A Comparison of the Altaic Languages with Japanese.

(1924)

The language spoken today by the Japanese nation is a mixture of Japanese and Chinese, where the Chinese elements have come in through different channels and are of different age and extension, and therefore more or less subjected to the laws of historical changes in Japanese. By Japanese, for our purpose, we have to understand only that what is genetically of Japanese origin. We must try, as far as possible, to eliminate everything borrowed, both loanwords and what are termed **calques* linguistiques**.

The origin of the Japanese language is not known, owing to the deplorable fact that the closest links between Japanese and other known languages, either dead or spoken to day, are lost or completely unknown. Such an isolated position always provides a good opportunity for speculation, as has been the case with Etruscan and the language of the Basques in Europe. Many men, with the help of daring hypotheses, have tried to bridge the unknown to provide the isolated languages in question with some related languages and to give them their proper place among the languages of the world.

The closest languages with a construction similar to that of Japanese are the group known as Altaic. The Altaic group is usually mentioned in connection with the Uralian, to which belong the Finno-ugrian languages and those of the Samoyeds, but since this relationship has not yet been scientifically proved, I prefer here to restrict discussion to the Altaic only.

Among the Altaic languages are included the Turkish, the Mongolian and the Tungusian dialects, including Manchu.*

These all form a genetic unity, a totality, which is well defined and sufficiently easy to evidence, notwithstanding the fact that many branches of the Altaic common stem have probably disappeared without offspring. There must once have existed a "pre-altaic" language, of which the oldest Turkish, oldest Mongolian and oldest Tunguse were originally only dialects or subdialects. The number of common words, common traits in the grammar etc. is so great that there is no reason to doubt the existence, thousands of years ago, of a "pre-altaic" nation with a language of its own. The homeland of this nation seems to have been in Mongolia or Manchuria. As this geographical basis makes it a priori reasonable to search for possibilities of discovering further old relatives, the question of the relationship between Altaic and Japanese has, in my opinion, a raison d'être

There have been many attempts to compare the Japanese language with the Altaic. A long time ago professor Boller, in Vienna, compared all Uraloaltaic languages with Japanese, and some thirty years ago Dr Grunzel, also in Vienna, wrote a »Vergleichende Grammatik der Altaischen Sprachen», convinced that the Finnougrian languages should be excluded. Grunzel, however, without hesitation, numbers Japanese among the Altaic languages and gives a list of allegedly identical and »Altaic-Japanese» words. His Altaic equivalents to his Japanese words are, however, so full of errors that after correcting all the mistakes nothing remains of his whole book. In so far as he applies a certain method in searching for common words and common grammatical elements, he keeps on a more modern and scientific basis than professor Heinrich Winkler, an eager writer in Breslau. This diligent scholar has written many books on »Uraloaltaic», convinced as he is of the common origin

^{*} It must be noted that this paper was written before Ramstedt had an opportunity of studying Korean and thus of becoming convinced of its relationship with the Altaic languages.

of Altaic and Uralic. One of his books bears the title »Finnischngrisch und Japanisch». I read it many vears ago, but I must say that the book in no way proves the relationship of Finnish and Japanese, but rather the high-handed relationship of the author to both of them. He bothers himself little with the history of sounds and words, the essential basis of all linguistic studies nowadays, but talks at length of what he calls sinnerer Sprachbaus, inner structure. By way of example I can relate that he believes the names Mongol. Uigur, Ugor, Wogul, Magyar etc. to be originally identical. I could say much of his failures, but it is not worth the trouble. I will only point out that the inner structure of languages, when of such a type as Finnish and many other, is not very convincing and can by no means form a substitute for serious etymological studies. The ways of expressing a thought in words cannot differ very much, and the laws of human logics necessarily produce similarities in the sinner structure» of languages even when they are of quite different origin. - W. Pröhle, a good specialist in Turkish, later published, in the Hungarian periodical Keleti Szemle (XVII; 1916-17, pp. 147-183), essav »Studien zur Vergleichung des Japanischen mit den uralischen und altaischen Sprachen». I have not, however, had an opportunity of seeing this study.

A kind of agreement seems to exist between scholars of good reputation, be it stated or tacit, that the Altaic languages and Japanese are comparable, or that there may be some remote relationship between them. With the increase in knowledge — vestigia terrent — the errors of earlier writers have been exposed. Today still, too little is known about the Tungusian dialects, the Altaic linguistics are too new, and outside the Altaic peoples there are small tribes whose linguistic relations are also too little known. In the North, along the Kolyma River, live the Yukagirs, some hundred individuals, whose language as far as I know is something near Altaic.* Along the Yenisei River are the small tribe of Yenisei-

^{*} According to professor Björn Collinder, who in the forties of this century thoroughly investigated the language of the Yukagirs, it is rather close to the Uralian group.

Ostyaks, whose language has been a riddle, but seems to be a kind of Chinese or Tibetan, a monosyllabic language. Then there are the Gilyaks on Amur and Sakhalin, the Ainus, and many other strange survivors of earlier populations. No one can now tell how much has been lost for ever. To construct relationships under these conditions is a very dangerous undertaking and the best man can lose himself on such adventurous constructions. The material we now possess, therefore, is very inadequate for our purpose, but I hope more material will be collected before it is too late.

The nations of the world change and change, and their languages are subject to many kinds of alterations. If we consider that during a single thousand years many new languages spring from one and these new ones are sometime so dissimilar that great societies of learned men have work enough to discover the etymologic connections between well-known languages in Europe, how much similarity can we then expect to find by superficial studies of languages in East Asia. The field is a wide one and very little has been done. But we can say, nevertheless, that the Altaic languages are sufficiently known to provide a firm basis for further studies.

It is not more than about a thousand or a thousand fivehundred years ago that Turkish was a widespread new language, and the Osman, Crimean, Tatar, Kirghiz, Turkestan-Turkish etc. of our days are still very close to each other, though only recent dialects of this old Turkish. In the same way the languages of the Mongols, Buryats and Kalmucks are very recent developments of an older common language. Old Turkish and old Mongolian were no more remoted from each other than are English and German to day. Both were descendants of an older language, from which also the Tunguses of today have inherited their speech, partly preserving some old features, but on the other hand adopting a lot of old Chinese and other foreign material in their language. We can only go about three or four thousand years back in time, and it is uncertain if we can go much farther with the aid of the present material. As the Altaic languages, owing to their simple construction of syllables and the clear meaning of suffixes, are comparatively stabile and conservative, we can suppose that the original pre-altaic also was a long-lived language and can very well imagine that it can go ten thousand years back in time. But is that sufficient for connecting Japanese with Altaic? Suppose Japan was at that time partly invaded by people coming across Korea to Japan and the islands in the South (Luchu), Japanese, if related to Altaic, is of course not directly related to Turkish or Mongolian or Tungus, but with the oldest possible source of pre-altaic. What kind of language was pre-altaic?

There is, going from West to Eeast, a curious scale of phonetic possibilities in the construction of words, i.e. the possibilities of combining sounds into syllables or words seem to diminish towards the Eeast. In the Indo-European languages, let us say in English. we find words such as spring, write, thrifty etc., or in Latin princeps etc., i. e. a syllable can contain one, two or three consonants both before and after the vowel. The Finno-Ugrian languages can have only one consonant before the vowel and at the most two after it. The Altaic seems to have had only one before and not more than one after the vowel. The farther East we go the more restricted is the number of consonants which can be placed after a vowel. The Japanese language has now only n after a vowel. This scale of phonetically possible syllables and words may be accidental, but it indicates that we have good reasons to conclude that neither in Finnougrian nor Altaic, nor in Japanese, can we suppose such a development as in the English write: in Altaic and Japanese only one consonant can stand before the vowel

Turkish and Mongolian remain temporally, as I have mentioned, near us and near each other. With the help of the Tunguse dialects we can ascertain that of the surds, k, t, p could be initial sounds in a word. The corresponding sonants g, d, b were also possible and not merely as variants of k, t, p but also as original sounds of the words. Thus taki and daki, kam and gam etc. were different words with different meanings. Now the dialects, to take an example, point to k, t, b as the only possible initial clusils, the Mongol language has both k and g, t and d, but only b without p. The historical development of Turkish made a j (y) of initial d an, made k and g coin-

cide and developed an f out of an original p, later h and this h had disappeared before the history of Turkish commences. In the time of Chingis Khan, seven centuries ago, the Mongol language still had an h in the initial position, e.g. hutut > odut 'stars', hon > on 'year' etc., but this sound was so weak that the Mongols, though applying the Uigur alphabet to their language, left it without a special sign. Thus original Altaic had (to take some consonants only and only at the beginning of a Word)

k	Turkish k, g	${\bf Mongolian}\; k:q$	$\mathrm{Tungus}\; k:q:h$
g	g,k	g	g
t	t, d	$t (ti > \check{c}i)$	t
d	j	d	d,dj
p	-	h, —	p, f, h, -

In oldest Japanese there were probably only k, t, p as initial sounds, without the corresponding g, d, b, and these were brought into existence by a special sandhi-law, known as n i g o r i in Japanese. If the initial g, d, b did exist once — such a possibility may be assumed a priori — how did they disappear from the beginning of a word? I think we can follow analogies of the Altaic and other languages: g can have coincided with k or been given a g which can have later disappeared, g probably gave a g, and g could have been weakened to g.

In the oldest Turkish there existed two kinds of l, two of r and two of n (l and l, r and r', n and n'): 'stone' is now tas in Turkish but was tal in the oldest Turkish, and in Mongolian it is tsuluun, Burj. $sul\bar{u}$, < silagun < tilagun < talagun: the Altaic word tala or tal had an l sound differing from the l in tala 'prairie', which word is to be found as a loanword in Sanskrit. If Japanese is supposed to be genetically related to Altaic, we must presume that also Korean is related to Altaic. Now it happens that 'stone' is tol in Korean (SKE p. 272), and if we turn to Japanese it may be something like to (Jap. to 'whetstone', togu 'to whet'?).

One of the difficulties with Japanese is the very small scale

of sounds in a syllable. We have e.g. ka and kan, but no kat, kan, kar, kal, kas, kach as syllables. If we take the Japanese kata 'side, half' (katappo, kata-ashi), as coming somewhere near Altaic and Korean we must, in my opinion, conclude that in kata the original can have been karta, kalta, kasta or something of that sort. I am almost sure that in pre-historic Japanese there were many kinds of »closers» or postvocalic consonants. With other words ka can he traced back to kak, kag, kai, kar, kal etc. I do not mean, of course. that every syllable ka does this or that every ka goes back to all of them. But we must have such a hypothesis. It shows at first glance how far the Japanese language has developed and how many differences have been lost, which makes tracing the way back a very difficult and dangerous task now. But if this hypothesis is wrong, we must abandon all hope of approaching nearer Altaic from Japanese and must look in another direction, e.g. toward Malay or Papuan or something else.

But I really do not think that we need abandon all hope. The structure of the whole language and the way of connecting suffixes (not prefixes or infixes) to a stem is more or less the same in Japanese as in Korean and Altaic. If the Japanese kata had originally been the only possible type — supposing Altaic and Japanese are related — the Altaic kalta, karta etc. would either have an infix, which is an impossibility, or we find ourselves in the dilemma of discovering that everywhere, in each word, only a single open syllable, e. g. ka, ke, ki, ta, te, ti would be the only possibility and everything else only composition or suffixes, which is equally impossible. We therefore have the right to construct a pre-japanese karta, kasta, kamta etc., but of course no skarta or mkarta, or anything like Indo-Chinese (Tibetan gsum 'three' or rta 'horse') or Indo-European. I may mention in this connection e.g. Tungus kalta 'half'. Mongolian qalta-gai, kelte-gei id., and Korean karida 'to divide', and leave the question open as to whether anyone wishes to combine these with the Japanese kata.* This combination seems to be very plausible,

^{*} This combination does not occur in SKE p. 98 s. v. karida.

but there are difficulties and discrepancies too. I give this only to show how far we might yet still come if all the material were collected. A ka can, of course, also have been an open syllable with a long vowel or a diphthong. In Luchuan the syllable ki has regularly developed to chi, but 'tree' (Japanese ki) is correspondingly $k\bar{\imath}$. Since in Japanese we still have konoha 'leaf' instead of kinoha, kī might have been something like koi or kei, i. e. there must have been something between k and i preventing the application of the rule ki > chi. The Turkish qatyg, qaty 'hard' is the same word as the Mongolian gatagu (now pronounced $\chi at\bar{u}$) and Tungus kata 'hard': can this be the same as the Japanese kata in kataki 'hard'? When we have in Turkish qara 'black' and in Mongolian also qara 'black', the difficulty is that they are too similar: the Mongolian qara ought to be in Turkish qar or the Turkish qara in Mongolian qarai or qaraga. Between Mongolian and Turkish there must, in this word, be a loan, but they can both also have get it from the same, third source. Too great similarities here are always misleading. We can not connect the Japanese kurai, kure with the Turkish gara 'black'. If we suppose the Mong. galtasun and Jap. kata to be identical, and gata-gu to be the Jap. kata-i, then the vowel u is our obstacle in kurai, where we would expect an a.

If the Japanese r is a sound between l and r and corresponds in loanwords to the Chinese l, it most probably has been an l earlier. But if the r of today is an earlier l, where has then the original r (we have to suppose it once existed) disappeared? The Tungus dialects do not like r: earlier fergile 'under' gave the Manchu fedjile, earlier burgu Goldian buigu. The original r can, therefore, have given i in Japanese or disappeared entirely like the later r in Luchuan, where tori 'to take' is tui, bakari is bakai, hidari is fijai etc. But what happened at the beginning of a word? The Altaic languages never have an r or an l in this position. This can of course be a special pre-altaic law, but we may suppose that farther back in time words could begin also with l and r. In Turkish an \hat{r} , after a vowel, has given z, and later, in some dialects, s. In Japanese we now have bakari and bakashi, yahari and yappashi, and it is not beyonds the

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bounds of possibility to assume that the earlier r also can have given s. Thus, if we take a word e. g. sake 'wine', there is a possibility that it had originally been raki. Now it happens that the oldest known word for brandy or a distillated drink in the Asiatic languages seems to have been just raki or rak: Arabian 'araa, Turkish araau. Mongolian araki, in the dialects along the Amur araki etc. We have here probably a very old wandering word, just like tabako, notato or koppu (English cup, Finnish kuppi) and many others. I do not. of course, pretend that the Japanese sake is the same word as araki or Hindi arrak, but phonetically there is nothing to deny this. The a in araki can be of comparatively recent origin, and thus a prothetic addition in languages where r as the first sound was impossible (e.g. rus 'Russian' gives in Turkish orus or urus) and in Japanese an initial vowel could perhaps drop out (idete gives dete etc). The identity of these words, if positive, does not, however, prove the common origin of the languages, but that a loanword could sometimes come from another source than Chinese or Ainu, or that there some kind of communication has existed with the continent, where the origins of the Altaic people are to be sought.

As an inhabited country Japan is very old. Tens of thousands of years can have elapsed since the first inhabitants came to Japan. and they certainly had their own language. There are evident racial differences between the Japaneses and the Koreans and much more so between the Japaneses and the Mongols. If we suppose that the languages of the Altaic or pre-altaic peoples have a common origin with the Japanese language, we must also suppose that the Japanese language originally belonged to a tribe or a nation which invaded Japan later and assimilated the first inhabitants, of whom we have no knowledge at all. But this invasion from Asia must have happened long ago, so long ago that the languages can no longer be very similar. The isolated Japanese language has had its own history. We can see that since the days of the arrival or borrowing of the Chinese words in Japanese much has been changed. Chinese tung 'East' has given too, Chin. tung 'to know' has given tuu, now tsuu (intsuji 'interpreter'), king has given kyoo or kei according to different times

or different dialects. There must, however, have existed some kind of ng in Japanese at that time and this ng was developing towards u and after e and i towards i. We still find it in some cases in Luchuan. where the Japanese koo 'in this way' (< kau) is kang. Besides this ng after a vowel, Japanese probably had also an -m (sam, san, saburo, samisen, -200) and possessed thus all three nasals in the post-vocalic position. The Chinese loanwords were adopted early enough to be subjected to the same development. The old-japanese future aramu 'likely to be' gave aram and this either aran or arang > arau > aroo, old-japanese semu 'likely to do' gave sem and this either sen or seng > seu > shoo. Today there is only the postvocalic -n left, and this too is not very distinct and often disappears (cp. moji 'letter' beside monji). This monji, moji shows us that in the middle of words an n can have disappeared also in original Japanese words. Many contractions can have taken place, just as we have now funede instead of an earlier fune ni te 'with a ship', or arazu instead of an earlier aranu-tu or arantu 'without being'. In Luchuan we have shichi 'dving' from an earlier sinite. Jap. shinde, and we can see that the Luchuan form shichi is the regular one, whilst in the Japanese shinde the postvocalic n has been preserved because the analogy of the other forms of the same verb supported it (shinu, shinuru, shinan etc.). We have in present-day Japanese nomu and nonde, youru and yonde, but instead of nonde and yonde the regular development ought to have been noode or node, yoode or yode. Usually isolated words develop directly following the rules of the development, whilst words belonging to a group keep together and create irregular forms ex analogia. The sh of Japanese of to day is a new sound and can be heard before any Japanese vowel, but originated from an s only before an i, ch, in the same way, being an earlier t before an i. If the pre-japanese language had possessed an sh and also an ch, these must have given an s as a result. Here again we can follow the way of early Chinese loanwords: Chin. shan 'mountain' gives san, cha 'tea' gives sa in kissa 'tea-drinking', which prove that this development came from the Japanese language itself, not from Chinese. There is in Luchuan a word sa meaning 'amount', kussa 'so

much', chassa 'how much', and this sa can be an earlier cha and correspond to the Mongolian $\check{e}ag$ ($<\check{e}ak$) 'amount', the Turkish $\check{e}aq$ 'time' (< »amount»), the Tatar $qa\check{e}an$ 'at which time', 'how many', 'how much'. This may, however, be an old Chinese loanword too, of which there are many in the oldest Altaic. But let us go a little farther: if s can be a representative of an older ch and an older sh, and beside this of the original s, and perhaps of an original r, and perhaps of something else, then a word like saka 'hill', 'slope' can have been saka, shaka, chaka, raka etc., or sarka, saska, shalka chalka etc. We have thus a long row of possibilities open.

Through pure curiosity and interest in the Japanese language I have tried to collect some commonly used Altaic words from everyday life, avoiding civilized words. It sometimes happens that Japanese offers something possible of comparison. To the Jap. katai 'hard' corresponds the Mong. gatagu and to Jap. karai 'acrid' Mong. aalaau 'hot', to Jap. kiri 'limit' Mong. kili, to Jap. kiri 'to cut' Mong. kili- in kilugu and Turk. qylyč 'sword' (derived from a verb meaning 'to cut'), to Jap. ki- in kiru 'to put on, be clad' Mong. ked- and Turk. ked-, kei-, ki- (< ked-) 'to be clad', to Jap. kuru, ki-, ko- 'to come', Luchuan chuung (< kiu < ki) and Mong. kür 'to arrive' and the Turk. kir-'to enter'. But among thousands of other words these can all be but accidental similarities with no equivalents in etymological meaning. If we chose words beginning with t we could also make a list of coincidences, but of the words with an initial p there are very few left in the Altaic languages. Because the p disappeared early in Turkish and Mongolian, we must rely entirely on certain Tungus dialects which are very insufficiently studied. But because the Chinese fun 'smell' has given the Mong. önür 'smell', önüs- 'to smell' and Chin. fu-djin 'lady' Old-Mong. üžin 'lady, princess', and the Mong. olan 'many' corresponds to Tung. fo-jima (Mong. -lan is a suffix as well as Tung. jima), we must reconstruct a word po or fo 'many, several, mostly', which seems to be comparable with the Japanese ho-bo 'several, mostly'. Perhaps we have here again an old Chinese loanword? Then, to go further, we have more difficult problems with words beginning with $g, d, b, \xi, \tilde{g}, j$ (i. e. Jap. g) etc. It is possible

to find many pre-altaic words with an initial d- under the Jap. u-: e.g. Tung. dolbu 'night' ~ Jap. yo / yuu (yoru and yuuqure), likewise the Altaic $\check{z} \sim di$ as Jap. y (Tung. $\check{z}a \sim dia$ 'cheap, easy' Jap. yasu?), the Altaic b could be the Jap. w: Mong. bü- 'to be', Jap. wi-. Altaic m-= Jap. m-: Mong. $m\ddot{u}ren$ 'river', Korean mul 'river' 'water' = Jap. mi-zu 'water'? We can perhaps also find something among words beginning with vowels, e.g. Gold. indo, inno, inaki 'dog' = Jap. inu. But we can never be sure that we are on the right track fail to bear in mind what we in fact understand as Japanese. If we take in Japanese the noun yasui, and the verb derived from it yasumu, we can perhaps find parallels to this relationship in the Altaic languages. But there are also many kinds of probable compositions in Japanese words which seem to be quite simple: e.g. kesa (< ki-asa, earlier perhaps ko-asa), tayasui 'easy, simple' (perhaps te-yasui »hand-easy»), tasukeru 'to help' (orig. te-sukeru »hand-help»). mayu 'eyebrows' (< me 'eye' and yu or perhaps y 'brow'?), yane 'roof' (< ya 'house' and some ne 'top', cf. mine 'top of a mountain' with mi as in misaki 'promontory'), and takane 'a high peak', where this ne can be an old Japanese word with the variants ni, no (cp. ki, ko 'tree') and connect with noboru 'to ascend', 'to go up', noru 'to ride on'. We can also ascertain that the Japanese language has had many suffixes, which are now disappearing or at least being lost in the mind of the speakers. No ending a remains as a suffix for obtaining substantives from verbs, but nawa 'rope' and nau 'to tie', oya 'parents' and oyuru or oiru 'to grow old' do exist. I do not know how much the Japanese language with all its dialects has been studied from this point of view. Without hesitation I would connect takara 'treasure' with takai, sakura 'cherry blossom' with saku 'to bloom', in kokoro I would presume the same suffix -ra, etc. It is not possible to treat this question of suffixes in detail, but I think it will be necessary to start every investigation from the Japanese language itself and have all sinner questions and sinner structures cleared up, before we can expect any results from the comparisons with Altaic, which again is much easier to handle.

There are, in my opinion, many erroneous spellings in Japanese.

E. g. mutsukashii or muzukashii is written using the sign for 'six' (=mutsu), and I can not understand what the word for 'difficult' has to do with 'six', nor can I find any parallels, and I think the word is to be taken as mu-tsukashii 'not manageable' (akin to tsukami-nikui). Every small detail of old composition and all traces of inner developments in Japanese ought to be collected and studied. As to such details, I would add that a word like kangaeru 'to think' must be a compound, and kan 'opinion' or 'thought' is perhaps a Chinese loan, as ng in the word is not Japanese: Luchuan has kan-chigee 'mistake' (= Jap. kan-chigai).

Certain other points too should be made clear. The grammars mention a polite verb -masu (arimasu contra the simple aru < a'to be', Luchuan ang < amu 'to be'; Manchu and Mongolian also have a verb a- 'to be'), but I do not believe a verb masu has ever existed. If dasu, sasu and all the others in the negative form have dasanu, sasanu, in the (probable) future dasoo, sasoo etc., then masu ought not to be masen, mashoo, if it were a verb of two syllables. The irregularity points to the verb suru, negative senu, future seu, shu, shoo (the actual shiyoo is a late analogical form), and we have thus in arimasu an arima and a su: »to make (su) the opportunity (ma) to be (ari)». Then of course there are many cases where a single word is understood as many, only because the Chinese signs differ in meaning: kami 'upper part' (kawakami), kami 'god', kami 'official, government' and kami 'hair' are apparently the same word (kami no ke 'hair') = Luchuan kami 'upper', but kami 'paper' has another ancestor, Luchuan kabi 'paper'.

The Luchuan dialect, of which I have made the acquaintance in Chamberlain's excellent book, gives the most interesting facts and indications about the development of Japanese. If e.g. Jap. shita 'tongue' is shiba there, with probably the same ha as in Jap. kotoba or koto no ha, the Jap. shita is likely to be a compound of shi and ta (could we perhaps here see an equivalent to the Tung. $si\eta$ -ma < sig-ma?). If the Japanese language is thus studied from within, we can still see today the great richness it has possessed. If we take as an example the syllable su, we have at least:

- su 'den, nest', sumu 'to live, to dwell', sumau 'to live', probably also suwaru 'to sit down', sueru 'to set down';
- su 'pure, clean', sude 'empty hands', sumu 'to be clear', suku 'to be transparent', probably suku 'to clear the hair, comb' (Luchuan shidi > Jap. sunde);
- su 'fearfulness' (Mong. sür id.?) in sugoi, susamajii 'fearful';
- su 'sand', cp. suna 'sand', perhaps sukoshi < su-ko shi 'a little', orig. »a sand grain»?
- su 'end', sumu 'to end, to come to an end', sue (< su-he) 'the end', perh. sugiru 'to go beyond', sugosu 'to pass', 'to let go over';
- su 'coal', 'soot', sumi 'charcoal' (< »soot body»), susu 'soot' (a reduplication or »pure soot» or »soot sand»?), susuri 'ink box';
- su 'acid' in sui and in suppai 'sour', Luchuan shiisang, Jap. susa aru.

This single example shows how far we can come without any special theories about relationship with other languages. We find that there had been a long period of wear and tear before the language came to use Chinese loanwords. The eventual similarities with Korean and the Altaic languages, therefore, are not easily detected. Most words have no doubt been shortened to one or two syllables, the consonants at the end of syllables have dropped out, the diphthongs have given simple vowels (in beginning perhaps long ones, which were later shortened), there may have been many kinds of "vowel gradation" (ki: konoha, mi: mono, hiru: hosu), many kinds of contractions (kesa, k-ono, k-ore, k-are, s-ore, sa-te), both synkope and apokope (sak-ari, sakari n-aru > Jap. sakan na), both regressive and progressive vowel assimilations (ku, kurushii; yo-i, yoroshii), many kinds of suffixes and suffixes on suffixes which have later been understood as single suffixes (such as now -rashii in bakarashii).

I have said little so far of the grammar and the structure of phrases. But there is in fact very little to say about the grammar and the construction of quite simple phrases, especially in a language which uses only suffixes and compounds and never tried to rely on vowel changes for grammatical purposes. All changes of vowels are, both in Altaic and in Japanese, the results of phonetic laws and are quickly restored by analogy with the majority of the dismemhered forms of the same word. The grammar of Japanese therefore resembles that of the Altaic languages: you can translate Mongolian text word by word into Japanese. Many linguists of renown attach great importance to the pronouns, because they often seem to belong to the oldest stock of words in a language. The demonstratives of Japanese (kore, kare, sore and sa in sa-te) could be considered as derived from some deictic elements k and s with primary are (< a) and o- (Luchuan unu 'that'), and we have in Altaic also such a k (Mong. ene kü 'just that', Chuvassian ku 'this') and ś (Turk. ol 'that', sol 'just that'). The third person 'he, she, it' is Turk. ol, genetive $any\eta$, where the stem is an-, and the o- in the nominative something inexplicable, being probably of totally different origin, so that we have in pre-altaic both o and a or on and an as the stem for 'he' and 'that'. There is, further, a stem e or en for 'this' (Mong. ene, Manchu ere 'this'), Korean i in i saram 'this man', and we can suppose that the Japanese i in ima 'now' and in some other words is etymologically connected (see SKE p. 66). There are also similarities in the interrogative pronouns, which are of value to our purpose. The original pronominal forms for 'I', 'thou', 'we', 'you', if there have been any, have been replaced in Japanese since earliest times by various substantives. In Altaic as well as in the Indo-European languages they are common. In Turkish they are added to various verbal nouns in shortened forms, forming thus a personal conjugation of the verb unknown in Mongolian and in Tungusian very young, in so far it exists at all. The Burvat language can attach these shortened personal pronouns to every possible word, which is thus used as a predicate (χūm-b 'I am a man', ende-w 'I am here', χūn-ś 'you are a man', ende-ś 'you are here' etc.). The Kalmuckian and Buryat languages show us, how a personal conjugation takes form. In the oldest Turkish this development had already advanced to something similar to what we find in Greek and Sanskrit. The personal conjugation was nevertheless something unnecessary and occasional

in pre-altaic, all verbs being, grammatically, nouns which could also function as predicates.

The Uralian and the Altaic languages have a negative verb 'not to be', which from its very beginning is the same as 'to be'. A Mongol says jabu 'go!' and bü jabu 'do not go', originally »be — go», »let the going be». 'Do not' is in German lass sein!, in Swedish lât bli!, and we can see why 'to be' is just the same as 'not to be'. In other languages this verb is used as a separate word, but in Turkish it has been agglutinated to a verbal noun in -m or -ma: bolti 'it was', bolm-adi 'it was not'. The negative verb in Altaic was a- and is the same as the Mongolian a-qu 'to be', Manchu aku 'no', Goldian aba 'was not', ana 'isn't', asi 'not being'. It is therefore curious and interesting to find in Japanese something so like Turkish as toru 'takes' and tor-anu 'does not take', and that the verb 'to be' is a- in aru, Luchuan a-ng, and the corresponding substantive asi 'being'.

If we look at the most usual grammatical forms of nouns or verbs we can well state that the structure of the Altaic languages and of Japanese is about the same. It is not possible, however, to identify any single suffix of Japanese with any of the Altaic languages. In the Altaic languages a similar trend to express the same idea always with the same ending is to be noticed as there is e.g. in the English genitive in s; man's, men's, child's, children's, but it may be a product of unification or generalisation. The original form of the Turkish genitive suffix -nin has been -in or -n. So also in Mongolian and Tungus. Is this -n somehow originally identical with the Japanese -no, earlier -nu? The Altaic genitive in -n was, from the very beginning, an adjective: 'fathers house' < "paternal" house». To the Japanese -ni (the suffix for locative) we can see something similar in the Tungus instructive in -n: Gold. kho-ni, $kho-\acute{n}$ 'in what way', and to the Japanese -to, earlier -tu, in Tungus and Mongolian in the adjective or possessive noun in -tu: Mong. amin 'life', amitu 'with life, living', cf. Luchuan min-tu 'husband', orig. with a wife from mi or min, Jap. men, me 'woman, female'. The ending for derived intransitive or passive verbs is, in Turkish, often an -l- (passive), in Mongolian -l- (intransitive and frequentative), and in Japanese the -r- (in kumo-r-u, hana-r-u) seems to be something comparable. Likewise the Turk. Mong. Tung. -r- in the transitives and Japanese -s- (Turk. and Mong. ked- 'to be clad', Jap. ki- id., Turk. Mong. kedür- 'to dress an other': Jap. ki-s-e; Jap. nar-u 'to be': Jap. nas-u 'to do' etc.). All such comparisons are, however, too speculative and of less value than comparisons of words or better stems.

In the oldest Altaic some interesting Chinese loanwords attract our attention. There is, in the Mongolian, a plural suffix $-tan \sim -ten$ (amitu 'with life, living', plur. ami-tan 'the living beings'); this ending is also used without the plural sense and can be rendered through 'rank, class' (nojon tan, lama tan). In the conjugation of the verbs in Tungus the plural of the third person has the suffix -tan or -ten. This could very well be the Chinese word $t\ddot{o}ng$ 'class, rank' (Jap. it-too 'first class', Lucuan -ta, -cha as a plural sign). In Turkish the plural ending is now very often used, though in the old language its usage was very rare. The Turkish plural ending $-lar \sim -ler$ corresponds to the Mong. -nar (eke-ner 'the mothers', aqa-nar 'the older brothers' or 'the uncles'), which is used only with words meaning persons and implies a collective sense. As the original form has no doubt been -lar, I think it is quite possible that we have here the same element as in the Japanese -ra in warera, kodomora.

To summarize the results I must state that our knowledge of everything which ought to be known to enable a real comparison of Altaic and Japanese is, after all, too shallow. I have seen no compendium of the Japanese dialects, the Luchuan Grammar of Chamberlain being the only study of this kind I have ever encountered. I once met a Russian teacher in Osaka who had investigated the dialect of the island Psira, South of Luchu. This dialect is somewhat nearer to Luchuan than to modern Japanese: r and l exist there as different sounds, and many phonetic features must be very old. E. g. 'three' is miz-tsi or mi-tsi, i. e. z occurs at the end of a syllable. There are, further, long vowels, as in Luchuan: Jap. kame 'tortoise' is in Luchuan $kam\bar{\imath}$ and these long vowels are older than anything the oldest Japanese may have had. All such discrepancies are of

the highest value to etymological studies and without knowing them we can not restore the words of the oldest Japanese, the written language being only one among many dialects. All that is still left of the dialects ought to be collected, with special attention paid to possible variations (ki 'tree', kono ha, mi 'body', mono 'thing' etc.), quantity of the vowels, their height, stress, intonation, etc., the »living» and »dead» suffixes for derivation and declension. There are, further, in Formosa, a number of different tribes. Are they all of Malayan origin? Is it not possible to expect to find among them people whose ancestors could have had something to do with the ancestors of the Japaneses? Such high mountains are usually the last refuge of aborigines. For a thorough study of Japanese we must know the tribes of Formosa and their languages. If there is nothing common except old Chinese influences, they are, naturally, of no value to our purposes.

I must mention also the Ainu, who lived in Japan before the ancestors of the Japanese immigrated, but are now a small remnant in the North. This shows that the Japanese came from the South.