

## The Main Periods of Early Greek Linguistic Development

With the deciphering of Linear B, whole new areas of study were opened up in the fields of both pre-alphabetic Greek historical grammar and Ancient Greek dialectology. As early as 1955 Ernst Risch came forward with some of the first speculations relating to the complex of pre-alphabetic linguistic features. The results of further research into Early Greek, particularly in the realm of phonology, were brought together by Michel Lejeune in 1972 in his *Phonétique historique*, in which he employed the technique of relative chronology to classify the pre-alphabetic phonological features as pre-Mycenaean, Mycenaean, or post-Mycenaean. In 1976 the same author introduced a tentative distinction between “prémycénien” and “proto-mycénien” linguistic features. Most recently, a number of scholars have been concerned with working out an outline of the linguistic changes in Early Greek, and have revealed a steadily increasing number of linguistic processes dating from that period.

Studies of this type are completely legitimate. The pre-Mycenaean origin of a whole series of Greek pre-alphabetic features can be proved beyond any doubt, and it must be assumed that it took many centuries for the whole complex of changes to occur. Whereas only thirty years ago the prehistory of the Greek language vanished into murky darkness before the second half of the 8th century B.C., lit up only occasionally by the feeble light of a few more or less isolated sequences of linguistic changes, today the whole time span between 700 B.C. and 2000 B.C. stands revealed in the considerable detail of a whole series of Early Greek linguistic features. Drawing, therefore, on what has been discovered, I have attempted to divide the prehistory and protohistory of the Greek language into three main chronological periods, which I shall now describe in reverse order, going backwards in time; for this reason I have designated these periods alphabetically as phases Z, X and Y:

Z) Phase Z represents the post-Mycenaean pre-alphabetic period, preceding the earliest documents written in the alphabetic script [the end of the 8th century B.C.] and taking in the so-called “dark centuries” after 1200 B.C. To this period can be ascribed all phonetic changes which must be assumed because of the direct or indirect consequences they had for alphabetic Greek, but which had not yet occurred in Mycenaean. There are a great many changes of this kind, some of them widespread in Greek, others restricted to certain dialects. In the case of some changes, however, Mycenaean does not afford us sufficient evidence to be able to state with complete certainty that they are post-Mycenaean, either because the Linear B spelling is ambiguous or because the relevant phrases are simply not found in Mycenaean. It is this problem that has given rise to a number of scholarly disputes — for example, whether an expression such as a-ke-ra2-te should be considered an *agērhantes*, a geminated *agerrantes* or a com-

compensatorily lengthened *agērantēs*. But in the case of linguistic features that are clearly post-Mycenaean, there is generally enough evidence available for them to be placed in some kind of time scale. This offers certain bases for dividing the main post-Mycenaean phonological changes into two sub-phases:

Z 2) This, the more advanced post-Mycenaean pre-alphabetic phase, is the period in which, following the end of the early post-Mycenaean migrations, the Greek dialects took shape along lines more or less typical of the Classical period. Some of these dialects developed in relative isolation (e.g. Cypriot, East Thessalian, Cretan, Elean), while others were in close geographical contact with other Greek dialects, in many cases, ones that they were distant from genetically (e. g. Attic and Euboean with Boeotian; Corinthian, Megarian and East Argolic with Attic; West Thessalian with North-West Doric; Lesbian with Ionic of Asia Minor, etc.).

With regard to phonological features, this meant a wide variety of changes — from features limited to a single dialect, through features that developed independently in several dialect regions (e. g. *paisa* from *pansa*, beside *pāsa*), to features affecting a great many Greek dialects (e. g. the vocalic contractions) — though with results that were not the same everywhere, and in many cases actually continuing into the alphabetical period (e. g. the elimination of *w*). The point in time at which many of these changes occurred can often be fixed with some accuracy. Thus the Attic-Ionic change  $\bar{a} > \bar{æ} > \bar{ē}$  clearly came after some important early post-Mycenaean changes (e. g. the palatalization of labiovelars and also the first compensatory lengthening of the *stalnā* > *stālā* type); on the other hand, it preceded a number of other pre-alphabetic changes (e. g. the second compensatory lengthening of the *pansa* > *pasā* type). This enables us to place the change  $\bar{a} > \bar{æ}$  sometime in the middle of phase Z (i. e. after the beginning of the first millennium B.C.), and helps us, at the same time, to distinguish the earlier post-Mycenaean phase Z 1 clearly from the more advanced phase Z 2.

Z 1) Phase Z 1 is characterized by several important changes that occurred during the great migrational shifts of population following the collapse of Mycenaean civilization; these affected wide areas of the early post-Mycenaean world, in which there was still only slight dialectal differentiation. One of the earliest post-Mycenaean changes was probably the dissimilation of the aspirates (in accordance with Grassmann's rule). The two main phases of the elimination of labiovelars, i. e. their palatalization and labialization, must also be placed in this early period — as well as the introduction of the new, close long-vowel pair  $\bar{ē}/\bar{o}$  (e. g. in *ēmi* from *esmi*), which is found in a continuous stretch of territory running from the Corinthian Gulf in the north-east along the shores of the Saronic Gulf, and from there as far east as Asia Minor (i. e. in the North Doric and Attic-Ionic regions). Such a widespread geographical occurrence dates this innovation to some time after the departure of one part of the Doric population to the Peloponnesos and the southern Aegean, i. e. roughly to around 1000 B.C.

And this in turn gives a terminus ante quem for dating the first compensatory lengthening of the *\*esmi* > *ēmi* type mentioned above.

Y) The pre-alphabetic phase Z, for which no written documents exist, was preceded by phase Y, which is connected with the existence of Linear B and which can be divided into the phases Y 2 (Mycenaean proper) and Y 1 (proto-Mycenaean).

Y 2) The later of the two phases corresponds to the period covered by the surviving texts in Linear B. At the time when these were deciphered by Ventris, they were thought to date from about 1400 to 1200 B.C., but since Leonard R. Palmer's criticism of Arthur J. Evans's dating of the Cnossian tablets, a number of different proposals have been made for lowering the upper limit; the lower limit remains around 1200 B.C. It can be said that Linear B Mycenaean serves as a relatively reliable criterion for determining the post-Mycenaean provenance of a number of linguistic changes — with the reservation, however, that the form of Linear B was so strongly influenced by a long scribal tradition that it is very difficult to determine just what linguistic processes were actually going on beneath the surface of this "Mycenaean Koine" in the period during which the Linear B texts were being recorded. There is, in fact, a kind of exception even here: a few cases of orthographic variation, e. g. that of JO-/O- at the beginning of the relative pronoun *jōs* (and the adverb *jō*), which clearly documents the change of the initial *j-* into *h-* in expressions that had not undergone the earlier change from *j-* to *dz-*. A similar variation between the LB signs A2 and A in expressions like pa-we-a<sub>2</sub> *pharweha* (cf. Hom, φᾶρως) reveals a Mycenaean tendency to eliminate the antevocalic and intervocalic (-)h- that had arisen from an earlier (-)s-.

Y 1) This period runs from the time of the introduction of Linear B (the mid-15th century approximately, but according to some scholars as early as the 2nd half of the 16th century) down to the period of the oldest surviving LB texts (1380 or 1340 respectively). Michel Lejeune has employed the term "proto-mycénien" for this period, which he delimits by a number of phonological changes deduced from some anomalies occurring in the LB syllabary. Thus the rather anomalous Mycenaean value of the sign no. 62 PTE, points to an original value of PJE at the time when Linear B originated; this leads Lejeune to assign a clearly proto-Mycenaean origin to the change from *pj* to *pt*. Similarly, the origin of the above-mentioned variations JO-/O- and A2/A may be older than the Y 2 phase; where the initial *j-* (or antevocalic and intervocalic (-)h-) occurs in a tablet, it does not necessarily reflect actual pronunciation; it may have been simply a traditional spelling, i. e. it may have indicated that *j-* or *h-* was present in the word in question at the time when Linear B originated.

This leads one to suspect that the processes which led to the origin of phonological features that are firmly fixed in Mycenaean and show no signs of ortho-

graphic variation had been essentially completed by the time Linear B originated, or at least in the very early period of its existence, when the scribal tradition was being created — that is, in the 2nd half of the 15th century B.C. for example, the Mycenaean sign-group to-so indicates that since the origination of Linear B this demonstrative pronoun was clearly pronounced in a sibilant fashion as *tosos*, and no longer as *totjos* or *totsos*; not a single one of the dozens of examples of this word have the spelling to-ti-jo or to-zo, which, according to Ventris's rules, would correspond to the older stages of pronunciation *totjos* or *totsos*.

X) The pre-Linear B phase X covers the period between the arrival of the Indo-European ancestors of the Greeks in the Aegean region and the origin of Linear B. In recent years, the date favoured by most scholars for the arrival of these proto-Greeks has been somewhere in the 2200–2000 B.C. range. This phase of linguistic development was quite long, and it is not easy to find any objective stage at which to divide it. But it seems that the point at which the Early Greek antevocalic and intervocalic (-) *s*- completed its shift to (-) *h*- could serve this purpose very well. Taking this as a working hypothesis, then, we can divide the phase into two periods, X 2 and X 1.

X 2) The upper limits of this later pre-Linear B period are fixed by the change from (-) *s*- to (-) *h*- just mentioned. This must have taken place very early, for in the interval between this and the origin of Linear B there must have occurred not only i) the final phase of assibilation of the (*totjos* > *totsos* > *tosos* and *didoti* > *didotsi* > *didosi*) type, in the course of which a new intervocalic -*s*- developed in Greek, but also ii) a certain period of time needed for the restitution, or the analogical development, of an intervocalic -*s*- in various specific morphemic categories, clearly recorded in Mycenaean (ti-ri-si *trisi* Dat. Plur., do-so-si *dōsonsi* Fut., e-re-u-te-ro-se *eleutherōse* Aor.). This suggests that the change from *s* to *h* must have taken place in the early centuries of the second millennium B.C. Support for this hypothesis can be found in the retention of (-) *s*- in a whole series of Early Greek cultural loan-words taken from Mediterranean languages (some of them recorded in Mycenaean: a-sa-mi-to *asaminthos*, “bathing-tub”; sa-sa-ma Plur. of *sāsamon*, “sesami”; ku-ru-so *khērūsos*, “gold”) as well as in a great many Greek-Aegean place names (Salamis, Prosymna etc.). These are words that the Greeks brought into their language at the time of their early contacts with the Mediterranean civilizations, and the presence of (-) *s*- indicates that the shift from *s* to *h* had already been achieved before the words in question were taken over.

On the other hand, however, there is some evidence that this shift, though very early, did not predate the actual arrival of the Greeks in the Aegean region. For there also exist several Mediterranean ethnics in which the shift (-) *s*- to (-) *h*- did in fact take place (e. g. Λίγυες; cf. the Latin *Ligures* < \**Liguses*). Similarly, the early Greek loan-word ἄπιον “pear” (as opposed to the Latin *pīrum*), is clearly

of the same type. A comparison of the two types of borrowings places the change from *s* to *h* sometime in the first centuries of the second millennium B.C., the limit at one extreme being the period shortly after the arrival of the proto-Greeks (2200–2000 B.C.) and that at the other the period before the construction of the oldest Mycenaean shaft graves with their gold grave-goods (c. 1650 B.C.).

Within phase X 2, i. e. in the period after the *s* > *h* change had been completed, there occurred a whole series of important pre-Mycenaean changes, in particular some of the early stages of the Greek palatalization complex, which did not in fact come to an end until the post-Mycenaean period and which is still unclear in some of its details. On the other hand, the first phases of assibilation of the *\*totjos* > *totsos* > *τόσοσ* and *didōti* > *didōtsi* > *δίδωσι* type are older than these early palatalizations; they must be placed in the same period as the *s* > *h* shift.

X 1) Those phonological changes that must have come before the *s* > *h* shift I have assigned to the X 1 phase, the earliest phase of the pre-Mycenaean period on Greek soil. The most important of these is the vocalization of the sonants *m* and *n*, for the Indo-European *\*sm̥teros* must have first changed to *\*sateros* before the *s* > *h* shift could have occurred, resulting in *hateros* (compare the Mycenaean *a<sub>2</sub>-te-ro*). The change from *s* to *h* must also have been preceded by the metathesis *\*pheresi* > *phereis* in the second person singular (Kiparski's rule), for otherwise *\*pheresi* would have changed into *phe-rehi*, and lost its distinctive second person singular ending. It should be added that Kiparski's metathesis also occurred before the assibilation of *ti* > *tsi* > *si*, as shown by the line of development of the third person singular *\*phereti* > *phereit* > *pherei*. The *s* > *h* shift also came after the introduction of the prothetic vowels, which developed through the vocalization of the antecorsonantal laryngeal initially.

And it was subsequent to the origin of several Early Greek compounds with the sibilant *s* in the neighbourhood of consonants: cf. *\*Diwos-sūnos*, "Zeus's son", which, following the *s* > *h* shift, was changed by metathesis into *Diwonūs/s/os*. And if the initial phases of the assibilation *\*totjos* > *totsos* and *didōti* > *didōtsi* were in fact roughly contemporary with the *s* > *h* shift, then these three changes were also clearly preceded by the shift of the IE voiced aspirates *bh*, *dh*, *gh* to the unvoiced aspirates *ph*, *th*, *kh*. For the assibilation of the aspirated *\*methjos* into *metso*s was contemporary with the assibilation *\*totjos* > *totsos*, which necessarily entailed the previous change of the original IE *\*medhjos* into *\*methjos*.

Some of the phonological changes just mentioned have been attributed to an early period as that of the migration of the proto-Greeks from the IE homeland to their future Helladic sites. This, however, brings us to areas that lie outside the field of Greek studies and are clearly the province of Indo-European scholarship.

