## LINGUISTIC ARCHAEOLOGY OF SOUTH ASIA

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## **CHAPTER SUMMARIES**

**CHAPTER 1.** This chapter, intended primarily for non-linguists, discusses the scope of the field of study I have designated as "linguistic archaeology". This field uses the assumptions and methods of five subfields of linguistics to reconstruct a *sociolinguistic context* for ancient linguistic forms, i.e. to make inferences from the language of ancient texts and/or linguistic reconstructions about the groups who used the language in question. The five subfields are: **historical-comparative linguistics** (1.2), which makes inferences about historical relationships among languages on the basis of shared forms, and which (under favorable conditions) makes possible the reconstruction of earlier stages of languages;

**linguistic palaeontology** (1.3), which uses the history of the forms of language (attested or reconstructed), along with textual and other evidence, to draw inferences about the socio-historical realities of the ancient societies in which the languages were used; **sociolinguistics** (1.4), which provides information about the linguistic and social roles of linguistic variation, and in the present context provides important background for the study of the social contexts of linguistic change, as well as the possible relationships between culture contact and linguistic diffusion (convergence or borrowing); **glottochronology or lexicostatistics** (1.5), a technique which may provide useful (though very approximate) estimates of the chronology of prehistoric separation of related languages;

**philology** (1.6), not strictly a subfield of modern linguistics, is concerned with the interpretation of ancient texts, as well as their history. The first four of these subfields are each discussed in terms of their basic assumptions and the types of inferences which they generate, with examples from South Asia and other parts of the world.

Linguistic archaeologists also hope to be able to find ways to correlate the linguistic prehistories inferred by the above methods with the findings of archaeologists and other prehistorians. Section **1.7** discusses the need for a new kind of dialogue between historical linguists and archaeologists, following a suggestion by Colin Renfrew.

**CHAPTER 2.** This chapter presents background information on the linguistic situation in South Asia, starting from the earliest period for which useable data are available, and including the current locations of major languages, as well as those minor languages which are of historical importance. In **2.2** the prehistory and history of Indo-Aryan is traced briefly from the Rigveda through Middle Indo-Aryan (MIA), including the inscriptions of Ashoka in the 3<sup>rd</sup> century BCE, to the modern (NIA) languages. The subgroupings and chronology of Dravidian and Munda languages are discussed respectively in **2.4** and **2.5**. Other languages, including languages of the Tibeto-Burman family, as well as isolated languages and languages whose existence is inferred from traces found in other languages, are mentioned briefly in **2.6** and **2.7**. The sociolinguistic situation in ancient India is discussed in **2.8**, with a focus on linguistic variation and diglossia within the Indo-Aryan speech community.

**CHAPTER 3.** This chapter is a discussion of linguistic evidence found in Old Indo-Aryan texts which indicate contact between speakers of OIA and other languages. The chapter's conclusions are summarized graphically in the map (Figure 3.1). Note that this map covers a period of several millennia, since it includes the probable earliest locations of Munda/AA and Dravidian languages in the subcontinent, as well as the inferred locations of earlier languages such as the "Indus" language(s), along with the modern locations of Dravidian, Munda, and Tibeto–Burman languages, and isolated languages such as Nahali, which are not necessarily the same as their ancient locations.

Section **3.2** takes up the lexical evidence, looking first of all at loanwords in OIA which seem to be from Munda or Austro–Asiatic (AA) languages (**3.21**). These are the earliest identifiable foreign words in OIA, appearing in the oldest books of the Rigveda. Witzel and Kuiper have given the name "Para–Munda" to the language(s) which served as source(s) for this material. Though many of these words do not have specific Munda/AA etymologies, the hypothesis of AA origin is supported by the presence of prefixes of types found in Munda and other AA languages, which are not found in the other known language families of the area. These words appear in OIA texts belonging to the entire Vedic period, indicating the presence of Munda/AA speakers in all the regions associated with Vedic texts, from Panjab to eastern Uttar Pradesh – as well as further to the east, given the connection of Munda with the rest of Austro–Asiatic.

Dravidian loanwords in OIA appear at a somewhat later date, from the middle Rigvedic period (about 1200 BCE), in contexts which suggest a more southerly location, possibly Sindh (**3.22**). These words also continue to appear in OIA throughout the Vedic period and into the Epic and Classical Sanskrit periods. A small group of controversial words suggest the possibility of an even earlier contact between Dravidian and OIA, in the period of Proto–Indo–Iranian, which if it occurred must have been separate from that reflected in the Rigveda.

Apart from words attributable to languages of limited extent such as Burushaski and various (named or unnamed) Tibeto–Burman languages, an additional body of foreign words found in all periods of OIA are of unidentified origin, probably pre-Indo–Aryan and pre-Dravidian, and in some cases perhaps pre-Munda/AA(**3.23**). An examination of agricultural vocabulary in modern Hindi indicates that, even among words which existed in OIA, approximately 30% cannot be traced to known languages (**3.24**). Thus it is highly likely that a number of languages existed in South Asia before the arrival of Indo–Aryan and Dravidian speakers. Only a few of these languages, such as Burushaski and Nahali, can be identified by name. The name "Indus" is used here to designate this group of languages.

Changes in the grammatical structure of Indo–Aryan languages have been thought to show the influence of other languages, particularly Dravidian, though some scholars

disagree (3.3). Two such changes are discussed here: the development of the dental– retroflex contrast in phonology (3.31) and the so-called "quotative" construction (3.32). In both these cases it is suggested that the history of these features in Indo–Aryan indicates that they are changes which began soon after the entry of Indo–Aryan speakers into the South Asian subcontinent, and thus are likely to have been triggered by local languages. Overall, the lexical and structural evidence of OIA and the Dravidian languages suggests that a linguistic interaction zone or "linguistic area" existed in South Asia before the arrival of Indo–Aryan languages in South Asia. Within the subcontinent, it involved speakers of (Para-)Munda, Dravidian, and "Indus" languages, as well as the ancestors of Burushaski and other linguistic isolates mentioned in **3.2** above, and was probably linked to speech communities of Central Asia.

**CHAPTER 4.** This chapter seeks to provide an empirical basis for drawing inferences from data on linguistic convergence (linguistic elements diffused from one language to another) regarding the socio–cultural contact situations in which the convergence took place. Three types of inference are discussed: **intensity** of contact (the extent of social integration of the groups involved, **4.2**), **range** of contact (the proportion of each group involved in the contact, **4.3**), and the **dynamics** of contact and the relationships among the groups involved (**4.4**). Examples are given from modern and ancient languages of South Asia and elsewhere.

Following are the major findings of this investigation relating to the intensity of contact: (1) percentages of borrowed content words reflect primarily the *duration of contact*: thus, 500 years of Turkish rule in the Balkans produced higher levels of lexical borrowing than 200 years of British rule in South Asia;

(2) structural convergence (borrowing of grammatical or phonological *rules*), or borrowing of function words or inflectional affixes, or high levels of core (non-cultural) borrowing, reflect *symbiotic* relationships between ethnolinguistic groups in which the borrowing group identifies itself as part of the same society as the other group: thus the length of time for Turkish in the Balkans is comparable to the period of Saurashtri contact with Tamil, but the latter case shows much greater grammatical convergence; (3) extreme levels of the types of convergence mentioned under (2) imply at least a partial loss of the separate ethnolinguistic identity of the borrowing group;

(4) while intermarriage and intrafamilial bilingualism are presumably important social mechanisms promoting linguistic convergence, they are neither sufficient nor necessary explanations from a cross-cultural point of view;

(5) though cultural identification between groups is a *concomitant* feature of high levels of linguistic convergence, it is probably not an adequate *explanation* of it; *economic interdependence* would seem to be a more potent, and more general, factor.

Regarding the range or extent of contact, it is important to recognize that borrowed material in a language (whether lexical or structural elements) may not be available to all speakers of the language, and may not be used in all contexts. In particular, religious texts tend to be governed by notions of cultural or linguistic "purity", and their creators may avoid conscious use of borrowed material. Thus, if we find even a few borrowed words

in a society's ritual texts, we would conclude that other parts of the *convergence continuum* (**4.31**) would probably show a higher level of borrowed elements.

Section **4.4** proposes five models for such situations, which differ according to the quantities and types of elements diffused between two languages, as well as the direction of diffusion:

(A) the native-convergence (adoption) model, applicable to small immigrant groups who modify their home language by adopting elements of the host language (e.g. Pennsylvania Dutch, Saurashtri);

(B) the substratum (carry-over) model, applicable to the version of a host language, or a colonists' language, spoken by those (immigrant or colonized groups) who carry over elements of their home language into it (Indian English, Hawaiian English);(C) the bilingual majority model, referring to the situation of Brahui, in which the

language of an originally dominant minority has accepted linguistic diffusion from local languages through widespread bilingualism of both A and B speakers;

(D) the mutual convergence model, applicable to situations in which two languages of comparable prestige show similar levels of convergence with each other (Gumperz & Wilson's Kupwar Marathi and Kupwar Kannada);

(E) the creolization-cum-convergence model, a more elaborated version of model C which posits two bilingual groups as intermediaries between the monolingual extremes. The model most applicable to Old Indo–Aryan, in its early contact with Dravidian, appears to be either C or E.

**CHAPTER 5.** This chapter deals with the subgrouping of Indo–Aryan languages. Historical linguists disagree on the division of Indo–Aryan languages into different subgroups, because of a crisscross pattern of linguistic innovations which can justify, or conflict with, almost any attempt to establish areas which exclusively share particular features (Figures 5.1, 5.2). A division proposed by Sir George Grierson in the early decades of the 20<sup>th</sup> century (Figure 5.3), which links the eastern languages with the southern and southwestern languages, has not been accepted by most scholars. The evidence for Grierson's division rests primarily on the modern Indo–Aryan languages, and the features which are shared by the eastern and south/western areas (see Figure 5.4) have been regarded by others as either independent or late innovations. This chapter argues that the number of detailed similarities makes independent innovation unlikely. Whether early or late, the peculiar geographical distribution of these innovations calls for some historical explanation, which is discussed in Chapter 6.

**CHAPTER 6.** Following up the evidence of Chapter 5, which shows linguistic links between the eastern and southwestern regions of NIA conflicting with the accepted view of NIA subgrouping, this chapter examines the linguistic history of MIA as well as the prehistory and social history of the region in order to propose a resolution. An examination of the geographical distribution of linguistic traits in the Ashokan inscriptions (3<sup>rd</sup> century BCE) indicates that the majority of innovations appearing in the inscriptions show agreement between the east and southwest. This evidence is

summarized in **1.5**, where it is pointed out that the major dialectal divisions in MIA are between the northwest-center and the rest (southwest and east), with the midland area sharing individual innovations with the three adjacent areas (northwest, southwest, and east). Thus, the MIA data agree with the data from the modern languages presented in Chapter 5. The evidence of the Vedic dialects shows a similar division (**6.16**). In addition, the eastern languages are united by a group of innovations which set them off from the remaining languages; these innovations, which probably occurred after those innovations shared between southwest and east, appear in the mid-third century BCE, implying that the common SW-E changes probably occurred during or before the first half of the first millennium BCE.

**CHAPTER 7.** This chapter combines botanical and palaeobotanical information about South Asian crop plants with etymological information about plant names in order to illuminate the historical relationships between plants and human societies in South Asia. Section **7.1** presents data on 28 crop plants which have been identified in South Asian archaeological sites (six from the Early or Pre-Harappan period, nine from the Mature Harappan, and thirteen from the Late or Post-Harappan period), plus 50 additional plants (including 26 trees) for which there is other evidence (linguistic or textual) of early presence in South Asia.

Section 7.2 presents conclusions based on this information regarding prehistoric and historic communication between different language groups and different areas. In 7.21 it is noted that the majority of cases (eight in all) in which Dravidian crop names were borrowed into Indo–Aryan involve plants whose origin lies to the east of South Asia, suggesting that these plants may have been transported by sea to coastal parts of peninsular India which were dominated (then or later) by Dravidian-speaking groups. Rice may have been among these plants, which suggests that the acquisition of rice in western and southern India may have been independent from its development in eastern India, part of the primary belt of rice domestication. In another group of nine items, the similarities between the Dravidian and Indo–Aryan words seem to point to independent borrowing from the same or related sources, possibly Munda or other Austroasiatic languages.

Section **7.22** notes that eight crop names for which Austroasiatic etymologies have been proposed designate crops whose origin lies to the east of India, whereas one item (cotton), whose Austroasiatic etymology seems secure, probably originated in southwest Asia – a mystery requiring further investigation. Section **7.23** discusses crop plants, particularly millets, which are believed to have originated in Africa, and finds no regular pattern among the etymologies, suggesting the possibility of different routes of transmission to northern and southern parts of South Asia. Section **7.24** lists 15 South Asian crop names which have been borrowed into European languages at various historical periods, beginning with the borrowing of the Dravidian word for rice into ancient Greek and extending into the colonial period.

**CHAPTER 8.** This chapter examines the vocabulary of Dravidian languages contained in the *Dravidian etymological dictionary*, revised edition (Burrow & Emeneau 1984) and reconstructs the approximate forms and probable meanings of words in Proto-Dravidian (PD) and Proto-South Dravidian (PSD). The first section discusses two problems which make it difficult to reconstruct Dravidian: (1) the paucity of lexical materials for the nonliterary, as opposed to the literary, Dravidian language, which severely limits the number of items which can be reliably reconstructed (**8.21**); (2) the relationship between the two subgroups CD (Central Dravidian) and SD (South Dravidian), which involved some sharing of structural innovations, although the two branches cannot be considered a single subgroup – implying the likelihood of lexical diffusion between languages of the two groups at all periods (**8.22**). These two factors affect the reliability levels of PD and PSD reconstructions (**8.23**).

Section **8.3** presents prehistoric inferences based on the reconstructed vocabularies, which are given in the appendices to this chapter. The linguistic evidence suggests that the Proto-Dravidian speech community was part of a society of the early third millennium BCE which included settled agriculturists, herders, and hunters; they possessed some form of land ownership, along with some social stratification, and possibly the beginnings of caste and occupational specialization. They had a well-developed and varied technology, including metallurgy. Their economic system included trade, along with payment of debts and other obligations (contributions to rituals, possibly also fines and/or taxes) and marketing of produce. Their religion included a notion of god and worship, priest or devotee, sacrifice, and (demonic) possession. In its earliest phase, the PD speech community occupied the lower Godavari basin, and possibly other adjacent areas. This community was probably associated with the Southern Neolithic archaeological complex from its earliest stages (**8.4**).

The next stage, Proto-South Dravidian, reflects an advanced society with governmental structures including administration, tax collection, and an army, along with various types of habitation areas and urban structures (streets, prisons, palaces). The caste system appears to be present, along with names of occupations. Technology includes many terms for metal objects including weapons and ironwork, wheeled vehicles and ships, umbrellas, garments, and precious stones. Though linguistic evidence (e.g. Dravidian words in OIA) suggests that this stage may be as old as the mid-second millennium BCE, these reconstructions seem to anticipate historical and archaeological reality by a millennium or more. The earliest known communities which might be connected with these reconstructions are the early Tamil kingdoms described in the literature of the Sangam period (early centuries CE). This case may have valuable lessons to offer regarding the relationship between linguistic and archaeological evidence.

**CHAPTER 9.** This chapter discusses eight Marathi place name suffixes of probable Dravidian origin, and finds that their distributional patterns agree in that they occur with greatest frequency in the Konkan (coastal Maharashtra) and in the southwestern part of the Deccan plateau, an area in which suffixes of Indo-Aryan origin (such as  $-g\bar{a}v \leftarrow OIA$   $gr\bar{a}ma$ ) are of relatively lower frequency (see Figures 9.3, 9.4). It can be concluded

therefore that these areas were probably inhabited by Dravidian-speaking people earlier, possibly as early as the mid-third millenium BCE, corresponding to the "pre-Malwa Neolithic" phase in Maharashtra which has links in material culture with the southern Neolithic (9.4). Going beyond Maharashtra, two suffixes of Dravidian origin are found in a continuous distribution from the Dravidian south, through the coastal area of western India (Maharashtra and Gujarat), into the Indus Valley and northwest India, suggesting that these areas may also have been home to Dravidian speakers earlier (sections 9.5, 9.6).

**10.3. Historical linguistics and archaeology in South Asia.** As pointed out in **1.7**, linguistic events like language contact and geographical displacement imply various kinds of social change. The following paragraphs spell out the kinds of social changes implied by the specific inferences made in Chapters 3-9, and discuss the possible types of archaeological evidence that might be relevant to testing them.

Chapter 3 presents a picture of an ancient linguistic area, with different languages in contact with each other in various parts of the subcontinent, particularly in the Indus Valley. Because of certain linguistic changes, particularly the adoption of the dentalretroflex contrast in consonants, it is inferred that the contact between the inferred "Indus" language and the Munda/Para-Munda languages was somewhat intense, implying a fairly high degree of socio-economic integration. The same was true later of the contact between OIA (presumably both the inner and outer varieties) and the local languages, which presumably included both "Indus" and Para-Munda. Thus we infer some sort of economic interdependence in both of these cases. If "Indus" and Para-Munda were languages of the Indus Valley culture (respectively a local language and an interregional *lingua franca*), then it would not be surprising if such contact occurred; nor would it be surprising if early speakers of Indo-Aryan interacted with the local people in similar ways, given the need of pastoralists for agricultural produce. Interactions between Dravidian and Indo-Aryan speakers appear to be somewhat later, and perhaps occurred first in Sindh. Whether there are any specific archaeological assemblages which could be linked with any of these contact situations would require a separate study.

Significantly, however, we are still left with the old mystery: how did the Indo-Aryan languages supplant those of the established Indus Valley culture? Even assuming, as is commonly done nowadays, that Indo-Aryan speakers only appeared in the Panjab after that culture had begun to decline and its communication and trade networks had been disrupted, this is still a significant question. If, as Witzel and Kuiper believe, Para-Munda was a major language of the Indus Valley culture – Witzel (1999b:14) even suggests that it may have been the language of the Indus script – what happened to the local languages and their speakers, particularly the elites among them? Linguistics cannot solve this problem, of course, and the linguistic perspective may even serve to emphasize its paradoxical nature. As noted in **1.7**, the social factors associated with language shift and language loss are usually economic – or more broadly, ecological: new languages are learned from ecological necessity, and existing languages are lost when they no longer fill ecological needs.

A possible suggestion from a sociolinguistic perspective is that an alternative communication network already existed before the breakdown of the older Indus network. This might have been the case if outer OIA-speaking pastoralists were already present in the Indus Valley before the decline of the Indus Valley culture (say by the early second millennium BCE) in sufficient numbers to have created their own interactional network within the framework of the Indus Valley society. This would presumably have been done by moving into niches which allowed them to establish relations with local agriculturalists, and perhaps also with town dwellers. There is evidence for pastoralism in the Indus Valley from the Early Harappan period on (Possehl 1999:58 ff.)), and the possibility of Indo-Aryan speaking pastoralists in the southern Indus area has been mentioned above (10.21C). One would expect that such networks would be expanded as more and more OIA-speaking pastoralists entered the region. Such a hypothesis runs counter to what might be expected, since agriculturists tend to be more numerous than pastoralists in any area and thus the language of the latter is less likely to become dominant (Renfrew 1987:271). However, if we are dealing with a situation with many local languages/dialects, the wider network of the pastoralists might become the more viable medium of regional communication, especially in a situation where the earlier network which people depended on was no longer functioning. Alternatively, Indo-Aryan-speaking pastoralists may have moved into an existing (?Para-Munda-speaking) network and gradually converted it to an Indo-Aryan-speaking network.

Chapters 5 and 6 deal with a problem in what historical linguists call subgrouping (see **1.22(B)**). A set of linguistic features which has a limited but continuous distribution among the NIA languages is used as a basis to posit two partly separate branches of Indo-Aryan – in the sense that the two legs of a pair of trousers are separate, each with its own (partly) separate history. From this linguistic history it is inferred that the two "legs" of Indo-Aryan traversed different paths, one (the inner languages) from Panjab eastward into the Ganga-Yamuna Doab, the other (the outer languages) from Sindh southwestward through Saurashtra and Gujarat into the Deccan, and thence eastward to Orissa, Bihar, Bengal, and Assam, with subsequent westward movement from Bihar to Kosala (modern Avadh). Such an inference raises several sets of questions: first of all, what conditions might have provoked these alleged movements? Were these simply cases of the "wave of advance" model (1.72A, Renfrew 1987:124 ff.), i.e. were the Indo-Arvan speakers of these two groups mainly agriculturalists by this time, and moving as needed to find more land as the population grew? This might have been the case even if the overriding ideology of the society remained linked to pastoralism because it was the chosen activity of the elites. Were there differences in culture content between the two groups? The prevalence of goddess worship and snake worship have been reported in both Maharashtra and Bengal, though of course they are not unknown elsewhere. In addition, the two great Sanskrit epics appear to belong respectively to these two branches of Indo-Aryan: the Mahabharata to the inner group, and the Ramayana to the outer (6.31). Another question concerns the inference that the two "legs" merged in the area of Avadh, where there is evidence of linguistic mixture. What might be the archaeological equivalent of this mixture? There also appear to be other transitional areas, for example Rajasthan and Bandelkhand (western Madhya Pradesh). Once these questions are asked,

it is possible that linguists and archaeologists working together could find ways to test these hypotheses.

Chapter 7, a study of plant names and their histories, suggests several hypotheses, some of which reinforce those suggested by other evidence: for example, the sharing of a word for sesame between Mesopotamia (Akkadian **ellu**) and South India (SD1 **e.l.lu**) reinforces the hypothesis of the presence of Dravidian speakers in the prehistoric Indus Valley. A different kind of example is the suggestion that certain agricultural crops may have reached South India by sea from Southeast Asia (rice, ginger, sugarcane, coconut) or from Africa (sorghum).

Chapter 8 is a study of ancient (reconstructed) Dravidian vocabularies which leads to a number of inferences. An association is inferred between the reconstructed language known as Proto-Dravidian and the core area of the Southern Neolithic archaeological culture of the mid-third millennium BCE, and by implication with the later extensions of this culture. In **8.4** an attempt is made to test this against the archaeological evidence, particularly the archaeobotanical evidence, and the fit is found to be reasonable though not perfect. Reasoning from the current locations of Dravidian languages, as well as from the records of Dravidian-speaking kingdoms in South India in the early centuries of the CE, it would seem unsurprising that the largest complex known to archaeology in South India had the same linguistic affiliation. However, one may ask if this hypothesis can be *dis*proved: is there any archaeological evidence of discontinuity which might suggest that Dravidian speakers entered the region in the intervening period?

Chapter 8 also infers that Proto-Dravidian was spoken, either earlier or contemporaneously, in the Krishna-Godavari area. This would suggest a search for possible links between the archaeological sites in the two regions. It has already been pointed out that there are shared elements between some Southern Neolithic sites and sites in the northern Deccan, which can be associated with Dravidian elements in the Marathi language (Chapter 9, note 1) as well as Dravidian place names in Maharashtra (Chapter 9).

A further important inference of Chapter 8 is that the reconstructed language known as Proto-South Dravidian (PSD) represents an advanced culture with urban structures, complex irrigation works, rulers and administrators, armies and navies, taxation and customs duties, etc. (8.37). Even assuming that PSD, like all reconstructed languages, represents a composite of speech over a long period of time and over a wide geographical area, it is still striking that there is no archaeological site remotely resembling this description in South India in the period to which this reconstruction can be taken to apply, i.e. the late second millennium BCE at the latest. Thus either our linguistic chronology is wildly off, or there are sites waiting to be discovered. Such sites might be only large towns – or even large villages, or groups of villages – from our present perspective, and might be located in areas which are as yet unexplored, particularly coastal areas. Or they might be linguistic phantoms.

Chapter 9 explores the place names of Maharashtra and finds a large number of them to be of Dravidian origin. Combined with evidence of Dravidian elements in the Marathi language, and archaeological connections between sites in Maharashtra and farther south, a strong case can be made for a previous Dravidian-speaking population in Maharashtra. This is supported by ethnographic and historical evidence. Similar place names are also found in Gujarat and (probably) Sindh, supporting other evidence for an early Dravidian presence in those areas, possibly during the time of the Indus Valley culture (see above). What is perhaps most striking is the concentration of Dravidian place names in coastal Maharashtra, which considered along with later evidence for South Indian involvement in sea trade (**8.42**), leads to the possibility that sea trade was perhaps much earlier in peninsular India than it is now thought to be.

The above are some examples of the kinds of inferences produced by linguistic archaeology, along with suggestions about their possible relevance to archaeology. Testing linguistic inferences against archaeological evidence can be useful in two ways. For one, it can provide a test of the methods and assumptions of linguistic archaeology, and lead to their refinement. For example: we know that the uniform appearance of a reconstructed language may conceal variants which in reality occurred over a long period of time and over a large spatial area, but we have no idea of what the temporal and spatial *limits* might be, if any. By confronting the reconstructed language with an archaeological entity which partly corresponds to it, we can begin to see what these limits might be: thus, the comparison of Proto-Dravidian with descriptions of the Southern Neolithic (8.41) notes a number of reconstructed words for items which do not turn up archaeologically, such as two-storied buildings, ladders/staircases, wheels, and axles. Erring in the other direction, the PD reconstructions fail to include words for a number of millets found (sporadically) at the Southern Neolithic sites, though such words are found in the next stage, PSD.

On the other hand, when the linguistic results are found to fit with the archaeological findings, then the archaeologist and linguist are in a position to collaborate in developing a more complete picture of the prehistoric past. Admittedly, archaeological research can be done, and is done, in the absence of any notion of the subject population's linguistic repertoire. Yet language is the glue that holds speech communities together, and when linguistic information is available and can be made to fit with the archaeological evidence, the result can be a richer and more detailed picture of prehistory.