SYNTAGMATIC VERSUS PARADIGMATIC APPROACH IN PHONOLOGICAL EVOLUTION

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Abstract

Phonetic explanations of sound changes have somewhat gone out of fashion of late. Perhaps this is a natural reaction to the fact that with the advent of structuralism, it was discovered that the speech sounds of a language hang together in a sort of system regulated by a set of internal relations. What more natural than to believe that these relations also preside over the evolution of the systems, thus endowing them with a sort of creative force of their own, working in the direction of a closer integration. It was also obvious that in language, the segmental phonemes would be the likeliest objects of such an approach, since they are farthest removed from the representation of our untidy thoughts on the one hand, and on the other are subject to the constraints of the vocal organs with their limited number of positions. With the further refinement of technical data, acoustic classes emerged beside the traditional physiological ones, seemingly capable of a much higher degree of abstraction from the actual phonetic material (even though nobody has ever heard compactness or diffuseness). The substance seemed to fade beside the network of relations, the unilinear sequence of sounds receded as against the paradigmatic arrangements of the elements.

I may be permitted to point out that in natural science, taxonomy has never, to my knowledge, been credited with a driving force of its own. What it represents is very largely the record of the interaction of its elements - plants struggling against plants, animals struggling against animals, the whole subject to the varying conditions of the environment. Few people still believe that the whole of the natural kingdom rose into being by fiat and that came to fill in the environment. Rather on the contrary, we believe that the environment created the species and at least changed them into what they are now. There never was a stage in which they were not profoundly affected by their environment, which includes every other species of plants and animals as well. Underlying it all is the great will to live (Schopenhauer, though he was unaware of evolution).
Underlying all language is the will to communicate. But as we know, the other great force in nature, including human, is inertia, which evolves, under the dire threat of necessity, to overcome. We are well aware that inertia is a powerful force also in the evolution of language, where it constantly has to be overcome by the need to express oneself, and the expression must take place by means of discrete and distinctive elements. Inertia would merge in one inarticulate primal cry.

Here we are back to the distinctions which, as we know, can be arranged in a "meaningful" pattern, the parts of which hang together in certain (cor)relations. But all relations in the phonological system bear on sets of phonemes and their realizations; it is not as individual entities, though correlated, that they developed. Exactly as plants and animals, all the way up to man (who becomes man through the social use of language), developed in a particular habitat, did sounds develop in their natural environment, and this natural environment is the word. Or more precisely the syllable within the word, if it has more. All phonemes are abstracted from the positions in which they occur, and it was those which have shaped them, unless we want to go all the way back to Brunnman and assume with him that "der Anlass zur Entwicklung der Laute in seiner Eigenart zu suchen ist." We might as well assume that the incentive for the evolution of natural species lay in their specific nature. When we compare stage B of a language stage A, represented by their phonological systems, we are almost undoubtedly subject to an optical illusion, and that is, that the system as such has changed somewhat on its own account. Especially if we find so-called fuzzy points at one place, gaps in another, a more systemic relationship in a third, we can see it spreading before our eyes in a widely prevalent variety of Latin American Spanish, here again only in certain syllabic positions: in Spanish itself, /h/ arose out of /f/ reserved in Judeo-Spanish (Ladino). Also, the system does not seem to be working consistently in the direction of its closer integration; these features are not entirely absent, but we must never forget that, as de Saussure has pointed out (4), the phonemes are really abstracted from their concrete position in the syllable, and cover an explosive and an implosive kind. Only these actually occur in the chain of speech.

It would, of course, be perfectly true to say that even if the Germanic /f/ is still always there in syllable-initial position, its incidence as a clearly articulated trill has nevertheless been seriously impaired. Yet we surely cannot on the one hand blame the statistical recession of the /f/ in the inventory of some Germanic languages on its allegedly isolated place in the system and on the other proclaim the emergence of /f/ in the phonemic system of English as well as marginally in German loans from Romance as being due to an empty slot for it in the system despite its low frequency in the text. Be it not denied that the English /f/ might not have come into existence without the open-chain (5) of its pre-existing voiceless counterpart /h/, but it exists, after all, only in a few words such as vision, leisure, secure etc. The incidence of a phoneme should, accordingly, not amount to a major criterion in the establishment of a phonological system, any more than that of a phonematic category in the morphological system. A certain tense may be actually quite rare (e.g. in Balinese), but nevertheless occupy an important place in the system and endure for many centuries.

We have seen that the weakening or even loss of the /f/ in the two I.-E. language groups discussed seems to be due ultimately to the same cause, i.e. the position in the syllable, and cannot be generalized at all as proceeding from the paradigmatic place in the system. If isolation within the system were a valid criterion, the English /h/ would have been subject to a much wider loss than merely in some Cockney and other dialects. But an /h/ even occasionally comes into existence at the expense of another phoneme much better integrated with the others, in particular /f/. This has happened in ancient Greek in initial and intervocalic position, it has arisen in some Slavic languages in the place of a well-connected /f/ and we can see it spreading before our eyes in a widely prevalent variety of Latin American Spanish, here again only in certain syllabic positions: in Spanish itself, /h/ arose out of /f/ reserved in Judeo-Spanish (Ladino). Also, the system does not seem to be working consistently in the direction of its closer integration.
reduced to /u/ and /w/, being able to keep their timbre only under length, which favored greater sonority; /o/ and /o/ kept their place, though not without some vicissitudes, being of the middle degree of sonority as well as of length, while their long degrees /e/ and /s/ increased their aperture to /é'/ and /a/ respectively, the latter in agreement with the original /u/. Short /a/ and /s/ fell together, i.e. sonority and length went hand in hand. It is as part of the same principle of unimpeded sonority that all I.-E. diphthongs were homogenized, thereby entailing further changes in the phonological system including the consonants, which therefore can be seen to be ultimately due to syntagmatic and not paradigmatic features. The syllable is the natural syntact of the phoneme. Within it, all major sound changes of Common Slavic that give it such a different appearance from closely related Baltic were contained, while the one or two exceeding the limits of the syllable, like the Third (Baudouin de Courteney's): Palatalization effected the breach precisely at the point of least resistance involving the least sonorous /i/ and /u/. It was also at these weak points that the syllabic structure of Common Slavic eventually broke down.

The maximal assimilation which prevailed in Common Slavic in the sequence CV (tautosyllabic) is the reverse of the principle of the open syllable; hence the recurring palatalizations of the velars with their typically shifting locus (hub); the combinations of consonant + yod establishing new phonemes, the velarization of the /i/ etc. From the very opposition of the sequences CV and VC there evolved in Slavic their most consistent consequences in a truly dialectic harmony. The Common Slavic syllable was maximally homogeneous within, maximally delimited without, and only against this background do the individual changes make any sense.

References

3) André Martinet, Économie des changements phonétiques, Berne 1955, p. 59; on the double pressure on each phoneme from context and system cf. n.25.
4) F. de Saussure, Cours de linguistique générale, Paris 1922, P.79 ff.
7) op. cit., p. 345; for the following cf. pp. 129. 252.