Angela M a r c a n t o n i o, **The Uralic Language Family.**
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cations of the Philological Society 35). 335 p.

In her book, Angela Marcantonio sets herself the ambitious task of arguing that there is, in fact, no scientific evidence that the Uralic languages form a language family, "a genetically coherent group of related languages" (p. 1), the similarities between the Uralic languages in vocabulary being indistinguishable from change correspondences (pp. 151—153), and the grammatical and lexical correspondences which are significant being shared by a number of non-Uralic, especially Altaic and Palaeo-Siberian languages (p. 274). This is quite a radical claim, and most of the following review will deal with the substance of the arguments she has put forth. I will first deal, shortly, with the outer form of the book, which consists of ten chapters, including an introductory chapter and ending with a summary and conclusions. The chapters in between deal with the history of Uralic linguistics (Chapter 2), with contemporary divergent opinions within and outside of the "main" Uralic paradigm (Ch. 3), with the reconstruction of Proto-Uralic phonology and lexicon (Ch. 4), a statistical analysis pitting phonological correspondences against the expected distribution of false matches among unrelated languages (Ch. 5), with contacts between Uralic and non-Uralic languages (Ch. 6), the antiquity of the Uralic proto-language (Ch. 7), the reconstruction of Uralic morphology (Ch. 8) and, finally, with onomastics, archaeology and genetics (Ch. 9), thus covering a very broad range of topics. Each

chapter begins with a short overview of the main arguments A. Marcantonio plans to put forward, and ends with a short summary, which, though at times approaching repetetiveness, makes it easy for the reader to follow the author through a chain of arguments, sometimes intricate. The main text is followed up with five appendixes (pp. 280—290), the first two clarifying the distribution of, respectively, body-part terms in UEW and the lexical items of J. Janhunen's (1981) proto-Uralic corpus, the other three treating Uralic case endings, ethnonyms among the Uralic peoples, and common Hungarian-Bashkir toponyms. In general, the book is well-written, and contains an very elaborate bibliography (pp. 306—328), as well as separate indexes of general concepts, languages and names of authors (pp. 329—335). It must be noted, though, that the terminology A. Marcantonio uses is at times a bit foggy. The title of Chapter 4, "Reconstructing the sound structure and lexicon of the Uralic family tree" is, of course, a misnomer, but comprehensible, as is "reconstructed etymologies" (p. 130). More serious is the treatment of the word "sound-rule", used throughout Ch. 4 to mean synchronic sound-correspondences, but on p. 130 these sound-rules have miraculously discovered the fourth dimension and are referred to as "sound-changes". As I shall show later, I am not merely nitpicking here, the confusion of terminology is, in fact, coupled with confusion concerning the substance of sound-changes itself. This said, let us move on to the arguments A. Marcantonio marshals in support of her central thesis — the absence of a genetic relationship among the Uralic languages.

In the introductory chapter, A. Marcantonio attempts to define a "standard" Uralic theory (pp. 3—4), recognizing nevertheless that there are large differences of opinion in the field. She then proceeds to mount criticism against the traditional comparative methodology Uralic linguistics has applied (pp. 4—7). The sequent introductory chapters deal with what A. Marcantonio regards as a systematic re-interpretation of linguistic

evidence in favour of the "standard" theory (pp. 12—15), her own alternative model (pp. 15—16), and the recent discussion considering the validity of the family-tree model and proto-Uralic itself (pp. 16—18).

The second chapter, "The Historical Foundations of the Uralic Paradigm" (pp. 19—54), suffers from a lack of distinction between the historical foundations of the position of Hungarian w i t h i n the Uralic language family itself, and the relationship of Hungarian t o Uralic. Thus, A. Marcantonio writes: "Between the 15th and 17th centuries, a belief arose that Hungarian is closely related to Vogul and Ostyak, that is the "Ugric" people.", and that, according to B. Kálmán, "this belief was based on a coincidence rather than on scientific evidence.", the coincidence being the apparent similarity between the name of the region the Voguls and Ostyaks inhabited, *Yugria*, and the ethnonym *hungarus* (p. 31). But this is something else than the origin of the Uralic theory itself, and A. Marcantonio does not distinguish between them adequately. For example, on p. 270 she writes: "We saw that the origin of the U theory can be traced back to the emergence of a belief in a close relationship between Vogul, Ostyak and Hungarian (the "Ugric" node). Between the 15th and 17th centuries, it came to be taken for granted that the Eastern origin of the Hungarians, which was indicated in the Chronicles, could be identified with an area near the Ural mountains called *Yugria* (hence the term "Ugric"). This belief was originally based on nothing more than the apparent similarity between the toponym *Yugria* and the ethnonym *hungarus*". To be precise, it seems that the first mention of a relationship between the Hungarians and fur-traders at the shores of the Arctic sea preceded the connection between *Yugria* and *hungarus* (Stipa 1990 : 30—31), but this is not the point. The point is that the first serious comparative work on the Uralic language, by J. Sajnovics and S. Gyarmathi, concentrated itself on the languages which were most accessible, namely Hungarian, Finnish and Lapp,

although S. Gyarmathi (1799 : 189) in fact does claim that correlations between Hungarian and Vogul vocabularies are especially close, thereby providing linguistic evidence, and not a spurious similarity between ethnonyms. The origins of the "Uralic theory" are considerably more complex than A. Marcantonio makes them out to be.

A. Marcantiono also deals with the idea of Hungaro-Turkic genetical relationship and, in general, with the Ural-Altaic hypothesis, arguing that J. Budenz' comparative work on Hungarian and Finno-Ugric languages was not as strong as it is generally taken to be (pp. 35—42) and that J. Budenz and K. Donner remained adherents of the Ural-Altaic hypothesis, which was, according to A. Marcantonio, abandoned without any real proof of their non-relationship (pp. 46—47). As to lexical and morphological similarities between Hungarian and Turkic, A. Marcantonio criticizes the hypothesis that these are due to borrowing as unfounded (pp. 50—51). On pp. 50—51, A. Marcantonio draws her conclusions on the history of Uralic research, two of which illustrate the problem I have with A. Marcantonio's approach to history. First of all, she writes that "There are no historical records that refer to a U/F-U population, language or culture. These designations are purely linguistic creations from the second half of the 19th century." (p. 50) This is utterly trivial. In fact, I am willing to wager that there are no historical records referring to "Austronesians", "Eskimo-Aleuts" and "Macro-Penutians" either. She then goes on to write: "The few historical records that do exist are either inconsistent with the U paradigm, or are neutral. For example, the records that are supposed to be associated with the Hungarians, despite their ambiguities, all consistently consider the Hungarians purely and simply as Turkic people. The other historical resources refer only to individual people or languages which are now classified as U/FU." Since the Uralic language family, and proto-Uralic, are products of scientific research done over the past two hundred years or so, and since the avail-

able historical records only start many millenia after PU is supposed to have been broken up into its daughter languages, w e w o u l d e x p e c t those records to be neutral or inconsistent. More importantly, the historical records A. Marcantonio refers to date from before the rise of historical linguistics and ethnology as scientific disciplines, and one should be more wary in interpreting them.

It is unfortunate that A. Marcantonio then proceeds to look for "political factors" having supposedly led to the ascendancy of the Finno-Ugric paradigm in Hungary, and to find all the usual suspects (Austrians and communists), even going as far as to ascribe overt political motives to J. Budenz and P. Hunfalvy, both Germans (pp. 51—54). Of course, scientific research is influenced in a myriad of ways by the political and social environment it is carried out in. But the aim of all scientific research is to find out the truth about some part of the reality surrounding us. Only when it is clear that a scientific paradigm proclaims, due to its politicized nature, very much the opposite of truth, the socio-political forces behind it are a pertinent matter of discussion. Whether A. Marcantonio establishes such, we shall see below.

Chapter 3, "Modern interpretations of the Uralic paradigm" (pp. 55—68), deals with variations on the family tree model and alternative models based on shared isoglosses, as well as attempts to uncover genetic relationships between Uralic and other language families. Discussions on the validity of the family tree model have raged in Uralistics like the seven plagues of Egypt over the past decade or so (for example Künnap 1998), whereas the most vital question — what is a model supposed to depict and is it adequate for that purpose? (see Itkonen 1998) — has received, unfortunately, too little attention. Whereas A. Marcantonio's review of this discussion is generally adequate, she herself shows her lack of comprehension of this question by positing that on P. Hajdú's isogloss-based model reproduced on p. 61: "Furthermore, it is self-

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evident that such a scheme, based on isoglosses, cannot be converted either into a family tree type of scheme, or into the various versions of U family trees proposed so far, (as pointed out by P. Hajdú himself). This factor on its own should be enough to cast some doubt on the validity of the conventional family tree." (pp. 60—61). All but two of the isoglosses which P. Hajdú's diagram (reproduced on p. 61) depicts, illustrate general, typological features like the presence vs. absence of quantity or a dual category. Such features can and do appear, disappear and re-appear again in unrelated languages across the globe. It is only natural that one cannot build a family tree model on the basis of these. But the whole counterposition of the two models, which A. Marcantonio repeatedly undertakes (pp. 179, 275) is misguided. Briefly, a model based on shared isoglosses depicts the spread of linguistic features within related languages or transcending language families from a s y n c h r o n i c, though not necessarily contemporary, and a g e o - g r a p h i c a l point of view. The d i a c h r o n i c family tree model depicts the divergence of languages through time and has no geographical dimension, nor can it show the spread of typological features, contact influences and the like. It is the, often only partially attainable, end result of an analysis of the genetic interrelationships of a language family, nothing more. The two are not comparable.

The next Chapter, "Reconstructing the sound structure and lexicon of the Uralic family tree" (pp. 69—135) starts with a critical examination of J. Janhunen's (1981) corpus of PU etymologies, and his statement of PU-Proto-Samoyed and PU-Proto-Finno-Permic sound laws. A. Marcantonio claims here that: "[---] this corpus contains a large number of sound-rules and a small number of etymologies. If one counts only etymologies that obey the sound-rules regularly (that is, as they are stated) then the sound-rules outnumber the etymologies. In other words, this corpus does not meet the "significance criterion" of the Comparative Method —

that each sound-rule should be supported by a significant number of etymologies — and, therefore, the reconstruction does not qualify for the high level of confidence that is sometimes inherited when the Comparative Method is used. Accordingly, one cannot tell whether the corpus represents genuine linguistic relationships or is instead the result of chance resemblances." This claim is repeated elsewhere in the book (pp. 72—73, 129), and is one of the key arguments A. Marcantonio advances to argue for her rejection of Uralic genetic affinity. Therefore, it deserves some special attention.

A. Marcantonio claims that J. Janhunen posits 58 sound-rules for vocalism and 12 sound-rules for consonantism (p. 71), using 94 plausible etymologies (p. 72). In fact, J. Janhunen (1981 : 247—250) explicitly states 30 sound-rules, 11 to explain vocalic changes from Proto-Uralic to Proto-Samoyed, 7 to explain vocalic changes from PU to Proto-Finno-Permic, 12 to explain PU-Proto-Samoyed consonantal changes, the Proto-Finno-Permic consonantal system being, in general, the same as the Proto-Uralic one. Furthermore, it is obvious that an etymology in J. Janhunen's corpus entails a PFP form and a PU form, that is, as such does illustrate at least two sound-changes, but usually more, since words contain typically more than one phoneme. In fact, each of J. Janhunen's sound-laws is illustrated by a number of etymologies.

How then, has A. Marcantonio arrived at her claim that J. Janhunen's corpus contains 71 sound-rules, most of which supported by only one regular etymological item (p. 73)? By counting PFP-PS sound c o r r e s p o n d e n c e s, not diachronic sound laws, even though it is obvious that these correspondences illustrate the w h o l e vocalism of a lexical item, e.g. f o u r phonemes are compared, and that a number of them represent sporadic and combinatorial developments, a number of which are explainable (e.g. numbers 7, 8, 36—43 in J. Janhunen's corpus). These are, however, not what the significance criterion mentioned earlier applies to. In order to prove the

genetic relationship of two languages, regular phonological changes must be posited to explain the divergence of each of the two phonological systems from one common system — the one of a common proto-language. In order for the posited sound-laws to count as regular, they must be individually supported by a reasonable amount of material carrying those sound-laws — lexemes, morphemes. In that respect, regular synchronic correspondences between the two contemporary languages are not essential. They are, of course, the necessary product of regular sound-change, and without them, uncovering a genetic relationship would be very difficult. But the evidence of genetic relationship, and that needs backing by a reasonable number of examples, though not necessarily common ones, are the diachronic sound-laws. I will give an example why A. Marcantonio's method is wrong. In J. Janhunen's corpus (1981 : 247), the proto-Uralic etymon *torå* 'fight' illustrates, on its own, a Proto-Samoyed — Proto-Finno-Permic vowel correspondence. The correspondence does not, by A. Marcantonio's standards, meet the significance criterion. However, each one of the individual vowel changes leading from the Proto-Uralic word to its Proto-Samoyed and Proto-Finno-Permic descendants is backed up by more than eight other etymologies. Thus, puny, lonely *torå* forms, with the help of its little friends, is good evidence for the posited sound-changes and, therefore, for the genetic relationship between the languages concerned.

Methodological confusion is not the only thing which haunts this chapter. A. Marcantonio allows herself to bring the number of 94 regular etymologies down to 65, since for many etymologies "there is ambiguity as to their regularity." (p. 72). One of the unfortunate etymologies discarded in this way is the one of Finnish *sataa*, since A. Marcantonio (ostensibly p a r a p h r a s i n g J. Janhunen, since the following comment is under the header "Author's comments" in a table) claims that there are "semantic difficulties" (p. 72). What are the pur-ported semantic difficulties? In addition to the meaning 'to fall', a meaning 'to rain', present in Balto-Finnic may or may not have appeared in Proto-Uralic (Janhunen 1981 : 221). Another example: the etymology of Proto-Samoyed *wåcå* 'fence' is rejected for having "different meanings, possibly the result of areal innovation" (p. 72), meaning that in Ob-Ugric and Selkup a meaning 'fortification, town' exists, a perfectly acceptable semantic development.

The rest of the chapter deals with the phonological structure of the Uralic languages and with widespread, though not necessarily proto-Uralic features, like vowel harmony and consonant gradation (pp. 79—118), and with some problems regarding the Ugric proto-language and the position of Saami (pp. 119—129). A. Marcantonio observes that the spread of a number of sound-changes seems not to conform to traditional genetic nodes (p. 111), and that there are some sound-changes common to Uralic languages and unrelated, for example, Turkic languages (p. 112). A. Marcantonio claims that: "if the U paradigm had developed differently, and if, for instance, the U languages and the Tungusic languages, or the U languages and the Turkic languages had been "assumed" to be genetically related, these shared changes would certainly have been cited as evidence in favour of the (pre-established) relationship" (p. 113, see also p. 110). This is absolute nonsense. Similar phonological developments in related and unrelated languages occur all the time — compare the development of a velar stop to an affricate before a palatal vowel in, say, Vote, Swedish, Anglo-Frisian and Romance languages. Within a group of genetically related languages, shared innovations can be indicative of genetic subgroups, but across language families, they are utterly irrelevant to the question of genetic relatedness — of course, similar sound-changes in unrelated languages can be the result of contact. Her conclusions (pp. 129—130), largely based on her misreading of J. Janhunen's (1981) corpus outlined above, entailing, for example, that "it would be consistent with the

evidence to interpret the entire reconstruction as due to chance resemblance" (p. 129) and that "many of the postulated (intermediate) sound-changes [sic!] are based only on one or two assumed reconstructed etymologies, and, therefore, they could be considered to be ad hoc" (p. 130), are utterly unconvincing.

In chapter 5, "False matches or genuine linguistic correlations?" (pp. 138—153), A. Marcantonio performs a statistical test, pitting the distribution of PU etymologies among key Uralic language groups against the expected distribution of false matches, e.g. accidental lookalikes, claiming — wrongly, as we have seen — that such a test is necessified by the absence of a cumulative effect, the confirmation of every postulated sound-law by a number of regular etymologies, in the Proto-Uralic corpus (p. 136). The samples of PU she examines are body-part terms in UEW and the 94 etymologies of J. Janhunen's 1981 corpus. However, she raises the probability of accidental look-alikes in two manners, first, by disregarding vowels, second, by disregarding developments which lead to ø in some relevant groups involved. Additionally, the number of consonants used "for the purpose of analysis" is 9, even though P. Sammallahti's reconstruction of PU consonantism (quoted by A. Marcantonio on p. 107) involves 16 consonant phonemes. Consonants occurring word-internally only, for example, are disregarded. She marshalls the following argument for disregarding vowels: "Looking now at the vowels, these have a low significance for the reasons discussed in Chapter 4, that is, there are almost as many vowel-rules as etymologies within the P-Uralic corpus. In this situation, almost any vowel combination can be accepted as a "match" according to one or other of the rules, so that this criterion does not significantly alter the chances of a match. It is therefore appropriate to ignore vowels in this kind of test." (pp. 138—139) As remarked above, the statement that there are "almost as many vowel-rules as etymologies within the P-Uralic corpus" is simply wrong. Disregarding developments leading to ø in

one of the language groups is argued for by claiming "that the Hungarian ø can also correspond in various positions with any of the reconstructed consonants *s, *š, *w/ *v, *k, *m, *j, *l, *p, the "unspecified" segment *x, the specific "Ugric innovations" *θ and *g [...] and, of course, to ø.", in connection with a form used as an example, PU *witte ~ Hung. őt (p. 138). These methodological principles dramatically raise the possibility of an accidental lookalike occurring in one language or another. For example, PU śilmä is counted in this test as having two consonants, though it has 5 phonemes, and PU päŋi is counted as having merely one consonant (pp. 280—281).

The conclusions of A. Marcantonio's test are that there is a remarkable good fit to the predicted distribution of false matches. Nevertheless, a number of significant deviations must be explained (pp. 145—147). Most of the words purported to be statistically significant matches are, according to A. Marcantonio, also found in other language groups (pp. 147—153). Because the probability of an accidental look-alike is calculated only on the basis of a part of the consonantism of a reconstructed word, I find the results of this statistical test unconvincing.

Chapter 6, "Borrowed or inherited?" (pp. 154—179), deals with the analysis of lexical similarities between Uralic and certain non-Uralic languages. On p. 155, A. Marcantonio remarks that: "One should not be surprised that there are difficulties in distinguishing borrowed from inherited words in the Uralic context, because this has also been encountered more generally outside the Uralic field. The Neogrammarian principle that borrowed words can be identified because, unlike inherited words, they are mostly "irregular", is contradicted by modern research. In fact, borrowed words tend to become integrated into the phonological, semantic and morpho-syntactic structure of the recipient language after only a few generations, if not at the very time of the borrowing." The somewhat quaint claim that the Neo-grammarian principle entails that borrowed words are irregular is present elsewhere in the

book, although on p. 10 and p. 275 the culprit is the comparative method, on p. 156 "textbooks" supposedly assert this remarkable idea. Remarkable because, to my knowledge, neither the Neogrammarian principle, nor the comparative method, nor any book except A. Marcantonio's assert that there is a linguistic principle that borrowed words can be distinguished because of their "irregularity". According to the Neogrammarian principle, sound-laws occur without exception, that is, they are relevant to borrowed, as well as inherited words, but sound-laws are always restricted in space and time. Thus, at some point, a sound-change stops operating in a given linguistic area, and forms a p p a r - e n t l y in conflict with the sound-change may appear in a language, for example because borrowed words exhibit them, or because of a new sound-change. This fact is not unimportant for, for example, the identification and dating of loanwords. It seems that this is what A. Marcantonio had in mind. But it is something quite different than the rather outlandish claim that inherited words are "regular" (regular in what respect?) and loanwords are not. Also, the idea that "modern research" (p. 155) has provided us with the knowledge that borrowed words tend to be assimilated in the phonological system of the recipient language would seem to depend on one's definition of "modern". A pioneer in loanword studies like Vilhelm Thomsen seems to have been quite aware of it (Thomsen 1870 : 67, for example).

This failure to comprehend one of the most central principles of historical linguistics leads A. Marcantonio to the conclusion that "[---] it is not possible to distinguish between ancient borrowings and inherited words on linguistic grounds [---]" (p. 179), "[---] that the Comparative Method, at least as it is applied in the Uralic context, does not allow us to distinguish borrowed words from inherited words (and even, as we have already seen, from chance resemblances)." (p. 272), from which follows that: "What distinguishes a "borrowing", which can be identified because it is

"irregular", from a "direct borrowing" which is the opposite? The only justification for these classifications seems to be that there is an a priori assumption — which is held to have been settled historically — about which languages are genetically related and which are not." (p. 9).

Armed with this knowledge, A. Marcantonio proceeds to examine correlations between PU and non-PU vocabulary dealing with body parts, flora and fauna (pp. 157—163), concluding (p. 159) that most of these are accidental look-alikes. After that she examines Uralic-Altaic correlations (pp. 163—165) and correlations between Hungarian and non-Uralic, mainly Turkic languages (pp. 165—173).

Here, she claims that: "We shall see that there are strong correlations among all these languages at the phonological and lexical level. These correlations — several of which are certainly genuine — stand in stark contrast to the acknowledged very poor correlations between Hungarian and the other Uralic languages, which was discussed in Chapter 4" (pp. 165—166). Although A. Marcantonio elsewhere claims that the interpretation of these correlations as the result of borrowings stems from preconceived notions of which languages are related and which not (pp. 9, 272), her treatment of the problems concerning Turkic loans in Hungarian does not seem to be coupled to any conclusion concerning their status as borrowings. In this regard, her treatment of the question is teetering on the brink: although A. Marcantonio repeatedly claims that the connection between Hungarian and the other Uralic languages is weak, whereas the one between Hungarian and Turkic is quite strong, that Turkic elements in Hungarian were reinterpreted as borrowings during the consolidation of the — politically influenced! — Fenno-Ugric paradigm in Hungary (pp. 51—54), she does not go ahead and do the obvious — prove that Hungarian is genetically related to Turkic, not the Uralic languages. For only after that is done, the status of Turkish loans in Hungarian as loans becomes a matter of controversy.

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The treatment of Turkic loans in Hungarian is followed by an examination of Uralo-Yukaghir (pp. 173—175) and Uralo-Indo-European (pp. 175—179) parallels. Here, the title of the chapter — "Borrowed or inherited?" — is, indeed, very much a subject of discussion. A. Marcantonio concludes that a number of the lexical items shared between Uralic and Yukaghir are found in Altaic languages as well, making it impossible to decide on the question of borrowing vs. genetic relationships (p. 175) and that the lexical parallels between Uralic and Indo-European are most likely the result of contacts, the morphological ones of chance resemblance (pp. 178—179).

In Chapter 8, "The antiquity of Proto-Uralic" (pp. 180—202), A. Marcantonio criticizes the conventional dating of Proto-Uralic at about 8,000—6,000 years old, since a high antiquity of Proto-Uralic would explain the "high degree of irregularity that pervades U linguistics" (p. 180), examining palaeo-linguistics evidence like tree-names (pp. 181—184), which she dismisses (pp. 183—184). A. Marcantonio claims that : "[---] one should assume not only that the P-U community and the other Asiatic P-communities shared the same, vast *habitat*, but also that all these communities are more or less equally ancient." (p. 183) and that: "However, several scholars, including Janhunen (1999 : 31) claim that the Altaic languages are very young, mainly because the individual branches show very little diversity." (p. 183). J. Janhunen (1999 : 31), however, speaks about the Turkic, Tungusic, Korean proto-languages and their ancient homes, not about Altaic. In another publication, he claims that, w o u l d Proto-Altaic have existed, it might be identified with the local Hongshan-culture (Janhunen 1996 : 238), dated at about 4,000—3,000 B.C. (Janhunen 1996 : 224). A. Marcantonio proceeds to discuss the presence of Indo-European loanwords in Uralic languages (pp. 184—197). The most relevant groups for an early dating, namely Proto-Indo-European loanwords in Proto-Uralic are dismissed, since a large number of them are present in other language groups as well (pp. 195—197). Finally, A. Marcantonio examines hypotheses about ancient Uralic substrata in Germanic and other western IE languages (pp. 197—201), to which she relates with healthy scepticism. Not particularly healthy, however, is the claim that the absence of such a substratum is somehow an argument against an early dating of Proto-Uralic (pp. 197, 202). There are many possible explanations for the absence of Uralic substratum features in Germanic. The most natural one seems to be that speakers of Uralic languages perhaps weren't present in the place where Proto-Germanic emerged. A. Marcantonio concludes that there is no evidence in favour of the great antiquity of Proto-Uralic; however, she carefully remarks that Uralic, if it is a family at all, might be, in fact, very ancient (p. 202).

In the eighth chapter, "Morphology" (pp. 203—251), A. Marcantonio attempts to prove that there is too little reconstructed Proto-Uralic morphology to support the hypothesis that the Uralic languages are related. Dealing with reconstructed case endings (pp. 204—222), she reduces the traditional reconstructed system of six or eight cases to only three, claiming that: "However, among these primary case endings, those which are present in a l l of the U languages at the same time, and are therefore relevant for the purpose of comparison and reconstruction, are the local Cases only: Locative, Ablative, Lative" (p. 205). This procrustean methodological sleight-of-hand flies in the face of the well-established fact that through history, languages not only gain, but also lose morphology. Furthermore, she allows the possible Proto-Uralic syncretism of the *n*-genitive and *n*-lative to be a reason for dismissing them altogether, and refers to Ago Künnap's thoroughly discredited views on historical morphology in dismissing the Proto-Uralic accusative *-m* (p. 207). Using such methods, it is not surprising that what remains of the reconstructed Proto-Uralic case system is not very impressive.

A. Marcantonio proceeds to examine the processes which have led to the

emergence of the contemporary case-systems of the Uralic languages (pp. 209—222), repeatedly drawing attention to similar processes in unrelated languages (pp. 212, 218), and discusses the similarities between the Yukaghir and North Samoyed case systems (pp. 222—224). Regarding the fact that these similarities have neither been decisively explained by a posited genetic relationship, nor by borrowing, she remarks that: "One might simply observe that, yet again, through the application of the Comparative Method, no conclusive results can be achieved in this linguistic area." (p. 224). Dealing with the possessive suffixes (pp. 225—227), she casts doubt on the relationship between the Hungarian 3th person possessive ending -*a*, -*e*, Vogul -(*t*)*e* Ostyak -(*ə*)*ł*, all regular reflexes of Proto-Uralic *-*s*V, and connects the Vogul ending with a Proto-Samoyed formant *-*t*V and the 3th sing. suffix -*ta*, -*ty* in Yakut. This *ad hoc* comparison is commented with the following words: "Whatever the connections, this is yet another case of non-convergence between Ob-Ugric and Hungarian, and of a (possible), "horizontal" convergence between Ob-Ugric, Samoyed, and a Turkic language." (p. 224).

After dealing with the well-known velar and palatal vocalism the personal pronouns take in different Uralic languages (pp. 227—228), A. Marcantonio takes a look at the number markers in the Uralic languages (pp. 228—235). The multiplicity of plural endings in Uralic languages is taken to contradict their origin from a single proto-language (p. 228). On the fact that some Uralic languages use plural endings of Turkic origin, A. Marcantonio remarks that: "This fact does not seem to have given rise to suspicion about the validity of the conventional interpretation" (p. 233) and claims that borrowing of grammatical morphemes is very rare, if it happens at all (p. 234). Again, rare or not, it seems to have happened in the case of, for example, Cheremis, and grammatical borrowing is, in general, not unknown (Wilkins 1996 : 112). If A. Marcantonio does reject this explanation, it is, like in

the case of Turkic elements in Hungarian, like the comparison between Vogul and Yakut possessive markers, incumbent upon her to provide a credible framework in which the Cheremis plural endings or the Turkic loans in Hungarian can be interpreted as genetically inherited. In fact, I hereby pledge to eat my cherished copy of Paavo Ravila's "Totuus ja Metodi" if A. Marcantonio succeeds in doing that.

After dealing with Uralic tense and aspect markers (pp. 236—237), A. Marcantonio examines similarities between Uralic and non-Uralic syntactic structures (pp. 237—244), arguing that these can be neither explained by syntactic borrowing (pp. 237—238), nor by invoking the overall typological similarity between Uralic and Altaic languages (p. 237), and performs a statistical test, pitting the presence of grammatical consonantal formants in individual Uralic, Altaic languages, as well as in Yukaghir and in Dravidian against the predicted distribution of false matches, and concludes that the correlations between the groups cannot have been the result of chance, but that the question, whether these correlations are the result of borrowing, inheritance or both, cannot be answered (p. 248). Concluding, A. Marcantonio claims that the comparative method cannot be effectively applied to Uralic morphology, since the paradigmatic verb endings, the complex case endings and so on cannot be reconstructed (p. 249), and regards it as more productive "to regard the modern forms as stemming from a "pull" of common material, spanning throughout a vast dialectal area, from which each language has picked up building material independently, although, probably, in parallel" (p. 250). A. Marcantonio also claims that the view of grammaticalisation as a relatively sudden process would contradict the idea of Uralic as a very old family, after all, large parts of the case-systems of contemporary Uralic languages have formed through grammaticalization (pp. 250—251). This reasoning is not particularly convincing, since it contains the assumption that nothing else but a relatively

short grammaticalization process happened between Proto-Uralic and the current Uralic languages — to say nothing of the fact that the forming of case endings by grammaticalization of postpositions is a rather marginal phenomenon in the Finno-Permic languages.

The ninth chapter is titled "Completing the picture: Proper names, archaeology and genetics" (pp. 252—268). In it A. Marcantonio claims that there is little evidence provided by proper names — ethnonyms and toponyms, for the genetic relatedness of the Uralic languages (p. 252), that speakers of Uralic are genetically not related among themselves and that archaeological evidence "suggests a movement of people and technology from the South-West to the North-East, in the opposite direction to the supposed migrations involved in the Uralic theory." (p. 253). A. Marcantonio proceeds by attacking the current etymologies of *suomi* and *magyar* (pp. 253—264). Whereas the etymology of *suomi* as a Baltic loanword she criticizes is, indeed, of enormous complexity, the alternative she posits, the toponym *sumi* in the region of the Sayan mountains, first proposed by M. A. Castrén, seems a tad speculative — not to speak of the fact that it seems problematic from the phonological point of view. Criticism of the conventional comparison between *mansi* and *magyar* is coupled by noticing the similarity between *magyar* and *bashkir* and a large number of supposed common Hungarian-Bashkir proper names (pp. 256—264). As it is, the conventional derivation of *magyar* from an Ugric stem **мańćз* does not exclude the possibility that the ethnonym *bashkir* is related, and A. Marcantonio does not provide an alternative etymology except the comparison between *magyar* and *bashkir*. A. Marcantonio also proposes a number of supposed Siberian and Tungusic parallels to Finnish toponyms (pp. 264—265). Regarding genetics, we find, predictably, that there are no "Uralic genes" (pp. 265 —266), and there is no archaeological evidence for a migration of speakers of Uralic languages from the east to the west (pp. 266—267). The chapter ends with a paraphrase of Kaisa

Häkkinen "that there is no self-evident link between the linguistic tradition and the genetic and archaeological findings." (p. 268). The Finnish original, provided in the notes, says something quite different: "Kielen ja geneettisen perimän tai arkeologisten muinaisjäänteiden välillä ei kuitenkaan vallitse mitään itsestään selvää sidosta" — "there is no self-evident link between language, the gene pool, or archaeological remains.". Something which should, indeed, be kept in mind when reading this chapter.

The final chapter, "Summary and Conclusions" (pp. 269—278), briefly restates the claims A. Marcantonio has made in the preceding sections, concluding with an evaluation of the comparative method (pp. 275—277) and the thesis that historical linguistics, and Uralic linguistics in general, has over-applied a Darwinian model of language evolution (pp. 278—279). The chapter ends with the words: "I believe that a shift in paradigm can no longer be delayed." (p. 278).

In many respects, A. Marcantonio's book is remarkable. On the one hand, it examines the Uralic theory on a very broad range of fronts, frequently referring to research done in general historical linguistics, and fondly quoting researchers in the fields of mathematics and biology (pp. 1, 269), something which indicates a healthy, far-sighted view on science. On the other hand, the book is crippled beyond repair by frequent misreadings of source material — of which the treatment of J. Janhunen's (1981) analysis of Proto-Uralic is the most serious example — and, at times by an astonishing lack of insight in the very subject matter of historical linguistics — the bizarre claims about borrowed words are an example of this, but one could also mention the frequent mention of "shared sound-laws" as somehow indicating genetic relationships. The conclusion seems inescapable that Angela Marcantonio's desire to prove her case has, at times, led her to misinterpreting her sources so as to fit her general thesis. This is, in fact, a rather sad conclusion, since, obviously, a lot of time and energy has been spent in writing this book, which could

have, perhaps, been applied more productively.

The question, whether A. Marcantonio has succeeded in proving her case must be answered in the negative. The central claim that the "significance criterion" of the comparative method has not been met in the case of Proto-Uralic, since the number of sound-laws is too high compared to the number of regular etymologies, has shown to be based on a mere misreading of source material. In fact, the "significance criterion" is met. The approach to the history of Uralic linguistics is one-sided at best, tendentious at worst. The parallels between Uralic and non-Uralic languages which A. Marcantonio, time and again, advances are interesting in themselves, but as such do not, in any way, cast doubt on the genetic relatedness of the Uralic languages. In many cases, A. Marcantonio implies that the analysis of Turkic elements in, for example, Hungarian as borrowed is weak, but does not take the obvious step of proving that Hungarian is a Turkic, not a Uralic language. The treatment of Uralic morphology is marred by a totally unwarranted reduction of Uralic case endings and *ad hoc* comparisons between Uralic and non-Uralic material.

Viewed against this, the repeated accusations A. Marcantonio hurls at "forces" supposedly holding back a paradigm chance, minimizing evidence not in accordance with the mainstream model, and doing other nefarious things (pp. 278, 12—15, 51—54) seem rather shrill. If A. Marcantonio's arguments are the best there are in support of a paradigm shift, which supposedly "can no longer be delayed", then the prospects for such a paradigm shift are very bleak indeed.

LITERATURE

G y a r m a t h i, S. 1799, Affinitas linguae Hungaricae cum linguis fennicae originis grammatice demonstrata, Gottingae.

I t k o n e n, E. 1998, Sukupuu ja kontakti. — Vir., 96—103.

J a n h u n e n, J. 1981, Uralilaisen kantakielen sanastosta. — JSFOu 77, 219—274.

—— 1996, Manchuria. An Ethnic History, Helsinki (MSFOu 222).

—— 1999, Euraasian alkukodit — Pohjan poluilla. Suomalaisten juuret nykytutkimuksen mukaan, Helsinki (Bidrag till kännedom av Finlands natur och folk 153), 27—36.

K ü n n a p, A. 1998, Breakthrough in present-day Uralistics, Tartu.

S t i p a, G. J. 1990, Finnisch-Ugrische Sprachforschung von der Renaissance bis zum Neopositivismus, Helsinki (MSFOu 206).

T h o m s e n, V. 1870, Über den Einfluss der Germanischen Sprachen auf die Finnisch-Lappischen. Eine Sprachgeschichtliche Untersuchung, Halle.

W i l k i n s, D. P. 1996, Morphology — Kontaktlinguistik I. Ein internationales Handbuch zeitgenössischer Forschung, Berlin, 109—117.

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