* had ceased being a trill and become a fricative; if this was so, it was hardly of importance whether the friction was taking place in the alveolar region or further back, against the front part of the palate — both ways of articulation may have had the same effect. It is only on the above-mentioned evidence of the NE and GA standards that one is led to the assumption of the inverted articulation of the EModE non-prevocalic *r*-sound.

(112) E. SIEVERS, *Ags. Gr.*, p. 130; his opinion is upheld by the more recent version of the book, prepared by K. BRUNNER (e. g., *Ae. Gr.*, p. 149).

(113) H. SWEET, *HES*, § 506; H. C. WYLD, *SHE*, p. 34; K. LUICK, *Hist. Gr.*, § 143; E. J. DOBSON l. c., p. 724.

(114) The bimoric value of OE long vowels and "long diphthongs" is discussed by J. VACHEK, *Anal. Trend*, pp. 44—53.

(115) The omission of *r* in such positions must have taken place by the close of the 15th century in colloquial speech but about two and a half centuries later in cultivated speech (LUICK, *Hist. Gr.*, § 567; HORN—LEHNERT, *LL*, § 431f.).

(116) For particulars, see D. JONES, *Outline*, § 759f.; W. HORN—M. LEHNERT, *LL*, § 433, who point out that the phenomenon has also been registered in English local dialects and the Eastern variety of American pronunciation.

(117) A peculiar instance of the use of the hiatus *r* by a child was kindly communicated to me by Dr. W. R. LEE: a little girl, aged 8, used the form [ə ræpl], meaning *an apple*.

(118) It may be of interest to note that the delimitative *r* somewhat resembles the French "mots de liaison", like /z/, /t/ etc., established by V. HOŘEJŠÍ, *Pokus*.

(119) V. HOŘEJŠÍ in the paper referred to above (Note 118) explains the decrease of the use of liaison in French as a manifestation of an effort to individualize the French word (i. e., to achieve its clearer delimitation in the context of the sentence). If this motive is also present in the above-described English tendency to abolish the hiatus *r*, it can hardly claim to be the primary force underlying the process; it may, of course, be regarded as a sort of catalyzer, contributing to the intensity of the said tendency.

(120) Cf. W. HORN—M. LEHNERT, *LL*, § 434.

(121) Cf. J. VACHEK, *Prof. Luick*, p. 277f.

(122) An interesting piece of evidence of the above fact was kindly communicated to me by Prof. D. B. FRY: A little girl was instructed by her parents to pronounce words like *train*,

truck in a careful manner. Soon she astonished her parents by pronouncing the word *satchel* like [sætrel].

(123) D. Jones, *Outline.* §§ 749, 797; Ida C. Ward, *Phon.*, § 360.
(124) Incidentally, the phonematic merger of /r/ and /w/ also exposes the inadequacy of the phonematic interpretation of English *u*-diphthongs as "vowel + /w/". If this kind of inter-. pretation were correct, members of SES word-pairs like *curry — cowie* [kʌri — kaui] would have to be regarded as virtual homonyms after the merger. And yet they would continue being kept apart as [kʌwi — kaui]; the difference of the two froms rests not so much in the different qualities of the vowels [ʌ] and [a] as in the contrast between the consonantal [w] and the 'semivocalic' [u̯], often realized rather as non-syllabic [o] or even [ɔ]. This clearly demonstrates the unpracticability of phonematic interpretations evaluating the second component part of the English *u*-diphthongs as /w/.
(125) Many books and papers have been devoted to this subject; for English see especially E. Bachmann, *Einfluß*; for French, V. Buben, *Influence.*
(126) For more comment on the co-operation of internal and external motives in language develop- ment see above, Chapter Two.
(127) This change was discussed by A. I. Smirnitskiy in his posthumously printed, highly original paper *Otpadenie.*
(128) Theoretically, it might be possible to assume that the LME non-prevocalic *r*-sound was an alveolar fricative (this seems to be held by E. J. Dobson); physiological considerations would not necessarily contradict this theory, but, as noted above, the NE and GA facts distinctly advocate the opinion held by Luick and Horn—Lehnert.
(129) Horn and Lehnert opine that the initial trilled *r* did not develop to the present-day SES alveolar fricative *viâ* the inverted *r* but directly (see LL § 430); this, of course, leaves unexplained the GA state of things in which the articulation of the initial *r*- is just as inverted as that of the non-prevocalic *r*. But this issue is irrelevant for our main theme, the decline of the /r/-phoneme in the SES, and therefore we will not work it out in detail.
(130) The various amounts of semantic relevancy, typical of various positions in the word, are remarkably borne out by the findings of the modern theory of information (see esp. Jerome S. Bruner—Donald O'Down, Language and Speech 1, pp. 98—101).
(131) Cf. also above, Chapter Three, Section IV. — One can heartily agree with A. Martinet when he urges (*Économie*, p. 169f.) that the loss of inflexional endings in originally synthetic languages, developing more or less analytic grammatical structures, cannot be explained on purely mechanical grounds, as exclusively due to the reducing influence of strong dynamic accent. The operation of such accent, that is to say, was rendered possible by the greater semantic importance which the members of the language community began to attach to the word-stem at the expense of the ending morphemes. It is fair to state that an anal- ogous theory was propounded (though unfortunately never published) by V. Marthesius in his lectures on the development of English.
(132) A similar structural isolation is a characteristic feature of three more ModE consonant phonemes, viz. /h/ (see here above, Chapter Two), /w/ and /l/. As has been shown in Section II of the present chapter, an attempt at dealing with the problem of /w/ in the SES phonematic system may be detected in the intended phonematic merger of /r/ and /w/; such merger would considerably increase the distributional capacity of /w/ and so prop up its position in the language. — As regards /l/, its distributional capacity in ModE is relatively high, so that no sign of any tendency working against it can be ascertained, at least not in the SES standard.
(133) See R. Jakobson, *Consonnes* (esp. p. 40f.).
(134) To all evidence, such phonematic union has really been effected in the GA standard of English where non-syllabic prevocalic [ɚ] (as in *red*) obviously constitutes an allophone of the non-prevocalic syllabic [ɚ] (as in *better, part*); see further below, Chapter Eight.
(135) J. Vachek, *Pomĕr* (see Bibl.).
(136) Cf. Š. Peciar, *K otázke*, and E. Pauliny, *Fonológia* (esp. pp. 76ff.). — It should be said that other evidence given by Peciar against the phonematic identity of Slovak [i] and [j] is not conclusive. This expecially concerns the argument that B. Trnka's "laws of minimal phonological contrast", urging that "phonemes differentiated by a mark of correlation never combine in the same morpheme" (*Gen. Laws*, p. 57), is also applicable to the combin- ation of two allophones of the same phoneme. It is urged that the phonic difference between such allophones is necessarily even less conspicuous that the phonic difference between sounds implementing correlative phonemes. This conclusion, however, is clearly unjustified. The smaller amount of phonic difference is not the essential feature differentiating a combin- ation of allophones from a combination of correlative phonemes. The essential point is

that in the former case one has to do with a geminated phoneme, not with a group of two different phonemes, as in the latter case. Since, then, no group of two different phonemes exists here, the "law of minimal phonological contrast" cannot be applied to it. Of course, there is some sort of contrast between [i] and [j], but it only exists on the prosodic level — phonologically this contrast is inessential. (On the prosodic level of language, see M. RENSKÝ, *Slabika*.)

(137) The above formulation is based on the monophonematic interpretation of StdE *i*- and *u*-diphthongs (we believe to have demonstrated this interpretation three decades ago, cf. J. VACHEK, *Interpretation*, esp. pp. 121ff.). The biphonematic interpretation of these diphthongs, backed especially by the American descriptivist school, evaluates the *i*-diphthongs as combinations of vowel + /j/, and, analogously, the *u*-diphthongs as combinations of vowel + /w/. Should this conception of StdE dipthongs be justified, the sounds [i] and [j] would certainly constitute separate phonemes, in view of instances like /ijt/, /ri'sijv/ etc., containing morphematically homogeneous combinations of the type /i + j/. But phonetic and historical considerations speak emphatically against the phonological identification of the I- or U-element with the consonant [j] or, respectively, [w] (see the above-quoted paper and Chapter Nine further below).

(138) Except, of course, the highly specialized technical term *Yiddish* [jidiš] which clearly ranks as a foreignism, and thus is exempted from the current rules governing the phonematic structure of StdE words.

(139) The fricative pronunciation of OE ʒ̇- before palatal vowels was questioned by some scholars (cf. LUICK, *Hist. Gr.*, §§ 633, 642), but their scepticism never met general acceptance.

(140) For particulars, see here above, Chapters Two and Three.

(141) The assumption sometimes voiced by the writers of such grammars (see, e. g., J. WRIGHT—E. M. WRIGHT, OEG, § 271) that the grapheme *i* in *neriːean*, *heriːean* etc. merely denotes "a vocalic glide which was developed between r and j", cannot hold good: as long as the transitory sound remains a mere glide, its existence is not functionally signifiant, and as such the sound is hardly taken notice of, let alone put down in writing. As soon as it is registered in written utterances, the very registration furnishes clear evidence of the fact that the existence of the sound has been realized, which in turn yields evidence of its functional relevance.

(142) See, e. g., V. MATHESIUS, *Hiát*.

(143) Though an OE non-geminated nasal or liquid could function as a syllabic nucleus, most frequently it developed a svarabhakti vowel that took over the nuclear function (see, e. g., *wæstm — wæstem, hræfn — hræfen*, etc.).

(144) The existence of this functional opposition is in no way disproved by contractions like *friʒnan — frinan*. Such contractions have an exclusively physiological, not phonological, motivation, affect also other vowels before ʒ̇ (cf. *sæʒde > sǣde*), and do not abolish the word-initial group *ʒ̇i*- which never becomes *ɪ̇*-.

(145) The close phonematic relationship of [i] and [j] was obviously characteristic of some other old IE languages. One of the most conspicuous instances of such relationship is certainly that of Latin in which the distribution of [i] and [j] was so complementary that no special grapheme was needed for [j] but *i* could be used throughout. It is thus highly probable that in Latin, too, [i] and [j] constituted allophonic variants of one and the same phoneme. (For a different, though not very convincingly stated view, cf. J. HORECKÝ, *Fonológia*, p. 23ff.)

(146) On this point see, e. g., E. PAULINY, *Fonológia*, esp. pp. 42f.

(147) Cf. H. KUČERA, *Phonology*, esp. p. 31.

(148) Thus, e. g., the analysis of the mutual phonematic relation of the sounds [u] and [w] in different languages might also lead to interesting conclusions. Such an analysis lies, however, outside the scope of the present remarks.

(149) This chapter is a revised version of our paper '*Short M. W.*' (see Bibliography).

(150) The use of the traditional terms 'short' and 'long' in this chapter should be regarded as purely conventional; from the phonematic viewpoint the respective terms 'free' and 'checked' would be more adequate (cf. J. VACHEK, *Anal. Trend*, pp. 44—53).

(151) The fact was clearly revealed by statistical analyses of ModE texts carried out in the English Seminar of the Brno University; contexts subjected to this examination amounted to 400,000 phonemes.

(152) See, e. g., B. TRNKA, *Analysis*, p. 14; similarly N. S. TRUBETZKOY, *Grundzüge*, p. 108f. — The so-called triphthongs of the type [aiə], [auə], formerly also evaluated monophonematically, are now generally admitted to constitute biphonematic groups of the type /ai + ə/, /au + ə/.

(153) For a detailed argument on this point, see J. Vachek, *Interpreution*, p. 125ff.
(154) Of the interpretations contrary to this view the most widely known is certainly that of B. Bloch and G. L. Trager, *Syll. Phon.*, pp. 225 ff.). The authors evaluate ModE *i-* and *u-*diphthongs as biphonematic groups of the type 'vowel + *j*' or 'vowel + *w*' respectively. On the inadequacy of such interpretations see here below, Chapter Nine.
(155) On this point, see J. Vachek, *Interpretation*, p. 131f.
(156) As far as we were able to ascertain, D. Jones (*EEPD*) registers this type of pronunciation also in the following words: *dear, inferior, near, pierce, sincere, superior.*
(157) It is also upheld, though indirectly, by the development found in the Cockney dialect of English. According to the observation of Ida C. Ward (*Phon.*, pp. 120ff.), in Cockney the centring diphthongs are not infrequently replaced by disyllabic groups in which the two elements originally composing the diphthongs have become separated by *j* or *w*, and consequently divided into two successive syllables (thus, the Cockney counterpart of the SES [iə] is often [i:jə]; analogous pairs are SES [uə] — C'[o:wə], SES [ɛə] — C [e:jə]). If the Cockney developments of the English centring diphthongs are compared to the SES developments reflected by the phenomena mentioned above, it will be readily seen that the only common denominator of both kinds of development can be the tendency to restrict the occurrence of the phoneme /ə/ to unstressed syllables alone. The Cockney method of achieving that aim is the more remarkable as it solves the problem on an even wider scale than the method adopted by the SES: the diphthong [ɛə], unaffected by the eliminating tendences in the SES, becomes discarded in Cockney together with the other centring diphthongs.
(158) Kemp Malone, *Phonemes*, pp. 159ff. In his later contributions on the subject Prof. Malone has modified his views on this point.
(159) In their paper quoted above in Note 154. — See also B. Bloch, *Overlapping*, pp. 278ff.
(160) See, e. g., D. Jones, ʌ and ə, 1946, p. 2; Same, *Phoneme*, §§ 202ff.
(161) It is worth pointing out that the application of Bloch and Trager's theory to the conditions found in the SES can hardly be regarded unfair: the American authors state expressly that although their theories are based on the American type of pronunciation, their conclusion may be applicable to other standards of English as well. — The question concerning the validity of the suggested interpretation for American English will be touched later on.
(162) See L. V. Shcherba, *Glasnye*, p. 95.
(163) See K. Luick, *Hist. Gr.*, §§ 528ff. — W. Horn and M. Lehnert, *LL*, § 94 and pass., prefer to regard the sound as a delabialized *o* or *ọ*. — In H. Kökeritz's opinion, by the end of the 16th century [sic! J. V.] the ME *u-*sound "had obviously become an unrounded, centralized, lowered vowel, qualitatively not very different from modern [ʌ]" (*Shakesp. Pron.*, p. 240). Both descriptions undoubtedly refer to a quality similar to, but not identical with, that of ModE [ʌ], which renders the 17th century phonematic identification of the concerned stressed vowel and the unstressed [ə] as good as certain.
(164) Cf. K. Luick, *Hist. Gr.*, § 561, also Anm. 1. — The adduced dating appears most probable in view of further phonematic development (see below). On the ground of objective evidence no exact dating seems possible (cf. W. Horn—M. Lehnert, *LL*, § 96); although Luick is inclined to ascribe the ultimate establishment of the SES [ʌ] to a distinctly later period, viz. to the end of the 18th or the beginning of the 19th century, he frankly admits the difficulties involved in fixing the date ("die Zeit des Überganges ist schwer zu bestimmen", op. cit., § 563).
(165) Cf. K. Luick, *op. cit.*, § 567. — According to W. Horn—M. Lehnert (*LL*, § 431f.), in colloquial speech the change must have taken place earlier than is generally assumed. Here, as elsewhere, the popular pronunciation may have anticipated the phonematic solution to be later adopted by the SES; it is only logical to conclude that the popular pronunciation also reached the stage of [ʌ] for ME ə correspondingly earlier than the SES.
(166) See K. Luick, *op. cit.*, § 567f. — It can be assumed that the stage immediately preceding the ultimate loss of [r] was one in which the articulation of the consonant [r] was only 'indicated' in a manner analogous to the one still found in Nothern English [= NE]. As is generally known, in the NE standard this 'indication' of [r] is effected towards the end of the articulation of the ə-vowel by the simple device of turning the tip of the tongue against the palate (see K. Luick, *op. cit.*, § 566ff; R. J. Lloyd, *Northern English*, Leipzig 1899, § 100ff.) From the phonematic viewpoint, this articulation must have still been evaluated as the phoneme /r/, preceded by a transitory, i. e. non-phonematic ə-sound.
(167) It is certainly worth noting that in the NE Standard where the former ME stressed *u-*vowel appears to have preserved the quality of ə (see, e. g., K. Luick, Hist. Gr., § 563; cf. also above Note 160, the ə-sound corresponding to the one found in the SES centring diphthongs has not acquired the phonematic status owing to the inverted articulation of the final

stage of the ə-vowel; such articulation can hardly be interpreted otherwise than as a proof of the continued existence of the /r/-phoneme in such positions (see above Note 166). In the NE Standard, therefore, those unstressed ə-vowels which are not characterized by the inverted articulation must be phonematically assigned to the stressed ə-vowel (as in *but, love*). — In the General American Standard, where even the preconsonantal [r] has preserved its inverted articulation and where the inverted pronunciation of the final stage of the ə-sound in instances like *here, fair, poor* etc. is even more strongly marked than in the NE Standard, there can be no doubt whatever of the phonematic preservation of /r/ and of the purely transitory character of [ə] in such cases. There, too, the instances of unstressed ə-vowels obviously constitute allophones of the stressed vowel found in words like *but, love*. In its quality this vowel perceptibly differs from the ə-vowel corresponding to it in the SES, while the articulatory and acoustic similarity of the General American vowel to the unstressed [ə] is much closer than in their SES counterparts. (Cf. J. S. KENYON, *Amer. Pron.*, §§ 84, 322). If it is asked why the American stressed ə-vowel has not reached the stage of the SES [ʌ], the answer is not far to seek. The point in the vocalic pattern which the SES stressed ə-vowel was ultimately bound to reach was firmly held in the General American Standard by the *a*-phoneme, corresponding to the SES /ɔ/ (as in *dog, hot*).

(168) See, e. g., K. LUICK, *Hist. Gr.*, § 614; D. JONES, *Outline*, § 362; I. C. WARD, *Pron.*, § 183; W. HORN—M. LEHNERT, *LL*, § 325—326.

(169) Cf. W. HORN—M. LEHNERT, *LL*, § 326. — For American English, see analogous observations of J. S. KENYON, *Amer. Pron.*, § 139 and NATHANIEL M. CAFFEE, *Unstr. V.* (See also below Note 173.)

(170) See J. S. KENYON, *Amer. Pron.*, § 255. — The high mixed wide *i*-vowel (the 'barred i' of TRAGER and SMITH, *Outline*, p. 14 and 20) has been disregarded here; for all that has been written about it (see, e. g., H. A. GLEASON, *Introduction*, p. 231f.), its phonematic status in the GA standard can hardly be regarded as definitely proved. Its detailed discussion, however, must be left to some other occasion.

(171) ALLAN F. HUBBELL, *Analysis*, pp. 105ff. — HUBBELL's monograph on the pronunciation of English in New York City has not been accessible in this country.

(172) Exceptions to this are the instances of posttonic final *-y, -ies, -ied*, pronounced in the dialect as [i, iz, id] (corresponding to the SES [i:z, i:d]). Here the continued unreduced pronunciation of the vowel [i] is due to the preservation of secondary stress. It deserves to be noted that evidence for an analogous unreduced, long pronunciation of the final *i*-vowel can also be found in EModE (see HORN—LEHNERT, *LL*, § 316). — The presence of full vowels in instances like *advisory, unite* [æd-, ju:-] is explained away by the American author as due to the fact that in such cases it is doubtful whether the vowel exhibits 'the weakest degree of stress'. To this it could be added that in such cases one usually has to do with words of foreign character, in which deviations from the normal phonematic distribution can be frequently found.

(173) The said disadvantage was keenly realized by NATHANIEL M. CAFFEE, *Unstr. V.*, pp. 103ff. CAFFEE's own phonematic explanation, suggesting "that the phonemic structure of the vowels of unstressed syllables could be arranged in a classification dependent upon the phonemes of the stressed vowels" (p. 103) does not seem more commendable, as it fails to draw a clear dividing line where any sound phonematic analysis is obliged to draw it, viz. between stressed and half-stressed syllables on one hand, and the wholly unstressed syllables on the other. Nevertheless, some of Caffee's observations are most illuminating, e. g. those which quote instances of restressing [ə] into [ʌ] in American English, see esp. pp. 104—106 of the quoted paper. (Cf. also above Note 169.)

(174) Some parts of the present chapter were published in our Czech paper *Yaleská škola* (see Bibl.), others, in *External Factors* (see Bibl.). In editing the paper partial use was made again of the English translation of the first of the two papers, provided and kindly placed at our disposal by Prof. P. L. GARVIN, whose help is here thankfully acknowledged.

(175) For some other particulars of the biphonematic interpretation see BSE 3, p. 68, Note 92. — The latest biphonematic interpretations are by W. MERLINGEN and by J. C. WELLS (see Bibl.); their respective arguments are discussed at some length in our paper *Phon. Status*.

(176) The symbol /j/ stands here for /y/, regularly used now by the Americans, but having different phonetic consociations in most of European linguistic work.

(177) Cf. J. VACHEK, *Dictionnaire*, s. v. *Corrélation de coupe de syllabe*.

(178) Parenthetically, it should be pointed out that also the further stages of the development of our diphthongs, materialized in the Cockney dialect of English (in many respects carrying further the developmental trends of the SES), speak convincingly for their monophonematic interpretation. Phonic word-structures like [tsəi, lɑidi, rɔit], contrasted with the

corresponding SES structures [ti:, leidi, rait], prove beyond any doubt that the *i*- and *u*-diphthongs continue to be developed (and, therefore, continue to be evaluated by the speakers) as wholes, not as groups of two separate phonemes. — The inadequacy of the descriptivist framework in analyzing the English *i*- and *u*-diphthongs is revealed most conspicuously in the work of those linguists who describe Cockney in terms of this framework (see, e. g., E. SIVERTSEN, *CPhon.*, pp. 34ff., who interprets Cockney [əi] as /ij/, Cockney [ai] as /ej/ etc.). (Cf. J. VACHEK, *Phon. Cock.*)

(179) The contrived character of the biphonematic evaluation of English free vowels was noted more than once (see, e. g., E. HAUGEN — W. F. TWADDELL, *Facts*; H. KURATH, *Binary Int.*); nevertheless, the biphonematic interpretation persists in most of the books and papers written by American descriptivist authors.

(180) As the oscillation of the initial and final elements of [ɔI] appears to be much less marked than that of the elements of [aI, aU] etc., analysts sometimes interpret it as a group of two phonemes /ɔ/ + /I/, not as a monophonematic /ɔI/. Though considerations of systemic homogeneity would advocate rather the monophonematic than the biphonematic evaluation, the thesis presented here further below remains valid whether the former or the latter of the alternative evaluations is adopted.

(181) On the terms 'synchronically domestic'and 'synchronically foreign' see V. MATHESIUS, *Sprachgut.*

(182) LUICK, *l. c.*; HORN — LEHNERT, *LL*, § 185.

(183) Among the first who clearly saw the possibility of the internal motivation of the operation of external factors in the development of language, was B. HAVRÁNEK, who, as early as in 1931, maintained that "ce ne sont que des raisons intrinsèques qui peuvent résoudre la question de savoir pourquoi certaines influences étrangères agissent, trandisque d'autres restent sans effet" (*Contribution*, p. 304). — It is fair to state that some other scholars have anticipated this approach to the problem even earlier, but failed to give it precise formulation (e. g., R. JAKOBSON, *Remarques*, pp. 97 et pass.).

(184) The word *boy* is an exception to this, as it cannot be regarded as synchronically foreign (although E. J. DOBSON, *Boy*, regards it as a French loan-word, too). It may, however, rank as an emotional term; as is commonly admitted, emotional words may also reveal structural features deviating from those found in the purely communicative stock of words.

(185) Analogous underlining of synchronically foreign charcter of words by introducing into them a phonematic item evaluated as a foreignism, may at times be found also in other languages. An instance of such foreignism in vulgar Czech is the phoneme /g/, unknown in domestic word-stock but often introduced into synchronically foreign words, for the purpose of underlining their synchronically foreign status (see instances like *balgón* 'balcony', *cirgus* 'circus', *plagát* 'placard, poster', etc., for the first time pointed out by V. MATHESIUS, *Structure.*).

(186) See here above, Note 183. For a similar, more recent thesis by V. N. YARTSEVA, see here above, Note 50. YARTSEVA's thesis, it should be noted, covers only the grammatical structure of language; our examination, however, gives evidence of its validity on the phonic level as well.

(187) Quite recently, an interesting attempt may be observed in the SES (and some other standards of ModE) at the integration of /ɔI/ in the phonematic pattern of 'long' vowels. The integration is effected by providing a symmetric partner for /ɔI/ by the change of /ou/ into /əu/. For more details, see our paper to be published in SPFFBU A13, 1965.

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SOUHRN

O novoanglických periferních fonémech

I. Periferní složky v jazykové struktuře

Někdy se mylně soudívá, že jazyk je soustava uzavřená, tj. že všechny její složky jsou v ní dokonale a stejně pevně zasazeny. Ve skutečnosti tomu tak ovšem není: v každé jazykové rovině najdeme složky přechodové, jež nelze vždy dobře začlenit k tomu či onomu polárnímu, vyhraněnému typu. Je tomu tak i ve zvukové stavbě jazyka, kde lze zjistit vedle prvků pevně do struktury zařaděných i prvky periferní, zařaděné do struktury méně určitě, ať už proto, že jsou v této struktuře "neplně integrovány" (termín MARTINETŮv), či proto, že jejich funkční zatížení je nepatrné. Autor v této studii podává syntézu svého více než desítiletého průzkumu oblasti anglických periferních fonémů. Má za to, že toto studium leckdy vrhá netušené světlo na vývojové tendence jazyka jinak málo zřejmé a že někdy pomůže objasnit i některé staré problémy anglického jazykového vývoje.

II. Likvidace novoanglického fonému /h/

Zatímco sta. foném /h/ (se svou kombinatorní variantou χ) se vyskytoval v poměrně velkém počtu poloh ve slově, je na. /h/ fonémem periferním: je omezeno na jedinou možnou polohu ve slově, tj. na počátek slov před samohláskou, ev. polosamohláskou. V průběhu vývoje angličtiny ztrácel foném *h*/χ pozici za pozicí. Příčinou toho byla jednak jeho izolace v souhláskovém fonologickém systému, k níž došlo po rozvázání svazku, který foném *h*/χ původně poutal k fonému *g*/ʒ, zvláště pak po zániku osamostatněného fonému /ʒ/. Po omezení fonému *h*/χ na poměrně malý počet slovních poloh přistupuje ke kvalitativnímu handicapu ještě handicap kvantitativní, totiž nepatrné funkční zatížení fonému /h/. V lidových nářečích, v nichž do vývoje nezasahují činitelé kulturní a civilizační tou měrou jako v jazyce spisovném, bylo /h/ jako foném zpravidla zlikvidováno úplně; tak v londýnském cockney se udržuje jen jako záležitost fonostylistiky a zčásti i fonologie větné.

V průběhu likvidace fonému /h/ zaniklo — hlavně pro nepatrné funkční zatížení — i několik jiných fonémů, jež s fonémem *h*/χ více nebo méně strukturně souvisely. Vedle uvedeného již /ʒ/ to byly zvláště rstřa. neznělé likvidy /R, L, N/ a v době rna. zčásti také /W/.

Likvidační proces *h*/χ byl motivován zprvu jen prostou zákonitostí mechaniky mluvidel (do počátku doby střa.). Později pak k této motivaci ryze mechanické přistupuje motivace jazyková: snaha likvidovat foném funkčně nedost únosný (v důsledku jeho nepatrného funkčního zatížení). Při tomto procesu nelze a priori vyloučit vliv vnější, tj. možnost, že tu spolupůsobil vliv francouzštiny. Ten by však — podaří-li se jej vůbec prokázat — byl pouze urychlovatelem daného procesu, který zcela nepochybně vznikl z kořenů ryze domácích (má ostatně zajímavou obdobu i jinde v germánských jazycích, zvláště v horní němčině).

III. Raně středoanglické /J/ a osobní zájmeno she

Střa. východně centrální zájmeno *schē* vzniklo procesem *hēo* > *hēo* > *çō* > *schō/schē*. Poslední etapa tohoto vývoje představuje hláskovou substituci [š] za nedostatečně zatížený rstřa. periferní foném /J/, jehož realizací [ç] bylo; /J/ vzniklo z *hj*, obdobně jako rstřa. /R, L, N, W/ vznikly ze skupin *hr, hl, hn, hw*.

Při substituci [š] za [ç] však nešlo o pouhé mechanické nahrazení jedné hlásky druhou na základě fonetické příbuznosti [š] a [ç]; k volbě [š] jako substituta vydatně přispěli i činitelé morfologičtí a syntaktičtí, ba i lexikální. V oblasti morfologické to bylo uvolnění pouta, spojujícího do té doby tvary osobního zájmena 3. osoby shodným fonematickým počátkem (srovn. sta. *hē — hēo — hit*, pl. *hīe/hī*). Uvolnění nastalo jednak zevšeobecněním nedůrazného *it* v důrazných polohách, jednak — a to hlavně — pronikáním skandinávského tvaru *þei* do nom. pl. zájmenné flexe. Na základě nářečních faktů se dokazuje přímá závislost mezi brzkým zdomácněním tvaru *þei* a pronikáním [š-] v tvaru osobního zájmena žen. rodu.

Důležitou úlohu hrála při substituci i přestavba soustavy ukazovacích zájmen, hlavně zánik tvarů *sē, sēo*, jež sice nebyly přímým zdrojem střa. *schē* (jak se někteří domnívají), ale přece právě svým zánikem usnadnily proniknutí [š-] do tvaru žen. rodu osob. zájmena. Po tomto zániku totiž už nehrozilo osobnímu zájmenu *schē* nebezpečí homonymního konfliktu s demonstrativním *schō/schē, ve které by se staré sē/sēo bylo pravděpodobně vyvinulo. Poněvadž pak zánik tvarů sē/sēo byl úzce spjat s definitivním vytvořením určitého členu *þē, je zřejmé, že do substitučního

procesu zahrávali i činitelé syntaktičtí. Protože pak /J/, na rozdíl od /R, L, N/, nepřešlo v svůj znělý protějšek /j/, vyhnula se angličtina i homonymii zájmenných výrazů že̢ — ̣hē̢ (na. *you* — *she*). Zřejmě se tedy i lexikální oblast, byť jen velmi vzdáleně, účastnila svým vlivem na substituci /J/ — /š/.

I v jiných nářečích probíhal vývoj na. zájmena *she* ve znamení pozoruhodné harmonizace potřeb všech dílčích jazykových rovin.

IV. Fonologické hodnoty anglických hlásek wh-ových

V jihoangl. standardu najdeme za psané *wh-* (sta. *hw-*) vedle většinové střídnice [w] i menšinovou [W], popř. [hw]. Rstřa. tu měla [W], vzniklé z *hw* obdobně jako [R, L, N, J] vznikly z *hr-, hl-, hn-, hj-*. Avšak periferní foném /W/ se v jazyce udržel mnohem déle než periferní fonémy /R, L, N, J/, a to patrně proto, že svým výskytem v slovech j. *what, where, which, why* se stal vítaným signálem interogativnosti. Teprve v rna., když byly tázací věty dostatečně charakterizovány jinak (v důsledku stabilizace pořádku slov, vzniku pomocného *do* atd.), ustoupilo /W/ svému znělému protějšku /w/. Avšak [W] se drží vedle [w] jako výslovnost menšinová; autor dovozuje, že je ji třeba fonologicky hodnotit jako /hw/ a že jí přísluší důležitá funkce fonostylistická (signalizace chtěné umělosti). Toto hodnocení platí s příslušnými obměnami také pro na. [ç] v slovech jako *hue, huge* atp., jež je individuální variantou hláskové skupiny [hj] a také fonologicky musí být interpretováno jako /hj/.

Vývoj sta. *hw*, jejž autor v hlavních rysech sleduje, pomůže objasnit i dva dosud temné body angl. hláskového vývoje, ev. poopravit mylné názory dosud tradované. Především, na. *who* [hu:] nemohlo vzniknout zánikem postkonsonantního *w* před *ū* v pozdní střa. nebo v rna., jak se soudívá, poněvadž tu nebylo *hw*, ale *W*. Ve skutečnosti fonetické [W] v pstřa. [Wu:] bylo fonologicky přehodnoceno v /h/, protože je [h] před [u:] akusticko-fyziologicky prakticky úplně shodovalo s [W]. — Za druhé, grafika slov j. na. *whore*, rna. *whote* (= hot), *whom* (= home) apod. není motivována existencí někdejší nářečního *hw-* v těchto slovech, ale prostě korespondencí psaného *wh-* a vyslovovaného [h-]. Tato korespondence vznikla na základě případů j. výše uvedeného *who* [hu:], a pak typu *whole*, kde psané *wh-* vskutku mělo někdejší nářeční motivaci. (I vznik tohoto typu autor podrobněji probírá a zpřesňuje běžné formulace o něm tradované.) Jazyk využil korespondence *wh-*/[h] k zřetelné grafické diferenciaci homonym, j. *whole — hole, whore — rna. hore* (= na. *hoar*), ve shodě s ‚ideografickými' tendencemi, které se v anglické psané normě v té době počínaly projevovat.

I zde se tedy ukazuje, že jazyk periferního fonému /W/ využil k účelům fonostylistickým jeho přehodnocením v /hw/.

V. Otázka fonologické hodnoty novoanglického [ŋ]

Ač se právě anglický protiklad [n — ŋ] často uváděl jako školský příklad protikladu dvou fonémů (zatímco v češtině jsou obě hlásky jen variantami fonému jednoho a téhož), ve skutečnosti není fonologická hodnota na. [ŋ] ani zdaleka tak jasná, jak se za to mívá. Už E. SAPIR v r. 1925 pokládal angl. [ŋ] v slovech j. *sing, tongue* za realizaci fonematické skupiny /ng/, kdežto v slovech j. *ink, tank* za variantu fonému /n/. Od této interpretace by mohly zrazovat jednak metodologické rozpaky spojené s dvojfonémovým výkladem hlásky nesporně jednoduché, jednak nechuť vykládat jednu a touž hlásku v různém okolí fonologicky různě. Avšak tyto rozpaky by nemohly hrát rozhodující úlohu při interpretaci [ŋ]. Závažnější nesnází je existence slovního páru *longer* [lɔŋgə] ‚delší' — *longer* [lɔŋə], ten, kdo touží'; obě slova mají zcela obdobnou morfémovou stavbu a jsou rozlišena protikladem [ŋg] : [ŋ]. To se zdá jasně svědčit o existenci [ŋ] jako samostatného fonému v angličtině. Nicméně i tuto skutečnost by bylo možno oddisputovat tím, že některé sufixové morfémy souvisí se slovním základem volněji než jiné, takže doklad *longer* [lɔŋə] bychom mohli se Sapirem vykládat jako /long-ə/ proti *longer* [lɔŋgə], v němž by se morfématický šev fonologicky neprojevoval: /longə/.

Historický vývoj ukazuje, že na. hláska [ŋ] vznikla v pozdní střa. z -*ng*; dále, že toto [ŋ] bylo velmi pevně integrováno v souhláskovém systému a že vítaně vyplnilo volné místo do té doby patrné v soustavě anglických fonémových vztahů. To vše mluví jasně pro fonémový statut /ŋ/. Toto /ŋ/ však nikdy nemělo v angl. fonologickém systému příliš pevné postavení, bylo tu vždy fonémem periferním, a to jednak pro své malé funkční zatížení, jednak pro svůj stále zřetelný těsný vztah k /ng/.

V další historii jazyka nechybělo pokusů zlikvidovat tento periferní foném (viz zvláště **rna.** změnu nepřízvučného *-ing* v *-in'*). Stav *-ing* byl však restituován nátlakem jazykových teoretiků a foném /ŋ/ tím v jazyce udržen. Úsilí teoretiků mělo úspěch zřejmě jen proto, že v jazykovém

systému byl pro ně příznivý předpoklad, totiž uvedená již plná integrace /ŋ/ v systému. Nicméně zůstává pozice /ŋ/ v angličtině velmi vratká a v nářečích pokročil proces jeho likvidace znatelněji než v spisovném standardu.

VI. Soumrak novoanglického fonému /r/

V kapitole II. bylo ukázáno, jak byl v průběhu vývoje angličtiny postupně likvidován foném /h/. Do jisté míry lze podobný vývoj zjistit i u jihoanglického fonému /r/, který byl v průběhu vývoje angličtiny eliminován ze značného počtu svých bývalých výskytových poloh. Přestože mu dosti značný počet výskytových poloh ještě zbývá, svědčí některé fonetické jevy o tom, že je dnes v ja. standardu postavení fonému /r/ značně otřeseno. Jevy ty jsou vznik a naopak zánik hiátového -r-, labializace [r] a tím jeho přechod — alespoň u některých mluvčích — ve [w], a konečně sklon ke splývání počátečních skupin [tr-] a [dr-] s afrikátami [č, dž].

Stejně jako u fonému /h/, i zde vyplývá postupná likvidace /r/ z pohnutek rázu jak kvantitativního (zmenšení počtu výskytových poloh), tak kvalitativního. Kvalitativní činitelé, kteří tu hráli a dosud hrají významnou úlohu, jsou hlavně dva: 1. Funkční obojakost ja. /r/, které má jednak funkci rozlišovat významy slov, jednak funkci vymezovací (hiátové -r- je signálem mezislovné hranice). 2. Strukturní osamocení ja. fonému /r/ ve fonologickém systému ja. standardu, datující se od doby, kdy hrčivá výslovnost hlásky [r] přešla ve výslovnost třenou (patrně invertní). Pozornost je věnována i chronologii všech procesů.

Pokud jde o řešení situace ja. /r/, vznik i zánik hiátového -r- se zřejmě snaží zrušit funkční obojakost ja. fonému. O radikální vyřešení všech problémů ja. /r/ usiluje tendence po splynutí tohoto fonému s ja. /w/. K tomuto splynutí dochází však jen u nečetných mluvčích, jinde mu brání civilizační činitelé. Tak zůstává /r/ v ja. standardu bolavým místem fonologického systému, jeho nesporně periferní složkou.

VII. Fonologický vztah novoanglického [i] a [j]

Průzkum nové angličtiny ukazuje, že hlásky [i] a [j] jsou tu variantami jednoho a téhož fonému /i/. Svědčí o tom jednak polohová komplementárnost těchto dvou hlásek v na., jednak jejich akusticko-motorická blízkost (fonetikové svorně označují výslovnost na. [j] spíše za polosamohláskovou než frikativní), a konečně neexistence morfématicky homogenních skupin [ji-], resp. [-ij] v na. Rozdíl daný různou slabičnou funkcí [i] a [j] jejich fonologickému ztotožnění nevadí, poněvadž je známo dost případů, v kterých se slabikotvorné a neslabikotvorné hlásky doplňují v jediný foném (např. čes. a slov. [r — r], [l — l] atp.). — Pozoruhodné je, že v sta. byly hlásky *i* a *j* zřejmě realizacemi dvou sekundárních fonémů samostatných, podobně jako je tomu v dnešní češtině. Byly tu morfématicky homogenní skupiny *ji*- a-*ij*, dnešnímu jazyku neznámé, nemluvě o jiných zjevech, j. byl vznik hiátového -*j*-, nové angl. neznámého, mezi *i* a samohláskou (obdobně jako v češtině); to vše ukazuje na samostatný fonematický statut sta. *i* a *j*. Spojení typu *ji*-, -*ij* byla v průběhu vývoje angličtiny důsledně zlikvidována a tím umožněno fonematické splynutí /i/ a /j/.

Sta. jasná odlišenost obou fonémů byla způsobena zvláště předhistorickou palatalizací původně velárního ʒ v sousedství původně palatálních samohlásek; tato změna vydatně rozhojnila případy, v nichž /i/ a /j/ sousedily. — Ani existence sta. souhláskových geminát není v rozporu s fonologickou samostatností sta. /i/ a /j/. V sta. totiž nešlo o skutečně gemináty, ale o dlouhé souhlásky, jejichž systémovým protějškem u samohlásek nemohlo být /ij/ nebo /ji/, ale /i:/, jež ostatně stává s /ji/ v protikladu, srovn. *ʒif* — *ʒs*.

Také na. foném *i/j* je svého druhu periferní složkou na. fonologického systému. Je totiž přechodovým prvkem stojícím mezi samohláskovým a souhláskovým podsystémem na. fonologického systému. Je zřejmé, že nepatří plně ani k jednomu z těchto dvou podsystémů, má však pro oba velký význam tím, že tvoří jakýsi svorník, spojující je navzájem.

VIII. Novoanglická „krátká mixed vowel" jako fonologický problém

Fonologické hodnocení na. krátké mixed vowel [ə] je velmi ztěžováno jednak jejím nerovnoměrným výskytem v slabikách přízvučných a nepřízvučných, jednak nejistotou, jak vykládat na. tzv. dostředné dvojhlásky. Autor poukazuje na své starší dvojfonémové hodnocení těchto dvojhlásek. Poukazuje na tendenci směřující k jejich likvidaci jak v ja. standardu, tak v lidovém londýnském cockney a vyvozuje z ní závěr, že [ə] je v dnešním ja. standardu samostatným fonémem, ovšem v zásadě omezeným na slabiky nepřízvučné.

Existence takového fonému je v jistém rozporu s nepochybnou funkční platností dynamického přízvuku v angličtině. Je proto třeba foném /ə/ v ja. hodnotit jako systémovou anomálii, jako

periferní prvek, s jakými se ve fonologických systémech spisovných jazyků, ortoepicky přísně normovaných, leckdy setkáváme. Autor pak načrtává vývoj, který vedl ke vzniku tohoto periferního fonologického rysu, a upozorňuje na některé novější hláskové jevy, jež svědčí o tom, že se v ja. standardu jeví tendence usilující o odstranění této systémové anomálie. Je to zvláště tendence směřující k fonologickému splynutí nepřízvučného /ə/ s přízvučným /ʌ/.

IX. Místo dvojhlásky [ɔɪ] v novoanglickém fonologickém systému

Autor vychází ze svého jednofonémního hodnocení na. „dlouhých" samohlásek a dvojhlásek a podrobněji se vypořádává s dvojfonémní interpretací těchto jevů školou yaleskou. Ukazuje, že v na. fonologickém systému samohlásek stojí dvojhláska [ɔɪ] bez protějšku v řadě *u*-ové a že je tedy nepochybně periferním prvkem systému.

Na otázku, proč se tento nesystémový prvek v jazyce i nadále udržuje, lze odpovědět tím, že angl. [ɔɪ] přísluší důležitá úloha fonostylistická: signalizuje synchronickou cizost slovních výrazů, v kterých se vyskytuje. Autor podrobněji ukazuje, jak již v 18. stol. musila být v jazce tato fonostylistická hodnota [ɔɪ] zakořeněna. Jinak by nebylo možno vyložit, proč se ortoepistům a jazykovým teoretikům podařilo jazykovému společenství vnutit „spelling pronunciation" s [ɔɪ] v slovech typu *joint, point*. V těchto slovech bylo tehdy vyslovováno əi, jež bylo akusticky prakticky totožné s əi ze stř́a. ī, jak ukazují rýmy typu *joins — refines*. Bylo nasnadě, že další vývoj slov j. *joint, point* povede směrem əi > ai, stejně jako vývoj əi ze stř́a. ī. Jestliže se tak nestalo, nelze to vyložit jinak než živě pociťovanou potřebou podtrhnout cizost výrazů *joint, point* atp. tím, že se do nich zavede fonematický rys, který by v nich cizost výrazně signalizoval. K tomu se právě dobře hodila dvojhláska [ɔɪ], platící už od doby stř́a. za signál cizosti a vystupující v této funkci již v slovech typu *joy, choice* (jejichž [ɔɪ] je ze stř́a. ǫi).

Průzkum anglických periferních fonémů ukázal, že přes svou anomálnost nejsou tyto systémové složky bez zajímavosti. Způsob, jímž daný fonologický systém (popř. jiné jazykové roviny) reagují na přítomnost takových složek, vrhá nejednou názorné světlo na tendence, jež by se jevily mnohem matněji, kdyby periferních prvků nebylo. Způsob reakce systému na daný periferní jev může mít různé formy, od úplné likvidace periferního jevu až po jeho ponechání za cenu jeho funkčního přehodnocení, ale vždy se tu jeví úsilí uvést stav v oblasti periferní v nějaký soulad se strukturními zákony platnými v daném systému. I když se někde řešení zatím neprovedlo (např. v případě na. [ŋ]), přece jen existence sil, které o řešení usilují, je mimo veškerou pochybnost.

РЕЗЮМЕ

О новоанглийских периферийных фомемах

I. Периферийные слагаемые в языковой структуре

Иногда неправомерно считают, что язык — замкнутая система, т. е. что все ее слагаемые одинаково совершенно и устойчиво размещены в ней. На деле же дело обстоит, конечно, не так: в каждом языковом ярусе находим промежуточные слагаемые, не всегда могущие быть отнесенными к тому или другому полярному, вполне определенному типу. Так бывает и в звуковом строе языка, где наряду с устойчиво бытующими в структуре элементами можно установить также периферийные элементы, входящие в структуру менее определенно, пусть уже потому, что они в этой структуре получили „неполную интеграцию" (как звучит термин Мартинета), пусть потому, что их функциональная нагруженность является ничтожной. В предлагаемом исследовании автор подводит синтез своих более чем десятилетних изысканий в области английских периферийных фонем. Он считает, что подобное изучение подчас проливает совершенно новый свет на тенденции развития языка, остающиеся до того мало четкими, и что оно иногда содействует правильному объяснению даже некоторых „старых" проблем английского языкового развития.

II. Ликвидация новоанглийской фонемы /h/

В то время как др.-англ. фонема /h/ (со своим комбинаторным вариантом χ) встречалась в относительно большом количестве позиций в слове, н.-англ. /h/ представляет периферийную фонему: она ограничивается единственно возможной позицией в слове, т. е. началом слов перед гласным, эвент. полугласным. На протяжении развития английского языка фонема h/χ лишалась одной позиции за другой. Причиной тому была, с одной стороны, ее изоляция в фонологической системе согласных, наступившая после того, как были утрачены узы, связывавшие первоначально фонему h/χ с фонемой g/ʒ, особенно же после падения обособившейся фонемы /ʒ/. После ограничения фонемы h/χ относительно небольшим числом словесных позиций, к качественному хендикепу приступает еще количественный хендикеп, именно незначительная функциональная нагруженность фонемы /h/. В народных говорах, не подвергающихся в той мере, как литературный язык, влиянию со стороны всякого рода культурных и цивилизационных факторов, h в качестве фонемы было, как правило, ликвидировано полностью; так, в лондонском кокни оно сохраняется лишь как явление фоностилистики, а частью также синтаксической фонологии.

В ходе ликвидации фонемы /h/ утратились — главным образом в силу ничтожной функциональной нагрузки — еще некоторые другие фонемы, стоявшие с фонемой h/χ в более или менее плотной структурной связи. Помимо отмеченной уже фонемы /ʒ/ это были, в частности, р.-ср.-англ. глухие плавные /R, L, N/, а в р.-н.-англ. период частью тоже /W/.

Ликвидационный процесс h/χ мотивировался сперва только простой закономерностью механики речевых органов (до начала ср.-англ.-яз.). Впоследствии к этой чисто механической мотивации приступает языковая мотивация: стремление ликвидировать недостаточно функционально емкую фонему вследствие ее ничтожной функциональной нагруженности. При этом в процессе a priori нельзя исключать внешнего влияния, т. е. возможность содействия со стороны французского языка. Последнее являлось бы — если вообще удастся доказать его —, однако, лишь ускорителем данного процесса, вне всякого сомнения имевшего чисто домашние корни (впрочем, существуют его интересные соответствия и в других германских языках, в частности в верхненемецком).

III. Ранне-среднеанглийское /J/ и личное местоимение she

Ср.-англ. восточно-центральное местоимение schē возникло в результате процесса hēō>hēō>hjō>çō>schō/schē. Последний этап этого развития представляет собой звуковую субституцию посредством [š] недостаточно нагруженной р.-ср.-англ. периферийной фонемы /J/, реализацией которой и было [ç]; /J/ восходит к hj, аналогично как р.-ср.-англ. /R, L, N, W/ восходят к группам hr, hl, hn, hw.

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При субституции [š] вместо [ç], однако, наличествовало не одно только механическое замещение одного звука другим на основе фонетического родства [š] и [ç]: выбору [š] в качесвте субститута значительно способствовали также морфологические и синтаксические, а даже и лексические факторы. В области морфологии это было ослабление связей, до того связывавших формы личного местоимения 3-го лица тождественным фонематическим началом (ср. др.-англ. hē-hēo-hit, мн. ч. hīe/hī). Ослабление произошло частью путем обобщения неударяемого it в ударяемых позициях, частью — и главным образом — путем инфильтрации скандинавской формы þei в форму им. пад. мн. ч. местоименной флексии. На основе диалектных данных выявляется прямая взаимосвязь между скорым внедрением в английский язык формы þei и проникновением [š-] в форме личного местоимения жен. рода.

Важную роль при субституции играла также перестройка системы указательных местоимений, главным образом падение форм sē, sēo, которые, хотя и не были непосредственным источником ср.-англ. schē (как полагают некоторые), но все же именно благодаря своему падению сделали легким закрепление [š-] в форме жен. рода личного местоимения. После такого падения, нужно иметь в виду, личное местоимение schē не находилось уже под угрозой омонимичного конфликта с указательным *schō/schē, в которое древнее sē/sēo, вероятно, развилось бы. Поскольку же утрата форм sē/sēo стояла в тесной взаимосвязи с окончательным образованием определенного артикля þē, очевидно, что субституционный процесс испытывал и некоторое влияние со стороны синтаксических факторов. И поскольку /J/, в отличие от /R, L, N/, не изменилось в свою звонкую противоположность /j/, английский язык избежал и омонимии местоименных выражений zē — ჳhē (н.-англ. you — she). Следовательно, даже лексический ярус, хотя и косвенным, весьма отдаленным способом, принимал некоторое участие в процессе субституции /J/ посредством /š/.

Тоже в других говорах развитие н.-англ. местоимения she стояло под знаком замечательного слаживания потребностей всех частных языковых планов.

IV. Фонологические эквиваленты английских wh-образных звуков

В южноангл. стандарде за письменное wh- (др.-англ. hw-), наряду с майоритетным рефлексом [w], встречается и миноритетный рефлекс [W], эвент. [hw]. Р.-ср.-англ. яз. тут имел [W], возникшее из hw, подобно как и /R, L, N, J/ возникли из hr-, hl-, hn-, hj-. Однако периферийная фонема /W/ в языке оказалась гораздо прочнее, нежели периферийные фонемы /R, L, N, J/, по-видимому, по той причине, что благодаря своему наличию в словах вроде what, where, which, why она стала желательным сигналом вопросительности. Только в р.-н.-англ. яз., когда вопросительные предложения получили достаточную иную характеристику (вследствие стабилизации порядка слов, возникновения вспомогательного do и т. д.), /W/ уступило место своей звонкой противоположности /w/. Но [W] удерживается рядом с [w] в качестве миноритетного произношения; автор обосновывает, что последнее приходится фонологически расценивать как /hw/ и что последнему свойственна важная фоностилистическая функция (сигнализация нарочитой искусственности). Подобная оценка действительна, с соответственными видоизменениями, также применительно к н.-англ. [ç] в словах вроде hue, huge и т. п., которое представляет индивидуальный вариант сочетания звуков [hj] и которое также фонологически должно интерпретироваться как /hj/.

Развитие др.-англ. hw, прослеживаемое автором в главных чертах, поможет объяснить и два пока темных пункта английского фонетического развития, эвент. внести определенные коррективы в высказывающиеся до сих пор неточные соображения. Прежде всего, н.-англ. who [hu:] не могло возникнуть в результате падения постконсонантного w перед ū в позднем ср.-англ. яз. или в р.-н.-англ. яз., как обычно полагают, ибо здесь было не hw, а W. На деле же фонетическое [W] в п.-ср.-англ. [Wu:] было фонологически переоценено в /h/, так как [h] перед [u:] в акустико-физиологическом отношении практически полностью совпадало с [W]. — Во-вторых, графика таких слов, как н.-англ. whore, р.-н.-англ. whote (= hot), whom (= home) и т. п., мотивируется не наличием прежнего диалектного hw- в этих словах, а просто корреспонденцией письменного wh- и произносимого [h-]. Эта корреспонденция возникла на основе случаев, как-то вышеуказанного who [hu:], и затем типа whole, где письменное wh- в свое время фактически имело диалектную мотивацию. (И возникновение этого типа автором подробно рассматривается и уточняются перенимающиеся традиционные формулировки.) Язык использовал корреспонденцию wh-/[h] к отчетливой графической дифференциации омонимов, как-то whole — hole, whore — р. н.-англ. hore (= н.-англ. hoar), в соответствии с идео-

графическими тенденциями, начинавшими обнаруживаться к тому времени в английской письменной норме.

И здесь, следовательно, оказывается, что язык использовал периферийную фонему /W/ к фоностилистическим целям путем переоценки ее в /hw/.

V. Вопрос о фонологической интерпретации новоанглийского /ŋ/

Несмотря на то что английское противопоставление /n — ŋ/ часто приводилось в качестве школьного примера противопоставления двух фонем (между тем как в чеш. яз. оба звука являются лишь вариантами одной и той же фонемы), на деле фонологическая интерпретация н.-англ. [ŋ] далеко не столь ясна, как обычно считают. Еще Э. Сэпир в 1925 г. англ. [ŋ] в словах вроде sing, tongue признавал реализацией фонематической группы /ng/, а в словах вроде ink, tank — вариантом фонемы /n/. Подобная интерпретация могла бы казаться неприемлемой, как ввиду методологических затруднений, связанных с двуфонемным толкованием бесспорно простого звука, так и ввиду возможной неохоты трактовать один и тот же звук по-разному в зависимости от его фонологического окружения. Однако это недоверие не могло бы играть решающей роли при интерпретации /ŋ/. Более серьезным затруднением оказывается наличие словесной пары longer [ləŋgə] „длиннее“ — longer [ləŋə] „тот, кто стремится“; оба слова, обладая совершенно аналогичным морфематическим строением, различаются благодаря противопоставлению /ŋg/ : /ŋ/. Это будто бы свидетельствует о наличии /ŋ/ как самостоятельной фонемы в английском языке. Тем не менее, даже от этого факта можно было бы отделаться ссылкой на то, что некоторые суффиксальные морфемы стоят в более свободной связи с основой слова, чем другие, так что случай longer [ləŋə] мы могли бы, вслед за Сэпиром, объяснять как /long-ə/ в разрез с [ləŋgə], где морфематический предел фонологически не проявлялся бы: /longə/.

Историческое развитие показывает, что н.-англ. звук]ŋ] возник в п.-ср.-англ. яз. из -ng; далее, что это [ŋ] весьма прочно интегрировалось в консонантической системе, выгодно заполнив пустую клетку, имевшуюся в системе английских фонемных отношений. Все это ясно говорит в пользу фонемного статута /ŋ/. Однако это /ŋ/ в английской фонологической системе никогда не имело особенно устойчивого положения, оно всегда являлось периферийной фонемой, отчасти благодаря своей малой функциональной нагруженности, отчасти же благодаря своему постоянно отчетливому соотношению с /ng/.

В последующей истории языка не отсутствовали попытки ликвидировать эту периферийную фонему (см. особенно р.-н.-англ. изменение неударяемого -ing в -in'). Состояние -ing, однако, было восстановлено под давлением теоретиков языка, и фонема /ŋ/, таким образом, была сохранена в языке. Усилия теоретиков увенчались успехом, видимо, лишь потому, что в языковой системе для них существовали благоприятные предположения, а именно отмеченная уже полная интеграция /ŋ/ в системе. Тем не менее положение /ŋ/ в английском языке остается весьма шатким, причем по говорам процесс его ликвидации достиг заметно большей меры, нежели в литературном стандарде.

VI. Регресс новоанглийской фонемы /r/

Во II-й главе было указано, как в ходе развития английского языка постепенно ликвидировалась фонема /h/. До известной степени подобное развитие можно установить и у южноангл. фонемы /r/, которая в течение развития английского языка подвергалась элиминации из значительного количества прежних позиций появления. Хотя довольно значительное количество позиций появления за ней сохраняется, некоторые фонетические явления свидетельствуют о том, что к настоящему времени положение фонемы /r/ в ю.-англ. стандарде сильно подорвано. Явления эти — это возникновение и, напротив, падение -r- при зиянии, лабиализация [r] и тем самым переход этого звука — по крайней мере у некоторых говорящих — в [w], и, наконец, склонность к слиянию начальных групп [tr-] и [dr-] с аффрикатами [č, dž].

Равно как и у фонемы /h/, также здесь постепенная ликвидация вызывается стимулами как количественного характера (уменьшение позиций появления), так и качественного характера. Количественных факторов, игравших и играющих до сих пор знаменательную роль, в основном, два: 1. Функциональное „двуличие“ ю.-англ. звука /r/, который имеет отчасти функцию различать значения слов, отчасти же функцию размежевательную (-r- в зиянии — сигнал межсловесной границы). 2. Структурная изоляция ю.-англ.

фонемы /r/ в фонологической системе ю.-англ. стандарда, относящися к тому времени, когда „дребезжащее" произношение звука /r/ перешло в произношение фрикативное (видимо, инвертное). Внимание уделяется и хронологии всех процессов.

Что касается разрешения ситуации ю.-англ. /r/, то возникновение и падение -r- при зиянии, очевидно, направлено на отмену функционального двуличия ю.-англ. фонемы. К радикальному разрешению всех проблем ю.-англ. /r/ устремлена тенденция, имеющая своим исходом совпадение этой фонемы с ю.-англ. /w/. Такое совпадение, однако, происходит только у немногочисленных говорящих, у других же препятствуют ему цивилизационные факторы. Таким образом, /r/ в ю.-англ. стандарде остается слабым звеном фонологической системы, ее бесспорно периферийным слагаемым.

VII. Фонологическое соотношение новоанглийского [i̯] и [j]

Исследование новоанглийского языка выявляет, что звуки [i] и [j] здесь представляют варианты одной и той же фонемы /i/. На это указывают как позиционная комплементарность этих двух звуков в н.-англ. языке, так их акустико-моторическая близость (фонетистами единодушно признается н.-англ. [j] в произношении скорее полугласным, нежели фрикативным звуком), так и, наконец, отсутствие морфематически гомогенных сочетаний [ji-], эвент. [-ij] в н.-англ. яз. Различие, обусловленное разной слоговой функцией [i] и [j], не мешает их фонологическому отождествлению, поскольку известно немало случаев, когда слогообразующие и неслогообразующие звуки взаимно пополняются в единственную фонему (напр., чеш. и словацк. [r̥ — r], [l̥ — l] и т. п.). Заслуживает внимания, что в др.-англ. яз. звуки i и j, по всей видимости, являлись реализациями двух самостоятельных фонем, подобно как это имеет место в современном чешском языке. Здесь были представлены морфематические гомогенные сочетания ji- и -ij, чуждые нынешнему н.-англ. языку, не говоря уже о других явлениях, как-то о возникновении -j- при зиянии, неизвестного н.-англ. языку, между i и гласным (аналогично как в чеш. яз.); все это вскрывает самостоятельный фонемный статус др.-англ. i и j. Сочетания типа ji-, -ij на протяжении развития английского языка подверглись последовательной ликвидации, и тем самым было обусловлено фонемное совпадение /i/ и /j/.

Др.-англ. четкое различение обеих фонем было вызвано особенно доисторической палатализацией исконно велярного ʒ в окружении исконно палатальных гласных; вследствие этого изменения обильно умножились такие случаи, в которых /i/ и /j/ находились в соседстве. — Даже наличие др.-англ. удвоенных согласных не противоречит фонологической самостоятельности др.-англ. /i/ и /j/. В др.-англ. яз., надо отдать себе отчет, мы имели дело не с подлинными удвоенными согласными, а с долгими согласными, системным противопоставлением которых в рамках гласных могло быть не /ij/ или /ji/, а /i:/, которое, впрочем, подчас противопоставляется /ji/, ср. ʒīf — īs.

Тоже н.-англ. фонема i/j — своего рода периферийное слагаемое н.-англ. фонологической системы. Она оказывается переходным элементом, стоящим на грани подсистемы гласных и согласных н.-англ. фонологической системы. Очевидно, она не относится целиком ни к одной из этих двух подсистем, имея, вместе с тем, для обеих большое значение благодаря тому, что образует какой-то болт связывающий их вместе.

VIII. Новоанглийский „краткий mixed vowel" как фонологическая проблема

Фонологическая оценка н.-англ. краткого [ə] весьма затрудняется отчасти в силу его неравномерного появления в ударяемых и неударных слогах, отчасти же по причине неуверенности, как же толковать н.-англ. т. н. центрипетальные двугласные. Автор ссылается на высказанную им еще раньше двуфонемную оценку подобных двугласных. Обращая внимание на тенденцию, направленную к их ликвидации как в ю.-англ. стандарде, так и в просторечном лондонском кокни, он приходит к заключению, что [ə] в нынешнем ю.-англ. стандарде является самостоятельной фонемой, принципиально ограничивающейся, конечно, неударными слогами.

Существование такой фонемы находится в некотором противоречии с несомненной функциональной значимостью динамического ударения в английском языке. Вот почему фонему /ə/ в ю.-англ. яз. приходится признавать системной аномалией, периферийным элементом, с какими подряд встречаемся в фонологических системах литературных языков, строго нормированных в орфоэпическом отношении. Затем автор очерчивает развитие, повлекшее за собой появление этой периферийной фонологической черты, указывая на некоторые позднейшие звуковые явления, свидетельствующие о том, что

в ю.-англ. стандарде обнаруживается тенденция к устранению этой системной аномалии. Это в особенности тенденция, направленная к фонологическому слиянию неударяемого /ə/ с ударяемым /ʌ/.

IX. Место двугласного /ɔɪ/ в новоанглийской фонологической системе

Исходя из своей однофонемной трактовки н.-англ. „долгих" гласных и двугласных, автор обстоятельно рассматривает двуфонемную интерпретацию яльской школой подобных явлений. Он указывает, что в н.-англ. фонологической системе гласных двугласный [ɔɪ] лишен противопоставления в и-образном ряду, в силу чего последний, вне всякого сомцения, носит характер периферийного элемента системы.

На вопрос о том, почему же этот несистемный элемент продолжает сохраняться в языке, можно ответить таким способом, что английскому [ɔɪ] отводится важная фоностилистическая роль: посредством его сигнализируется чуждость содержащих его словесных обазований. Автор подробно цамечает, как уже к 18 в. по необходимости в язык внедрилась эта фоностилистическая ценность [ɔɪ]. В противном случае нельзя было бы объяснить, почему орфоэпистам и языковым теоретикам удалось привить данному языковому обществу „spelling pronunciation" с [ɔɪ] в словах типа joint, point. В этих словах тогда произносилось [ɔɪ], которое в акустическом отношении практически совпадало с [əi] из ср.-англ. ī, как показывают рифмы типа joins — refines. Следовало ожидать, что дальнейшее развитие слов вроде joint, point поведет в направлении [əi>ai], равно как и развитие [əi] из ср.-англ. ī. Если так не случилось, то это можно объяснить не иначе, как ярко ощущавшейся потребностью подчеркнуть чуждость выражений joint, point и т. п. посредством введения в них такой фонематической приметы, которая четко сигнализировала бы эту чуждую природу. Весьма пригодным здесь оказывался двугласный [ɔɪ], служивший еще со ср.-англ. времени сигналом чуждости и выступавший в данной функции уже в словах типа joy, choice ([ɔɪ] которых восходит к ср.-англ. ǫi).

В результате исследования английских периферийных фонем было выявлено, что несмотря на свою аномальность эти системные слагаемые весьма интересны. Способ, каким данная фонологическая система (эвент. и другие языковые ярусы) реагирует на присутствие таких слагаемых, лишний раз проливает наглядный свет на тенденции, которые сказывались бы в значительно более тусклом виде, не будь периферийных элементов. Способ реагирования системы на данное периферийное явление может получать разные формы, от полной ликвидации периферийного явления вплоть до соблюдения его за счет его функциональной переоценки, но притом всегда сказывается усилие привести состояние в периферийной области в какое-нибудь согласие с действующими в данной системе структурными законами. Даже если кое-где такое разрешение пока не было проведено (напр. в случае н.-англ. /ŋ/), все же существование стремящихся к разрешению сил стоит вне всякого сомнения.

<div align="right">Перевел <i>Роман Мразек</i></div>