Mario Alinei - Origini delle Lingue d'Europa [Origins of the Languages of Europe]; Volume 1 – Teoria della Continuità [The Continuity Theory], Volume 2 – Continuità dal Mesolítico all'età di ferro nelle principali aree etnolinguistiche [Continuities from the Mesolithic to the Iron Age in the Principal Ethnolinguistic Areas] (Il Mulino – Bologna, 1996 and 2000).

Reviewed by Jonathan Morris[1].

One of the main problems of a successful scientific theory is the excessive attachment to it by its proponents, who would rather tinker with its core assumptions in order to accommodate contrary evidence than abandon it. Conventional theories of Indo-European origins would seem to be a case in point. Indeed, the traditional theory of a Bronze Age invasion of nomadic pastoralists, reproposed most notably by Maria Gimbutas, is foundering on the absence of generalised archaeological evidence for rape, pillage and discontinuous change, and appears to be losing ground to Colin Renfrew's wave model of farmers/language teachers from somewhere in the Fertile Crescent introducing Europe's Mesolithic hunter-gatherers to agriculture, even though this is essentially a more peaceful version of the same old invasion theory shifted backwards in time by a couple of millennia.

Origini delle Lingue d'Europa by the Italian dialectologist and linguist, Mario Alinei, can be read as a radical critique of both. While there is evidently far more to his work than this, it is hard to give more than a brief sketch of a richly detailed 2,000 page work in the same number of words.

His Continuity Theory proposes that Indo-European speakers arrived in Europe tens of millennia ago, and that by the end of the Ice Age, had already differentiated into Celtic/Italic/Germanic/etc. speakers occupying territories within or close to their traditional homelands. He also suggests that the glaciers and pre-glacial basins that compartmentalised Europe during the Ice Age may actually have been the mechanisms for this process of differentiation of Indo-European into its component families.

As such, the transition from, say, Mesolithic to Neolithic would have occurred in a smooth and continuous way, with the full involvement of native populations. The only major discontinuities since the Ice Age, therefore, have been the expansion into new territories liberated by the retreating glaciers (e.g. Scandinavia) and the stratification of societies (including subjugation of one people by another) permitted by technological advantages accruing from the Chalcolithic onwards. An evident virtue of this theory is that it dispenses the need for the ghostly pre-Indo-European substrate that the theories of Gimbutas and Renfrew require in the same way that 19th century physics had to postulate a luminiferous aether.

The Continuity Theory also draws radically different conclusions about the rate of linguistic change from those of the traditional theories of Renfrew and Gimbutas. Clearly, if a homogeneous proto-Indo-European people appeared in Europe 6,000 years ago, then

[1] We would like to thank Mother Tongue for permission to reprint this article.

firstly, all subsequent language evolution will necessarily be compressed into the 6,000 years between then and the present, and secondly, the projection of this rapid rate of linguistic change back into the Palaeolithic will lead to the evident conclusion that no useful inferences can be drawn about languages spoken at that time, since it will impossible to distinguish genuine cognates in extant languages from chance similarities.

Arguing for a principle of linguistic conservation rather than rapid change results in a much simpler explanation for Indo-European's astonishingly large linguistic franchise: its speakers were the first settlers in their home regions. This raises another key assumption of his theory that is diametrically opposed to Renfrew's: that intruders tend to adopt the language of the indigenous population rather than vice-versa, unless they migrate in sufficiently large numbers. The European colonisers of the New World may have comprehensively displaced its indigenous peoples, but the lethal cocktail of violence and disease that they introduced does not appear to hold for Renfrew's essentially peaceful model of Neolithic colonisation. As such, most of the evidence seems to be on Alinei's side: Thus, despite migrating to Iberia, Italy and North Africa in considerable numbers, the Vandals, Ostrogoths, Visigoths and Lombards left only minimal linguistic traces of themselves. Cavalli-Sforza's genetic evidence showing that Near Eastern gene inflows during the Neolithic account for only 25% of total variation is hardly what we would expect had wildly successful farmers pushed indigenous hunter-gatherers to extinction. Indeed, Alinei draws on the work of Zvelebil to argue that the initial appeal of farming to highly specialised and productive hunter-gatherers was distinctly limited and that the onset of the Neolithic was a much more piecemeal affair. He also provides archaeological evidence to suggest that the Germanic speaking areas to the West and South of the Rhine (i.e. Alsace and Switzerland) had already been in place for millennia, suggesting, if anything, that the Celtic domination of Central Europe was a similar case of a group that expanded from a primary focus in Western and Northern France (as defined by the original megalithic areas) to establish a transient hegemony based on superior access to deposits of copper and iron. Like the Normans in Britain, the Celts would this have passed on a vocabulary associated with technological innovation before being gradually assimilated by their subjects.

Why then, do proponents of traditional theories believe in them? Alinei considers that their motivations are ideological and ultimately traceable to the 17th century Biblical belief in catastrophes, overlaid by a 19th century belief in Aryan supremacy which created the myth of an Indo-European people that sprung up in fully civilised form and a pre-Indo-European populations akin to the 'damned pre-diluvians'. Biblical creationism was successfully defeated by uniformitarianism, first by James Hutton and Charles Lyell in the field of geology and later by Charles Darwin in the field of biology. Alinei points out that the same principle found initial favour in linguistics but was later derailed by the Neogrammarians. As such, by arguing for slow and continuous change, he is merely returning to an old idea. Having said this, I suspect that his view of his opponents is oversimplified. What may have begun as an argument of the form 'late arrival ergo rapid language change' appears to have inverted cause and effect and become 'rapid language change ergo late arrival'. This has revived the Socíété Linguistique de Paris' prohibition of speculating on the origin of Indo-European, although these days it tends to wear statistical clothes, dismissing potential cognates as chance similarities. Alinei points out that while this late origin may represent

the current consensus in Indo-European studies, specialists of other language families such as Uralic or Australian argue quite happily for much deeper origins.

In similar fashion, Alinei turns on its head the old argument that a widely occurring pan-Indo-European word for a cultural innovation datable to a given era necessarily implies subsequent dispersion by pointing to examples where one might expect to find a PIE root conserved in several families and but actually finds a completely disparate series of words. For example, the IE root *mrt-* 'die' is widely conserved, but the words for burial, an innovation of the Upper Palaeolithic, *(e.g. seppelire, tapto, adnaichim, grafa)* show comprehensive differentiation, as do Mesolithic innovations such as the extraction of resin from trees: (IE *deru* (tree) > ME *tar*, Celtic *betulla* (beech) > *bitumen*, Lat. *pinus* (pine) > *pix* (pitch)). There are many other examples of 'missing cognates' such as 'bread' and 'war'. The evident conclusion is that differentiation had already taken place at the time of these cultural innovations.

Indeed, it is by making detailed comparisons of words and material cultures that Alinei arrives at powerful insights. Three of these deserve particular mention.

Firstly, he shows how the invention of new words in Indo-European is conditioned by material culture, allowing them to be dated by archaeological evidence. In Latin, verbs originally relating to a hunter-gatherer society generate huge lexical families (e.g. *legō* (collect, gather) > *lignum, ēlēgans, neglegere, collēctus, religiō, etc.*). In Germanic, verbs for 'doing, binding, turning' are grammaticalised into suffixes that are used to form abstract words (*e.g. wert* (turn) > *-wards, skap* (do, make) > *-schaft, haft* (handle) > *-haft*). The social stratification of the Bronze Age is paralleled in the lexical distinction between noble work (Lat. *Opus*, Gk. *érgon*, NHG *Werk*) and slave work (Gk. *pónos*, Russ. *rabota*, NHG. *Arbeit*).

Secondly, he suggests that the boundaries of material cultures coincide with linguistic boundaries. Hence the Uralic/Baltic frontier would already be reflected by the boundary across the South of Latvia between the Kunda and Nemunas cultures as early as the Mesolithic, shifting slightly to the North with the Narva culture of the pre-agricultural Neolithic, but then becoming stable. Furthermore, Latvian shows distinct Uralic influences, such as borrowings from Livonian and the characteristic Uralic accent on the first syllable that Lithuanian does not. He also shows, for example, that the Bronze Age cultures of Chassey, Cortaillod, Lagozza and Pfyn-Rosen (derived from the Urnfeld) already correspond to Franco-Provençal, Occitan, Gallo-Italic and Germanic speaking groups.

Thirdly, as a consequence of this early differentiation, he suggests that modern Italian dialects are not descended from classical Latin but from a series of differentiated sister Italic languages. In this way, they may conserve features that are more archaic than classical Latin. Indeed, the conventional assumption that all of these dialects derive from vulgar Latin results in bizarre phonological changes occurring in a compressed time frame. Lat. *caseus* (cheese), for example, is clearly associated with Lat. *coagulum* (rennet), but there are no regular sound correspondences in Latin that could derive the former from the latter. This is not true of Lombard dialect, however, where the intervocal *–gl-* in Latin corresponds to medial *ǧ* and final *č*. In this way, Lomb. *cač* can be derived from *coagulum*,

and since Lombardy has been a major dairy centre since Neolithic times, it is plausible as the primary origin for Lat. *caseus*, particularly given indications by early Latin writers such as Plautus that *č* was assimilated into Latin as *–sj-*. In similar fashion, the etymologically obscure *ferrum* (iron) can be explained as a loan from Gallo-Italic (cf. Lat. *fabrum*, Fr. *orfèvre*), probably originating as a compound noun, *aes fabrum* (worked metal). Similarly, *pratum* (meadow) is probably cognate to *pilatus* (hairy) [cf. Fr. *pelouse*], but borrowed from Ligurian, in which the rhotacisation of the *–il-* is perfectly natural. This point has enormous implications for glottochronology, since if Vulgar Latin is not the true ancestor of say, modern Milanese (which would be the descendant of a Lombard dialect that had fully differentiated at the time of the Roman empire), then clearly the rate of linguistic change used to calculate the point of divergence between modern dialects/languages will be systematically overestimated. Furthermore, there are modern parallels. The main reason why American English and Brazilian Portuguese, for example, differ from their European counterparts is that they conserve dialectal features that British English and European Portuguese do not, rather than because of divergence since colonisation. It is regrettable that Alinei restricts his discussion of this point to Latin/Italian rather than establishing it as a general principle, since this would demonstrate the inherently conservative nature of language.

The second volume is a family-by-family development of the above ideas. If anything, its only shortcoming is that it is not exhaustive, since Alinei does not cover Iberia, Greece or Asia Minor. It is nevertheless impossible in this brief essay to convey the wealth of material that it does contain. As a dialectologist and chief editor of the *Atlas Linguarum Europae*, a Europe-wide dialect atlas, Alinei is eminently placed to build his arguments based on highly detailed studies of dialect words, showing for example, how Corsican words for parts of a plough can be used to show that agriculture was introduced from Tuscany during the Neolithic. I shall thus limit myself to a couple of points that undermine his rivals.

Firstly, the Gimbutas theory has to explain how a cultural frontier apparently corresponding to the Uralic-Baltic divide was in place millennia before the arrival of her Kurgan peoples. It is possible to argue that only the Nemunas culture to the South was 'Kurganised', but why, in the absence of any evidence for conflict, do these putative warrior-pastoralists destroy all traces of the pre-Indo-European Nemunas culture but have no impact on their Northern neighbours, who are separated only by a minor river, and this despite the fact that the latter appear to have suffered the intrusion of the Boat Axe culture from Scandinavia at roughly the same time. Then there is the question of the Kurgan peoples themselves. Alinei devotes an entire chapter to showing that these and their predecessors of the Sredny Stog culture were far more likely to have been Altaic speakers. The notion that these peoples were responsible for introducing the inhabitants of Eastern Europe to the horse would also explain the Altaic origin of many horse breeding terms in the Slavic languages (e.g. Russ. *lošad'* (horse) < Chuvash *laša*; Serb. *ajgir,* Pol. *ogier* (stallion) < Turkic *ajgur*), not to mention the word *kurgan* itself, which derives from an old Turkic word that probably meant 'hill-fort'.

In similar vein, his chapter on Scandinavia creates further serious problems for Renfrew's theory. The arrival of the specialised Fosna fishing culture on the islands off the Western coast of Norway between Stavanger and Vega can be dated to shortly after the retreat of the

glaciers, around 8,500 B.C. Furthermore, agriculture did not appear in this region until the Bronze Age (around 2,200 B.C.), and even then was restricted to the interior of Western Norway. Despite the fact that there was only a late conversion to agriculture, all of the toponymy of the coastal region is Germanic in origin. Nor are there any obvious pre-IE survivals in a specialist fishing vocabulary, despite the likelihood that the incoming IE farmers lacked one. Did the incoming IE farmers succeed in destroying all traces of pre-IE languages in the area, while abandoning their 'technologically superior' agriculture for an 'inferior' Mesolithic fishing existence?

Finally, there is the question of the Palaeolithic and the evidence for the early spread and differentiation of Indo-European. Alinei believes that language is very old, stretching back to early Homo Sapiens and possibly to Homo Erectus, although he perhaps pushes his attempts to collate language and material culture too far with a model based on work by Matthew Dryer and others that proposes cognitive parallels between the operations involved in making stone tools and the formation of sentences. He concludes that the persistence of simple choppers in SE Asia until the end of the Pleistocene is a hallmark of monosyllabic languages, while more elaborate hand-axes can be identified with agglutinative languages. It is nevertheless easy to think of counterexamples, such as the Andaman islanders, who never developed elaborate hand axes, but who speak highly agglutinative languages.

In the light of new genetic evidence that has appeared since the first volume of his book was published, his dates for the differentiation of Indo-European from Nostratic as early as 80-90,000 years ago are probably far too high. If current interpretations of mitochondrial and Y-chromosome DNA evidence are correct then the earliest possible date for an entry into a Europe still occupied by Neanderthals would be around 45-50,000 years ago[2], although such an entry date is still radically different from those of the traditional theories. Furthermore, the vagaries of climate change between then and the end of the Ice Age must have shifted Europe's population around, by turns isolating them and mixing them together. Whether or not such linguistic evidence for such patterns can be unscrambled remains to be seen.

Having said this, Alinei does have interesting things to say about the Palaeolithic. His very strong point regarding the coincidence of linguistic boundaries with those of material cultures is less likely to work for such remote periods for the obvious reasons that hunter-gatherers had simpler material cultures and occupied less well-defined territories, even if he does identify the Epigravettian, which occupied Italy and the coast of France and Catalonia from 24,000-10,000 B.C., with proto-Italic speakers.

He also makes an interesting analysis of words with religious and magical associations. We know from ritually arranged bear skulls and long bones in such caves as Régordou that between 40-10,000 years ago there was a stable totemic cult of the bear in Central and Northern Europe. We also find that a PIE complex with regular correspondences (Hitt. *hartagga*, Gk. *árktos,* Lat. *ursus*) is replaced in such areas by euphemisms: OE *bera* (the brown one), Russ. *medved'* (honey eater), Lit. *lokys* (hairy). If we assume that the Proto-

Indo-European word became taboo and was replaced by a euphemism, then it seems logical to argue that the emergence of these expressions can be identified with the religious context of the Palaeolithic, when they emerged, rather than the entirely different religious context of the Bronze and Iron Ages, as would follow from conventional theories. If so, then we have semantic evidence for the differentiation of Indo-European even at this early stage.

This, then, is a brief sketch of Alinei's theory, which is both simpler than its rivals and more powerful in terms of the insights it provides into language in the Meso- and Palaeolithic. While his book contains some flaws I believe that it deserves to be regarded as one of the seminal texts on linguistic archaeology, although given its lamentable lack of citation in English-language circles, it appears that recognition will have to wait until a translation of the original Italian appears.

Notes:

[1] Stephen Oppenheimer has argued for two waves of migration into Europe: one from Anatolia around 45-50,000 kya and another via the Caucasus and Ukraine around 33,000 kya. (Cf. The Real Eve, p. 137).