# JAPANESE - URALIC LANGUAGE COMPARISON; LOCATING JAPANESE ORIGINS WITH THE HELP OF SAMOYED, FINNISH, HUNGARIAN, ETC.: AN ATTEMPT

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1980
Published by:
Lajos Kazár - Tsurusaki Books
Hamburg

#### ACKNOWLEDGMENTS

I wish to express heartfelt thanks to the Deutsche Forschungsgemeinschaft, Bonn - Bad Godesberg, for having granted me a generous stipend over a two year period during which I was able to devote my time to research work.

My thanks also go to Universität Hamburg, in particular to the Head of its Seminar für Sprache und Kultur Japans, Prof. Dr. Oscar Benl.

At Ruhr-Universität Bochum Prof. Dr. Bruno Lewin has obliged me by kindly helping with advice and encouragement.

I am equally thankful to my teachers and friends at The Australian National University, Canberra, and at Indiana University, Bloomington, Indiana, where I fondly recall the names of Distinguished Prof. Denis Sinor, Prof. Alo Raun, Prof. Gyula Décsy, and others in the Department of Uralic and Altaic Studies.

Last, but certainly not least, I express my gratitude to my country of birth, Hungary, where I spent my first 21 years of life and where I received an education without which this work would not have been possible. I still receive most valuable help from the Institute for Linguistic Science within the Hungarian Academy of Sciences where Prof. Péter Hajdú, Director, and other prominent members have frequently advised me on difficult matters.

For errors and mistakes I am alone responsible.

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#### O. INTRODUCTION

The aim of the research project whose results are presented in these pages has been to gather and analyse, by way of comparison, assumed correspondences

between Japanese and Uralic.

The posing of the question concerning genetic or other relationship between Japanese and languages of the Eurasian mainland is not new at all. Japanese researchers themselves have been trying to solve the riddle of their earthly provenance for at least 250 years, and many, if not most, have turned their attention westward. The famous Confucian scholar and statesman of the Tokugawa era, Hakuseki ARAI proposed as early as 1717 that a strong historical relationship once existed between Koreans an Japanese. (For pertinent literature see Miller

1967 and 1971.)

In Europe, especially from Hungary, searching eyes were early cast eastward because an almost forgotten, but still felt relationship with peoples "somewhere in the East" stirred the minds. Yet sooner than any Hungarians we know of, other nationals probed into central and eastern Asia and recorded their observations. Otto Donner in "Die uralaltaischen Sprachen" (FUF 1, 1901, 128-46) drew attention to the importance in this field of such early researchers as the Swede Philip Johan Tabbert von Stralenberg who in his comprehensive work <u>Das Nordund Östliche Theil von Europa und Asia</u> (Stockholm, 1730) called the entirety of the until then little known peoples of that vast area "Tatarische Völker", and divided them in six groups: 1. Uighurs = the Finno-Ugric peoples and the inhabitants of the Baraba, the plain between 0b and Yenissei; von Stralenberg lumped this first group with the Huns, 2. Turko-Tatars, 3. Samoyeds, 4. Mongols and Manchus, 5. Tunguses, 6. tribes between the Black and Caspian Seas.

It was mainly on the basis of von Stralenberg's work that the Hungarian János Sajnovics sought and found evidence of language relationship between Lapp and Hungarian (Demonstratio idioma Ungarorum et Lapponum idem esse, Trnava, 1770), to be followed by another Hungarian, Samuel Gyarmathi, who in his Affinitas linguae Hungaricae cum linguis Fennicae originis grammatice demonstrata (Göttingen, 1799) offered solid evidence for the genetic relationship of

the Balto-Finnic languages and Hungarian.

Elsewhere in Europe, in the wake of early linguistic successes achieved in the decipherment of old scripts and in connection with comparative studies of the Finno-Ugric, Indo-European, and Semitic languages, some scholars turned their hands and minds to comparative language studies outside of these fields, since there were on record suggestions and pioneering works such as von Stralenberg's. In the early 19th century, particularly significant was H.J. Klaproth's Asia Polyglotta (1823) in which, among other things, Korean was tentatively linked to the Altaic languages, i.e., the Turkic, Mongol, and Manchu-Tungus group, and at that time, in a broader sense, including such languages as Finnish, Hungarian, Estonian, Mordvin, Vogul, etc. Klaproth and P.F. von Siebold in 1832 went so far as to suggest that Japanese belonged to the Altaic languages (Donner 1901, 131).

Given this spirit, it is not surprising that Hungarians and Finns felt encouraged to go farther afield. Between 1840 and his premature death in 1858, Antal Reguly undertook difficult journeys to the Voguls and Ostyaks, well east of the Ural Mountains, gathering valuable linguistic and ethnographic material among them and other related peoples on his way. His main concern was with the eastern, Ugric, branch of the language family that later became known as Finno-Ugric and still later, with the inclusion of Samoyed, Uralic. He felt that even by risking his life he had to write down the Vogul and Ostyak heroic songs which only a few old people were able to recite well even then. However, it fell to Bernát Munkácsi, Károly Pápai, József Pápay, and others to carry on the work as best as they could.

The great Finnish linguist, M. Alexander Castrén, began his equally trying field research around 1840 and went, within approx. ten years, all over Siberia,

gathering and interpreting, alas, for posthumous publication, material very valuable for both Uralic and Altaic linguistics. His far-flung explorations were continued on the Finnish side by A. Ahlquist, A. Kannisto, K.J. Karjalainen, T. Lehtisalo, and others.

As mentioned before, even in the time of Reguly and Castrén not only Hungarians and Finns were involved in feverish research on Uralic-Altaic problems. Other European researchers often looked even farther afield, since they were not primarily concerned with special Hungarian and/or Finnish ethnic and linguistic relations. So in time Japanese again came into view. As early as 1857, A. Boller, an Austrian Sanskritist who had a fair command of Hungarian, studied Finnish and what was then available about the Altaic group of languages, published a momentous article: "Nachweis, dass das Japanische zum ural-altaischen Stamme gehört" (Evidence showing that Japanese belongs to the Ural-Altaic family; see Sources). Somewhat later the famous French Orientalist De Rosny emphasized the necessity of thorough comparison between Japanese and Finnish. Around the turn of the century the Germans J. Grunzel and, in particular, H. Winkler tried to link Japanese to the Uralic and Altaic languages, then still considered to form one family.

We now return to the Hungarians and Finns. Vilmos Pröhle, an eminent Turkologist, took up Japanese, too, and published "Studien zur Vergleichung des Japanischen mit den uralischen und altaischen Sprachen" (Studies toward a comparison of Japanese with the Uralic and Altaic languages; see Sources). By 1916 the Uralic = Finno-Ugric and Samoyed languages were considered to be an established language family, to be treated separately from the Altaic group whose cohesion was not convincingly proven. It must be noted that in spite of the traditional (and perhaps misleading) term "uralisch und altaisch" in the title, Pröhle's article barely touches on Altaic. The whole treatment centers on Japanese-Uralic correspondences, and Pröhle emphasized the Uralic nature of Japanese. He reaffirmed his stand in 1943 when he published Grundriss einer vergleichenden Syntax der ural-altaischen Sprachen mit besonderer Berücksichtigung der japanischen Sprache (An outline of a comparative syntax of the Ural-Altaic languages with particular consideration for the Japanese language; see Sources). One has to add that in this work Pröhle treated the Uralic and Altaic languages together, for, as he put it, he saw no essential syntactic difference between them. -- In 1941 Ferenc Pap published his A magyar - japán nyelvrokonság (Hungarian-Japanese language relationship; see Sources). This small treatise gives several hundred Hungarian-Japanese look-alikes, without phonological support or an attempt to link the words in question with cognates in other Uralic languages .-- Back in 1924 the well-known Finnish Altaicist G.J. Ramstedt brought out his "Comparison of the Altaic languages with Japanese" (see Sources). This article throws up bold ideas, but is relatively short and shows that Ramstedt did not go deeply into Japanese.

In the meanwhile Japanese scholars continued their own research. In his article "The relationship of Japanese to the Ryūkyū, Korean, and Altaic languages" (1948: see Sources) Shiro HATTORI, while showing very convincingly the formal identity of Ryūkyūan with Japanese, gives his opinion on the various comparisons of Japanese with other languages. To quote him: "Up to now it has been theorized on various occasions that Japanese is related to Ainu, Aleutian languages, Eskimo, Hyperborean languages, Chinese, Tibetan, Burmese, Austroasiatic languages, Austronesian languages, Persian, Greek, Irish, other Indo-European languages, and several diverse tongues such as Basque, Sumerian, and Mexican Indian languages. I do not believe that any of these theories has been linguistically prooved in a satisfactory manner and I think that the probability of any connection between Japanese and these various languages is extremely small. ... If we are to say that any language does have a relationship to Japanese, we must first cite the Ryūkyū language. Then searching further, although we cannot say that there is any complete linguistic proof, Korean comes to mind as the language for which the probability of relationship to Japanese is the greatest. Still further we might put forth the probability of relationship with the Altaic languages ... ." -- In support of this proposition, Hattori then reminds us that Hideyo ARISAKA ascertained that Nara Japanese (8th cent. A.D.) possessed vowel harmony; further, Kyosaku MAEMA and Shimpei OGURA established that vowel harmony also existed in 15th cent. Korean; on the basis of this common characteristic between Old Korean and Old Japanese, on one hand, and the Altaic languages, on the other, one may infer the probability of relationship among these languages. However, Hattori

rightly points out that in contradistinction to Turkic, Mongol, Manchu-Tungus, and Korean where vowel harmony extends or extended to the suffixes, Old Japanese vowel harmony did not affect the suffixes. He then concludes that vowel harmony developed independently in each of the languages concerned. In other words, "it is not improbable that the original parent tongue had no vowel harmony."

Hattori concerns himself also with Ramstedt's above article and remarks that Ramstedt assumed that some Japanese open syllables came from closed ones (e.g., ka < kat/kap/kar/kal/kas/kach; this assumption is contested by the present writer); Ramstedt also held the view that personal conjugation, not found in Japanese, was not necessarily a feature of proto-Altaic, and that the verbs were at the same time nouns, able to function also as predicates. In general, Hattori calls Ramstedt's article an excellent treatise, but does not regard it as convincing

because the comparison made in it is fragmentary.

In Note 58 to his quoted article, Hattori makes a short reference to Pröhle's 1916 publication thus: "Dr. Wilhelm Pröhle ... states that the grammatical structure of Japanese is fundamentally identical with that of the Uralic languages, and concludes that these two languages are of the same stock, pointing out that remarkable resemblances can be noted between Japanese and the Uralic languages in primitive grammatical suffixes and in many of the words that can be considered native to Japanese. However, since the rules of phonetic correspondences have not yet been clearly established, we cannot take this theory as demonstrated. If the same resemblance could be noted in the Altaic languages, the probability of relationship between these languages would become greater. All in all, if we consider Pröhle's treatise or the above-mentioned contributions of Matsumoto, Horioka, C.K. Parker, we begin to have an impression that Japanese can be compared with any language."

In view of the extreme diversity of languages with which Japanese has been linked one must sympathize with Hattori. But was he fair to Pröhle?—— It is admitted that 90 word comparisons, 10 morphological parallels, and similarities in consonant development, as presented by Pröhle 1916, are not enough to claim genetic relationship even if we add Pröhle's syntactic proof of 1943. On the other hand, Hattori is demanding the impossible when he makes it practically a condition of Japanese-Uralic relationship that one should demonstrate the same resemblances in the Altaic tongues, too. To be certain, many syntactic and morphological identities have been demonstrated between Uralic and Altaic, there are also many certain word identities in the same field, but it is a hopeless task to endeavour to harmonize the phonological systems. Scholarship at large can be happy if the Uralic track leads to Japanese. Instead of dismissing Pröhle's probe, as Hattori did, one should have followed it up long ago.

Japanese may or may not be a hybrid language. We do not yet know. But there is a chance that it is an important continuer of a Eurasian language of old whose other remnants we can recover not in the vicinity of Japan, but much farther away. It has been repeatedly found in ethnology and general cultural history that peoples which once constituted cultural entities, when driven apart, often better preserve their former cultural traits in their separate, peripheral distribution than the parts remaining close to the old centers where sometimes violent politic-

al changes alter language and mode of life altogether.

Among Uralic linguists the view is general, and this may be due to Ramstedt's influence, that Japan is much too far geographically from the supposed original center of the Uralic peoples for Japanese to be considered for genetic relationship or even erstwhile contacts with the Uralic languages. Hattori's last-quoted remark may also have influenced potential Japanese inquiry to probe the Uralic possibility. And now we have R.A. Miller's book Japanese and the other Altaic languages (1971; see Sources) in which we read: "Even when Japanese materials of far greater accuracy and value were at hand, continuing interest in the 'Ural-Altaic' hypothesis and unwillingness to limit the investigation to Altaic materials alone continued to hamstring research. Pröhle is a good example; in its handling of Japanese materials it shows great advances over Boller (1857), but since it treats these materials against the overwhelmingly vast horizon of 'Ural-Altaic', few if any of its etymologies continue to be of interest today, except for their imidental role in the history of Japanese comparative studies" (pp. 13-14). But here follows what Pröhle had written regarding his aim (Pröhle 1916/17, 148; translation): "In the following studies I shall try: 1. to treat the most

important features of Japanese phonetic history, then compare with Uralic those momphological and lexical correspondences of the Japanese language which appear really noteworthy, 2. to compare the syntactic structure of Japanese with that of Uralic, more correctly, Ural-Altaic, 3. to scrutinize the noteworthy lexical correspondences between Japanese, on one hand, and Mongol and Manchu-Tungus, on the other; finally, to present my conclusions."—The last part of Pröhle's planned work could not be materialized. The second part went largely unnoticed because of WW 2, the first one because of WW 1.—There can be no doubt that the Altaicist Pröhle recognized many lexical and morphological correspondences between Japanese and Altaic. Yet he emphasized the Uralic nature of Japanese, while in connection with Ural-Altaic he used the epithet "so-called."

In 1966 S.E. Martin brought out his "Lexical evidence relating Korean to Japanese" (see Sources). In it 320 word comparisons are offered with reconstructed phonetic values for proto-Korean-Japanese. The list is quite impressive, but the reconstructed forms do not seem to be plausible, at least as far as Japanese

is concerned. Nor is the semantic side convincing enough.

Also in 1966, Shichiro MURAYAMA published, after a series of pertinent articles, "Mongolisch und Japanisch: Ein Versuch zum lexikalischen Vergleich" (Mongolian and Japanese: An attempt at lexical comparison; -- see Sources). Among the 50 items listed there a lot appear in very similar phonetic shape and with identical or near-identical meaning on the Uralic side, too.

A volume practically inseparable from R.A. Miller's 1971 book was published in 1975 by the well-known scholar in numerous fields, K.H. Menges under the title Altajische Studien II; Japanisch und Altajisch (see Sources). In it, Menges corrects Miller on important points in matters Altaic, develops new ideas in connection with his suggestions, often reminds the reader of pertinent Uralic fea-

tures, and branches out into Nostratic, too.

In 1973 B. Lewin summarized his research in Japanese as linked with the extinct language of the onetime Koguryŏ kingdom in northern Korea. I may be permitted to quote repeatedly from his article "Japanese and the language of Koguryŏ" (see Sources), since it is very relevant to the present endeavour. In his introduction Lewin writes: "The research done in the past has focused more and more on two lines of genetic comparison: . . in the direction of Altaic languages, and . . of Austroasiatic and Austronesian languages. The Japanese people are doubtlessly a mixed race, therefore all attempts will fail to trace Japanese back to a single original language. The genetic relationship of Japanese must be seen in both directions, but a better understanding, reached during the last decades, has shown that closer genetic ties bind Japanese to the Altaic languages. This has been confirmed by the exploration of the fragments which are known from the old Koguryŏ Language" (p. 19).—According to Lewin, Murayama, and others, this extinct Korean language stood very close to Old Japanese, or its forerunner.

Concerning the history of Koguryŏ, there are Chinese records available from the Shih-chi to the Wei-shu (the dynastic history of the T'o-pa Wei), the Sui-shu, and the T'ang-shu (p. 22); fragments of the lost Koguryŏ dynastic records have been preserved in the later Korean dynastic histories, such as the Samguk-sagi (of 1145) and the Samguk-yusa (13th cent.). Koguryŏ is said to have been established by the Kao-kou-li tribes in the 1st cent. A.D. in what is known to us as Southern Manchuria and the Upper Yalu area.—Lewin thinks that Japanese could be in part an offspring of the Koguryŏ language. Still according to him, "the relative next after Japanese is Korean which has developed from the Silla language. The Koguryŏ language might also be considered as a missing link between Korean and Japanese. Standing more distantly, but without doubt also related to this

group, are Tungus and Manchu."

Lewin calls this group of languages the eastern branch of the Altaic tongues. The central and western branches are constituted by the Mongol and Turkic languages. In an appropriate diagram Lewin derives the Altaic languages from the same source as the Uralic ones. He points out further that archaeologists suggest a link between the proto-Japanese, the bearers in Japan of the Jomon ("cord impression" on pottery) culture (down to approx. 250 B.C.) and peoples in northern Asia, perhaps a primitive Ural-Altaic group (note: the proto-Japanese were not identical with the ancestors of the Ainu). Around the 5th cent. B.C. an infusion of peoples from the south is assumed, who might have entered Japan partly through southern Korea, partly through the Ryūkyū Islands. These waves are supposed to

have taken to Japan rice cultivation and with them is associated the Yayci culture (down to approx. the 3rd cent. A.D., according to other periodization, to the middle 4th cent.). Through racial mixture of these peoples with the proto-Japanese arose the Hayato and Kumaso peoples, mentioned in the Kojiki (712) and the Nihongi (720). It is thought, writes Lewin (p. 29) that the proto-Japanese people spoke a language of Ural-Altaic origin, "whereas the southern peoples brought into Japan Austroasiatic and Austronesian elements."

The language of the people of the Yayoi culture (exluding the Ainu) is thought to have been "essentially of Japanese character", as shown by some terms preserved in Chinese records dating from the 3rd cent. A.D. (Wei-chih, Wo-jen chuan).--The Yayoi culture used bronze and other metals, and was essentially of agricultural character. Archaeology ascribes to this period many southeast Asian features. The early part of the so-called Tomb Period in Japan covers the last stretch of the

Yayoi era.

In the second half of the 4th cent. A.D. a sudden change took place in Japanese history, which deeply affected Japan's cultural development, and so its language, too. Still following Lewin (pp. 30-31), we can say that archaeological proofs of this change have been found in tombs all over western and central Japan. While during the Yayoi and the early Tomb periods there were relatively few horses in Japan, in the late Tomb period (from the late 4th cent to the 7th) their number increased suddenly. The well-known haniwa-figures, figurative guardians of the tombs, often represent realistically equipped warriors and battle-horses. No doubt, a new wave of people arrived on the Japanese Islands, the so-called kiba-minzoku 'horse-rider-folk'. An explanation of the finds was first given in 1949, in a tentative manner, by the archaeologist and historian Namio EGAMI, the ethnologist Masac OKA, the archaeologist Ichirō YAWATA, and the cultural-anthropologist Eiichirō ISHIDA (see Sources).

The thought of an invasion of Japan as late as the 4th cent. A.D. found no sympathetic reception among the Japanese public. Egami's presentation of the

facts was perhaps partly responsible for this.

G. Ledyard, Korean and Chinese historian at Columbia University, re-examined the data, trying to embed the change in Japan in a setting that shows post-Han changes on the continent and, in particular, on the territory of Korea. His article "Galloping along with the horseriders: Looking for the founders of Japan" (1975; see Sources) is also relevant to the present, and probably future, research, therefore I adduce from it at least the part which summarizes Egami's main arguments: "According to Egami, the basic character of the Yayoi and Early Tomb Periods is 'incantatory, sacrificial, southeast Asian, in a word agricultural', while the Late Tomb Period is 'realist, warlike, baronial, north Asian, in a word horserider' (p. 166). The general outline of his theory is stated in eight points. 1) Early and Late Tomb periods are fundamentally different. 2) The change from one to the other was not evolutionary but dramatic and sudden. 3) Agricultural societies are generally conservative and do not aggressively borrow foreign culture or reform their own; Japan is not likely to have been able to invade a stronger southern Korea in the 4th century and bring the horserider culture back; rather the horseriders conquered both southern Korea and Japan. 4) Japan's adoption of horserider culture was not partial but total; Japanese and continental horserider culture are 'completely in common'. 5) The horses did not come by themselves to start Tomb Period II, they brought people with them. 6) Tomb Period II was of a baronial and aristocratic character, and the horserider culture was spread over Japan by force. 7) The regional distribution of tombs in Tomb Period II shows a recognition of strategic localities, supporting the idea of rule by warriors. 8) Ordinarily, horseriding peoples do not stop their conquests when they reach the sea, but get in boats and continue them (pp. 169-170)" (in Ledyard, 222).

The invaders, the <u>kiba-minzoku</u>, are thoght to have descended upon Japan from Siberia. "All the northern continental races that came southward to the Korean peninsula, such as the Puyo, Koguryo, and Maek, are thought to have been Tungusic in race and to have previously inhabited Manchuria" (Lewin, p. 31, quoting Yū

MIZUNO's "Origins of the Japanese people" 1968).

Now, if the kiba-minzoku were of Tungusic origin, one should seek Japanese-Tungus language links. Some scholars have done that, yet the findings have not solved the problem. Could it be that the language of the kiba-minzoku was not of Tungusic type, or not even Altaic? Alternatively, is it that these people spoke

a Tungus-type language, but being small in number against the former arrivals they merely influenced the primitive Ural-Altaic type of language already in use on the islands? The frank answer to these questions is that we do not know.

The present investigation attempts to contribute to the solution of the problem by bringing into the picture some of the results worked out by Uralic linguistics, which at times overlap with Altaic results.

What is awaited now is constructive valuation and help from all sides.

The results and proposals presented in these pages should, of course, not be considered as definitive, but sooner as once treated material to be refined further. The sound correspondences will probably never be as good as the tenet "exceptionlessness of sound laws" would require them to be. That ideal has not been reached in most fields, if anywhere. Then again, no claim is made that the Uralic languages come from proto-Japanese or vice versa.

If this contribution has shown that the origin of the Japanese language cannot in the future be discussed without some knowledge of the results of Uralic linguistics quite some progress will have been made. Conversely, if Japanese cannot be handled without Uralic, then it will most probably not be possible for Uralic

linguists to ignore Old Japanese any further.

Clearly, co-operation among Japanologists, Uralicists, and Altaicists is badly needed. First of all, the works Omodaka 1967, Ono 1974, and Shinmura 1965 (or later ed.) ought to be translated into English in order that scholars at large have access to these very important sources. In the translations, all words of proven or suspected, foreign origin should be marked. Important Japanese language publications, or at least their usable extracts, should appear collected and in English, for it would be unreasonable to expect non-Japanologists to give up their studies for a number of years in order to become sufficiently conversant with Modern and Old Japanese. In other words, the parcupine-like bearing of Japanese linguistics in Japan should be changed .-- Altaic linguistics on the whole is open to proposals of comparison with Japanese, but we have to note that there is no agreement among scholars concerning the common origin of the languages broadly called Altaic .-- As regards Uralic lingistics, the onus is squarely on the Hungarian, Finnish, and Estonian academic institutes, created in the first place to trace the relationships of the national languages in question, no matter how far researchers have to go to achieve that aim.

#### 0.1 THEORETICAL ASPECTS

- O.1.1 Because serious scholars such as Klaproth, Siebold, Boller, De Rosny, Grunzel, H. Winkler, Pröhle, Ramstedt, Lewin, Martin, Murayama, Menges, Miller have suggested and/or attempted to prove that J is a language akin to the U and/or the A ones, and because Miller 1971 expressly claims that J is an A language (the work could not secure the hoped-for concensus mainly on the ground that "the other Altaic languages" have not been convincingly shown to have originated from the same parent language), a new attempt, with improved tools, at linking J to U, a proven language family, is warranted. The new attempt would be in line with all previous suggestions and/or attempts mentioned above, for the results of the investigation could at least be partly applied to A-J comparative research which is, to be certain, complementary to the present one.
- 0.1.2 If the present analysis does not offer sufficient plausible results to warrant further research, U-J comparative efforts may be taken as unrewarding.
- 0.1.3 If the results will not be judged sufficient in quantity or quality, or both, to allow the postulation of genetic relationship, but will be deemed sufficient to suggest lasting contact relations—say, several thousand years of intensive contact—then it is proposed that such results, taken together with the partial results of A-J language comparison, anthropological and ethnological data, and the relatively recently published results of pertinent archaeological and historical research (Oka, Egami, Yawata, Ishida, Kidder, Lewin, Ledyard) will have at least succeeded in showing that the dominant part of the J population

descends from people who must have migrated to the Japanese Islands not from the islands of the Pacific Ocean, as often claimed, but from Siberia. Even this result would have a momentous impact upon the orientation of scientific investigation concerning the provenance of the J language and the J people, on the one hand, and the insufficiently known past of northern Eurasia, on the other.

0.1.4 The present attempt at seeking evidence of deep-going relationship in the said field has to defend itself against the following likely objections (answers have been given immediately).

0.1.4.1 When, if at all, did such a people get to Japan, which could have taken with itself a language which is supposed to be typologically similar, or even genetically related, to the U and/or the A languages? The answer is based on the works of scholars named under 0.1.3 (see Sources). The approximate time of a large-scale move of a horse-riding people from NE Asia through Korea to Japan was the second half of the 4th cent. A.D.; however, on the evidence of 3rd cent. records (Wei-chih) some earlier waves of invaders/immigrants speaking a language similar to that of the later arrivals (Puyŏ?) are not left out of consideration; the 8th cent. J historical records, though clad in a mythological language, speak not only of an eastward moving conquest but also of the "pacification" of peoples whose place-names allow such an inference.

0.1.4.2 How could in those days invaders/immigrants in numbers, even with a considerable number of war horses, get across the sea which separates the southern tip of Korea from Japan? The distance between, say, the shore near Pusan and that near Fukuoka is roughly 185 km.; on the way there are the islands Tsushima and Iki of considerable size; neither the strait between Pusan and Tsushima, nor that between the latter and Iki, nor that between Iki and Fukuoka (Kyūshū) is as wide as is the strait at Calais; yet the British Isles were invaded by Caesar's Romans and William the Conqueror's Normans, not to speak of the invasion by the Angels and Saxons over a much longer sea route. Further, early Korean and Chinese records tell of travel to and from Japan as a matter of course; the Korean historical work Samguk-sagi (1145) recorded (from earlier records) 29 invasions/raids by Japanese between the years 50 B.C. and 497 A.D. (Ledyard 1975, 240). If wars could be carried out across the sea between peoples of that area as early as the first centuries A.D., then a conquering people from NE Asia could surely order enough boats, to be built, if necessary, in order to ferry the warriors, their families, slaves, horses, and other belongings to the shores of Japan in the second half of the 4th cent., a time of a NE Asian "Völkerwanderung." We should recall that the Mongols of Kubilai khan invaded Japan twice (1274, 1281) over the same sea route, with armies numbering well over 100 000 men, a large part of them mounted warriors, and the wooden boats they used had also been built following age-old tradition.

0.1.4.3 Is it possible that a people speaking a language supposedly close to U did go as far as Korea and Japan? (Note: the so-called U original home is still a matter of debate; there have been suggestions that it ought to be located as far east as the Sayan Mountains, for Samoyeds still live there, and linguistic evidence indicates that the roots of the U peoples should be sought in Siberia). The answer is: yes -- in view of the following facts: the distance in straight line between the Ural Mountains and, say, Kyūshū is approx. 6000 km.; Huns, Avars, Petchenegs, Uzes, Kumans, Mongol-Tatars are known to have moved from the eastern half of Siberia as far as Central Europe by no other means of transportation than that offered by horses and carts, covering, say, from the area of the Baikal to the Carpathian Basin no less than 6000 km.; for such peoples wandering in an easterly direction was as easy or as difficult as in the opposite way; again, the distance over land in a straight line from Britain to NW India is no less than 6000 km., yet Sanskrit is as much an IE language as English is; further, the onetime speakers of Tocharian lived on the NW borders of China, and some other Indo-Europeans got even farther east.

0.1.4.4 Is a comparison between U and J allowable without involving the A tongues? Because the U languages form a proven language family, the answer is: yes.

0.1.4.5 Is it not against the right method to try to compare U and J without first reconstructing a proto-J language on whose time-depth it should depend whether

the suggested comparison with U may be attempted at all? If the reconstruction of PJ at least to the time-depth of PU (approx. 6000 years ago) is a conditio sine qua non of the proposed comparison, then that comparison is not allowable. By the same token, the idea of any distant historical comparison of J with other languages must be abandoned from the start (actually attested J goes back to the 8th cent. A.D. only, with fragments dating from earlier centuries), for J stands isolated, and internal reconstruction within an isolated language has a very limited scope: its results alone are definitely not reliable when the reconstruction of a p-language is to be achieved.

0.1.4.6 If the reconstruction of PJ is not possible at present--because the right method of reconstruction requires the combination of internal reconstruction and comparison with at least one cognate language -- why is the present comparison attempted? Answer A): The postulate that only a p-J language taken back at least to the level of PU is suitable for comparison with the latter emanates from people who a) either balk at the very idea of getting involved with "that difficult language" (i.e., J), b) fear that the proposed comparison could yield such new evidence as would make a large-scale revision of the present  $\overline{\textbf{U}}$  research results imperative, c) think that the size of the J population makes it necessary to postulate a language history for J several (or many) thousand years longer than that of the U languages whose respective speakers are relatively small in numbers, d) assume that the populace of Japan is either autochtonous or, if coming from elsewhere, its hypothetical immigration took place so far back in history that any link with the U peoples is practically ruled out, if only for geographical reasons. Answer B): The proposed U-J comparison does not recognize the validity of arguments tied up with a), b), c), and d) above; it counters as follows: a) so long as we do not know that the dominant (also in language) part of the J population could not possibly come from the continent the way must be left open for the comparison of J with languages found or once recorded there, b) it is unscientific to postulate a longer language history for the J people than for any smaller one merely on the ground that the former is large at present (the J population figures went up rapidly in the 19th cent. only), c) a link, genetic or other, of J with the U languages, or others, cannot be ruled out a priori, nor can the degree of relationship, or its time-depth, if a relationship is allowed, be determined without first making a thorough investigation, d) in the pioneering days of historical language comparison there were no reconstructed forms available as an inheritance, yet by hard work, ingenuity, adherence to general scientific principles the various edifices have been brought under roof; if the pioneering Uralicists, Indo-Europeanists, Semitists, etc. had not dared to use what material was at their disposal, waiting until some deus ex machina would hand them ready reconstructed forms, historical lingistics would never have started in earnest.

### 0.2 METHOD

- 0.2.1 Since this is a pioneering work, its method is basically and by necessity inductive. The model to be followed is, of course, that of comparative historical linguistics generally.
- 0.2.2 Aware of the pitfalls that the inductive method by itself may harbour, this attempt tentatively applies--as a general guide--the frame worked out so far by U linguistics which has profited from IE and other linguistic achievements.
- 0.2.3 The restricting term "as a general rule" is important, for the U or lower level reconstructions as well as some important phonological features, e.g., consonant and vowel quantity; vowel alternation in the first syllable; vowel alternation generally, cannot be regarded as definitive. The Achilles' heel of U linguistics is the paucity of old language records (even those of Hu go back to the 10th cent. only, with the oldest text dating from the end of the 12th cent.). For this reason alone it would be against the principles of science to exclude, a priori, from the investigation in hand such material as cannot be classed U, being ascertained so far only as FU, Ugric, etc., i.e., on a more recent level. Experience teaches us that dialectal or other material not noticed, or wrongly viewed, for a long time may gain importance and even upset current tenets when viewed

in the light of new evidence. Further, while the reconstruction of the various levels of p-languages, culminating in PU, is possible by the combined application of internal reconstruction and external comparison (where U linguistics is lucky because its member languages are numerous and are strewn over a wide area), final proof is missing, for there is no means of checking the reconstructions, say, at the level of 2000 years ago--in contradistinction to IE.

0.2.4 For these reasons the present attempt must not allow itself into accepting the U frame as a final one into which the J data should be forced. The way of trial and error" has usually proved better than rigid adherence to preconceived ideas.

0.2.5 It is easy to imagine that comparativists on the U side and in other areas will raise objections to the propositions under 0.2.4, since this step means in effect that the whole U structure may be challenged instead of being taken as a firm frame of reference. Unfortunately, this cannot be helped. While endorsing the usefulness of reconstructed forms and working hypotheses, we cannot pass by, for instance, the following weighty argument as a reason for the proposals under 0.2.4: "It is a matter of course that in many instances the reconstruction of a PU or PFU word is more uncertain than the etymology which it is based upon. In the following list of nearly 800 reconstructions, the readers may therefore put their question marks ad libitum" (Collinder 1960, 405; and Collinder is a leading U linguist) .-- The most reliable materials at the disposal of the comparativist are still those forms which are in use or have been fixed in a writing suited to retain the phonetic qualities of speech sounds. As will be seen, numerous present-day U words differ little in their respective phonetic shapes from OJ words compared with them. This circumstance could be of great significance. If the sound correspondences prove to be fairly regular, the likely explanation is that U and J are somehow linked and that these languages have remained relatively conservative. We may note by the way that the conservativeness of some U languages has been repeatedly emphasized by linguists. E.g., Fi has been likened to an ice-box, for it has preserved ancient loans from IE with very little change. As regards J, Chamberlain remarked pertinently: "In the languages of Western Europe we see a gradual change of grammatical system, ending in some cases, -- that of English for instance, - in so complete an alteration of physiognomy that it would be hard to believe that the ancient and the modern belong to the same family of speech, were it not that the intermediate forms have been preserved. Japanese, on the contrary, has gone on repeating itself. The spirit of its grammatical system is the same now as it was twelve hundred years ago, althogh the material elements of the conjugation are much changed"(p. 225).

0.2.6 Concerning phonetic laws, it has to be pointed out that the tenet of the neo-grammarians about the exceptionless nature of phonetic laws ("Ausnahmslosig-keit der Lautgesetze", on the pattern of the exceptionless laws of the natural sciences) has been frequently reeinterpreted in order to fit the facts so that one can sconer speak of tendencies in sound development. That the exceptionless nature of phonetic laws is only an ideal has been demonstrated in the case of the phonetic history of the Hu language. These remarks do not mean that the present attempt does not seek regular correspondences, but they indicate, e.g., the following.

0.2.6.1 Since vowel harmony, or strict adherence to it, is not a must in the U languages (only rudimentary vowel harmony is postulated for PU; Szinnyei 1922, 41 ff. flatly rejects the assumption of vowel harmony in PU) and because 8th cent. J even with its eight-vowel system did not have true vowel harmony (none that extended to the suffixes), it would be a bad mistake to abandon any comparison on the ground that the forms in question display different vowel orders. E.g., Hu kavar 'mix, stir', kavarog 'to mill (as a crowd)' stand against kever and kevereg id.; the "high" (palatal) vowel order forms are used more in the dialects; in the Hu language island of what is now southern Burgenland (Austria), villagers use only the form kever and its derivatives; if an outside researcher had knowledge merely of the usage of this language island, but not of Hu at large, he might hesitate to equate kever with kavar because of the difference in vowel order. Split (as in the case of kever: kavar) has created scores of parallel forms in Hu and probably in the other U languages. It is further likely that a tendency to fronting (of vowels, as is well proven in Hu) has preserved the forms

with front vowels, discarding most of the forms with back vowels. In Hu we still find hundreds of words with at least one vowel order variant, while the number of three- or four-fold variants in the dialects is legion. In this connection we can speak of fan-like split. Many examples of split can also be found in J and in other languages, the phenomenon doubtlessly being a way of non-purposed increase of the vocabulary. It may indeed be a paleolinguistic feature.

- 0.2.6.2 Because Fi, Lp, Est, and Vote (and sporadically some other U languages) display what is termed consonant gradation (for PFU illustrated in a nutshell thus: under certain conditions,  $*-p--*-\underline{w}-; *-\underline{t}--*-\underline{\delta}-; *-\underline{k}--*-\underline{v}-; *-\underline{m}--*-\underline{w}-$ , etc., while \*-pp-~\*-p-; \*-tt-~\*-t-; \*-kk-~\*-k-) and because some highly regarded scholars succeeded in convincing their colleagues of the excellence of the concept of the consonant gradation theory, its essence and most of its implications were adopted and taught, at least in the first half of this century, by the majority of U linguists. "In recent decades, however, a critical attitude has developed among those who had previously professed the Uralic origin of consonant gradation" (Lako 1968, 61) .-- Indeed, the theory has been abandoned (for c. g. is probably an area phenomenon, linked with medial clustering, most conspicuously exemplified in Lp), but while the theory was held valid all reconstructions had to be carried out in conformity with it, and reconstructions effected or revised since its abandonment could not be divested of the original, often ill-fitting, attire. In this respect, the whole system is still in need of revision. E.g., (TESZ)"Hu tép- 'tear, pluck'; uncertain origin, perhaps PFU; if so, then on the basis of cognate forms, e.g., Fi temmata, tempaan, etc. one should posit the medial cluster \*-mp-; yet Hu -p- cannot be derived from PFU \*-mp-, for by right it should come from \*-mpp-; however, this is not quite justified for lack of a sufficient number of sure supporting etymologies." -- We might note in passing that Hu phonetic history does not have a shred of evidence in support of the assumption that Hu simplex consonants derive from clusters, or even from geminates. On the contrary, all evidence shows that in the early recorded stages of Hu, simplex consonants were the rule, and medial clusters arose either through gemination, or the elision of a vowel between two consonants, or the insertion of glides. Had Hu been given more consideration by the creators of the consonant gradation theory, may be the points would not have been set as unluckily as they have been. In the reconstructed forms on the U side one has to allow for such discrepancies.
- 0.2.7 As a general phonological guide on the U side, this analysis employs Collinder 1965 and Lakó 1968. For the J side, the reader is referred in the first place to Wenck 1959.--The frame cannot be made final at the outset. In time it will have to conform to the regular correspondences which the present attempt aims at gathering, primarily from etymological comparisons.
- 0.2.8 Since a syntactic comparison of U with J has already been carried out (Pröhle 1943), a new effort in that direction may be spared now.
- 0.2.9 The present analysis is mainly concerned with lexical and, in the second place, with morphological, comparisons. For both tasks, it has to take up on the U side whatever material has been recorded and/or is still in use, while on the J side it preferably uses 8th cent. material (0J). For the latter, the main source is Omodaka 1967, with Ono 1974 helping out; Shinmura 1965, Kenkyusha 1954, and Nelson 1962 serve as supplementary sources. For the J morphological material, the main sources are Sansom 1928 and Lewin 1959.—An evaluation of the J dialect material would take us too far afield. According to concensus, the J dialects do not yield more with regard to the pre-Nara language than OJ does (Unger 1977, 147).
- 0.2.10 Since word formation cannot be satisfactorily treated unless we get at the smallest components above the phoneme level, a separate paper entitled "Open monosyllabic words and possible word formation hereof in the Uralic languages and Japanese, with side-glances at the Altaic languages: An outline" has been prepared (and printed in UAJ 52). Because in the etymologies we shall have many practical illustrations of the thesis in question, its inclusion can be spared now. The main idea of the thesis is this: with compound words excluded, all disyllabic and longer U and J words--allowing for prothetic elements or a reduplicated syllable-are theoretically taken as having open monosyllabic roots of CV, or perhaps V, shape (where one might have to allow for the loss of an original initial consonsonant). E.g., OJ ko.m.u 'bear children' is assumed to have come from ko 'child';

na.r.u 'become' and na.s.u 'accomplish, make' are both from the root na-; e.r.u 'get, be able' stands against the attested shorter form e id. Thus, for instance, OJ tukuru 'make, create' offers itself, according to the pattern seen again and again, to be analysed as follows: \*tu- (as root) + k.u + r.u (as extension elements, i.e., derivational endings or formants) .-- As the lengthening of verb forms is well attested since OJ times, we are permitted to apply the pattern to pre-Nara J, and so postulate an immediate antecedent for OJ tukuru in the form, say, \*tuku (cf. J haeru < hayeru < payu 'grow'; J homeru < homuru < pomu 'to praise'). A very similar pattern of root extension into stems and extended stems can be observed in U and A. Making use of these parallels, I suggested in an etymological comparison the following: OJ tukuru : Fi teke- 'do, make', Lp daga- id., MdE tejeid., Hu <u>të-v-</u> (root <u>te-</u>, cf. <u>të-het</u> 'may do') id., FU \*<u>teke-</u>. While the meanings on both sides are identical, OJ tukuru is one syllable longer than FU \*teke-. The reconstruction (by U sources) considered the vowel order of Lp daga- as normal, so FU \*teke- was set against the part tuku- of OJ tukuru, knowing that r.u is a verb formant .-- The treatment of open monosyllabic base words links up with a field which might as well be regarded as belonging to paleolinguistcs, so forcefully presented by Décsy in his Sprachherkunftsforschung (Research on the origin of language) I, 1977 (see Sources). Pertinently, Menges 1975 brings up and illustrates open monosyllabic roots in A convincingly.

#### 1. PRESENTATION OF THE MATERIAL

1.1 Once a group of scholars is sufficiently familiar with some branch of scientific literature many short-cuts are possible in their articles. For instance, in Collinder 1977 only a modicum of explanation is given. Having become accustomed to using such a tool, some scholars object to a not so succinct treatment. But it should be borne in mind that before such a simplified tool as that of Collinder could be produced, practically every one of its now succinct entries had been elaborated in considerable detail. From those early elaborations, which were by no means all successful, the phonological, morphological, and syntactic rules governing the various assumed earlier stages of the languages in question have been distilled. The aggregate of such rules has been published in special volumes, but it is understood that their contents underlie the material held in the simplified tools .-- While the present analysis also has to consider the general pace of our days, it cannot afford to neglect essential details. This is all the more valid since U and A scholars cannot be expected, as a rule, to be familiar with J linguistics, while to J linguists the material of the opposite camp is usually little known. Besides scholars who belong to neither camp might also be or become interested in this new attempt at solving a vexing problem.

1.2 Emphasis being on etymological comparison, the presentation of a comparison shall be sketched: a) As a reference and aid to the reader not versed in this material, especially OJ, every entry begins with the modern J dictionary form of the OJ word in question (unless the OJ word has no J continuer; if a form is not attested in OJ, but only later, no reconstruction is attempted, for excepting OJ i, e, o, later J sounds differ predictably from OJ ones), b) while the whole family of the entry word cannot, as a rule, be given (for lack of space and time, and because we lack reliable J etymological dictionaries, which regrettable state flows mainly from the fact that no cognate language of J has yet been found), an effort is made to present several obviously or assumedly related forms with the entry word, c) then follows, as a rule, the OJ form (or forms), with the vowel values for i, e, o indicated, if known; if the word in question is a verb its OJ conjugation class is given (if known, mainly for better recognition; how far back the origin of the conjugations in J lies is beyond our ken; one has not detected parallels to them in U or A, but various conjugation systems in U show that a common conjugation system need not be postulated for the p-language), d) in case when Omodaka does not list a word which appears useful for our purpose, but other sources (listed above) do, they are used; Chamberlain, although short, is

adduced at times for OJ, for his etymological explanations are noteworthy, e) after the J data follow those of the U side, taken (mostly extracted) from up-todate U works (see Sources), with explanations supplied by the works in question, f) thereafter come the semantic, phonological, and morphological comments; because the second syllable vowel, especially in disyllabic words, is subject to lots of wear and tear and because in the reconstructions on the U side this vowel is quite often indefinite, while in J, OJ disyllabic verbs it is automatically  $-\underline{\mathbf{u}}$ , it is treated only as an exception; in other words, attention is focused on the first three sounds, including  $\emptyset$  values, g) when opportune, reference to A parallel(s) is given, h) for better surveyability, all essential J and U forms taken up in the comparison are presented in a simple attached table.

- 1.3 At the end of the etymologies, tables of sound correspondences are presented, with comments following them. These are necessary in view of such oppositions as labiovelar initial consonants present in some of the comparisons.
- 1.4 The numbered entries are listed alphabetically, but a grouping of the lexical material according to representative semantic fields (plants, animals, body parts, etc.) is provided.
- 1.5 The morphological parallels are then presented with the help of phonological gains from the etymological comparisons.

## 2. ETYMOLOGICAL COMPARISONS

U \*0

or \*u

TESZ, MSZFE (ex.): Hu  $\underline{az}$  ( $\underline{a-z}$ ) 'that'; 'the' (definite article)  $\sim$  Zr  $\underline{a-z}$ Table 1 : a-ti, '(see) there'/Vty o-: o-ti 'in that direction'/Ch u- 'that, a-no the other'/Md o- id.//Yr a-, a- 'that' -- U \*o or \*u -- The element -z 21 a-re of Hu az is a pron. formant which presumably comes from a PU dem. pro-11 a-chi OJ a noun: \*t3. SW 18:  $\overline{*an3}$ - 'other, another' (indefinite pron.). a-re Hu a-z Comm. 1. Ono states that OJ a comes from ka id. Lewin 1959, 52 ff. gives an exhaustive treatment of the pronouns on the J side, without Zr asuggesting the derivation of  $\underline{a}$  from  $\underline{ka}$ . He also emphasizes that in J Vty owe find no primary personal pronoun of the 3rd person, while an as-Ch utounding shifting of roles of the personal pronouns can be seen in the historical development of J. 2. Miller 1971, 155 ff. treats of the OJ

(over there)(plus composita with a-; s. Lewin 1959, 53).

1. J <u>a- : a-no 'that', a-re</u> id., <u>a-chi</u> 'there'. OJ <u>a, a-re</u> 'he, she', 'that'

pronouns. He maintains that in the pair  $wa \sim a$  'I', a is an allegro —variant, i.e.,  $\underline{a} < \underline{wa}$  through underarticulation of  $\underline{w}$ . 3. The proposition is made here that a) (agreeing with Lewin) 1st and 3rd person pronouns became mixed up in J, b) an independent pronoun: a, of 3rd person function, was among the primary OJ pronouns. This OJ a is set against U \*o or \*u. Cf. entry woti.

pronouns at length, showing a resemblance between sets of A and OJ

2. J <u>abiru</u>, OJ <u>abu</u> <u>amu</u> (k.n.) 'pour water over the body; take a shower /a bath', J <u>furo</u> 'bath; tub; bathtub'. Ono: <u>puro</u> 'the place where a warm bath is prepared and taken'. TESZ (ex.): Hu fürd(ik) 'take a bath', füröszt- 'bathe', fürdő~feredő 'bath, bathing place' .-- These drived forms come from an assumed verbal stem fir-~fer-~für- $(\sim \underline{\text{for-}})$ , being front vowel order variants of the stem <u>for-</u> of the verb forms <u>for-</u> dit- '(Vt) turn', forog- '(Vi) revolve, swivel'. This stem is very likely onom. in origin and goes back to the FU, perhaps the U, era. Cf. Vg poßrit- 'roll about, wallow, welter'/Vty porjal- '(Vi) turn, revolve'/MdE puvrams '(Vt) turn, brandish'

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//Sk puroldam '(Vt) turn over, revolve' .-- FU (?U) *pxrk3- which
Table 2
J fu.r.o
                   probably has to do with Hu for(r)- '(Vi) boil'.
                        Comm. 1. As regards the proposed correspondence of Hu forog-,
OJ pu.r.o
                   s. entry furu 'to wave, etc.'. 2. I suggest that Hu fürd(ik) is
J a.bi.r.u
                   semantically too far removed from forog-, even though some animals
OJ a.bu
" a. mu
                   roll in dust when taking a dust-bath. The essential factor in bath-
Hu fü.r-öszt- ing is the free use of water on the body; while many animals, even
                   birds that don't swim, bathe their bodies in water, humans hardly
     fi.r-
     fe.r-
                   ever take a dust-bath. 3. P.b.m.f.b.s.: 'take a bath/a shower'. 4.
                   Phon.: initial J \underline{f}-, OJ \underline{p}-, in the case of \underline{abiru}, \underline{abu}, \underline{amu} (where
     fö.r-
                   a- is taken as a prothetic vowel), J, OJ b-, OJ m- vs Hu \underline{f}-(<\underline{p}-)/
1st syll. J, OJ \underline{u}, J \underline{i} in the derivative <u>abiru</u>, vs Hu \underline{\ddot{u}}, \underline{e}, \underline{i}, \overline{\ddot{o}}/ medial J, OJ \underline{r}
vs Hu \underline{r}. 4. It goes without much explanation that \underline{r} is taken as a root expansion element ("Wurzelerweiterung") which can be shown to be a verb formant on the J
side, but very likely on the U side, too (s. Morphology). It is suggested that
the forms in question go back to a CV shaped root.
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3. J<u>aburu</u>, dial. <u>iburu</u>, <u>iboru</u> (Haguenauer 1956, 298), OJ<u>aburu</u> (y.) 'roast, broil, expose to the sun/fire'.

SW 114: PSam \*p∂rå- '(Vi) burn'; cf. Yn <u>poraĭ</u>, der. <u>foradabo</u> 'to roast'/Yr păraś, <u>parā</u> '(Vt) burn'.

Table 3 a.bur.u Comm.: 1 P.b.m.f.b.s.: 'burn; expose to fire'. 2. The vowels a-, 11 i.bur.u i- are considered prothetic; thus: initial J, OJ b- (< p-) vs i.bor.u PSam \*p-/ 1st syll. J, OJ  $\underline{u}$  (dial.  $\underline{o}$ ) vs PSam \* $\underline{a}$  7 medial J, OJ OJ a.bur.u r vs PSam \*r . 3. Cf. TESZ (ex.): Hu pirit- 'to dry; roast so as to make reddish brown', piros, OHu pirus, poros 'red; of ruddy face; roasted', pirul- 'become red; get flushed (from heat)'. PSam \* p@r.åpir.ít-These words are perhaps of onom. origin .-- It is suggested here " pir.ulthat the Hu words in question -- today of mixed, formerly of velar, vowel order -- have to do with the Sam words above. 4. Cf. entry hosu.

4. J afureru, OJ aburu (sh.n.) 'be in excess; brim over, overflow', OJ abusu (y.) 'leave over, spare'. Table 4 FUV 64: Fi paljo 'much'/Ch pülä 'rather, much, considerable amount'/ [?Vg poal 'dense, tight'//Yr pal'; paju 'dense, tight, a.fur.e.r.u thick', pal' 'dishevelled (e.g., the hair)', paaji- 'swell up, OJ a.bur.u fester'/Yn fodeme- 'become thick, thicken' .-- U \*palja. a.bus.u Fi palj.o Comm.: 1. P.b.m.f.b.s.: 'excess; superfluity'. 2. J, OJ ais taken as a prothetic sound (cf. the entries furo and amaru); pül.ä ? Vg poal thus: initial J, OJ b- vs U \*p-/1st syll. J, OJ u vs U \*a / pal' medial J, OJ  $\underline{r}$  vs U \*1j where \*j is taken as a glide. 3. The ? Yr opposition OJ a.bu.r.u : a.bu.s.u indicates a root element bu. paj.u 4. Cf. FUV 155: Fi paljo (as above)//Mo hülä-, üle- 'be super-11 pal fluous'; <u>üle</u> 'enough, sufficient'/Ma <u>fulu</u> 'much, more, superfluous'; <u>fuldun</u> 'growing densely'; Go <u>fuli</u> 'too much'; Olča 11 pāj.i-? Yn fod eme-\*palj.3 puulee; Go pulö, pülöhö 'more, abundant'; Neg. hulöhö id. 5. Cf. Räsänen 1955, 50 (similarly to Collinder; reference to Sauvageot 1930, 16).

5. Jagaru, OJagaru (y.) 'go or come up (to), get up (on), rise, jump up'; Jageru, OJagu (sh.n.) 'raise, lift, elevate'; Jagameru, OJagamu (sh.n.) 'esteem, look up to, praise exalt'; J, OJaga-ta 'upland rice field'(ta 'field'); OJugu-motu, Ono: uguromotu (y.) '(earth, etc.) gets piled up high'—motu 'hold, keep'?/. TESZ, MSZFE (ex.): Hu hag- 'step up (onto), step on/in, ascend, climb up (e.g., a mountain); (of a larger male animal) cover, serve (e.g. a cow)'; hago 'mountain pass, saddle of a mountain'; hagcso 'doorstep, threshold; passage over a hedge; loft' Vg kank-, vang- 'climb, climb up'/Os vony-, vun-, kānət- 'climb, go/travel uphill or upstream'/Zr kai-, kaj- 'climb, go up, rise'.--The Zr word belongs here only if its medial consonant comes from FU \*n.--Ugric (?FU) \*kana- or \*kanka-. Comm.: 1. P.b.m.f.b.s.: 'rise; get up (on high)'. 2. Phon.: initial J, OJ Ø-

Comm.: 1. P.b.m.f.b.s.: 'rise; get up (on high)'. 2. Phon.: initial J, OJ Ø-vs Ugric (?FU) \*k-/1st syll. J, OJ a, u vs Ugric (?FU) \*a /medial J, OJ g vs Ugric (?FU) \*n or \*nk. 2. Cf. (TESZ, ex.) Hu ágaskod(ik) 'stand on tiptoe; rear, prance (of a horse); strive upward'.--This word derives from ágas 'draining rack

(for drying crockery); the word agas comes from ag 'bow, limb, Table the explanation being that a rearing horse, or a man with J, OJ ag.a.r.u raised arms, looks something like a branching tree or a drainag.e.r.u J ing rack (made of a smallish tree) .-- I note that this explanaag.u OJ tion of agaskod(ik) fails to account for the meanings 'stand ag.a.m.e.ru J on tiptoe; stretch oneself upwards; strive upwards' (pertain-OJ ag.a.m.u ing to examples given by TESZ itself). My proposition is that 11 ug.uágaskod(ik) comes from a stem \*ág- which is a variant by 77 ug.u.r.osplit of hag-, the two differing in meaning slightly. For the Hu hagstring of suffixes seen in -askod(ik), cf. Hu vád-askod(ik) 'make accusations repeatedly' (vad 'accusation'), legy-esked-۷g kank-(ik) 'dance attendance on somone' (legy 'a fly'), ügy-esked(ik) yang-'become handy/skilled'(ugy 'affair, concern). The pattern 0s Mount probably started with adjectives, e.g., <u>ügyes</u> 'handy, skilled' 11 . . . . . . . . . . . was made into a verb, and on this analogy similar formations kai-Zr have come about from nouns and verb stems .-- Concerning the kajpreservation or loss of initial k- in the language zone in \*kan.3question, reference is made to: a) Pelliot's "Les formes avec et sans q- (k-) initial en turc et en mongol", Tung Pao 37, 73-101, b) Benzing 1956, 11 (very useful table), c) Rahder or \*kank3ug-o.r-1953, 204-5: "... large number of Japanese word doublets one of which with /k-/, the other without /k-/." 3. Cf. (TESZ ex.) Hu ugr(ik), ugor-, dial. ugar-'jump, leap, bound; fly up (of a spark); rise to join a female (said of large male animals)' .-- Origin unknown .-- I propose that the stem ugor-/ugar- is a development from a shorter stem: \*ug-, itself a variant of ág-, seen above, and by that token, cognate with hag- If that is allowed, we can compare OJ agu to Hu ag- and ug-, while Hu ugor-/ugar- can be likened to J, OJ agaru. OJ ugumotu and uguromotu would strengthen this argument. 4. Futaky 1975, 39 gives 0s \*5vi 'top, upper, high' as coming from Tg \*ogi 'top, height, high'. 5. Cf. Poppe 1960, 107 (ex.): Mo <u>ögede</u> 'upward', <u>ögse-</u> 'go upstream/ against the flow of a river'/ Ev <u>ugī</u> 'that which is on top', <u>ugīr-</u> 'raise, lift', Lam <u>uger-</u> id., <u>ugereb-</u> 'ascend'/Kor <u>ū</u> < \*ög- 'the topmost; tip, top, height, up'/ Yak <u>öksöj-</u> 'travel against the flow of a river' (from Mo), OTu <u>ög-</u> 'praise, exalt'.-- (Note in this connection J <u>agameru</u>, OJ agamu 'esteem, praise, exalt'.)

6. Jago, OJagi 'upper jaw; the gills of a fish', Jagi-: agi-to 'a gill' (to 'door; entrance'), Ono: ago 'jaw; chin'.

TESZ, MSZFE (ex.): Hu all 'chin; mouth'.--This word is of debated origin. ?~Os ănəl 'jaw; mouth'/Vty anläs 'jaw-bone, jaw'/Ch on las 'lower jaw; chin'/ IpN algna 'the part of the gum which corresponds to each tooth'.--Vty -s, Ch -s are denom. noun formants.--FU \*onl3 or \*oln3.--Correspondences in A have also been suggested, e.g. Osm, Chag anak 'chin; lower jaw' (s. also FUV 153).

Rédei 1975, 97: FU \*on3-l3 'lower jaw'. The base \*on3 is to be considered as the velar variant of FU \*an3 id. with which go Vty an 'jaw-bone'; Zr an id.; Os anay 'chin'.

Comm.: 1. P.b.m.f.b.s.: 'jaw; chin; mouth'. 2. Phon.: initial and 1st syll. J, OJ <u>a</u>- vs FU \*<u>o</u>-/ medial J, OJ <u>g</u> vs FU \*<u>g</u> /cf. stemfinal J -<u>o</u>, -<u>i</u>,  $\overline{OJ}$  -<u>i</u> to FU \*-<u>3</u> in the same position. 3. The ele-Table ago agi ment FU \*-13 is, of course, considered to be an accretion. That OJ also means that in the LpN form the position of  $-\underline{l}$  - is attributable to metathesis. 4. Hu áll does not fit into the pattern, and it probably does not belong here. 5. Prohle, No. 78, also adduced onflas Ch Yr nanu, nanui 'chin; jaw-bone', Sk aka, akai, akku 'jaw-bone', 11 on laš Km onai id. \*on3-13 FU

7. Jai-: aida, OJ apida 'opening, gap, space, interval'. Omodaka: -da is a suffixed element. (No further explanation is given)

FUV 63: Fi ovi 'door'//? Ch amasa, omasa, opsa (-sa is probably a suffix)//Vg oow, as as w /os aw, ow 'door; window-space; mouth of a river/a bottle/a net, etc.; blow-hole of a horn'//Yr noece 'door'/Tv noa/Yn nia, no, nu/Sk -a in maata (maat 'tent')/Km aaje/Koibal ai/Motor no/Taigi nja-da (-da is pu3rdsy).--U \*owo.

Comm.: 1. P.b.m.f.b.s.: 'opening; gap', hence 'door, window-hole, mouth of a river'. 2. Phon.: initial and 1st syll. J, OJ a- vs U \*o-/ medial J Ø, OJ p vs U \*w/ stem-final J, OJ -i vs U \*-o. 3. It is not clear whether the Sam forms are

		4	100
11	OW	Ū	*ơwơ
0s	aw	Motor	no
11	āew	Koibal	ai
Vg	ซีพ	Km	аje
***	op.a-sa	Sk	-a
11	om.a-sa	11	nu
? Ch	am.a-sa	11	no
Fi	ov.i	Yn	ŋia
OJ	ap.i-da	Tv	noa
J	a .i-da	Yr	nđe
Table	2 7		

shortened ones or whether they were never expanded. Their initial nasals are secondary.

8. J akinau, OJ akinapu (y.) 'deal, trade, exchange, sell', ? J oginau, Ono: oginapu ~oginupu < okinupu (y.) 'make up (for losses), make good, expiate, compensate (for); stop a gap'.

Table 8 TESZ (ex.): Hu kinál- 'offer, proffer, tender; offer for sale'. a.kin.a. .u --Origin uncertain. Does it have to do with kiabál- 'to yell'? OJ a.kin.a.p.u Comm.: 1. P.b.m.f.b.s.: 'offer in exchange'; on the J side, ? J the sense 'expiate; compensate for' might come from dealing o.gin.a. .u ? 0. o.kin.u.p.u with the gods (in a tangible way). 2. Phon.: it is assumed o.gin.u.p.u that either Hu kinál- has lost an initial (velar) vowel or, o.gin.a.p.u which is more likely, the J words in question have acquired a prothetic a-/o-; with this assumption: initial J  $\underline{k}$ -,  $\underline{g}$ -, OJ  $\underline{k}$ -

vs Hu k-/1st syll. J i, OJ i, i vs Hu i < i / medial J, OJ n vs Hu n. 3. It is interesting to note that the first element of the OJ ending -napu, also occurring in izanapu 'invite', has a close parallel in the Hu verb formant n, e.g., in <u>uzen-/izen-</u> 'send a message'. 4. Cf. entry <u>izanau</u>.

9. Jaku, Ono: aku (y.) 'be/become opened/vacated/empty; begin; expire, be out', Jakeru, OJaku (sh.n.) 'open, unlock, undo, untie; make a hole; empty'. TESZ, MSZFE (ex.): Hu dial. aj, áj 'notch(ing), incision; valley, chasm, cleft'; der. ajak 'lip'/-k is a dim. formant/; fël-ajz- (<ajaz-) 'to string/draw a bow; excite, key up', dial. 'prize open; gag someone's mouth'/fël- is a verbal prefix, meaning 'up'/~0s on 'mouth, opening, hole, door opening'/Zr vom, vem, em 'mouth, outlet, opening'/Vty im, em id./? Ch än 'estuary', an 'opening of a bag'/MdE on-, oj-, ov- 'opening'/Lp vuonas 'halter or band on the muzzle of a dog'//Yr hā', hān' 'mouth'/Yn ē', na'id./Tv nān id./Sk ak, āk, ān id./Km àn, an, ån id.--U \*ane.

Table	9	•	,
J, OJ	ak.u	Lp	vuon.a.s
J	ak.e.r.u	Yr	ńā >
Hu	aj	**	ńāŋ 3
11	áj	Yn	ēś
0s	on	71	nas
Zr	vom	Tv	ŋāŋ
11		Sk	ak
Vty	im	**	āk
11	ěm	11	ān,
? Ch	än	Km	an
11	an	11	an
MdE	on	**	ån
***	oj		
***	OV	U	* an.e
		?FU	* an.a-

Comm.; 1. P.b.m.f.b.s.: 'open; to open'.2. Phon.: initial and 1st syll. J. 0J  $\underline{a}$ - vs  $\overline{U}$  \* $\underline{a}$ -/ medial J, OJ  $\underline{k}$  vs  $\overline{U}$  \* $\underline{n}$  (note:  $-\underline{m}$  in Zr and Vty comes from  $*\underline{n}$ , no doubt through  $\underline{n}$ )/while -u in  $\underline{aku}$  is automatically affixed, cf. e in akeru vs U \*e in the same position. 3. It is proposed here that aku may be linked with another word family, obviously related to Hu aj, aj. TESZ, MSZFE (ex.): Hu old-, OHu od-, ovd-, dial. od-'undo, (ab)solve, untie, release'. Its assumable base: 6- < ou-< ay-or oy- could come from FU; cf. Vg ank-'undo, take off (e.g., clothes)'/Os ana-tà 'untie (a knot), undo, release'/Md anksi-ma, avsi-ma 'hole cut in ice'/Fi avata 'to open, let out', avanto 'hole cut in ice', Est avama 'open up'. --Hu -d, Md -s, -ma are formants. In Hu old-, 1 is an inetymological insertion .-- FU \*ana- 'open'. 4. TESZ and MSZFE do not link the two word families together.

10. J <u>akubu</u>, Ono: <u>akubu</u> (y.) 'to yawn', J <u>akubi</u> 'a yawn'.

SW 20: \*<u>änk3-</u> 'to yawn' < PSam \*<u>än</u> 'mouth'; cf. Sk (aorist 1st sg) <u>aankang</u>.

Table 10

Comm.: 1. The meaning agree. 2. Phon.: initial and 1st syll.

J, OJ <u>a</u>- vs PSam \*<u>ä</u>- /medial J, OJ <u>k</u> vs PSam \*<u>nk</u>. 3. A corresponding J base \*<u>aku</u> could be posited, to which the verb
formant -<u>bu</u> has been attached; cf. OJ <u>kamubu</u> 'behave like a

god' < kamu 'god'. 4. Cf. the entries aku and ago.

11. Jama-/e, OJ ama >  $\underline{ame}$  'rain, rainfall; sky, heaven', J  $\underline{ama}$ - (in compounds); Ono: OJ  $\underline{ama}$  was believed to be the place where the gods lived. FUV 99: Fi ilma 'air, weather, storm'; Ilmari, Ilmarinen 'the weather god of the ancient Finns'/Lp âlbme~ âlme- 'heaven; snow-Table J ame storm'/Vty in~inm- 'heaven', inmar 'God'/ Zr jen~jenm- 'heaven; ama-God'/Vg iilam~eelam 'weather; world'/Os ilam, itam 'weather; sky, OJ ama cloudy'(of day, weather); num-it9m 'sky; the god of the sky' 11 ame<sup>2</sup> (num 'upper') .-- FU \*jilmä. Fi juma-la Est juma-1 Hajdú 1975, 220 gives a listing which complements the above by: Ch jumo Est jumal 'sky; godhead'/Ch jumo /Md jumi id. jumi Cf. also: Jamal Peninsula (at the mouth of the Ob) where the U Md ? Yr Jama-1 peoples have had many sacrificial places since time immemorial. FU(?U) Comm.: 1. P.b.m.f.b.s.: 'sky; godhead', hence 'weather, rain'. 2. Among the adduced U terms, the portion in which 1, n appear ? \* jymy-ly close to the beginning shows the result of metathesis (cf. NyK 81, 1979, No. 1, p. 67, Ganschow: "... metathesis goes back into the distant past of the Volga-Finnic languages. "It is therefore proposed that Fi, Est, Livonian ilma (< \*imala ?) go with the non-metathesized form jumala (where -la is doubtless a dim. formant); in Vty inm-, inmar, Zr jenm-, n has apparently stepped in for 1; Vty in, Zr jen must be worn forms (the stem-final vowels have also been lost here); the Lp, Vg, and Os forms seem to follow the pattern of Fi ilma. 3. If the forms in question are brought back to a pre-metathesis formula, say, \*jgmg-lg (positing velar vowel order), the phonological comparison runs: initial J, OJ  $\not D$  vs FU (?U) \*j-/1st syll. J, OJ a vs FU(?U) \*x (if velar order is posited) or FU \*i (if palatal order is posited)/medial J, OJ m vs FU(?U) \*m /stem-final J-e/-a, OJ -a, -e vs FU

12. J ama-i, OJ ama-si 'sweet, honeyed, fine; fair', J uma-i, OJ uma-si 'delicious, dainty, palatable, sweet, savory, tasty', J oishi-i 'tasty, sweet, dainty'. Ono: epi 'an incense/perfume made of the leaves and bark of trees'.

		/ F	J	
lable	12			FUV 37, TESZ, MSZFE (ex.): Hu 1z ~ize- 'taste',
J	am.ai	Zr	is	dial. also 'smell, scent, odour'; dial. izul-
11	um.ai	11	is k-	'smell (at)' ~ Lp hâvse-~hâkse-'(Vt) smell,
OJ	am.a.s.i	11	isal-	know the smell of; scent, wind; smell at,
11	um.a.s.i	Vg	ät	sniff'; LpL hapså 'odour, stench, excrement of
J	o .i.š.i-i	11	ätän	reindeer in summer'; Lp aps 'odour, stench',
δ.	ep.i	0s	ew.a.l	a:pse- 'give off stench'/? MdM opôś 'odour'/
Hu	í .z(-)	77	ep.a.t	Ch ups/Zr is~ isk- 'odour, stench', isal- '(Vt)
11	í .z.ül-	**		smell'/Vg ät 'odour', äten 'odorous, palatable'
Lp	hávs.e-	Tv	nobta	/Os ewal, epat 'odour, smell', ewlan, eptan
17	haps.a	Yn	obto	'odorous, sweet, palatable'//Yr nabtie- '(Vi)
11	aps	Sk	aptea-	smell; stink', napt 'odour, smell'/Tv nobta /
11		11	apty	Yn obto/ Sk aptea- '(Vi) smell, stink', apty
? Md	op.ő.ś	Km	puptu	'odour, smell, stench'/? Km puptu 'odour,
Ch	üps	U	*ipse	smell'Because of its final $-\frac{1}{5}$ , Md opos is uncertain in this line-up; Km $p^{\frac{1}{5}}$ is secondary.

U \*ipse 'taste; smell' .-- Sauvageot equated these words with Mo amta 'taste, sa-

vour', Go amta 'tasty, etc.'.

(?U) ★ or \*-ä. 4. Cf. Pröhle No. 79.

Comm.: 1. P.b.m.f.b.s.: 'taste; smell'. 2. I assume that J oishi-i is a variant development of ama- and/or uma-, and posit for it an earlier stem form: \*opi-. Thus: initial and 1st syll. OJ  $\underline{u}$ -,  $\underline{a}$ -,  $\underline{e}$ - (? \* $\underline{o}$ -) vs  $\underline{U}$  \* $\underline{i}$ -/ medial OJ  $\underline{m}$  (? \* $\underline{p}$ ) vs U \*p. 3. The element \*-se in the U form is plainly an accretion. 4. Cf. Murayama 1966, No. 1.

13. J <u>amaru</u>, OJ <u>amaru</u> (y.) 'be left over, be in excess', J <u>amasu</u>, OJ <u>amasu</u> (y.) 'leave over, let remain, spare', OJ <u>masu</u> (y., Vt, Vi) 'increase, surpass, swell', OJ ama 'many', OJ mane-si, amane-si 'excessive, extensive, numerous'; Ono: -mari 'remainder' < amaru. Gulya 1966: OsE mas 'enough'. TESZ, MSZFE (ex.): Hu marad-~OHu morod- 'remain, be left over, linger, stay; be in excess', maraszt- 'keep back, detain' ?~ Yr marre 'withhold, retain, not to

give', ? maru 'greedy, covetous, niggardly'/Tv mara'ama 'fasten, make secure'/?km

```
Table
             13
                                                 mari 'greedy, covetous' .-- In Hu marad-, -d
 J
         a.ma.r.u
                         Hu
                                                 is a frequ. formant [maraszt- is caus.].--
                                  ma.r.a.d-
         a.ma.s.u
                                  ma.r.a.szt- The equation is acceptable only if the
                         11
 OJ
         a.ma.r.u
                                                 basic meaning was 'retain', and if marad-
                                  mo.r.o.d-
         a.ma.s.u
                          ? Yr
                                  ma.fr. ē
                                                 has acquired its meaning 'stay, remain'.
 11
         a.ma
                           11
                                  ma.r.u
                                                 SW 87: *mar- (s. some details above).
 11
         a.ma.n.e.si
                         Tv
                                  mâ.r.a. ma
                                                      Comm.: 1. P.b.m.f.b.s.: 'be in excess;
                                  mā.r.i
           ma.n.e.si
                        ? Km
                                                 keep back'. 2. On the J side, it is ob-
           ma.s.u
                                                 vious that a- is prothetic. Thus: initial
          -ma.r.i
                                                 J. OJ <u>m</u>- vs OsE <u>m</u>-, Hu <u>m</u>-, PSam *<u>m</u>-/1st
                         PSam *m %. r-
 0sE
          ma.s
                                                 syll. J, OJ a vs OsE a, Hu a, o, PSam *a /
                                                medial J, OJ \underline{r}(in the non-caus. forms) vs
Hu \underline{r}, PSam \underline{*r}. 3. The root element on the J side is obviously \underline{ma}. PSam \underline{*m}3- fair-
ly represents the same on the U side. 4. Cf. entry afureru.
      14. 0J amo, omo 'mother'.
                  'mother (especially of animals)'; Est ema 'mother'/Hu eme 'female of an animal'//Yr nebe, niemeä 'mother'/Tv name/Yn ee'/Sk emy, eu
FUV 31: Fi emä
            14
                   /Motor imam (-m is px1stsg)/Taigi emme, imam id.--U *emä.
OJ
         amo
         omo
                        Comm.: 1. P.b.m.f.b.s.: 'female; mother'. 2. OJ & is usually
                   the equivalent of <u>a</u>; thus: initial and 1st syll. 0J <u>a</u>-, <u>ô</u>- vs U *<u>e</u>-/ medial 0J <u>m</u> vs U *<u>m</u> /final 0J -<u>o</u>, -<u>ô</u> vs U *-<u>ä</u>. <u>3</u>. Cf. Yuk <u>emej</u>, <u>emee</u> 'mother' (FUV 31). 4. Cf. FUV 153: Fi <u>emä</u>, etc. .../Tu
Fi
         emä
Est
         ema
Hu
         eme
                   Kirg. emä 'mother'/Kor omi id. Lallwort? 5. Cf. Murayama 1966, No.13.
Yr
        nebe
Tv
        hame
         emy
Motor ima(m)
Taigi emme
      * emä
     15. J amu, OJ amu (y.) 'knit, braid, plait, crochet; compile', J ami, OJ ami
'net, netting
Table
            15
                                 FUV 26: Fi <u>äimä</u> 'needle with triangular point for sew-
J, OJ
         am.u
                   Zr
                                 ing leather or furs'/Lp aibme vaime-/Ch ima 'needle'/
                          jem
         am.i
                  Yr
                       niib.e Zr jem//Yr niibe/Tv njäime/Km niimi/Koibal neme/Motor
OJ
         am.i
                  Tv njäim.e ime id.--U *äimä.
Fi
       aim.ä
                                      Comm.: 1. P.b.m.f.b.s.: 'needle' (of a primitive
                  Koib nem.e type), hence 'netting needle', hence 'to net; net'. 2.
       aibm.e
                  Motor im.e Phon.: initial and 1st syll. J, 0J \underline{a}- vs \overline{U} *\underline{\ddot{a}}- (note:
       aim.e-
                         *äim.ä the sound V *_{\underline{i}} is most likely an on-glide of *_{\underline{m}}; cf.
                                 SW 22: *ejmä 'needle' and a number of reconstructions
in these pages where *_{\underline{j}} is either an on- or an off-glide)/ medial J, OJ \underline{m} vs U
*m. 3. The essential difference between the two sides here is that of vowel order
4. Cf. FUV 153: Fi <u>äimä</u> ...//Tg <u>imna</u>, <u>inmõ</u> id. (Vague correspondences in Tu).
     16. OJ amu- : aduti < amu + tuti '(target) shooting mound' (tuti 'earth'; Ono).
SKES (ex.): Fi ampu- 'to shoot'/Vty ibi- id. /? Zr ebes 'force vigor, might'.
           16 Comm.: 1. Semantically, the OJ, Fi, and Vty words tally; Zr ebes
OJ
        am.u- comes into the picture only if its former meaning had to do with
Fi
        amp.u-
                'shooting with a bow/ throwing a missile'. 2. Phon.: initial and
        jb.j- 1st syll. OJ a- vs assumable FU *a- (s. Collinder 1965, 95; Zr ebes
Vty
        eb.es does not conform)/ medial OJ m vs assumable FU *mp (s. Lakó 1968,
                 66; it is suggested that the cluster *mp should be taken as consist-
                 ing of *\underline{m} to which a homorganic *\underline{p} was added). 3. There is a
chance that OJ yumi 'a bow (to shoot with)' has to do with amu-; prothetic y- is
quite frequent in J, while \underline{a} \sim \underline{u} alternation is also attested, e.g., OJ \underline{asa} \sim \underline{uso}
~usu- 'light, pale, shallow'.
17. J, OJ ane 'elder sister; an older/a big sister'. FUV 25, TESZ, MSZFE (ex.): Hu angy 'the sister of the husband; the wife of an
elder brother/an uncle/a cousin/any older relative'~Vg oni, on 'aunt', ani 'sis-
ter-in-law'/Os anaya, pńaki 'wife of an elder brother; step-mother'/Zr öńe, öńa 'sister-in-law', uńe 'aunt', ońa 'daughter-in-law; sister-in-law'/Lp vionne 'wife
```

of an elder brother'//Yr hejjè 'younger sister of the mother'/Sk one, one,

Table	17		on 'aunt' The initial vowel of the Vg forms de-
J, OJ	an.e	Lp vionne	rives from p-Vg *a. In Hu ángy, -gy [d] is pro-
Hu	án gy	Yr ńējj.è	bably identical with the denom. nominal formant
√g	ðń.i	Sk ōń.e	gy $<$ FU *Mc. In the Os forms, $-\gamma_3$ $/$ -ki is a dim.
"	ōn	" on.a	formant. The element -a of Zr ona, ona is probab-
11	an.i°	" oń.e	ly a dim. formant; -e of Zr öne, une is probably
0s	ăń.aya	" on	px1stsg in a vocative role U *aha.
Zr	öń.e	U *an.a	TESZ: Hu ángy may well have had a base identical
**		? Hu any.a	with that of anya 'mother'.

Comm.: 1. P.b.m.f.b.s.: 'female relative, older than the ego'. 2. Phon.: initial and 1st syll. J, OJ  $\underline{a}$ - vs U \* $\underline{a}$ -/ medial J, OJ  $\underline{n}$  vs U \* $\underline{\underline{n}}$ / final J, OJ  $\underline{-\underline{e}}$  vs U \* $\underline{-\underline{a}}$ . Note: Lp  $\underline{v}$ - and Yr  $\underline{n}$ - are secondary. 3. Cf. entry  $\underline{ani}$ .

18. J, OJ <u>ani</u> 'elder brother; an older male person'.

A) FUV 32: Fi <u>enä</u> (in place-names) 'great, big'; comparative <u>ene-mpi</u> 'more';

Table J, OJ Fi " Lp " Md Vg Os ? Tv U	18 an.i en.ä aen.ĕ in.e jän.i eń.e an.i'e *eń.ä	Fi Lp Vg ? Hu Yr Tv Yn U FU PSam	an.oppi vuon.e ān.ap n.apa- nyn.ap nin.aba in.obo *an.3  *an.3-pp3 *in.ä	superlative eni-n 'greatest, most'/Lp aednāg (attributive form), aedna 'much, a lot', aenë-mus 'most'/Md ine 'great, big'/Vg jäni, jenig 'great, big'/Os eńa//? Tv ani'eU *eńä.  B) FUV 25, TESZ, MSZFE (ex.): Fi anoppi 'mother-in-law'/Lp vuone vuodnamâ-/Vg åånæp/?Hu napa-//Yr nynap 'father-in-law'; 'elder brother of the wife'; nee-nynap 'mother-in-law' (nee 'woman')/Tv ninaba 'father-in-law; elder brother of the wife'/Yn inobo idU *ana, FU *ana-maa.  C) SW 27: *inä 'elder brother'; cf. Tv ńenne, ńini 'younger brother of the father'/Yn ina, inā id./Yr ńińńěkkà /Sk innê.
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Comm.: 1. P.b.m.f.b.s.: 'older person (than the ego); older relative; big, great'. 2. It appears that A) is a palatal vowel order variant development of B), with semantic differentiation, while C) seems to be a variant development of either. --Phon.: initial and 1st syll. J, OJ  $\underline{a}$ - vs U \* $\underline{e}$ - (A), U, FU \* $\underline{a}$ - (B), PSam \* $\underline{i}$ -(C)/medial J, OJ  $\underline{n}$  vs U \* $\underline{n}$  (A), U, FU \* $\underline{n}$  (B), PSam \* $\underline{n}$  (C)/ final J, OJ - $\underline{i}$  vs U \*- $\underline{a}$  (A), U, FU \*- $\underline{a}$  (B), PSam \*- $\underline{a}$  (C). Cf. entry  $\underline{a}$ ne.

19. J <u>aogu</u>, OJ <u>apuku</u>, <u>apugu</u> (y.) 'to fan, agitate, instigate', J <u>aoru</u> id., Ono: <u>aputu</u> (y.) 'to fan; flap (e.g., sails)'.

Table 19 TESZ (ex.): Hu <u>evez-</u> 'paddle/row (a boa

Table	19		
J	ag.u	Est	sa.ps(u)
11	ar.u	Liv	sa.ps
OJ	a.p.u.ku	LpK	suo.pc
11	a.p.u.gu	Zr	sõ.p.e.ć
ō.	a.p.u.tu	Vg	t <del>ä</del> s
Hu	e.v.e.z-	0s	sö.g.ə.s
FU	* e.v.ä	11	se.w.a.s
 F	sou.ta-	FU	*sa.p63
		(or)	*sä.pć₃
Lp	su.g.â-		
11	su.wde-	PSam	*tu-
Ch	šua-	Tv	
11	šue-		tδ.psa
Zr	syn(?)	<u>Sk</u>	_tu
Vg	to.w-	?0s	jo.w-
0s	ta.w-	11	jå.w-
Hu	e. v. e. z-	11	ja.γ-
Sk	tua-		31 4
11	tu-		
Km	tu. )b-		
11	tu.		
σ	*sõ.γ.õ		

TESZ (ex.): Hu evez- 'paddle/row (a boat), wag (the tail), flap (the wings), move the fins (said of a fish), beat the air with the hands, flourish (a stick)' .--Origin debated. -- Proposition 1): ~ Fi evä 'fin', dial. evä 'fin; paddle'.--The FU base may have been \*evä which has been complemented in Hu with the denominal verb formant -z.--The weakness of this equation is that a regular correspondence can be found in Fi only. --- Proposition 2):~Vg toBB- 'to row, paddle'/Os tup 'a paddle'/ Fi souta- 'to row, paddle' .-- In this comparison, the difference of vowel order constitutes the difficulty. FUV 75 (ex.): Fi souta- 'to row'/Lp sukkâ-~ suga- '(Vi) row', suwde- 'to ferry/con-

FUV 75 (ex.): Fi souta- 'to row'/Lp sukka
suga- '(Vi) row', suwde- 'to ferry/convey in a boat by rowing' /Ch sua-, sue'to row'/Zr syn-/Vg tow-/Os taw-/ Hu eve//Sk tua-, tu-/Km tu/b-, tu/---- U \*soγο.

FUV 126: Est saps sapsu- 'steering oar'; Liv saps /LpK suopc /Zr soped /Vg tääs 'paddle; stern of a boat' /Os sogas, sewas 'stern of a boat; oar'.--FU \*sapd3 or \*säpd3

Comm.: 1. P.b.m.f.b.s.: 'to paddle; paddle; beat the air'. 2. It is fairly obvious

that Proposition 2) offered by TESZ is practically the same as what we see under FUV 75. On the other hand, the word families presented under FUV 75 and FUV 126 differ from each other very little either semantically or in phonetic shape. The assumed difference in vowel order cannot be definitely stated, for FU \*sapé3 must have come--if the analyses of Rédei 1975, 93-102 are correct--from a trisyllabic word (i.e., a vowel has to be supplied between \*p and \* $\frac{c}{c}$ ); the element \*-63 must, therefore, be an expansion on a disyllabic stem, say, \*sap3; in medial position a velar stop is so frequently appearing for a labial one (or its reflex, e.g., in Os sögas ~ sewas above) that the assumed FU \*sap3 may be taken as the variant by split of U \*soyo. -- If that is allowed, then: initial J, OJ Ø vs Fu \( \frac{\phi}{2} \) (Proposition 1), FU, U \( \frac{\sigma}{\sigma} \) elsewhere (cf. also PSam \( \frac{\state}{\sigma} \), Os \( \frac{\phi}{2} \) / 1st syll.

J, OJ \( \frac{\phi}{2} \) vs FU \( \frac{\state}{2} \) (Proposition 1), U \( \frac{\phi}{2} \) (ef. PSam \( \frac{\state}{\state} \), Os \( \frac{\phi}{2} \), \( \frac{\phi}{2} \) (ef. PSam \( \frac{\phi}{2} \), Os \( \frac{\phi}{2} \), \( \frac{\phi}{2} \) (ef. PSam \( \frac{\phi}{2} \), \( \f jownemt 'to wag, fan, brush', Os Vach, Vasjugan jaylim 'to fan, brush; shoo away! Os Demjanka jawtes 'wag the tail'; Os stem forms:  $ja\gamma$ -,  $j\gamma$ -,  $j\gamma$ -,  $j\gamma$ -. Since Os initial j-,  $\frac{1}{2}$  ( $\lambda$ ,  $\frac{1}{2}$ ) can all be derived from PFU \*s-, \*s- (lako 1968, 51), this word family must not be excluded from the comparison above.

20. J ara- 'new, fresh, novel' in ara-ta-ni 'newly, anew, afresh', aratameru 'to change, renew, etc', OJ ara-kazime 'beforehand, previously' (-kazime/pazime 'a beginning'); Ono: ara- : ara-ta 'new, fresh' (-ta is an adj. formant, s. Lewin 1959, 138). Table 20 FUV 88 (ex.): Fi alka- 'to begin'/[? Vg awl 'beginning; end' Os J, OJ ar.aalan, oten 'beginning; end' J .-- FU \*alka-. Fi al. .ka-SKES (ex.): Fi alka- (approx. as above)...//? Sk ol, ul, olle, ? Os al.a.n ulu 'head; butt'. ot.a.n Comm.: 1. P.b.m.f.b.s.: 'begin; beginning (either end of a long object or of a road); new'. 2. Phon.: initial and 1st syll. J, OJ <u>a-</u> vs FU \*<u>a-</u>, ? Sk <u>o-</u>, <u>u-/</u> medial J, OJ <u>r</u> vs FU \*1, ? Sk \*al.\_.ka-? Sk ol

1 / stem-final J, OJ -a vs suggested FU \*-a- in the same posiul tion. For FU \*alka- probably comes from a trisyllabic form, say, all.e \*ala-ka- (s. Rédei 1975, 93-102), \*ka being a suffix and an acul.u cretion on a former disyllabic stem. 3. Vg awl shows the result of metathesis:  $-\underline{w}$  is a reflex of FU  $\times \underline{ka}$ .

21. 0J are in mi-are 'appearance of the gods' (mi is an honorific proclitic), OJ ara-pa (deverbal?) 'the outside shape; appearance', arapasu (y.) 'show, reveal,

manifest', araparu (sh.n.), J arawareru 'appear, emerge'.

Table 21 TESZ, MSZFE (ex.): Hu áld- 'to bless', OHu: 'to sacrifice, praise,
OJ ar.e sanctify; to curse'; áldás 'blessing', OHu also 'pledge'; áldo" ar.a.pa más 'a toast/a drink (to someone), pledging drink (to bind a deal), celebration'; OHu áldomás 'blessing, sacrifice, sacriál. .dficial feast'; áldoz(ik) partake of a sacrifice, receive the Holy Communion' ~ Os àliltà 'to curse, execrate, put a spell on' 0s àl.i.l-/Ch ultém 'pray'/MdE altan, alvtan 'to promise', altams 'pro-Ch ul. .tém al. .tan mise, dedicate, consecrate; curse, bewitch' .-- On the basis of Md E . . . . . . . . the Hu and Os words we can posit medial \*1, while in considera-FU \*al.3tion of the Ch and Md data, perhaps  $*\underline{lk}$  can be assumed. --Hu  $-\underline{d}$ , Os  $\frac{-i1}{caus}$  are frequ. formants; Ch  $-\frac{t}{t}$ , Md  $\frac{-vt}{vt}$ ,  $-\frac{t}{t}$  (< FU \*kt) are caus. formants.—The semantic duality 'bless': 'curse' could \*al. .k3-

have its origin in the FU p-language. -- FU \*ala- (or \*alka-).

Comm.: 1. Sacrificial offerings in the presence of the gods or at times when an individual or the community implores the gods to be present are still a part of J (especially Shinto) religious life. In this sense, are may be taken as the equivalent of a sacrificial act. This meaning would be congruent with the likely basic meaning on the U side (the meaning 'to curse' is very likely secondary). 2. Phon.: initial and 1st syll. OJ  $\underline{a}$ - vs FU  $*\underline{a}$ -/medial OJ  $\underline{r}$  vs FU  $*\underline{l}$ / final OJ  $-\underline{e}$ , -a (in the same position) vs FU \*-3.

22. J aru, OJ ari (-ra-line conj.) 'there is, to exist, something is situated (somewhere); to stand (of a mountain/a building); stay, not to go further (e.g., with a lecture); (in habeo-constructions) 'have, possess', e.g., J hito-ni ...

```
aru 'people have (something; literally: to people there is)'.
Table
           22
                       FUV 88, TESZ, MSZFE (ex.): Hu all-, earlier also al- 'to stand,
J
          ar.u
                       stop, stand still; be certain/valid', allapit- 'put/set firmly,
OJ
          ar.i
                       establish', állapot 'position, standing; condition, situation',
Hu
         á1(1)-
                       allat 'animal', in OHu 'situation, condition, reality, substan-
11
                       ce, essence, being', <u>állít-</u> 'to position, place, establish; to
Zr
         sul-
                       state, assert' ~ Zr sulal- '(Vi) stand; to cost (a certain
                       amount)', sul- id./Vty sil-, sel- 'to stand, come to a stop; exist; stand still; to cost (something); be worth/valid' /Ch solgem, salyem '(Vi) stand)'.-- In Hu all-, the occurrence of ll may be explained by a change FU *lk>*\gamma_l>!1; that ll
         sul.a.l-
Vty
         sil-
Ch
         šol. .gem
11
         šal. .gem
                       should be the result of secondary lengthening (EtSz) is less
FU
        #sal. .k3-
                       probable .-- FU *salk3-.
```

Comm.: P.b.m.f.b.s.: 'to stand, exist, be firmly placed, not to move'. 2. Phon.: initial J, OJ  $\underline{\emptyset}$  vs FU \*s-/ 1st syll. J, OJ  $\underline{a}$  vs FU \*a / medial J, OJ  $\underline{r}$  vs FU \*l; in connection with the remark that Hu -ll- is not due to secondary lengthening I side with EtSz. 3. That implies that the Hu stem  $\underline{a}$ l- did not take on the expansion element FU \*k3, as Zr sul- is also without it. Going by Rédei 1975, 93-102, there ought to be a vowel between FU \*l and \*k.

23. J, QJ aru 'some; one; a certain; an unnamed', e.g., OJ aru pi 'a certain day', aru pito 'a certain person'.

Table 23 TESZ (ex.): Hu vala-: vala-ha 'sometime' (at a certain time), 'one day', vala-hol 'at some place', vala-ki 'somebody', vala-mi 'sometime' (at a certain time), 'one day', vala-hol 'at some place', vala-ki 'somebody', vala-mi 'sometime' (at a certain time), 'one day', vala-mi 'sometime' (at a

24. J, OJ <u>asa</u> 'morning; forenoon', J, OJ <u>asu</u> 'tomorrow'. Ono: <u>asa</u>, <u>asu</u>, and their derivatives are probably based on a stem <u>as-</u>, meaning 'day-break'; in connection with <u>asa-si</u> 'shallow, superficial', Ono says OJ <u>asa</u> alternated with <u>oso</u> and <u>usu</u>, meaning 'slight, faint, low; short (also in time); thin'; cf. OJ <u>asu</u> (sh.n.), J. <u>aseru</u> 'be/get shallow/superficial/pale'.

24 Fokos-Fuchs 1959: Zr asuv, asil, asil 'the morning; tomorrow; in the morning', as, ase J, OJ as.a 0s was. . xaxint-11 as.o 'in the morning'. as.u MdE Munkácsi 1896: Vty aski = Zr aski 'tomorrow; as.o.l doms us.u as.o.l gadoms in the morning; the following day', askaz OJ os.o 'the following day', asil 'daybreak, morning; ? Hu ősz J as.e.ru Zr east'. ezas.u.v Ganschow 1965, 70: Os wasyayint- 'it begins ? Vg at-22 as.j.l 77 ? Zr to dawn'. as oz-Ravila 1959: MdE ašo 'white', ašoldoms 'to 11 ? Vty us-Vty as. .ki 11 shine, shimmer (white), be bright and shiny', azašolgadoms 'to dawn, grow light'. as.i.l

TESZ (ex.): 1) Hu <u>osz</u>, OHu (1395) <u>ez</u> 'white, greyish, grey-haired'.--This word is of unknown origin. 2) Hu <u>ez-</u>: <u>ezüst</u> 'silver'.--This word is probably a loan from p-Permian: Zr <u>ez-jś</u> 'silver'(-<u>jś</u> 'metal'?), az-veś 'silver; of silver'. One cannot prove that the first elements of the compounds have the meaning 'white'. 3) Hu <u>vas</u> 'iron' ... cf. Vg. <u>atßaš</u> 'lead', Zr <u>ozjs</u> 'tin', Vty <u>usveś</u> 'tin', <u>azveś</u> 'silver'.

Comm.: 1. The data on the U side are not necessarily related among themselves; they have been adduced to facilitate further research. 2. The presumed basic meaning on the J side is 'light, slight, pale', hence 'dawn; morning'. Approx. the same basic meaning could be posited on the U side. 3. Phon.: initial J, OJ Ø vs Ø on the U side, except in Os /1st syll. J a-, u-, OJ a-, o-, u- vs Zr a-, ? o-, Vtw a-, ? u-, Vg, MdE a-, Os -a-, Hu o-, e-. 4. The first components of the composites Vg atbos, etc. can have hardly any other meaning than 'white, light in color', since the second component means 'stone/metal'. 5. Cf. entry ishi.

25. J, OJ ase 'sweat, perspiration', J atsu-i, OJ atu-si 'hot, warm, sultry'. FUV 87: Lp accâgâ 'red hot (of iron, etc)'/Md ežda- 'to heat/warm'/Vg ɔšəm, išm, ism, etc. 'hot'; išt- 'to warm'.--FU \*äčä-.

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FUV 100, TESZ (ex.): Hu izz- 'glow, be red-hot'; izzad- 'to sweat'/Vty esty- 'to heat'/
 Table
         as.e
                     Hu
                            iz(z)-
                            iz(z).a.d- Zr özjy- 'catch fire'; őzty- 'ignite, fire,
         ats.u. .i
                     **
 J
 OJ
         at.u.s.i
                     Vty
                            es . .ty- light'/Os ol-, at- 'to heat, ignite' .-- In Hu,
 Lp
         acc. â.g. âs Zr
                            öz . .jy- zz is the result of gemination .-- FU *äs3-.
Md.
         ež. .d'.a- "
                            õz . .ty- --This equation is uncertain because the the
 Vg
                             öl
          28. 9. M
                     0s
                                         Hu word family is of velar vowel order, while
 11
                             et
                                         the rest indicates palatal order.
         iš. .m
         is. .m
                     FU
                            äs
                                              Comm.: 1. P.b.m.f.b.s.: 'to heat; hot',
                                .3-
         iš. .t-
                                         hence 'sweat'. 2. The two word families on
FU_ _ _*äč.ä- _ _
                                         the U side appear to be variants by split. 3.
                                         Phon.: initial and 1st syll. J, OJ a- vs FU
5. Miller 1971, 84.
     26. J ashi, OJ asi (in compositions also a-) 'foot, leg, paw; limb; one's
step, pace '.
FUV 25 (ex.): Fi askel 'step, pace', askele- 'to step'/MdE eskila-, MdM askela-
'to step'/Ch aškol, oškol 'step, pace', aškedä- 'climb, step, go'/Vty uckyl 'step,
pace'/Zr oskel, voskol /Vg uosl, uusil id.//Sk aasel- 'to step over or beyond'.
--U *ackele or *askele.
Table
          26
                                            Comm.: 1. P.b.m.f.b.s.: 'foot, leg; step,
J
        aš.i
                      Vty
                             uć. .kyl
                                            pace'; cf. Németh 1928, 83 where it is
OJ
        as.i
                      Zr
                             os. .kel
                                            pointed out that some Tu terms for parts
Fi
                      11
        as. .kel
                            voś. .kol
                                            of the body express the function of the
                     Vg
        as. .kele-
                            uoš. . 1(?)
                                            part in question. 2. Phon.: initial and
        eś. .kila-
                     **
                            uus. . 1(?)
                            uus. . l(?) 1st syll. J, OJ <u>a-</u> vs U *<u>a-/medial J sh</u>, aas. . el-(?) OJ <u>s</u> (=<u>ts</u>) vs U *<u>c</u> or *<u>s</u>.--It would be
MdM
        as. .kala-
                      Sk
Ch
        aš. .kõl
                      U
                           * ać. .kele
                                            hard to reconcile OJ s with U * ck or * sk.
                     or *as. kele_
        oš. .kől
                                            Therefore it is proposed, and later com-
        aš. .kedä-
                                            parisons seem to support the proposal,
                     ? Fi
                             as. .tu-
                                            that the clusters * ck, * k are to be dis-
                                            solved; this means that the (incomplete)
stem is U *ać- / *aś- where complementing with a final vowel is necessary. 3. The
elements in *-kele are taken as expansions of a disyllabic stem, i.e., they are
considered to be formants. Cf. Rédei 1975, 95 where Fi astu-'to step, go' is also
adduced, albeit with a question mark. 4. Cf. Pröhle No. 82.
    27. J ada, OJ ata 'foe, enemy, feind; grudge, revenge; bad conduct'. Ono:
ada > adaku (sh.n.) 'act faithlessly/in an inconstant way'; atamu (y.) 'show en-
mity', atasu (y.) 'rise against, turn on, bite back'.
                  TESZ (ex.): Hu ádáz 'enraged, furious, frenzied, cruel, wild', dial. ádász id., ádázat 'fury'.--Origin uncertain.
Gulya 1966: ? OSE ätem 'bad; lean, thin'.
          27
J.
        ad.a
OJ
        at.a
Ō.
                  Ganschow 1965, 68: ? Os atom 'bad', atmint- 'find fault with,
        ad.a.ku
        at.a.mu
                  reprimand, abuse'.
                      Comm.: 1. P.b.m.f.b.s.: 'inimical; bad, wild'. 2. Phon.: in-
        at.a.su
                  itial and 1st syll. J, OJ \underline{a}- vs Hu \underline{\acute{a}}-, ? Os \underline{\ddot{a}}-, \underline{\acute{a}}-/ medial J \underline{\acute{a}},
        ád.á.z
? Os
       ät.a.m
                  OJ \underline{t}, \underline{d} vs Hu \underline{d}, ? Os \underline{t}/ stem-final J, OJ -\underline{a} vs Hu -\underline{\acute{a}}, ?Os -\underline{\grave{a}} in
        at.a.m
                  the same position.
    28. J ataeru, OJ atapu (sh.n.) 'give, award, allot, bestow', OJ atu (sh.n.)
'strike, hit, hit the mark; give, allot, assign, divide (one's property ), parcel
out, give as is fitting'. Ono, Chamberlain: atapu 'to give' comes from atu 'to
place near, put on, fix on'.
                      FUV 88, TESZ, MSZFE (ex.): Hu <u>ad-~OHu od-</u> 'give, allot' \sim Zr
Table
J
       at.a. .e.ru
                      ud-nis 'give to drink, water (animals); feed'/Vty ud- id.;
OJ
                      offer, give food '/MdE and-oms 'to feed, nourish'/Fi anta-
11
       at.a.p.u
                      'give, present', Est. and-ma 'give, hand over; dedicate'/Lp
Hu
       ad-
                      vuovddet 'distribute food' .-- FU *amta- 'to give'.
```

Comm.: 1. P.b.m.f.b.s.: 'give, allot'. 2. Phon.: initial

and 1st syll. J, OJ  $\underline{a}$ - vs FU \* $\underline{a}$ -/ medial J, OJ  $\underline{t}$  vs FU \* $\underline{t}$ 

(note: \*m is a prenasalizing intruder, the same as n, whether

Zr, Vty ud-

Md

Fi

FU

and o.ms

anta-

\*amta-

visible or only traceable) /final of the primary stem (in ataeru, atapu)J, OJ -a vs FU \*-a. 3. For the voicing of OJ p, t, k, s through assumed prenasalization, s. Wenck 1968, further Ramsey - Unger 1972. 4. Cf. entry ataru.

29. Jatama 'head; brain; mind', OJ atama 'fontanelle'. Satow (TASJ 9, 197) suggested that the root word of atama is ata-.

Table FUV 86, TESZ, MSZFE (ex.): Hu velő 'brain, mar-29 J, OJ Vty vi . .m row, marrowfat, vele-je px3rdsg ~ Fi ydin (ytiat.a.ma me-), yty, ydyn 'marrow'/Lp ađâ, âđđamâ/ Md udevij. .m Hu vel.eme/Ch wim, wem /Vty vim, vijim /Zr vem/Vg vεlam/ Fi yt.y.me- Zr ve . .m Os welam, wetam//Sk küütü id.-- U \*wisa , FU Vg 11 yd.y.n wel.a.m 11 \*Bic3, with the FU formant \*me added: \*Bice-me. yt.y 0s vel.a.m 11 vet.a.m Comm.: 1. P.b.m.f.b.s.: 'brain; marrow'. 2. ađ.a Lp Phon.: initial J, OJ  $\not Q$  vs U \*w-/ FU \*\beta-/ 1st syll. J, OJ  $\underline{a}$  vs U, FU \* $\underline{i}$ / medial J, OJ  $\underline{t}$  vs küt.ü add.â.mâ Sk \*wi8.3 U Md ud.e.me U, FU \*\( \) / final -a of the J, OJ primary stem vs U, FU \*-\( \) (\*-e). 3. The elements -ma on the J side, \*-me on the U side are evidently addi-Ch wi · · m FU \*Bi8.3 we . .m \*Bi6.3-me tions to disyllabic stems.

30. J, OJ atari 'neighbourhood, vicinity, direction, side'. Table TESZ, MSZFE (ex.): Hu oldal~OHu odal/oldal, dial. odal, odó, at.a.ri odu 'side e.g., of a mountain, of a human or animal; border; old.a.l vicinity, neighbourhood; direction (right or left from a given OHu od.a.l point); the side or half of something or somebody, which faces anta.1 Vg a certain direction' ~ Vg antel, antil 'rib (of the chest)'/0s anti.1 pnti, onti, onti, anti id .-- This equation is acceptable only 0s pati if -1- of oldal is secondary (i.e., oldal < odal) .-- FU \*onto(-13) ont.i 'side of the body; half; wall'. \* ont. 3(13)

Comm.: 1. P.b.m.f.b.s.: 'side, vicinity'. 2. Phon.: initial and 1st syll. J, OJ  $\underline{a}$ - vs FU  $*\underline{o}$ -/ medial J, OJ  $\underline{t}$  vs FU  $*\underline{t}$  (note: \*n, merely indicates prenasalization of \*t)/ stem-final J, OJ a vs FU \*3, in the same position. 3. Expansion element J, OJ -ri stands against \*-13 on the U side. 4. Cf. Benzing 1956, 46: (in connection with the cluster \*ld) Tg \*xolda-n'side; wall; board'.-- According to Benzing (p. 11), \*x- marks an initial whose phonetic quality is not certain (is \*x- in \*xolda-n prothetic?); note further that \*1 in the cluster \*1d stands before a dental stop; a good parallel to this occurrence seems to be Tg kalta-: kalta-ka 'the shore yonder', kalda-ma 'steep bank of a river' where the basic meaning (of kalta-) is most likely 'half; one side (of paired objects)'. One wonders whether 1 in that position is etymological? 5. Cf. Poppe 1960, 150: Tg Ev oldon-du 'beside' (where  $\underline{n}$  is likely secondary, if not  $\underline{1}$ , also, while  $\underline{du}$ must be a loc. suffix).

31. J ataru, OJ ataru (y.) '(Vt/Vi) hit, strike, dash into; touch; shine on; guess right, draw a prize (and win); be fulfilled; confront; correspond to; be related to; apply to; be assigned to; be affected by/exposed to/punished by (e.g., heaven',[? J ateru, OJ atu (sh.n.) 'apply, place, put, hit (the mark); guess; succeed; expose to; assign, allocate, divide one's property, parcel out'], J, OJ ate 'an aim/end/object; a stroke; a pad (used when chopping things); examples: J sagashi-ateru 'find out, discover, detect, locate' (sagasu 'search for), fune-wa iwa-ni ataru 'the boat strikes a rock' (f. 'boat', wa topic marker, i. 'rock', ni 'in. into'), mizu atari 'illness from water' (m. 'water'), ate-koto 'a guess, a conjecture' ( $\underline{k}$ . 'word'),  $\underline{i}$ -ateru 'hit the target' ( $\underline{i}$  <  $\underline{iru}$  'shoot with a bow'), mi-ataru 'be found' (mi < miru 'see').

31 FUV 80, TESZ, MSZFE (ex.): Hu talál- 'find, come upon, meet, Table J, OJ a.tar.u encounter; perceive, catch sight of; get at, obtain, win, gain; a.tar.i occur, happen; hit the mark; find out, invent; get somewhere, find one's way to some place'  $\sim$  Ch tola-, tola- 'come, arrive' Fi tule-, tulla- id., Est tule-ma 'come'/? Ip tolli- 'come'(? 17 11 a.te ? J a.ter.u <Fi)//Yr toś 'come'/? Yn tuu- /? Tv tū am id./Sk tulyś-'reach, a.tu arrive at', tuldy- 'bring, deliver'(?)/Km solam 'come' Hu tal.á.l-Ch U \*tule- 'to come'. tol.a-

Comm.: 1. P.b.m.f.b.s.: 'come/arrive/cause to arrive', tol.a-Fi hence 'hit (e.g., the target)', hence 'find/be struck/affected tul.e-

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(by)' .-- Under entry ataeru we have seen OJ atu (sh.n.). Whether
           tull.a-
Fi
                            that word family has to do with ataru, etc. is difficult to
Est
            tul.e.ma
? Lp
           toll.i
                            decide; the semantic fields overlap; one cannot exclude the
Yr
            tō . . ś(?)
                           possibility that a CV root form has developed in two directions.
           tū-
tū°.a.m
? Yn
                            2. Phon .: taking a- as prothetic, -- initial J, OJ t- vs U *t-
                           /1st syll. J, OJ \underline{a}, \underline{e}, ? J \underline{e} in \underline{ateru}, OJ \underline{u} in \underline{atu} (where -\underline{u} is automatically attached as a verb final) vs \underline{U} *\underline{u} /medial J,
? Tv
Sk
            tul.y.ś-
                           OJ \underline{r}, where there is root extension by \underline{r}, vs \overline{U} \times \underline{\overline{1}}. 3. Cf.
            tul. .dy-
                            Joki 1944, 72: Km torlam, tulam 'to hit, strike', na tobi 'the bullet hit the mark' Erdelyi 1969, 230: Sk cari- 'strike
Km
           šōl.a.m
          *tul.e-
                           home, hit the mark'/ Lehtisalo 1936, 303: Tv jare-de ama 'en-
counter, meet (someone)', Sk tar-nam 'to meet'.
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32. J ato, OJ ato 'track, a mark/trail/spoor/trace/wake (after a boat)'. FUV 82, TESZ, MSZFE (ex.): Hu út, uta-, OHu utu Sk at.o wat 'way, path, road'/Vg axt-/Os og t//Yr qu', qud-, muõtt. a. OJ at.o muotta.

\* ut. ka nut 'way, path, track'/Yn urii, u', udo-/Sk wat, muotta 'way, path, track'/? Km a'ta, a'da, a'ci út Hu U ut.a-'way, path, track, footprint; wrinkle / .-- U \*utka. OHu ut.u Comm.: 1. The meanings agree. 2. In the Vg, Os, Yr hu? and Km forms we see the result of metathesis. Sam 11 nud- $\underline{\mathbf{n}}$ -,  $\underline{\mathbf{w}}$ -, and  $\underline{\mathbf{m}}$ - are prothetic. Thus: initial and 1st 11 nut syll. J, OJ <u>a</u>- vs  $\overline{U} *\underline{u}$ -/ medial J, OJ  $\underline{t}$  vs  $\overline{U} *\underline{t}$  /cf. Yn ur.ĭ final  $J - \underline{0}$ ,  $OJ - \underline{0}$  to  $OHu - \underline{u}$  (after the loss of this u > -u, the initial u- became compensatorily lenghthen-11 ud.oed). 3. U \*-ka must be taken as an accretion on a disyllabic stem; the positing of a cluster U \*tk is

hardly justified. 4. Cf. Poppe 1960, 150: Tg Ev uža <\*uža 'spoor, track'.

33. J atsu-i, OJ atu-si 'thick; rich; kind, cordial'. Table Lehtisalo 1936, 265: LpL assa 'thick', p. 195: LpN assu-sas ats.u. .i 'thick (to a certain measure--said of flat objects)', gassu-sas' thick (" " " --said of round objects)'(from \*asso OJ at.u.s.i " -- said of round objects)'(from \*asso, Lp ass ā \*gasso 'thickness'), p. 340: LpK kassig 'thick'. âss.u FUV 96: Lp gassag, (attr. gassa ) 'thick (of round objects)'/Ch 11 \*ass.o kezge, küzgü 'thick'/Vty, Zr kyz/Os kol, kot id .-- FU \*kese. \*gass.o Comm.: 1. The basic meaning is on both sides 'thick'. 2. FUV ? Lp kassi.g leaves Lp assa, etc. unmentioned. However, the existence of words ? 11  $\widehat{ga}$  ss.  $\widehat{a}(g)$ of identical meaning and similar phonetic shape--where one word kež. .ga begins with  $\underline{k}$ -/ $\underline{g}$ -, the other with vowel initial--prompts one to think that the loss of initial k- (? through underarticulation) 5 11 küž. .gü ?Zr/Vtykyz is to be suspected in Lp (cf. frequent loss of k- especially in ?0s köl Tg). It seems that one is faced with a split, for thickness of köt flat objects' is differentiated from 'thickness of round objects'. ? FU \*kes.e The Ch, Zr, Vty, Os, and some Lp, forms are taken as having retained their respective reflexes of FU  $*\underline{\mathtt{k}}$ -.--Even if the forms with k-/g- initial have to be ruled out, Lp assā, assu can still be usefully compared to J atsu-. 2. Phon.: initial and 1st syll. J, OJ a- vs Lp a- (or J, OJ Øvs FU \*k-, J, OJ a- vs FU \*e) /medial J ts, OJ t vs Lp ss (? FU \*s)/ stem-final J, OJ  $-\underline{u}$  vs Lp  $-\underline{a}$ ,  $-\underline{u}$  (? FU \*-e).

34. Jau, OJ apu (y.) 'meet, come together, encounter; fit, suit; be suited; enter, match, harmonize with', Jawasu, awaseru 'make meet, put together, unite, combine, fit, adjust to, OJ apasu (sh.n.) id., e.g., med-apasu 'marry off (a girl; med woman'). Ono: apu (sh.n.) 'oppose, resist, defy, withstand' is cognate with apu (y.) above

FUV 26, TESZ, MSZFE (ex.):OHu av(ik) 'become united; take root in; enter, penetrate, soak in; shrink, thicken (Vi), avat- '(Vt) (by soaking) shrink, compact (hemp, flax, cloth), dial. ovot- id.; graft, inoculate; (officially) make enter, e.g., into the ranks of monks/officers/knights; let someone into a secret', avat-koz(ik) 'meddle (in), intervene, interpose' ~Vg tuj-, toj-, to- 'enter'/Os tam, Aan-, lan-, jan- 'enter, go in (e.g., a house)/? MdE sovams, suvams, MdM suvams, sevams 'enter'/? Lp suogne- 'enter', suoknat- 'pass through an opening; soak; penetrate' (e.g., grease into leather)//Yr tuu-, tunu- 'enter; come, approach'.--