BESPRECHUNGEN

If the family tree is swaying, should you hide your head in the (family) bush?

KAISA HÄKKINEN, Suomen kielen vanhimmasta sanastosta ja sen tutkimisesta: Suomalais-ugrilaisten kielten etymologisen tutkimuksen perusteita ja metodiikkaa. (The oldest vocabulary of Finnish and research into this: the principles and methodology of etymological research into the Finno-Ugric languages). Turun yliopiston suomalaisen ja yleisen kielitieteen laitoksen julkaisuja 17. Turku 1983. 447 pages.

Kaisa Häkkinen's doctoral thesis appeared at the end of 1983 in an edition which was, sadly, very limited. Since it is, in many ways, one which is important and controversial, it is well worth investigating with regard to its fundamental content.

Form before content

Unfortunately, attention has to be paid to the stylistic features of the book. The bibliography contains rather a number of illogical features as well as direct mistakes. The text refers to many sources which cannot be found in the bibliography. Here are some examples (in brackets, the page where the reference occurs): Castrén 1858 (72), Castrén 1956 would seem to be a typing error (65), Fromm 1983 (72), Galkin 1964 (198), Culya CSIFU I 1968 (150), Hausenberg 1983 (49), T.I. Itkonen 1958 (272), T. Itkonen CQuilFU I 1980 (244), Kannisto: Tietosanakirja 1909 - 1922 (190), Ravila 1959 (55), Ravila 1957 (151), Rédei - Róna-Tas NyK 74 (104) and Rintala 1979 (28). Part of these would appear to be typing errors. In addition, there is reference, on pages 18 - 19, to the stages of Jean Piaget's developmental psychology and this also seems to be absent from the bibliography. On page 198, the book speaks of Miller's hypothesis without sufficient references. For Hakulinen's book, Suomen kielen rakenne ja kehitys, the abbreviation SKRK is used and this is not explained in the bibliography as are others, even those which are generally well-known.

In the bibliography and references there are also many other inconsistencies. Sometimes reference is given to a dictionary by page number (e.g. on p. 192: MSzFE II, 312), sometimes by headword (e.g. on p. 193: MSzFE het). Sometimes the year is missing from the bibliography (e.g. Anttila, Internal...). On pages 72 and 189 the abbreviation Stud. Sept. is not clarified, in contrast with other abbreviations used. On page 72 Alhoniemi's publication is mentioned as forthcoming ("tulossa") and on page 158, Alhoniemi 1983 is mentioned as unpublished ("ilmestymätön"). On page 150, there is a reference to Décsy UAJb. 41, pages 188 - 189, whilst the bibliography mentions the pages from the article as being 33 - 75. Page 56 has Ferguson UHL 1978, the bibliography has Ferguson UHL 1978 1. The bibliography sometimes has Greenberg UHL 1b 1978 (completely underlined) and sometimes Greenberg UHL 1a 1978 (partly underlined). Sometimes there is, e.g. Itkonen E. FUF 31 (e.g. p. 328), sometimes Itkonen E. FUF 31₃ (e.g. p. 222). The pages of Terho Itkonen's article, Kantasuomesta suomeen, are not in the bibli-

ography. Sometimes there is Koivulehto Neuphil.Mitt. 1972, 1973 or 1974, i.e. the year of publication (e.g. pp. 10 and 318) and sometimes, e.g. Neuphil. Mitt. 72, i.e. the edition (e.g. pp. 315 and 390). Similar variations appear for Koivulehto SFU 17 (in the bibliography) and SFU 1981 (p. 101). De Saussure's work is, on page 16, from 1967 and, on page 115 from the years 1916/1967 (according to the principles of the bibliography on p. 399, the second alternative is correct). In the bibliography, Skalička is CTIFU I 1965 but, on page 30, CTIFU I 1970. And so on.

These are a small sample of the mistakes and illogical features. Perhaps no attention would have been paid to them if the bibliographical reference system had been easy to use. It is rather troublesome to have to hunt through all or nearly all of the works of a writer in the bibliography before the reference you are looking for can be found. This is because the name in the bibliography is not immediately followed by that abbreviation or year which has been used in the bibliographical reference. The intention has evidently been to underline (partly?) the abbreviation but, even here, it has not been done logically (c.f. Koivulehto SUST 185 and Janhunen SUST 185, of which the former has Symposium Saeculare Societatis Fenno-Ugricae underlined while the latter does not). In such cases it would seem to be better not to use underlining at all. The best system of reference would definitely be the use of name and year in both the references and the bibliography. The use of the lower index (sometimes FUF 31, sometimes FUF 31) does not seem to be enough since its logical use does not seem to have been successful. Häkkinen speaks - quite rightly - of the use of ADP to facilitate lexical research. This would also be of help in keeping the reference and bibliography system up to date at the writing stage of the research! It should also be mentioned that in an article in Virittäjä which covers the same themes and which appeared later than the work in hand, (1984 p. 287 - 306), the author also uses a reference system based on the edition (even if, here, too, e.g. E. Itkonen's first two works are in the wrong order and, missing from the bibliography are, amongst others, Suhonen 1980 (p. 289) and E. Itkonen FUF 40 (p. 289)).

The etymological list (pp. 265 - 378) and the list of abbreviations (pp. 433 - 435) also contain an unfortunately large quantity of mistakes and inaccuracies. In the former, in the Saami section, the initials JAF (evidently Friis' dictionary, which is not in the bibliography at all) are missing, as are the initials HG (Grundström's dictionary). In many cases, more modern sources could have been used than Friis' dictionary. In the text, on page 199, Häkkinen writes Skolt Saami phonematically whilst, in the etymological list, it is written phonetically. Why could the phonematic transliteration not have been used in the etymological list as well, since the author seems to have a good command of it and since most examples of languages distantly related to Finnish are written phonematically. On page 267 there is a reference to the Wogulische Volksdichtung but not to its author, Kannisto, which is where it can be found in the bibliography. Where the word anoppi is mentioned (p. 276) mention could be made of Janhunen's explanation (sometimes SUSA 77, sometimes SUSA 77a!), according to which it is evidently originally a compound. This does, however, come up in respect of the word appi (p. 277), which is the second component of that compound. Where the word jähtyä is mentioned (p. 290), the abbreviation used for Saami is lpT (Ter Saami) and, e.g. for the word läyli (p. 321), the abbreviation is IpR (Swedish Saami), both of which are absent from the catalogue of abbreviations. For the word kietoa (p. 298), there is mention of FUF 43 without the name of the author (this is evidently Sammallahti). In connection with the word lahti (p. 315) there is reference to pages 263 - 270 of Posti's article of 1977 which, according to the bibliography, means the whole article. In connection with the word poro (p. 343), reference could have been made to Korhonen 1981, p. 159 (Johdatus lapin kielen historiaan), where an attempt is made to give a more precise description of relationship between Finnish and Saami words. The North Saami equivalent of the word tymä is JAF (Friis) dåbme, which cannot, however, be correct. Moreover, the Saami equivalent of the word täi (p. 368) is better suited to the dik'ke of Nielsen's dictionary than to the dikke of Friis, although the former dictionary is given priority by Häkkinen. Similarly, the Saami equivalent of the word vieda (p. 373) would be better found in T.I. Itkonen's dictionary than in Friis'. Why are the abbreviations for languages sometimes written as abbreviations for the more modern names en. (= Enets) and slk. (= Selkup) and sometimes for the old names jur. (= Yurak or Nenets) and samT (Tavgi Samoyed or Nganasan, written by Häkkinen as Nganassaani)? In the bibliography, after the word Vogul there is the name Mansi in brackets. Why is the author not consistent in mentioning the alternative Khanty for the word Ostyak? Kaisa Häkkinen is a representative of the generation which, it is assumed and hoped, will change over to the use of the more modern names but, in this case, the process seems to be taking place rather haphazardly! The word (modern) Saami (nykysaame) crops up once (on page 51), elsewhere even modern Saami is called Lappish (lappi)!

Family tree, family bush or the wash of the wave theory

The most relevant sections of Häkkinen's book comprise a critique, on pages 65 - 99, of the foundations of the family tree model of the traditional protolanguages. In particular, she questions, in the light of contemporary materials, the existence of many "intermediate protolanguages", between Proto-Uralic and the younger protolanguages. She does not question here the more obvious and well-founded protolanguages: Proto-Baltic-Finnic (PBF) ("Proto-Finnic"), Proto-Saami, Proto-Mordvinian, Proto-Mari, Proto-Permic, Proto-Mansi, Proto-Khanty and Proto-Samoyed are, with the exception of the last-mentioned, rather young protolanguages whose daughter languages are very closely related. In many cases, these daughter languages are even regarded as dialects of one another, even if there is good reason to speak of, for instance, the Saami and the Khanty languages in the plural. But how should the relationship between those definite, younger protolanguages be presented through "intermediate protolanguages"? Häkkinen indicated that it is by no means self-evident that simple phonological, morphological and lexical isoglosses are to be found, on the basis of which we can confidently build abstracts of the next levels, the "intermediate protolanguages", the intermediate stages between Proto-Uralic and younger protolanguages. There is good reason to bear in mind that, in practice, groups of isoglosses pointing to the existence of "intermediate protolanguages" cannot be found unless significant changes have taken place in the phonological or the morphological system at that stage of the language, since, in that case, it would be natural to regard mere lexical isoglosses as inconclusive. The rate of change of a language is by no means stable so we must take into consideration the possibility of such "intermediate protolanguages" as well.

Let us investigate the "intermediate protolanguages", starting from the West, as Finnish investigations usually do. Proto-Saami and Proto-Baltic-Finnic are generally traced back to the Baltic-Finnic-Saami protolanguages ("early Proto-Finnic" is, to my mind, a rather one-sided name, the birth of which is related to the need to describe the history of the Baltic-Finnic languages rather more precisely; from the point of view of the Saami people and the Saami language, the name may even be regarded as insulting). I do not understand why, according to Häkkinen, "the position of Saami amidst the Finno-Ugric languages is one of the hardest bones of contention" (p. 71). She relates this question to the problem of "Proto-Saami" which, in my opinion, should be regarded as unjustifiable, in the light of modern knowledge. I shall deal with this problem in more detail elsewhere. It should be confirmed that the history of the birth of this theory and its factual justification are connected with physical anthropology, on the basis of which one could search for almost any substrate languages whatsoever from amongst the Uralic languages. Equally good, if not better proof could be found, for example, for "proto-Ob-Ugric". In dealing with the "Proto-Saami" theory, Häkkinen refers to Kert (1971 Saamskij jazyk. Kil'dinskij dialekt, Fonetik, morfologija, sintaksis) and Wiklund (1896 Entwurf einer urlappischen Lautlehre I) without page numbers, although both deal with "Proto-Saami" only briefly, within a few pages (p. 71). Maybe she would have written differently about the subject had she looked carefully at the type of linguistic arguments put forward by Kert and Wiklund.

Häkkinen observes that there are only one or two phonological changes connected with the Baltic-Finnic-Saami protolanguage (p. 72 - 73). And what if there really were not many, since, in the light of modern knowledge, Mordvinian can also be traced back, in historic phonological term, to a protolanguage almost identical to the Baltic-Finnic-Saami protolanguage. The paucity of sound changes cannot, in this case, be negative proof from the point of view of the Baltic-Finnic-Saami protolanguage. In this connection, Häkkinen draws upon the notion that indications of sound changes are important, since reduction in phonological similarity with more distant (= more Eastern) related languages must be a result of sound changes (p. 73). It is true that, in the light of modern knowledge, this is the situation between the isogloss formed by Baltic-Finnic, Saami and Mordvinian and that formed by other related languages. The problem lies in the fact that, so far, no conclusive explanation has been given of the relationship between the phonological system reconstructed on the basis of Baltic-Finnic, Saami and Mordvinian and the comparable system for the Finno-Ugric group of languages from further eastwards. The primary problem is the history of the vowel system (Helimski's article: Problems of Phonological Reconstruction in Modern Uralic Linguistics - SFU 1984: 241 - 257, is an excellent review of the situation of contemporary research). It should also be borne in mind that the solution to these problems may also partly depend upon the fact that questions of the historical phonology of Baltic-Finnic-Saami-Mordvinian may also be in need of some refinement.

In Häkkinen's opinion, it seems doubtful that "in connection with the division of each protolanguage, another line of development, leading to Baltic-Finnic seems, in practice, to have been preserved whilst, on the other hand, the branch which has separated from this line has <u>immediately</u> [sic!] begun to change rapidly" (s. 73, underlining J.L.). If we investigate what we know of the phonological systems of Proto-Uralic (PU) and PBF, these

changes can also be found in abundance in the line which descended from Baltic-Finnic: PU *!'s mergeance into other vowels; *vy- > y-; the disappearance of *n, the "secret laryngial" *x, *5, *5, and of the affricates or their mergeance into other phonemes; the birth of long vowels in the first syllable; the simplification of the consonant system at the ends of words; the completion of the vowel system in the second syllable, etc. It should also not be forgotten that, in many cases, problems of historical phonology are connected with those languages and language groups where the breaking down of one single phonotactical border (the basic bisyllabic construction of Nennwort stems) has begun a whole flood of changes. The conservative nature of Baltic-Finnic (and even this only covers the vowel system and partly the basic structure of the words) has been under the shadow of the conclusiveness of many old Indo-European loan-words. In another context, Häkkinen indicates that many of these loans may be from different periods or from different sources and that the vowel system of the loans is not very conclusive justification for the archaic nature of Baltic-Finnic (p. 147 -149).

Perhaps it would be advantageous, for a change, to start with the notion that Baltic-Finnic is, in many respects, a very innovative language and that the existence of a conservative key language is an illusion which cannot be used at all to support research into historical phonology. Perhaps this point of departure would give interesting alternative solutions to many questions of primary importance. If one is provocative, it may be claimed that research into the historical phonology of the Uralic languages is still in many respects in its swaddling clothes since the research material is viewed very onesidedly: typical of Hungarian research is lack of clarity over the place of Saami amongst the Uralic languages and generally typical is the brushing over of the Samoyed languages and the unbelievably bold confinement to "Finno-Ugric" materials, even if all "Finno-Ugric-ness" is very problematic, as Häkkinen's research indicates, etc. The situation of comparative Uralistics is also well exemplified by the fact that there is impermissably little serious discussion and debate taking place. Many researchers certainly do not approve of, for example, Janhunen's concept of Uralic phonological history or of Kojvulehto's concept of the older Indo-European loan-words but, of these themes there is hardly any discussion or debate at all.

After phonological innovations, Häkkinen moves on to deal with the combined morphological innovations of "intermediate protolanguages" from different periods (pp. 74 - 81). In this connection, too, she restricts herself almost entirely to one "intermediate protolanguage", within the Finno-Ugric protolanguage, yet nowhere does she defend or justify this restriction. Häkkinen confirms that at all stages, the daughter languages of the Uralic protolanguages had modus-, tempus- and person-systems for verbs as well as case, number- and possessive suffix systems for nouns. In researching the age to be given for different morphological elements, criteria have to be found, on the basis of which the correct conclusions can be drawn regarding the age or, in other words, the tracing back to possible protolanguages or to corresponding levels of abstraction of linguistic history. Such criteria are, for example, distribution, the concentration of the morphological position, pragmatic reasons (i.e. in connection with the 3rd person of the verbs), the relative distribution of the morphemes and, of course, phonological criteria. In introducing the traced-back elements of different "intermediate protolanguages", Häkkinen sometimes seems to be getting confused with the "intermediate protolanguages". On page 78 she speaks of a Finno-Volgaic comitative suffix which has equivalents in Baltic-Finnic, Saami and Mordvinian. She takes no stand herself on whether the possible Mari equivalent belongs here although she mentions this. But then, according to Häkkinen, "the translative ending is the same age i.e. Finnish-Saami-Mordvinian..." (underlining J.L.). The relationship between Finno-Volgaic and Baltic-Finnic-Saami-Mordvinian here remains extremely unclear.

In this section I would have expected the author to make use of contrastive historical research into the morphology of the Finno-Ugric languages (K.E. Maitinskaja 1981, Istoriko-sopostavitel'naja morfologija finno-ugorskih jazykov), since this contains views worthy of note upon the history of different forms and categories of forms (and it is also restricted to the same Finno-Ugric "intermediate protolanguage" as Häkkinen's research!). In the same way, Helimski's monograph, Drevnejšie vengersko-samodijskie jazykovye paralleli (1982) has many sharp observations and opinions upon the morphological isoglosses connected with the "intermediate protolanguages", especially on pages 11 - 22. Otherwise, Häkkinen seems to know contemporary Soviet research into Uralistics only superficially despite the fact that its significance cannot be ignored (could this lack of familiarity explain the fact that there are some striking errors of transliteration in the bibliography regarding OFUJ II (Osnovy f-u:ogo jazykoznanija)?). Häkkinen also rarely pays attention to Janhunen's article, On the Structure of Proto-Uralic (1982, FUF 44) although it is an indisputably significant summary of what can be said for definite today about the morphology of Proto-Uralic. In my opinion, here, too, this arbitrary limitation of the area of research to Finno-Ugric, "intermediate protolanguage" materials brings about its own revenge.

From the distribution of the morphological elements dealt with by Häkkinen we can certainly create many isoglosses which support the traditional "intermediate protolanguages": BF-sa. modus markers *-nc- and *-ks-, the imperative -ky; BF-sa.-md. the -*ksV-translative, the *-jnVk-comitative, the *-la-locative suffix; the BF-sa.-md.-mr. *-s- based local case system; the PFU *-ne-conjunctive (not Proto-Uralic, as Häkkinen claims, see Maitinskaja ibid. p. 22 and Janhunen ibid. p. 37). However, according to Häkkinen, the caritive material restricted to the Finno-Permic languages *-ktv(mv) (Janhunen ibid. p. 29 and 34) as well as the verbal suffixes *-pA- and *-jA-(ibid. p. 34 - 35) are quite probably Proto-Uralic. In connection with the above, only some of the Saami languages indicate an original form where there would be *-pt- and not *-kt- (Korhonen 1981, Johdatus lapin kielen historiaan pp. 226 - 227). This may be a question of interference on the contamination of suffixes of different origin. According to Häkkinen it is also open to doubt whether the caritive suffix in the Permic languages is too well-preserved to be very old (p. 77). It must, however, be remembered that the conclusive nature of the phonetic structure of morphological elements should not be investigated solely on the basis of phonological rules, and that attention must also be paid to their functional loading and often, also, to the need to avoid homonymous suffixes. On page 79, Häkkinen confirms that the Finno-Ugric present conjugation has undergone rather a lot of reconstruction, for instance, before the Baltic-Finnic-Saami protolanguage, but that the FinnoUgric "intermediate protolanguage" had a present conjugation, functionally, at least. Why, in this context, is there no reference to Janhunen's (ibid. p. 35) reconstruction of the verb conjugation? Perhaps Häkkinen regards this as unfounded or perhaps she sees it as external to the area of her research. Here, too, the limitation of the research to the Finno-Ugric languages has a profound influence on the analysis. In connection with the conjugation of the present, it is worth bearing in mind that the drifting together of the subjective and objective conjugations of Proto-Uralic may have had a noticeable effect on mixing-up precisely the present conjugation (Häkkinen, on page 80, does not seem to agree with Janhunen's concept of the Proto-Uralic nature of the objective conjugation).

Finally, consideration should be given to the extent to which morphological features should be accumulated in one isogloss before it proves that the equivalent "intermediate protolanguage" is correct. Häkkinen seems to expect rather a lot of them, in fact, not to put too fine a point on it, she expects so much that, during the period of the possible "intermediate protolanguage" rather great reconstructions of the morphological system as well as rather a lot of morphological innovations must have taken place. We can hardly assume that there would have been decisive changes to certain fundamental parts of the morphology over a period of 500 - 1000 years, which is the lifespan of a normal "intermediate protolanguage". It is really quite hard to believe that a lot of upheavals in the morphological system would have taken place in just one stage of the language. The (ostensible ?) scarcity of morphological innovations affecting different isoglosses does not, in itself, offer negative proof against the "intermediate protolanguage". However, when Häkkinen argues (especially on pages 12 - 22) against the Urschöpfung of words, free morphemes, we should also be able to find arguments against the Urschöpfung of affixes, bound morphemes. Maitinskaja's work, in particular, would have been a good source for this kind of argumentation.

Häkkinen is correct in drawing upon Hajdú in demanding a typologically-based description of the relationship between the Uralic languages (p. 82). An ascendent or retrospective research-work could also be of use here when it is remembered that the above-mentioned also have their limitations. It must be borne in mind that a solution may be found for many of the problems connected with "intermediate protolanguages", especially when the "black holes" of the history of the vowel systems of the Permic and Ugric languages have been illuminated. It is quite possible, even probable, that between the Baltic-Finnic-Saami-Mordvinian isogloss and Proto-Uralic we can reconstruct several phonemic systems which are linked with different language groups in different ways. This being the case, we may have new, positive proof for some of the "intermediate protolanguages".

When Häkkinen relates rather sceptically to the family tree model in the light of contemporary knowledge, why then does she introduce this on page 83 and without any comment? There would be plenty to comment upon: For example, the existence of Proto-South-Samoyed is extremely questionable (see Helimski 1982 Drevnejšie... pp. 37 - 47). When considering the correctness of the family tree model attention must also be paid to the areal contact of the daughter languages. Häkkinen does mention examples of research into these on page 49. There she uses, in certain cases, the symbol \sim (e.g. Steinitz: sam. \sim Ob-Ugr.). If this is a question of bilateral loan contacts, it would be better to use the symbol \sim (as, for example, on page 261), since Häkkinen also uses the symbol \sim to indicate etymological equivalence. In addition to the contacts between existing daughter languages, the possibility must also be taken into consideration that between the Uralic languages

there have been others which have later disappeared or which have merged into them and which may also not belong to the Uralic language group. We have historical information regarding Merja and Muroma. It is hardly possible that, after the Mesolithic Period, there were only islets of individual languages in Northern Eurasia where only the predecessors of the contemporary languages were spoken and which were not in constant contact with neighbouring languages. On page 84, Häkkinen confirms that the birth of contemporary languages is by no means simply a process of decay of the protolanguages but also of the mergeance of several languages. To this it could be added that in addition to mergeance, the regional interaction between languages has also had its effect, with the result that it is sometimes difficult to distinguish features which indicate a common source-form or the effects of loans. As examples of this, the consonantal gradation of Baltic-Finnic and Saami and the birth of the expanding diphthongs of Northern Baltic-Finnic and Saami may be the results of such interaction.

In dealing with the relationship between the vocabulary and the family tree model, Häkkinen also brings up glottochronology (pp. 86 - 90). Unfortunately, she is not familiar with the above-mentioned research by Helimski (1982) which deals rather extensively with glottochronology. On page 87 she speaks of Swadesh 100- and 200-word lists but, on page 175, of 100- and 212-word lists. The list in question is of 215 words. These inaccurancies indicate that the final checking of the text was not completed. In dealing with glottochronology, Häkkinen confirms that this does not in all respects support the traditional family tree model, a fact which appears in Helimski's research on pages 12 - 14. I hope I will be able to present my own lexicostatistical calculations of over thirty Uralic languages in the near future and, in that connection, I will comment more precisely on the method.

After glottochronology, Häkkinen deals with the existence of Proto-Ugric in terms of vocabulary. She confirms that almost all calculations indicate that Hungarian is the language which has suffered most from the loss of its old vocabulary (p. 91), without referring to any source. Evidently, she means the calculations on her table on pages 438 - 442. According to her, there were over 500 common Ob-Ugric vocabulary innovations, whereas common Ugric had only 160 (p. 92). Häkkinen attempts to indicate that, despite this, the existence of a Ugric protolanguage seems probable. She justifies this by comparing the distribution of the common vocabulary of the Ugric languages with that of the different groups of etymologies of languages distantly-related to Finnish, where the differences between different vocabulary groups (e.g. Finno-Volgaic and Baltic-Finnic-Saami) are small (pp. 93 - 94). Häkkinen's calculations are based, in respect of Finnish, on SKES information on the equivalents of Finnish words in the distantlyrelated languages. It should, however, be remembered that when the final parts of SKES were written, a lot more was known about the phonological relationship between Finnish, Saami, Mordvinian, Mari, in part, the Permic languages (especially in terms of the vowel system) than when Toivonen wrote the initial part. Therefore, attention must be paid to the fact that, in this respect, SKES is an incoherent work. If the sections written by Toivonen were brought up to date, many an etymology would gain a different explanation. To some extent, this would also influence the distribution of the different groups of words distantly-related to Finnish.

This is partly connected with the fact that Häkkinen does not deal at all systematically with the question of how correct parallels between etymo-

logical dictionaries are in general even if she does present etymological sources for the Uralic languages (pp. 42 - 49). As an example of a totally different approach, perhaps we should remember Aulis J. Joki's research, Uralier und Indogermanen (1973), which first has a thorough presentation and critique of previous research and, only after that, the writer's own opinions and an etymological list. One cannot help but be critical, to a certain degree, of Häkkinen's word-equivalent statistics if one is sceptical about rather a lot of etymologies of distantly-related languages as given by the etymological dictionaries. The fact that Häkkinen, in her statistics regarding word comparisons, is restricted to only three sources (SKES, MSzFE and FUV, of which she gives no indication of which edition she uses even if there is hardly any difference between them despite the development of etymological research) demands, in my opinion, at least a thumbnail sketch of their trustworthiness. Certainly such sketches appear here and there, e.g. in the etymological list and in the conclusion. Häkkinen also takes no stand on the etymologies presented although there would certainly be good cause to do this and despite the fact that it would suit this research work well.

I will not comment at any greater length on the etymologies dealt with by Häkkinen. I will just put forward a few individual comments at this stage. She seems to believe that the Saami equivalent of the Finnish word pensas, on pages 390 and 393, is unsure, although, in my opinion, this is quite unquestionable and parallels can be found (c.f. Bergsland 1965 Vir, 154 - 155). Connected with this is also Häkkinen's affirmation that the Baltic-Finnic CeCa-stem type hints that the words were originally loan-words (p. 393). In Proto-Baltic-Finnic at the latest there was evidently a massive changeover from the CeCa-type to the CeCa-type as the rules for vowel harmony relaxed (indicated, for instance, by sm. $mela \sim mdM \ mil'a$). The expansion of the CeCa-type also indicates that even in this respect Baltic-Finnic is not very conservative. Further, on page 393, Häkkinen confirms that, in the Baltic-Finnic word for berries (for example fi. juolukka) the only thing in common is the stem *jō-. Here, one can find an excellent equivalent in Saami: the common Saami *jone (saN jognā), 'whortleberry'.

Does Häkkinen succeed in felling the traditional family tree with her tools of historical phonology and morphology? In my opinion, she only manages to shake off a few dead branches, By themselves, the "black holes" of historical phonology in no way shake the family tree. It must also be borne in mind that the existence of isoglosses which support or destroy the "intermediate protolanguages" depends rather a lot on how well we know historical phonology, since this also depends on how surely we can indicate that etymologies are right or probably wrong. Isoglosses related to morphological elements seem, in the light of contemporary knowledge, often to support the "intermediate protolanguages". It is my opinion that the weight of Häkkinen's arguments is lightened mostly by the fact that she starts, a priori, from the Finno-Ugric even if it is clearly a question of an "intermediate protolinguistic" concept. (I have used "intermediate protolanguage" in quotation marks since all protolanguages are "intermediate protolanguages", in the sense that they have their predecessors which, at least at present, we cannot find for certain nor prove to be correct).

Searching for a new n

Häkkinen goes quite far into the elucidation of the significance of the phonetic structure of etymologies and then moves over to the elucidation of the semantics of etymologies. In the previous section a lot of space is devoted to the elucidation of the differences in the distribution of the distantly-related equivalents of the initial Finnish k, the first-syllable a and y and the intervocalic v (pp. 109 - 166). This section would be well-suited as study material for the different degrees of difficulty of the history of phonology. However, in this type of research, it is a waste of paper and an underestimation of the reader. The whole subject should have been dealt with much more concisely, in as much as it is necessary to sacrifice space to dealing with this, by a short substantiation of a situation which is generally known.

Häkkinen does not have so much to say about the semantic side of etymologies, which is quite understandable. As an example of the significance of semantics in conclusions to be made on the basis of materials which are full of gaps, she deals at length with the problems of reconstructing the numerical system of the Finno-Ugric "intermediate protolanguage" (pp. 178 - 203). She indicates that the grounds upon which the six-number system is held to be the "original" numerical system in the FU. "intermediate protolanguage" are not convincing. She explains at length the etymological background to the numbers '7', '8', '9' and '10' in different FU languages. She pays special attention to 'ten', the basic number in the system (which is not necessarily the same as '10'). Let us call it n_{x} in which case the numerical system would be 1, 2, ...n, (n + 1), (n + 2), ... (n^2) , $(n^2 + 1)$... independent of the value of n... As I have already shown, Häkkinen is working with Finno-Ugric, in other words, with "intermediate protolinguistic" material. It is my opinion that this already makes rather lame her argument that the n of the Finno-Ugric "intermediate protolanguage" is equal to 10. On page 187 she points out that the Finno-Ugric word '5' (fi. viisi, etc.) probably has an equivalent in the Samoyed languages (PS *wüt '10'), the significance of which she does not explain in this context. The significance, however, comes to light on page 195. The deliberation of the proto-Uralic nature of the etymology of this is of utmost importance from the point of view of the whole problem. Since I see no reason to doubt that fi. viisi '5' etc. belong etymologically with PS *wüt '10' (c.f. Janhunen 1982 Uralilaisen kantakielen sanastosta (SUSA 77) p. 47), the basis of the search for the n of the Finno-Ugric "intermediate protolanguage" is seen in a new light. In this case it is evident that the Proto-Uralic n was not 10 but, more probaly 5 (if the numerical system in general was even stable). However, the flawless Finno-Ugric etymology of the number which meant '6' implies that the Finno-Ugric numerical system (if there was such a thing) was different from the Proto-Uralic system. But we must be careful: is it not true to say that the contradictions of the materials rather indicate that the changeover to a "final" decimal system was by no means a straightforward process for the Proto-Uralic people and their linguistic descendents but one which may have had many intermediate stages, a distinct possibility, since the numerical system was not generally stable?

Häkkinen pays rather a lot of attention to the etymologies of numbers meaning '10' in the FU languages. When the decimal system finally became stabilised in the predecessors of these languages, it was possible to create

or find the basic number of the system in different ways. In some quarters it was found through the word *luki ('to count') (Saami, Mari and Mansi) but not necessarily simultaneously since such a derivation may even have happened in parallel. When investigating the Baltic-Finnic and Mordvinian words which mean '10' (e.g. fi. kymmenen, md. kemen) it is worth paving attention to the Proto-Baltic-Finnic geminate *mm, which either may be secondary or may be an indication that the Baltic-Finnic and Mordvinian words were loan-words or an indication of their relative newness (no Baltic-Finnic-Saami *mm-word is known). The word fi. sata 'hundred' is, in my opinion, no proof of the age of the decimal system since this is, after all, n², so its value depends upon n! It should also be noticed that the equivalent of the fi. sata 'hundred' is disregarded in Southern Saami dialects. In these, as is to be expected, '100' is, in addition to the word tjuetie, also nimme (really 'name') and stoere-luhkie (really 'big ten') (see Bergsland 1982, Sydsamisk grammatik, p. 128 and Hasselbrink 1981, Südlappisches Wörterbuch I pp. 110 - 111). For its part, this indicates that one has to be careful with the word for '100', too. In another context, Häkkinen points out that the word sata may have been borrowed separately by the Ugric languages (p. 223). Does this not take away rather a lot of the conclusiveness from the 'hundred' word in the Finno-Ugric "intermediate protolanguage"?

Häkkinen is certainly correct in proving the lack of evidence which the East Saami numerical attributes give for the six-number system (pp. 199 - 202), but it was not necessary to pay attention to this proof for pages on end. On pages 202 - 203, once again she does not notice the difference between the meanings of the words '100' and 'hundred' or '20' and 'twenty' since the equivalence of and the relationship between these words is solely dependent upon the value of the respective n.

In my opinion, the numerical system is a fine example of the conclusiveness of flawed materials. Firstly, it is an example of how the questionable limitation of the research materials to the "intermediate protolanguage" (Häkkinen, page 22: "I shall not go into the Proto-Uralic numerical system here at all.") confuses the background to the matters in many respects. Secondly, flawed materials may be used when it is a question of a subsystem of a vocabulary, of which there are few examples (in addition to numbers, pronouns and terms indicating relatives are the most obvious). But, for how long have numbers constituted a clear system in the Uralic languages? The contradictions of the materials seem to imply that this was not, at least, the case in Proto-Uralic, nor in the Finno-Ugric "intermediate protolanguage".

So, Häkkinen's journey through numbers does not seem to have been entirely successful. From the point of view of the research as a whole, it would have been quite justifiable to leave it out, since it remains rather detached.

You can beg, steal or borrow (even words!)

Those sections in which Häkkinen deals with the significance of loanwords from the point of view of the family-tree model are both interesting and rather sharply observed (pp. 100 - 108 and 211 - 263). Jorma Koivulehto's research, in particular, has shed new light upon many old concepts, especially on the old Indo-European loan words in the Uralic languages, and has made them a point for re-evaluation (I do not think I would be mistaken in saying that there is a general hope that he will produce, for instance, an

intermediate report, a wider overview of the contacts between the Indo-European and the Uralic languages). The new views really give no confirmation for the traditional concepts of the "intermediate protolanguages", as Häkkinen indicates in many connections.

She briefly runs through the contacts between the archaeological cultures of the early stages of both language groups but does not draw any conclusion in one direction or the other (pp. 213 - 215). I believe that it would be appropriate to forget for a moment about considering how archaeological cultures and ancient stages of the languages should be connected to one another in practice, since research at the moment is best served by increasing the precision of the respective research results of each of these sciences. There is certainly good cause to question more deeply and widely the extent to which an archaeological culture corresponds to a language or to closely-related languages as well as the extent to which one language has been spoken solely in the area of one archaeological culture. It has been regarded as almost self-evident that the disintegration of an archaeological culture and a protolanguage go hand-in-hand, even if this is not always necessarily so. Too much indifference in the linking of linguistics and the results of archaeological research may do a disservice to both sciences (see my review of Fodor's book in this publication).

Häkkinen also touches upon loan-words as she deals briefly with the problem of the early relationship of the Uralic and Indo-European language groups and shows that the Nostratic hypothesis does not, in principle, contradict diachronic linguistic research at all. She questions this hypothesis on the grounds that such an expansive language community as the Nostratic "super-family" can hardly have existed in the conditions of the primitive community (p. 212, underlining J.L.). In my opinion, the question of the primitiveness and expansiveness of communities and cultures is completely relative. No culture is primitive, since it is the product of thousands of years of development and experience. A culture or community may seem, to our eyes, to be primitive but it has been the guarantee for the development and the preservation of the human race over thousands of years. Evidently, there have always been cultures which have developed in different circumstances and in different ways and some of these, in their time, have been capable of surprisingly rapid expansion, whereas others have faced surprisingly rapid weakening or destruction. Despite this, it is worth approaching the contemporary approval of the Nostratic hypothesis from the point of view that, at present, there is a lot of work which has to be done on the internal linguistic history of isolated languages and generally-recognised language groups before more precise consideration can be given to more distantly related groups. On the other hand, there is good cause to remember that the researchers of the Nostratic languages may, in many respects, have welcome "outside" viewpoints and a wider research background for research which is sometimes far too bogged-down in old viewpoints.

In dealing with the similarities in the pronouns of the Indo-European and the Uralic languages, Häkkinen shows that "the pronouns do not contain rare or phonetically-difficult sounds", so similarities may be a coincidence in pronouns rather that in other words (p. 216). What, then, of the Russian amo 'this', where there is an a, which is extremely unusual except in younger loan-words! Even the most important pronouns may have rare or "difficult" sounds.

Later, Häkkinen indicates that the distribution, in terms of distantlyrelated languages, of the old Indo-European loan words in Finnish differs from the vocabulary of other distantly-related languages (especially the figure on pages 227 and 228 which has remained without a necessary tittle). According to her, the Indo-European layer of loan-words, which is regarded as being older, is clearly more heterogeneous and therefore probably partly from different periods. Sound correspondences - especially between vowels also offer no positive proof of their age (pp. 222 - 223). As a final conclusion regarding the older Indo-European loan-words she confirms that loan-contacts are not restricted only to one stage of the language, for instance to the Finno-Ugric "intermediate protolanguage" (p. 235). There is still plenty of research to be done on the older contacts between the Uralic and the Indo-European languages. This kind of research and the development of the phonology and the lexicology of the Uralic languages in many respects go hand-in-hand. In my opinion, however, one must beware of straightforward conclusions for or against the family tree model on the basis of this.

Häkkinen deals separately with the vocabulary layers of Baltic-Finnic, especially in the light of loan-words (pp. 236 - 263). She shows that, in quantitative terms, Baltic loans appear mainly in Finnish, Olonets Karelian and Estonian and also, least, in Livonian, Veps and Ludic. In this context, she shows that the latter languages are less conservative in terms of their vocabularies (p. 239). I would not necessarily use the concept conservative (nor, similarly, in connection with the historical phonology) since, firstly, vocabulary which is regarded as, or in fact is, large also has the opportunity to preserve a larger part of any vocabulary layer (this is confirmed by Häkkinen herself) and, secondly, the size of any vocabulary layer must also be investigated in relation to the size of the whole known vocabulary of the language. In addition, it should be borne in mind that Livonian and Votic were, evidently already in the last century, in a "pathological" condition, on a road which was undeniably leading them towards death: the vital need for renewal of the vocabulary finally focussed on loan-words and the widening of the vocabulary by derivation from its own resources became less and less productive; the men, in particular, are bilingual and it is more and more common that the foreign language becomes the only means of communication; in mixed marriages, the foreign language more and more often becomes the common language; finally, the old mothertongue begins to become, for the individual, a more and more unclear system which further leads to the increased use of the languages of the environment and even to the use of foreign morphological elements. (I found a concrete example of this situation when I met some of the last speakers of Ume Saami. I heard each one repeatedly say gialla nåhkaa, 'the language is ending'.) Even, when one investigates the known vocabulary of Ter Saami, it becomes evident that this contains the least vocabulary which can be traced back at least to Proto-Saami, but the share of distantly-related etymologies in this vocabulary which can be traced back to Proto-Saami is relatively greater than in any other Saami language (of the layers of loan-words, the share of Baltic-Finnic loans is sligthly greater than the average in the Proto-Saami vocabulary and the share of Scandinavian loans is slightly smaller). If we were to investigate the dialect vocabulary of Finnish, which corresponds to the settlement area of the number of speakers of Vote, Veps or Livonian, it is hardly likely that we would find all the Baltic loan-words or all words from other lexical layers of Finnish. Häkkinen certainly pays attention to these

matters elsewhere (p. 246), but attention should also be paid to them in this context.

When she deals with older Germanic loan-words, Häkkinen shows that since Baltic-Finnic equivalents are not to be found for all of the old Germanic loan-words in Saami, there is no justification for tracing them back to an undivided Baltic-Finnic-Saami protolanguage ("early Proto-Finnic"), but rather to an earlier Proto-Saami (p. 240). For the time being, only a few such words have been found and, of these, a suitable equivalent in Baltic Finnish can be found for one (saN buoi'de ('fat') ofi. paita ('shirt'). In my opinion, at this stage it is better to say that the Baltic-Finnic equivalents of these Saami words have disappeared than that they should be considered as having appeared only in early Proto-Saami. As an additional example, the vowe! system of the saN luoi'kat ('to lend/borrow'), clearly indicates a loan from the period of the Baltic-Finnic-Saami protolanguage and not from an "earlier" Proto-Saami (whatever Häkkinen might mean by that). I do not know of any example of a Baltic-Finnic loan in Saami where the a of the lender-language would be equivalent to the Saami *\(\bar{o}\) (saN uo). Consequently. "earlier Proto-Saami" is completely unsupported by the historical phonology.

What of the Germanic loan-words for which Koivulehto has given equivalents right back to the Permic languages? These words give good cause for wider reflection on whether the "intermediate protolanguage" and their chronologies have actually been constructed on firm ground. It is unfortunately rare that any stand has been taken on the etymologies presented by Koivulehto, Generally, when we begin to speak of pre-Germanic loans, it easily comes to mind that there may be more old layers of Indo-European loan-words in the western Uralic languages than we can confidently distinguish (c.f. Häkkinen pp. 240 - 241). In addition, the lender-languages may have been languages which have later disappeared or have merged into other languages. The present situation also sets new requirements for research into the lender-languages. Häkkinen confirms that the earlier Germanic loans can only have infiltrated the Permic languages through contact between the Finno-Ugric languages (p. 236). This being the case, it is possible and even probable that the same has happened with words other than loanwords from the western Finno-Ugric languages to the Permic languages.

After loan-words, Häkkinen moves on to deal with the common vocabulary of the Baltic-Finnic languages (this could, in fact, have been given its own chapter) (pp. 244 - 263). Here she indicates that the definition of the vocabulary which is to be regarded as Baltic-Finnic cannot take place mechanically. However, the distribution of words which, in other ways, are regarded as common Baltic-Finnic in contemporary Baltic-Finnic is generally quite comprehensive. The greatest lack of words (or lack of recognised equivalents) is in those languages whose vocabulary is otherwise restricted and which have a narrow spectrum of dialects (Livonian and Votic as well as Veps and Ludic) (pp. 250 - 251). I have already commented upon this problem above. In this section Häkkinen comes to show that the family tree model is extremely bad at describing the internal relationships of Baltic-Finnic since there have been contacts between the languages and since several languages are also the result of the mergeance of languages. Häkkinen does not extend her distribution analysis within the Baltic-Finnic languages. This is perfectly understandable since there are no easy-to-use sources, i.e. dictionaries of dialect, for this. As she seems to enjoy vocabulary research based on Finnish, perhaps, in the future, she will extend her work in precisely this direction even if this would often require familiarization with archive sources. The position of southern Estonian amongst the Baltic-Finnic languages might turn out to be interesting in such research since it differs in many other respects from northern Estonian. Attention paid to the internal distribution of Estonian dialects might also further the precise description of Estonian-Finnish, -Votic and -Livonian vocabulary contacts. Finally, Häkkinen shows that the oldest layer of loan-words in Baltic-Finnic is best clarified by falling back upon those words which are known in all or almost all of the daughter languages (p. 261). This observation is also valid in researching the distribution of the vocabulary layers of other language groups. I have come to a similar conclusion regarding Saami's oldest vocabulary; of the approximately six hundred naming words (Nennwort) in Saami which have a distantly-related linguistic equivalent, only about eighty appear in a narrower area in the Saami languages than is also typical of vocabulary defined as common Saami by other methods. She also confirms that, in respect of an individual word, its distribution is not always a sure indication of its age. An important starting point for future research into the history of phonology should be that etymologies which are more complete in their distribution are taken as basic materials (pp. 262 - 263). And even here a wolf may appear in sheep's clothing: in another place (p. 223) Häkkinen refers to the possibility that the etymology of the Finnish word sata '100' may not be straightforward because it may have been borrowed from different quarters or at different times from the Indo-European languages.

The king is dead, long live the king!

In her final observations, Häkkinen begins with estimates regarding the relationship between etymology and the history of phonology (pp. 379 - 380). In short, she is an etymology optimist but a phonological history pessimist: the strict rules of historical phonology often do battle against all the other criteria for the approval of etymology. As an example she mentions that the most important and best-preserved words often become irregular (e.g. numbers and pronouns) (p. 379). However, the quantitative share of these two groups in the whole research material is tiny and, as regards the pronouns at least, it is worth leaving them out of the basic materials of research into historical phonology or dealing with them separately since, in the Uralic languages - historically, at least - even their basic structure differs from that of the naming words (Nennwort).

I have deliberately not dealt separately with the book's section on the phonological side of etymologies (pp. 120 - 166) since, in my opinion, it is written too much like a study-book and does not contain much of note. Perhaps attention should be paid to one individual point. On pages 116 - 117, Häkkinen puts forward the idea that the unfortunate concept of a sporadic change may be superfluous since it can be explained that the general rule (e.g. BF.-sa. * \ddot{u}) saN \mathring{a}) also goes against another rule (e.g. BF.-sa. * \ddot{u}) saN i in a palatal environment) but rules which go against one another are of different strengths in different situations (thus BF.-sa. * $\ddot{s}\ddot{u}$) saN $\ddot{c}\ddot{a}k'c\ddot{a}$ 'autumn', but BF.-sa. * $\ddot{u}\ddot{j}i$ > saN $igg\dot{j}a$ 'night'). All well and good, but what is the result; we get a more finely honed concept but the phenomenon itself (that we cannot, at least for the time being, explain every phonological change with precise rules) remains precisely the same as before. The explanation is based solely on a euphemism for the word sporadic!

In my opinion, it is entirely incomprehensible that Häkkinen does not critizise the present state of research into the historical phonology of the Uralic languages any more systematically although, in her final observations, she has to confirm that information on phonological history is the most difficult to evaluate in terms of many etymologies (p. 379). In this field there are continuous developments (especially since Janhunen clarified the phonological history of Proto-Samoyed and linked it with the phonological history of the western Finno-Ugric languages), which, without a doubt, have a great influence upon etymological research, too. I have already referred to Helimski's review of the current situation. The absence of an appraisal of the history of phonology is also indefensible in terms of Häkkinen's limitation to the "intermediate protolanguage" (even if she does often use the terms "Uralic" and "Finno-Ugric", e.g. on pages 161 - 162 quite arbitrarily, and then on page 266 appears the monstrous word "Finno-Ugric-Samoyed"!). Despite the periodic confusion of the terminology, on page 58 we can read: "Often even the terms Uralic and Finno-Ugric are treated as synonymous despite their fundamental difference". If this is a question of a fundamental difference, why has the "Finno-Ugric" sub-heading of the research not been justified?

As she further handles the semantic side of etymology, she confirms that "although the vocabulary is a system (fi. systeem!) which is indefinite as to its limitation and partly unclear as to its internal relationships, it must, however, be regarded, from the point of view of communicativeness, as a complete system (fi. järjestelmä)" (p. 380). In the Finnish language systeem! and järjestelmä are synonyms, but whether they are also intended to be synonyms here remained unclear to me. Do not the indefinite nature of the limitations of a vocabulary and the partial unclearness of its internal relationships result, in practice, from precisely the communicative function of the language? The limitations of a vocabulary may be unclear and the internal relationships are variable because the border areas of the vocabulary and the internal relationships are differently placed from the point of view of communicative function.

Häkkinen confirms later that since derivation has been the most important factor in forming the vocabulary of the Uralic languages during the whole period which can be researched using historical linguistic methods, then more attention should be paid to research into derivational morphology (pp. 381 - 382). This is a very well-founded claim since the most extensive pieces of comparative research into the derivation of the Uralic languages - Györke's, Die Wortbildungslehre des Uralischen (1934) and Lehtisalo's, Über die primären ururalischen Ableitungssuffikse (1936) - are already half a century old and, in many respects, due for continuation. This kind of research would enrich Uralistics in many ways: word comparisons would gain better explanations, the description of the contemporary languages and their predecessors would be enriched and morphological reseach would go deeper in many areas.

Finally, Häkkinen concentrates the results of her research to the effect that there is good reason for a critical investigation of the family tree model as a description of the interrelationships of the Uralic language group. She visualizes the new "zero point" of research as the family bush where the simultaneous branches from the common protolanguage are groups of closely-related languages, Baltic-Finnic, Saami, Mordvinian, Mari, the Permic languages, Proto-Ugric and Proto-Samoyedic. In my opinion, the

"zero point" would be better seen if the Ugric languages were also separated from one another since there are still significant problems connected with the degree to which they belong together: the reconstruction of proto-Ugric as a branch separate from the others is still rather superficial. This is partly due to the many possible interpretations of the relationships between these languages.

Häkkinen further confirms that it seems difficult to distinguish between the Finno-Ugric protolanguage and Proto-Uralic (p. 384). I cannot comprehend this difficulty other than as an optical illusion caused by an "intermediate protolinguistic", Finno-Ugric viewpoint. However, in practice, Häkkinen's family bush model means that the concept Finno-Ugric can and need no longer be used more than in areal terms. Of course, from the point of view of terminology, this will have a revolutionary effect: Finno-Ugristics is dead, long live Uralistics! Or do we dare to deal with the phenomena from the new viewpoint without daring to change the terms which we use for them? So, I am forced to wonder why Häkkinen fights against her own family bush model by 1) leaving out its easternmost branch and 2) with no justification, restricting herself - right up to the sub-title of the research - to the Finno-Ugric languages.

In renewing the terminology, Häkkinen has not been logical in her naming of languages, either, as I already pointed out at the beginning of my evaluation. Why should we not use the new names more logically since they are anyway becoming common (typical: the names of the Samoyedic languages are so trivial to many that the traditions are most easily broken with respect to them)? Is the making of terminology into a real focus for research a utopia which will suffocate under the pressures of the traditions? Is Arvo Valton right: "Kes hoiab kinni rituaalist, on valmis karistama neid, kes seda ei tee." (Valitud teosed 2 (1984), p. 236)?

Another matter which remains a utopia seems to be the creation of a good joint ADP system for the Uralic languages. Häkkinen deals with this from the point of view of etymological research (pp. 395 - 397 and earlier, p. 49), but there could equally well be a use for this in all the sub-sections of Uralistics. Let us restrict ourselves here to dreaming of a possible ADP information system to serve etymological research, such as many others have certainly already come to dream about. Firstly, there must preferably be a basic dictionary bank, based on phonological orthography, for different Uralic languages (they could also be for closely-related languages). Secondly, they would be supplemented by appended banks of which, primarily, there would be a morphophonological bank or a lexeme bank (how words inflect), a dialect distribution bank, a word derivation bank, an etymological bank (with source references) and, of course, a meanings bank. I believe that the ADP banks which will possibly be made in Hungary on the basis of the Uralisches etymologisches Wörterbuch will not reduce the need for more extensive information systems, since those banks will perhaps include only the kind of information which is necessary from the point of view of those making that dictionary. There is also the danger of imagining that the information coming out of one dictionary project is sufficient even if, in reality, fundamentally different kinds of information are necessary. The creation of the kind of ADP bank system of which I dream would be a considerable research project in itself (and the creation of ADP banks would be a valuable project in terms of synchronous phonology and dialect research). Of course, the project could make use of existing ADP banks (e.g. the punch-tapes used

in the photo-typesetting of dictionaries, as well as other mass banks, all of which should always be preserved for posterity). Such a job would, of course, be big (and, initially, expensive) but its demands could be shared through international cooperation. Nowadays it is technically possible to produce to printing standard, both on the ADP monitor and on paper, all the necessary symbols of the phonological systems as well as different typefaces (and, if trouble were taken, a quality phonetic script would also be possible). Under no circumstances should there be any haggling over whether the monitor should have all the symbols necessary for reproduction on paper, for instance, of a printing original. In the long term, this would mean great savings in both time and resources since the most troublesome stages of publishing (typesetting and editing) would be dealt with much more straightforwardly than has been the case. Have I brought up another impossible utopia?

King-size is better than Long-size

In my opinion, Häkkinen's research would have been better structured if she had followed the advice given for literature: write as concisely as you can and then reduce it by half. The work is hampered all the time by seeming like a study-book. For example, the first chapter would be very good for a studybook but is not suitable for a research work of this kind. Its teacher-like nature and its excessive thoroughness lead easily to an underestimation of the reader. Similarly, chapter 2.3. (meaning) remains rather unconnected. There is good cause to wonder whether an etymological appendix of over one hundred pages is really necessary. I, for one, would rather look at etymological dictionaries than at this appendix, since dictionaries contain a lot of the type of information which cannot be squeezed into a concise etymological appendix. I realise how much trouble it has taken to compile this, but that alone is not reason enough for its inclusion. The comments on the etymologies in the appendix are, of course, concise and partly arbitrarily chosen so not even this defends the inclusion of the appendix. Summa summarum: in this case, a two-hundred-page research work would have been far more balanced than one of over four hundred pages since, then, the primary results of the research would not have been left in the shadow of the rest and since, then, the internal structure of the work would have been much more balanced. The external lack of finishing touches and, in particular, the numerous mistakes and inaccuracies imply that the work has been done in too much of a hurry.

Häkkinen's research is welcome because it is able to give certain basic points of view on Uralistics a thorough shaking. It forces one to take a stand and provokes thoughts and maybe utopias, too. A research work which makes one consider the permanence of scientific results is always worthwhile. But what will be done by the research tradition, the eternal friend and enemy of science? I fear the worst...

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