ENDANGERED LANGUAGES OF THE PACIFIC RIM

Shinjiro KAZAMA

Basic Vocabulary (A) of Tungusic Languages

ツングース諸語における基礎語彙 (A)
(「環太平洋の言語」成果報告書A2-037)

発行日　平成15年 3 月 25 日
刊行責任者　大阪学院大学情報学部
文部科学省科学研究費補助金「特定領域研究『環太平洋の「消滅に瀕した言語」にかんする緊急調査研究』」
領 域 代 表　宮岡伯人
総括班代表　崎山　理・遠藤　史（編集担当）
〒564-8511 大阪府吹田市岸部南 2 丁目36-1
TEL: 06-6381-8434 （代表）（内線5058）
著者　風間　伸次郎（東京外国語大学）
印刷　中西印刷株式会社
〒602-8048 京都府京都市上京区下立売通小川東入
TEL: 075-441-3155 （代表）

Basic Vocabulary (A) of Tungusic Languages
(ELPR Publications Series A2-037)

Published: March, 2003
Project Director: MIYAOKA, Osahito
Editorial Board: SAKIYAMA, Osamu, and ENDO, Fubito (Assistant)
Grant-in-Aid for Scientific Research on Priority Areas
Ministry of Education, Culture, Sports, Science and Technology
Endangered Languages of the Pacific Rim
Faculty of Informatics, Osaka Gakuin University,
2-36-1 Kishibe Minami, Suita, Osaka 564-8511, JAPAN
TEL: +81-6-6381-8434 (extension: 5058)
E-mail: elpr@utc.osaka-gu.ac.jp
Author: KAZAMA, Shinjiro (Tokyo University of Foreign Studies)
Printed by Nakanishi Printing Co.,Ltd.
Shimotachiuri Ogawa Higashi, Kamikyoku, Kyoto 602-8048, JAPAN
TEL: +81-75-441-3155
ISSN 1346-082X
Copyright is held by the author.

Publications on Tungus Languages and Cultures 25

Basic Vocabulary (A) of Tungusic Languages

Shinjiro KAZAMA

Contents

[Introduction] 1

[Resource: Fieldwork and Consultants] 3

[Genetical Relationship and Phonetic Changes (esp. concerning to consonants)] 6

1. (the phonetic changes occurred in Group I and Group II)
2. (the phonetic changes occurred only in Group I)
3. (the phonetic changes occurred only in Group II)
4. (the phonetic change occurred only in Group III)
5. (the phonetic changes occurred only in Group IV)

6a. (in (Ek) and (S)) 6b. (in (Ek1) and (S)) 7. (in (N) and (Na k))

8. (in (U) and (Oc)) 9. (in (Ul) and (Ut))

10. (in (Ew)) 11. (in (S)) 12. (in some dialects of (Ek))

13. (in (N)) 14. (in (U)) 15. (in (Oc))

16. (in (Na)) 17. (in (Ul)) 18. (in (Ut))

[An outline of Phonological systems of every language] 12

Ewen Solon Negidal Ewenki 1 Ewenki 2

Kur-Urmi dialect of Nanay Udehe Orochi Hezhe

Nanay Ulcha Uilta Jurchen Manchu Sibe

[Presentation of the Data] 16

(1) head (2) hair (of the head) (3) eye (4) ear (5) nose (6) mouth (7) tooth, teeth

(8) hand (9) finger (10) foot (11) skin (12) (bodily) hair (13) blood (14) bone

(15) flesh (16) body (17) diseases, illness, sickness (18) medicine (19) salt

(20) oil (21) liquor, wine (22) tobacco (23) food (24) egg (25) bird

(26) knife (27) thread (28) clothes, clothing (29) paper (30) thing (31) worm, insect

(32) fish (33) dog (34) house, home (35) money (36) tree (37) grass

(38) leaf (39) flower, blossom (40) fruit, nut (41) seed (42) field, acres, rice-field

(43) way, road (44) river (45) mountain (46) water (47) stone (48) earth

(49) fire (50) wind (51) cloud (52) rain (53) sky (54) sun (55) moon (56) star

(57) day (58) month (59) year (60) morning (61) afternoon (62) night

(63) yesterday (64) tomorrow (65) today (66) now (67) when

(68) hour, time (69) one (70) two (71) three (72) four (73) five (74) six

(75) seven (76) eight (77) nine (78) ten (79) how much (80) how many

(81) altogether, all, whole (82) age (83) husband (84) wife (85) father, papa

(86) mother, mama (87) son (88) daughter (89) elder brother

(90) elder sister (91) younger brother (92) younger sister (93) friend, mate

(94) male (95) female (96) person, man, one (97) I (98) you
(99) he (100) she (101) who (102) name(103) letter (as in 'letters of the alphabet')
(104)voice (105)sound(106) language, speech (107) mind, heart
(108) God (109) this one (110); (111) it, that one
(112) which one (113) what (114) why (115) here (116) ; (117) there
(118) where, anywhere (119) left (120) right (121) front (122) back
(123) inside, inward, interior (124) out, outside, exterior (125) up (126) down
(127) to see (128) to hear (129) to say (130) to sing
(131) to speak (132) to laugh, to smile (133) to cry (134) to be angry
(135) to be amazed (136) to hit(137) to push (138) to hold
(139) to walk (140) to run (141) to stand (142) to sit
(143) to go to bed, to lie down (144) to slumber, to sleep (145) to eat
(146) to drink (147) to fly(148) to roast, to grill (149) to kill (150) to wear
(151) to read (152) to cut (153) to make (154) to open
(155) to close (156) to dwel (157) to count (158) to give birth
(159) to be born (160) to die (161) to meet (162) to place
(163) to go out (164) to go in (165) to come (166) to go
(167) to move (168) to give (169) to do (170) to think
(171) to know (172) to be able (to do something) (173) there is
(174) none (175) big (176) small(177) strong (178) weak (179) long
(180) short (181) far (182) near (183) hot (184) cold (in terms of weather)
(185) new (186) old (187) many (188) few (189) light (luminance)
(190) white (191) black(192) red (193) colour (194) good (195) bad
(196) same (197) yes (198) no (199) to be (200) not to be
[Reference Section] 135
1. Distribution of forms according to whether they share the same source
1.1 Entries where all language forms share a common source
1.2 Entries where only one language form does not share the common source
1.3 Entries where only two language forms do not share the same source
1.4 Entries where only Group IV forms do not share the same source
1.5 Entries where only Group IV forms plus 1~2 language forms do not share the same source
1.6 Entries where there is complementary distribution of different sources divided along lines of Group membership
1.7 Entries where the sources do not seem to follow a pattern
2. Loanwords from other languages
[References] 139

[Introduction]

This paper is the English version of Kazama (1998a & 1998b).

Concerning comparative studies of Tungus languages, the large encyclopedic work Tsintsius et al (1975, 1977; henceforth abbreviated as Ts.) is extant, but this work only arranges words from among the Tungus languages into groups of cognates, regardless of their meaning. It is therefore impossible to gain a complete picture of cases where words of different etymology have the same meaning. The present paper firstly aims to arrange word forms from different Tungus languages into entries in a basic vocabulary list. 'Basic Vocabulary A' used in the title of this paper refers to the first table (A) in *Survey Sheets for Asian and African Languages, Parts I and II* (Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies 1966, 1967). Only the meaning of item (26) [7] 'sword' has been replaced with the meaning 'knife'.

According to Ikegami (1974), the Tungus languages can be divided into four groups, mainly based on phonological correspondences, as the following shows (for language names, abbreviations as shown will be used throughout the present paper):

Group I	Group II	Group III	Group IV
Ewen (Ew)	Udehe (U)	Nanay (Na)	Jurchen (J)
Ewenki (Ek)	Orochi (Oc)	Ulcha/(Ul'chi/Olcha) (Ul)	Manchu (Ma)
Solon (S)		Uilta/(Orok) (Ut)	Sibe (Si)
Negidal (N)			

In the present paper, Sibe (Si) is treated as different from Manchu. Sibe items are listed in the Group IV column on the vocabulary tables, together with (Ma) and (J).

The Kur-Urmi dialect of Nanay (Na k) is regarded as a mixed languages. Its substratum is proverbly the language of Group I (especialy Negidal), and later it was influenced by Nanay. In the present paper, the Kur-Urmi dialect of Nanay (Na k) is treated as a language of Group I, and (Na k) items are listed in the Group I column on the vocabulary tables, together with (Ek).

The Lower Amur dialect of Nanay (Na l) sometimes shows different words from (Na)(Najkhin dialect). Some words of this dialect are treated in this paper in such cases.

It was suggested in Kazama (1996a) that Hezhe be classified as belonging to Group II due to phonological correspondences, but this requires further consideration. For the purposes of this paper, Hezhe has been placed in the Group

II column together with (U) and (Oc) to highlight the similarities and differences between these languages.

So the tables will be as follows:

Group I		Group II	Group III	Group IV
(Ew)	(Ek1)	(U)	(Na) (Na l)	(J)
(S)	(Ek2)	(Oc)	(Ul)	(Ma)
(N)	(Na k)	(Hz)	(Ut)	(Si)

[Resource: Fieldwork and Consultants]

In order to avoid idiolectal and dialectal differences, efforts have been made to refer to the lexicon of only one consultant per language when creating lists of word forms for the languages. The word forms from (Ew), (S), (N), (Ekl), (Ek2), (Na k), (U), (Oc), (Hz), (Na), (Ul) and (Si) were collected in fieldwork conducted personally by the present author. (Ut) data were collected by Prof. T. Tsumagari. (Ek1) refers to the Khamnigan dialect of Ewenki, located in Chinbarg-qi in the Inner Mongolian Autonomous Region of China. (Ek2) refers to the Oluguya dialect of Ewenki, also located in the Inner Mongolian Autonomous Region of China.

(Ew) data were collected in Magadan in the summer of 1996, from Ms. Zinaida Iwanovna Babceva (female, born in the village of Talaja in 1935).

(N) data were collected in Mago in the summer of 1998, from Ms. Elena Trofimovna Paskaeva (female, born in the village of Im in 1929).

(S), (Ek1) and (Ek2) data were collected in the city of Nantun in the Inner Mongolian Autonomous Region of China in the summer of 1988: (S) data from Ms. Kamila (female, born in 1960), (Ek1) data from Mr. ərdəni (male, born in Chinbarg-qi in 1923), and (Ek2) data from Ms. Mani (female, aged around 40 at the time). Fieldwork was conducted with Professor Toshiro Tsumagari of Hokkaido University, from whom the present author gleaned much practical wisdom and advice. The vocabulary of (Ek1) and (Ek2) have already been presented in Tsumagari (1992a). Further, the special characteristics of (Ek2) are given in Tsumagari (1997).

(Na k) data were collected in Khabarovsk in February 1990, from Mr. Georgij Aleksandrovich Udinkan (male, born in the village of Ulika Natsional'nyj in 1927).

(U) data were collected in Khabarovsk in December 1989, from Ms. Valentina Tunsjanovna Kjalundzjuga (female, born in the village of Gvasjugi in 1937).

(Oc) data were collected in the village of Ust' Orochskaja in the summer of 1995, from Mr. Gregorij Igorevich Akunka (male, born in the village of Xutu daatani in 1921). The reader is referred to Kazama (1996b) for more on (Oc).

(Hz) data were collected in the village of JieJingkou in China in the summer of 2002, from Ms. WenLan You (female, born in Bacha in 1944).

(Na) data were collected in Khabarovsk in December 1989, from Mr. Viktor Mixajlovich Gejker (male, born in the village of dzhari(Trojtskoe) in 1941).

(Na l) data were collected in Khabarovsk in December 1989, from Ms. Asja Nikolaevna Gejker (female, born in the Verxnij Ekon' in 1940).

(Ul) data were collected in Khabarovsk in February 1990, from Ms. Marija

Pavlovna Mjastsova (female, born in the village of dudi in 1942).

(Ut) data were collected by Prof. T. Tsumagari in Abashiri, from Ms Chiyo Sato (female, born in South Sakhalin in 1910).

(Si) data were collected in Kyoto in January 2003, Mr. Chengzhi (male, born in the village of Chapchar in the Sibo Autonomous Region of China in 1968).

Data for (Ma) and (J) were collected from available literature, although admittedly this could be considered problematic in terms of methodology.

(Si) data are based on the Japanese index in Yamamoto (1969). Also listed in the same work are (Ma) cognates, and (Ma) cognates in this paper are taken from the same list.

(J) data are from the vocabulary items in Kiyose (1977) under '1. The Berlin National Library Text' from page 96 onwards, and also '2. Supplement from the Tooyoo Bunko Text' from page 146 onwards.

In terms of phonological representation, the present paper uses /ň/ in place of the IPA [ɲ]. This recognises the phonetic parallel with /č/ [tɕ] and /ǰ/ [dʑ] in terms sound changes. In (Na) and (Ut) there is no phonetic contrast between n and ň before i, so there should no problems with rewriting [ɲi] as /ni/. Yet in most languages there is contrast between [ti] and [tɕi] as well as between [di] and [dʑ], and in the case of (Ul) there is even contrast between [ni] and [ɲi]. In order to treat these phenomena, in (Ul) [ɲi] is written as /ňi/. However, si is written as si regardless of whether palatalisation occurs with s. In (S) and (J) there *is* a contrast between /si/[si] and /ši/[ɕi], so the difference is retained in the notation.

In (Ew), (Ek) and the like, [ɣ] is rewritten as /g/. The so-called suspended vowels and aspirated vowels, as per Shnejder (1936), are represented as V(')V/V'V and V(h)V/VhV respectively (where V is a vowel). With (Ew), vowels indicated by the 'hard' symbol (nonpalatalized symbol as ъ and ҍ) in the Cyrillic alphabet in Novikova (1980) are represented by /ɯ/.

In (Ek1), (Hz) and (Na), the sound value of /c/ is [ts] and that of /z/ is [dz].

In (J), h has been changed to x, and e to ə, following the example of Tsumagari (1989). Also, ng has been changed to ŋ.

With (Ma), following the lead of Tsumagari (1992b) and Ikegami (1987), and in accordance with standard practice in the Möllendorff system of transcription, e has been changed to ə, c to č, j to ǰ, y to j, ngg to ŋ and h to x respectively. However, ū has been left unchanged.

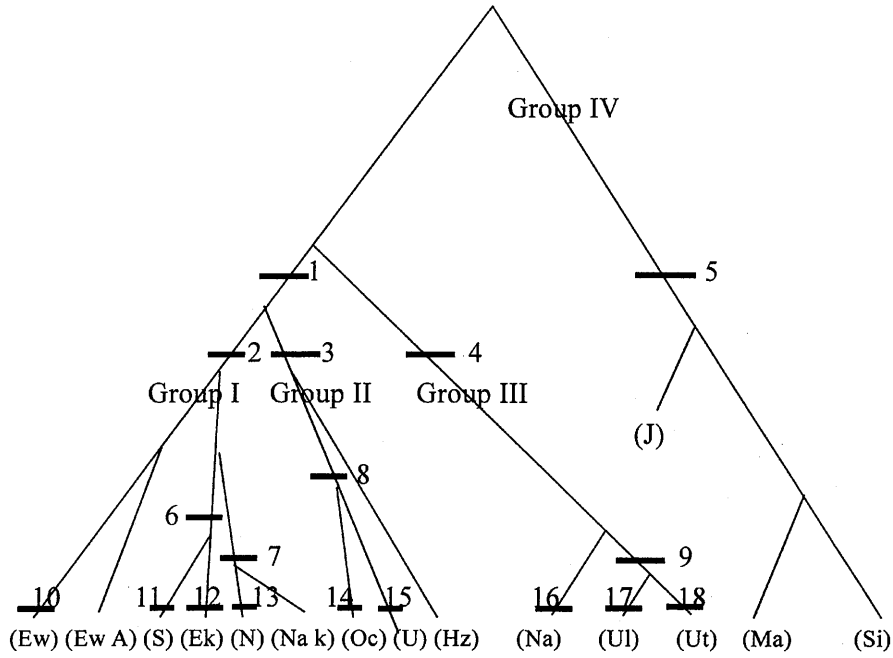
Using the methods described above, word forms are firstly given for each language, and then comments are given below the word forms. Most of the

comments describe how word forms of different etymology (according to Ts.) are distributed. However, since Ts. does not have (Hz) and (Si), when this paper quotes Ts. as saying something applies to all Tungus languages, it really means the languages apart the two mentioned above (i.e. (Ek), (S), (Ew), (N), (Oc) (U), (Ul), (Ut), (Na), (J) and (Ma)).

With problematic cases, every effort has been made to check with primary sources. However, with the present paper it has not been possible to consult all the available literature on comparative studies in Tungus languages and Altai languages, apart from Ts. Hence this paper is intended only to be a preliminary survey on the topic, an interim paper reporting findings at this stage of investigation, and pointing to future directions in fieldwork.

I would like to express my gratitude to my language consultants. And I thank Mr. Lam Patrick for traslating this article in English. Needless to say, I alone am responsible for mistakes of fact or interpretation. And I also thank to Prof. Tsumagari for providing his precious data of Uilta.

[Genetical Relationship and Phonetic Changes (esp. concerning to consonants)]



*(Ew A) is the Arman dialct of Ewen, and (Pro.T.) is Proto-Tungus.

**The follwing numbers in ( ) are the entry numbers in [Presentation of the Data].

***This hypothesis of genetical relationship is still preliminary one and phnetic changes are not exhaustive.

1. (the phonetic changes occurred in Group I and Group II)

p- > x- (43), (87), (126), (139), (183)

e.g. (43): (Ek1) xokto || (U) xokto || (Na) pokto

x- > ϕ - (38), (45), (50), (56), (67), (77), (80), (122), (180)

e.g. (67): (Ek1) aali || (U) ali || (Na) xaali

si- > ϕ i- (185)

e.g. (185): (Pro.T.) *sirkun || (S) ikkin || (Oc) ikkəi || (Na) sikun

u > i (50), (52), (72), (79), (80), (101)

e.g. (51): (Ek2) tigdə || (U) tigdə || (Na) tugdə

-nd- > -n- (33)

e.g. (33): (Ek2) ŋinakin || (Oc) inaki || (Na) inda

-ŋg- > -ŋ- (74), (133)

e.g. (74): (Ek2) ŭuŋun || (U) ŭuŋu || (Na) ŭuŋgun

2. (the phonetic changes occurred only in Group I)

-*rŋ- > -nŋ- (59)

e.g. (59): (Pro.T.) *arŋani || (Ek2) anŋani || (Oc) aŋani || (Hz) arni || (Na) aiŋani

-ps- > -s- (144)

e.g. (144): (Ek1) aasin- || (Oc) aapin- || (Na) apsin-

3. (the phonetic changes occurred only in Group II)

-*ns- > -s- (11)

e.g. (11): (Pro.T.) *nansa || (N) nana || (Oc) nasa || (Hz) nasa || (Na) nanta

-ps- > -p- (144)

e.g. (144): (Ek1) aasin- || (Oc) aapin- || (Na) apsin-

4. (the phonetic change occurred only in Group III)

-*ns- > -nt- (11)

e.g. (11): (Pro.T.) *nansa || (N) nana || (Oc) nasa || (Hz) nasa || (Na) nanta

5. (the phonetic changes occurred only in Group IV)

p- > f- (126), (139)

e.g. (139): (N) xuli- || (U) xuli- || (Na) pulsi- || (J) fuli-

x- > ϕ - (50), (56), (77), (113)

e.g. (50): (Ek1) ədin || (U) ədi || (Na) xədun || (J) ədun

-ldi- > -ňji- (158)

e.g. (158): (Ek1) baldi- || (Oc) bagdi- || (Ma) baňji-

-lg- > -lx- (39)

e.g. (39): (Ek1) ilgaa || (Ma) ilxa

-rk- > -č- (193)

e.g. (193): (Pro.T.) *borko || (N) boɪko || (Ma) bočo

-kt- > -x- (24), (56)

e.g.(24):(N) ʊmʊkta||(Oc) umukta ||(Ul) ʊmʊkta|| (Ma) umxan

6a. (the phonetic changes occurred only in (Ek) and (S))

-ls- > *-lt- > -ld- (15), (32)

e.g. (15): (S) uldə || (Ek1) uldə || (Ul) ulsə

-*ns- > *-nt- > -nd- (11)

e.g.(11): (Pro.T.) *nansa || (S) nanda || (Ek1) nanda || (Oc) nasa

-ms- > *-mt- > -md- (> -nd- in (S)) (14)

e.g. (14): (S) gıranda || (Ek1) gıramda || (Ul) gıramsa

6b. (the phonetic change occurred only in (Ek1) and (S))

x- > ɸ - (88), (139), (192)

e.g. (88): (S) ʊnaaǰı || (Ek1) unaaǰi || (Ek2) xunaaǰi

7. (the phonetic changes occurred only in (N) and (Na k))

-ls- > -l- (15), (32)

e.g. (15): (N) ulə || (Na k) ulə || (Ul) ulsə

-*ns- > -n- (11)

e.g.(11): (Pro.T.) *nansa || (N) nana || (Na k) nana || (Oc) nasa

8. (the phonetic changes occurred only in (U) and (Oc))

-ld- > -gd- (128), (156), (158)

e.g. (128): (Ek1) baldi- || (U) bagdi- || (Oc) bagdi-

-lb- > -gb- (> -bb- in (Oc)) (62)

e.g. (62): (Ek1) dolbo || (U) dogbo || (Oc) dobbo

-rb- > -gb- (> -bb- in (Oc)) (102)

e.g. (102): (Ek1) gərbi || (U) gəgbi || (Oc) gəbbi

-V r V- > -VV- (or -V r Sonorant- > -V Sonorant-) (21), (37), (44), (45), (59), (181), (186), (191)

e.g. (45): (Ek1) bira || (U) biasa || (Oc) biaka

9. (the phonetic changes occurred only in (Ul) and (Ut))

-rb- > -lb- (102), (160)

e.g. (102): (Ek1) gərbi || (Na) gərbu || (Ul) gəlbu || (Ut) gəlbu

-ŋg- > -nǰ- (> -nd- in (Ut)) (153)

e.g. (153): (Na) aŋgo- || (Ul) anǰʊ- || (Ut) andu-

-lg- > -lǰ- (> -ld- in (Ut)) (104)

e.g. (104): (Na) ǰilgan || (Ul) ǰılǰan || (Ut) ǰilda

-rk- > -č- (> -t- in (Ut)) (185)

e.g. (185): (Pro.T.) *sirkun || (Na) sikun || (Ul) siču || (Ut) sitəu

-*rŋ- > -ň- (> -n- in (Ut)) (59)

e.g. (59): (Pro.T.) *arŋani || (Na) aiŋani || (Ul) aňa || (Ut) anani

10. (the phonetic changes occurred only in (Ew))

-kt- > -t- (43)

e.g. (43): (Ew) xootarɯn || (Ek1) xokto || (Na) pokto

-gd- > -d- (10)

e.g. (10): (Ew) bədɯl || (U) bəgdi || (Ul) bəgdi

-ls- > -lr- (15), (32)

e.g. (15): (Ew) ulrɯ || (Ek1) uldə || (Ul) ulsə

-*ns- > -nr- (11)

e.g.(11):(Pro.T.)*nansa ||(Ew) nanrɯ ||(Ek1) nanda || (Oc) nasa

s- > x- (27), (133), (171)

e.g. (15): (Ew) xaa- || (Ek1) saa- || (Na) saa-

w- > m- (149)

e.g. (149): (Ew) maa- || (Ek1) waa- || (Na) waa-

11. (the phonetic changes occurred only in (S))

Various regressive assimilation between two consonants

(2), (12), (23), (37), (39), (56), (60), (62), (102), (104), (108)

e.g. (37): (S) orotto || (Ek1) orokto || (Ut) orokto

-kl- > -l- (143)

e.g. (143): (S) xulәə- || (Ek2) xukləə-

č > s (29), (174)

e.g. (29): (S) saasʊn || (Ek1) čaasun

12. (the phonetic changes occurred only in some dialects of (Ek))

-ls- > *-lt- > -ld- > -ll- (15), (32)

e.g. (15): (Ek2) ullə || (Ek1) uldə || (Ul) ulsə

-ms- > *-mt- > -md- > -mn- (14)

e.g. (14): (Ek2) giramna || (Ek1) gɪramda || (Ul) gɪramsa

-V s V- > -V x V- (3), (84), (92), (95)

e.g. (3): (S) eesa || (Ek2) eexa || (Oc) isa ||(Ut) isal

13. (the phonetic change occurred only in (N))

-r- > -ɨ- / -j- (44), (45)

e.g. (44): (N) bɪa || (Ek1) bira || (Na) bira

14. (the phonetic changes occurred only in (U))

-a/o k V- > -a/o ' V- (21), (25), (33)

-ə k V- > -ə g V- (90)

-i/u k V- > -i/u x V- (31)

e.g. (33): (U) ina'i || (Ek2) ŋinakin || (Na) inda

-V- s -V- > -V- h -V- > -V- j -V- (11), (29), (66), (106), (140)

e.g. (29): (U) xauja || (N) xaʊsan || (Oc) xausa || (Ut) xausali

č > s (170)

e.g. (170): (U) məisi- || (Oc) məiči- || (Na) murči-

15. (the phonetic changes occurred only in (Oc))

-gb- > -bb- (62), (102)

-kp- > -pp- (76)

e.g. (76): (Oc) ǰappu || (U) ǰakpu || (Ek2) ǰapkun

16. (the phonetic changes occurred only in (Na))

Palatalization

ti > či (63), (64)

di > ǰi (1), (104), (156), (165)

e.g. (1): (Na) ǰili || (Ek1) dili || (Ul) dɪlɪ

17. (the phonetic changes occurred only in (Ul))

-oga- > -aa- (53)

e.g. (53): (Ul) baa || (Na) boa || (Ut) boo

-oŋa- > -aa- (99)

e.g. (99): (Ul) naan || (Na) ňoani || (Ut) nooni

18. (the phonetic change occurred only in (Ut))

Devoicing of sonorants before voiceless consonants

-ms- > -ps- (14)

e.g. (14): (Ut) girapsa || (Oc) giamsa || (Ul) gɪramsa

Palatalization

ti > či (63), (64)

di > ǰi (1), (104), (156), (165)

e.g. (1): (Ut) ǰili || (Ek1) dili || (Ul) dılı

č V(except i) > t V (127), (161), (185)

e.g. (127): (Ut) itə- || (Ek2) ičə- || (Na) ičə-

ǰ V(except i) > d V (34), (119), (145), (153)

e.g. (127): (Ut) dəptu- || (N) ǰəp- || (Oc) ǰəptə- || (Na l) ǰəp-

-oga- > -oo- (53)

-oŋa- > -oo- (99)

[An outline of phonological systems of every language]

*H - Hard vowels, S - Soft vowels, N - Neutral vowels (concerning to vowel harmony)

*So-called "long vowels" are interpreted as vowel sequences.

Ewen

• Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s		x
w		j	
	r	l	

• Vowels

H i ə ɵ ʊ

S ɪ a o u

• Syllabic Structure

(C)V(V)(C)

*[ɯ] is a weakened allophone of /ə/ and /a/.

Solon

• Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s	š	x
w		j	
	r	l	

• Vowels

H i ə ɵ ʊ

S ɪ a o u e ee

• Syllabic Structure

(C)V(V)(C)

Negidal

• Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s		x
w		j	
		l	

• Vowels

H i ə ɵ ʊ

S ɪ a o u e ee

• Syllabic Structure

(C)V(V)(C)

Ewenki 1

・Consonants

p	t	c/č	k
b	d	z/ǰ	g
m	n		ŋ
	s		x
w		j	
	r	l	

・Vowels

H ə

———— N i u

S a ee o

・Syllabic Structure

(C)V(V)(C)

Ewenki 2

・Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s		x
w		j	
	r	l	

・Vowels

H ə

———— N i u

S a ee o

・Syllabic Structure

(C)V(V)(C)

Kur-Urmi dialect of Nanay

・Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
f	s		x
w		j	
	r	l	

・Vowels

H ə

———— N i u

S a o

・Syllabic Structure

(C)V(V)(C)

Udehe

・Consonants

p	t	c/č	k
b	d	z/ǰ	g
m	n	ň	ŋ
f	s		x
w		j	
		l	

・Vowels

H ə

———— N i u

S a o

・Syllabic Structure

(C)V(V)(C)

Orochi

・Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s		x
w		j	
	(r)	l	

・Vowels

H ə

——————— N i u

S a o

・Syllabic Structure

(C)V(V)(C)

Hezhe

・Consonants

p	t	c/č	k
b	d	z/ǰ	g
m	n		ŋ
f	s	š	x
w		j	
	r	l	

・Vowels

H ə

——————— N o i u

S a

・Syllabic Structure

(C)V(V)(C)

Nanay

・Consonants

p	t	c/č	k
b	d	z/ǰ	g
m	n	ň	ŋ
	s		x
w		j	
	r	l	

・Vowels

H ə

——————— N i u

S a o

・Syllabic Structure

(C)V(V)(C)

Ulcha

・Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s		x
w		j	
	r	l	

・Vowels

H i ə ɵ ʊ

————————————

S ɪ a o u

・Syllabic Structure

(C)V(V)(C)

Uilta

・Consonants

p	t	č	k
b	d	ǰ	g
m	n	ň	ŋ
	s		x
w		j	
	r	l	

・Vowels

H ə ɵ

——————— N i u

S a o e

・Syllabic Structure

(C)V(V)(C)

*/s/ realizes as [ɕ]~[ʃ] before /ə/ or /u/.

Jurchen

・Consonants

	t	č	k
b	d	ǰ	g
m	n		
f	s	š	x
w		j	
	r	l	

・Vowels

H ə

——————— N i u

S a o

・Syllabic Structure

(C)V(V)(C)

Manchu

・Consonants

p	t	č	k	
b	d	ǰ	g	
m	n		ŋ	
f	s	š	x	
w		j		
	r	l		

・Vowels

H ə

——————— N i u

S a o ū

・Syllabic Structure

(C)V(V)(C)

Sibe (Considreing this Sibe phonology, I reffered to Kimura 2000.)

・Consonants

p	t	č	k	q	
b	d	ǰ	g	ɢ	
m	n		ŋ		
f	s	š	x	h	
v					
w		j			
	r	l			

・Vowels

o

——————— N ə i u

a

・Syllabic Structure

(C)V(V)(C)(C)

[Presentation of the Data]

(1)[1]あたま（頭） head				
(Ew) dɪl	(Ek1) dili	(U) dili	(Na) ǰili	(J) uǰu
(S) dɪl	(Ek2) dil	(Oc) dili	(Ul) dɪlɪ	(Ma) uǰu
(N) dɪl	(Na k) dili	(Hz) dili	(Ut) ǰili	(Si) uǰu

According to Ts., uǰu in Group IV corresponds to 'brain' in Groups I, II and III (e.g. (Ek) irgə or (Na) iigə etc.). On the other hand, only (Ma) has fəxi as 'brain' (at the same place the literary Mongolian (henceforth abbreviated as (lit.Mo)) word hekin 'head' is given for reference). (Ma) ǰili has the meaning of 'the root of antlers belonging to deer etc.' (Haneda 1937).

(2)[2]かみのけ（髪の毛） hair				
(Ew) ňuurit	(Ek1) nuuriktə	(U) ňuktə	(Na) nuktə	(J) funirxəi (gen.?)
(S) nuuttə	(Ek2) ňuriktə	(Oc) nuktə	(Ul) nuktə	(Ma) fənixə
(N) ňuuktə	(Na k) ňuktə	(Hz) juuktə	(Ut) ňiruktə	(Si) finxə

Concerning the word form for (Oc), Avronin i Levedeva (1978) give ňuktə, and this has been confirmed with other (Oc) informants who also gave ňuktə, as surveyed by the present author. According to Ts., the cognate forms found among Groups I, II and III are not to be found in Group IV, and this is true vice versa. The origin of the Group IV form is unknown. Ts. gives the (lit.Mo) form hünegen 'fox' for reference.

(3)[5]め（目） eye				
(Ew) jaasɯl	(Ek1) iisal	(U) jaa	(Na) nasal	(J) jaši
(S) ɪɪsal	(Ek2) eexa	(Oc) isa	(Ul) ɪsal	(Ma) jasa
(N) eesa	(Na k) isal	(Hz) isala	(Ut) isal	(Si) jasə

Out of Group II, (Oc) isa displays a hidden g that corresponds to the l in other Groups (Kazama 1996b). According to Ikegami (1989), (Ma) lacks the plural ending -l on nouns shared by many Tungus languages. Here we see that 'eye' also lacks an l at the end of the Group IV forms.

(4)[7]みみ（耳） ear				
(Ew) korɪt	(Ek1) seen	(U) ku'ai	(Na) sian	(J) šaa
(S) seen	(Ek2) seen	(Oc) sian	(Ul) sıan	(Ma) šan
(N) seen	(Na k) sian	(Hz) sian	(Ut) seen	(Si) san

According to Ts., there are words that correspond to the (Ew) and (U) forms in (Ek), (Oc) and Group III. In every case this is korokto 'the external ear'. This means that apart from (N) and (S), there is a distribution among Groups I, II and III. However, since the form contains an r, the korokto in (Oc) probably needs to be regarded as a borrowing from Group III.

According to Ts., there are words like h^{i}æækaan 'ear accessory' in (Ew), sasa 'cheeks' in (U) (< seečaan, (N) xeečaan 'cheeks'). These facts point to the possibility that there once existed words in (Ew) and (U) with the meaning 'ear' and sharing the same origin as the other languages.

(5)[8]はな（鼻） nose				
(Ew) oŋat	(Ek1) oŋokto	(U) ŋiuə	(Na) oporo (Na l) ŋoaksa	(J) soŋi
(S) ňeenčɪ	(Ek2) oŋokto	(Oc) ŋikso	(Ul) waksa	(Ma) oforo
(N) oŋokto	(Na k) oforo	(Hz) oforo	(Ut) xuriga	(Si) ovuru

In Ts., cognates with the above (Ew) and (Ek1 2) are given for (Ek), (Oc), (Na), (Ul), (Ma) and (Ul). These words were borrowed into (N) as words meaning 'bow of a ship' (corresponding to (Ek) oŋo, (Na) xoŋko, etc.) Of these, (Oc) xoŋko has an x in word initial position, indicating that it is probably a loan from Group III.

Regarding Group II above ((U) and (Oc)), Ts. compares ňees in the Arman dialect of (Ew) with waksa (Ul) and naksa (Ut) (all these words mean 'nose'). In Ikegami (1997) naaksa is given the meaning 'nasal mucus, pus'. Since the -ks- of (Ek) and (Oc) corresponds to the -č- of (S), the ňeenči in (S) above can be considered cognates with these. However, one needs to give an explanation for why an n arose in ňeenči.

According to Ts., the words seen in (Na), (Si) and (Ma) are not found elsewhere, and their origin is unknown. However, even within (Na), an

informant from the lower reaches of the Amur River gave ŋoaksa for 'nose', suggesting that oporo in (Na) may have come from (Ma).

Ts. also gives cognates of the above (Ut) as xoorian 'the brow' in (Na), xoran 'face (mild vulgarism), the brow' in (Ul) and (Oc) xoran 'face, borrowed from (Ul)'.

According to Ts., the (J) word above is retained as a word meaning 'nose ring' in all members of Groups II and III, except (Ut) (e.g. (Na) sanǰaxa). (Ma) soŋixa has meanings such as 'the bridge of the nose, bent wood put on the nose of bulls etc.' (Haneda 1937)

(6)[9]くち（口） mouth				
(Ew) amŋɯ	(Ek1) amŋa	(U) aŋma	(Na) aŋma	(J) amga
(S) amma	(Ek2) amŋa	(Oc) amma	(Ul) aŋma	(Ma) aŋa
(N) amŋa	(Na k) amŋa	(Hz) aŋma	(Ut) aŋma	(Si) aŋə

(7)[13]は（歯） tooth, teeth				
(Ew) iit	(Ek1) iiktə	(U) iktə	(Na) xuktə	(J) wəixə
(S) iittə	(Ek2) iiktə	(Oc) iktə	(Ul) iktə	(Ma) wəixə
(N) iiktə	(Na k) iktələ	(Hz) iiktələ	(Ut) kərəktə	(Si) vixə

According to Ikegami, iktə in (Ut) is 'The canine tooth of a dog or a bear. The tooth of a Steller's sea lion'. Also, according to Ts., the word for tooth in both (Ul) and the northern dialect of (Ut) is iktə. When compared with xuktə in (Na), there is no word initial x, and i appears instead of u. From a comparative perspective, this has the typical appearance of a word in Groups I and II. It is not known why the i vowel in Group I is long. Likewise, we have no explanation for the word final -lə in (Na k) and (Hz), but note its appearance in (10) 'leg, foot' and (28) 'clothes, clothing' as well. The origin of the (Ut) kərəktə is obscure.

(8)[30]て（手） hand				
(Ew) ŋal	(Ek1) naala	(U) ŋaala	(Na) ŋaala	(J) gala
(S) naala	(Ek2) ŋaala	(Oc) ŋaala	(Ul) ŋaala	(Ma) gala
(N) ŋaala	(Na k) ŋaala	(Hz) naala	(Ut) ŋaala	(Si) ɢala

(9)[31]ゆび（指） finger				
(Ew) xərɯgun	(Ek1) urugun	(U) uňaa	(Na) čumčuən	(J) ---
(S) unaxan	(Ek2) uňakačan	(Oc) čomočko	(Ul) čumčuun	(Ma) simxun
(N) ---	(Na k) čimčikən	(Hz) čuptun	(Ut) kotoo	(Si) šumxun

The (Ew) word listed above actually refers to the thumb, according to Novikova (1980). According to Ts., its cognates are found in every Tungus language except for (J), and they all mean 'thumb'. In the above, (S) also probably corresponds to (Ek1).

The forms seen in (Ek2) and (U) are also seen in all Tungus languages apart from (J) and (Ma). In Group I this is the index finger in all cases except for (S). Derivations have meanings such as 'spoon' and 'ring'. In (S), the same word has the meaning of 'fingers (in general), spoon', and a derivation meaning 'ring'. In Group II the meaning is 'finger (in general)', again with derivations with meanings such as 'spoon' and 'ring'. In Group III there is no word with the meaning of 'finger'; the meaning here is 'spoon', with 'ring' as the derivation.

The cognates found in (Na k), (Hz), (Oc), (Na), (Ul), (Si) and (Ma) above are, according to Ts., in Groups I and II, Group III except for (Ut), and in (Ma). In Groups I and II the meaning is 'little finger' (in (Oc) there is also the meaning of 'finger (in general)')

Cognates with (Ut) kotoo are found in (Na) and (Ul), according to Ts. They have meanings like 'snapping a finger' and 'clicking a finger'.

As seen in the above, the words for 'finger (in general)' are myriad. The meaning changes from 'thumb' to 'index finger' to 'little finger', depending on the language, thus displaying both expansions and reductions in

meaning.

For reference, the terms for thumbs and fingers for a number of languages are listed below. ((Ew) terms are from Cincius i Rishes (1952); (Ek) terms are from Boldyrev (1994); (Na) terms are from Onenko (1986); (Ut) terms are from Ikegami (1997); and (U) terms are from the present authors own survey conducted in the village of Krasnyj Jar (the informant was Mr. Susan Chikxuvich Geonka, born in 1915 at the village of Xabagou).

'finger'	'thumb'	'index finger'
(Ew) xair/ŋaal	(Ew) xurəgən	(Ew) unikaan
(Ek) umuukəəčəən	(Ek) umuukəəčəən /əŋki	(Ek) apkal /uňakaačaan
(U) uňaa	(U) xoo	(U) siuə
(Na) cumcuən	(Na) puuruən	(Na) siru cumcuən
(Ut) kotoo	(Ut) pərə	(Ut) xunigə

'middle finger'	'ring finger'	'little finger'
(Ew) dulagan	(Ew) ač gərbələə /čimčəənni geeno	(Ew) čimčəən
(Ek) dulug/dulugun	(Ek) gərbiijə aačin umuukəəčəən	(Ek) uňakaačaan /nikaakii
(U) dulimtə	(U) čimca'a agani	(U) čimca'a
(Na) tokon cumcuən	(Na) gaikoan əikəni	(Na) gaikoan
(Ut) taldaawu	(Ut) gajau	(Ut) čimutəə

Incidentally, index finger in (Ek) apkal means 'the eldest son'. The various forms of middle finger mean literally 'the middle (finger)'. For ring finger, we see meaning constructions such as 'the finger with no name' in (Ek), and 'the elder brother of the little finger, the elder sister of the little finger' in (U) and (Na).

(10)[33]あし（足） leg, foot				
(Ew) bəduul	(Ek1) bəgdiir	(U) bəgdi	(Na) bəǧji	(J) budixə
(S) bəldiir	(Ek2) xalgan	(Oc) bəgdi	(Ul) bəgdi	(Ma) bətxə
(N) bəgdi	(Na k) bəgdi	(Hz) bəgdələ	(Ut) bəǧji	(Si) bətkə

According to Ts., cognates with (Ek2) mean 'foot, sole' in (Ew), (N), (Ul), (Uk) and (Na) (according to Avrorin i Levedeva 1978 (Oc) is also included). With (S) there are other meanings such as 'palm of the hand, footrprints'. In (Ma) it is 'palm of the hand'. Depending on the dialect, in (Ek) this can mean 'foot, palm of the hand, hoof'. In (U) it means 'forepaws of a bear, footprints of a bear'. According to Kazama (1991 p.84), even in (Na) the meaning of 'footprints of a bear' is found. This use arose out of a taboo prohibiting the use of the original word for 'footprints'.

The word final l in (Ew) may well have the same origin as the (Hz) word final -lə mentioned previously.

(11)[38]ひふ（皮膚） skin				
(Ew) ərtɯ/nanrɯ	(Ek1) nanda	(U) ňaa	(Na) xərəktə	(J) sugu
(S) nanda	(Ek2) illə	(Oc) nasa	(Ul) xərəktə	(Ma) sukū
(N) nana	(Na k) nana	(Hz) nasa	(Ut) xərəktə	(Si) soqu

The illə in (Ek2) originates from <*ilsə < *ulsə, which usually means 'flesh'.

According to the informant, ərtɯ in (Ew) means 'human skin', while nanrɯ means 'animal skin'. Even in Ts. cognates with this nanrɯ mean 'animal skin', and are given in all Tungus languages except for Group IV.

Cognates of the (Ew) ərtɯ, seen also in Group II and (Hz), have sound correspondent forms meaning 'human skin' in (N), (Oc), (Ul), 'human or bird skin' in (Ew) and (Ut), and 'tree bark' in (Ek) (Ts.).

The forms in Group IV are in complementary distribution with the above, and in (Ts.) only (Ma) and (J) are given. Concerning the meaning of the (Ma) sukū, Haneda (1937) gives 'all kinds of skins including human skin, leather, fruit peel etc.'.

(12)[42]け（毛） hair				
(Ew) ňuurit	(Ek1) nuuriktə	(U) ňuktə	(Na) nuktə	(J) funirxəi
(S) ŋatta	(Ek2) ňuriktə	(Oc) nuktə	(Ul) nuktə	(Ma) funijəxə
(N) ňuuktə	(Na k) ňuktə	(Hz) juuktə	(Ut) sinakta	(Si) finxə

Cognates with (Ut) sinakta, according to (Ts.), are found in all Tungus languages except for (J) ((Ek) in inŋakta etc.). All these mean 'the fur of animals, the feathers of birds'. In (U) there is the additional meaning of 'human hair'. The ancestral form of these are said to be *siŋakta (for a detail treatment of the correspondences see Kazama (1996b)).

(13)[44]ち（血） blood				
(Ew) xuŋəl	(Ek1) səəksə	(U) sakia	(Na) səəksə	(J) səgi
(S) səəči	(Ek2) səəxə	(Oc) səəksə	(Ul) səəksə	(Ma) šəŋi
(N) səəksə	(Na k) səəksə	(Hz) səəksə	(Ut) səəksə	(Si) siŋə

The word in (Ew) does not correspond with the forms in other languages, but according (Ts.), the only word that corresponds with this is xuŋəl in the Nakannovskij dialect of (Ek), meaning 'name of a kind of food made from dried animal blood'.

(Ew) has xəəs 'dried and hardened blood' that corresponds to others.

In many cases, nouns ending in -ksa/ -ksə have the meaning of 'liquid' derived from a verbal stem. Along these lines, the (Ek) səŋgii- 'to flow (blood)' is given.

(14)[45]ほね（骨） bone				
(Ew) ikɯri	(Ek1) giramda	(U) giama	(Na) girmaksa	(J) giraŋi
(S) gıranda	(Ek2) giramna	(Oc) giamsa	(Ul) gıramsa	(Ma) giraŋi
(N) ---	(Na k) giramna	(Hz) giamsa	(Ut) girapsa	(Si) giraŋə

Once again, only the (Ew) form ikɯri finds no correspondents in other languages. According to (Ts.) correspondents are found in Groups I, II and III except for (S) and (Na), these meaning mostly 'backbones (of fish etc.), the spine'. Only in (N) does this refer to 'bones' in general.

There are correspondents among the languages such as (Ew) girɯmrɯ 'grave, skeleton' and (N) gijamna 'skeleton', but these do not have the general meaning of 'bone' either.

(15)[46]にく（肉） flesh				
(Ew) ulrɯ	(Ek1) uldə	(U) ulə	(Na) uliksə	(J) jali
(S) uldə	(Ek2) ullə	(Oc) uktə	(Ul) ulsə	(Ma) jali
(N) ulə	(Na k) ulə	(Hz) ulsə	(Ut) ulisə	(Si) jələ

Regarding the forms in the languages of Group IV, (Ts.) gives them under different headings: (S) jali 'flesh' and (Ul) jali 'the flesh of bears (religious archaic)'. These are probably borrowings from (Ma). There many also be correspondences between Groups I, II and III on the one hand and Group IV on the other.

The underlined portion of (Na) uliksə is probably superfluous when one

compares it with other forms. It may be an element added afterwards (much like the girmaksa in the last heading (14)).

(16)[47]からだ（体） body				
(Ew) bulgis	(Ek1) bəjən	(U) bəjə	(Na) bəjə	(J) ---
(S) bəjə	(Ek2) bəjə	(Oc) bəjə	(Ul) bəjə	(Ma) bəjə
(N) ---	(Na k) bəjə	(Hz) bəjə	(Ut) bəjə	(Si) bəj

Due to misses in survey work this was not taken, but (Ew) has bəj 'body' and this is used quite commonly. According to (Ts.), in almost every language the word is expanded to into refer to many concepts, with meanings such as 'human, man, male, husband, body, oneself, personality, face, tree trunk, life'.

(17)[48]びょうき（病気） diseases, illness, sickness				
(Ew) butən	(Ek1) ənuku	(U) uňi	(Na) ənuu	(J) ---
(S) ənux	(Ek2) ənuk	(Oc) ənuu	(Ul) ənuu	(Ma) ňiməku
(N) ənuk	(Na k) ənuku	(Hz) uŋku	(Ut) ənuu	(Si) ňuŋku

(Ew) butən is recorded clearly even in Novikova (1980) as 'sickness', but it does not appear in (Ts.). The closest words to this are those derived from the verbal stem of 'to die' and seem to recorded as such: but butəək in (Ew) and (Ek).

The cognates of (U) uni, according to (Ts.), mean 'insult' in (Ew) and (Ek). In (N), (Ul) and (Na), languages along the Amur River, this means 'the sickness you get when you do not eat the food served out to guests' The present author also asked a number of informants in a (Na) village about this. Apparently, this superstition is actually still believed in. In (U) unuu is also used. This unuu was unugu, according to another informant, and in (Ts.) this is also given in the form of unugu in the same entry as (U) uni. The word in (Hz) is probably also a cognate. Ikegami (1997) gives the meaning of xuni-, the same kind of sickness in (Ut) as 'stomach pain (in children and the such) when one cannot get the things one wants'.

According to (Ts.), (N), (Ek1 2), (Na k), (Na), (Ut) words are the cognates of the (Na) words ənusi- 'to have pain, to be sick' and ənənə 'ouch!'.

These are found extensively in the Tungus languages, except for (J).

The words in Group IV are, are said to be only in (Ma) in (Ts.), these being derived from nimə-mbi 'to be sick'.

(18)[50]くすり (薬) medicine				
(Ew) bəg	(Ek1) əəm	(U) okto	(Na) okto	(J) ---
(S) əəŋ	(Ek2) bəgə	(Oc) bəəki	(Ul) okto	(Ma) okto
(N) okto	(Na k) okto	(Hz) okto	(Ut) okto	(Si) oqtə

According to (Ts.), the cognates of (Ew) bəg and (Ek2) bəgə show an curious distribution, for example, (Ek) bəgə means 'the enzymes taken from animal brains and livers for the purposes of processing leather, medicine, ointment'. The word in (N) means 'medicine', and (Oc) bəədə- (< bəgdə-) means 'to cure'. (Ts.) also mentions the ancient Turkic word buɣa 'a prescription of medicine' here for reference. The forms in (S) and (Ek1) are loans from (lit.Mo) em 'medicine' (Tsumagari 1992a). (Oc) bəəki is also recorded in Avrorin i Levedeva (1978), but not in (Ts.). This is possibly a derivation for the (Oc) bəədə- 'to cure') mentioned above.

The region between the lower reaches of the Songhua River and the mouth of the Amur River, together with the neighbouring Sikhote Alin region has been named 'the Amur River region' by Ikegami (1987). He points out the languages of this region have many loan words from Manchu and Chinese, and constitute a linguistic region of their own, especially in contrast to the Tungus languages of Eastern Siberia. The word okto and the distribution of its cognates, given above, also seem to fit this description of a linguistic region. Here, we can assume that the word spread from Manchu into the lower reaches of the Amur River.

Many words below also show the same 'lower Amur River region' type of distribution. In these cases, (Ut) and (S) are sometimes included. This can be understood when we consider the extension of the Santan trade route from the Amur estuary to Sakhalin , and in the case of (S), the fact that these people were affected by the Qing Dynasty and thus forced to shift their present location.

(19)[53]しお（塩） salt				
(Ew) tak	(Ek1) dawsun	(U) sa'i	(Na) daoson	(J) dabsun
(S) doosun	(Ek2) turukə	(Oc) daksu	(Ul) dausun	(Ma) dabsun
(N) daksun	(Na k) daosun	(Hz) daosun	(Ut) dausu	(Si) dafsun

Regarding tak in (Ew), (Ts.) gives it an entry of its own, as it is an item that only occurs in (Ew). At first sight this form seems similar to the (Oc) form, but in (Ew) the general change of *-ks->-s-> should have occurred, so it is difficult to claim this kind of change from the (Oc) form .

(Ek2) turukə and (U) sa'i are also given their own entries in (Ts.), and their origins are unknown.

Other forms, such as (S) and (Ek1), are loans from Mongolian ((lit.Mo) dabusu(n)). Attention has been drawn to the fact that in (Oc) and (N), k appears in daksu.

(20)[54]あぶら（油） oil				
(Ew) imrɯ	(Ek1) imuksə	(U) imo	(Na) simuksə	(J) imənji
(S) imičči	(Ek2) imuurən	(Oc) umuksə	(Ul) simsə	(Ma) nimənji
(N) xaata	(Na k) imuksə	(Hz) iməksə	(Ut) ilda/nəmuu	(Si) nimənjə

According to Ikegami (1997), ilda is 'the oil from seals', and nəmuu is 'the solidified oil from seals or bears'. In (Ts.), ilda is only given for (Ut), while the cognates of nəmuu are given in (Ek), (N), (U), (Ul) and (Ut). The meaning in all cases is 'the fat of bears or sea animals'.

All the forms, except for (N) and (Ut), correspond with each other. According to Novikova (1980), (Ew) has imrɯn and imsɯ, which mean 'oil, fat'. Hence, imrɯ would correspond to the (Ek2) imuurən, while imsɯ would correspond to the (Ek1) imuksə (changes due to *-ks-->-s-).

A phenomenon that occurs with the aforementioned (U) sakia 'blood' also occurs here: words that have female vowels in other languages have masculine vowels in (U), and this only occurs with (U). The impression the present author had while listening to these sounds was that ə and a sounds are much closer in Group II (U) and (Oc) than in other languages.

An intriguing question would be how the word-initial n in (Si) and (Ma) appeared, as these are not found in (J). Apart from niməŋi, (Ma) has another word simeŋi meaning 'oil from the seed of the paulownia tree'.

Similar to the phenomenon mentioned in (13) 'blood', the words for 'oil' are said to be derived from verb stems such as (Ek) imuu- and (Na) simu- (both meaning 'applying oil').

(21)[55]さけ（酒） liquor, wine				
(Ew) miinə /xʊlaŋ̆ja	(Ek1) araki	(U) a'i	(Na) araki	(J) nurə
(S) arɪxɪ	(Ek2) araki	(Oc) araki	(Ul) arakɪ	(Ma) arki
(N) ajaxɪ	(Na k) arki	(Hz) arki	(Ut) arakki	(Si) airkə

The (Ew) miinə is derived from the Russian vino. Regarding the cognates of (J), (Ts.) lists (Ek) nərə- (<Mo) 'to distill', (Ma) nurə, niru, nursə (all meaning 'wine'). However, the words in (Na) and (S) are probably loans from (Ma).

The others come from the same etymon in Mongolian. The form in (Oc) has an r in it, and this indicates that the word entered the language after the phenomenon of r-deletion occurred.

(22)[56]タバコ tabacco				
(Ew) təbəəki	(Ek1) tamakii	(U) dami	(Na) damaxi	(J) ---
(S) daŋga	(Ek2) ňimisinna	(Oc) damisi	(Ul) daŋpɪ	(Ma) dambagu
(N) saŋňan	(Na k) damxi	(Hz) damxin	(Ut) saŋňa	(Si) damənə

(Ew) owes its form to Russian. The origin of (Ek2) is unknown. Tsumagari (1992a) records damga 'tobacco' from his (Ek2) informant; (Ts.) also records damga 'tobacco' for (Ek).

In other languages, words that correspond to (Ut) saŋňa and (N) saŋňan usually mean 'smoke'. According to Ikegami, 'smoke' in (Ut) is saŋnaka, with a diminutive attached.

Apart from these, all others above are from the same etymon in Mongolian.

(23)[59]たべもの（食べ物） food				
(Ew) ǰəpluɯ	(Ek1) zəptilə	(U) ǰəu	(Na) siaori (Na l) ǰəpuri	(J) ---
(S) ǰittərə jəm	(Ek2) ---	(Oc) ǰəu	(Ul) ǰəpuwu	(Ma) ---
(N) ǰəpkit	(Na k) ǰəpuriksə	(Hz) ǰifku	(Ut) dəppi	(Si) ǰər ǰaqə

All forms come from either the present participle form or the impersonal participle form of the verb 'to eat'. The reason why the (Na) form differs so greatly will be given later under (45) 'to eat'.

(24)[61]たまご（卵） egg				
(Ew) ʊmtɯ	(Ek1) umukta	(U) umukta	(Na) omokta	(J) ---
(S) ʊmʊtta	(Ek2) umukta	(Oc) umukta	(Ul) ʊmʊkta	(Ma) umxan
(N) ʊmʊkta	(Na k) omokta	(Hz) omokto	(Ut) ŋojokko	(Si) umhan

According to (Ts.), (Ut) here shares no cognates with other languages. For reference he gives the Gilyak word ŋojeq 'egg'. The others can be considered to be cognates. It is possible to think of these as derivations from verb stems such as the (Ek) umuu-. Also, (Ts.) treats the group of words represented by (Ek) umuk and (Na) omo as cognates (these mean 'nest') and lists them under the same entry. Further, according to Yamamoto (1969), (Si) uməhan has another meaning: that of 'bone marrow'.

(25)[63]とり（鳥） bird				
(Ew) dəgi	(Ek1) dəgii	(U) činda'a	(Na) ňiəcəən (Na l) ňiəčəən	(J) ---
(S) dəgii	(Ek2) dəgii/čiwkaačan	(Oc) čindəkə	(Ul) čiində /gasa	(Ma) gasxa/čəčikə
(N) čɪwkaan	(Na k) čiwkan čiwčakan/gaskan	(Hz) čičakan	(Ut) gasa	(Si) ɢashə/čičikə

The various forms of Group I probably come from verb stems such as (Ek) dəgii- 'to fly'. According to (Ts.), in Groups II, III and IV, the verbs 'to fly' also have the same origin, but no derivations meaning 'bird' have

arisen from these.

Cognates with the Group II form are, according to (Ts.), words meaning 'the name of a species of bird' in (Ek), (Ew), (N), (Ul), (Ut) and (Na). In particular, the (Ek) and (Na) words mean 'a bird of the family Paridae'. It is highly possible that semantic broadening has occurred in Group II.

(Na) has gasa 'waterfowl', and also niəčəə for birds other than waterfowl. According to (Ts.), a dialect of (Na) has the word niəčiən gasa 'bird (generic term)'. Judging from the data in (Ts.) alone, all the Group III languages have the same phenomenon. In Group II, the cognates for gasa also mean 'waterfowl', but in Group I, (Ek) gasa means 'crane', and (N) gasa means 'swan'. (Si) and (Ma) in Group IV seem to refer to the general concept of 'bird' ((Ts.), Yamamoto 1969, Haneda 1937).

On the other hand, according to (Ts.), the word in (Na) that refers to birds other than waterfowl, niəcəən, has cognates in (Ek), (S), (Ew), (U), (Ma) and (J). meaning 'duck ((U) has duckling)'.

(26)[70]ナイフ knife				
(Ew) xɪrkan	(Ek1) učі	(U) kusigə	(Na) kucəən	(J) ---
(S) usxən	(Ek2) koto	(Oc) kučə	(Ul) laučaan	(Ma) xuwəsi
(N) koto	(Na k) (kəətə) koto	(Hz) kioto	(Ut) kučigə	(Si) kusii

(Ew) xirkan is, according to (Ts.), unique to (Ew) and its origins are unknown.

(Ek2) kotokon is koto 'hunting knife' with a diminutive attached. According to (Ts.), its cognates are only found in the languages of Group I and the Kur-Urmi dialect of (Na).

(Ts.) regards (S), (Ek1), (U), (Oc), (Na) and (Ut) as corresponding with each other and treats them all under one entry. If this is correct, then one must concede that a change has occurred in Group I languages where k has been deleted before u. For example, the following also display the same correspondences and should be regarded as instances of the same sound change: (Ek) ukun, (Na) kuun, (Ma) xuxun 'milk'; (Ek) urim, (Na) kuri 'grey'; (Ek) əwi-, (Na) kupi- 'to play'.

With (Ma) xuwəsi, (Ts.) notes that (Ma) has a word xuwəš- 'to iron', and

thus compares the word only with (Na) xusiədə-.

(27)[77]いと（糸） thread				
(Ew) xum	(Ek1) subə	(U) siəktə	(Na) kupən	(J) togo
(S) širtə	(Ek2) tomko	(Oc) sumu	(Ul) xupə	(Ma) toŋo
(N) sumu	(Na k) kufən	(Hz) siəktə	(Ut) kupə	(Si) toŋə

Words corresponding to the ones in (Ew), (N), and (Oc), according to (Ts.), are found in all Tungus languages, and they mean 'tendon'. Of these, (Ma) subə and (S) sumul are said to mean 'tendon', so the (Ek1) above has probably come from Manchurian.

Also, according to Avroin i Levedeva (1978), (Oc) sumu has another form, sumu(g) 'hidden g'.

The words that correspond to (S), (Hz) and (U), according to (Ts.), mean mainly 'fibre' and 'thread', and are found in all Tungus languages. (lit.Mo) sirüsün 'tendon' and sirkeg 'fibre' are given as reference.

Cognates with tomko in (Ek2) and the forms seen in Group IV can also be found, according to (Ts.), as corresponding forms in all Tungus languages. They are mostly the same in form and almost all have the verb form 'to twist thread'. Here the (lit.Mo) tomu- 'to twist thread' is also listed for comparison.

Cognates with (Na k) kufən, (Na) kupən, (Ul) xupə, and (Ut) kupə, according to (Ts.), have a distribution very close to the 'lower Amur River region'. Moreover, (N) and (Oc) refer to 'cotton thread'.

To make a bold hypothesis, one may propose that the sum words referring to 'tendon' were originally in the ancient Tungus languages. Then words from Mongolian were borrowed from a fairly early period, finally followed by dissemination of the word for 'cotton thread' along the Santan trade routes.

(28)[79]きもの（着物） clothes, clothing				
(Ew) oj	(Ek1) tətii	(U) təgə	(Na) tətuə	(J) ---
(S) təggəčči	(Ek2) najama	(Oc) təggə	(Ul) tətu	(Ma) ətuku
(N) orbaxo	(Na k) tətuə	(Hz) tərgələ	(Ut) tətuwə	(Si) utuku

(Ew) oj means 'on top of', and probably means 'to wear on top of'.

(Ek2) najama refers to clothing made from elk, and the informant also gave 'clothing made of skin'. According to (Ts.), cognates with this word are found in

Group I languages except (N), and also in (Ma).

(Ma) ətuku seems to have a form that comes from the t-deletion of (Na) and (Ut), but (Ts.) classifies these under different headings.

The others, namely (S), (Ek1), (Na k), (Hz), (U), (Oc), (Na) and (Ut) are considered correspondents with each other. The derived forms are different from Group to Group, but all are derived from the word 'to wear'.

(29)[80]かみ（紙） paper				
(Ew) gumaaga	(Ek1) čaasun	(U) xauja	(Na) xaosan	(J) xauša
(S) saasun	(Ek2) gumaaji	(Oc) xausa	(Ul) xausalı	(Ma) xauša
(N) xausan	(Na k) xaosian	(Hz) xaosian	(Ut) xausali	(Si) hosin

(Ew) and (Ek2) forms are probably from the Russian bumaga, but the initial b has become a g. (Ut) has also borrowed the same word, and uses it to refer to 'money'. Once again, g appears. This dissimilation probably occurred to avoid a sequence of labials.

(S) and (Ek1) forms are from Mongolian.

Apart from the ones mentioned above, all other words are cognates. According to (Ts.), these are distributed in languages in Groups II, III and IV, together with Negidal as the only representative for Group I. This is a typical 'lower Amur River region' distribution. Also, from the forms in Group II and in Negidal, one may assume that the forms there were borrowed after deletion of initial x had occurred in these languages.

(30)[81]もの（物） thing				
(Ew) nukta	(Ek1) jəəm	(U) xaǰu	(Na) xaǰon	(J) xačin
(S) jəm	(Ek2) sajauusi	(Oc) xaǰu	(Ul) ǰakasal	(Ma) ǰaka
(N) ---	(Na k) ǰakan	(Hz) ǰaka	(Ut) ---	(Si) ǰaqə

(Ew) nukta, according to (Ts.), is only found in (Ew), and its origin is unknown. The origin of the (Ek2) form is not given in (Ts.) either.

Regarding the (Ek1) jəəm, Tsumagari (1992a) records this as jəəmə, and refers to eema 'what kind of' given in (Ts.). It is possible that this is a loan from Mongolian, as can be said with the (S) form (However, the vowels are different: (lit.Mo) jaɢum, (Mo) jum).

The (U) and (Oc) forms show, according to (Ts.), a typical 'lower Amur River region' distribution (i.e. (N), (Oc), (Ul), (Ut), (Na)). The initial x is present, not just in Group III, but also in (N) and (Oc), indicating that words were borrowed after the deletion of initial x- in Groups I and II. In (Na), the meaning is not 'things in general', but for example, 'tools, weapons and household items (used for hunting, including clothes)', in other words, 'tools (for a special purpose)'. This meaning is probably common to all Group III languages.

(Na) refers to 'things (in general)' with ǰaka, a word that is cognate with (Ul), (Na k), (Hz), (Si), and (Ma) above (although this could not be gained from the aforementioned informant). Cognates with this, according to (Ts.), are found in the dialects of (Ek), in (S), (Na), (Oc) and Groups III and IV, but not in (Ew) and (U).

Cognates with the (J) form show, according to (Ts.), 'lower Amur River region' distribution (i.e. (S), (N), (Oc), (Ul), (Ut), (Na), (Ma) and (J)), and have meanings like 'kinds, various'. It is also noted that (Ul) also has the meaning of 'thing'.

(31)[83]むし（虫） worm, insect				
(Ew) maǧjılı	(Ek1) kulikan	(U) kuliga/uə	(Na) pəəntə	(J) ---
(S) xulıxan	(Ek2) kulikan	(Oc) kulia	(Ul) sılakta	(Ma) umijaxa/imijaxa
(N) kulıxa	(Na k) kolaan	(Hz) kuliakan	(Ut) koliga	(Si) nimahə

Cognates with (Ew) maǧjılı mean, according to (Ts.), 'to wiggle' in (Ek) , (U) and (Na), and 'all over the place' in (N). The meaning of 'worm or insect' is only found in (Ew), where it is also used to refer to shellfish.

The cognates of (S), (N), (Ek1, 2), (Na k), (U), (Oc), (Hz), and (Ut) above are, according to (Ts.), distributed among Groups I, II and III. In (Ek) and (S) the forms kuliin and xoleen with no diminutives refer to 'snake'; the meaning changes to 'worm or insect' when the diminutive is added. On the other hand, in (N), (U) and (Oc), the forms cited above do mean 'worm or insect', in particular the (U) and (Oc) forms mean 'worm or insect (including snakes)'. Surprisingly, in (Ew) it actually means 'mosquito'. In Group III the form refers to 'worm or insect', and the word for snake is derived from the verb stem for 'to crawl'.

(Na) pəəntə means 'earthworm', but according to (Ts.), cognates of this mean 'seal (sea animal)' in (Ek) (certain dialects only), (N), (Oc), (U), (Ul), (Ut) and (Ma). Also, in (Na), examples of this form being used to mean 'seal' are attested in folktales etc.

According to (Ts.), cognates with Group IV forms are in (Ek), (Ew), (N), (Oc), (Ut), (Na), (Ma) and (J). The meaning is 'maggot' ((U), (Ma) and (J) have 'worm or insect').

(32)[89]さかな（魚） fish				
(Ew) olrɯ	(Ek1) oldo	(U) sugǰa	(Na) sogdata	(J) liwaxa
(S) osxon	(Ek2) ollo	(Oc) sugǰasa	(Ul) sugdata	(Ma) nimaxa
(N) olo	(Na k) olo	(Hz) imaxa	(Ut) suŋdatta	(Si) nimhaa

The form for (S) is given as oxson in (Ts.). The cognates are found in (S), (N), (Ut), (Na) and (Ma). In (N), (Ut) and (Na), this is 'a word similar to dace', while (Ma) it is 'river bass'. This can be regarded as an instance of semantic broadening in (S).

According to (Ts.), the cognates for (Ew), (N), (Ek1 2) and (Na k) are also found

in groups II and III, but they mean 'boiled fish'. The primitive form is probably *xolso.

The cognates for (U), (Oc), (Na), (Ul) and (Ut) are, according to (Ts.), present in all languages in Group I, and they refer to specific species of fish, such as ciscoes, spring salmon or trout, rainbow trout and walleye Pollack.

For correspondents with (Hz) and Group IV forms, (Ts.) gives (Ek) leemba 'salmon, trout', (Ul) nimo 'cisco'. The cognates for these are distributed, not just in Group IV languages, but in (Hz) and the Kur-Urmi and Bikin dialects of (Na). These are distributed in the middle reaches of the Amur River, a language region described in Kazama (1996b).

(33)[94]いぬ（犬） dog				
(Ew) ŋɪn	(Ek1) ninakin	(U) ina'i	(Na) inda	(J) indaxum
(S) nɪnaxɪn	(Ek2) ŋinakin	(Oc) inaki	(Ul) ŋda	(Ma) indaxūn
(N) ŋɪnaxɪn	(Na k) inakin	(Hz) inakin	(Ut) ŋinda	(Si) jonhun /indaaxun

All the Tungus language forms above correspond with each other, but in (Ew) and the Group III languages, the –kin suffix present in other languages has been lost. Ikegami (1989 p.1078) also points out that the *-kii, *-kin suffix is missing only from Group III languages in the words meaning 'squirrel' and 'liver', which are found across almost all the Tungus languages.

(34)[112]いえ（家） house, home				
(Ew) ǰʊʊ	(Ek1) ǰuuk	(U) ǰugdi	(Na) ǰoo	(J) bogo
(S) ǰʊʊ	(Ek2) ǰuu	(Oc) ǰubba	(Ul) xagdʊ	(Ma) boo
(N) ǰʊʊ	(Na k) ǰoo	(Hz) ǰoo	(Ut) duxu	(Si) boo

The forms in Groups I, II and III correspond with each other, but according to (Ts.), there are no corresponding words in Group IV. On the other hand, according to (Ts.), the forms found in Group IV are only (Ma) and (J). Further, she gives the Chinese fang^2 'house' for reference.

The forms in Group II (U) and (Oc) are in dative and accusative form respectively. In forms without case, –di and –ba are usually deleted, but

sometimes cased forms can also appear without the suffixes. In this sense, there is a degree of instability in this area.

In (Ul), ǰʊʊ forms are not used. Instead, (Ul) xagdʊn 'house' is used, which in other languages would mean 'a bear's den'.

(35)[117]かね（金） money				
(Ew) məŋən	(Ek1) məgun	(U) ǰia/tiaǰa	(Na) ǰixa (Na l) ǰaxa	(J) ---
(S) məgun	(Ek2) məŋun	(Oc) ǰixa	(Ul) ǰɪxa	(Ma) ǰixa/məŋun
(N) bʊmaaska/karčɪ	(Na k) ǰixa	(Hz) ǰixa	(Ut) gumaska	(Si) ǰihaa

The forms seen in Groups I and IV ((Ew) məŋən and its corresponding forms) are also in all Tungus languages. They all mean 'silver'. In (Ek), (Ew) and (Ut) there is the additional meaning of 'gold'. This could be an influence from Turkic languages.

(U) teeǰa is obscure in origin. It could be from the Chinese die²zi 碟子, which means '(Noun) Small dish, plate. (Classifier) Used for counting dishes' (from Kuraishi 1985).

According to (Ts.), the forms in Groups II, IV, (Ul) and (Na) mentioned above are also found in (S), (N), (Ul) and (Ut). They follow the 'lower Amur River region' distribution, and this suggests an origin in Manchurian.

(36)[118]き（木） tree				
(Ew) xɪakɪta	(Ek1) moo	(U) moo	(Na) moo	(J) mo
(S) moo	(Ek2) moo	(Oc) moo	(Ul) moo	(Ma) moo
(N) moo	(Na k) moo	(Hz) moo	(Ut) moo	(Si) moo

According to (Ts.) and Novikova (1980), there is also moo 'tree' in (Ew). According to (Ts.), xɪakɪta is found in (Ek), (Ew) and (N), and means 'larch'. Novikova (1980) defines the word as '(1) larch and (2) a living tree'.

(37)[121]くさ（草） grass				
(Ew) ňɵɵčə	(Ek1) orokto	(U) soktou/xaikta	(Na) ňaǰaxa (Na l) ňaǰixa	(J) orxo
(S) orotto	(Ek2) orokto	(Oc) ookto	(Ul) ---	(Ma) orxo
(N) xarta	(Na k) orokto	(Hz) orokto	(Ut) orokto	(Si) orhə

(Ts.) treats the (Ew) form as having the same origin as ňɵɵ- 'to come out'. -čə is the perfective form of adjectives and verbs in this language, so the word can actually be interpreted to mean 'things that have come out'. According to (Ts.), cognates with ňɵɵ- meaning 'to come out' are found in all Tungus languages, except for Group IV, but a derivation meaning 'grass' is unique to (Ew).

According to (Ts.), (Na) ňaǰaxa also exists in (Ul) (ňaǰaxa) and (Ma) (ňančixa). These are the only cases, and both of them mean 'grass'.

According to (Ts.), cognates with the above (S) orotto are found in Groups I and II. In Group III, only (Ut) has it, (Na) and (Ul) do not. Furthermore, the meaning in groups I and II is basically 'hay, straw'. In Group III, one must consider the choice of two scenarios: that of ňaǰaxa replacing orokto, or that of orokto entering from (Ek) into (Ut). (Ts.) gives another cognate for orokto: the (Ma) orxoda 'ginseng'. This is said to be found in Groups II, III and I, and probably spread from Manchurian.

(38)[124]は（葉） leaf				
(Ew) əbdərum	(Ek1) napči	(U) abdia	(Na) xabdata	(J) abuxa
(S) naččɪ	(Ek2) abdanna	(Oc) abdasa	(Ul) xabdata	(Ma) abdaxa
(N) abdaxan	(Na k) abdana	(Hz) ---	(Ut) xamdatta	(Si) afhə

The forms in (S) and (Ek1) are, according to (Ts.), only in (Ek) and (S). These are loanwords ((lit.Moo) nabči 'leaf'). All the others can be traced back to *abdansa, and it is possible that *-nsa is a suffix. According to (Ts.), the noun forms 'leaf' with the same origin are found in all Tungus languages except for (S), and only (Ma) has the verb abda- 'to break off the end, to break a branch'. Haneda (1937) has abtala-mbi 'to prune tree

branches, to thin out (a forest)'.
(Ma) has another word, a doublet: afaxa 'a piece of paper'. (Ts.) regards this as a loanword from (J).

(39)[125]はな（花） flower, blossom				
(Ew) ňəəčə	(Ek1) ilgaa	(U) ilaa	(Na) kəkuu	(J) ilxa
(S) ɪggaa	(Ek2) oňo	(Oc) ilakta	(Ul) sılaa /čičaa	(Ma) ilxa
(N) ---	(Na k) čičakta	(Hz) ilga	(Ut) sillaa	(Si) jilhaa

The (Ew) ňəəčə is the same word as (37) 'grass'; Novikova (1980) also gives two meanings for this word. (Ek2) oňo is a derivative of oňo- 'to draw', but it only means 'decoration, pattern'. The meaning of 'flower' is not found in any of the following dictionaries: Vasilevich (1958), Kolesnikova i Konstantinova (1960) and Boldylev (1994).

(Na) kəkuu is not in (Ts.), and the meaning is unclear. The word kəkuukəən 'flower' is given in Onenko (1980) and Onenko (1986).

Forms such as (S) given above are in all Tungus languages, according to (Ts.). The forms in (Ew), (N), (Oc) and (Na) mean 'pattern, decoration'. The forms in Group I and (Na) are said to have come from Manchurian. If this is true, it implies that Group I languages also a period of contact with Manchurian, and this is a question that requires further investigation. Also, (Ul) and (Ut) have sila and silla respectively as forms for 'flower', together with irga meaning 'pattern, decoration'. This form is said to be from the primitive *ilga. In general, syllable-final r should have changed to l in (Ul) and (Ut), one would be forced to say this is an exception where the process happened the opposite direction, if no other data is given. Ikegami (1997) records the accusative form of this word as irgambi. And this indicates that the word originally had an n in word-final position.

(40)[126]み (実) fruit, nut				
(Ew) bokɯt	(Ek1) ---	(U) kusta/səutigi/kimokta	(Na) bookto	(J) tuwəxə
(S) ---	(Ek2) ---	(Oc) gəbəku	(Ul) bookto	(Ma) ---
(N) purəkəǰi	(Na k) ofokta	(Hz) ---	(Ut) ---	(Si) ---

The type of fruits and nuts found in the Tungus language areas, which stretch from the Maritime Province in the south to northern areas across Siberia in the north, are not necessarily the luscious fruits one might imagine, but mostly berries and pinecones. This is reflected in the words to be examined below, and also explains why it is difficult to collect samples of these kinds of words.

According to (Ts.), cognates of (Ew) bokɯt and (Na) bookto are found in all Tungus languages except (S). With the exception of (U) , the meaning is always 'walnut' or 'pinecones'.

Regarding (J) tuwəxə, (Ts.) regards (S) tuwik and (Ma) tubixə as the only cognates. However, -xə in (J) and (Ma) often correspond to -ktə in (Ek) and others, so there is a real possibility that (Ek) təwuktə might also be a cognate.

In (S), another informant gave (S) ǰimsə, but this is a loanword from Mongolian ((lit.Mo) ǰimis, see Ozawa 1983).

Concerning (U) kusta, if this is seen as kusikta, then it is found in (Ts.), with cognates in (Ek), (Oc), (U), (Ul), (Na) and (J), all meaning 'walnut'. Cognates with (U) səutigə are, according to (Ts.), found only in (U) and (Na), and the meaning is 'pinecone'. (Ts.) was not able to find correspondents for (U) kimokta.

With regard to (Oc) gəbəku, according to (Ts.), there are correspondents such as the (Ew) (Arman dialect) gərbəə-, the (U) gəgbə- (both mean 'to collect berries'), and the (Na) gəgbəli- 'to pick (from a plant)'. The (Oc) term is said to have derived from a such a word.

(Ts.) gives both a verb and a noun for (U), and only a noun for (Oc).

(41)[127]たね（種） seed				
(Ew) čəjnə/ňaŋta	(Ek1) ňiintə	(U) ---	(Na) čəməə	(J) ---
(S) ur	(Ek2) seema	(Oc) čəməni	(Ul) ---	(Ma) usə
(N) ---	(Na k) ---	(Hz) ---	(Ut) ---	(Si) usoo

According to an informant, the (Ew) čəinə is from the Russian semja 'seed'. (Ek2) šeema is also regarded as from Russian (Tsumagari 1992a). The term in (S) is from Mongolian ((Mo) ür). (Ek1) niintə means 'root' in Groups I, II and III, and this could be a fieldwork error.

According to (Ts.), cognates for (Ew) ňaŋta are found in (Ek), (Ew), (Oc) and (U), and mean 'pinecone, walnut'. Cognates with these are also found in (Ut) and (Ma).

According to (Ts.), the cognates for (Oc) and (Na) above are in (Ek), (Oc), (U), (Ut) and (Na), and mean 'rice in the husk, seed, seed of walnuts'.

The words given for (Si) and (Ma) are, according to (Ts.), also found in (Oc) as uši, in (Ul) as usə, in (Na) as usə, and in (Ma) as usə. All of these mean 'seed'. It is possible that these spread from Manchurian.

(42)[129]たはた（田畑） field, acres, rice-field				
(Ew) agarat	(Ek1) tarigaaŋŋii buga	(U) talii	(Na) usin	(J) ušin
(S) taragan	(Ek2) ---	(Oc) ---	(Ul) usun	(Ma) usin
(N) ---	(Na k) ---	(Hz) naa	(Ut) ---	(Si) usin

The (Ew) form is from the Russian ogorod 'field'. According to (Ts.), the forms in (S) and (Ek1) above are from (lit.Mo) tari- 'to sow'. Cognates are found in (Ek), (S), (Oc), (U), (Ul), (Na) and (Ma). (Ts.) gives the (U) form as tali 'field, vegetable', with the r changed to l, similar to the table above. Historically r-deletion should have occurred in all (U) words, but depending on the time borrowing, some of these might have become l.

Cognates of words found in (Na), (Ul) and Group IV are, according to (Ts.), found in Group II (except (U)), Group III and Group IV. According to another informant interviewed by the present author, (U) also has ui 'field'.

(43)[132]みち（道） way, road				
(Ew) xootarum	(Ek1) xokto	(U) xokto	(Na) pokto	(J) ǰugu
(S) təggu	(Ek2) xokto	(Oc) xokto	(Ul) pokto	(Ma) ǰugūn
(N) uǰa	(Na k) fokto	(Hz) xokto	(Ut) pokto	(Si) ǰohun

The (S) term təggu is probably from (lit.Mo) teregür meaning 'a wide road with many passersby' (Ozawa 1983).

Cognates seen in Group IV are given in (Ts.) as (Ek) ǰugu, (Ew) ǰug and (S) ǰug, where they mean 'direction, way'. (U) ǰuu- is also given, meaning 'to aim'. (lit.Mo) ǰüg 'direction, way' is listed for reference.

The forms in (Ew) and (Ek1) are given as cognates, and (Ts.) also gives (Ma) oktoron 'rabbit tracks'. The exact identity of the -rum ending in (Ew) has not been determined, but it could be related to this -ron.

(44)[135]かわ（川） river				
(Ew) okaat	(Ek1) bira	(U) uli/biasa	(Na) maŋbo/bira /birakaan	(J) bira
(S) doo	(Ek2) bira	(Oc) uli/biaka	(Ul) ʊnɪ	(Ma) bira
(N) bɪa	(Na k) bira	(Hz) maŋma /bira	(Ut) uňi	(Si) biraa

According to (Ts.), (Ew) okaat is only found in the dialects of (Ew) and its origins are obscure.

(S) doo is not given in (Ts.), and its origins are also unknown. Regarding uli in (U) and (Oc), (Ts.) gives (Ul) ula 'underground caves of ice', and compares this with (Ma) ula 'big river'. (U) uli is different from the other Tungus languages in that it also refers to 'water'. (lit.Mo) usu-n also appears to have the meaning of 'water, river, stream' (Ozawa 1983).

As cognates with (Na) maŋbo are extensively in Ikegami (1987), they will not be discussed here.

Regarding the cognates of (Ut), (Ts.) gives (Oc), (Ul), (Ut) and (Na), meaning 'big river', and also gives (Oc) and (U) words meaning 'the Anjuj River'.

According to (Ts.), the word forms represented by (Ek1) bira are in all Tungus languages. However, in (Ew), bira exists only in the folktales of the

Okhotsk dialect, while birakčan, a form with what is considered a diminutive, can have many meanings—'small stream, lowlands with small streams, basin, ravine'—depending on the dialect.

(45)[136]やま（山） mountain				
(Ew) xəpkəčən	(Ek1) xoroon	(U) uə	(Na) xurəən	(J) alin
(S) ur	(Ek2) urə	(Oc) uwə	(Ul) kadalı	(Ma) alin
(N) ujə	(Na k) urə	(Hz) urkən	(Ut) xurigə	(Si) alin

According to (Ts.), the words that correspond to (Ew) only exist in (Ek) and (Ut). Judging from the distribution and the shape of the form, the (Ut) word is probably a loan from (Ek).

The meaning of (Ek1) xoroon is, according to (Ts.), 'top (of the head), peak, ridge, tip'. The word is found widely among Groups I, II and III. In (Ma) it means a 'hair whirl'.

Concerning alin in Group IV, (Ts.) compares it with (Ek) alan- and (Ew) alan-, both meaning 'to climb over mountains'. Comparisons are also made with (U) ala 'lowlands' and (Na) ala 'low mountain'.

The other forms, such as the (S) ur, are said to correspond with each other. According to (Ts.), (Ew) also has urəəkčəən 'mountain'. (Ut) preserves the word-final g (<*k) well, as was also seen in (8) xuriga 'nose' and (26) kučigə 'knife'.

(46)[143]みず（水） water				
(Ew) məə	(Ek1) muu	(U) uli	(Na) muə	(J) mukee/mukuu
(S) muu	(Ek2) muu	(Oc) muu	(Ul) məə	(Ma) mukə
(N) muu	(Na k) mukə	(Hz) mukə	(Ut) məə	(Si) mukuu

According to (Ts.), (U) also has derived forms that seem to be cognate with the other languages, such as mudə 'flood' and muləxi 'bucket'.

(47)[145]いし（石） stone				
(Ew) ǰol	(Ek1) zolo	(U) ǰolo	(Na) ǰolo	(J) wəxə
(S) ǰolo	(Ek2) ǰolo	(Oc) ǰolo	(Ul) ǰolo	(Ma) wəxə
(N) ǰolo	(Na k) ǰolo	(Hz) ǰolo	(Ut) ǰolo	(Si) vəxəə

(Ts.) regards the various forms in Group IV as cognates with (45) 'mountain' terms (Ek) urə and (Na) xurəən etc. According to (Ts.), there is also the form urakčan 'stone', found only in the Koryma-Omolon dialect in (Ew).

(48)[146]つち（土） earth				
(Ew) təər	(Ek1) kurisun	(U) naa	(Na) naa	(J) boixo
(S) sɪrtan	(Ek2) tukala	(Oc) naa	(Ul) naa	(Ma) boixon
(N) tuuj	(Na k) naa	(Hz) tukala	(Ut) naa	(Si) biohun

According to (Ts.), apart from the (Na) turka 'piece of earth', cognates with (Ew) təər are found only in the eastern dialects of (N) and (Ek).

The (S) form is probably from (lit.Mo) sir 'earthen paint' (Ozawa 1983). This is not recorded in (Ts.).

(Ek1) kurisun is from (lit.Mo) körüsü-n, which means 'outer shell of things, surface of the earth' (Tsumagari 1992a).

Cognates with the forms in (Ek2) and (Hz) are found, according to (Ts.), throughout Groups I, II and III. The various meanings are 'earth, clay, dirt, rubbish'.

The Group II and III form naa is used very often in (Na) and others, with broad meanings such as 'the wide earth, place'. According to (Ts.), this is also found in (Ma), but except for the case of (N), is missing in Group I. Instead, Group I languages use buga and its cognates to mean 'place'.

In (Ts.), the forms found in Group IV, such as (Ma) boixon, are only given for (Ma) and (J).

(49)[151]ひ（火） fire				
(Ew) tog	(Ek1) togo	(U) too	(Na) tawa	(J) tuwə
(S) tog	(Ek2) togo	(Oc) too	(Ul) tawa	(Ma) tua
(N) togo	(Na k) too	(Hz) too/tua	(Ut) tawa	(Si) tuwa

Here, we propose that the primitive form is *tuga. It appears that progressive assimilation of the vowels has occurred in Groups I and II, while regressive assimilation has occurred in Group III.

(50)[152]かぜ（風） wind				
(Ew) ədum	(Ek1) ədin	(U) ədi	(Na) xədun	(J) ədun
(S) ədin	(Ek2) ədin	(Oc) ədi	(Ul) xədun	(Ma) ədun
(N) ədin	(Na k) ədin	(Hz) ədin	(Ut) xədu	(Si) udun

(51)[153]くも（雲） cloud				
(Ew) təgəəčin /tidəkun	(Ek1) təksə	(U) tokia	(Na) təwəksə	(J) tugi
(S) təčči	(Ek2) tuuxu	(Oc) tokso	(Ul) təwəksə	(Ma) tugi
(N) ---	(Na k) tuusu	(Hz) ---	(Ut) təwəksə	(Si) tuksu

In (Ew), -ks- should have become -s-, so the form given above does not conform to the predicted correspondence. However, the (Ek2) form does show the process of change as -ks- > -s- > -x-. Tsumagari (1992a) hears the form in (Ek1) as tuksu, but upon listening to the tape again, the present author found it sounded more like təksə.

Also, note that the Group II words have masculine vowels (see (20) oil for discussion).

(52)[155]あめ（雨） rain				
(Ew) ʊdʊm /tid	(Ek1) udun	(U) tigdə	(Na) tugdə	(J) aga
(S) ʊdan	(Ek2) tigdə	(Oc) tigdə	(Ul) tugdə	(Ma) aga
(N) tigdə	(Na k) təgǰi	(Hz) tigdə	(Ut) tugdə	(Si) aha

The forms represented by (Ew), (S) and (Ek1) show an intriguing distribution, as shown in (Ts.): (Ek) udun means 'windy rain', (S) and (Ew) seemly mean 'rain', (Oc) udu(n) means 'summer rain', and (Ut) udala actually means 'frog'.

Cognates with (Ek2) tigdə are, according to (Ts.), not found in Group IV, but distributed widely across Groups I, II and III. However, in Group I the usage is rather limited: (S) uses it only in the verb form 'to rain', while in (Ew) it means 'bad weather, rainy day'.

The forms found in Group IV are, according to (Ts.), limited to that Group alone. The (lit.Mo) aɣar 'atmosphere, air' is given there for reference.

(53)[157]そら（空） sky				
(Ew) ňaaňın	(Ek1) naŋna	(U) ňaŋňa	(Na) boa	(J) abka
(S) bokkon	(Ek2) buga	(Oc) bua	(Ul) baa	(Ma) abka
(N) buga	(Na k) ---	(Hz) baa	(Ut) boo	(Si) afqaa

According to (Ts.), the cognates of (Ew) ňaanın are found in (Ek), (Ew), (N), (Oc), (U), (Ut) and (Ma), and they all mean 'sky'.

(S) is from Mongolian.

The word forms represented by (Ek2) buga are, according to (Ts.), found in all Tungus languages. In all languages this word has a wide range of meanings: 'the wide earth, sky, weather, the universe, god'. (Ew) and (Ma) do not have the meaning of 'sky'. The meanings in (Ma) lean more toward the concept of 'place'.

Concerning the words in Group IV, for example (Ma) abka, (Ts.) gives (lit.Mo) abaɣai 'an honourable father' for reference. He also treats (U) abuga 'father' as a cognate.

(54)[159]たいよう（太陽） sun				
(Ew) ňɵɵltun	(Ek1) sigun	(U) suu	(Na) siun	(J) ---
(S) sigun	(Ek2) siwun	(Oc) səu	(Ul) siun	(Ma) šun
(N) siun	(Na k) siwun	(Hz) siwun	(Ut) suun	(Si) sun

Concerning (Ew) ňɵɵltun, (Ts.) considers this a derivative of (Ew) ňɵɵ- 'to come out'. According to (Ts.), words with the same origin as ňɵɵ-, and with the same meaning of 'to come out' are found in all languages in Groups I, II and III, but derivatives with the meaning of 'sun' are only found in (Ew) and certain eastern dialects of (Ek), where one form is juultən (Specifically, these are the four eastern dialects of Ajan, Tottin, Urmi and Chumikan. The word also has the meaning of 'east' in these languages). Also, according to (Ts.), the meaning of 'to come out' in (Ek) juu-/ňuu- and (Oc) ňuu- refers to the rising of the sun as well.

The forms represented by (S) sigun are, according to (Ts.), found in all Tungus languages except for (Ew).

Although not given above, (Ek) has dilačaa 'sun', which is a rather

unique vocabulary item. According to (Ts.), its cognates are only found in (S) and (N).

(55)[160]つき（月） moon				
(Ew) bɪag	(Ek1) beega	(U) bia	(Na) bia	(J) bija
(S) beega	(Ek2) beega	(Oc) bia	(Ul) bɪa	(Ma) bija
(N) bɪaga	(Na k) bia	(Hz) bia	(Ut) bee	(Si) bia

(56)[162]ほし（星） star				
(Ew) ---	(Ek1) oosikta	(U) waikta	(Na) xosiakta	(J) ošixa
(S) oosɪtta	(Ek2) oxikta	(Oc) xosikta	(Ul) xosta	(Ma) usixa
(N) oosɪkta	(Na k) ofokta	(Hz) ušakta	(Ut) uňigəri/xosikta	(Si) usihaa

Due to mistakes in fieldwork, informant data on this item is not yet available, but (Ew) does have oosɪkat 'star'.

There is a word-initial x- in (Oc) xosikta, so this is most certainly a loanword from Group III.

(Ut) unigəri is, according to Ts., only found in (Ut), and Ikegami (1997) gives uňγr from Gilyak for reference. Also, (Ts.) gives (Ut) wasikta 'star'.

(57)[163]ひ（日） day				
(Ew) inəŋ	(Ek1) inəŋi	(U) inəŋi	(Na) ini	(J) inəŋi
(S) inigə	(Ek2) inəŋi	(Oc) inəŋu	(Ul) inəŋ	(Ma) inəŋi
(N) inəŋ	(Na k) inəŋi	(Hz) ini	(Ut) inəŋi	(Si) jinəŋə

Judging from (Ts.), it appears that this item is also found in all Tungus languages. According to (Ts.), the verb inə- 'to dawn' is found in (Ek), (Oc), (Na) and across Groups I, II and III, so this item is probably a derivation of the verb. (Ts.) also lists (Ek) inə- and (Na) ində- 'to live a day, to rest a day' under the same entry. However, considering the changes of -n- < *-nd- in Groups I and II, 'to dawn' and 'to live a day' must still be considered different in terms of origins, even if the two have merged into the same form today.

(58)[166]つき（月） month				
(Ew) atkıkan	(Ek1) beega	(U) bia	(Na) bia	(J) ---
(S) beega	(Ek2) beega	(Oc) bia	(Ul) bıa	(Ma) bija
(N) bıa	(Na k) bia	(Hz) bia	(Ut) bee	(Si) bia

Accoriding to (Ts.), (Ew) atkıkan exists only in (Ew). It also has the meaning of 'moon', but the origins are obscure.

(59)[167]とし（年） year				
(Ew) anŋan	(Ek1) annañii	(U) aŋani	(Na) aiŋani (Na l) angani	(J) anija
(S) anee	(Ek2) anŋani	(Oc) aŋani	(Ul) aña	(Ma) anija
(N) anŋan	(Na k) aiŋani	(Hz) arni	(Ut) anani	(Si) ani

In (Hz) phrases such as əi arŋa 'this year', arŋa can be considered an older form still extant. Kazama (1996a) discusses how this phrase does indeed preserve the primitive form *-rŋ-.

(60)[168]あさ（朝） morning				
(Ew) baǰıkar	(Ek1) timaačina	(U) timadila	(Na) čimii	(J) ərtə
(S) əddə	(Ek2) təgəltənə	(Oc) timai	(Ul) tımaı	(Ma) ərdə
(N) baǰık	(Na k) ərdə	(Hz) tumaki	(Ut) čimai	(Si) ərdəə

According to (Ts.), cognates with (Ew) baǰıkur are found in all Group I languages except (S), and in Group II languages as well (however in (Ek) they are only found in the eastern dialects). The meaning is 'morning, early morning', and in (U) it means 'very soon after dawn'.

Regarding (S) əddə, (Ts.) gives the following information: (Ek) (<Yakut, abbreviated as (Yak) henceforth); (S) (<(Ma)<(Mo)); (Ew)(<(Yak)); (Na) (<(Ma); (Ma)(<(Mo)). In terms of meaning, in (Ek), (S), and (Ew) it is 'early in the morning', in (Na), (Ma) and (Mo) it is 'early'.

Regarding (Ek2) təgəltənə, (Ts.) considers this a derived word from (Ek) təgə- 'to sit'. This verb is of course in all Tungus languages, but (Ts.) also clearly states it has the meaning of 'to wake up' in languages other than (S) and Group IV. However, (Ek) is only case where a derivative meaning 'morning' is formed from this word.

The cognates of word forms like the (Ek1) timaačina are found in great numbers in entry (64) 'tomorrow' below. According to (Ts.), in (S) and (Ew) the words only mean 'tomorrow'; in (N), (Oc) and (Ma) they have both meanings; in Group III there appear to be formal differences such as *timaki 'morning' and *timana 'tomorrow'. Also, Avrorin i Levedeva (1978) gives the (Oc) form as timaki.

The form of (U) appears to have the locative form (-dila) normally attached to words ending with consonants. This requires further investigation.

(61)[169]ひるま（昼間） afternoon				
(Ew) inəŋ	(Ek1) inəŋi	(U) inəŋi	(Na) ini	(J) inəŋi gəli
(S) inigə	(Ek2) inəŋi	(Oc) inəŋu	(Ul) inəŋi	(Ma) inəŋi
(N) inəŋ dolmm	(Na k) inəŋi	(Hz) ini tokon	(Ut) inəŋi	(Si) jinəŋə

(62)[171]よる（夜） night				
(Ew) dolbɯ	(Ek1) dolbo	(U) dogbo	(Na) dolbo	(J) dorowo
(S) dobbo	(Ek2) dolbo /axiltana	(Oc) dobbo	(Ul) dolbo	(Ma) dobori
(N) dolbo	(Na k) dolbo	(Hz) siksərin	(Ut) dolbo	(Si) diovurə

The -ri at the end of (Ma) words probably resulted form combination with ərin 'hour, time', and is seen in such words as ňəŋňəri 'spring', ǰuwari 'summer', bolori 'autunm', tuwəri 'winter' and siksəri 'evening'.

(63)[172]きのう（昨日） yesterday				
(Ew) tiiniw	(Ek1) tiiniwə	(U) tiinəŋi	(Na) čisəəniə	(J) ---
(S) tiinugu	(Ek2) tiinəwə	(Oc) tinəu	(Ul) tisəə	(Ma) siksə
(N) tiinuj	(Na k) siksə	(Hz) siksə	(Ut) čeennee	(Si) čikəsəə

The forms in (Ew), (S), (N), (Ek1), (Ek2) , (U) and (Oc) above are, according to (Ts.), found in Groups I, II and (Ut) in the form of čiňəə/činə. (Ts.) creates a different entry for cognates of (Na) čisəəniə, and views this form as exclusive to Group III.

In other words, these two forms are in complementary distribution. Furthermore, in Groups I and II the structure is *ti- + inəŋu 'day', while in Group III it is čisə- (< tisə-) + inəŋu. It would be convenient to postulate that a verb *ti- 'to pass' existed in the past, and this awaits further research.

In (Ts.), siksə is given in all languages in Group I except (S), and also in Groups II and III; the meaning is always 'evening'. For some reason (Ma) siksə is not given at all. On the other hand Zhang et al. (1989) and Haneda (1937) give (Hz) siksərin 'evening' and (Ma) siksəri 'evening'. In these languages, this form takes the place of siksə found in other languages. Hence, 'evening' and 'yesterday' are shown by words of the same origin, and this parallels the phenomenon of 'morning' and 'evening' having the same origins, as shown above.

(64)[173]あす（明日） tomorrow				
(Ew) tɪmɪnaak	(Ek1) timii	(U) timaana	(Na) čimana	(J) ---
(S) tɪmaasɪn	(Ek2) timi	(Oc) timia	(Ul) tɪmana	(Ma) čimari
(N) tɪmanna	(Na k) timaki	(Hz) tumaki	(Ut) čimanaa	(Si) čimarə

See entry (60) morning.

(65)[174]きょう（今日） today				
(Ew) ərəw inəŋu	(Ek1) əsi inəŋi	(U) əinəŋi	(Na) əiňiə	(J) ---
(S) əri inigə	(Ek2) əxitkən	(Oc) əinəŋu	(Ul) əinəŋi	(Ma) ənəŋi
(N) əinəŋdu	(Na k) əinəŋi	(Hz) əini	(Ut) əsinəŋi	(Si) ənəŋə

In (Ew) the demonstrative pronoun is a modifier and takes an accusative form, agreeing with the noun.

In (Ew) and (S), ərə and əri 'this' appear explicitly, but in (Ek1) and (Ut) əsii/əsi 'now' is given. Also, (Ek2) əxitkən is from *əsitkən, and for the (U) form Shnejder (1936) also gives ə(h)inəŋi, so one can see the older form was *əsinəŋi. In (Na) it is əi 'this', əsi 'now', giving a construction like 'this' + 'day'. Hence it is hard to determine just which one is the original.

According to (Ts.), the form əxitkən seen in (Ek2) means 'just now' in most dialects of (Ek) . In the Tokkin dialect it is given as əxiitkən inəŋ 'today'.

(66)[175]いま（今） now				
(Ew) tiək	(Ek1) əsi	(U) əi	(Na) əsi	(J) təə
(S) əsi	(Ek2) ərdəət	(Oc) əsi	(Ul) əsi	(Ma) tə
(N) əsi	(Na k) əsi	(Hz) əsi	(Ut) əsi	(Si) təə

Regarding the forms seen in (Ew) and Group IV, (Ts.) lists them under the same entry. He also gives (Ek) tikin and (Na) tikin/ tixin, all meaning 'now'.

Regarding the form in (Ek2), (Ts.) analyses it as ər-dəət, where -dəət is a clitic and appears with the meaning of 'now' in many eastern dialects of (Ek) and the northern Baikal dialects.

According to (Ts.), the cognates of words like (Ek1) əsi are found in all Tungus languages except for (J). However, she does not give the əsi form for (Ew), only a derivative. Likewise, in (Ma) only the meanings 'certain, correct' are given.

(67)[176]いつ（何時） when				
(Ew) ook /adɪ čaas	(Ek1) aali	(U) ali	(Na) xaali	(J) ---
(S) ooxɪdʊ	(Ek2) ookin	(Oc) ali	(Ul) xaalɪ	(Ma) ataŋi
(N) ooxɪn	(Na k) ali	(Hz) ---	(Ut) xaali	(Si) atiŋə

Concerning (S) ooxɪdʊ, (Ts.) gives its cognates so that they appear only in (S), (Ek), (Ew) (ook) and (N) (ooxin). In other words, this is a Group I distribution. The meaning is 'when' in all cases. On the other hand, according to (Ts.), cognates with (Ek1) aali are found in (E2), but only in the Kolyma-Omolon dialect and Okhotsk dialect: aalik meaning 'some time, always, suddenly, straightway'. Cognates are not found in (S) or in Group IV. In (N) cognates are only found in the downstream dialects, and in (Ek) they are only found in the eastern and northern dialects.

Concerning the (Ma) form given above, (Ts.) gives xai 'what' in (Na) and aj 'what' also in (Ma) as cognates.

(68)[178]とき (時) hour, time				
(Ew) ---	(Ek1) adii čaas	(U) ---	(Na) xado čaasa	(J) ---
(S) ərin	(Ek2) solo	(Oc) ---	(Ul) ərun	(Ma) ərin
(N) ---	(Na k) ---	(Hz) čaas	(Ut) ---	(Si) ərin

In (S) the word (S) saga was gained from another informant, but this is a loan from Mongolian. The (Ek1) form is from Russian.

The cognates of (Ek2) are, according to (Ts.), found in (Ek), (Ew), (S), (Ut), (Na) and (Ma). The (Ek) and (Ew) forms are presumed to be from (Yak). Apparently, the meaning is mostly 'free time, time spent at leisure'. (Ts.) also gives (lit.Mo) sula 'empty, free' as reference. The word probably entered from (Mo) into (Ma), and then spread to (Na) and (Ut).

Cognates with (Ma) ərin are found in all Tungus languages except for (Ek). The meaning is always 'time', but the distribution of vowels is rather unusual: (N) əjun, (Oc) əruu(n), (Ul) əru(n) and (Ut) əri(n)/əru(n). Normally i in Groups I and II should correspond to u in Group III (see Ikegami 1989). In (U) the form has changed from r to l: əli(n) (see also entry (42) 'field, acres, rice-field'.

(69)[179]いち (一) one				
(Ew) əmuɯn	(Ek1) umun	(U) omo	(Na) əmun	(J) əmu
(S) əmun	(Ek2) umukən	(Oc) omo	(Ul) əmun	(Ma) əmkə/əmkən
(N) əmun	(Na k) əmun	(Hz) əmkən	(Ut) geeda	(Si) əmkən

The correspondences in the numbers from 'one' to 'ten' are given in detail in Ikegami (1989 p.1079).

(70)[180]に (二) two				
(Ew) ǰəər	(Ek1) zuur	(U) ǰuu	(Na) ǰuər	(J) ǰuwə
(S) ǰuur	(Ek2) ǰuur	(Oc) ǰuu	(Ul) ǰəər	(Ma) ǰuwə
(N) ǰuu	(Na k) ǰuur	(Hz) ǰuru	(Ut) dəə	(Si) ǰuu

(71)[181]さん（三） three				
(Ew) ɪlɯn	(Ek1) ilan	(U) ilaa	(Na) ilaan	(J) ilan
(S) ɪlan	(Ek2) ilan	(Oc) ilaa	(Ul) ɪlaan	(Ma) ilan
(N) ɪlan	(Na k) ilan	(Hz) ilan	(Ut) ilaa	(Si) jilan

(72)[182]し（四） four				
(Ew) digən	(Ek1) digin	(U) dii	(Na) duin	(J) duwin
(S) digin	(Ek2) digin	(Oc) dii	(Ul) duin	(Ma) duin
(N) digin	(Na k) digin	(Hz) duin	(Ut) ǰiin	(Si) dujin

(73)[183]ご（五） five				
(Ew) tʊnŋan	(Ek1) tunna	(U) tuŋa	(Na) toiŋga	(J) šuñja
(S) tʊŋa	(Ek2) tunŋa	(Oc) tuŋa	(Ul) tʊñja	(Ma) suñja
(N) tʊnŋa	(Na k) toinŋa	(Hz) sunza	(Ut) tunda	(Si) suñjaa

(74)[184]ろく（六） six				
(Ew) ŭuŋən	(Ek1) nuŋun	(U) ŭuŋu	(Na) ŭuŋgun	(J) niŋu
(S) niŋun	(Ek2) ŭuŋun	(Oc) ŭuŋu	(Ul) ŭuŋgun	(Ma) niŋun
(N) ŭuŋən	(Na k) ŭuŋgun	(Hz) niun	(Ut) nuŋu	(Si) niŋun

(75)[185]しち（七） seven				
(Ew) nadan	(Ek1) nadan	(U) nada	(Na) nadan	(J) nadan
(S) nadan	(Ek2) nadan	(Oc) nada	(Ul) nadan	(Ma) nadan
(N) nadan	(Na k) nadan	(Hz) nadan	(Ut) nada	(Si) nadən

(76)[186]はち（八）				
(Ew) ǰapkan	(Ek1) zapkun	(U) ǰakpu	(Na) ǰakpon	(J) ǰakun
(S) ǰaxun	(Ek2) ǰapkun	(Oc) ǰappu	(Ul) ǰakpʊn	(Ma) ǰakūn
(N) ǰapkʊn	(Na k) ǰapkun	(Hz) zakun	(Ut) ǰakpu	(Si) ǰaqun

(77)[187]く (九) nine				
(Ew) ujun	(Ek1) jəgin	(U) jəi	(Na) xujun	(J) ujun
(S) jəgin	(Ek2) jəgin	(Oc) jəgin	(Ul) xujun	(Ma) ujun
(N) jəjin	(Na k) xujun	(Hz) ujun	(Ut) xuju	(Si) ujin

(Ts.) treats the above forms as one entry, but forms such as (Ew) ujun and the (S) jəgin type forms 'can probably be traced back to different primitive forms, and are not necessarily cognates', states Ikegami (1989).

Here the informant of (Oc) avoided using xuju, due to the bad meaning of Russian word similar to it, and used the word of (U) he knew.

Groups I, II and IV can probably be thought of as Group III forms with the word-initial x- dropped. Hence, (Oc) xuju is a line from a Group III language. Also, in (Oc) there are forms such as xujuktə (<*xujultə) 'nine days' and xuju(n) muda 'nine times' which are also forms used in Group III. These forms were probably borrowed all at once from Group III.

Hence, there is a possibility that a cognate of jəgin was once used in (Oc). However, since (Ew) has ujun, the two forms are not neatly divided between Groups I/ II and Groups III/ IV. The question of why such a distribution emerged is a topic for future research.

(78)[188]じゅう (十) ten				
(Ew) mɪan	(Ek1) zaan	(U) ǰaa	(Na) ǰoan	(J) ǰuwa
(S) ǰaan	(Ek2) ǰaan	(Oc) ǰaa	(Ul) ǰuan	(Ma) ǰuwan
(N) ǰaan	(Na k) ǰaan	(Hz) ǰuan	(Ut) ǰoon	(Si) ǰuan

(Ts.) creates a different entry for (Ew) mian.

(79)[191]いくら how much				
(Ew) ---	(Ek1) adiiči	(U) adi	(Na) xado	(J) ---
(S) ooxɪɪ	(Ek2) iirbaan	(Oc) ---	(Ul) ---	(Ma) ---
(N) adɪɪ tamanɪn	(Na k) ---	(Hz) ookii ǰixa /adii ǰixa	(Ut) xasu-kka	(Si) jasqə

According to (Ts.), cognates with (S) ooxɪɪ are found in (Ek), (S), (Ew), (U) and (Na), but what some of what (Ts.) recognises as cognates— in

(U) 'olu 'olu 'many more times' and in (Na) okukaŋa 'not very big' (Kur-Urmi dialect only)— seem very far removed from the others in terms of both meaning and form. Hence it is probably better to consider these as special words in Group I (although these forms do not appear in (N)).

In (Ts.), (Ek2) iirbaan is given as (Ek) iir 'what kind of, which, wherein', and the ii- component for forming interrogatives is shown to widespread in Groups I and II, but not used in Groups III and IV.

Within Group III, (Na) xado and (Ut) xasu are in a complementary relationship, and the question is which form (Ul) takes. (Ts.) gives both forms, but with careful research we see that in Petrova (1935), Sunik (1985) and Angina (1993) only xasu(n) is given (n appears at the word-final position in this word. Ikegami 1997 also gives the accusative form xasumba. Only Schmidt (1923) gives (Ul) xadu 'how many' and xadulta 'how many days', and (Ts.) probably relied on this data. It is of course possible that xadu was being used when Schmidt conducted his survey, but it is likely that the error arose when the survey was taken from a (Na)-speaking informant.

According to (Ts.), cognates with (Ut) xasu(n) are found in (Ek), (Ew) and (N) as asun 'how many, how much (used with the same types of things, distance and time)'. In (S) it is found only as asxan 'a little', and in (Ul) and (Ut) it is found as xasu(n) 'how many'. (Ts.) also compares these with (Na) xas 'once more', but this more likely originated from a different word (<xais <xaisi < Chinese hai²shi⁴ 还是). Hence one can say that the cognates do not exist in Groups II, IV and (Na).

(80)[192]いくつ how many				
(Ew) adɪ	(Ek1) adii	(U) adii	(Na) xado	(J) ---
(S) adɪɪ	(Ek2) adii	(Oc) adii	(Ul) xasu	(Ma) udu
(N) adɪɪ	(Na k) adii	(Hz) adii	(Ut) xasu	(Si) udu

(Ts.) considers all of these correspondences, except for (Ul) and (Ut) above.

(81)[194]ぜんぶ（全部） altogether, all, whole				
(Ew) čəələwən	(Ek1) biəs	(U) təu/təuməni	(Na) xəm	(J) gəmur
(S) xokko	(Ek2) weexen	(Oc) gaam	(Ul) čʊpal	(Ma) gəmu/wačixijamə
(N) čʊpal	(Na k) čuŋnu	(Hz) saku	(Ut) gəəmǰi	(Si) gumə

(Ew) čəələwən is the accusative form, and in Novikova (1980) čəələn is given. This is also given in Tsincius i Rishes (1952), but for some reason does not appear in (Ts.).

According to (Ts.), the cognates with (S) xokko, of which (Ek) kuuktə is a representative, are found in all Tungus languages except (Oc). The meaning is 'altogether' in every case, but the rather different form of (S) casts doubt on its correspondence.

The (Ek1) form is from Russian, but the origin of the (Ek2) form is unknown.

(Hz) xiaok is given in Kazama (1996b) as a word shared by languages in the 'middle Amur River region', a language region consisting of (Hz), (Na), the Kur-Urmi dialect and the Bikin dialect. (Na) siak 'until' is also a possible cognate. Neither of these words is given in (Ts.). Note that the Gilyak form is sɯk/sik.

Concerning the (U) form təu, təuməni is the accusative form, so təu has an n at the word-final position. Furthermore, Shnejder (1936) gives tə(h)u as 'the second change (word-final n)' so the primitive form is probably təsun. According to (Ts.), the only cognate with təu is found in (Na) as təxu 'the whole thing'.

We will tentatively propose that (Oc) gaam and (Ut) gəəmǰi are cognate with each other. There is also the possibility that the (Ma), (Si) and (J) forms, as well as (Na) xəm are cognate. However, (Ts.) creates a separate entry only for (Oc) gaam and (Ma) gaǹǰi 'all', and another separate entry only for (Ma) and (J) forms. According to (Ts.), cognates with (Na) xəm come from (lit.Mo) xamtu 'together'. The forms in Group I come form (Yak), and the forms in Group II come from Group III. (Na) kamor 'together' is said to have a similar origin.

From the present author's experience, in (Ul) and (N) along the lower regions of the Amur River, čupal 'all' is a very commonly used word. According to (Ts.), this is found in almost the same form across (N), (Ut), (Ul) and (Oc). Since there is a l at word-final position, it is probable that the forms in (N) and (Oc) are from Group III. However, although given in (Oc), this word is not found in Avrorin i Levedeva (1978). Nor is čopal found in the text of Kazama (1996a), even though gaam 'all' appears 19 times in this text (drawn from the speech of three informants combined). In (Ut), according to Ikegami (1994), čipaali seems to be used in the northern dialect, and čipal/čuppal is also given in Ikegami (1997). (Ts.) regards this čopal and čop '(disappear) into oblivion' as cognates. This form is found in (Ek), (N), (Oc), (U), (Ul), (Ut) and (Na), and even in (Ew) there exists a form that is probably a derivative of this word.

Concerning (Ma) wačixijamə, (Ts.) analyses this as being from the verb waǰi- 'to bring to an end'. The cognates of this verb are forms such as (Ek) od- and (Na) xoǰi-. These are found in all Tungus languages, except for (S) and (N).

(82)[197]ねんれい (年齢) age				
(Ew) anŋanaŋan	(Ek1) nasun	(U) səə	(Na) səə	(J) səə
(S) nasun	(Ek2) baar	(Oc) anŋani	(Ul) aňa	(Ma) səgə
(N) anŋanın	(Na k) səə	(Hz) səə	(Ut) anaňi	(Si) səə

According to (Ts.), (S) nasun is from (lit.Mo).

(Ek2) is, according to (Ts.), a form unique to (Ek2), originating in the (lit.Mo) word baraGan 'appearance'.

The form in (Ut) is the same as the (Ut) form under (59) 'year'; this is a derivative of the (Ew) anŋan.

Forms such as the one in (U) have cognates, according to (Ts.), in (Oc), (U), (Ul), (Na) and (Ma), and have a 'lower Amur River region' distribution. It would be reasonable to think of this as a form that originates in (Ma).

(83)[199]おっと（夫） husband				
(Ew) ətikən	(Ek1) ətirkəən	(U) mafa	(Na) əǰi	(J) əigə
(S) ətəxən	(Ek2) ədi	(Oc) ədi	(Ul) ədi	(Ma) əigən
(N) ətixən	(Na k) ədi	(Hz) ədi	(Ut) əǰi	(Si) ixən

According to (Ts.), cognate forms with (Ew), (S), (N) and (Ek1) mean 'old man, bear' in the four languages in Group I. It also appears in other languages, such as (U) əkčə 'second cousin', (Na) əksən 'uncle on the father's side', (Ma) əskən 'uncle on the father's side'. (Ts.) also gives (lit.Mo) əčigə 'father' as reference, but as is seen in (Ek1) adirkaan in the following entry (84), in Tungus languages it comes with a word containing masculine vowels of vowel harmony. Hence, there is some doubt about the correspondence with (lit.Mo).

On the other hand, according to (Ts.), the cognates with (U) mafa are found in Groups II and III (where the meaning is 'old man, bear') and (Ma) (mafa; 'ancestors beyond one's father, ancestors in general'), but not in Group I.

There is also (Oc) ada, and it is a word used by husbands and wives to call each other.

According to (Ts.), forms that have direct correspondences with the (Hz), (Oc), (Na), (Ul) and (Ut) forms are found in all Tungus languages. In Group III and (Ek) the words only mean 'father'. In (Ew), (N) and (Oc) the words mean 'husband, male', and in (S) the words mean 'master'.

(Ma) əigən is, according to (Ts.), unique to (Ma) and (J).

(84)[200]つま（妻） wife				
(Ew) atɪkan	(Ek1) atirkaan	(U) mamasa	(Na) asi	(J) sarigan
(S) asɪ	(Ek2) axi	(Oc) ada	(Ul) asɪ	(Ma) sargan/xəxə
(N) asɪ	(Na k) asi	(Hz) asa	(Ut) asi	(Si) xəxə

According to (Ts.), the forms seen in (Ew) and (Ek1) mean 'old woman'

in the four languages of Group I, 'woman, wife' in the (U) atiga, 'husband of the mother' in the (Oc) ataŋa and (Ut) ati, and finally 'female (fish)' in the (Ma) atu. In (Na) the word for spider is 'ataka mamani', and mama means 'grandmother/ old woman' in (Na). It is not known why this mama is needed in the word. According to (Ts.), the form for 'spider' in Groups I, II and (Ut) is atakii and its related forms. (Ts.) creates a new entry for these forms. There is perhaps a relationship with the word for 'old woman'.

According to (Ts.), (U) mamasa and its cognates in Groups II and III mean 'grandmother, wife', while (S) maama means 'a title for calling old people politely', and (Ma) mama means 'grandmother, old lady (honorific term)'. The fact that it is not found in Group I apart from (S) is parallel to (83) (U) mafa 'husband'.

According to (Ts.), the cognates of (Oc) asa in Groups I, III and (Oc) in Group II have the meaning of 'woman, wife' (however (Ul) only has the meaning of 'wife'). The cognate in (U) a(h)anta of Group II only means 'woman'.

(Ts.) also says that the Group IV words, exemplified by (Ma) sargan, are only found in (Ma) and (J).

According to (Ts.), the cognates of (Ma) xəxə, are xəxə 'wife' in (S) and xəxə 'circular button hole' in (N), (Ul) and (Na). However, it is probable that the (S) form comes from (Ma), while forms in (N) and the other two languages have other origins.

(85)[202]ちち (父) father, papa				
(Ew) amum	(Ek1) amin	(U) abu	(Na) amaa	(J) amin
(S) abaa/amɪ	(Ek2) ami	(Oc) ami	(Ul) amaa	(Ma) ama
(N) amɪ-/amaa	(Na k) ami/amaa	(Hz) ami	(Ut) amma	(Si) aməə

We have already touched upon (U) abuga under entry number (53) for 'sky'. With kinship terms there is the problem of reference forms and address forms where they differ; due to the limited survey time, the forms given here are a mix between the two forms. Please refer to Kazama (1995) for more on kinship terminology.

(86)[203]はは（母） mother, mama				
(Ew) ənin	(Ek1) ənə/əňin-	(U) əniŋə	(Na) əňəə	(J) ənijən
(S) əňəə/əməə	(Ek2) əňin	(Oc) əňəə	(Ul) əni/əňəə	(Ma) ənijə
(N) əni-/əňəə	(Na k) əňəə	(Hz) əni	(Ut) ənnə	(Si) ənii

The exact identity of the -ŋə in (U) əniŋə is unknown. However, with the extra syllable it corresponds well with abuga 'father' in terms of the number of syllables.

(87)[206]むすこ（息子） son				
(Ew) ňarʊd	(Ek1) omolgi	(U) baatama sitə	(Na) xusə piktə	(J) ---
(S) ukkəəxən	(Ek2) xutə	(Oc) xitə	(Ul) xusə piktə	(Ma) ǰui/xaxa ǰui
(N) nɪjajɪ xutə	(Na k) xusə xutə	(Hz) xaxa sitə	(Ut) puttə	(Si) hahəǰi

According to (Ts.), the cognates with (Ew) ňarʊd have the following meanings: in the four languages of Group I they mean 'young man', as exemplified by (Ek) nirawii. In Groups II and III the forms are nari, nai, nii and niinta, meaning 'person' (in (Oc), (U) and (Ut) there is also the meaning of 'man'). In Group IV, (Ma) ňalma only has the meaning of 'person', but (J) has 'person, man'.

Cognates with (S) ukkəəxən, according to (Ts.) are firstly (Ek) xurkəəkəən and (Ew) xurkəən, both meaning 'minor, youth'. (S) is also said to include the same meaning. Other cognates given include (Ut) purigə etc., and the (Na) Bikin dialect form furi, meaning 'young'.

On the other hand, (Ts.) creates a new entry for plurals of the word 'child' (such as (Ek) xuril, (Na) puril and the (Na) Golin dialect form puri/furi 'family'). This word should really be analysed as cognate with the word for 'young' listed above. In other words, the irregular form for the plural of child is probably caused by suppletion. The correspondences between the singular form is also less than regular.

For a discussion on (Ek1) omolgi, see Kazama (1995).

The baata in (U) baatama sitə is 'boy', thus giving 'child who is a boy'. Regarding this baata, (Ts.) compares it with (lit.Mo) bagatur 'hero, brave'. This word has entered many Tungus languages with the same meaning of 'hero, brave'. (U) is the only language with the meaning of 'boy'. Hence there is a need to examine whether this correspondence is really what it seems.

According to (Ts.), the forms in Group IV — exemplified by (Ma) ǰui — are only found in (Ma) and (J). She also gives the Chinese zi^{3} 子 'child' for reference.

(88)[207]むすめ（娘） daughter				
(Ew) xʊnaaǰ	(Ek1) unaaǰi	(U) ǎǰigama sitə	(Na) əktə piktə	(J) ---
(S) ʊnaaǰɪ	(Ek2) xunaaǰi	(Oc) asam sitə	(Ul) əəktə piktə	(Ma) sargan ǰui
(N) asatkan xutə	(Na k) asi xutə	(Hz) asa sitə	(Ut) əəktə puttə	(Si) sahəŋǰi

For discussion on forms such as (Ew) xʊnaaǰ, see Kazama (1995).

In (U), both ǎǰigama sitə and ǎǰiga mean 'girl', thus giving 'a child who is a girl'. Here the form of ǎǰiga is also odd. (Ts.) compares this with (Ek) asii, but a systematic correspondence cannot be established. According to (Ts.), cognates with sargan are only found in (Ma) and (J).

(89)[211]あに（兄） elder brother				
(Ew) ak-	(Ek1) akin	(U) agaa	(Na) agaa	(J) axun
(S) axaa/axɪn	(Ek2) akii/akin-	(Oc) akaa	(Ul) agaa	(Ma) agə
(N) axɪ-	(Na k) agaa	(Hz) aga	(Ut) axaa/aaŋ-ni	(Si) agəə

(90)[212]あね（姉） elder sister				
(Ew) ək-	(Ek1) əkəə/əkin	(U) əxəə	(Na) əgəə	(J) əjun
(S) adaa/əxin	(Ek2) əki	(Oc) əkəə	(Ul) əgəə	(Ma) gəgə
(N) əxi-	(Na k) əgəə	(Hz) əkin	(Ut) əgəə/əigə-ňi	(Si) gəxəə

According to (Ts.), the cognates for (Ma) gəgə are only found in (Na) and (Ma) , and the form in (Na) probably originates in (Ma). If one takes into account the parallelism with the form for 'elder brother', then one can conclude that the original forms were probably forms like (Ek1) əkin. gəgə is a reduplicated form, suggesting some sort of influence from Chinese, but in this case corresponding Chinese form does not exist. Instead, in a rare occurrence, an (Ma) has actually entered Chinese in the form of gege 格格 'a daughter of royal birth'. The meaning of (Ma) gəgə is, according to Haneda (1937), 'a daughter of one's father's brother who is older than oneself, or a female relative of the same generation who is older than oneself'.

(91)[213]おとうと（弟） younger brother				
(Ew) nəө-	(Ek1) nəkun	(U) nəŋu-	(Na) nəku	(J) dəgun
(S) əkkəəxən nəxun	(Ek2) nəkun	(Oc) nəŋu-	(Ul) nəu(-dumə)	(Ma) dəo
(N) nəxun	(Na k) nəku	(Hz) nəu	(Ut) nəu	(Si) duu

According to (Ts.), (Ma) dəo has correspondents not only in Group IV, but also in (S) (<(Mo)) and (Na) (<(Ma)<(Mo)). Apparently these come from the (lit.Mo) degun.

(92)[213]いもうと（妹） younger sister				
(Ew) nəө-	(Ek1) nəkun	(U) ǎjigama nəŋu-	(Na) nuuči əgəə	(J) ňijoxun
(S) ʊnaǎjı nəxun	(Ek2) axatkan nəxun	(Oc) nəŋu-	(Ul) nəu(-dumə)	(Ma) non
(N) naxatıkkan nəxun	(Na k) ---	(Hz) nəu-/xunǎji	(Ut) nəu	(Si) nun

(93)[218]ともだち（友達） friend, mate				
(Ew) gıa/ǰaal	(Ek1) girki	(U) anda	(Na) anda	(J) nəkur
(S) axaa nəxun	(Ek2) druk	(Oc) ǰaa	(Ul) anda	(Ma) guču
(N) ǰaal	(Na k) bari	(Hz) ---	(Ut) andail/anda	(Si) guču

According to (Ts.), words with the same origins as (Ew) gıa share the meaning of 'another, the second, companion' among all the languages in Group I ((S) only has the meaning of 'another'). (Ts.) also gives (U) geæ 'another', (Na) giagda and (Ul) geegda(n), all meaning 'unmarried'. Furthermore, she compares these with the three languages in Group III and (Oc) 'oar' (and with (Na) giol etc.). Yet one does not find the results conclusive. According to Onenko (1980), (Na) giol means 'an oar with only one end for rowing', so there is at least a meaning connection.

Apparently (S) axaa nəxun is ax düü 'brothers, compatriots' in (Mo)

(Ozawa 1983), so this is probably a loan translation.

According to (Ts.), the cognates of (Ek1) girki are found in the four languages of Group I and (Na) girki. This (Na) form is probably a loan from (Ek) itself, as it contains -rk-. Group I languages apart from (S) have the meaning of 'companion, assistant'. (Ek) and (Ew) have the additional meaning of 'wife'. In (S), the word is used in the phrase 'to take a wife'. (Na) girki apparently means 'a person with a pointy head, or an idol shaped as a beast, or a sacred spirit that helps shamans'.

The (Ek2) is from Russian (drug).

According to (Ts.), the word anda (e.g. (U) anda) is found in various forms in all Tungus languages except (Ew) and (S). This is apparently a loan from (lit.Mo), where anda means 'companion'. This word was probably borrowed into Groups I and II after the -n- <*-nd- change had occurred. Regarding (Ut) andail, Ikegami (1997) says this 'can be used for just one person', while (Ts.) gives it as a plural form, citing the singular as anda.

The cognates of (Ma) guču include, according to (Ts.), (S) gusu 'companion', (Oc) gočo 'uncle', (Ul) goču 'relatives on the father's side', (Na) gučəkə 'mother's younger brother', and (J) guču 'bodyguard'.

According to (Ts.), there is only cognate for (J) nəkur: the (Ma) word nəku, which means 'girlfriends of women'. (Ts.) also gives (lit.Mo) nökür 'husband, close friend, comrade, companion' as reference.

(94)[224]おとこ（男） male				
(Ew) bəj	(Ek1) nirawii bəjə	(U) niinta	(Na) xusə	(J) xaxai
(S) nɪrʊg bəj	(Ek2) bəjə	(Oc) xusə nii	(Ul) xusə nɪɪ	(Ma) xaxa
(N) niijəbə	(Na k) nirai bəjə /xaxa	(Hz) xaxa nio	(Ut) xusə /xusənnee	(Si) hahə

For a discussion on the (S) and (Ek1) forms, see (87) 'son'.

According to (Ts.), cognates with (Na) xusə mean 'hunter (in folktales)' in three Group I languages: (Ek) (isəgdin), (Ew) and (N). In (U) it also means a character in folktales: 'young man'. In the three languages of Group III it is xusə 'male'. According to (Ts.), (Oc) xusə is from (Ul), it does have the same form as Group III and preserves the word-initial x-, so there

is little doubt that this is indeed a loanword.

The forms in Group IV (e.g. (Ma) xaxa) have spread, according to (Ts.), to (Oc), where the meaning is 'a hero's name', and to (Ut) and (Na) where it means 'valiant'.

(95)[225]おんな（女） female				
(Ew) asɪ	(Ek1) asii bəj	(U) aanta	(Na) əktə	(J) xəxəə nijarma
(S) axɪɪ bəj	(Ek2) axi	(Oc) asa nii	(Ul) əəktə nɪɪ	(Ma) xəxə
(N) asɪbə	(Na k) asi bəjə	(Hz) asan nio	(Ut) əəktə /əəktənnee	(Si) xəxə

As shown by the fact that Shnejder (1936) gives the form a(h)anta for (U) aanta, the form is a result of changes from *asa·nta, and is the counterpart of nii·nta. The forms seen in Group III (e.g. (Na) əktə) are compared with (Ek) əkiin 'older sister' in (Ts.)'s work, but there is much room for further investigation. əktə/əəktə 'female' is a form unique to Group III, and is so noted, even in (Ts.).

For (Ma) xəxə see (84) 'wife'.

(96)[226]ひと（人） person, man, one				
(Ew) bəj	(Ek1) bəjə	(U) nii	(Na) nai	(J) ---
(S) bəj	(Ek2) bəjə	(Oc) nia	(Ul) nɪɪ	(Ma) nijalma
(N) bəjə	(Na k) bəjə	(Hz) nio	(Ut) nari	(Si) nanə

See (16) 'body' and (87) 'son'.

(97)[227]わたし（私） I				
(Ew) bii	(Ek1) bii	(U) bii	(Na) mii	(J) miňi (gen.)
(S) bii	(Ek2) bii	(Oc) bii	(Ul) bii	(Ma) bi
(N) bii	(Na k) mii	(Hz) bii	(Ut) bii	(Si) bii

(98)[228]あなた you				
(Ew) xii	(Ek1) sii	(U) sii	(Na) sii	(J) ---
(S) sii	(Ek2) sii	(Oc) sii	(Ul) sii	(Ma) si
(N) sii	(Na k) sii	(Hz) sii	(Ut) sii	(Si) sii

(99)[229]かれ（彼） he (100)[230]かのじょ（彼女） she				
(Ew) noŋɯn	(Ek1) nugan	(U) uti nii	(Na) ňoani	(J) ---
(S) tari	(Ek2) tawar	(Oc) ---	(Ul) naan	(Ma) i
(N) nʊŋan	(Na k) ňoani	(Hz) niani	(Ut) nooni	(Si) tərə

According to (Ts.), cognates with (Ew) noŋɯn are found in all Tungus languages except for Group IV (However, (S) only has the oblique case form. Poppe (1931) and Hu & Chaoke (1986) both say there is no word specifically used as the third person pronoun in (S)).

Regarding the cognates of (Ma) i, (Ts.) gives (S) ini 'his' in addition to (Ma) and (J).

(101)[237]だれ（誰） who				
(Ew) ŋii	(Ek1) ŋii	(U) ŋii	(Na) ui (Na l) ŋui	(J) ---
(S) awʊ	(Ek2) ŋii	(Oc) nii	(Ul) ui	(Ma) wə
(N) ňii	(Na k) ŋii	(Hz) nii	(Ut) ŋui	(Si) vəə

(S) awʊ is, according to (Ts.), aɣuu. It is given a form that corresponds to (Ek) abguu (*xabagu) 'which, what kind of' and (Na) xai 'what' etc.

Apparently, the forms apart from (S) all correspond to each other. Ikegami (1989) proposes the ancestral form of *ŋui or * ŋəi.

(102)[239]なまえ（名前） name				
(Ew) gərbɯ	(Ek1) gərbi	(U) gəgbi	(Na) gərbu	(J) ---
(S) gəbbi	(Ek2) gərbi	(Oc) gəbbi	(Ul) gəlbu	(Ma) gəbu
(N) gəlbi	(Na k) gərbi	(Hz) gərbi	(Ut) gəlbu	(Si) gəfə

(103)[240]じ（字） letter				
(Ew) ---	(Ek1) bičig	(U) bitxə	(Na) ---	(J) ---
(S) bitəg	(Ek2) dukiwun	(Oc) ---	(Ul) ňʊrča /bitxə	(Ma) xərgən
(N) ---	(Na k) bitxə	(Hz) ---	(Ut) bičixə	(Si) xərxən

According to (Ts.), the cognates of (Ek2) dukiwun are only in Group I, i.e. (Ek), (Ew) and (N), in such examples as (Ek) dukuu- 'to write' and dukiwun 'letter (epistle)'.

(Ma) xərgən is, according to (Ts.), only found in (Ma).

Cognates with (S) bitəg are, according to (Ts.), in all Tungus languages apart from (Ew) and (U). In all languages the cognates have the primary meaning of 'letter (epistle)'. (Ts.) also gives (lit.Mo) bičig (<Turkic languages) for reference.

(104)[241]こえ（声） voice				
(Ew) dılgan /og	(Ek1) dilgan	(U) kəjə	(Na) ǰilgan	(J) ---
(S) dıggan	(Ek2) guulaji	(Oc) ---	(Ul) ǰılǰan	(Ma) ǰilgan
(N) dılgan	(Na k) dilgan	(Hz) dilgan	(Ut) əəwurə	(Si) ǰilhan

The (Ek2) form is from the Russian golos. (U) kəjə will be discussed under (106) 'language, speech'.

In Avrorin i Levedeva (1978) (Oc) digga(n) 'voice, speech' is given.

According to (Ts.), cognates with (S) dıggan are in all Tungus languages apart from (U), and the meaning is also 'voice'. However (Ts.) considers (U) diɣan- 'to speak' a cognate of (S) dilgan.

(105)[242]おと（音） sound				
(Ew) iig	(Ek1) ajalgu	(U) uǧja-	(Na) siasin	(J) ---
(S) ---	(Ek2) igdi	(Oc) ---	(Ul) ---	(Ma) asuki/mudan
(N) ---	(Na k) ---	(Hz) dilgan	(Ut) seesini	(Si) jiasəkə

According to (Ts.) the (Ew) iig, (Ek2) igdi and (U) uǧja- above have cognates in (Ek), (Ew) and (N) with the forms ii- 'to emit a sound' and iig 'sound (noun)' (in addition, (Ek) has igdi- 'to rumble'). In (U), the forms are igdi 'voice' and uga 'sound'. In (Ul) and (Ut) it is ujsi- 'to emit a sound' and in (Na) it is xujsi- 'to emit a sound'.

However, there is a possibility that (U) uǧja- is from (lit.Mo) üge-n 'language, word, speech' (Ozawa 1983).

(Ek2) ajalgu is from (Mo) (Tsumagari 1992a. According to Ozawa 1983, (lit.Mo) ajalgu means 'dialect, small dialect, pronunciation, to sing loudly').

According to (Ts.), cognates with (Na) siasin and (Ut) seesini are found in (N) (xeesixin) and the three languages in Group III, where the meaning is 'sound'. The form of (N) probably originated from (Ul).

The cognates of (Ma) asuki are, according to (Ts.), in (Ek), (Ew), (Ul), (Ut), (Na) and (Ma), but in Group I they mean 'to squeak, to wheeze', while in Group III there are meanings like 'rustling sound'.

(Ma) mudan means 'sound, melody, winding road' (Haneda 1937). According to (Ts.), this is found in (Ek), (U), (Ut), (Na) and (Ma). The shared meaning is 'sharp curve in a river'. (Oc), (Ul) and (Na) have the meaning of '~ times', but this is possibly from another word. Also, the (Oc) form probably comes from Group III. (Si) iasəki means 'music, the sound of a song' (Yamamoto 1969).

(106)[243]ことば（言葉） language, speech				
(Ew) təərən	(Ek1) inni	(U) kəjə	(Na) xəsə	(J) xərsəbə (acc.)
(S) ---	(Ek2) tuurən	(Oc) ---	(Ul) xəsə	(Ma) gisun
(N) xəsə	(Na k) xəsə	(Hz) gisun	(Ut) kəsə	(Si) gisun

The cognates for (Ew) təərən and (Ek2) tuurən are according to (Ts.), in three languages in Group I ((Ek), (Ew) and (N)), where they exist together with the verb 'to talk' ((Ek) tuurən-/turəən-). Also, there is (Oc) turpin 'tales passed on as oral tradition'. In the (Oc) form there is an r, indicating it is a loanword.

In (S), another informant gave (S) ugə, but this is from (lit.Mo) üge-n 'language, word, speech (Ozawa 1983)'.

According to (Ts.), the cognates with (Ek1) inni are found in all Tungus languages with the meaning of 'tongue'. However, unlike Russian and Mongolian, the same word does not always have the meaning of 'language'. During surveys, this was confirmed, and the following sentences was also collected: sii oondi innijə saandi 'what sort of languages do you know?' (Tsumagari 1992a). This particular informant can speak Mongolian fluently, so the word is possibly a loan translation from Mongolian.

The forms given above under (U), (Na), (Ul) and (Ut) have, according to (Ts.), the meaning of 'language' in (N), (Oc), (U), (Ul) and (Ut). They mean 'legal ordinance' in (S) and 'royal edict, legal ordinance' in (Ma). The (S) form probably comes from (Ma).

Cognates with (Hz) gisun are, according to (Ts.), (Ma) gisun 'talk (noun)' and gisurə- 'to talk', and also (Na) gisurə- 'to talk'. This is probably from (Ma). (Ts.) also makes comparisons with (Ek) gis 'drumstick' and other

words with similar meanings in (S), (Ew), (N), (Oc), (Ul), (Ut) and (Na). However, the meanings are so different that more caution is called for here.

According to (Ts.), (J) xərsəbə has cognates in (Ek) (əərii-), (S), (Ew), (N), (Ul), (Ut) and (Na) (xəərsi-). They mean 'call' or 'shout ((Ek), (N), (Ut))'.

(107)[244]こころ (心) mind, heart				
(Ew) xusə	(Ek1) miigan	(U) miawa	(Na) doo	(J) əriŋə
(S) ---	(Ek2) meewan	(Oc) məjə	(Ul) mıawa	(Ma) gūñin
(N)	(Na k) miawan	(Hz) miawa	(Ut) mərə	(Si) Gonin

According to (Ts.), there are no correspondents in other languages for (Ew) xusə. According to Novikova (1980), the meaning of the word is 'initial motivation, reason, cause'.

According to (Ts.), words such as (Ek1) miigan are distributed in all Tungus languages, and all have the meaning of 'the anatomical heart (=serdtse)'. In none of the languages is 'heart (as the seat of emotions)' listed as one the meanings (the Russian serdtse does have the meaning of 'heart (as the seat of emotions)', but in (Ts.)'s entries it probably only has the anatomical meaning. The entry given in Research Institute for Languages and Cultures of Asia and Africa (1967) gives the Russian serdtse, so informants might have been greatly influenced by this.

The cognates with (Oc) məjə are, according to (Ts.), in (Ek), (Ew), (N), (Oc), (U), (Ul), (Ut), (Na) and (Ma), and are said to be derived from verbs such as 'to think, to notice, to think of'. Examples are (Ek) mərgə-, (Oc) məiči-, (Na) məxə-, (Ma) mərki-.

(Na) doo- has meanings such as 'inside, in the heart' and is used in such expressions as 'to feel unwell, to have one's feelings hurt'. According to (Ts.), these are in all Tungus languages, but the meaning of 'heart (as the seat of emotions)' is only listed for (Oc), (Ul) and (Na).

According to (Ts.), the cognates of (Ut) mərə are mainly distributed among Group III languages. For example, in (Na), there is murun 'heart' and murči- 'to think'. Others are apparently (Ew) murač 'vitality, good

fortune', (Oc) muiči- 'to think'. Avrorin i Levedeva (1978) has (Oc) məiči- 'to think', but no muiči-.

Regarding (Ma) gūnin, Haneda (1937) gives the definition as 'meaning, volition, intention'. (Ts.) considers this a cognate with the words meaning 'to say, to tell' which are present in all Tungus languges (such as (Ek) guun- and (Na) un-). He also gives the example of guni- 'to think'.

According to (Ts.), cognates with (J) əriŋə are found in all Tungus languages, with meanings like 'breath, life' (e.g. (Ek) əriiksə, (Na) ərgən. The meaning of 'heart (as the seat of emotions)' is also given for (Ek), (N), (Oc) and (U).

(108)[245]かみ (神) God				
(Ew) xəwki	(Ek1) burkan	(U) ənduri/əǰəni /puǰa/ňuŋiə	(Na) əndur	(J) fīǰur
(S) bokkon	(Ek2) burkan	(Oc) ənduri	(Ul) masɪ	(Ma) ənduri/fučixi
(N) ---	(Na k) səwən /ənduri	(Hz) ənduri	(Ut) əǰəxə/səwə	(Si) ənduri

According to (Ts.), the cognates with (Ew) xəwki are found in all Tungus languages except for (Ma) and (J). In the four languages of Group I the word has the meaning of 'God', while other cognates have the meaning of 'idol'. In (Ek) and (N) there is the meaning of 'sacred spirit that helps shamans'. In Group II, (Oc) has səwəən 'sacred spirit' and səwəki 'wooden idol'; (U) has səwən 'sacred spirit' and səwəxi 'wooden idol'. In Group III, forms such as (Na) səwəən apparently have two meanings: 'wooden idol' and 'indwelling sacred spirit that helps shamans'.

The cognates of (Ek1) burkan, according to (Ts.), are in (Ek), (S), (Oc) and (Na). (Ek) and (S) are said to be loans from (lit.Mo) burxan. (Oc) bərxə bəəkini 'God's leaves' and (Na) burkian 'God's name' are also given in (Ts.). Judging from the fact that (Oc) has -r- and (Na) has -rk-, these are thought to be recent loanwords.

Concerning the cognates of (Hz) ənduri, (Ts.) says they exist in (S), (N), (Oc), (Ul), (Na) and (Ma). Also, from Ikegami (1997) one can see that there is a cognate in (Ut) as well. These show a distribution that can be described

as a 'lower Amur River region' distribution. (Ts.) sees the following loan relationships: (N) < (Ul) < (Ma), (Ul) < (Ma), (Na) < (Ma). Both (N) and (Oc) have the form ənduri. The fact that -r- and -nd- are present indicate unmistakably that this is a recent loanword. One can safely propose that it spread downstream from (Ma).

The meaning of (Ut) əǰəxə is, according to Ikegami (1997), 'unseen god that attaches itself to idols etc.' According to (Ts.), there are cognates in (N), (Oc) (Ul) and (Ut), and they mean 'protector spirit of hunters (or an idol in human form of such a spirit)'. (Na) also has the word əǰəxə, and there it means 'a metal or wooden amulet worn around the neck for success in hunting (Onenko 1980)'. The reader is referred to Kazama 1993, p. 180, 210, 211 for further discussion. It is thought that in (Ut), apart from before i, ǰ has changed to d, hence (Ut) əǰəxə is probably a loanword from elsewhere.

(Si) fečixi/fučixi apparently means 'the various Buddhas, the gods in Buddhism'. (Si) enduri means 'guardian god of a place, kitchen god' (Yamamoto 1969). According to Haneda (1937), in (Ma), fučixi is 'Buddha, Bodhisattva' and ənduri is 'God'. (Ts.) says (Ma) fučixi is from the Chinese fo^2 佛('Buddha'), but if we consider changes in (Ma) as f- < *p-, -č- < *-rk-, then there is a real possibility that the (Ma) word is actually from the above-mentioned (lit.Mo) burxan.

(J) fǐjur is not given in (Ts.), and its exact identity is unknown.

(109)[249]これ this one				
(Ew) ərək	(Ek1) əri	(U) əti/əiti	(Na) əi	(J) əsə
(S) əri	(Ek2) ər	(Oc) ---	(Ul) əi	(Ma) ərə
(N) ---	(Na k) əi	(Hz) əi	(Ut) əri	(Si) ərə

The cognates of (U) uti are, according to (Ts.), limited to (Ma) ubu 'here', utala 'this one only', and uttu 'this way'.

However, (U) also has əji 'this' (Shnejder 1936), and the present author has also confirmed this with other informants.

The -k in (Ek) ərək is considered an indicator of nominative case(Novikova 1968). This is a rare example, because in Tungus languages, and indeed all Altaic languages, the nominative case usually bears no

suffix, whether it be a noun or a pronoun.

(110)[250]それ　(111)[251]あれ it, that one				
(Ew) tarak	(Ek1) tari	(U) uti	(Na) təi	(J) ---
(S) tarɪ	(Ek2) tər	(Oc) ---	(Ul) ---	(Ma) tərə
(N) ---	(Na k) tii	(Hz) ---	(Ut) tari	(Si) tərə

(112)[252]どれ which one				
(Ew) jaak urəəčin	(Ek1) awguun	(U) jəuxə	(Na) xawoi	(J) ---
(S) ijə	(Ek2) iir	(Oc) jawa	(Ul) xaawʊnɪ /xamataa	(Ma) ---
(N) ---	(Na k) osi	(Hz) ja	(Ut) xaawu	(Si) jaaəm

Ikegami (1989) conducts a detailed examination of pronouns, concluding that there are two types of words meaning 'what'. One type has forms similar to jaa, and is mostly used in Groups I and II. The other type is used mostly Group III and has forms such as xai. In (Ma) of Group IV both types are in use.

Words for 'which one' are based on derivatives from 'what' and show basically the same kind of distribution. However, the (Ek1) awguun given here belongs to the xai type.

(113)[253]なに（何） what				
(Ew) jaak	(Ek1) ikun	(U) jəu	(Na) xai	(J) ---
(S) uxuŋ	(Ek2) eekun	(Oc) jəu(xə)-kəə	(Ul) xaɪ	(Ma) ai
(N) eexʊn	(Na k) ema	(Hz) imǰaka	(Ut) xai-ga	(Si) ai

(S) uxuŋ is not in (Ts.). It is probably a result of regressive assimilation from ixuŋ.

(114)[254]なぜ why				
(Ew) jaamɪ	(Ek1) ida	(U) jədu	(Na) xagoi /xaimi (Na l) xaigoi	(J) ---
(S) ittu	(Ek2) eeda	(Oc) jaanami	(Ul) xaǰujɪ	(Ma) ainu
(N) iimi	(Na k) iidaj	(Hz) ---	(Ut) xaimi	(Si) anə

(Na) xagoi means 'what for'.

(115)[257]ここ here				
(Ew) ələ	(Ek1) ədu	(U) olo	(Na) əidu	(J) ---
(S) ədu	(Ek2) ədu	(Oc) ədu	(Ul) əidu	(Ma) uba
(N) ədu	(Na k) ədu	(Hz) ədu	(Ut) jədu	(Si) jəvaa

(116)[258]そこ (117)[259]あそこ there, that place, over there				
(Ew) ---	(Ek1) tala	(U) talaa	(Na) tado	(J) ---
(S) tadʊ/talaa	(Ek2) təələ	(Oc) tala	(Ul) tɪdʊ	(Ma) tuba
(N) taɪdʊ	(Na k) tadu	(Hz) tadu	(Ut) čadu	(Si) təva

(118)[260]どこ where, anywhere				
(Ew) ilə	(Ek1) ilə	(U) jələ	(Na) xaido	(J) ---
(S) ilәə	(Ek2) iidu	(Oc) idu	(Ul) xaɪdʊ	(Ma) aibidə
(N) iidu	(Na k) idu	(Hz) jaadu	(Ut) xaidu	(Si) avii

(119)[266]ひだり (左) left				
(Ew) ǰəgənti	(Ek1) zəgin	(U) ǰəəŋəǰə	(Na) ǰəuŋgiə	(J) ǰo
(S) ǰəəŋguu	(Ek2) ǰəgin /ǰəgiŋŋuu	(Oc) ǰəənti	(Ul) ǰəunti	(Ma) xasxū
(N) ---	(Na k) xasxa	(Hz) ---	(Ut) dəunǰee	(Si) šolhoo

The cognates of (Ma) xasxū are found also in (Hz)(according to An 1986), (Na k) and Bikin dialects of (Na). They are distributed in a language region described as the 'middle Amur River region'. For (J) ǰo (Ts.) gives the Chinese zuo^{3} 左'left' as reference.

All other forms are regarded as cognates with each other. (Ts.) gives (lit.Mo) ǰegün 'left, east' as reference.

(120)[267]みぎ（右） right				
(Ew) aangɪda	(Ek1) zup /zuptəəwi	(U) aŋaǰaa	(Na) aaŋgia	(J) ǰəgun
(S) barʊʊŋgʊʊ	(Ek2) aan /aaŋŋuu	(Oc) aanti	(Ul) aaŋgɪ	(Ma) iči
(N) ---	(Na k) ista	(Hz) ---	(Ut) aaňjee	(Si) isitə

(S) barʊʊŋgʊʊ is a loan from (Mo) baruun 'west, right'.

According to (Ts.), cognates with (Ma) iči are limited to ista 'right' in the Kur-Urmi dialect of (Na), (Hz) jočokta (according to An 1986), and isikta/ isixta 'right' in the Bikin dialect of (Na). These show a distribution in the Amur River middle region. Concerning (Ek1) zuptuuwi, (Ts.) gives (Ek) ǰupkəəki 'enough, accurate, just right', and for reference gives (lit.Mo) ǰöb 'correct, accurate'. According to Ozawa (1983), there is also the meaning of 'right'.

(121)[268]まえ（前） front				
(Ew) ǰuuldə	(Ek1) zuləəski	(U) ǰuləxi /ǰuliələ	(Na) ǰuləsi /ǰuliələ	(J) ǰulee
(S) ǰuldəədə	(Ek2) ǰulguu	(Oc) ňauki	(Ul) ǰuləsi	(Ma) ---
(N) ǰuləski	(Na k) ǰulə	(Hz) ǰuptun /ǰulisi	(Ut) dullee	(Si) ǰulxə

According to (Ts.), cognates with (Oc) ňauki include (Ek) ňaawdə 'forward', (Ew) ňawla- 'to move' and (Ut) nawra- 'to go forward, to lead'.

(122)[269]うしろ（後） back				
(Ew) amarda	(Ek1) amaski	(U) amiani	(Na) xamiala	(J) amurgai
(S) amıdaata	(Ek2) amalguu	(Oc) amasi	(Ul) xamıla /xamısı	(Ma) amargi
(N) amaskı	(Na k) amindula	(Hz) amiludu /amisiki	(Ut) xamarree	(Si) amirxə

(123)[270]うち（内） inside, inward, interior				
(Ew) doon	(Ek1) doolo	(U) dolo	(Na) doola	(J) dolo
(S) doolo	(Ek2) doolo	(Oc) doo	(Ul) doo	(Ma) dolo
(N) doonın	(Na k) doolani	(Hz) dolani	(Ut) dooni	(Si) diurxə

(124)[271]そと（外） out, outside, exterior				
(Ew) baad	(Ek1) tuliigu	(U) buala	(Na) boala	(J) tulilə
(S) tuldəə	(Ek2) tulguu	(Oc) buala	(Ul)	(Ma) tulərgi
(N) buala	(Na k) bixandu	(Hz) tuləɗu	(Ut) bookkee	(Si) tiulxə

According to (Ts.), the cognates of the forms in Group I (excluding (Ew),

(N), and (Na k)), Group IV and (Hz) are not found in Group II. In Group III, (Ul) tuli, (Ut) tuliə(n) and (Na) tuliə all mean only 'courtyard, empty yard outside of a house'. The derivations are not shown. According to Ikegami (1997) one of these is (Ut) tullee 'outside'.

On the other hand, in Groups I and IV, and especially in (Ew), (Ek) and (Ma), many different case forms and derivatives are widely used.

(125)[273]うえ（上） up				
(Ew) ojda	(Ek1) ugiigu	(U) uilə	(Na) uilə /ujələ/uisi	(J) wəši
(S) oroondo	(Ek2) uilə	(Oc) uilə	(Ul) uilə	(Ma) niŋu/niŋudə
(N) uuski /uulə	(Na k) uuski /uiski/ujuki	(Hz) uisiki	(Ut) uwwee	(Si) nuŋuu

Cognates with (Ew) ojda are, according to (Ts.), found in all Tungus languages. Its central meaning is said to be 'surface'. The descriptions for (Ek) and others also show the meaning to be 'something in contact with the top or upper part of an object'.

(S) oroondo is possibly from (lit.Mo) orui 'peak, apex'.

According to (Ts.), the form in (Ma) is only found in (Ma) itself.

All other forms are thought to correspond with each other. According to (Ts.), there are also others: (Ew) has ɵj 'up' and (Ma) has wəsixun 'up, upward, high, east, eastward'. Of all the cognates, only (Ma) is clearly labelled as having the meaning 'east', and this is a notable example. The word for 'up' in Turkic languages seems to also have the meaning of 'east'; this will require further investigation.

(126)[274]した（下） down				
(Ew) xərgə	(Ek1) niigu	(U) xəgilə	(Na) pəgiələ /pəisi/pəguĭjmə (Na l) pədgilə	(J) fuĭilə
(S) əggilə	(Ek2) xərgilə	(Oc) xəgilə	(Ul) pəĭilə /pəisi	(Ma) fəĭərgi
(N) xəjgiski /xəjgilə	(Na k) xəĭilə	(Hz) nisiki	(Ut) pəĭĭee	(Si) fəĭirxə

(Ek1) niigu is not in (Ts.), and its origins are obscure.

(127)[275]みる（見る）				
(Ew) kəjət-	(Ek1) icə-	(U) isə-	(Na) ičə-	(J) hača-/turuga-
(S) iši-	(Ek2) ičə-	(Oc) ičə-	(Ul) ičə-	(Ma) tuwa-
(N) ičə-	(Na k) ičə-	(Hz) ičə-	(Ut) itə-	(Si) ta-

In (Ew), the -t ending in kəjət- is an element indicating aspect. Novikova (1980) lists this word as kəəjə-, while Ts. lists it as kəjəə-. According to Ts., this only exists in the various dialects of (Ew), and its origins are unknown.

Kiyose (1977) describes hača- as 'to see' and turuga- as 'to look'.

With (Ma) tuwa-, Ts. only gives one cognate: (J) čəntəməi tuwanĭula 考選 'to examine'.

All other forms (e.g. (S) iši-) are thought to correspond to each other, and according to Ts., they are found in all Tungus languages except for Group IV. In (Ew), there is also ič-/ it- 'to be able to see, to notice, to sight' (Ts., Novikova 1980).

(128)[277]きく（聞く）				
(Ew) dolčı-	(Ek1) dooldi-	(U) duisi-	(Na) dosĭji-	(J) dondi-
(S) dooldı-	(Ek2) dooĭji-	(Oc) dookči-/doogdi-	(Ul) dosoĭı-	(Ma) donĭji-
(N) dooldı-	(Na k) olgi-	(Hz) doldi-	(Ut) dooĭji-	(Si) donĭji-

According to Shnejder (1936), dogdi- and düisi- are respectively 'to hear' and 'to listen'. Onenko (1980) assigns 'to hear' to dooldi- and 'to listen' to dosĭja-/dosoĭa-.

According to Ts., the same dichotomy exists in (Ek) (dooldii- 'to hear', doolčat- 'to listen'), (Ew) (doldɯ- 'to hear', dolči- 'to listen'), (N) (dooldii- to hear', dooldiit- 'to listen'), and (Ul) (dooldi- 'to hear', doosoǰo-/doosoǰi- 'to listen'). With (S) dooldi-, (Oc) doogdii- and (Ut) dooǰi-, the second of the pair is not given, but they are all translated as 'to hear (slyshat')'. (Ma) doǰi- recorded as 'to hear, to listen'.

Ts. gives (lit.Mo) duɣul- as reference. Modern Mongolian has duul- 'to listen, to audibly feel something', and duuld- 'to hear, to catch something audibly, to hear about something'. (Ozawa 1983).

(129)[280]いう (言う)				
(Ew) gəən-	(Ek1) cuugi-	(U) digan-	(Na) un-	(J) xəndu-
(S) ǰiǰi-	(Ek2) tuurən-	(Oc) digan-	(Ul) un-	(Ma) sə-
(N) gun-	(Na k) un-	(Hz) xəsu-	(Ut) un-	(Si) gisərə-

The form (S) ǰiǰi- is given as ǰaǰi- in Ts. The cognates of this are (U) ǰaŋgæli- 'to fool around, to act like a small child'; (Ul) ǰaŋgira- 'to engage in frivolous talk, to chatter away aimlessly', (Na) ǰanaan- 'to fool around, to joke', ǰaǰamori- 'to engage in frivolous talk, to chatter away aimlessly'; (Ma) ǰaŋgila- 'to flatter, to woo'. Given the lower Amur River distribution of these words, and the fact that -ŋg- is in the (U) form, it is safe to conclude that these words spread originally from (Ma).

Regarding (Ek1) cuugi-, Ts. gives cuugii- 'to be boisterous, to speak with a loud voice'. He also considers this a loan from Mongolian ((lit.Mo) šiɣugi- 'to be boisterous, to be noisy'). Ts. also lists (Ma) čurgi- 'to be boisterous, to speak in a loud voice, to shout' under the same entry.

According to Ts., the cognates of (Ek2) tuurən- are found in the four languages of Group I as verbs with the meaning of 'to say' however the (N) form is only used in folktales. The only other cognate is found in (Oc) as turpin 'tales (passed on as oral tradition)' (however, since there is an r, it is a loan). See also (106) 'language, speech'.

The origin of (Hz) xəsu- is possibly xəsə 'language, speech' (see (106) 'language, speech'), which is widely distributed in the lower Amur River region. (Ma) also has the form of xəsəbu-, but in (Ma) xəsə also means 'Heaven's decree, Providence', so the word means 'to have a destiny'.

For cognates of (U) digan- and (Oc) digan- (in Avrorin i Levedeva 1978 it is given as diggan-), Ts. lists (N) dilgan-, (Ul) dilǰan-/ǰilǰan-, (Ut) ǰildan- and (Na) ǰilgan- (The meaning is 'to vocalise, to shout, to say' in all cases. See also (104) 'voice').

According to Ts. the cognates with the above (Ew), (N), (Na k), (Na), (Ul) and (Ut) forms are found in all Tungus languages except for (J) , and apart from (N) and (Ma), the gloss for these words is given as 'to speak, to say'. (N) only has 'to say', while (Ma) gūni- has 'to think, to consider carefully'.

(Ma) sə- is, according to Ts., only seen in (Ma).

The cognates of (J) xəndu-, according to Ts., are (Ut) kən- (given as kəən- in Ikegami 1997) 'to speak', (Ma) xəndu- 'to say, to tell, to explain'.

(130)[283]うたう（歌う）				
(Ew) ikə-	(Ek1) dawlaa-	(U) jəxə-/čaŋala-	(Na) ǰari-	(J) xudila-
(S) dooloo-	(Ek2) xəəgəə-	(Oc) iikə-	(Ul) jaajı-	(Ma) učulə-
(N) iixə-	(Na k) ǰari-	(Hz) ǰari-	(Ut) jaaja-	(Si) učulə-

According to Ts., cognates with (Ew) ikə- are only found in Groups I, II and IV, and are missing only in Group III. The forms are: (Ek) ikəə-, (Ew) ikəə-, (N) ixəə-/ikə-, (Oc) ikə-, (U) jəxə- and (Ma) jəkə-; all have the meaning of 'to sing, song (noun form)'. However, the (Ma) word only means 'to sing lascivious songs', and does not have the meaning of 'song (noun)' (Haneda 1937).

The (S) and (Ek1) forms are, according to Ts., unique to (S) and (Ek), being loanwords from (lit.Mo) dayla- and (Mo) duula-.

The cognates of (Ek2) are, according to Ts., confined to (Ek), and the meaning is 'to sing and dance'. Derivatives from this include words that mean 'round dance'. Ts. sets up a different entry for (Ek) xəəǰə- 'to perform a round dance' (cognates are in (Ek), (Ew), (Na) and (Ut)) , but the above two words are found in complementary distribution, even within the (Ek) dialects. Hence the two words are probably of the same origin.

The cognates of (Na) ǰari- are, according to Ts., (Ek) ǰara- 'to sing', to sing along'; (Ew) ǰaramkan- 'to reply, to answer'; (Oc) ǰarali- 'to start talking', ǰari-

'to sing'; (Ul) ǰara- 'to answer, to reply', ǰaralu- / ǰarali- 'to start talking'; (Na) ǰarali- 'to start talking', ǰari- 'to sing' and (Ma) ǰari- 'to pray before shamanistic gods while calling on a name' (this meaning comes from Haneda 1937). Of the above, the word in (Oc) has an r; thus one may deduce that it is a loan from Group III. Also, in Group III, the verbal affix used to indicate 'to begin to...' is normally -lu, but in the case of (Na) and (Ul) above, the Group I and Group II –li is found instead. (Na) does not even have the original verb form. Hence, these words are likely to be loans from Group I.

The cognates of (Ut) jaaja- are, according to Ts., in all Tungus languages except for (S) and (J). In (Ul) and (Ut) it means 'to sing'; (Ma) jajada- means 'to talk falteringly' (This meaning is from Haneda 1937). Nevertheless, in all other languages it means 'to sing shamanistic songs, to perform shamanism'. It is likely that a widening of meaning has occurred in (Ul) and (Ut). According to Ts., the cognates of (U) čaŋala- 'to sing (songs in Russian)' —— according to Shnejder 1936 it also means 'to play a musical instrument' —— are (Ew) čaguluun 'the sound of metals', (Na) čaaŋgala- 'to sing Russian songs', (Ma) čan 'an instrument similar to a gong' and čaŋa 'a gong'.

According to Ts., there is only cognate with (Ma) učulə-, and it is (S) učuň 'song'. This is apparently a loanword from (Ma) itself.

According to Ts., the cognates of (J) xudila- are (Na) xoǰaola- (Kur-Urmi dialect), xoǰila- (Bikin dialect), both meaning 'to call, to invite'. Next to these, the Chinese hao^{4}zhao^{4} 号召 'to call out to someone' is given as reference.

(131)[285]はなす（話す）				
(Ew) təərə-	(Ek1) cuugi-	(U) čulə-	(Na) xisaŋgo-	(J) ---
(S) ǰiŋǰildi-	(Ek2) tuurən-/ulgučəən-	(Oc) təəlumuči-	(Ul) ʊrčʊlʊn-	(Ma) gisurə-
(N) ulgučəən-	(Na k) ---	(Hz) xəsu-	(Ut) kəən-	(Si) gisərə-

(U) čulə- is not found in either Ts. or Shnejder (1936); its origins are unknown.

According to Ts., cognates of (Oc) təəlumuči- are found in (Ew), (N), (Oc), (U), (Ul), (Ut) and (Na). In (Ew), the meaning is 'to inform, to relay a message, to tell a story', but in the other languages the meaning is 'to tell a legend or a true story'. The word for 'true story, legend' is təəlɯ/təəluŋ in Group I, təəluŋu/təəlumu in Group II and təəluŋgu/təəluŋu in Group III.

(Na) xisaŋgo- is not found in Ts., but the present author was once informed by a Nanay speaker (the late Mr. N. P. Bel'dy) that xisaŋgo- and xəsə(-wə) aŋgo- (literally translated as 'to make words') are virtually the same. If this is so, then this would be a rare example , as Tungus languages generally do not favour compound word formation.

For a discussion on (Ma) gisurə- see entry (106) 'language, speech'. All the other words are discussed under entry (129) 'to say'.

(132)[291]わらう（笑う）				
(Ew) iň-	(Ek1) inəktə-	(U) iňə-	(Na) inəktə-	(J) inǰə-
(S) nəttə-	(Ek2) iňə-	(Oc) iňəktə-	(Ul) iňəktə-	(Ma) inǰə-
(N) iňə-	(Na k) iňəktə-	(Hz) niktənə-	(Ut) inə-	(Si) inǰi-

All the forms above are said to correspond with each other. In Ts. also, the forms for all Tungus languages are given. In addition, (lit.Mo) inije- 'to laugh, to smile' is given for reference.

(133)[292]なく（泣く）				
(Ew) xoŋ-	(Ek1) soŋo-	(U) soŋo-	(Na) soŋgo-	(J) songo-
(S) soŋo-	(Ek2) soŋo-	(Oc) soŋo-	(Ul) soŋgo-	(Ma) soŋə-
(N) soŋo-	(Na k) soŋgo-	(Hz) soŋo-	(Ut) soŋo-	(Si) soŋu-

Forms for all Tungus languages are also given in Ts.

(134)[296]おこる（怒る）				
(Ew) xiir-	(Ek1) tikuuli-	(U) tagda-	(Na) ajaktala-	(J) fəši-
(S) alıı-	(Ek2) tikuul-	(Oc) ajaktala-	(Ul) tagda-	(Ma) fanča-
(N) kətpə-	(Na k) siaktan-	(Hz) xaŋka-	(Ut) tagda-	(Si) fančə-

According to Ts., no cognates exist for (Ew) xiir-. This form is only found in (Ew).

Also, according to Ts., cognates with (S) alıı- are only found in the four languages of Group I, i.e. in (Ek) and (N) it is ali- 'to be angry', in (Ew) it is alit- 'to hate, to dislike'.

According to Ts., the cognates for the forms seen in (Ek1) and (Ek2) above are only found in (Ek), (S) and (Ew) of Group I. (S) tegul- and (Ew) tikul- both mean 'to be angry'.

The cognates of (Hz) xaŋka- are, according to Ts., (Ek) xanuu- 'to run out of breath'; (Ew) xanun- 'to run out of breath, to choke, to drown'; (N) xan- 'to run out of breath'; (Oc) xaŋkapsi 'to be stifled from heat'; (U) xaŋka- 'to have a suffocating feeling because of the heat'; (Ut) paŋa- 'to run out of breath'; (Na) paiŋka- and xaŋka- (Kur-Urmi dialect) 'to run out of breath, to be angered, to be incensed' and (Ma) faŋša- 'to fumigate'.

The cognates of (U) tagda- are, according to Ts., found in (N), (Oc), (U), (Ul), (Ut) and (Na). This displays a lower Amur River distribution, but there is no (Ma) form. All the forms are tagda-, and the meaning is also 'to be angry' in all cases. This item is probably originally from (Na). Judging from the fact that the only Group I language to have this is (N), we can safely say that the (N) item, at least, is from another language.

The cognates of (Na) ajaktala- are, according to Ts., in (Ek), (N), (Oc), (Ul) and (Na). All except (Ek) have the meaning of 'to be angry'. Also ajakta 'to be spiteful, ill-tempered' is given. Only (Ek) has the meaning of 'brave'.

The cognates of (Ma) fanča- are, according to Ts., (S) paňči-, (N) pači-, (Oc) paan-, (Ul) pačursu-, (Na) pakpari-/pakčiači- and (Ma) fanča-. The meaning in (S) and (Na) is 'to be angry', in (N) and (Ul) it is 'to sulk, to be fickle', and in (Oc) it is 'to be sad, to be disappointed'. It is unusual to find word-initial p's in Group I and II languages, such as (S), (N) and (Oc). This, coupled with the fact that the form displays a lower Amur River distribution, leads us to believe that it has spread from Manchu.

Incidentally, Tsintsius (1982) states that there are 89 words in (N) that begin with p; of these 15 are onomatopoeic words and 6 are clearly labelled as loans from (Ul). However, there are probably many more loans from (Ul). According to Avrorin i Levedeva, in (Oc), the number of words beginning with p is said to be 150.

According to Ts., the cognates with (J) fəši- are: (Ek) xəkərgə- 'to be angered', (Ew) xəkuruŋči- 'to worry', (Ul) pəkən- 'to be angered', (Ma) foxodo- 'to be vexed, to feel mortified, to be angry' and fəxərə- 'to bear a stern facial expression'.

(135)[297]おどろく (驚く)				
(Ew) mɪaŋčɪ-	(Ek1) gajka-	(U) xuənə-	(Na) xajam /ərdəŋgəsi-	(J) ---
(S) nəələ-	(Ek2) olo-	(Oc) pəksə-	(Ul) pəskə-	(Ma) gələ-
(N) ---	(Na k) ərdəŋgəsi-	(Hz) lələ-	(Ut) olo-	(Si) bəŋdə-

The cognates of (Ew) mɪaŋčɪ- are, to according to Ts., (Ek) məəmbə- 'to worry', (Ew) mææn- 'to be amazed, to be interested', (Ul) meen- 'to hesitate, to be bewildered', (Na) mian- 'to hesitate, to be amazed, to be startled'.

The cognates of (S) nəələ- and (Ma) gələ- are, according to Ts., in all Tungus languages. In many other languages the form is ŋəələ-/ŋələ- , mostly meaning 'to fear', but in most languages the meaning of 'to be amazed (pugat'sja)' is also given.

Cognates with (Ek2) olo- are, according to Ts., found in all Tungus languages except for (U) and (J). Apart from (Ma), the meaning is 'to be amazed, to be startled (by sudden noises etc.)' (Ma) olixada has the meaning of 'to be terrified, to fear'.

According to Ts., the cognates of (Ek1) gajka- are: (Ek) gajka-, (S) gaixa- (both meaning 'to be amazed (udivljat'sja)'); (U) gaiti, (Na) gajtaj and (Ma) gajtaj (all meaning 'suddenly, straightaway, quickly'); (Ma) gajka- 'to spread the news of'. (lit.Mo) ɣaixa- 'to be amazed' is given as reference. The form in question is only distributed among some Group I, II and III languages. The forms in (Ek), (S) and (Ma) are probably from Mongolian. The (U) and (Na) forms are probably from (Ma).

The cognates of (U) xuənə- are, according to Ts., (Ek) xənuu-, (Ew) xəənu-, (N) xənu- and (Ut) xənun- (the meaning in all these forms is mostly 'to notice'). Other cognates are (U) xono-/xuənə- 'to be amazed' and (Ul) punu- 'to begin to doubt, to have a hunch about something'. Judging from the fact that the (Ul) form begins with p, (Ut) is probably from (Ek). (U) xalaŋgi- is not even found in Ts., its origins are obscure.

The cognates of (Oc) pəksə- are, according to Ts., (N) pəskə-, (Oc) pəksi-/pəksə-, (Ul) pəksi-/pəskə-/pəski-, (Ut) pəskə- and (Na) pəksə-. In all cases, the meaning is 'to be amazed'. According to Ikegami (1989), the ancestral from *-ks- should correspond to the following: (N) -ks-/ -s- | | (Oc) -ks- | | (Ul) -ks- | | (Ut) -ks-/ -sk- | | (Na) -ks-. Hence the forms for (N) and (Ul) are quite odd.

(Na) xajam is a mimetic word, used adverbially. According to Onenko (1980), it means 'at a loss to know what to do, bewildered'. In Onenko (1986), (Na) ŋəələ- and olo- are given for 'to be amazed (ispugat'sja)' and ərdəŋgəsi- is given for 'to be amazed (udivljat'sja)'

(136)[298] うつ (打つ)				
(Ew) kusi-	(Ek1) sukə-	(U) waa-	(Na) duktə-/paačila-/siantola-	(J) dugu-
(S) mundaa-	(Ek2) duktə-	(Oc) paati-	(Ul) paatıla-/duksin-	(Ma) tanta-
(N) muŋı-	(Na k) čučala-	(Hz) nantola-	(Ut) mində-	(Si) tandə-

According to our informant, the (Na) forms have the following meanings: duktə- is 'to knock (bit')', paačila- is 'to knock (udarjat')', siantola- is 'to punch (with a fist)'.

For the various (Ut) forms, Ikegami (1997) gives 'to knock, to hit' for duxin-, 'to hit with a rod' for mində-, 'to knock or to hit (once)' for paačila-, 'to knock, to hit' for paači-, 'to slap' for panada-, 'to hammer down a nail, to hit a nail' for tukpən-. The cognates of (Ew) kusi- are, according to Ts., in all Tungus languages. In Group I, the main word in most languages apart from (S) is the verb 'to fight, to hit one another', as in the (Ek) kusii-. On the other hand, in Groups II, III and IV, nouns such as (Na) kusun

'strength' are typical. Novikova (1980) also gives (Ew) kusi- as 'to fight, to hit one another'.

According to Ts., (S) mundaa- only exists in (S).

Concerning (Ek1) sukə-, Ts. gives the meaning for (Ek) sukə- as 'to chop firewood with an axe'; sukə is given as 'axe (the noun)'. Cognates with this are found in (S), (N), (Oc), (U), (Na) and (Ma); apparently they come from (lit.Mo) süke 'axe'. In other words, the three languages of (Ew), (Ul) and (Ut) were unaffected by these borrowings. Incidentally, concerning the word for 'axe', according to Cincius i Rishes, in (Ew) it is tobar (from the Russian topor) and ňaan (origin unknown— Ts. says this is only found in (Ew)). In (Ul) the word for 'axe' is sakpin (origin unknown— Ts. says this is unique to (Ul)). In (Ut), according to Ikegami (1997), there is masaari (from Japanese) and toporo (from Russian).

According to Ts., the (Ek2), (J) and (Na) form duktə- is found in all Tungus languages in the form of du-/ duu-/ dug- or duktə-. The meaning is 'to hit, to knock'. The (Ut) duxin- form above is given as (Ut) duuxin- in Ts. However, in (Ma) it means 'to hit with a rod'. Here, -ktə is apparently an aspect marker with the meaning of 'iterative'.

For (U) waa-, see entry (149) 'to kill'. In Ts. and Shnejder (1936), the verb 'to hit' of (U) is given as koŋko- 'to knock with a hard object'. The cognates with this are found, according to Ts., in all Tungus languages except for (S) and (J). In (Ek), (Ul) and (Na) it means 'to knock something that is empty'.

The cognates for (Oc) paati- and others are, according to Ts., (Ew) patul- 'to hit', (N) paati 'a hammer for tanning', (Oc) papati 'a hammer for tanning', paati- 'to hit', (U) paktan- 'to hit', and in the Group III languages, (Ul) paatila- 'to hit', paati 'hammer', (Ut) patčilla- 'to hit' and (Na) paačila- 'to hit', pači 'hammer'. As there is a word-initial p-, the (N) and (Oc) words are possibly loans from Group III. However, (Ew) and (U) also have words beginning with p-, and this is not readily explained. It may have something to do with the fact that they are onomatopoeic words. There is a theory that in Japanese also, word-initial p- has been retained for onomatopoeic words.

(Na) siantola- is formed by attaching the verbalizing -la suffix to sianto

'fist'. According to Ts., cognates with this are only found in Groups II and III, and all these languages have forms that are the same as the above for the noun 'fist' and the verb 'to punch (with a fist)'. In Chinese, the word for 'fist' is 'quan²tou'拳頭, so the above probably come from Chinese.

Cognates of (Ut) mində- are, according to Ts., (N) mina-, (Oc) mində- and (Ut) minda-. (N) and (Ut) mean 'to beat on a drum' while (Oc) means 'to hit with a rod'.

Also, according to Ts., the cognates of the forms seen in (Si) and (Ma) are: tantok 'woodpecker' in the Arman dialect of (Ew), tatutči- 'to beat on a drum' in (Ut), tanta- 'to knock' in the Kur-Urmi dialect of (Na) and tanta- in (Ma).

(137)[308]おす（押す）				
(Ew) tini-	(Ek1) ana-	(U) anauli-	(Na) ana-/ǰigda-	(J) ---
(S) ana-	(Ek2) ana-	(Oc) ana-	(Ul) ana-	(Ma) ana-
(N) ana-/tigə-	(Na k) ana-	(Hz) ana-	(Ut) ana-	(Si) anə-

The cognates of (Ew) tini- are, according to Ts., (Ek) tiin- 'to hold down', (Ew) tini- 'to hold down', (U) tuun- 'to build up into a heap of ice' and (Na) Kur-Urmi dialect tiŋku 'mouse trap'.

According to Ts., (Na) ǰigda- 'to hold down' is only found in (Na).

The cognates of forms like (Ek1) ana- are, according to Ts., found in all Tungus languages, but (S) ana- 'to push' is not given in Ts. Also, Ts. gives the meaning of 'to slot in' for (J) ala-, whereas Kiyose 1977 gives 'to be defeated'.

(138)[310]もつ（持つ）				
(Ew) ǰawat-	(Ek1) zabuuca-	(U) ǰawasi-	(Na) ǰapača-	(J) ǰafa-
(S) ga-/uurii-	(Ek2) ŋaalixin-	(Oc) ǰawača-	(Ul) ǰapča-	(Ma) ǰafa-
(N) ǰawčı-	(Na k) ǰa-	(Hz) ǰafa-	(Ut) daputa-	(Si) ǰafa-

(Ek2) ŋaalixin- is, according to Ts., a derivative of (Ek) ŋaala 'hand'.

Similar verbs are also found in (Ew) and (N), but not in Groups II and III. (Ma) has galada- 'to lay one's hands on something'.

According to Ts., forms like (Ew) ǰawat- have cognates that are found in all Tungus languages and mean mostly 'to grab'.

Cognates of (S) ga- are, according to Ts., found in all Tungus languages and have meanings like 'to take, to buy'.

(139)[316]あるく（歩く）				
(Ew) gɪrka-	(Ek1) uli-	(U) xuli-	(Na) pulsi- (Na l) pul-	(J) fuli-
(S) uli-	(Ek2) xuru-	(Oc) ŋənə-	(Ul) pulsi-	(Ma) jabu-/suǰu-
(N) xuli-	(Na k) ənə-	(Hz) ənə-	(Ut) gitu-	(Si) javə-

Cognates of (Ew) gɪrka- and (Ul) gitu- are, according to Ts., found in forms such as (Ek) giran- 'to walk (shagat')', to stride' in all Tungus languages except for (S), (Ma) and (J). According to Chaoke & Tsumagari (1997), (S) also has gira- 'to stride'.

(Ek2) xuru-, according to Ts., manifests itself as commonly used words in (Ek) suru- 'to go' and (Ew) xər- 'to go', but in all other languages it is extant only as (N) sojiwuk (<*soruwuk) 'present, gift (archaic word)'.

The cognates with the various forms in (S), (Ek1), (Hz), (U), (Oc), (Na), (Ut) and (J) are, according to Ts., found in all Tungus languages, but the (Ek) form is apparently only rarely used.

(Si) suǰi- means 'to sprint, to run', according to Haneda (1937). Cognates with this, according to Ts., are (Ek) suča-, (U) susa-, (Na) čoča- and others, where they mostly have the meaning of 'to escape'. In Ts., these words are given in all Tungus languages except for (Ul), (Ut) and (J). Actually, (Ul) and (Ut) also have tuča- and tuta- respectively, both meaning 'to escape'.

These are possible cognates of the above, but Ts. probably saw these as cognates of (Na) tutu- 'to run'. She omitted these from the table there.

(140)[319]はしる（走る）				
(Ew) tɪba-	(Ek1) tuksa-	(U) tukia-	(Na) tutu- /pagǰiala-	(J) ---
(S) uttəlii-	(Ek2) tuuxa-	(Oc) tutu-	(Ul) tutulu-	(Ma) fəkəši-
(N) tuksa-	(Na k) fagǰan-	(Hz) bugdaana-	(Ut) tuksa-	(Si) fəksi-

According to Ts., there is only one cognate for (Ew) tɪba-: (U) tif, which is a mimetic word meaning 'the manner by which people come out of a building very quickly'. It is not clear whether this is really a cognate.

According to Ts., (S) uttəlii-, (Si) fəkəsi- and (Ma) fekəši- have cognates in all Tungus languages except for (J). Some examples of these are (Ek) xukti- and (Na) pukči-. The (Ew) form means 'to drag an animal and lead it somewhere'. The (S) and (Ma) forms mean 'to gallop (of horses)'; in all other languages it means 'to gallop or run (of animals in general)'.

The cognates of (Ek1) tuksa- are, according to Ts., in all Tungus languages except for (J). (Ul) in Group III and (Na) only have the meaning of 'rabbit', and not the meaning of the verb 'to run'. The meaning of rabbit is found in all Tungus languages except for (Ew), (Ma) and (J). In Groups I and II, -ki, the shared suffix indicating 'animal' is attached to the form (see entry (33) 'dog'). (Ma) toksaka means 'illegitimate child', but (Na) toksa means 'rabbit, illegitimate child'. From this one may assume that the original meaning was 'rabbit', but once the word took on a bad meaning, it was replaced by a new word. Incidentally, according to Yamamoto (1969) and Kiyose (1977), words for rabbit are (Ma) gūləmaxūn, (Si) Gulmahun and (J) gulmaxai. According to Ts.'s account, these are found in (Ma), (J) and (Na). The (Na) form probably comes from (Ma). According to Yamamoto (1969), (Si) Guləmahun is also used as an abusive word.

Cognates with (Hz) bugdaana- are, according to Ts., (S) buuguu- 'to preserve', (Ew) bugun- 'to hide', (Ut) bui-/ buj- 'to store up, to preserve', (Na) bugda- 'to hide, to run' and (Ma) buksi- 'to hide, to lie in wait for someone'.

According to Ts., cognates with (Oc), (Na) tutu- are in (S), (Ew), (Oc), (U), (Ul), (Ut) and (Na). Of these, the form in (Ut) is probably of the same origin as (Na) čoča- 'to escape', as outlined above.

(141)[321]たつ（立つ）				
(Ew) ilɯ-	(Ek1) ilii-	(U) ili-	(Na) ili-	(J) ili-
(S) ili-	(Ek2) ilgiima-	(Oc) ili-	(Ul) ili-	(Ma) ili-
(N) ili-	(Na k) ili-	(Hz) ili-	(Ut) ili-	(Si) ii-

(142)[322]すわる（座る）				
(Ew) təgə-	(Ek1) təgə-	(U) təə-	(Na) təə-	(J) tə-
(S) təgə-	(Ek2) təgə-	(Oc) təə-	(Ul) təə-	(Ma) tə-/təčə-
(N) təgə-	(Na k) təə-	(Hz) təə-	(Ut) təə-	(Si) tə-

(143)[324]ねる（寝る）				
(Ew) xuklən-	(Ek1) ukləə-	(U) kəptə-	(Na) akpaŋgo-	(J) ---
(S) xuləə-	(Ek2) xuklәə-	(Oc) čoroči-	(Ul) akpan-	(Ma) dədu-
(N) ---	(Na k) xuklə-	(Hz) dudu-	(Ut) akpan-	(Si) dudu-

The cognates with forms in (Ew), (S), (Na k) and (Ek1, 2) are, according to Ts., only found in the four languages of Group I and the Kur-Urmi dialect of (Na). Hence these can be thought of as words unique to Group I.

According to Ts., there is only one cognate of (U) kəptə-, the mimetic word kəptu kəptu/kəptə kəptə 'in a sleepy way'.

Cognates of (Oc) čoroči- are, according to Ts., (Ek) čərərgə- 'to lie down flat', (N) čorojkin- 'to fall down on one's back', (Oc) čoroči- 'to sleep on one's back', (Ul) čoroči-, (Ut) toroči- and (Na) čoroači- (for these three Group III languages the meaning is 'to sleep on one's back'). Since there is an r, it is quite possible that the (N) and (Oc) forms come originally from Group III. This item would show a lower Amur River distribution if the presence of (Ek) were discounted.

Ts. compares (Na) akpaŋgo-, (Ul) akpan- and (Ut) akpan- with (Ek) aasin- and others in the following entry: (144) 'to slumber, to sleep'.

Concerning cognates with (Si) dudu- and (Ma) dədu-, Ts. only gives

comparisons with (J) tədu- 'to go to bed' and (Oc) dəə 'bed', both found in the next entry: (144) 'to slumber, to sleep'.

(144)[325]ねむる（眠る）				
(Ew) ---	(Ek1) aasin-	(U) ŋua-	(Na) ao-	(J) tədu-
(S) aasɪn-	(Ek2) aaxin-	(Oc) aapin-/aa-	(Ul) aʊ-	(Ma) amga-/amxa-
(N) aasɪn-	(Na k) afin-	(Hz) afina-	(Ut) au-	(Si) amhə-

According to Ts., the only cognate for (U) ŋua- is (Oc) ŋua-. However, this word is not found in Avrorin i Levedeva (1978), and surveys by the present author also failed to uncover such a word. The source of (Oc) ŋua- in Ts. is Schmidt (1927), and this was probably an error. If this is the case, the word in question must be unique to (U). We have already dealt with (J) tədu- under (143) 'to go to bed'.

The forms in all other languages correspond to each other, but how they do so is rather complicated. Not listed here is (Na) apsin- 'to lie down', which is said to correspond to the (Hz) and (Oc) forms. In Groups I and III there are no -pi- / -fi- forms like the ones found here; this is another piece of evidence supporting the view that (Hz) is the closest overall to the Group II languages.

(145)[328]たべる（食べる）				
(Ew) ǰəp-	(Ek1) zəp-	(U) digə-	(Na) sia- (Na l) ǰəp-	(J) ǰəfu-
(S) ǰit-	(Ek2) siluu-	(Oc) ǰəptə-	(Ul) ǰəp-	(Ma) ǰə-
(N) ǰəp-	(Na k) ǰəp-	(Hz) ǰəfu-	(Ut) dəptu-	(Si) ǰə-

The cognates for (Ek2) siluu- are, according to Ts., found in all Tungus languages except for (J), with the meaning of 'soup' (such as (Ek) silə). With the exception of (S), the three languages in Group I have a verb meaning 'to eat soup'. Ts. further compares this with (lit. Mo) šilün 'soup'.

Cognates with (U) digə- are, according to Ts., (Ek) dirga 'esophagus', (U) diga- 'to eat, to eat as a staple', (Ul) dirgan 'to have plenty of food', dirga- 'to live in abundance', (Na) ǰirgan 'to have plenty of food' and ǰirga- 'to live in abundance'.

In Ts., the cognates of (Na) sia- are given with the meaning of 'to bite, to chew'.

Even in (Na), ǰəp- is used in the lower reaches of the Amur River. This is probably due to a semantic extension that occurred in some dialects of (Na).

(146)[329]のむ（飲む）				
(Ew) kool-	(Ek1) imi-	(U) umi-	(Na) omi-	(J) omi-
(S) ɪmɪ-	(Ek2) um-	(Oc) imi-	(Ul) ʊmɪ-	(Ma) omi-
(N) ʊm-	(Na k) omi-	(Hz) omi-	(Ut) umi-	(Si) aimi-

The cognates of (Ew) are, according to Ts.: (Ek) kool-, (Ew) kool-, (N) koli- (the above all mean 'to drink'); (N) kolimusi-, (Ul) koǒjomsi-, (Ut) kodomo-/ kokomu- (these mean 'to be thirsty').

(147)[337]とぶ（飛ぶ）				
(Ew) dəg-	(Ek1) dəgili-	(U) diəli-	(Na) dəgdə-	(J) ---
(S) dəglii-	(Ek2) dəgi-	(Oc) diəli-	(Ul) dəgdə-	(Ma) dəi-/dii-
(N) dəg-	(Na k) dəgdə-	(Hz) dəgdə-	(Ut) səgdə-	(Si) dəi-

The element -li seen in Groups I and II probably originates from an aspectual affix indicating the inchoative. On the other hand, the element -də seen in Group III languages is probably a common element in the Tungus languages, occurring in the present form of irregular verbs such as *bur- 'to die' and *ga- 'to take'. Novikova (1968) characterizes this as 'an element that appears in verbs indicating a change from one state to another'. The action of 'flying off' certainly matches this description.

(148)[345]やく（焼く）				
(Ew) čaarɪt-	(Ek1) kapsa-	(U) daga-	(Na) ǰəgǰi-/silo-	(J) ---
(S) sılı-	(Ek2) xigə-	(Oc) kaamuči-/ǰali-	(Ul) ǰəgdi-	(Ma) šolə-/šolu-
(N) ǰəgdi-/kakčı-	(Na k) ǰəgǰi-	(Hz) ǰiǧjə-	(Ut) daldači-/siloči-	(Si) solu-

(Ew) čaarɪt- is from Russian.

Cognates with (S) sılı-, (Ut) siloči-, (Si) šolu- and (Ma) šolə-/šolu- are, according to Ts., in all Tungus languages apart from (J). The meanings are

'food grilled on skewers', 'to skewer something onto cooking skewers', 'to grill with skewers'. Ts. further compares this with (lit.Mo) sira- 'to roast, to grill'.

The origins of (Ek1) kapsa- is unknown. Cognates of (Ek2) xigə-, according to Ts., are found in all Tungus languages apart from (S), (Oc) and (J). They have meanings such as 'to warm oneself up, to warm something up, to put something onto the fire, to cook something on using heat'. However, (U) pikilə- begins with p, indicating that this might be a loan from (Na).

Cognagttes with the words seen in (N), (Na k), (Hz), (Na) and (Ul) are in all languages in Groups I (except for (S)), as well as Groups II and III. The form is ǰəgdə- ((Ut) has dəgdə-) and means 'to burn (vi.)'. The (Ma) and (J) words in Group IV mean 'to burn (vt.)'.

Cognates of (U) daga- are, according to Ts., (Ek) dalga- 'to grill on skewers of to cook in a frying pan'. These are found in all Tungus languages apart from (Oc), (Ma) and (J).

Cognates of (U) kaksi- are, according to Ts., found in (N), (U), (Ul)< (Ut), (Na) and (Ma). (U) kakčisi- means 'to brown the surface, to toast', (Ut) kakči- means 'to turn red hot', (Na) kaktari means 'the choky smell of burning/ singeing'. In all other languages verbs with the meaning 'to be burnt (in various spots on the surface), to smell like something is burnt' are given.

The origins of (Oc) kaamuči- and ǰali- are unknown. These are not found in Avrorin i Levedeva (1978) either.

(Ut) daldači- is not found in Ts. either. Concerning 'to roast, to grill', Ikegami (1994) has obtained dəgǰi- from two informants. In Ikegami (1997) dəgǰi- is described as 'to burn (vt.)'.

(149)[349]ころす (殺す)				
(Ew) maa-	(Ek1) waa-	(U) waa-	(Na) waa-	(J) wadu-
(S) waa-	(Ek2) waa-	(Oc) waa-	(Ul) waa-	(Ma) wa-
(N) waa-	(Na k) waa-	(Hz) waa-	(Ut) waa-	(Si) va-

(150)[356]きる（着る）				
(Ew) tət-	(Ek1) təti-	(U) tətigi- /təisə-	(Na) tətuələ- /təsiči- (Na l) tərču-	(J) ətu-
(S) titi-	(Ek2) tət-	(Oc) təti-	(Ul) tətu-	(Ma) ətu-
(N) təti-	(Na k) təči-	(Hz) titi-	(Ut) tətu-	(Si) utu-

See entry (28) for 'clothes, clothing'

(151)[359]よむ（読む）				
(Ew) taŋ-	(Ek1) taŋi-	(U) taŋi-	(Na) xola- (Na l) taon-	(J) taun-/finija-
(S) iši-/əəri-	(Ek2) taŋ-	(Oc) taŋi-	(Ul) taʊn-	(Ma) tuwa-/hūla-
(N) taŋ-	(Na k) xula-	(Hz) xola-	(Ut) taun-	(Si) hula-

Ts. views the forms in (Ew), (N), (Ek1), (Ek2), (U) and (Oc) above as cognates with the forms found in (Ut) and lists them under one entry. According to that entry in Ts., the forms in all languages in Group I (except (S)) and Group II are taŋ-/taaŋ-/taŋi- 'to read, to count'. In Group III it is (Ul) taun- 'to read', in (Ut) taun- 'to read, to count', in (Na) taon- 'to count'. No cognates are given for (Ma). As was seen in entry (127) 'to see', Ts. believes there are no cognates with (Ma) tuwa- apart from that found in (J). However, this (Ma) tuwa- can also be seen as a correspondent of the above. Ts. also compares these with (lit.Mo) toɣa-n 'number, amount'. Yamamoto (1969) describes taa- as 'to read silently' and hula- as 'to read aloud'.

(S) iši- means 'to read aloud'; see entry (127) 'to see'. According to Ts., the cognates of (S) əəri- are in all Tungus languages apart from Group II and (Ma). Examples are (Ek) əərii- and (Na) xəərsi-, meaning 'to shout, to call'. However, the (J) word means 'a story'.

According to Ts., cognates with (Na k) xula-, (Hz) xola- and (Na) xola- are only found in (Na), (Ma) and (J). Ts. also compares these with the Chinese hu[1] 呼 'to call'.

(152)[361]きる（切る）				
(Ew) miinə-	(Ek1) mii-	(U) kusigusi-	(Na) caaso- /čaali-	(J) ---
(S) ǰigə-	(Ek2) ǰigə-	(Oc) miinə-	(Ul) čaasʊ-	(Ma) faita-/sači- /furu-/məitə-
(N) miinə-	(Na k) xoina-	(Hz) kəčəə-	(Ut) mii- /xətun-	(Si) mitə-

Concerning the meaning of various forms in (Ut), Ikegami (1997) gives čigasu- 'to cut, to fold (many times)', čigali- 'to cut, to fold (just once)', čiŋguli- 'to cut (with an axe or a saw), to fold (by hand)', miinə- 'to cut

repeatedly, to cut into small pieces', mii- 'to cut, to cut slightly', xoo- 'to cut by striking with an axe'.

Concerning the meaning of various forms in (Si), Yamamoto (1969) gives fiatə- 'to cut out', sačə- 'to cut at, to cut', furu- 'to cut in a downward direction, to cut in half', miti- 'to cut in half, to cut off' and dajəvə- 'to cut and wound someone'.

Cognates of mii-/miinə-/mitə-/məitə-, as seen in (Ew), (N), (Ek1), (Oc), (Ut), (Si) and (Ma) are, according to Ts., in all Tungus languages except for (S). According to Ts., in Group III there are (Ul) ŋui-, (Ut) mii-/miinə- and (Na) mui-/ŋui-. (Ul) and (Na) seem to have preserved the older diphthongs.

According to Ts., cognates with (S) ǰigə-, (Ek2) ǰigə- are in all Tungus languages except for (S) and (Ut). They have various meanings such as 'to cut finely, to spit'. (J) ǰisu- means 'to do, to prepare'. This is also given in Chaoke & Tsumagari (1995, 1997), and is without a doubt most often-used word in (S).

(U) kusigusi- is derivation of 'knife'. According to Ts., there are similar verbs in the three languages of Group III, as well as in (Ma) (see also entry (26) for 'knife').

Cognates with (Na k) xoina- mean, according to Ts., 'to cut, to cut off, to cut down' in Group I (except for (S)) and Group II. Examples are (Ek) xoog-, (Ew) xoon- and (Oc) xoi-. In (Na) the word is only found in the Kur-Urmi dialect, so it is safe to assume that it is not found in Group III.

According to Ts., (Na) caaso- has only one cognate: (Ul) času-/časi- 'to cut finely, to cut out'. There is no mention of (Ut) čigasu-. As one can see from (Ut), xamačiga and (Na) xamačaa, meaning 'what kind of', together with (Ut) koliga(n) and (Na) kolaan, meaning 'bug/ worm', (Ut) preserves intervocalic g's relatively well. Hence (Ut) čigasu- may also be a cognate.

Cognates of (Ma) faita- are, according to Ts., found in all Tungus languages. These are also the cognates of xa/xaa/xaan in Groups I and II, and that of pooni/paani/poani in Group III (all meaning 'part').

Cognates with (Ma) sači- are, according to Ts., (Ek) capčii 'pieces of wood', (S) sarči- 'to sever', (N) čapča-/čapči- 'to break', (U) čapča 'to spit firewood' and (Na) čapči- 'to spit firewood', to sever'. Strangely enough, in Group III, we only find this item in (Na).

Cognates of (Ma) furu- are, according to Ts., found in (Ek), (Ew), (N), (Ul), (Na) and (Ma). These all have the meanings of 'to cut finely, to pound into fine pieces'. (Na) purtu means 'a fragment, a small piece', and (N) is said to come from (Ul).

(153)[362]つくる（作る）				
(Ew) oo-	(Ek1) bələkə-	(U) oo-	(Na) aŋgo-	(J) ---
(S) oo-	(Ek2) oo-	(Oc) oo-	(Ul) aŋǰu-	(Ma) ara-/wəilə-
(N) oo-	(Na k) aŋgo-	(Hz) oo-	(Ut) andu-	(Si) arə-

According to Ts., cognates of (Ek1) bələkə- are found in all Tungus languages, and the meaning is always 'to prepare'. Also, (lit.Mo) beledke- 'to prepare' is given for comparison. The forms found in (Na k), (Na), (Ul) and (Ut) are characteristic of Group III. According to Ts., (Ma) ara- also only has one cognate in (J), making this a characteristic word of Group IV.

Cognates with (Ew) oo- are, according to Ts., found in all Tungus languages. However, whilst in Groups I and II the two meanings of 'to make, to do' and 'to become' can be expressed through inflections at the end of words, Group III and (Ma) words cannot express the meaning of 'to make, to do'. Ts. gives o-fi 'because' as the cognate of (J).

Cognates of (Ma) wəilə- are, according to Ts., found in (Ek), (Ew), (Ul), (Ut), (Na) and (Ma). These find their origins in (lit.Mo) üile 'work, behaviour'. Apparently, in (Ek) and (Ew) the word was borrowed through Yakut, while in other languages the route was via (Ma).

(154)[363]あける（開ける）				
(Ew) aaŋa-	(Ek1) kaalga-	(U) ŋiəntilə-	(Na) nixəli-	(J) ---
(S) naŋı-	(Ek2) nii-	(Oc) nii-	(Ul) ačʊ-/ňii-	(Ma) nəi-
(N) nii-	(Na k) nixəli-	(Hz) nixələ-	(Ut) nii-	(Si) li-

The cognates of (Ew) aaŋa- are, according to Ts., found in (Ek), (S), (Ew), (N), (U), (Ul), (Ut) and (Na). In (Ek), aŋa- apparently means '(of animals) to open the mouth', while aŋa means 'an animal's mouth'. In the three languages of Group III it means to 'to pull the trigger'. (U) aŋgala means

'bottle' (<(Ma)). Since the (Ma) term is not given, the present author searched through other sources and found (Ma) aŋara 'bottle' (Haneda 1937). Ts. further compares this with (lit.Mo) anGai- ' to open up (of gaps between objects), to open wide (of mouths etc.)'.

Cognates with (S) naŋɪ- are, according to Ts., only found in the four languages of Group I. Their various meanings are: 'to open, to spread open' in (Ek) laŋi-, 'to remove a tent cover' in (Ew) naŋi-, 'to spread open, to stretch' in (N) laŋisin-.

(Ek1) kaalga- is a derivative of (Ek1) kaa-, described in the next entry: (155) 'to close'. According to Ts., cognates with this form are found in (Ek), (S), (Ew), (Ul), (Ut), (Na) and (Ma). In (Ew) it is kaalgɯ- 'to close', and in Group III the meaning is all 'to strangle to death, to suffocate'. Ts. further compares this with (lit.Mo) qaGa- 'to close', and claims the forms seen in (Ek), (S) and (Ma) are all directly imported from the Mongolian form. It is also believed that the forms in (Ek2), (U), (Hz), (Oc), (Na), (Ut), (Si) and (Ma) all correspond with each other. According to Ts., cognates of these are found in all Tungus languages apart from (S), (Ew) and (J). The meaning is all 'to open'. As we can see from the above, the forms for (U) and (Na) are slightly different. Ts. makes further comparisons with (lit.Mo) nege- 'to open'.

(155)[364]しめる（閉める）				
(Ew) nipkɯ-	(Ek1) kaa-	(U) kimpi-	(Na) dasi-/jakči-	(J) ---
(S) tiri-	(Ek2) som-	(Oc) lakči-	(Ul) somu-	(Ma) jaksibu-
(N) lakčɪ-/som-	(Na k) dasi-	(Hz) dasi-	(Ut) somi-	(Si) jaqsə-

The cognates of the (Ew) form shown above are, according to Ts., in all Tungus languages except for (S), (Ma) and (J). In (Na) and (Ul) it means 'to block, to block the way of passage'; in other languages it means 'to fill in a hole, to close something up'.

(S) tiri- is given as (S) tir-/tirə- 'to hold down' in Ts. Cognates with this are found in all Tungus languages apart from (U) and (J), and the meaning is 'to hold down' in all cases except for (Ma) ((Ma) čirgə- means 'to take off a

bowstring, to pound the earth until it is hard'. As Chaoke & Tsumagari (1997) also gives tiri- with 'to hold down', we can safely assume we are dealing with the same word.

Cognates with (N) som-, (Ek2) som-, (Ul) somu- and (Ut) somi- are, according to Ts., (Ek) soom-, (Ew) xoom-, (N) soom-, (Ul) somi-, (Ut) somi-, (Ma) somi- and (J) somi-. The meaning is 'to be hidden' in (Ma) and (J). In other languages it is 'to shut, to close (doors, windows etc.)'.

According to Ts., the cognates of (Na k) dasi-, (Hz) dasi- and (Na) dasi- are in all Tungus languages apart from (S), (U) and (J).

The cognates of the (N), (Oc), (Na), (Si) and (ma) forms seen above are, according to Ts.: (Oc) jakči-/lakči- 'to close a door, to lock something', (U) jakčigi- 'to prop open a door', (Ul) jaklu-/ jaksi-/ jakču- 'to lock something', (Na) jakči- 'to close something, to lock something', and (Ma) jaksi-/ jaksi- 'to close something, to bolt a door'.

(156)[365]すむ (住む)				
(Ew) iin-	(Ek1) bi-	(U) bagdi-	(Na) bi-/balǰi-	(J) ---
(S) təgə-	(Ek2) uriin-	(Oc) bi-	(Ul) bi-	(Ma) tə-
(N) bi-	(Na k) balǰi-	(Hz) baldi-	(Ut) bi-	(Si) tə-

According to Ts., the cognates of (Ew) iin- are firstly in-/ iin- 'to live' in the three languages apart from (S) in Group I, then also inirgə-/inərgə- 'to come back to life' in (S). In Group II, there is (Oc) ini/ iniji/ inihi and (U) inigi meaning 'to be alive', and in (Na) (Kur-Urmi dialect) there is iŋkii 'to be alive'. The word for 'to be alive' in (Na) is ujun, and according to the available data in Ts., only the three languages of Group III and (Ma) wəjxun 'to be alive' are given as cognates. The above thus shows a complementary distribution. If we assume that i in Groups I and II relates to u in Group III, then it is possible these words correspond to each other.

The forms found in (S), (Si) and (Ma) are really the same as 'to sit' given in entry (142), which is distributed throughout all Tungus languages. As far as one can determine from the Ts. data alone, the (Ek) form is the only one with the extra meaning of 'to dwell'.

See (173) 'to be' for an explanation of the bi- given in (Ek1). For details on (U) bagdi- and (Na) balǰi- see (158) 'to give birth' and (159) 'to be born'.

Cognates of (Ek2) uriin- are, according to Ts., (Ek) uriin- 'in terms of shifts in accommodation) to stay, to put up at', (Ew) ərin- 'to stay somewhere in the middle of a trip, to put up a tent'. With (S), a likely derivative is given: (S) uriilən 'family, household'. The distribution here is biased toward Group I.

(157)[393]かぞえる（数える）				
(Ew) taŋ-	(Ek1) taŋi-	(U) taŋi-	(Na) taon-	(J) ---
(S) taŋıı-	(Ek2) taŋi-	(Oc) taŋi-	(Ul) taun-	(Ma) tolo-
(N) taŋ-	(Na k) taon-	(Hz) taun-	(Ut) taun-	(Si) tolu -

For a discussion on the forms found in (Ew) and (Na), see entry (151) 'to read'.

Concerning (Si) tolə- and (Ma) tolo-, Ts. only gives (Ek) toolo- (<(Mo)) 'to count' and does not give the (Ma) form. However, we can safely assume this is from Mongolian ((lit.Mo) toγala-, (Mo) toolo- 'to count').

(158)[394]うむ（産む）				
(Ew) bak-	(Ek1) baldi-	(U) jatasi-	(Na) baa-	(J) ---
(S) baldı-	(Ek2) baldi-	(Oc) bagdi-	(Ul) baka-	(Ma) baňji-
(N) baldı- /baxa-	(Na k) ---	(Hz) uǰi-	(Ut) jaata-	(Si) baňjə -

Cognates with (Ew) are, according to Ts., distributed in all Tungus languages with the meaning of 'to find something' (only (J) does not have a gloss). Words in (Ew), (Oc), (U), (Ut) and (Na) have the meaning 'to give birth' clearly labelled.

Cognates with words like (S) baldı- and (Ma) baňji- are, according to Ts., found in all Tungus languages. All languages other than (J) have the meaning of 'to be born, to grow up'. Moreover, languages other than (J) and (Ew) also have the meaning of 'to live one's daily life'. However, the meaning of 'to give birth' is given for the four languages of Group I, but not for the languages of Group II and III. In (Ul) and (Na) the meaning of 'to give birth' is found in a derivative created by attaching a causative affix and changing the voice of the word.

According to Ts., the cognates of (U) jatasi- are (N) jatawu 'a small hut for giving birth', (Oc) jaataŋko 'the impurity of women after childbirth', (U)

jata '(menstrual) blood' jatasi- 'to give birth', jata(')u 'a small hut for giving birth', (Ut) jaata- 'to give birth' and (Na) Kur-Urmi dialect jaata 'separation of a clan'.

(159)[395]うまれる（生まれる）				
(Ew) bakap-	(Ek1) baldi-	(U) bagdi-	(Na) baǰi-	(J) ---
(S) baldı-	(Ek2) ---	(Oc) bagdi-	(Ul) balda-	(Ma) baňji-
(N) baldıw-	(Na k) baǰi-	(Hz) uǰi-	(Ut) baǰi-	(Si) baňjə-

(Ek) bakap- derives its meaning of 'to be found' by the addition of a passive (reflexive) suffix -p to baka- 'to find something/ someone'

(160)[397]しぬ（死ぬ）				
(Ew) ačča oo- /kəkəə-	(Ek1) bu-	(U) budə-	(Na) bur-	(J) bučə-
(S) bu-	(Ek2) bu-	(Oc) bu-	(Ul) bul-	(Ma) bučə-
(N) bu-	(Na k) bu-	(Hz) budə-	(Ut) bul-	(Si) bəčə-

(Ew) ačča oo- means 'to cease to exist', and there is a tendency to use this form when referring to people. Apparently, kəkəə- is used for animals etc. According to Ts., there is only one cognate with kəkə-: (Ek) kukəlčəə 'to be on the verge of death, about to die'.

According to Ts., the forms in the other languages have cognates throughout all Tungus languages. In (Ew), words only have derived meanings from 'to die', such as buni 'the dead', bunikən 'the underworld'. The (Ew) words do not precisely match the meaning of 'to die', which is found with forms in other languages.

(161)[402]あう（会う）				
(Ew) bakaldɯ-	(Ek1) bakaldi-	(U) ba'asi- /baasa-	(Na) ačan-	(J) ---
(S) baxaldı-	(Ek2) naaldi- /ičəldi-	(Oc) baači-	(Ul) baačı-	(Ma) ača-
(N) baxatmat-	(Na k) bakači-	(Hz) bakči-	(Ut) ataali-	(Si) ačə-

The forms found in (Ew), (S) and (Ek1) are formed by the attachment of a reciprocal voice markers. For example, the (Ek1) word is formed by the addition of the reciprocal voice marker -ldii to baka- 'to find something'. According to Ts., cognates in Groups II and III have the following forms: (Oc) bagače-/bači-, (U) b(') agdi-, (Ul) baači-/baaču-, (Ut) bagači- and (Na) baači-. The meaning in all cases is 'to meet'. Of these, (U) b(') agdi- is derived from *bakaldi via the process of -ld- > -gd-, and this corresponds to the forms found in Group I. On the other hand, (U) ba(') asi- given above is derived from Group III type forms such as (Na) baači-, via the process of -č- > -s-.

Cognates with the words given under (Na), (Ut), (Si) and (Ma) are, according to Ts., found in all Tungus languages apart from (J). With the exception of (Ut), in Groups II and III the form is ača- ((U) has asa-), and the meaning is 'to fit together, to be suitable'. Also, forms with -li attached — such as (Oc) ačali-, (U) asali-, (Ul) ačali-, (Ut) ataali- and (Na) ačamboali- — all mean 'to meet'. In Group I, it is words with an r element —such as (Ek) arča-, (S) arčaa-, (Ew) arčaldɯ- and (N) alčaldii-/atčaldii- —that mean 'to meet'. Manchu in Group IV has both forms: (Ma) ača- 'to meet, to fit together, to hit the mark' and arča- 'to intercept a beast and strike it, to block a path'.

(162)[408]おく（置く）				
(Ew) nəə-	(Ek1) nəə-	(U) nədə-	(Na) nəə-	(J) ilišu-
(S) nəə-	(Ek2) nəə-	(Oc) nəə-	(Ul) nəəku-	(Ma) sinda-
(N) nəə-	(Na k) nəə-	(Hz) nədə-	(Ut) əksə-	(Si) sənda-

(Ma) sinda- possibly corresponds to words such as (Ek) tiin- and (Na) činda-, which mean 'to release' in all Tungus languages apart from (J). Even in Ts., (Ma) sinda- is described as having the meaning of 'to place' in addition to 'to release'. In (Na), kiŋdaa- means 'to break into pieces, to snap', and according to Ts., cognates are found in (Ek), (Oc), (Ul) and (Ut). However, these probably come from a different source all together.

According to Ts., cognates with (Ut) əksə- are: (Ek) əkčə- 'to bring, to take, to set aside, to preserve'. (Ut) əksə- 'to set aside', əksəpsi/əksəpsuli 'dangerous' and (Oc) əksən 'wolf'. There is another example in (Ek), ŋəələ-, where 'wolf' is derived from 'ferocious', so there are reasons to believe the above are cognates.

Concerning (J) ilišu-, Ts. compares this with (Ek) il- (found also in all Tungus languages) and gives the definition of 'to put into place, to make something/ someone stand'.

Cognates of forms such as (S) nəə- are also given in Ts. as being in all Tungus languages apart from (Ut) and Group IV. As we shall see in the next entry, (163) 'to go out', in (Ut) the following changes have occurred: č > t, ǰ > d, ň > n. Hence (Na) niə- and (Ul) niə-/ňəə- have become nəə- in (Ut). It is quite possible that the word ceased to be used to avoid homophonic confusion between the words 'to place' and 'to go out'.

(163)[410]でる (出る)				
(Ew) ňuu-	(Ek1) juu-	(U) ňuu-	(Na) niə-	(J) tuti-
(S) juu-	(Ek2) juu-	(Oc) ŋəi-	(Ul) ňiə-	(Ma) tuči-
(N) juu-	(Na k) ňuu-	(Hz) niu-	(Ut) nəə-	(Si) tiči-/tuči-

The forms found in Groups I, II and III are seen as cognates. In Ts. also, the meaning 'to go out' is given for all forms throughout the Tungus languages, with the exception of Group IV.

In contrast, according to c., cognates with (Ma) tuči- are only found— apart from (Ma) and (J)— in the (Ek) form turku- 'to go out (into a wide open space)'

(164)[411]はいる（入る）				
(Ew) ii-	(Ek1) ii-	(U) iigi-	(Na) ii-	(J) iri-
(S) ii-	(Ek2) ii-	(Oc) ii-	(Ul) ii-	(Ma) dosi-
(N) ii-	(Na k) iŋə-	(Hz) niŋ-	(Ut) ii-	(Si) dosi-

Cognates with forms such as (Ew) ii- are given with the meaning of 'to go in' across all Tungus languages in Ts. Even (Ma) (Sibe) is given as jubə- 'to go out'. On the other hand, Yamamoto (1969) does not list this word at all. Ts. considers (J) iri- a cognate and lists it under the same heading, comparing it with (lit.Mo) ire- 'to come'.

With (Ma) dosi-, Ts. sees this as a cognate with doo 'inside', which is found in all Tungus languages. Ts. lists these under the same heading, but there are no other languages with derivative verbs that mean 'to go in'.

(165)[412]くる（来る）				
(Ew) əm-	(Ek1) əmə-	(U) əmə-	(Na) ǰi-	(J) di-
(S) əmə-	(Ek2) əmə-	(Oc) əmə-	(Ul) di-	(Ma) ǰi-
(N) əmə-	(Na k) əmə-	(Hz) əmə-	(Ut) sinda-	(Si) ǰi-

The forms seen in (Na), (Ul) and Group IV are, according to Ts., only found in (Ul), (Na), (Ma) and (J), as expected. Ts. gives (Ul) ǰi-, as does Petrova (1936). However, Sunik (1985) gives the form di-. As far as one can tell from actual field surveys conducted by the present author thus far, all informants have the di form (Kazama 1996b contains many examples of this).

For some reason, (Ut) sinda- is not given in Ts. According to Ikegami (1994) sinda- is also used in the northern dialects. In Petrova (1967) the sample for 'to come' is taken as xinda- (see Petrova 1967, p.131, 1.9 etc. The word appears in the text). However, not even this form is given in Ts. Hence, it is not possible to clarify its relationship with other languages.

Cognates with the various forms related to (Ek) əmə- are, according to Ts., only found in Groups I and II, as expected (the Kur-Urmi dialect of (Na) is included here). The meaning is 'to come' in all languages.

(166)[413]いく (行く)				
(Ew) ŋən-	(Ek1) nənə-	(U) ŋənə-	(Na) ənə-	(J) gənə-
(S) ninə-	(Ek2) xuru-	(Oc) ŋənə-	(Ul) ŋənə-	(Ma) gənə-
(N) geexʊ-/ŋəni-	(Na k) ənə-	(Hz) ənə-	(Ut) ŋənə-	(Si) gənə-

Cognates with (Ek2) xuru- are, according to Ts., (Ek) suru-/xuru-/šuru-, (Ew) xər- (the meaning of the above being 'to go away') and (Na) s {外字} jiwuk 'a bride's dowry'.

(167)[416]うごく (動く)				
(Ew) xoŋnɯ-	(Ek1) gurgəl-	(U) ŋənə-	(Na) tuiŋku- (Na l) tuňku-	(J) ačidu-
(S) guggəl-	(Ek2) xawal-	(Oc) ---	(Ul) ---	(Ma) ašəšə-/aiči-
(N) ---	(Na k) ---	(Hz) ---	(Ut) tuttu-	(Si) ači-

According to Ts., cognates with (Ew) xoŋnɯ- are not found in other languages; the other item under the same entry is (Ew) xoɣnə- 'to move, to move slightly, to sway, to crawl (as in babies)'. Novikova 1980 also gives the same form.

Concerning cognates with (S) guggəl- and (Ek1) gurgəl-, Ts. only gives (S) gurgəlbuu- 'to move (vt.)', (Ew) gurgəl- 'to move, to sway, to tremble'. However, through surveys, we have found the word in (Ek) as well. We also found that the (S) form is a transitivised one formed by the addition of the affix -buu. The origin of the derivative, an intransitive word, also exists.

Cognates with (Ek2) xawal- are (Ek) xawaa- 'work (noun)', xawal- 'to work', (Ew) hawa 'work (noun)', xawad- 'to work', (N) xawaadakta- 'to work', (Na) pasali- 'to work hard, to be diligent', (Ma) fašša- 'to work hard, to be diligent'.

With (U), we collected a word called ugi- from other informants. However, according to Ts., there is only one other cognate apart from (U) ugi- 'to sway, move': (Oc) uggi- 'to sway, to move'. Hence this is said to be a characteristic Group II word.

Cognates with (Na) tuiŋku- are, according to Ts., (Ew) tuŋkə- 'to knock or push quietly', (Na) tumku-/tuŋku- 'to move, to sway', (Ul) tujnčulbu-/tunču- 'to move (vt.), to sway (vt.)' and (Na) tuiŋku- 'to move, to sway'.

Concerning cognates with (Ut) tuttu-, Ts. says there are none to be found in other languages. The only other word under the entry is (Ut) tutči- 'to sway, to move in a swaying motion'. However, in (Ut) changes have occurred so that nasals before voiceless consonants have become denasalised, resulting in homorganic voiceless plosives. Also, č has become t in all environments except before i. Hence, the (Ul) form tunču- above would have changed in the following manner in (Ut): tunču- > tuntu- > tuttu-. We thus conclude that (Ut) tuttu- is a cognate of (Na) tuiŋku-. In addition, to be exact, the meaning of (Ut) tuttu- is 'to move (vt., vi.)', according to Ikegami (1997).

In Ts., there are no records of cognates of forms such as (Ma) ači-. Ts. does give ači- 'to make another carry a load', but this probably has a different origin. Haneda (1937) also only gives the meaning of 'to make another carry a load'.

(168)[418]あたえる（与える）				
(Ew) buu-	(Ek1) buu-	(U) buu-	(Na) buu-	(J) ---
(S) buu-	(Ek2) buu-	(Oc) buu-	(Ul) buu-	(Ma) bu-/šələ-
(N) buu-	(Na k) buu-	(Hz) buu-	(Ut) bəə-	(Si) bu-

According to Ts. and Novikova (1980), the Ora dialect in (Ew) has bəə- 'to give'.

(Si) šelə- is, according to Yamamoto (1969), 'to give (without charging money), to lend'. (Ma) šələ- is also, according to Haneda (1937), 'to give (without charging money)'. However, according to Ts., there are no other cognates with this, only the (Ma) form is given. This is said to be from the Chinese she^{3} 捨 'to forgo'.

(169)[419]する				
(Ew) ňək-	(Ek1) oo-	(U) ---	(Na) ta-	(J) ǰisu-
(S) oo-	(Ek2) gərbə-	(Oc) ---	(Ul) ta-	(Ma) ara-
(N) oo-	(Na k) ---	(Hz) ---	(Ut) xai-	(Si) arə-

Cognates with (Ew) ňək- are, according to Ts., (Ek) ňəkə-, (Ew) ňək-, (N) ňəxə-, (Oc) ňəə- and (U) ňəxə-. The meaning is all 'to do, to perform a task'. The present author also collected (U) nixə- from other informants, and in Kazama (1996b, p.113) this is recorded as (Oc) jaa-wa ňə-i-si 'what are you doing'. Thus we conclude that this is a Group I, and especially a Group II word.

Please refer to (153) 'to make' for a discussion on (S) oo-.

Cognates with (Na) ta- are, according to c., (Ul) ta-/ ti- 'to do, to be...(copula), a kind of auxiliary verb that connects to adverbs', (Na) ta- (the meaning is the same as (Ul)), (Ut) to- 'to do', (Ma) tafurša- 'to be extremely excited'. These words are used in Groups III and IV (especially in Group III). According to Ikegami (1997), (Ut) to- means 'to do (something), to have sexual intercourse'.

According to Ts., there is only one cognate with (Ma) ara-: (J) lalu mutəburu 'to record (an event)' For an explanation of (J) ǰisu-, please see (152) 'to cut'.

(170)[420]おもう（思う）				
(Ew) mulgat-	(Ek1) bodo-	(U) məisi-	(Na) murči- (Na l) murču-	(J) ---
(S) bodo-	(Ek2) duumaj-	(Oc) məiči-	(Ul) murču-	(Ma) gūňi-
(N) məjgə-	(Na k) muǰulə-	(Hz) goni-	(Ut) mərəči-	(Si) ɢoni-

According to Ts., the only cognates of (Ew) mulgat- are (Ek) mulgiit- 'to act cunningly' and (Ew) muulgut- 'to consider, to decide, to imagine'. Cognates with (S) bodo- are, according to Ts., (Ek) bodo- (<(Mo)) 'to think', (S) bodo- (<(Mo)) 'to think', (Oc) budu- 'to decide', (U) bodo- 'to think, to look on as, to count', (Ul) bodo- 'to count', (Ut) boddo-/ bodo- 'to think', (Na) bodo- 'to think, to count, to take into consideration, to decide', (Ma) bodo- 'to

think, to think of, , to plan, to count, to set up boundaries'. According to Ozawa (1983), the (Mo) form is bobo- ((lit.Mo) bodu-) 'to think, to calculate, to aspire to'. It is possible that in languages other than (Ek), the word first entered (Ma) from (Mo), and then spread from there.

(Ek2) duumaj- is from Russian.

The cognates of (U) məisi- are, according to Ts., (Ek) mərgə-, (Ew) mərgɯ-, (N) məigə-, (Oc) məjči-, (U) məisi- (the meaning of all the above is 'to think'), (Ul) məxə- 'to notice, to get an inkling about something', (Ut) mərgə 'intelligent', (Na) mərki- 'to notice, to get an inkling about something' and (Ma) mərki- 'to think of something, to surmise'.

Cognates of (Na) murči- are, according to Ts., (Ew) murač- 'mental strength, good luck', (Oc) muiči- 'to think, to consider', mujuŋku 'intelligent', (Ul) murun 'heart', muruči- 'to think, to consider, to decide'. The situation here is the same as (Ut), (Na) and (Ul).

See (129) 'to say' for an explanation on (Ma) gūni-.

(171)[421]しる（知る）				
(Ew) taa-/xaa-	(Ek1) saa-	(U) saa-	(Na) saa- /taako-	(J) sa-
(S) saa-	(Ek2) saa-	(Oc) saa- /təmnə-	(Ul) saa-	(Ma) sa-
(N) saa-	(Na k) saa-	(Hz) saa-	(Ut) saa-	(Si) sa-

Cognates with (Oc) təmnə- are, according to Ts., (Ek) tumnaači 'intelligent', (N) tumkun 'intelligent', (Oc) tumnə- 'to understand'.

(172)[422]できる				
(Ew) xaa-	(Ek1) ətə-	(U) ňoni-	(Na) otoli-/mutə-	(J) dugi-
(S) ətə-	(Ek2) sataa-	(Oc) təmnə-	(Ul) mutə- /ʊtılı-	(Ma) mutə-
(N) ʊtılı-	(Na k) otoli-	(Hz) ulxi-	(Ut) utuli-	(Si) mutu-

According to Ts., cognates with (S) ətə-, (Ek1) ətə- are (Ek) ətə- 'to stop (vt.), to finish (vt.)', (S) ətə- 'to finish (vt.), to have time to do something, to be possible (judging from the situation)', (Ew) ət- 'to defeat the opposition convincingly, to be possible (judging from the situation)', (N) ətə- 'to stop (vt.), to finish (vt.)', (Oc) ətə- 'to be possible (judging from the situation)', (U) ətə- 'to win', (Ul) xətə- 'to win', (Ut) xətə- 'to win, to be settled', (Na) xətə- 'to win, to be settled', (Ma) ətə- 'to win, to be possible (judging from the situation)', ətəŋi 'strong, brave'.

Cognates with (Ek2) sataa- are, according to Ts., only (Ek) sataa- and (Ew) xataa- (the meaning in both cases is 'to be able to do something (ability)'. Ts. lists these words clearly as loans from Yakut.

(Hz) ulxi- is glossed in An (1986) as 'to understand (the Chinese dong^{3} 懂)' and 'to be possible (judging from the situation) (Chinese hui^{4} 会)'. This word is not listed in Ts., and its ancestry is unknown.

According to Ts., (U) ňoni- 'to be able to do something (ability) ' has cognates only inside of (U) itself.

Cognates with the (Na) form mutə- are, according to Ts., found in (Oc),

(U), (Ul), (Ut), (Na) and (Ma), all with the same mutə- form. The meaning is 'to be possible (judging from the situation)'. Ts. also gives (J) mutəburu 'to make, to finish,, to carry out a task', together with the (Na) Kur-Urmi dialect form mətə- 'to be possible (judging from the situation)' as cognates. The fact that the Kur-Urmi dialect form is different draws our attention, but this item mostly displays a lower Amur River distribution, and both the form and meaning is quite uniform across the languages. There is a strong possibility the item spread downstream from (Ma).

Cognates with (Na) otoli- and (Ut) utuli- have the meaning of 'to understand, to comprehend', and are found in (Ew), (N), (Ul), (Ut) and (Na). Of these, (N), (Ul) and (Na) are clearly labelled with the meaning of 'to be able to do something (ability)'. Also, (Ma) utulixəku 'rambling and irrelevant (of speech), ambiguous, unconvincing (meanings taken from Haneda 1937)' is listed as another cognate.

The cognates of (J) dugi- are unknown.

(173)[424]ある				
(Ew) bi-	(Ek1) bi-	(U) bi-	(Na) bi-	(J) bi-
(S) bi-	(Ek2) bi-	(Oc) bi-	(Ul) ---	(Ma) bi-
(N) ---	(Na k) ---	(Hz) bi-	(Ut) bi-	(Si) bi-

(174)[426]ない				
(Ew) ačča	(Ek1) aačin	(U) anči	(Na) abaa (Na l) kəwkə	(J) asuwi
(S) aasın	(Ek2) aačin	(Oc) maaki	(Ul) kəwə	(Ma) akū
(N) aača	(Na k) abaa	(Hz) anči	(Ut) anaa	(Si) aqu

Ts., the forms in (Ew), (S), (N), (Ek1, 2) , (U), (Ma) and (J) are all seen as cognates and listed under the same entry. However, (Na) abaa is given under a different entry, with (Si) aba 'none' listed as the only cognate.

Cognates with (Ut) anaa are, according to Ts., found in (Ew) (Arman dialect), (Oc), (Ul), (Ut) and (Na), and of the very same form. Apart from (Ut), which uses the form as a predicate to mean 'without ~, there is no ~', the common use in all other languages is for forming phrases used

adverbially in sentence-medial positions.

Cognates of (Oc) maaki are, according to Ts., (Ek) maja- '(a religious word) animals failing to fall into a trap, bad luck in hunting', majin/majan 'lack of success, failure (in hunting)', (Ew) maj 'premonition, uneasiness', (N) maja- 'failure to catch fish or animals', (Oc) majmaki-, maki(n) 'none', (Ut) maja- 'failure to catch fish or animals, bad luck', (Na) maňa- 'failure to catch, bad luck, to disappear, to run out of' and (Ma) maja- 'to disappear and come to nothing, to be annihilated'.

According to Ts., the cognates of (Ul) kəwə and (Na l) kəwkə are (N) k'ewk'e 'completely, utterly, all over', (Oc) kowak '(onomatopoeic word) completely', (Ul) kauka bi-i 'to be very still', kəwə 'none', kəwə o- 'to disappear and come to nothing', (Ut) kəkku 'empty' and (Na) (Najkhin dialect) kəwkə 'none', kəwkəgdə o- 'to disappear and come to nothing'. However, an examination of Onenko (1980) reveals that the (Na) forms given by Ts. are not listed. (Na) kaokaa 'to do nothing and be very still' is to be found, however.

(175)[427]おおきい（大きい）				
(Ew) əgǰən	(Ek1) xəgdəgə	(U) sagdi	(Na) daaji	(J) amban
(S) boŋgon	(Ek2) xəgdi	(Oc) sagdi	(Ul) daajı	(Ma) amba
(N) əŋdəŋə	(Na k) kəətə	(Hz) sagdi	(Ut) daaji	(Si) ambuu

According to Ts., cognates with forms such as those in (Ew), (N) and (Ek1, 2) are: (Ek) xəgdi 'big', (S) əgduug 'big', (Ew) əgdɯ 'the majority, a big amount, big', (N) əgdi, (Oc) əgdi, (U) əgdi, (Ul) əgdi, (Ut) əgǰi and (Na) əgǰi (the words from (N) all mean 'many'). Here the word-initial x- in (Ek) does not fit in with the expected correspondences. When one considers the derivatives given under the same entry, such as xəgdig 'old (of age), main, prominent', xəgdiŋə 'big, adult, old (of age)', it appears there may be a relationship with sagdi, which will be examined below.

(S) boŋgon is not in Ts., and its origins are unknown.

Cognates with the three languages in Group II, according to Ts., are in all Tungus languages in the same form (although (Ma) has sakda and (J) has salada). The word is

used to mean 'old (of age)', aged' in Groups I, III and IV.

According to Ts., cognates with daai and daaji — as seen in (Na), (Ul) and (Ut) — are only found in (Ul), (Ut), (Na), (Ma) in addition to Groups III and IV. The meaning in all cases is 'big'. However, in Haneda (1937) the (Ma) word dai is not to be found, and Fukuda only gives the Chinese da[4] 大 'big'. Hence it is quite possible this item originated and spread from Chinese.

Cognates with words like (Ma) amba are, according to Ts., (N) amban 'bad spirit, devil', (Oc) amba 'bad spirit, tiger, very', (Ut) amban 'bad spirit, devil', (Na) amban 'big spirit, tiger, quite, big', (Ma) amba 'big' and (J) amban 'big'.

(176)[428]ちいさい (小さい)				
(Ew) kučukən	(Ek1) niiči	(U) ŋičaa	(Na) nuuči	(J) oson
(S) nisxun	(Ek2) usa/usiakan	(Oc) ŋučkuni	(Ul) ňuučikə	(Ma) ăjigə
(N) naxatıkkan	(Na k) niskun	(Hz) uskuli	(Ut) nuuči	(Si) ăjik

According to Ts., cognates with (Ew) kučukən do not exist in other languages. However, he compares this with kaччaa- 'to become smaller' and kaччygyi 'small' in Yakut.

Cognates with the forms seen in (S), (N), (Ek1), (Na k), (Hz), (U), (Oc), (Na), (Ul) and (Ut) are, according to Ts., found in all Tungus languages except for (J). All mean 'small', apart from (Ma) isuxun, which means 'weak, small (of children)'.

According to Ts., the only cognate with (J) oson is (Ma) osokon 'small'. However, it is possible that the above words such as (Oc) ŋučkuni are also related.

Cognates with (Ek2) usa/usiakan are, according to c., (Ek) usa 'bad, few', (Ew) us 'ill-natured, bad-tempered', (N) osa 'ill-natured, bad', (U) was(')a 'few', (Ma) osxa/ osxon 'ill-natured, cruel' and (J) usagaburən 'spite, hate'.

Cognates with (Ma) ăjigə are, according to Ts., (Ek) aăjin 'the firstborn child', (Na) ăji boŋgodu 'at the very beginning', (ma) ăji 'the firstborn child' and ăjigə 'small'.

(177)[437]つよい（強い）				
(Ew) əŋi	(Ek1) buku	(U) maŋga/mai	(Na) masi /maŋga	(J) xatan
(S) xususi	(Ek2) sootmal	(Oc) kusuŋki	(Ul) masɪ	(Ma) ətəŋi/akdun /xūsuŋə
(N) ---	(Na k) masi	(Hz) ---	(Ut) masi	(Si) xusuŋə

Cognates with (Ew) əŋi are, according to Ts., (Ek) əŋəsii 'strength, full of strength, strong, strongly, very', (Ew) əŋi 'strength, full of strength, strong', (N) əŋəsin 'strong' and (Ut) ənəjəə 'very'. The (Ut) ənəjəə given here is also found in (Na), but is used as an exclamation word there, and probably should not be taken up for comparison here. Hence we conclude that this word form is characteristic to Group I.

(S) xusu-si, (Oc) kusuŋ-ki, (Si) xusu-ŋə and (Ma) xūsu-ŋə are said to have the structure 'strength-with'. Cognates with these are, according to Ts., (Ek) kuči-təj (<(Mo)) 'strong, full of strength', (S) xusu-si 'strong' (however, according to Chaoke 1995, the word of 'strength' in (S) is təŋkə, and xusu is not given at all), (Ew) kuussi (<Yakut) 'forcibly', (N) kusun, (U) ku(h)i, (Ul) kusun, (Ut) kusun, (Na) kusun and (Ma) kusun (all words from (N) mean 'strength'). In addition, Ts., compares these with (lit.Mo) küčün 'strength'.

Cognates with (Ek1) buku are, according to Ts., found in (Ek), (S) and (Ma). All of these are said to come from (lit.Mo) bökə 'full of strength, warrior'.

According to Ts., cognates with (Ek2) sootmal are (Ek) soo 'strong, ill-natured, bad-tempered, very', (Ew) soo 'very, strong, big, impressive, strength' and (N) soo 'very, quite'. One can analyse (Ek2) sootmal as a word with an attached comparative affix.

According to Ts., the form maŋga, as seen in (U) has the following cognates: (Ek) maŋa '(of substances) hard', (S) mandee 'afflicting, heavy (?)', (Ew) maŋ '(of substances) hard, difficult', (N) maŋga '(of substances) hard, strong, precious', (Oc) maŋasi '(of substances) hard', maŋga 'strong', (U) maŋa(h)i '(of substances) hard, (of boats etc.) unable to proceed', maŋga 'afflicting, expensive, bad, strong, very', (Ul) maŋga 'afflicting, tiring, fierce, strong', (Ut) maŋga '(of substances) hard, strong, very, warrior,, rich

person' maŋgauli '(of substances) hard', (Na) maŋga 'afflicting, tiring, strong, very', (Ma) maŋga '(of substances) hard, afflicting, strong' and (J) maŋga 'afflicting, difficult'.

Cognates of masi (as seen in (Na), (Ul) and (Ut)) are, according to Ts., in (N), (Oc), (U), (Ul), (Ut) and (Na), all of which have the form masi and mean 'hardy, strong'. Also, in (Ek) there is mannii 'hardy, strong', and in (Ma) there is masila- 'to make stronger'.

For a discussion on forms such as (Ma) ətəŋi, see entry (172) 'to be able (to do something)'.

Cognates with (ma) akdun etc. are, according to Ts., found in (Ek), (N), (Oc), (U), (Ut) and (Na) with the meaning of 'hole in which a bear hibernates during winter', and also in (S) and (Ul) with the meaning of 'home, housing'. In (Ma) akdukan/ akdun the meaning is apparently '(of a physical place) hardy, strong'.

(178)[438]よわい（弱い）				
(Ew) ərdəskə/ač əŋilə	(Ek1) zəkəj	(U) gəəsə'ə	(Na) sətui	(J) nitaba
(S) təŋkəj aašın	(Ek2) ---	(Oc) ədəə	(Ul) ǰukəə	(Ma) nijərə
(N) ---	(Na k) baitako	(Hz) ---	(Ut) ugdəə	(Si) nirə

The structures of (Ew) ač əŋilə and (S) təŋkəj aačin are 'none strength' and 'strength-of self none'. See entry (177) 'strong'. According to Ts., there are no cognates in other languages for (Ew) ərdəskə 'weak, lack of strength'. This is analysed as a derivative of (Ew) ərgɯd- 'to grow weak'.

(Ek1) zəkəj is given in Ts. as (Ek) ǰokəj 'bad'; cognates with this are words with meanings such as 'to suit, appropriate', found in (Ek), (S), (Ew), (N), (Ut) and (Na).

(U) gəəsə'ə is only given under (U) in Ts. as (U) gə(h)ə 'bad, weak'. There are apparently no corresponding words in other languages.

Cognates with (Oc) ədəə are, according to Ts., (Oc) ədə 'stupid, weak', (U) əədə 'stupid', (Ul) ədən 'stupid, fool', (Na) əədən 'fool' and (Ma) ədən 'incomplete, lacking, deformed'.

According to Ts., (Na) sətui has no correspondents in other languages.

The cognates of (Ut) ugdəə are, according to Ts., (Ek) uǧjə '(of salmon) thin, frail', (N) ugdəxə 'few, small, weak in strength', (Ut) ugdə 'quiet, calm, weak, lack of strength', (Na) (Kur-Urmi dialect) uǧjə- 'to disappear into the depths of a lake (said of fish)'.

According to Ts., (Ma) nijərə has no cognates in other languages, but (Ma) ňərə 'weak, thin, thing (of clothing)' is given.

The cognates with (J) nitaba is, according to Ts., (Ma) nitan 'weak, weak (of alcohol), dull (of colours), blunt (of knives etc.)'.

(179)[455]ながい（長い）				
(Ew) ŋonum	(Ek1) nonimi	(U) wanimi	(Na) wanimi (Na l) ŋonimi	(J) golmigi
(S) nonom	(Ek2) ŋonim	(Oc) ŋonimi	(Ul) warmı	(Ma) golmin
(N) ŋonom	(Na k) ormi	(Hz) onimo	(Ut) ŋonimi	(Si) ɢolmin

(180)[456]みじかい（短い）				
(Ew) urumkun	(Ek1) uruŋkun	(U) umasa'a	(Na) xurmi	(J) foxolo
(S) uruŋkun	(Ek2) urumkun	(Oc) uumi	(Ul) xurmi	(Ma) (mokto)/foxolon
(N) ---	(Na k) ---	(Hz) foxolon	(Ut) xurumi	(Si) fioxolən

Cognates with the various forms seen in Group IV are, according to c., (Ek) xokpočo 'the buttocks of animals (?)', (Ma) foxolon 'short', (J) foxolo 'short'.

Judging from the examples given in Yamamoto (1969), (Si) mohətə seems to mean 'short, not long enough' in things such as tails and hair, but according to Haneda (1937) (Ma) mokto means 'resilient, ferocious, to have the tip cut off and made blunt, to lose sharpness'. There is no mention of the meaning of 'short'. According to Ts., cognates of these words are found in (Ek), (S) (Ew), (Oc), (Na) and (Ma); they have meanings such as 'blunt, broken, short'.

All remaining forms apparently correspond to each other. By examining Ts., one confirms that the meaning is 'short' in all languages apart from Group IV.

(181)[457]とおい（遠い）				
(Ew) təgələ	(Ek1) goro	(U) goo/goolo	(Na) goro	(J) goroo
(S) goro	(Ek2) goro	(Oc) goo	(Ul) goro	(Ma) goro
(N) goolo	(Na k) goro	(Hz) goro	(Ut) goro	(Si) Goru

As -lə in (Ew) təgələ is a locative case affix, the form given in Ts. is təgə. However, this word is unique to (Ew); there are apparently no corresponding forms in other languages. Ts. compares this with tägäl/ tägil 'from afar' in Yakut. The other forms are considered to be correspondents. Ts. lists the meaning as 'far' in all Tungus languages. Even (Ew) has gor 'far'.

(182)[458]ちかい（近い）				
(Ew) ililə	(Ek1) daga	(U) daasa	(Na) ǰiǰa	(J) digasa
(S) daga	(Ek2) daga	(Oc) laki	(Ul) ǰiǰa	(Ma) xanči
(N) ---	(Na k) ǰapkandu	(Hz) kiradu	(Ut) laxa	(Si) hanči

Looking at the cognates of (Oc) laki and (Ut) laxa, in Ts., we only find the forms in (Oc) and (Ut) listed, meaning 'near'. In contrast, under another entry, laŋ 'near, next to' has words with the same form and meaning in (Oc), (U), (Ul), (Ut) and (Na). There is a possibility that these two words are actually cognates.

According to Ts., the only cognate of (Na) ǰiǰa is (Ul) ǰiǰa 'near'.

Cognates with (Si) xanči and (Ma) xanči are, according to Ts., (Ek) kani (<(Mo)) 'comrade', (Ew) kaani 'twin calves', (Ma) kani 'the same kind, comrade', xanči 'to be in a close relationship, near'. He also compares these with (lit.Mo) xani 'comrade', xaniča-/xaniči- 'to be in a close relationship'.

Cognates with such forms as (S) daga are, according to Ts., (Ek) daga, (S) daga, (Ew) daali, (N) daga, (U) daas(')a and (J) digasa. The meaning is all 'near'. Ts. also lists as cognates the following: (Na) dagamagda 'hunting knife used for short distances', (Na) Bikin dialect dapti 'a moment, a short time', and (Ma) dartaj 'a moment, straightaway'.

(183)[461]あつい (熱い)				
(Ew) xəksi	(Ek1) xəku /xəkupti	(U) xəkui	(Na) pəku/pəkusi	(J) xalgun
(S) əxuddi	(Ek2) xəkuxi /xəku	(Oc) xakasi	(Ul) ačka/ačkası /pəkusi/pəkuuli	(Ma) xalxūn
(N) xəku /xakagdı	(Na k) očosi /fəku	(Hz) očkoli /xəkui	(Ut) xəkkuuli /xulduu	(Si) halhun

Concerning the forms in the three languages of Group IV, Ts., lists them as loans from Mongolian ((lit.Mo) xaluun 'heat, stifling heat').

The forms in the other languages are said to correspond with each other. In Ts., they are clearly labelled with both the meanings 'hot (in terms of weather)' and 'hot (in terms of physical properties)'. In (Ma) fijakijan 'stifling heat, (physical) heat' is also given.

(184)[462]さむい (寒い)				
(Ew) gılsı/ iŋəň	(Ek1) iŋini	(U) gilii	(Na) gičisi	(J) šingun/bəi
(S) inigiddi	(Ek2) iŋinixi	(Oc) iŋənisi	(Ul) noŋdu /noŋdulı	(Ma) šaxūrun/bəikuwən
(N) iŋinigdi	(Na k) iŋni	(Hz) adakoli	(Ut) nuŋǰee /nuŋǰuuli	(Si) sahurun

Cognates with (Ew) gılsı, (U) gilii and (Na) gičisi are, according to Ts., in all Tungus languages except for (S), (Ma) and (J). They mean 'cold (in terms of physical properties)'. For (Ul) and (Na), Ts. only provides the gloss 'kholodnyj' and does not specify that it is about liquids. We can safely say it is used in (Na) to mean 'cold (physical property)'. As the metalanguage of Russian only has one word meaning both 'cold in terms of weather' and 'cold in terms of physical properties of things', we suggest there has been an error in survey here.

Concerning the cognates of forms in (S), (N), (Ek1, 2), (Na k) and (Oc) above — such as (Ew) iŋəň — the present author succeeded in collecting the iŋəni form from another (U) informant. According to Ts., there are

actually words with the above forms that mean 'cold (in terms of weather)' in Group I and II languages. Even in Group III languages, 'to be numbed by the cold' is found as (Ul) siŋgun-, (Ut) siŋguun- and (Na) siiŋgu-. In (Ma), siŋgija/siŋgəjən/siŋkəjən 'cold (in terms of weather)' is given

Cognates with (Ul) noŋdʊ/noŋdʊlɪ, (Ut) nuŋ̈jee/nuŋ̈juuli are, according to Ts., (Ek) ňəŋdələə 'bright (of the sky on a cold day), pristine, not cloudy', (Ul) nuŋduli/ŋuŋduli 'cold (in terms of weather)' and (Ut) nuŋduuli/nuŋ̈juuli 'cold (in terms of weather), (Na) noŋ̈ji 'cold (in terms of weather)'. One can regard these as characteristic Group III words.

According to Ts., there are no cognates in other languages for (Ma) šaxūrun.

Regarding the meaning of (J) šingun/bəi, Kiyose (1977) gives šingun 'cold' and bəi 'chilly'. Ts. does not give cognates for šingun in other languages, but the word seems to correspond with the Group III words meaning 'to be numbed by the cold', as seen above. According to Ts., cognates with bəi are (Ek) bəgii-, (Ew) bəi-/bəji-, (N) bəjii-, (Ul) bəi-/bəji- and (Na) bəi-/bəji-. The meaning in all of these is 'to be numbed by the cold, to get frostbite'.

(185)[467]あたらしい（新しい）				
(Ew) anŋamtɪ	(Ek1) irkəkkin	(U) iməxi	(Na) sikun	(J) ičəgi
(S) ikkin	(Ek2) oomokta	(Oc) ikkəi	(Ul) siču	(Ma) ičə
(N) iixin	(Na k) irkin	(Hz) irkiŋgi	(Ut) sitəu	(Si) ičəə

Concerning (Ew) anŋamtɪ, Ts. regards this as a cognate with the word for 'year' found in all Tungus languages (see entry (59) 'year'). According to Ts., the only other cognates are in (Ek) anŋaamakta 'fresh (of animal footprints)' and anŋamta 'new'.

(Ek2) oomokta is not found in Ts., and its origins are unknown.

Cognates of (U) iməxi are, according to Ts., (Ek) iməkin 'fresh, new', (N) iməxin 'fresh (of food)', (U) iməxi 'new', (Oc) iməw/iməu 'fresh', (Na) Bikin dialect imkin, (Na) Kur-Urmi dialect imkin 'fresh, new'. This can be regarded as a word that is basically distributed over Groups I and II.

The other forms in (S), (N), (Ek1), (Na k), (Oc), (Na), (Ul), (Ut), (J), (Si) and (Ma) are said to correspond with each other. Ts. describes this item as occurring in all Tungus languages apart from (Ew); the meaning is always 'new' except fro (U). Under (U) sikə 'young' is also given, but this does not correspond well and needs further investigation.

(186)[468]ふるい（古い）				
(Ew) irbət	(Ek1) agipti	(U) daampii/anapti	(Na) goropči	(J) fuwəi
(S) irəət	(Ek2) goropti	(Oc) goopti	(Ul) balaptı	(Ma) fə
(N) ---	(Na k) goropti	(Hz) ---	(Ut) goropči	(Si) fəə

The cognates of forms seen in (Ew) and (S) are, according to Ts., (S) irəəktə 'old, of the past', (Ew) irbəət and (N) ij (<*ir) 'just a moment ago, just now'.

Cognates with (Ek1) agipti are, according to Ts., (Ek) agipti, (S) agiktii/ ajirtii, (N) agipti/ ajipti (the meaning of these is 'old, from before'); (Oc) ainan, (U) anana, (Ma) aifini (the meaning here is 'past, in the past, since a long time ago').

The various form seen in (Ek2), (Na k), (Oc), (Na) and (Ut) are considered to be cognates of the forms seen in (181) 'far'. According to Ts., the words are (Ek) goroptii, (Oc) goopti, (Ul) goropti, (Ut) goropči and (Na) goropči (the meaning is 'old (especially of things)' in all cases).

According to Ts., (U) daampii is only found in (U), and is shown as daaampi(h)i 'deteriorated, old'.

Regarding the cognates of (Ma) fə, Ts. only shows one cognate outside of (Ma): (Na) pər pər gudəənəsi 'deteriorated'.

(187)[471]おおい（多い）				
(Ew) xooja	(Ek1) xəgdi	(U) əgdi	(Na) əgǰi	(J) ambala
(S) baraan	(Ek2) kətə	(Oc) əgdi	(Ul) əgdi	(Ma) labdu
(N) əgdi	(Na k) ---	(Hz) malxun	(Ut) bara	(Si) laftə

With (Ew) xooja, Ts. regards it as cognate with (Ew) xoo 'strong, big, impressive, strength, to be many, abundance' as seen in (177) 'strong' ((Ek) soo, (N) soo).

Cognates with (S) baraan and (Ut) bara are, according to Ts., (Ek) baran, (S) baraa, (N) baja and (Ut) bara (all meaning 'many'), as well as (Ew) baran '(of dishes) big capacity, deep', (Ma) baran 'a large quantity, a pile, a crowd'. The (Ut) form has probably entered from (Ek).

For a discussion of the forms found in (N), (Ek1), (U), (Oc), (Na) and (Ul), see (175) 'big'.

Cognates of (Ek2) kətə are, according to Ts., found in (Ek), (Oc), (U), (Ul), (Ut) and (Na). The (Ek) word means 'many', but forms in most other languages have adverbial meanings such as 'excessively ~, too ~, almost ~, almost about to ~ (however, in (Oc) there is also kətu/kətu əgdi, which means 'many').'

According to Ts., cognates with (Hz) malxun are found in (N), (U), (Ul), (Na) (Kur-Urmi and Bikin dialects only) and (Ma). This shows a lower Amur River distribution. The meaning is all 'many', apart from (U) malukči-, which means 'to reach one's full height, to become an adult'. The (N) form probably comes from a Group III language. In the Nanay language, the Najkhin dialect (the basis of the literary language) does not make use of this word. In contrast, (Hz) and (Na) (Kur-Urmi and bikin dialects) do use this word. In Kazama (1996a), I noted that these three languages formed the middle Amur River language region.

Forms such as (Ma) labdu only have one other cognate. According to Ts., it is (Na) labdo 'many, deep'. Ts. also compares this with (lit.Mo) lab 'deeply, firmly, definitely'.

(188)[472]すくない（少ない）				
(Ew) abuul	(Ek1) askun	(U) waca'a	(Na) oi /oikookaan/otkoo (Na l) oikaan	(J) əkəxun
(S) xondo	(Ek2) uwukun	(Oc) ujaka	(Ul) oɪ	(Ma) komso
(N) ʊgdakkʊn	(Na k) komso	(Hz) ---	(Ut) ojuuka	(Si) qomsə

The cognates of (Ew) abɯl are, according to Ts., in all Tungus languages apart from (J). With the exception of (Ma), they have forms such as abul-/ abuli-, meaning 'lacking not enough' ((Ma) absa-/ absi- means 'thin, emaciated').

Regarding (S) xondo, Ts. shows the isolated (S) word xondokxon 'a little of, a small amount of'. The present author suspected this comes from Mongolian, but no matching Mongolian words have been found thus far.

Cognates with (Ek1) askun are, according to Ts., (Ek) asun, (Ut) xasu 'how much, how many' etc. These are said to have formed by the attachment of diminutives; in other languages in Group I, such as (S) and (N), there are also derivatives meaning 'a little'.

Ts. regards the following as cognates: (Ek2) uwukun, (Oc) ujaka and (Na) oi/ ojuuka. These are listed under the same entry as (Ek) (ugiikuun), (N), (Oc), (Ul), (Ut) and (Na). The meaning in all cases is 'few'.

Concerning (U) waca'a, please see entry (176) 'small'.

Regarding forms such as those in (Na k) and (Ma), Ts. lists these as cognates with (Ek), (Na) and (Ma). It is said that (Ek) and (Ma) borrowed (lit.Mo) xomsa 'few, lacking' directly, while (Na) did so via (Ma).

(189)[476]ひかり (光)				
(Ew) ŋəəri	(Ek1) nəərin	(U) ǰigda	(Na) ŋəəgǰən/ixərə	(J) fəčin
(S) ılaan	(Ek2) garpa	(Oc) ŋəəgǰə	(Ul) mınıana-	(Ma) əldən
(N) ---	(Na k) ---	(Hz) ---	(Ut) kiltom	(Si) əldən

Cognates of (Ew) ŋəəri, (Ek1) nəərin, (Oc) ŋəəgǰə and (Na) ŋəəgǰən are, according to Ts., in all Tungus languages. As seen before, these seem to take endings such as -rii/-rin in Group I and endings like -gǰə/-gǰən in Groups II and III. In these languages the meaning is the noun 'light' as well as the adjective 'shining, bright (however, in (S) the meaning has shifted to 'the morning glow')'. In (Ma) it is gəxun 'light, bright, clean'; there is also gəri, but it means 'flash, flicker'.

Cognates with (S) ılaan are, according to Ts., ila- in Groups I and II, iwan- in Group III and jila- in (Ma). These mean 'to light a fire, to stir up a fire'. Apart from forms in (S), only (Ek) ilan/ilačin 'light (emitted from fire),

ignition, bursting into flames'

Cognates with (Ek2) garpa are, according to Ts., nouns meaning 'light, light ray' in (Ek), (Ew), (N) and (Ut). Also, in all Tungus languages apart from (J), there are identical or slightly phonologically altered verbs meaning 'to shine, to shoot an arrow'.

(U) ǰigda- is not given in Ts. Its origins are unknown.

According to Ts., (Na) ixərə 'light dish, lamp, lighting' is also distributed among (N), (Oc), (Ul), (Ut) and (Na), mostly in the same form and meaning. It can probably be analysed as having a lower Amur River distribution. However, it is not found in (Ma).

According to Ts., cognates with (Ma) əldən are not found outside of (Ma) itself. Only the (Ma) verb əldə- 'to give off light, to shine' is listed together. Similarly, according to Ts., (J) fəčin also lacks cognates in other languages.

(190)[477] しろい (白い)				
(Ew) ňoobatı	(Ek1) bagdarin	(U) čaligi	(Na) čaaǧjan	(J) šangijan
(S) gıltarın	(Ek2) bagdarin	(Oc) čəəkkə	(Ul) čaaǧjan	(Ma) šaŋijan
(N) bagdıjın	(Na k) čaaǧjan	(Hz) siaŋgin	(Ut) taagda	(Si) šaŋən

According to Ts., there are no cognates with (Ew) ňoobatı in other languages. The only cognates are within (Ew) itself, being the various forms of the verb 'to turn white'.

According to Ts., cognates with (S) gıltarın are only found in (Ek), (S) and (Ew). They mean 'white', but (Ek) has the additional meaning of 'white (of the hair of reindeer)'.

The cognates of (Ek1, 2) bagdarin are, according to Ts., in (Ek), (S), (N) and (Ma). (Ma) balda means 'white stripes/ spots on the coats of animals', but forms in all other languages mean 'white'.

(Oc) čəəkkə is given even in Avrorin i Levedeva (1978), but is not listed in Ts. at all (in Avrorin i Levedeva (1978) it is given as (Oc) čəəkkə(n), and the word-final n seems to be attested). This is a possible cognate of the (U) and (Na) forms listed above. With (Oc), other informants have provided us

with (Oc) čaagǰa. This is also seen in Avrorin i Levedeva (1978), and is probably a loan from Group III.

The other forms in (Hz), (U), (Na), (Ul), (Ut), (J), (Si) and (Ma) are said to correspond with each other. According to Ts., correspondents with these are found in all Tungus languages, but the shared form čaalban/čalban found in the four languages of Group I mean 'white birch', and with the exception of (S) čiga/čigan 'white', no other cognates meaning 'white' are given for Group I. On the other hand, in Groups II, III and IV, words meaning 'white birch' are not listed apart from (Oc) čaaba/čaabban 'white birch'. As with (189) 'light', here we also note the words with the -ǧjan/-ǧjən ending. In addition, in (U), there is a common -ligi suffix, as we shall see under the entries 'black' and 'red' below. Ts. compares these with (lit.Mo) čaγan 'white' and čaγaγčin 'white (of spots and markings on animals)'.

(191)[478]くろい（黒い）				
(Ew) xakuɯrɪn	(Ek1) koŋnorin	(U) pa'aligi	(Na) ---	(J) saxalijan
(S) xaraa	(Ek2) koŋnorin	(Oc) sakai	(Ul) saxar /saxarɪn	(Ma) jačin/kara /saxalijan/saxaxūn
(N) koŋnojɪn	(Na k) saxarin	(Hz) sakalki	(Ut) saari	(Si) jəčin

Although we did not obtain specific data from the informants, the word saxarin 'black' is also used very commonly in (Na).

According to Ts., this (Na) word, together with various forms in (Ew), (Na k), (Oc), (Hz), (Ul), (Ut), (J) and (Ma), find their cognates in all Tungus languages except (S), (N) and (U). The meaning is 'black'. There is also the additional meaning of 'dark' in all languages, although this is not attested in (Ul) and (Ut).

The cognates of (N) koŋnojin and (Ek1, 2) koŋnorin are, according to Ts., only distributed in the four languages of Group I. These form a set with bagdarin 'white' as listed under (190) 'white'. They can be thought of as Group I words.

(U) pa'aligi is given as pa(')aligi in Shnejder (1936). Ts. regards this as a cognate with (Ek) xaktiraa 'dark', (Na) pakči 'dark' and (Na) paka paka bi- 'deep black'. Cognates with these are apparently found in all Tungus languages. However, the fact that there should be a word starting with p in (U) is strange, considering the phonetic correspondences. For example, in Shnejder (1936) there are only 81 words starting with p-. Of these, 14 are loanwords from Russian, one is a loan from Chinese and 10 could be considered onomatopoeic, leaving us with only 56 words. Many of these are in turn expected to be loans from (Na).

According to Yamamoto (1969), (Si) jačin means 'black', qarə means 'black, bluish dark (of the fur on a horse)', sahelin/ sahelian means 'dark coloured' and sahaahun means 'jet-black'. In Haneda (1937), the meanings are: (Ma) jačin 'blue, bluish black', kara 'black horse, black dog', saxalijan 'black coloured, black' and saxaxūn 'blackish, pale black'.

Cognates of (S) xaraa and (Ma) kara, according to Ts., are found in the four languages of Group I plus (Ut), (Na) and (Ma). However, this is a loan

from (lit.Mo) xara 'black, dark'.

Regarding (Si) jačin and (Ma) jačin, Ts. lists them under the same entry as (Ek) eella 'charcoal', which is found in all Tungus languages. Moreover, he casts some doubt as to whether the abovementioned words come from the Chinese yuan²qing¹ 元青.

(192)[479]あかい (赤い)				
(Ew) xʊlaňa	(Ek1) ularin	(U) xulaligi	(Na) səəgǰən	(J) fulagijan
(S) ʊların	(Ek2) xularin	(Oc) səəgǰə	(Ul) səəgǰə	(Ma) fulaxūn
(N) xʊlajın	(Na k) ---	(Hz) fulgian	(Ut) səəgdə	(Si) fulgian

According to Ts., cognates of the (Ew), (S), (N), (Ek1, 2), (Hz), (U), (J), (Si) and (Ma) forms are found with the meaning of 'red' in all Tungus languages apart from (Ul) and (Ut). However, in (Na) there is only folgææ/ forgææ, and their forms are telltale signs that they are loans from (Ma). Hence, one can say the form is missing in Group III.

On the other hand, there are forms that are basically in complementary distribution with the above, such as cognates with (Na) səəgǰən, (Ut) səəgdə already mentioned above. According to Ts., cognates with these are found in (Ek), (Oc), (Ul), (Ut) and (Na), but in (Ek) only the Zeja dialect has səgǰən 'blood red'. As we have seen so far, (Oc) is likely to have come under the heavy influence of Group III languages. This form could just be another loanword from Group III.

(193)[483]いろ (色)				
(Ew) baad	(Ek1) uŋgu	(U) səəsəli	(Na) boiko (Na l) botko	(J) bočogai
(S) bodoor /uŋgu	(Ek2) kiraska	(Oc) xačii	(Ul) ---	(Ma) bočo
(N) ---	(Na k) ---	(Hz) ---	(Ut) bəxə	(Si) fian

According to Ts., the cognates of (Ew) baad are only found in (Ek) and (Ew). Found in the dialects of (Ek) is baadə, the meaning of which is 'face'. In (Ew), a variety of meanings is listed: 'demeanour, countenance,

structure, shape, colour, external form'. In addition, for comparison, (lit.Mo) bajdal 'demeanour, external appearance, state, living environment' is given.

A correspondent with (S) bodoor, as given in Ts., is (S) buduun 'dye, paint'. Cognates with this are said to be in (Ek), (S), (U), (Ul), (Na) and (Ma). (lit.Mo) buda 'dye, colour' is given for comparison here.

(Ek1) uŋgu is a loanword from (lit.Mo) öngge 'colour, colouration, surface, external appearance, demeanour, condition' (definitions from Ozawa 1983). (Ek) kiraska is a loan from Russian.

(U) is probably the Chinese se^{4}色 'colour'.

The cognates of (Oc) xačii, with the meaning of 'kinds, various', were found to have a lower Amur River region distribution when we examined them under entry (30) 'thing'. The meaning of 'colour' does not seem to be recorded.

(Na) and the forms seen in Group IV (except (Si)) are said to correspond with each other. According to Ts., cognates with these are found in (Ew), (Oc), (U), (Ut), (Na), (Ma) and (J). The primitive form can be traced back to *borko in all languages except for (Ew) and (J). The meaning in (Ew) is 'facial beauty, loveliness', while in other languages it is 'colour'. In (Oc), (Na) and (Ma) there is the additional meaning of 'dye'. In (Ut) the extra meanings are 'demeanour, shape', while in (Ma) they are 'demeanour, facial beauty'. Also, Ikegami (1997) gives (Ut) boččo 'facial features'.

According to Ts., the cognates of (Ut) bəxə are in (S), (N), (U), (Ut), (Ma) and (J), showing a lower Amur River distribution. The meaning in all cases is 'ink'. Listed under (Ut) is the additional meaning of 'dye'. According to Ts., there is the (lit.Mo) word beke 'ink', but the ultimate source here is probably the Chinese mo^4 墨 'ink'.

(194)[485]ﾚﾚ (良ﾚ)				
(Ew) aj	(Ek1) aja	(U) aja	(Na) uləən	(J) nonmuxo/sain
(S) aja	(Ek2) aja	(Oc) aja	(Ul) uləən	(Ma) xoǰo/sain
(N) aja	(Na k) aja	(Hz) aja	(Ut) uliŋga/aja	(Si) sian

The cognates of (Na)(Ul) uləən and (Ut) uliŋga are, according to Ts., (U) uligdig(')a '(of things and living things) beautiful', (Ul) uləən 'good', (Ut) uliŋga 'good, beautiful, easy, liberated, kind' and (Na) uləən 'good, beautiful'.

According to Ts., the cognates of (J) nonmuxo are in all Tungus languages apart from (U). The various meanings include 'slow, tardy, stiff-mannered, quiet, kind, calm'. These are thought to have entered from (lit.Mo) nomuqan 'mild-mannered, calm'.

Apart from (Ma), the cognate of (Ma) xoǰo is, according to Ts., (J) xoǰo 'beautiful'. The meaning of (Ma) xoǰo is given as 'beautiful, exemplary, complete'.

(Si) sian and (Ma) sain come from Mongolian.

All other forms correspond with each other, and in Ts. these are given for all Tungus languages. However, while in Groups I, II and III aja/aj 'good' is given, in Group IV only words such as (Ma) ajnči 'perhaps, probably' and (J) aixuburu 'to save, to liberate' are listed. Moreover, in Group III, or at least in (Na), the meaning is not '(the absolutely positive sense of) good', but in actual usage there has been a somewhat downgrade to 'not too bad, okay, healthy'.

(195)[486]わるい（悪い）				
(Ew) kəəňəli	(Ek1) əruu	(U) gəə	(Na) čukin	(J) əxə
(S) əruu	(Ek2) əruu	(Oc) atakasi	(Ul) orkın	(Ma) əxə/əxəliŋə
(N) usa	(Na k) əxələ	(Hz) əxələ	(Ut) orki	(Si) əxə

According to Ts., the only other cognate with (Ew) kəəňəli outside of (Ew) itself is (Ek) kəňəčəən 'charcoal fallen from fire', and even this is doubtful as a candidate for correspondence. The cognates within (Ew) itself are listed as kəəňeli/kəəňeŋi; there is a wide range of meanings: 'bad, detestable, harmful, ill-natured'.

Cognates with the forms seen in (S) and (Ek1, 2) are, according to Ts., found in (Ek), (S), (Ul), (Na) and (Ma). In (Ek) and (S) the words simply mean 'bad', in (Na) an (Ma) they mean 'suffering', in (Ul) and (Ma) they are

verbs meaning 'to cause to suffer'.

As (U) gəə is given as gə(h)ə in Shnejder (1936), the primitive form is likely to be gəsə. According to Ts., there are no cognates with this word in other languages. Only (U) gə(h)ə 'bad, detestable, weak' is listed.

(Oc) atakasi is given as (Oc) adaksi in Ts. This word has already been touched upon in entry (184) 'cold'.

With (Oc), we have obtained other words from informants: (Oc) okki and (Oc) čuki. These correspond to the abovementioned (Na) and (Ut) forms respectively. Firstly, with (Oc) okki, cognates listed in Ts. are limited to (Oc), (Ul), (Ut) and (Na). The meaning is said to be 'bad' in all cases. Therefore one can say this word probably entered (Oc) from a Group III language. Secondly, with (Oc) čuki, the only cognates given in Ts. are (Oc) and (Ul). Onenko (1980) gives the word, and it is without doubt in use in (Na). Perhaps the more downstream the dialect, the more often it is used. This is another word that probably entered (Oc) from a Group III language.

Cognates with (J) əxə, (Si) əxə, (Ma) əxə/əxəliŋə are, according to Ts., only found in (Na), (Ma) and (J). It is likely the (Na) form is originally from (Ma).

(196)[488]おなじ（同じ）				
(Ew) tarakat	(Ek1) əmun adali	(U) bəjəku	(Na) ---	(J) əmǔji
(S) adal	(Ek2) urəldi	(Oc) omonti	(Ul) əmətəni	(Ma) əmu adali
(N) ---	(Na k) əmutu	(Hz) əm durun	(Ut) əmättə	(Si) əm durun

(Ew) tarakat is derived from a demonstrative pronoun, and probably means 'that kind of'.

According to Ts., (S) adal and (Ek1) adali have cognates in all Tungus languages apart from (Ew) and (J). However, the meaning of 'same' is only clearly labelled for (Ek) and (Ma). In (S) the meaning is given as 'similar'. Meanings in other languages are even more varied; it is highly probable that words of other origins are mixed in with the list. On the other hand, words with a derived meaning from 'same' — namely 'twins' — are

distributed in various forms: (N) adaxu/ adaku, (Oc) adawau/ adau, (U) ad(')u, (Ul) adau/ adu, (Ut) adaaw/adau and (Na) adoo. This could described as a lower Amur River distribution, but samples for (Ma) are not to be found. Ts. compares these with (lit.Mo) adali 'same, similar' under the same entry.

Cognates with (Ek2) urəldi are, according to Ts., found in (Ek), (Ew) and (Ut): (Ek) urəə- 'similar', urəəldii/urəəldiičəə/urəəllii/urəərii 'similar', (Ew) urəəč 'similar, same' and (Ut) urəxə 'similar'. The (Ut) word is possibly a loan from (Ek). Ikegami (1997) does not give this word at all.

(U) bəjəku is claimed to be a derivative of the words examined under entry (16) 'body'. However, in this language, the affix meaning 'having ~, possessing ~' is -ki (in (Na) it is -ko/ -ku). Also, the presence of a single intervocalic k is strange for (U), considering the attested phonetic correspondences. If we restrict ourselves to the data in Ts., we find there are no languages with a clearly labelled meaning of 'similar' or 'same', apart from (Oc) bəjə, which has no additional affixes and is labelled 'similar'.

(Oc) omonti and various forms in (Ul), (Ut), (J), (Si) and (Ma) are said to be derivations from the numeral 'one'. Although we were unable to obtain a sample from the informant this time, (Na) əmutu 'same' is actually a very common word in everyday use. In Ts., words meaning 'same' are given for all Tungus languages apart from (Ek). These are: (S) əmun adali, (Ew) əmun urəč, (N) əməəntu, (Oc) omonti, (U) omoti, (Ul) omoto/ umutu, (Ut) umərtu/umətu/əmutu and (Na) əmutu.

(197)[492]はい				
(Ew) əj	(Ek1) əəŋ	(U) iŋkə	(Na) iin/iŋgə	(J) gisa
(S) mətər/tannagan	(Ek2) onton	(Oc) ii	(Ul) igəə	(Ma) jə/ə
(N) aaŋ	(Na k) ---	(Hz) ačiran	(Ut) əə	(Si) ən

Cognates of (Ew) əj with the meaning of 'yes' are only given for (Ew) and (Ma) in Ts.

According to Ts., (S) mətər has no cognates in other languages. It originates from (lit.Mo) metü/ metüber 'likewise, in the same way, in that

way'.

(S) tannagan is a derivative of the demonstrative pronoun (S) tajaa/tari, and means 'the same kind of'.

(N) aaŋ and (Ek1) əəŋ are obscure. As for a correspondent for (Ek2) onton, (Ek) Aldan dialect onton 'and then, after that' is given in Ts. This word is said to be a loan from Yakut.

In Ts., cognates of forms in (U), (Oc), (Na) and (Ul) are given for all Tungus languages apart from (S). All mean 'yes'.

(J) gisa is given in two places in Kiyose (1977). The glosses are 'all right, may' and 'it may be, so that' respectively. According to Ts., cognates with this apart from (J) are: (Ek) kičə- 'to keep and treasure something', (Ew) kičəj- 'to keep and treasure something' and (Ul)/ (Na)/ (Ma) kičə- 'to work hard'. (Ek) and (Ew) forms are said to have come from Yakut, with (lit.Mo) kičije- 'to work hard, to commit oneself to' given for comparison.

(Ma) jə was not found in any of the sources. It is a possible cognate of words in Groups II and III.

(198)[493]いいえ				
(Ew) ənni/ačča	(Ek1) əsin	(U) anči	(Na) abaa	(J) ---
(S) əntə	(Ek2) əčə	(Oc) ---	(Ul) kəwə	(Ma) ---
(N) əsim	(Na k) ---	(Hz) ---	(Ut) anaa	(Si) iin

Cognates with (S) əntə are, according to Ts., found in all Tungus languages with the exception of the three languages in Group III. The meaning is 'other, different'. For a discussion on (U), (Na), (Ul), (Ut) and (Ma) see entry (174) 'none'.

Forms in (Ew), (N), (Ek1) and (Ek2) are considered to be various conjugations of the negation verb ə-.

(199)[499]・・だ。・・である。				
(Ew) bisum	(Ek1) ---	(U) ---	(Na) bi-	(J) ina
(S) ---	(Ek2) bixi	(Oc) ---	(Ul) ---	(Ma) bi-
(N) ---	(Na k) ---	(Hz) ---	(Ut) bi-	(Si) ---

The gloss for (J) ina in Kiyose (1977) is 'shi[4]是, as for'. Ts. treats this as a cognate of (U) iŋkə mentioned under (197) 'yes'.

The other forms are based on the same verbal stem as that of (173) 'there is'.

(200)[500]・・(で) ない				
(Ew) ətɯn bisə	(Ek1) ---	(U) ---	(Na) ---	(J) gaiju/əšiin
(S) ---	(Ek2) ətən	(Oc) ---	(Ul) ---	(Ma) waka
(N) ---	(Na k) ---	(Hz) gia	(Ut) əsi bee	(Si) vaqə

(Ew), (Ek2), (Ut) and (J) əšiin are formed with the negation verb.

(Hz) gia means 'other' and is probably cognate with Group I words. For details, see entry (93) 'friend, mate'

The gloss for (J) gaiju given in Kiyose (1977) is 'fei[1]非, isn't'. Ts. sees this word as related to (Ul) kəwə seen under (174) 'none'.

Cognates of (Ma) waka are, according to Ts., (Ut) wakala- 'to prohibit', (Ma) waka 'not to be' and wakala-/wakaša- 'to criticise, to impeach'. In Ikegami (1997) (Ut) wakkala- 'to become perverse' is given.

[Reference Section]

1. Distribution of forms according to whether they share the same source

1.1 Entries where all language forms share a common source

Of the 200 entries, 39 entries have forms which share a common source, for every single language. The entries are:

(3) eye,	(6) mouth,	(8) hand,	(33) dog,
(49) fire,	(50) wind,	(51) cloud,	(55) moon,
(56) star,	(57) day,	(59) year,	(61) afternoon,
(64) tomorrow,	(65) today,	(70) two,	(71) three,
(72) four,	(73) five,	(74) six,	(75) seven,
(76) eight,	(78) ten,	(86) mother, mama,	(89) elder brother,
(97) I,	(98) you,	(102) name,	(122) back,
(123) inside,	(132) to laugh,	(133) to cry,	(141) to stand,
(142) to sit,	(147) to fly,	(149) to kill,	(168) to give,
(171) to know,	(173) there is,	(179) long	

This represents approximately a fifth part of all entries. If we ignore the phonetic changes, we can in theory use these words anywhere in the Tungus language region and still be understood. Therefore it is reasonable to say that these entries are the most fundamental vocabulary items in the Tungus languages. In other words, these words are the most basic of basic Tungus vocabulary.

1.2 Entries where only one language form does not share the common source

Of the 200 entries, 24 entries have forms where only one language form does not share the common source. The entries, together with the form that does not share the common source, are listed below:

(7) tooth, teeth ((Ut) kərəktə),	(10) leg, foot ((Ek2) xalgan),
(13) blodd ((Ew) xuŋəl),	(14) bone ((Ew) ikuri),
(16) body ((Ew) bulgis),	(23) food ((Na) siaori),
(24) egg ((Ut) ŋojokko),	(36) tree ((Ew) xıakıt),
(46) water ((U) uli),	(54) sun ((Ew) ňəəltun),
(58) month ((Ew) atkıkan),	(62) night((Hz) siksəərin),
(69) one ((Ut) geeda),	(85) father, papa ((U) abu),
(101) who ((S) awu),	(109) this one ((U) əti/əiti),
(111) it, that one((U) uti),	(121) front((Oc) ňauki),
(126) down((Ek1) niigu),	(137) to push ((Ew) tini-),

(146) to drink ((Ew) kool-), (160) to die ((Ew) ačča oo-/kəkəə-),
(166) to go ((Ek2) xuru-), (181) far ((Ew) təgələ)

By ranking the languages whose forms do not share the common source in order of frequency, we obtain the following list (numbers after the languages indicate the number of times they differed from the rest): (Ew) 10, (U) 4, (Ut) 3, (Ek2) 2, (Ek1) 1, (Oc) 1, (Hz) 1, (Na) 1, (S) 1. The language such as (Ew) is located to the north, in the most peripheral regions; it displays a great deal of vocabulary substitution. This is especially true of (Ew), where 5% of the 200 vocabulary items were found to be unique when compared with the other languages. Of special interest is the (Ew) form for 'blood' in entry (13) and the (Ut) form ilda under entry (20) for 'oil'. These forms are not found anywhere else in the Tungus languages, and their origins are unknown.

1.3 Entries where only two language forms do not share the same source

Of the 200 entries, 5 entries have forms where only two language forms do not share the common source. The details are as follows:

(4) ear ((Ew) korɪt, (U) ku'ai), (20) oil ((N) xaata, (Ut) ilda/nəmuu),
(21) liquor, wine ((Ew) miinə, (J) nurə),
(138) to hold ((S) ga- (Ek2) ŋaalixin-), (159) to be born ((Ew) bakap-, (Hz) uǰi-).

Again, (Ew) is the language with the greatest number of deviations.

1.4 Entries where only Group IV forms do not share the same source

The Group IV languages are thought to be very different from the other three Groups. This can be attested by an examination of the fundamental vocabulary. Of the 200 entries, 9 entries have forms where only Group IV language forms do not share the common source. The details are as follows (only (Ma) is given as a representative):

(1) head ((Ma) uǰu), (2) hair (of the head) ((Ma) funixə),
(15) flesh ((Ma) yali), (47) stone ((Ma) wəxə),
(90) elder sister ((Ma) gəgə), (91) younger brother ((Ma) dəo),
(150) to wear ((Ma) ətu-), (164) to go in ((Ma) dosi-),
(183) hot ((Ma) xalxūn)

Of these, (91) 'younger brother', (183) 'hot' are thought to have come from (Mo), and this is an indication of just how much Mongolian has influenced the Group IV languages.

1.5 Entries where only Group IV forms plus 1~2 language forms do not share the same source

There are 12 entries that belong to this category. The details are as follows. As before, only (Ma) is given as the Group IV representative.

(34) house, home ((Ul) xagdu, (Ma) boo),
(45) mountain ((Ew) xəəpkəčən, (Ma) alin),
(60) morning ((Ew) baǰıkɯr, (S) əddə, (Ma) ərdə),
(66) now ((Ew) tiək, (Ek2) ərdəət, (Ma) tə),
(99) he ((S) tarı, (Ek2) tawar, (Ma) i),
(119) left ((Na k) xasxa, (Ma) xasxə),
(125) up ((Ew) ojda, (S) oroondo, (M) niŋu/niŋudə),
(127) to see ((Ew) kəjət-, (Ma) tuwa-),
(162) to place ((Ut) əksə-, (Ma) sinda-),
(163) to go out ((Oc) ŋəi-, (Ma) tuči-),
(176) small ((Ew) kučukən, (Ek2) usa/usiakan, (Ma) ǎjigə),
(194) good ((Na) uləən, (Ma) xojo / sain).

The totally number of times for each language is as follows: (Ew) 5, (S) 3, (Ek2) 3, (Hz) 2, (Na k) 1, (Oc) 1, (Ut) 1 and (Na) 1. Here again, we find (Ew) having the greatest number by far.

In sections1.1 to 1.5 we have looked at entries where the languages basically share a common source for their forms, with only one or two languages, or just Group IV languages deviating. In other words, these entries have a high degree of co-ownership within the Tungus languages. There are a total of 89 entries from sections 1.1 to 1.5, and they represent approximately half of all the basic vocabulary A items.

1.6 Entries where there is complementary distribution of different sources divided along lines of Group membership

Within Groups, forms share the same sources (relatively speaking), but different Groups often differ in terms of sources as well. This is quite apparent in some entries. These entries further strengthen the case for dividing the languages into four Groups. 9 such entries are shown below.

(32) fish (I — II III — IV),
(52) rain (I — II III — IV),
(95) female (I II — III — IV),
(96) person, man, one (I — II III IV),
(153) to make (I II — III — IV),
(157) to count (I II — III — IV),
(161) to meet (I II — III IV),
(165) to come (I II — III IV),

(175) big (I — II — III — IV),

When these are divided according to the type of complementary distribution, they show the following pattern:

I II — III — IV	(153) to make,	(157) to count,
I — II III — IV	(32) fish,	(52) rain,
I II — III IV	(161) to meet,	(165) to come,
I — II III IV	(96) person, man, one	
I — II — III — IV	(175) big	

1.7 Entries where the sources do not seem to follow a pattern

In contrast to the entries seen in sections 1.1 to 1.5, there are entries whose forms have many different sources. A number of reasons can be given to explain this, but we note that subdivision into specific meanings have occurred in many verbs in the Tungus languages, such as:

(136) to hit, (148) to roast, to grill, (152) to cut,
(154) to open, (155) to close, (167) to move, (170) to think.

There are also languages where semantic expansions or contractions have contributed to the greatly varied forms. Entries showing this phenomenon include:

(9) finger, (25) bird, (32) fish, (40) fruit, nut.

Others represent abstract or generic concepts:

(30) thing, (93) friend, mate, (105) sound, (107) heart.

2. Loanwords from other languages

As was seen in the 'Presentation of the Data' section, at least within the boundaries of the forms examined in Ts., Mongolian is almost always involved where loanwords are a significant issue in the Tungus languages. The vocabulary entries where borrowings are a significant issue include the following, which have a strong cultural flavour:

(18) medicine, (19) salt, (21) liquor, wine, (22) tobacco,
(27) thread, (29) paper, (35) money, (103) letter,
(106) language, speech, (108) God, (151) to read.

[References]
An Jun 1986 *Hezhe-yu Jianzhi* (A sketch of the Hezhe Language, in Chinese). Minzu-chupanshe, Beijing.
Angina, S. V. 1993 *Russko-ul'chskij razgovornik.* Bogorodskoe.
Avrorin, V. A. i E. P. Levedeva 1978 *Orochskie teksty i slovar'.* Leningrad, Nauka.
Boldyrev, B. V. 1994 *Russko-Evenkijskij slovar'.* Novosivirsk, Nauka.
Chaoke, D. O. and T. Tsumagari 1995 *A Basic Vocabulary of Three Ewenki (Ewenke) Dialects.* Publications on Tungus Languages and Cultures 6, Center for Language Studies Otaru University of Commerce, Otaru.
Chaoke, D. O. and T. Tsumagari 1995 *A Basic Vocabulary of the Tungusic Languages in China.* Publications on Tungus Languages and Cultures 11, Center for Language Studies Otaru University of Commerce, Otaru.
Haneda, T. 1937 *Man-wa-jiten* (Manchu-Japanese Dictionary). Kyoto.
Hu CengYi and Chaoke 1986 *Ewenke-yu Jianzhi* (A sketch of the Solon Language, in Chinese). Minzu-chupanshe, Beijing.
Ikegami, J. 1974 Versuch einer Klassifikation der tungusischen Sprachen. *Sprache, Geschichte und Kultur der altaischen Voelker.* Berlin, Akademie-Verlag, 271-2.
_____ 1987 The Lower Amur and Sungari Basins — From the Viewpoint of Toponymy and Ethnonymy (in Japanese). [1999] *Researches on the Manchu Language*, Kyuko Shoin, Tokyo.
_____ 1989 Tungus-shogo (The Tungus Language, in Japanese). *Gengogaku-dai-jiten (the Sanseido Encyclopaedia of Linguistics), Vol. 2* Sanseido, Tokyo.
_____ 1994 Differences between the Southern and Northern Dialects of Uilta (in Japanese). [1999] *Researches on the Manchu Language*, Kyuko Shoin, Tokyo.
_____ 1997 *A Dictionary of the Uilta Language spoken in Sakhalin.* Hokkaido University Press, Sapporo.
Kazama, Shinjiro 1991 Nanay Texts. *Publications on Tungus Languages and Cultures 1*, edited by S. Kuroda and T. Tsumagari, Hokkaido University, Sapporo.
_____ 1993 *Nanay Texts.* Publications on Tungus Languages and Cultures 4, Center for Language Studies Otaru University of Commerce.
_____ 1995 Nanay Kinship Terminology. (in Japanese) *Bulletin of the Hokkaido Museum of Noethern Peoples Vol.4*

_____ 1996a Genetical Position of Hezhen. *Gengo-Kenkyu (Journal of the Linguistic Society of Japan), No.109.* Kyoto.
_____ 1996b *Orochi Linguistic Materials.* Faculty of Education, Tottori University, Tottori.
_____ 1998a The Basic Vocabulary of Tungus Languages (A) — Nouns *Altai Hakpo – Journal of the Altaic Society of Korea* No.7 the Altaic Society of Korea, Seoul.
_____ 1998b The Basic Vocabulary of Tungus Languages (A) — Verbs & Adjectives *Report on the Linguistic Data-Base of Languages of Indigenous Peoples in Northern Eurasia and the Typological Description of their Features Vol.IV: Papers on Northern Eurasia,* Chiba University, Chiba.
Kimura, S. 2000 *Sibe phonology.* MA thesis. Hokkaido University (unpublished)
Kiyose, G. N. 1977 *A study of the Jurchen Language and Script.* Kyoto Hooritsubunkasha.
Kolesnikova, V. L. i O. A. Konatntinova 1980 *Russko-evenkijskij slovar'.* Leningrad, Gosdarstvennoe uchebno-pedagogicheskoe izdatel'stvo ministerstva provesshenija RSFSR.
Kuraishi, T. 1985 *Chinese-Japanese Dictionary.* Iwanami-syoten, Tokyo.
Novikova, K. A. 1968 *Evenskij jazyk.* Jazyki narodov SSSR 5. Leningrad, AN SSSR.
_____ 1980 *Ocherki dialektov evenskogo jazyka* (tom 2). Leningrad, AN SSSR.
Onenko, S. N. 1980 *Nanajsko-Russkij slovar'.* Moskva, Izd. Ruskij jazyk.
_____ 1986 *Russko-Nanajskij slovar'.* Moskva, Ruskij jazyk.
Ozawa, Shigeo 1983 *A Dictionary of Mongolian Language.* Daigaku-syorin, Tokyo.
Petrova, T. I. 1935 *Ul'chskij dialekt Nanajskogo jazyka.* Moskva/Leningrad, Uchpedgiz.
_____ 1967 *Jazyk Orokov* (ul'ta). Leningrad. AN SSSR.
Poppe, N. N. 1931 *Materialy po solonskomu jazyku.* Leningrad, AN SSSR.
Schmidt, P. 1923 The Language of the Olchas. *Acta Universitatis Latviensis* 8, Riga.
_____ 1927 The Language of the Oroches. *Acta Universitatis Latviensis* 17, Riga.
Shnejder, E. P. 1936 *Kratkij Udejsko-ruskij slovar'.*

Gosdarstvennoe uchbno-pedagogicheskoe izdatel'stvo, Moskva-Leningrad.
Sunik, O. P. 1985 *Ul'chskij jazyk.* Leningrad, AN SSSR.
Institute for the Study of Languages and Cultures of Asia and Africa 1966, 1967 *Survey Sheets for Asian and African Languages, Parts I and II.* Tokyo University of Foreign Studies ILCAA.
Tsintsius et al. 1975, 1977 *Sravnitel'nyj slovar' Tunguso-man'chzhurskikh jazykov, Materialy k etimologicheskomu slovarju,* tom 1, tom 2. Leningrad, Nauka.
Tsintsius, V. I. 1982 *Negidal'skij jazyk.* Leningrad, Nauka.
Tsintsius, V. I. i L. D. Rishes 1952 *Russko-Evenkij slovar'.* Moskva, Gosdarstvennoe izdatel'stvo inoatrannykh slovarej.
Tsumagari, T. 1989 Joshin-go (The Jurchen Language, in Japanese). *Gengogaku-dai-jiten (the Sanseido Encyclopaedia of Linguistics), Vol. 2* Sanseido, Tokyo.
_____ 1992a A basic vocabulary of Khamnigan and Oluguya Evenki in northern Inner Mongolia. *Hoppo-Bunka-Kenkyu* 21, Sapporo, University of Hokkaido.
_____ 1992b Mansyuu-go (The Manchu Language, in Japanese). *Gengogaku-dai-jiten (the Sanseido Encyclopaedia of Linguistics), Vol. 4* Sanseido, Tokyo.
_____ 1997 *Ewenki-go Oruguya hougen-ni tsuiteno oboegaki.* (Remarks on the Aoluguya dialest of Ewenki, in Japanese) *Otaru Syoka Daigaku Jinbun Kenkyu 93,* Otaru University of Commerce Otaru.
Vasilevich, G. M. 1958 *Evenkijsko-Russkij slovar'.* Moskva, Gos. Izd. inostr. i nats. slovarej.
Yamamoto, K. 1969 *A classified Dictionary of Spoken Manchu — with Manchu, English and Japanese Index.* edited by Institute for the Study of Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies ILCAA.
Zhang, Yanchang, Zhang Xi & Dai Shuyan 1989 *The Hezhen language.* Jilin Changchun, University Press.

ツングース言語文化論集

既　刊

『ソロン語基本例文集』　朝　克、津曲敏郎、風間伸次郎　編
文部省科学研究費補助金（国際学術研究：63041002）研究成果報告書
北海道大学文学部、1991 年 3 月

『ツングース言語文化論集　1』　黒田信一郎、津曲敏郎　編
文部省科学研究費補助金（国際学術研究：63041002）研究成果報告書
北海道大学文学部、1991 年 12 月

『ナーナイの民族遊戯』（ツングース言語文化論集　2）
ポンサ　K．キレ著／　佐々木史郎、匹田剛、津曲敏郎　編訳
小樽商科大学言語センター、1993 年 3 月

『朝克著「エウンキ語基礎語彙集」索引』（ツングース言語文化論集　3）
津曲敏郎　編、小樽商科大学言語センター、1993 年 6 月

『ナーナイ語テキスト』（ツングース言語文化論集　4）
風間伸次郎　採録・訳注、小樽商科大学言語センター、1993 年 7 月

『ナーナイの民話と伝説』（ツングース言語文化論集　5）
風間伸次郎　採録・訳注、小樽商科大学言語センター、1995 年 2 月

『鄂温克語三方言対照基礎語彙集』（ツングース言語文化論集　6）
朝　克　採録・著、津曲敏郎　編、小樽商科大学言語センター、1995 年 3 月

『オロチ語基礎資料』（ツングース言語文化論集　7）
風間伸次郎　採録・訳注、鳥取大学教育学部、1996 年 3 月

『ナーナイの民話と伝説 2』（ツングース言語文化論集　8）
風間伸次郎　採録・訳注、鳥取大学教育学部、1996 年 3 月

『ウルチャ口承文芸原文集 1』（ツングース言語文化論集　9）
風間伸次郎　採録・訳注、鳥取大学教育学部、1996 年 3 月

『ナーナイの民話と伝説 3』（ツングース言語文化論集　10）
風間伸次郎　採録・訳注、東京外国語大学、1997 年 3 月

『中国ツングース諸語対照基礎語彙集』（ツングース言語文化論集　11）
朝克 採録・著 津曲敏郎 補訂・編、小樽商科大学言語センター 1997年 8 月

『ナーナイの民話と伝説 4』（ツングース言語文化論集　12）
風間伸次郎　採録・訳注、千葉大学、1998 年 3 月

『Эвенские народные песни〈エウェンの歌〉』（ツングース言語文化論集 13）
Bokova, E. P.著・Z. I. Babceva 露訳・A. B. Dorzheev 英訳・風間伸次郎編、2000 年 4 月

『ナーナイの民話と伝説 5』（ツングース言語文化論集　14）
風間伸次郎　採録・訳注、東京外国語大学、2000 年 4 月

『ナーナイの民話と伝説６』（ツングース言語文化論集　15）CD８枚付
　風間伸次郎　採録・訳注、、ELPR、2001年３月

『増訂 ウイルタ口頭文芸原文集』（ツングース言語文化論集　16）CD１枚付
　池上二良　採録・訳注、ELPR、2002年

『ウデヘ語自伝テキスト』（ツングース言語文化論集　17）CD１枚付
　アレクサンドル・カンチュガ著／津曲敏郎編訳、ELPR、2002年

『ナーナイの民話と伝説７』（ツングース言語文化論集　18）CD２枚付
　風間伸次郎　採録・訳注、ELPR、2002年

『ネギダール語 テキストと文法概説』（ツングース言語文化論集　19）
　CD１枚付 風間伸次郎　採録・訳注、ELPR、2002年

『ウルチャ口承文芸原文集２』（ツングース言語文化論集　20）
　CD２枚付 風間伸次郎　採録・訳注、ELPR、2002年

『ネギダルの伝説と民話』（ツングース言語文化論集　21）
　マリーナ・ハサノワ・アレクサンドル・ペヴノフ編著、ELPR、2003年

『ウデヘ語読本 自伝：少年時代』（ツングース言語文化論集　22）
　アレクサンドル・カンチュガ著、津曲敏郎編、北海道大学大学院文学研究科、
　2003年

『エウェン語 テキストと文法概説』（ツングース言語文化論集　23）
　CD１枚付 風間伸次郎　採録・訳注、ELPR、2003年

『ウデヘ語テキスト』（ツングース言語文化論集　24）
　CD１枚付 風間伸次郎　採録・訳注、ELPR、2003年

PUBLICATIONS ON TUNGUS LANGUAGES AND CULTURES
- A list of published books -

Solon Basic Sentences compiled by D. O. Chaoke, Toshiro TSUMAGARI, and Shinjiro KAZAMA, Faculty of Letters Hokkaido University, 1991.
Papers on Tungus Languages and Cultures edited by Shin-ichiro KURODA and Toshiro TSUMAGARI, Faculty of Letters Hokkaido University, 1991.

Traditional Folk Play of Nanay (Publications on Tungus Languages and Cultures 2). Pongsa K. KILE/ edited with a Japanese trnslation by S. SASAKI, G. HIKITA, and T. TSUMAGARI, Center for Language Studies Otaru University of Commerce, 1993.

A Solon (Ewenke) Index to the Classified Vocabulary by D. O. Chaoke: with English Equivalents
(Publications on Tungus Languages and Cultures 3). compiled by T. TSUMAGARI, Center for Language Studies Otaru Univ. of Commerce, 1993.

Nanay Texts (Publications on Tungus Languages and Cultures 4).
translated and annotated by S. KAZAMA,
Center for Language Studies Otaru Univ. of Commerce, 1993.

Nanay Folk Tales and Legends (Publications on Tungus Languages and Cultures 5).
translated and annotated by S. KAZAMA,
Center for Language Studies Otaru Univ. of Commerce, 1995.

A Basic Vocabulary of Three Ewenki (Ewenke) Dialects
(Publications on Tungus Languages and Cultures 6).
collected and transcribed by D. O. CHAOKE, compiled by T. TSUMAGARI,
Center for Language Studies Otaru Univ. of Commerce, 1995.

Orochi Linguistic Materials (Publications on Tungus Languages and Cultures 7).
translated and annotated by S. KAZAMA, Faculty of Education Tottori University, 1996.

Nanay Folk Tales and Legends 2 (Publications on Tungus Languages and Cultures 8).
translated and annotated by S. KAZAMA, Faculty of Education Tottori University, 1996.

Ulcha Oral Literature 1 - A Collection of Texts
(Publications on Tungus Languages and Cultures 9).
translated and annotated by S. KAZAMA, Faculty of Education Tottori University, 1996.

Nanay Folk Tales and Legends 3
(Publications on Tungus Languages and Cultures 10).
translated and annotated by S. KAZAMA, Tokyo University of foreign Studies, 1997.

A Basic Vocabulary of the Tungusic Languages in China
(Publications on Tungus Languages and Cultures 11).
collected and transcribed by D. O. CHAOKE, compiled by T. TSUMAGARI,
Center for Language Studies Otaru Univ. of Commerce, 1997.

Nanay Folk Tales and Legends 4
(Publications on Tungus Languages and Cultures 12).
translated and annotated by Shinjiro KAZAMA, Chiba University, 1998.

Ewen Folk Songs (Publications on Tungus Languages and Cultures 13).
E. N. BOKOVA/ translated in Russian by Z. I. BABTSEVA, translated in English by A. V. DORZHEEV, compiled by S. KAZAMA,
Tokyo University of Foreign Studies, 2000.

Nanay Folk Tales and Legends 5
(Publications on Tungus Languages and Cultures 14).
translated and annotated by S. KAZAMA,
Tokyo University of Foreign Studies, 2000.

Nanay Folk Tales and Legends 6
(Publications on Tungus Languages and Cultures 14).
With 8 CDs, translated and annotated by S. KAZAMA, ELPR, 2001.

Uilta Oral Literature - A Collection of Texts Revised and Enlarged Edition
(Publications on Tungus Languages and Cultures 16). With a CD,
translated and annotated by Jiro IKEGAMI, ELPR, 2002.

An Udehe Autobiographical Text: with a Russian Translation
(Publications on Tungus Languages and Cultures 17). With a CD,
Aleksandr KANCHUGA/ edited with a Japanese translation by T. TSUMAGARI,
ELPR, 2002.

Nanay Folk Tales and Legends 7 (Publications on Tungus Languages and Cultures 18).
With 2 CDs, translated and annotated by S. KAZAMA, ELPR, 2002.

Negidal Texts and Grammar (Publications on Tungus Languages and Cultures 19).
With a CD, translated and annotated by S. KAZAMA, ELPR, 2002.

Ulcha Oral Literature 2 - A Collection of Texts (Publications on Tungus Languages and Cultures 20). With a CD, translated and annotated by S. KAZAMA, ELPR, 2002.

Myths and Tales of the Negidals (Publications on Tungus Languages and Cultures 21).
by Marina KHASANOVA and Alexander PEVNOV, ELPR, 2003.

Autobiolographical story: Boyhood - An Udehe reader
In the Udehe language with Russian translation (Publications on Tungus Languages and Cultures 22). by Alexander Alexadrovich KANCHUGA Edited by T. Tsumagari
Published by Graduate School of Hokkaido University, Sapporo, 2003

Ewen Texts and Grammar (Publications on Tungus Languages and Cultures 23).
With a CD, translated and annotated by S. KAZAMA, ELPR, 2003.

Udehe Texts (Publications on Tungus Languages and Cultures 24).
With a CD, translated and annotated by S. KAZAMA, ELPR, 2003.