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ON THE INTEGRATION OF THE PERIPHERAL ELEMENTS INTO THE SYSTEM OF LANGUAGE

I. One of the features differentiating the Prague linguistic approach from those of other structurally oriented currents has been the thesis asserting the open, not closed character of the system of language. The said thesis denies the existence of an equal degree of integration in the language system of all its elements; it urges, on the contrary, that some elements of the system lack this integration or possess it to a relatively low degree. By the degree of integration of an element is meant here the degree of its participation in the relations characterizing the given system seen as an ensemble of its elements.

The idea was clearly illustrated by A. MARTINET[1] by examples taken from phonology. He drew a distinction between fully integrated and non-fully integrated (or even nonintegrated) phonemes — in French terms, phonèmes pleinement intégrés —non pleinement intégrés, non intégrés. As an example of a fully integrated phoneme may be quoted ModE /t/ whose distinctive features enable it to participate in a relatively large number of phonemic oppositions. By being voiceless (or, rather, tense) /t/ stands in opposition to a voiced (or, rather, lax) /d/; by being an interrupted phoneme it is opposed to a corresponding continuant /θ/; by being acute, in R. JAKOBSON's interpretation of the term, it stands in opposition to the grave /p/; finally, as a compact phoneme, it is opposed to the diffuse /k/, etc. Contrary to this, the ModE /h/-phoneme must be classed as non-integrated, because the only feature it has in common with other ModE consonant phonemes is exactly its consonantal character; in other words, there is no consonant phoneme in ModE to which /h/ would be so closely opposed as /t/ is to /d/, /θ/, /p/, /k/ and the like.[2] Consequently, ModE /h/ must be evaluated as an insufficiently integrated, in other words peripheral, element of the ModE phonological system.[3]

Other language levels, too, reveal the presence of insufficiently integrated peripheral elements. In another of our papers[4] we hope to have shown that, on the morphological level, the so called ModE Possessive Case *(John's, king's)* appears to be insufficiently integrated in the declension system of ModE nouns. Its exceptional position in the inflexional pattern is signalled

by its synthetic structuring; the ModE Possessive Case is the only surviving form of the old synthetic nominal inflexion, typical of OE, in a declension system that otherwise has been thoroughly rebuilt on analytic lines. One can thus safely denote it as a peripheral element of the ModE declension system of nouns — in other words, one is faced here with a peripheral phenomenon on the morphological level of language. — In the domain of Modern German word-formation the existence of some peripheral facts has been demonstrated by F. Daneš[5]: he has pointed out some forms which cannot be safely classed either with compounds or with derivations because they are situated in between these two word-formative categories (see instances like *Schulwesen, kugelförmig*).

The list of instances of insufficiently integrated language facts could be easily extended by quoting items from various language levels. In the present context it may be profitable to mention, at least briefly, the situation on the lexical level where peripheral phenomena are represented by non-domesticated loanwords. Both the morphematic composition and the phonemic structure of such loans are, as a rule, contrasted with the morphemic and phonemic patterns characteristic of those lexical items which are synchronically evaluated as domestic. And it is exactly the study of the peripheral phenomena on the lexical level that can suggest some useful methodological cues for the research in the peripheral phenomena of language in general.[6]

It is commonly known that language communities subject such loans, to a greater or smaller degree, to a process which may be denoted as their gradual domestication. Most of such words are, that is, morphologically and/or phonologically assimilated to the synchronically domestic elements of the word-stock. One can justly establish here a tendency towards some integration of the peripheral elements, a tendency securing for such elements a firmer place in the given lexical pattern (as was duly pointed out by V. Mathesius in his paper quoted here above, Note 6). The integrating tendency, however, is not confined to the lexical level alone; its operation can be discovered on other language levels as well. Thus, e. g., on the phonological level one can often ascertain the phonemicization of elements originally placed outside the phonological system, provided that this system could fit them in profitably in its structure. This was the case of Early Middle English [v, z] which had the phonemic status in French loans then penetrating into English, while the corresponding sounds in the domestic word-stock had only represented positional variants of the respective phonemes /f, s/. In the course of Early Middle English the sounds [v] and [z] were to become phonemicized because they fitted well in the phonemic pattern of the period.[7] Similarly, as has been demonstrated in another paper of ours,[8] one can establish in Present Day English a tendency aimed at the domestication of

the diphthong [ɔɪ], by now felt as a synchronically foreign element of the phonemic pattern. Both these cases of integration have been, of course, partly motivated by the domestication of Romance (and other) loans in the English wordstock. Similarly, the phonological system of Czech reveals a gradual integration in it of the sound [f] which originally had phonemic status only in synchronically foreign or emotionally coloured expressions.

II. A specific case of integration of a peripheral element can be found in those instances in which such an element preserves its formal structure (i. e. is not assimilated formally to the more central elements of the system) at the cost of being re-evaluated functionally. As was shown in some detail in our paper quoted here above, Note 4, the ModE synthetic Possessive Case could only hold its ground in what is an essentially analytic system of declension if some price was paid for this. The price was that the original inflexional ending *'s* was to be re-evaluated into an essentially suffixal element, in other words, that the whole form is now regarded more as a word-formative than as an inflexional affair. The word-formative status of *'s* is evidenced, among other things, by the circumstance that the supposed inflexional ending can be added not only to single words but to word groups as well (see the well-known expressions of the type *the King of England's rights and privileges, the man I saw yesterday's son*, etc.); admittedly, some of the ModE suffixes can also be joined to word-groups (see *old-maidish, I don't knowish*), while genuine inflexional endings can never occur in such situations. — An analogous case of functional re-evaluation can be found in the lexicalization of ModE forms of the type *latter, last, next* which in the earlier stages of the language constituted paradigmatic forms of the comparatives (or, respectively, superlatives) of adjectives but owing to considerable formal changes were to become so much unlike the forms of their positives that they cannot perform their original paradigmatic functions any longer. (As is commonly known, this original function has been taken over by new formations of the type *later, latest, nearest.*)

The cases of integration instanced in the preceding paragraph may be denoted as specimens of differentiative integration, to which can be opposed those integration cases in which no functional re-evaluation, resulting in semantic differentiation, is involved (in the latter cases one may speak of specimens of simple integration). The apparent contradiction in terms in the word-group 'differentiative integration' calls for some comment. As a matter of fact, no real contradiction is involved. It will be readily admitted that in order to fulfil all the multiform tasks imposed on it, language badly needs efficient differentiation of its means of expression. Still, those differentiated means make up an organic whole whose differentiated components are bound together by a network of delicate relations.

Among the probably most important relations of the kind one should mention the complementary distribution existing between the language means performing a purely communicative function, not burdened by signalling emotion, and those language means the obvious function of which is exactly to signal such emotion. In analyzing a language one often finds that the language means left unexploited by the purely communicative function are very efficiently utilized for emotive purposes. A well-known example of such utilization is yielded by ModE. As is commonly known, length of consonants is not functionally utilized in ModE for purposes of pure communication (while some other languages, such as Italian or Finnish, make ample use of it for that purpose). Consequently, differences in the length of consonants are at the disposal of the emotional function which uses them systematically as its signals (see instances like *I llove it*, *Nno*, etc.). One should underline the fact that the effectiveness of the means signalling emotion is due exactly to the contrast in which these means stand to those employed by the purely communicative function. In other words, the means used by the two functions are found to be mutually complementary; the whole within which they complement one another is, of course, internally differentiated according to the purpose served by this or that category of the means. And it is exactly the functional subordination of the means signalling emotion to the language system considered as a whole that can be denoted as an especially instructive specimen of what we have termed here above 'the differentiative integration'.

A number of instances of differentiative integration can be found, naturally, on other language levels as well. As an especially noteworthy case of the kind may be mentioned the facts of ModE gender, discussed in detail in another of our papers.[9] As is commonly known, the only formal indicator of gender in ModE nouns is the pronominal reference to them by either a personal or a possessive pronoun. The purely communicative ModE utterances follow the familiar rule found in standard textbooks: nouns denoting persons and bigger animals qualify, according to the sex of the denoted individuals, either as masculines or as feminines, while nouns denoting inanimate objects are classed as neuters. This textbook rule has, of course, a number of exceptions. One may leave aside here those exceptions which are motivated by the persistence of tradition, whether going back to Latin sources (such as feminine reference to names of countries) or to those in which the source of tradition was French (see feminine reference to names of ships) or, finally, ancient mythology (as is the case in *Sun*, *Death* masc., *Moon* fem., etc.). As really essential rank those exceptions in which the 'shift of gender' has been motivated by emotive factors. Admittedly, ModE nouns denoting vehicles, tools, etc., can have feminine pronominal reference if the speaker wants to stress his positive emotional approach to the objects

referred to (the presence of the corresponding negative emotional approach is sometimes signalled by masculine pronominal reference). When referring to nouns denoting persons, the emotional approach, whether positive or negative, may be signalled by neuter pronominal reference. Clearly, one is faced here again with a case of remarkable complementary distribution of means of pronominal reference: in this distribution the means signalling the two possible approaches, the purely communicative and the emotionally coloured, naturally complement one another and thus constitute an integrated structure, internally differentiated according to the principle of differentiative integration discussed here above.

Another instance of the differentiative integration of language means can be found in the domain of onomatology. We have in mind here word combinations of the type *that devil of a man*, in which the determining and the determined elements of the denomination have mutually exchanged their respective parts. As is commonly admitted, in a purely communicative utterance the bearer of a quality is regularly denoted by the basic noun, while the quality attributed to this bearer is expressed by an element developing that basic noun. In the instance quoted here above, however, it is exactly the other way round; it is the quality which is expressed by the basic noun, while the bearer of that quality is denoted by the *of*-phrase developing that noun. And there can be no doubt that this unusual type of combination of the two elements is utilized here for the purpose of signalling the emotional approach of the speaker: here again, one has to do with a case of complementary distribution of the two theoretically possible combination types, out of which the one or the other becomes selected according as the intention of the speaker is purely communicative or, conversely, emotionally coloured. In short, the inventory of the means placed at the speaker's disposal again appears to be a differentiatively integrated structure.

In the above-discussed instances the differentiative integration served the purpose of signalling the emotional (as opposed to the purely communicative) approach. This, however, need not necessarily be so. As a matter of fact, one can find cases of differentiative integration even within the inventory of such language means as serve purely communicative purposes — let us only recall the above-mentioned cases of lexicalization of formerly paradigmatic expressions like *latter, last, next*. In such instances, the word-form which in the framework of its morphological paradigm necessarily appeared to be inorganic and peripheral was to lose its anti-paradigmatic status when transferred on to the lexical level the regularities of which are less strict and, seen from both the formal and the semantic aspect, more tolerant. Consequently, the word-form affected by the transfer could have become integrated into its new surroundings more easily than into the old ones.

III. From the differentiative integration, mainly discussed so far, one should keep apart (1) the above-mentioned simple integration which results in a complete, functionally non-differentiated assimilation of the heterogeneous elements to the system in which they become included, and (2) those instances in which no integration takes place and the non-integrated element upholds its peripheral status. Instances of both these categories have already been mentioned: An example of (1) is yielded by the phonemicization in Early Middle English of the sounds [v, z] which in Norman French words penetrating into English had the phonemic status, while in OE the two sounds had had the status of allophones of /f/ or, respectively, /s/. On the other hand, the Present-Day Standard English /h/ constitutes an example of (2), i. e. of a heterogeneous, non-integrated element of the ModE phonological system, an element not bound by any paradigmatic relations with any other member of the pattern. It is worth noting, incidentally, that popular ModE dialects, free from the strict normalization such as has been imposed from above on the literary standard, have been able to effect some integration of /h/ in their systems of phonic values. Some of the commonly known features of Cockney English (but by no means characteristic of Cockney alone but of other English dialects as well) such as the notorious "dropping one's *h*'s",[10] unequivocally point to the fact that the sound [h] in these dialects has no longer the status of a phoneme but a different one: [h] has clearly been re-evaluated in them into a signal of emotional functional approach. The systemic anomaly could be eliminated here exactly for the reason that the tendencies of development, unimpeded by the rigid normalization, could assert themselves more freely than in the literary standard. In terms of the Prague group of the 'thirties one might speak here in Cockney about combinatory stylistic variants of the concerned vowel phonemes (thus, e. g., [hi-] ranks as a combinatory stylistic variant of the phoneme /i-/, etc.). The attribute 'combinatory' is needed here because [h] in the said dialects can only be found in pre-vocalic word-initial (or stem-initial) positions.

A similar inorganic, non-integrated element can be met with in Mod. Czech. It is the /e:/-phoneme which lacks a low back partner in the phonological sub-system of Czech long vowel phonemes (the long Czech *ó*-vowel is, admittedly, found only in synchronically foreign or in emotionally coloured expressions, e. g. *móda* 'fashion', *bóže* 'Heavens!'). And it is again symptomatic that Common Colloquial Czech, drawing on some features of the local dialect and not subject to the strict normalization from above, again eliminates this systemic anomaly by replacing the Standard Czech /e:/ by other phonemes, mainly by /i:/; such instances of /e:/ as persist in Common Coll. Czech are evaluated as signals of emotion or of foreign (or at least bookish) character.

It is hardly due to a chance that the instances given in the preceding two paragraphs have been supplied by the phonic level of language. Obviously, it is on this level that the mutual relations of the systemic components appear to be least complex, so that the integrated or non-integrated status of this or that component is here particularly prominent. There are, certainly, cases of non-integration on other levels, too, but in view of the more complex relations existing among the elements of those levels such cases are manifested less clearly and less distinctly, and also the limits separating the integrated and non-integrated elements appear to be less strict there than on the phonic level. This is especially the case of the lexical level in which the complexity of relations of its elements is so high that the very systemic status of the word-stock in language is often questioned. And it is undoubtedly due to this complexity that, as already pointed out here above, the lexical level has been able to absorb and to integrate some of the peripheral elements of the morphological level (see the above-mentioned instances of the type *latter, last, next*).

In some instances the newly integrated elements come to rank as archaisms (cf., e. g., ModE *whilom* < OE Dpl. *hwīlum*, which had become a peripheral element of the morphological level by obtaining the status of an adverb no longer closely linked with the nominal paradigm, and later was to be incorporated in the lexical level as a typical archaic item).

For all this complexity of the relations and regularities found on the lexical level (regularities qualified here above as relatively less strict and formally and semantically markedly tolerant) it would be erroneous to deny that one really has to do here with a level in its own right and with its own kind of regularities. This is evidenced, among other things, already by the above-noted tendency to incorporate into the word-stock, as firmly as possible, the heterogeneous components which found their way into it in the course of the development of language. One has to do here not only with a mere formal integration (which reshaped, e. g., the Anglo-Norman [na'sju:n] into ModE [nei∫n], both in its accentual and in its phonemic structure much closer to the domestic core of the word-stock than its Anglo-Norman source), but also with a semantic integration, i. e. with an enrichment of the semantic inventory of the word-stock in its given section (see the semantic differentiation of the expressions *nation — people — folk*, etc.). Integrations of the kind can only be understood if the word-stock, too, is conceived of as a sub-system of language, as a level in its own right, even if it constitutes a system markedly more open than are the systems of other levels. Even so, the existence on this level of some non-integrated elements can hardly be doubted. Such elements form the farthermost periphery of the level but for all their isolation in it they still undoubtedly belong to it: this is evidenced by the current use of such words in the utterances of the

masses of language users. Here belong, in fact, various ModE 'abbreviations' like [i: dži:], [ei em], [pi: em], American English [ou kei], etc. Such expressions lack, for the vast majority of speakers, any synchronic support in domestic non-abbreviated expressions, and thus prove to be morphemically unanalyzable by such speakers. In Mod. Czech an analogous position is held by those lexical items which are not governed by the common morphological regularities otherwise valid in the language — see, for inst. words like *klišé* 'a cliché', *relé* 'a relais', *sherry*, adj. *prima* 'first-rate', etc., which differ from the fully integrated lexical items not only by being morphemically unanalyzable but also by being undeclinable (more exactly, by preserving one and the same form in all cases).

It is, of course, true that from time to time one can come across a tendency aimed at some integration of such peripheral lexical elements — see, e. g. the Amer. English sub-standard verb *to okay* 'to approve', which arose from the above-mentioned *O. K.* by way of conversion. In this way, the lexical item *O. K.* manages to get somewhat shifted from the periphery of the lexical level closer to its central region, with the result that the basis of the converted expression *okay-* obtains the status of a stem morpheme. Even if this stem morpheme reveals some unusual phonological features (a disyllabic structure with two full, non-reduced vowel phonemes) and is still isolated among the ModE morphemes, there can be no doubt that some assimilation to the domestic word-stock has indeed been effected, in so far that what before the conversion was an absolutely heterogeneous formal element has now found its place in one of the basic word-categories whose grammatical features it can now share.

Similarly, one can find analogous tendencies in Common Colloquial Czech, where a marked effort can be established at some integration of the above-mentioned peripheral, non-integrated lexical items. Thus one can often hear a sub-standard, strongly emotionally coloured plural form *klišata* 'clichés', coined after the paradigm *kuře* sg. — *kuřata* pl. 'chicken — chickens'. One can also come across a derived adjective *klišový* 'cliché-like' and a diminutive noun *klišátko* 'a small cliché'. The above mentioned isolated adjective *prima* 'first-rate' can also be met with, in Comm. Coll. Czech, in the form *primový* which is declined after the common adjectival paradigm. It is again obvious that this kind of adaptation is able to link up the given items with the regularities of the Czech word-stock (in which, in this way, new stem-morphemes *kliš-*, *prim-* come to emerge); at the same time, the adapted forms cease to be isolated inflexionally, inasmuch as they become classed, like synchronically domestic Czech nouns and verbs, with some of the morphological paradigms.

As already noted, the adaptations of the kind just described rank as sub-standard; if they are employed in standard contexts, their use regularly

signals a more or less emotional approach to the extra-lingual reality concerned. Sometimes, however, an adapted item may even become absorbed by the literary standard and lose its emotional colouring. In our days, such radical adaptation has been experienced in Czech by the English term *whisky* which is being increasingly used in Czech contexts in the form *viska* (classed morphologically with the typical feminine inflexional paradigm *žena* 'woman'). This particular way of adaptation may have originated from word-groups like *láhev whisky* 'a bottle of whisky', in which the word *whisky* is interpreted as having a genitival form in which the typical Czech feminine paradigm *žena* has the regular ending *-y*. But it may also have been supported by the presence in the Czech word-stock of the semantically allied terms *vodka* 'vodka', *pálenka* 'gin', etc.; still, the analogy of the latter words could not solve all the problems connected with the integration of the word *whisky* in the Czech lexical sub-system. The form *whisky*, that is, has been fully integrated from the morphological, but not so fully from the lexical point-of-view: before the identifiable suffix *-ka* there remains the non-identified basic morpheme *vis-* which, from the ModCzech point-of-view could at most be classified as a virtual morpheme (to use the term coined years ago by B. Trnka[11]).

It should be noted that the factor of semantic analogy which has played a hardly unimportant part in the integration of the English word *whisky* in the word-stock of Czech becomes fully asserted in those instances of lexical integration which go by the traditional term "popular etymology". Clearly, in such cases the language user wants to incorporate, in the most consistent manner, an etymologically isolated lexical item into the existing domestic framework of morphemic and semantic structure. Thus, e. g., the ModE word *pickaxe* arose from Anglo-Norman *picois* by the semantic association of the latter with the domestic expressions *to pick* and *axe*. Similarly, the Mod. Czech term *velbloud* 'camel' was only secondarily associated with the domestic expressions *vel-ký* 'big' and *bloud-iti* 'to err', 'to wander' (the original Old Czech form *velbúd* reflects clearly the source word, present in Gothic *ulbandus*).

IV. All the enumerated illustrative examples of lexical, morphological, and phonological integration should not, however, make us blind to the fact that in a number of instances no integration takes place at all, with the result that the non-integrated item preserves the status of a heterogeneous element of the language system (or, of its respective level). It was exactly the existence of such non-integrated heterogeneous elements which, as early as in the late 'twenties, was to lead the theoreticians of the Prague group to formulations pointing out the incompletely balanced state of the system of language at any moment of its historical existence and of its

development. The assumption of such incompletely balanced state was, of course, a necessary pre-requisite for JAKOBSON's well-known thesis (included in the Prague Circle's collective theses presented to the First International Congress of Slavicists held in Prague in 1929)[12] urging the therapeutic character of a large number of changes to which language is subjected in the course of its development. Thought out consistently, this thesis cannot but lead to the conclusion that some lack of balance is even an indispensable pre-requisite for the development of language: a completely balanced system of language would hardly be able to develop at all. This statement of ours is not contradicted by the fact that a number of some changes in language development are, demonstrably, not of a therapeutic character (i. e. are not motivated by the need of greater balance in the system). As we hope to have demonstrated in another paper,[13] the consideration of the systemic needs of language plays only a regulative, not necessarily an initiative part in language development. In other words, the said consideration necessarily interferes with the process of development only in those situations in which the communicative function of language appears to be seriously jeopardized.

It is fair to state that the fact of the incomplete balance of the system of language has been noted — especially in the latest few years — also by some scholars not belonging to the Prague group. Apart from A. MARTINET's observations of the mid 'fifties, one should mention here especially two names of prominent American linguists. The first of the two is C. F. HOCKETT who, in establishing the universals in language,[14] came to the conclusion that some asymmetry is always present in the phonemic pattern of language. The other one is C. A. FERGUSON who, in reviewing Morris HALLE's monograph The Sound Pattern of Russian ('s Gravenhage 1959),[15] pointed out the fact that the author of the monograph was not always duly sensitive in his description to those items of the Russian phonological system which do not reflect its regularities so clearly and unequivocally as what might be called the fully integrated items of the pattern. All such observations are certainly most valuable; one should not, however, overlook the fact that such findings have been emerging in the writings of the Prague linguistic school since as early as the late 'twenties and that it was exactly in the Prague group that the problems of the periphery of the system of language were given incomparably more profound consideration than in any other centre of linguistic thought. And, which is even more important, the problems connected with the integration of such peripheral elements into the language system have remained, as far as we can see, virtually untackled by those other linguistic centres. And yet it appears that exactly the co-existence of the central and peripheral elements in the system of language (not only in its phonic plane) and the necessity to cope with the

tension involved by that co-existence constitutes another hardly unimportant universal feature of language.[16]

Our above observations will have revealed that the tendency aimed at the integration of the peripheral elements of language, though undoubtedly strong, is by no means so powerful as to eliminate all the anomalies and irregularities existing in language at any moment of its historical existence: for all the operation of the integrating tendency a number of anomalous features of the system are seen to persist in it. One might object that there is nothing particularly new in this statement — already the Jakobsonian thesis of the late 'twenties, recalled here above, took the "imperfect balance" of any language system for granted. But, as is commonly known, the said thesis urges that the imperfect balance of the language system follows from the fact that the therapeutic change, while it restores the balance in one section of the system, is bound to jeopardize it in another of its sections. Ours, however, is a different point; the permanently imperfect balance, as we take it, is not exclusively due to the mechanical, "unwanted" consequences of a previous therapeutic change, but simply to the fact that the undeniably present integrating tendency (a tendency whose therapeutic nature is obvious) can never assert itself fully in the system of language. If one raises the question why this is so, the most probable answer seems to be suggested by the hypothesis that there exist in language two diametrically opposed tendencies the mutual tension of which is reflected, more or less, in any stage of development of any language. One of the two is the tendency driving for integration, while the other is working against it. If this hypothesis is true, it might suggest the existence of another language universal.

Clearly, the above-suggested anti-integrating tendency must have some functional justification. If we take into consideration our observations mentioned in the earlier parts of the present paper, it appears most probable that the tension existing between the integrating and anti-integrating tendencies in language only reflects another tension clearly present in language utterances in which two basic functions permanently appear to conflict and, at the same time, to co-operate. They are the purely communicative function, directed at the reference to extralingual reality (very roughly, to K. BÜHLER's[17] 'Darstellungsfunktion'), and the emotive, subjective function, directed at the signalling of the subjective, personal approach of the speaker to that extra-lingual reality (again very roughly, at what is included by BÜHLER in his 'Kundgabefunktion' and 'Appellfunktion'). Obviously, if language were to give full way to the operation of the integrating tendency, it would deprive itself of some of the most advantageous means for the signalling of the emotive function. It is probably for this reason that the integration effected by the language system

is usually of the kind termed here above as differentiative, often making use of the above-noted complementary distribution of language means to keep apart and signal the two functions just mentioned. If this is so — and many facts ascertained in the analyses of concrete language systems appear to confirm this — then the absence of consistent simple integration can be accounted for by the presence of the integration effected on a higher level. Such an integration bridges the gap existing between the central and peripheral elements by uniting both into a system of a higher order, a system the inner structure of which is amply differentiated from the functional viewpoint. The periphery of this internally differentiated system is, in essence, delimited from the systemic centre by its manifest (even diametrical) structural contrast from it, and, analogously, the centre is just as manifestly differentiated and delimited from the systemic periphery.

V. We are fully aware that the solution suggested here does not cover all facts involved in the integration of peripheral elements. We have in mind those above-mentioned instances in which no integration of some elements takes place at all and in which the non-integrated elements stand out very strikingly against the background of the system (a system, at that, internally organized by the operation of differentiative integration). Such total lack of integration is characteristic, e. g., of the above-discussed case of Standard ModE /h/. As already noted above, the reason of its non-integration should be seen in the relatively very strict normalization of the literary standard, normalization enforced from above (school, various civilizational institutions) as well as from below (the requirements of social convention). It has been pointed out here above that in popular dialects, not subject to such strict normalization, the integration of [h], connected with its phonological re-evaluation, presents no particularly difficult problem. Still, one can find wholly non-integrated elements of the system even in local dialects. To mention only one instance out of many, the verb of existence frequently proves to have a paradigm equally irregular in the popular dialects as in the literary standards to which such dialects are subordinated. Clearly, one has to do here with a case of non-integration on the morphological level; and yet, as a rule, languages and dialects hardly show any resolute attempts directed at the elimination of such anomalies (or, if they do show them, then only to a limited degree).

It has often been argued that the non-integration in such instances is simply due to the high frequency of occurrence of such forms in concrete contexts, both in the standard languages and in the dialects. Although there is much to be said for this argument, it can hardly account for the fact in its entirety. For a fully satisfactory explanation of an anomalous case one needs not only to know the external circumstances in which the

case occurs but also the internal, structural condition which makes its persistence possible.

In our opinion, this external structural condition follows from our thesis, also noted here above, urging that the structural motivation plays only a regulative, not necessarily an initiative part in the process of language development. As has been shown in our paper quoted here above, Note 13, the processes taking place in language do not simply follow the regularities of the structure of language alone. There are other, external regularities which interfere, more or less, with the development of language — political, economic and cultural, and even the physiological and acoustic regularities conditioning the activities of the speech organs should not be overlooked. As long as the operation of these external regularities does not seriously jeopardize the basic, communicative function of language, no essential limits are set to it. But as soon as a case of such jeopardization does emerge in language development, the regulative part played by structural considerations is bound to intervene, and a necessary adaptation of the system of language is carried through.[18]

In view of our present-day knowledge of redundancy in language and of the part played by it in securing the communicative effectiveness of the language system functioning under abnormally difficult conditions, one cannot be surprised to find that at times the toleration of systemic anomalies in language may reach relatively high degrees. In other words, a language system may contain larger numbers of non-integrated (or non-sufficiently integrated) elements than a non-sophisticated linguist of structuralist obedience of the 'thirties, taking the thesis of the structural nature of language with dogmatic naivity, would have been ready to admit. An even greater mistake, of course, would be to overlook, or even to deny, the fact of the structural character of language. The very integrating tendencies by which language assimilates and adapts its peripheral elements and which we have tried, though in very rough outlines, to ascertain in the above lines, can yield conclusive evidence of the structural make-up of language. Moreover, the operation of those tendencies appears to show just as conclusively that it is in the said structural make-up that the source of the dynamics of the language system should be looked for.

A final remark should justify the fact that the above arguments do not attempt to formalize the presented theses. It will have been noted that the theses are, for the greatest part, concerned with problems of diachronistic, though strictly structural, character. And it is commonly admitted that mathematical science has not yet developed a formal apparatus capable of expressing what is happening within a changing structure.[19] There can be no doubt, however, that one day such apparatus will be available. Perhaps one of the justifications of these modest lines may be to urge the necessity of working out such apparatus.[20]

Notes

[1] A. MARTINET: Économie des changements phonétiques (Berne 1955), pp. 80 f.

[2] R. JAKOBSON—M. HALLE: Fundamentals of Language ('s Gravenhage 1956), p. 29. — Here it should be mentioned, in passing, that the classification of /h/ as a 'glide', frequently found in the writings of American linguists, is clearly inadequate. There is no vocalic articulation to which [h] would stand in a relation so obvious as is the one in which the real glides, [j] and [w], stand to [i] or, respectively, [u].

[3] J. VACHEK: Foném h/χ ve vývoji angličtiny [The Phoneme h/χ in the Development of English], *SPFFBU* A1, 1952, pp. 121—134. Also J. VACHEK: On Peripheral Phonemes of Modern English, *BSE* 4, 1964, pp. 7—109, esp. pp. 9—21.

[4] J. VACHEK: Notes on the English Possessive Case. *ČMF-Phil* 7, 1955, pp. 11—15; revised version in *BSE* 3, 1961, pp. 24—31.

[5] See his contribution to the discussion at the Erfurt symposium *Zeichen und System der Sprache* II, 1962, pp. 62, and especially his paper in the present volume, pp. 9—21.

[6] Cf. V. MATHESIUS: Zur synchronistischen Analyse fremden Sprachguts, *EStn* 70, 1935, pp. 21—35; reprinted in *PSRL*, pp. 398—412.

[7] Cf. J. VACHEK: On the Interplay of Quantitative and Qualitative Aspects in Phonemic Development, *ZfAA* 5, 1957, pp. 5—28.

[8] J. VACHEK: The Place of [ɔɪ] in the Phonic Pattern of Southern British English, *Linguistics* No. 14, 1965, pp. 52—59.

[9] J. VACHEK: Notes on Gender in Modern English, *SPFFBU* A 12, 1964, pp. 189—194.

[10] More exactly, "misplacing the *h*'s", because they are not only dropped but also inserted where they are not etymologically legitimate (for particulars, see our paper quoted here above, Note 3).

[11] In his university classes on English morphology. — M. DOKULIL speaks here about "residual morphemes".

[12] These theses were reprinted in *TCLP* 1, 1929, pp. 5—29 (in French); again in *PSRL*, pp. 33—58. Their abridged Russian version can be found in V. A. ZVEGINCEV's Istorija jazykoznanija XIX i XX vekov v očerkach i izvlečenijach II[3], Moscow 1965, pp. 123—140. — See also R. JAKOBSON's monograph Remarques sur l'évolution phonologique du russe comparée a celle des autres langues slaves, *TCLP* 2, 1929; reprinted in JAKOBSON's *Selected Writings* I ('s Gravenhage 1962), pp. 7—116.

[13] J. VACHEK: On the Interplay of External and Internal Factors in the Development of Language, *Lingua* 11, 1962, pp. 433—448.

[14] C. F. HOCKETT: The Problem of Universals in Language, in: *Universals of Language* (Cambridge, Mass., 1963), pp. 1—22. The American scholars often refer to such systemic anomalies by the term "the fuzzy points of the pattern".

[15] Published in *Language* 38, 1962, pp. 284—298.

[16] See also F. DANEŠ's paper in the present volume.

[17] K. BÜHLER: Sprachtheorie (Jena 1934).

[18] An interesting case of such regulative intervention in the history of English, concerned with the elimination of the Early Middle English phoneme /J/, was analyzed in some detail in our monograph quoted here above, Note 3, pp. 24—29.

[19] See Academician L. KÁLMÁN's (Budapest) statement made at the Colloquium of Algebraic Linguistics, held in Prague in September 1964.

[20] It should be added that even S. K. ŠAUMJAN's latest monograph Strukturnaja lingvistika (Moskva 1965), although it rightly stresses the dynamic aspect

of the synchrony of language, does not contribute to the solution of the problem. First, its author does not realize the impulse provided for the dynamics of the language system by the "fuzzy points" of the latter. — Second, his vindication of taxonomic linguictics as a discipline doing research in static synchrony of languaage does not convince, as there is, *sensu stricto*, no such thing as static synchrony. Incidentally, it is difficult to see how Šaumjan would oppose the Jakobsonian theses of 1929, on which he is perfectly silent although he mentions Jakobson's Oslo lecture of 1957 (which, however, cannot be duly appreciated without the knowledge of the speaker's pre-war conception). — Third, Šaumjan's restriction of the term "structural linguistics" to research in generative grammar (which he identifies with research in "dynamic synchrony") is manifestly unjustified, the more so that, so far, research in generative grammar has failed to cope with the problem of the "fuzzy points" of the system of language, the problem of paramount importance for dynamics of the synchrony of language. (On this point, see our paper On some basic principles of "classical" phonology, *ZfPhon* 17, 1964, pp. 409—431; N. Chomsky's and M. Halle's reaction to this paper in *Journal of Linguistics* 1, 1965, p. 131, misses exactly this most important fact of "fuzzy points", and so in no way invalidates our arguments.) More fortunate appears to be the approach of the "fuzzy points" by some modern logicians (see J. V. Neustupný's paper in the present volume).