

Current Trends in Linguistics

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*Diachronic, Areal, and
Typological Linguistics*

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CURRENT TRENDS IN LINGUISTICS

Edited by

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VOLUME 11

Diachronic, Areal, and Typological Linguistics

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EDITOR'S INTRODUCTION

With the publication of Vol. 10, *Linguistics in North America*, earlier this year, our geopolitically oriented survey of linguistics around the globe has ended. All but one of the previous volumes in the series, namely, Vol. 3, *Theoretical Foundations*, were organized according to some major areal segment of the world. By contrast, this book, and the two to follow, were designed to deal either with selected methodological issues that are, or ought to be, perennially focal to linguistic inquiry, as the problem of language classification; or with subjects currently of renewed internal concern to general linguistics, as its own historiography (Vol. 13); or, again, with burning topics of mutual interest that have emerged at the multiple interfaces of linguistics with its cognate disciplines, a wide array of which is being covered in Vol. 12.

The Editorial Board of Vol. 11 ingeniously conceived of *Diachronic, Areal, and Typological Linguistics* as consisting of a series of chapters devoted to a variety of methodological explorations, each to be followed by a case study exemplifying the particular mode of inquiry described. Accordingly, except for the introductory chapter by Robins, meant to provide a historical setting, this book is divided into two successive sections. These can be read in several ways: for instance, sequentially, through the nine methodological chapters, constituting Part Two, or crosswise, flipping from any methodological chapter directly to one or more of the ten corresponding case studies, which make up Part Three.

The fit is something less than perfect. While many pairs of authors wrote their respective contributions to Parts Two and Three in unison, others were unwilling or unable to cooperate, or even to consult with each other. In one instance, because of an editorial decision, there are two case studies for one methodological statement of lexicostatistic theory. In another instance, due to unforeseen difficulties, we have a case study, concerning the Altaic languages, unsupported by a separate methodological chapter, although this discrepancy is adjusted, to a degree, in Hoenigswald's introductory remarks to Part Two.

As reported in my Introduction to Vol. 7, the preparation of Vol. 11 was financed by the U.S. Office of Education, in the amount of \$33,834, through a contract with the Indiana University Foundation, bearing the identification USOE-OEC-0-9-

097735-2488. This continuing support for the series is hereby gratefully acknowledged.

As announced in my Introduction to Vol. 10, written only two months ago, the colossal bulk of Vol. 12, *Linguistics and Adjacent Arts and Sciences*, makes it difficult to forecast the precise publication date of the three separate tomes that its seventy-some chapters are likely to occupy, but my editorial staff, working in a concerted effort with the publisher's, is still aiming for the end of 1973. There are, however, unprecedented problems to be solved, which may delay the appearance of Vol. 12 until 1974. Not the least of these is our desire to provide that book with a sophisticated Index of Subjects, supplementing the routine Index of Names and Index of Languages. The development of a viable topical index for Vol. 12 will also be good exercise for the immensely more comprehensive and challenging task of preparing an Index of Subjects covering the contents of the entire series, which is intended to constitute a main component of Vol. 14, the *Index to Current Trends in Linguistics, Vols. 1-13*.

The manuscripts for Vol. 13, *Current Trends in the Historiography of Linguistics*, are now being gathered in, and their editing is progressing apace. This book will certainly appear in 1974.

Discussions are under way for the continued implementation of the impulse that has motivated and the ideas that have informed this series since its inception, but, in the light of a decade's experiences, it is sure to alter both its constitution and guise in the future. If the publisher's plans mature by the time expected, an initial announcement about the sequel to *Current Trends in Linguistics* can be made at the XI International Congress of Linguists, in Bologna, convening August next. In the meantime, preparations go on for a large variety of 'spin-off' books rooted in the series, including *Native Languages of the Americas: Linguistic Essays*, the only one in which I have personally maintained a direct editorial hand, and which is scheduled for publication simultaneously with Vol. 13.

The Editorial Board for Vol. 11 consisted of only two scholars, Henry M. Hoenigswald, who has prime responsibility for the methodological chapters in Part Two, and Robert E. Longacre, who fostered the development of the case studies in Part Three. The technical preparation of this book for press was accomplished jointly by the veteran team of Alexandra Ramsay Di Luglio and Lucia Hadd Zoercher, who also compiled the Master List of Abbreviations and the two Indexes that facilitate access to the contents of this volume. To the two Editorial Board members, both of whom contributed introductory remarks to their respective sections, and one of whom, moreover, wrote an article for the book, to the rest of the eighteen authors, to my editorial staff, and to the invisible stage-managers and hands in The Hague, goes my deep appreciation.

Bloomington, April 1, 1972

THOMAS A. SEBEOK

MASTER LIST OF ABBREVIATIONS

AAA-M	<i>American Anthropological Association, Memoirs.</i> Menasha, Wisc.
ACIAm	<i>xxxv Congress internacional de americanistas, México, 1962. Actas y memorias.</i> México, 1964.
AfrS	<i>African Studies.</i> Johannesburg.
AL	<i>Acta Linguistica Hafniensia.</i> International Journal of Structural Linguistics. Copenhagen.
AmA	<i>American Anthropologist.</i> Menasha, Wisc.
AnINA	<i>Anales del Instituto Nacional de Antropología e Historia.</i> México.
AnL	<i>Anthropological Linguistics.</i> Bloomington, Ind.
Anthropos	<i>Anthropos.</i> Revue internationale d'ethnologie et de linguistique/Internationale Zeitschrift für Völker- und Sprachenkunde. Freiburg, Switzerland.
ANZAAS	Australian and New Zealand Association for the Advancement of Science.
AO	<i>Archiv Orientalní.</i> Praha.
AOH	<i>Acta Orientalia Academiae Scientiarum Hungaricae.</i> Budapest.
BAE-B	<i>Bureau of American Ethnology, Bulletin.</i> Smithsonian Institution, Washington, D.C.
BiOr	<i>Bibliotheca Orientalis.</i> Leiden.
BSOAS	<i>Bulletin of the School of Oriental and African Studies, University of London.</i> London.
BSE	<i>Brno Studies in English.</i> Brno.
CAJ	<i>Central Asiatic Journal.</i> The Hague and Wiesbaden.
CAnthr	<i>Current Anthropology.</i> A World Journal of the Sciences of Man. Chicago.
CFS	<i>Cahiers Ferdinand de Saussure.</i> Geneva.
CSSH	<i>Comparative Studies in Society and History.</i> An international quarterly. The Hague.
CTL	<i>Current Trends in Linguistics</i> , ed. by Thomas A. Sebeok. 14 vols. The Hague. (CTL 3 = Theoretical Foundations, 1966; CTL 4 = Ibero-American and Caribbean Linguistics, 1968; CTL 10 = Linguistics in North America, 1973; CTL 11 = Diachronic, Areal, and Typological Linguistics, 1973.)
ESA	<i>Emakeele Seltsi Aastaraamat.</i> Tallinn.
FL	<i>Foundations of Language.</i> International Journal of Language and Philosophy. Dordrecht, The Netherlands.
FLing	<i>Folia Linguistica.</i> Acta Societatis Linguisticae Europaeae. The Hague.
GL	<i>General Linguistics.</i> Lexington, Ky.
HJAS	<i>Harvard Journal of Asiatic Studies.</i> Cambridge, Mass.
HMAI	<i>Handbook of Middle American Indians</i> , ed. by G. R. Wiley. Vol. 5, Linguistics, ed. by Norman A. McQuown, 1967. Austin, Texas University Press.
IF	<i>Indogermanische Forschungen.</i> Zeitschrift für Indogermanistik und allgemeine Sprachwissenschaft. Berlin.
IJAL	<i>International Journal of American Linguistics.</i> Baltimore.
IUPAL	<i>Indiana University Publications in Anthropology and Linguistics.</i> Bloomington and The Hague.
JanL	<i>Janua Linguarum.</i> Series maior, minor, practica, and critica. The Hague.
JAOS	<i>Journal of the American Oriental Society.</i> New Haven, Conn.
JASPsych	<i>Journal of Abnormal and Social Psychology.</i> Washington, D.C.
JPS	<i>Journal of the Polynesian Society.</i> Wellington, N.Z.

- JPSocPsych *Journal of Personality and Social Psychology*. Washington, D.C.
 JRSNSW *Journal and Proceedings of the Royal Society of New South Wales*. Sydney.
 JSoci *Journal of Social Issues*. Society for the Psychological Study of Social Issues. Ann Arbor, Mich.
 Kadmos *Kadmos*. Zeitschrift für vor- und frühgriechische Epigraphik. Berlin.
 KZ *Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der indogermanischen Sprachen*, begründet von A. Kuhn. Göttingen.
 Langages *Langages*. Paris.
 Lg *Language*. Journal of the Linguistic Society of America. Baltimore.
 Lingua *Lingua*. International Review of General Linguistics / Revue internationale de linguistique générale. Amsterdam.
 Linguistics *Linguistics*. An international review. The Hague.
 L & S *Language and Speech*. Teddington, Middlesex.
 Minos *Minos*. Revista de filología egae. Salamanca.
 MSFou *Mémoires de la Société Finno-ougrienne*. Helsinki.
 MSLL *Monograph Series on Language and Linguistics*, Georgetown University. Washington, D.C.
 MT *Mechanical Translation*. Cambridge, Mass.
 NTS *Norsk Tidsskrift for Sprogvidenskap*. Oslo.
 Oceania *Oceania*. A journal devoted to the study of the native peoples of Australia, New Guinea, and the islands of the Pacific Ocean. Sydney.
 OL *Oceanic Linguistics*. Special Publication. Pacific and Asian Linguistics Institute. University of Hawaii. Honolulu.
 OLM *Oceania Linguistics Monographs*. Sydney.
 Orbis *Orbis*. Bulletin international de documentation linguistique. Louvain.
 PAPS *Proceedings of the American Philosophical Society*. Philadelphia.
 PhJL *Philippine Journal for Language Teaching*. Quezon City.
 Phonetica *Phonetica*. Internationale Zeitschrift für Phonetik / International Journal of Phonetics. Basel and New York.
 PICL 8 *Proceedings of the Eighth International Congress of Linguists / Actes du Huitième Congrès International des Linguists, Oslo, 5-9 August, 1958*. General editor, Eva Sivertsen. Oslo, Oslo University Press, 1960.
 PICL 9 *Proceedings of the Ninth International Congress of Linguists, Cambridge, Mass., August 27-31, 1962*. Ed. by Horace G. Lunt. Janua Linguarum, series maior 12. The Hague, Mouton, 1964.
 PJS *Philippine Journal of Science*. Manila.
 PL *Pacific Linguistics*. Series A, B, C. Canberra.
 PRSNSW = JRSNSW
 PSR *Philippine Sociological Review*. Manila.
 RLar *Revue des langues romanes*. Montpellier.
 RLR *Revue de linguistique romane*. Lyons and Paris.
 RMEA *Revista Mexicana de Estudios Antropológicos*. México.
 RomPh *Romance Philology*. Berkeley and Los Angeles.
 SA *Scientific American*. New York.
 Science *Science*. Journal of the American Association for the Advancement of Science. Washington, D.C.
 SCL *Studii si Cercetări Lingvistice*. Bucharest.
 SG *Studium Generale*. Berlin, Göttingen, and Heidelberg.
 SIL *Studies in Linguistics*. Buffalo, N.Y.
 SJA *Southwestern Journal of Anthropology*. Albuquerque, N.M.
 SL *Studia Linguistica*. Revue de linguistique générale et comparée. Lund.
 SIPR *Slavistic Printings and Reprintings / Slavistische Drukken en Herdrukken*. 's-Gravenhage.
 SO *Studia Orientalia*, edidit Societas Orientalis Fennica. Helsinki.
 SS *Slovo a slovesnost*. Praha.
 SSLav *Studia Slavica Academiae Scientiarum Hungaricae*. Budapest.

TAPS	<i>Transactions of the American Philosophical Society.</i> Philadelphia.
TCLP	<i>Travaux du Cercle Linguistique de Prague.</i> Prague.
TPhS	<i>Transactions of the Philological Society.</i> Oxford.
TRÜT	<i>Tartu Riikliku Ülikooli Toimetised.</i> Tartu.
UAb	<i>Ural-Altaische Jahrbücher.</i> Wiesbaden.
UAS	<i>Indiana University Publications, Uralic and Altaic Series.</i> Bloomington, Ind.
UCPAAE	<i>University of California Publications in American Archaeology and Ethnology.</i> Berkeley and Los Angeles.
UCPL	<i>University of California Publications in Linguistics.</i> Berkeley and Los Angeles.
UUA	<i>Uppsala Universitets Årsskrift Recueil de Travaux publié par l'Université d'Uppsala.</i> Uppsala.
VFPA	<i>Viking Fund Publications in Anthropology.</i> Wenner-Gren Foundation for Anthropological Research, Inc., New York.
Vir	<i>Virittäjä.</i> Kotikielen seuran aikakauslehti. Helsinki.
VJa	<i>Voprosy jazykoznanija.</i> Moskva.
Word	<i>Word.</i> Journal of the Linguistic Circle of New York. New York.
ZAS	<i>Zeitschrift für allgemeine Sprachwissenschaft.</i> Berlin.
ZPhon	<i>Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung.</i> Berlin.

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PART ONE
INTRODUCTORY



THE HISTORY OF LANGUAGE CLASSIFICATION

R. H. ROBINS

The three methods of language classification comprised in the title of this volume, diachronic, areal, and typological, are recognized by modern scholarship as three legitimate and fruitful approaches to the comparative study of languages. It would be a source of satisfaction to be able to say that linguists have now overcome the confusions that have in the past beset comparative work.

Modern linguists are more explicit about the three separate systems they use, but it becomes quickly apparent that the same three have in one way or another controlled and characterized language classification from its earliest European days. Progress in scholarship, in this field as in others, has in great part lain in clarifying concepts and in sharpening the distinctions between theoretically separate but factually related methods, rather than in inventing entirely new modes of approach.

Logically the three classificatory methods are distinct, because the criteria employed to assign languages to classes in each are quite separate: diachronic (historical, or genetic, or genealogical) classes, or 'families', rest on the assumption of gradual divergence through time from a once more unitary state (cf. Vendryes 1921:349: 'Dire que le français est sorti du latin, c'est dire que le français est la forme prise par le latin en une certain région au cours des âges'); this was crudely expressed by Ross (1950, 1958:28) as 'Two languages are defined as related if and only if they were once one language', and dismissed by Allen (1953:88): 'Brothers if and only if they were once their father', which is a stronger objection to putting a cash value on the literal interpretation of much metaphorical terminology current in this field than it is to the methodology itself.

Areal classes group together languages spoken in geographically contiguous areas, and typological classes rest on shared but not universal features, at any level of analysis, that make certain languages significantly alike in structure in some respects.

However, while these three modes of classification are theoretically distinct, in fact their resultant classes overlap in membership, as a result of the natural course of events. The difficulties encountered in disentangling the three systems and their proper criteria comes largely from this empirical overlap of theoretically different methods.

Languages change in the course of transmission from one generation to the next. In the prolonged absence of a continuing need and opportunity for mutual under-

standing over an entire area, de Saussure's 'force d'intercourse', nothing prevents these changes from diverging further and further, as in the classic case of dialects of spoken Latin passing, imperceptibly at any one time, into the distinct Romance languages. But, without overseas migration or a successful penetration by speakers of a different language (e.g. the splitting of the Slavic speech area by Magyars c. 900 A.D.), historically related languages will continue to be areally contiguous; hence during the process of separation there is the possibility of changes spreading in 'waves' across a historically related community of diverging dialects and producing effects that blur an otherwise clearcut tree structure of historical relationships.

Particular words may be individually replaced more readily than phonological and grammatical structures; and not all parts of phonology and grammar change at an equal rate. The period of the 'great vowel shift' in English saw far more radical phonological changes than syntactic changes. In the absence of interference from extensive bilingual or substrate contacts, historically related languages are for some time likely to exhibit various structural and typological features in common.

So far empirical grounds have been given for expecting historical classes, genealogical families, of languages to share some areal contiguity and some structural similarity, at least for a certain time. But additionally areal and structural classes are themselves likely to overlap independently of inheritance. It hardly needs saying that intercourse across language divisions is most likely to occur in contiguous areas; and such intercourse, whose extreme developments are a bilingual community on the one hand or the suppression of one language by another in a few generations on the other, is a well known cause of the spread of structural features, phonological and grammatical, as well as some features of lexical structure, over whole regions (*Sprachbünde*) of genealogically distant or unrelated languages (Sandfeld 1930, Jakobson 1936, Emeneau 1956). Were this not the case, an areal classification of languages would be without linguistic significance. Jakobson (1957:524) summarizes the three methods: 'The genetic method operates with kinship, the areal with affinity, and the typological with isomorphism.'

It is legitimate for any linguist so to define the field of his operation as to exclude a particular type of classification from what he regards as strictly within the province of linguistics (cf. Allen 1953). It is also legitimate, though it may be dangerous, to apply criteria from more than one system of classification at once and to recognize the mixed nature of the resultant classes (as Guthrie 1948). More radically, the terminology of one system may be reinterpreted within the methods of another, as Trubetzkoy (1939a) suggested in a quasi-typological definition of Indo-European. The danger of such a mixture of methods lies in the likelihood of one's assuming that a dilution of criteria need not be accompanied by any weakening of inference. Trubetzkoy was perhaps himself misled in this respect, in his fallacious assumption that Indo-European could be simultaneously defined as a typological class and a genetic class having precisely the same membership. Possibly the best example of the near coincidence of geographical contiguity, typological similarity, and genetic relationship is to

be found in the Bantu languages, on the narrowest interpretation of the 'Bantu line'.

In the earliest European tradition of language classification these three systems are all found in operation to some extent. The ancient Greeks showed an almost total lack of interest in the structures and relationships of the non-Greek languages, despite the amount of bilingualism and professional interpreting that must have gone on in trading centers and at the periphery of the Greek world especially in and around the Greek 'colonies'. But at the same time they left records of a more detailed awareness of the dialectal differences within Greek than is available for any other language in antiquity. This is to be accounted for largely by the fact that among the Greek dialects several were the vehicles of literature recognized over the Greek world as a whole, and more than that number were literate, as is attested by the surviving inscriptions.

The linguistic and racial unity of the Greek-speaking world was recognized as a factor overriding its political fragmentation and frequent internecine conflicts. Herodotus (8.144.2) writing not long after the Persian wars, makes this, together with much common religious observance, a main ground for a united struggle against the barbarian Persians. Indeed, throughout Greek antiquity the major classification of the known languages of the world was a binary one of Greek versus barbarian.

Within Greek, however, a system of dialect classification appears to have been developed quite early in literary history and to have been maintained unaltered in essentials, save for the addition of the Hellenistic koiné, through the Byzantine period, and in fact up to very recent Greek scholarship, in which detailed epigraphic research has been applied to the traditional system, a system which had been based wholly on literary texts and, like so much Greek linguistics, had been greatly motivated by literary studies (Coleman 1963, Hainsworth 1967). The correctness and the adequacy of the Greek tradition are not here a prime concern; but what we see is a definite framework of four (pre-koiné) dialects: Attic, Ionic, Doric, and Aeolic. These dialects were themselves recognized as abstractions based on shared features, from a more delicate recognition of many individual city-state dialects. The terms *diálektos* and *glôssa* were in use when this distinction in delicacy was at issue. A Byzantine grammarian (Uhlig 1883:302-3) wrote: 'istéon dè hótí diaphéreí diálektos glôssēs, hótí hē mēn diálektos emperiektiké esti glôssôn: Dōrís gār diálektos mía, hyph'hén eisi glôssai pollaí, Argeíōn, Lakónōn, Syrakosíōn, Messénōn, Korinthíōn; kaí Aiolís mía, hyph'hén eisi glôssai pollaí, Boiōtôn kaí Lesbíōn kaí állōn' (Note that *dialect* differs from *subdialect* in that a dialect embraces more than one subdialect; Doric is one dialect, under which there are many subdialects, those of the Argives, the Laconians, the Syracusans, the Messenians, and the Corinthians; and Aeolic is one dialect, under which there are many subdialects, those of the Boeotians, the Lesbians, and others).

The historical origin of the pre-koiné dialects in the movements of separate divisions (*éthnē*) of the Hellenic people was recognized in the tradition of Aeolos, Doros, and Xouthos, sons of Hellen and the founders of the Aeolic, Doric, and Attic-Ionic com-

munities (Uhlig 1883: 462–3). This tradition went back as far as Hesiod (perhaps c. 800 B.C.). Plutarch (*Moralia* 9.15.747) quotes a fragment: ‘Héllēnos d’ egénonto philoptolémou basilēos / Dôros te Xoûthós te kai Aíolos hippiochármēs’ (Of Hellen the warlike king there were born Doros and Xouthos and the horseman Aeolos). The close kinship of Attic and Ionic was acknowledged, with Attic elevated to the status of a principal dialect, one suspects, because of its literary and cultural prestige. The special case of the koiné was admitted, but otherwise the picture of the Greek dialect situation was a static one, of a fixed classificatory tree; regional types of speech that did not fit the system were ascribed to racial mixtures from within the recognized subdivisions of the Hellenic stock (e.g. Thucydides 6.5, on the dialect of Himera in Sicily). Where the Byzantine grammarians referred to the phonological differences between dialects they stated these descriptively by reference to spelling conversion rules in relation to the koiné (e.g. Uhlig 1883:464: ‘hē Atthis trépei tò s pēi mēn eis t hoíon thálatta pēi dē eis x hōion xymphórā’; 466: ‘hē Dōris tōi ā anti toū ē chrētai, hoíon hāmērā’ [The Attic dialect turns *s* in some words into *t*, as in *thálatta* (‘sea’, koiné *thálassa*), but in others into *x*, as in *xymphórā* (‘misfortune’, koiné *symphórā*); the Doric dialect uses *ā* instead of *ē*, as in *hāmērā* (‘day’, koiné *hēmērā*)]). There is no suggestion of any historical presuppositions or of historical ordering.

No such classificatory frame was applied to the barbarian languages, the other term in the over-all Greek system. Strabo, the first century B.C. geographer, stated the Greek dialect system in its accepted form (8.1.2); but in reference to the non-Greek languages of Asia Minor he goes no further than suggesting the appropriateness of neighboring languages being alike in various respects, without further comment (1.2.34). Despite the great interest evinced by Greek and Latin scholars in etymology, this was never seen in a really diachronic perspective, but rather as a means of discovering or inferring the correct meaning of a word from its relations with other words in the language (cf. Uhlig 1883:14: ‘etymologiā estin hē anáptysis tôn léxeōn di’hēs tò alēthēs saphēnizetai’ [Etymology is the unfolding of words by means of which their true meanings are made plain]). Examples of ancient etymologizing, which persisted from Plato until the Middle Ages, are notorious and incidentally cast a wholly unfair light on ancient competence in the west in linguistic studies generally.

The Romans might have enjoyed a linguistic advantage over Greek scholars, in that they were more interested in Greek than most Greeks were in Latin; and some comparative studies were made between Greek and Latin structures, such as those of Varro (first century B.C.) and Quintilian (first century A.D.) on the case systems, and that of Macrobius (c. A.D. 400) on the Greek and Latin verbs. Varro was probably the Latin scholar best disposed towards the historical treatment of languages, and he treated Latin at length both historically and descriptively in his partially extant *De lingua Latina*. But he, like all other Roman scholars, misinterpreted the (West) Greek origin of the Roman alphabet and the one-sided dependence of Roman art and literature on Greek sources so as to derive the Latin language from Greek dialects with

barbarian admixtures (cf. Collart 1954: chapter 3). All Latin words bearing an obvious formal resemblance to a semantically comparable Greek word were treated by Varro as direct inheritances from Greek, the relation of *domus* to *dómos* 'home' being for him just the same as the relation of *feretrum* to *phérettron* 'bier' (5.160, 5.166).

Secular antiquity showed no signs of further progress in language classification, either in the Latin-speaking west or in the Greek-speaking east. But the recognition of Christianity as the official religion of the Empire and the study of Biblical literature introduced new influences. Most obviously, Hebrew and afterwards Arabic in the later Middle Ages presented themselves as languages unlike Latin and Greek but not to be dismissed as mere barbarian tongues; but more importantly, western scholars became aware of the Hebrew system of language classification such as is preserved in Genesis, chapters 10 and 11, wherein the nations and speech communities known to the ancient Hebrews at the time were classified under three lists as being descended from the three sons of Noah: Shem, Ham, and Japheth.

The integration of this Biblical system into the existing and developing western scholarship determined the course of language classification for centuries; and it must be regarded as part of the more general process whereby secular knowledge and thought were assimilated within a Biblical framework, as is seen, for example, in the reconciliation of sacred and profane history and chronology by such Christian writers as Augustine of Hippo and Orosius.

The most important figure in the formalization of early Christian and subsequent mediaeval doctrine on the classification of languages was Isidore of Seville (seventh century), who in part followed Augustine of Hippo. Hebrew was the first language spoken on earth, and Hebrew together with Latin and Greek constituted the three principal and sacred languages of mankind (*Origines* 12.1.2). Each was distinct typologically, as regards its predominant phonetic characteristics, Hebrew being 'guttural', Greek 'palatal', and Latin 'dental' (*Ibid.* 9.1.8); Isidore's first observation here may be seen as a natural reaction of a Latin writer to the phonemically distinct velar and uvular consonants of Hebrew.

Isidore established the Japhetic branch of the seventy-two languages ordained by God (*Origines* 9.2.2, 9.2.37) as the parent of the languages of Europe, building on the Biblical inclusion of Gomer (the Cimmerians) and Javan (the Ionian Greeks) within this group of languages, which in general lay to the north and west of Palestine. The Spaniards, for example, were descendants of Tubal, a son of Japheth (*Origines* 9.2.29).

This system of classification, like that of the Greek dialects, was historical in form, tracing back the separate languages to ancestral figures and seeing the dispersal and spread of populations as the carriers of linguistic divisions. It was, however, largely static history. As with the rest of the early creation story in the Old Testament, the languages of the world, like its plant and animal species, were made by God in their present and permanent form, once for all time. Languages from outside the Biblical