

## The Language of Japan's Continental Relatives



## *by* Christopher I. Beckwith

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## KOGURYO

# THE LANGUAGE OF JAPAN'S CONTINENTAL RELATIVES

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# KOGURYO

# THE LANGUAGE OF JAPAN'S CONTINENTAL RELATIVES

An Introduction to The Historical-Comparative Study of the Japanese-Koguryoic Languages

> With a Preliminary Description of Archaic Northeastern Middle Chinese

> > BY

CHRISTOPHER I. BECKWITH



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## PREFACE

The beginnings of this book go back to 1996, when I was Visiting Professor of Linguistics at the National Museum of Ethnology in Osaka, Japan. I noticed, by chance, some puzzling correlations between Japanese and Chinese that suggested a significant early preliterate loan relationship. Since this idea required the Proto-Japanese speakers to have lived at one time in contact with Old Chinese speakers, I began looking into the problem of Japanese ethnolinguistic origins, and became interested in the Koguryo language, which I had read about in the publications of my friend and colleague, Gisaburo N. Kivose. When I investigated the sources on Koguryo I discovered that the philology had never really been done. Most research involving the language-including some of my own-was vitiated by basic philological errors. In order that firm linguistic conclusions could be drawn, and in order to establish a solid foundation for the study of Japanese and Koguryo ethnolinguistic history, I decided to undertake the present study.

I would like to thank my friend, colleague, and former student who has far surpassed his teacher—Tsuguhito Takeuchi, of Kobe City University of Foreign Studies, for help beyond the call of duty in every respect before, during, and after my stay at the National Museum of Ethnology. I am also indebted to my sponsor there, Yasuhiko Nagano, for his generous assistance to me during my stay.

I could not have written this book without the help of many friends and colleagues. First of all, Gregory Kasza of Indiana University gave me much encouragement and advice, as did J. Marshall Unger of Ohio State University. The discussions I had with Jim Unger helped me to form clear views of my own on the relationship between Japanese and Koguryo. At the time I was writing grant proposals I also received helpful advice on my research from several other scholars, especially Alexander Vovin of the University of Hawaii. In several instances Sasha Vovin's criticism pointed out the way to a better understanding.

Most importantly of all, Professor Kiyose not only advised me, he sponsored me in my application for a Japan Foundation Fellowship and helped me in every possible way before, during, and after my stay in Japan. I cannot sufficiently express my deep gratitude to him. Due to all this help from my friends and colleagues I was fortunate enough to be awarded a Japan Foundation Fellowship for one year, from August, 2001 to August, 2002. I would like to thank the Japan Foundation (Kokusai Kôryû Kikin) of the Japanese Foreign Ministry (Gaimushô) for the fellowship, without which I could not have written this book.

Because Professor Kiyose retired in spring of 2002, his colleague Tatsuo Nakami, of the Institute for the Study of Languages and Cultures of Asia and Africa ('A-A-ken') at Tokyo University of Foreign Studies, kindly offered to sponsor me. I am very grateful to him and to A-A-ken for providing me with an office, an internet connection, and much other support. Professor Nakami also introduced me to many other Japanese scholars interested in the subject of my research, including several at A-A-ken. I wish to thank Bhaskararao Peri of A-Aken for lending me a printer to use with the Macintosh computer Professor Nakami found for me; without it my work there would have been far more difficult. I would also like to thank Izumi Hoshi and the staff of A-A-ken for their cheerful willingness to help me on many occasions during my stay there.

Of all the scholars I met in Japan, I owe the biggest debt of gratitude to Hiroömi Kanno, who collected almost everything ever published in Japanese and Korean on the Koguryo language, lent all of it to me, and helped me go through some of the Korean publications. Professor Kanno also assisted me with Korean linguistic matters, especially Middle Korean citations, and met me on several occasions for discussion of our common research interests. Without his help this book would have been much poorer.

When Professors Kanno and Nakami introduced my work to Takatoshi Matsubara, of Kyushu National University, he invited me to give a lecture on my research in Fukuoka. Professor Matsubara also took me around to meet archaeologists and anthropologists and to view Yayoi materials. I am grateful to Professor Matsubara for his generosity and encouragement, and to the faculty and staff at Kyushu National University who graciously showed me their collections.

I also wish to thank Professor Takeuchi for inviting me twice to Kansai, where he generously treated me and my family and introduced me to several of his collegues and students.

While I was living in Tokyo, my friend and colleague Michael Walter, of Indiana University, took care of many onerous tasks back

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home for me. I am indebted to him for helping me out of several difficult situations. In addition, I would like to thank Mike for generously answering questions of mine on Buddhist and other topics. I also owe my gratitute to my friends and colleagues Junko Tanaka, Roger Janelli, and Dawnhee Yim, who helped me with the Bibliography.

A special note of thanks is due to all my helpful colleagues on the Warring States Working Group internet site (http://www.umass.edu/wsp/), who have answered so many of my questions and often steered me away from error.

I would also like to thank Ann Bristow and Wen-ling Liu of the Indiana University Library, who very kindly helped me on several occasions, and the staff of the Indiana University East Asian Studies Center, who have often provided me with help not available elsewhere.

I am indebted to Adam Kilgarriff of the University of Brighton for permission to quote extensively from his first-rate computational work on the British National Corpus (see Chapter 10), to *Anthropological Linguistics* for allowing me to reuse selections from a published book review,<sup>1</sup> and to the Tôhô Gakkai for allowing me to reprint material from one of my papers.<sup>2</sup>

Last but not least, I wish to express my indebtedness to earlier researchers, especially the many scholars from Korea and Japan who have revived the Koguryo language and kept it alive through their energetic work.

I am very grateful to all my friends and colleagues, both those named above and many others, for so much kindness and sage advice.<sup>3</sup> Without their help this book would not have been possible. I have sometimes not taken their advice, and hope not to have made too many serious errors as a result. Needless to say, all errors that do remain in this book are fully my responsibility.

With the latter thought in mind, I would like to note that while I have of course examined all significant previous works known to me on topics closely related to the problems treated in this book, and have included references to them when relevant to the topic at hand, a re-

<sup>&</sup>lt;sup>1</sup> C.I. Beckwith, review of Laurent Sagart, *The Roots of Old Chinese* (Amsterdam: John Benjamins, 1999) in *Anthropological Linguistics* 44.2 (2002) 207-215.

<sup>&</sup>lt;sup>2</sup> C.I. Beckwith, On Korean and Tungusic Elements in the Koguryo Language. *Transactions of the International Conference of Eastern Studies* XLVII (2002) 82-98.

 $<sup>^3</sup>$  I have thanked colleagues who have helped me with specific problems at the appropriate places in the text.

view of all previous scholarship related in any way to the Koguryo language is far outside the purview of this book, which also does not constitute a complete survey of all primary source literature somehow connected to the topics covered. A monograph covering everything connected to Koguryo, and to Japanese, as well as to the many linguistic relationship theories involving the Japanese, Korean, Chinese, Tibeto-Burman, Turkic, Mongolic, and Tungusic languages, among many other topics mentioned in this book, would be a marvellous thing to have, but this book is not it. It would be necessary to write an encyclopedic series of monographs in order to fully cover these topics. In particular, the extensive Koreanist literature on Koguryo and related subjects includes many important facts and points of view and deserves specialized treatment by someone who, unlike me, is a specialist in Korean 'national language studies'. It must additionally be noted that there is a vast scholarly literature on Korean archaeology and history that it was not possible for me to evaluate and utilize. Finally, some publications could not be obtained by me, or were obtained too late to be included in the present work, the text of which was completed at the end of May, 2003. That was the point at which I declared the book finished and nothing more would be added to it unless, due to some earthshaking revelation, major parts of the book would need to be rewritten. No such revelation has occurred, though I have taken advantage of the lapse of time while the manuscript was under consideration by the publisher to add material to Chapter 12 from the paper I gave in East Lansing in August, 2003 at the 13th Japanese/Korean Linguistics Conference. Otherwise, aside from minor revisions for clarity and consistency, and corrections of not a few typographical errors, oversights, and other infelicities noted by myself and by readers of the manuscript, the book remains essentially as completed at that time.

A cautionary word about 'other theories' is also in order. Thomas Kuhn long ago observed that many proponents of disproven theories defend these theories with emotion, unwavering belief, and any and all weapons at their disposal. The point of this book is not to disprove the many other theories discussed in some depth, including the Japanese-Korean theory, the various Altaic theories, the Sino-Tibetan theory, and so on. The point is also certainly not to criticize other scholars. The point is to discover the truth. In order to find out the truth about the history and relationship of the Japanese and Koguryo languages I

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have examined all serious theories in turn to determine if they have any merit, and have rejected those that are not scientifically supportable. I apologize in advance to any adherents of rejected theories who may be upset by my criticism.

Finally, this book is not only not the first word in Koguryo studies, it is not the last word either. It is possible that more linguistic material may be gleaned from the sources, especially the toponym material from the former kingdom of Paekche, which evidently includes some Puyo-Koguryoic words, as is to be expected. These must be carefully distinguished from toponyms based on Han-Paekche words; this is an exceedingly difficult task, which seems to be beyond the abilities of any scholar currently working in this field, including myself. Also, many topics have been barely touched on, or not even mentioned. Others that have been discussed, especially those relating to archaeology, history, and other extralinguistic matters, undoubtedly include much that can be improved on. There are also certainly mistakes in this book, despite my best efforts to avoid or eliminate them. I hope that the many fine scholars working on Japanese, Korean, and other languages dealt with in this book will take Kuhn's insights to heart and turn their deep knowledge of their languages, as well as their considerable talent and energy, to the furthering of scientific progress by correcting, continuing, refining, digging deeper, building upon, and going beyond the research presented here. There are entire libraries devoted to the works of one author, such as Shakespeare, or even to a single poem, Beowulf. There is certainly room to spare for many more books on Koguryo and the Japanese-Koguryoic languages.

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## **ABBREVIATIONS**

a.	article
adi	adjective
ady.	adverb
A Imm	Archaia Iananaga languaga of the third contury Chinese accounts
AJph	Archaic Japanese—language of the third century Chinese accounts
AKog	Archaic Koguryo—language of the third century Chinese accounts
aux.	auxiliary
Bax.	Baxter (1992), A Handbook of Old Chinese Phonology
BEFEO	Bulletin de l'École Française d'Extrême-Orient
Ben	Benedict (1972) Sino-Tibetan: A Conspectus
BMEE A	Bulletin of the Museum of Far Fastern Antiquities
DMITLA	Duitein of the Museum of Fur Eustern Antiquities
DINC	Diffusit National Corpus
BSOAS	Bulletin of the School of Oriental and African Studies
c./ca.	circa
cf.	confer, compare, see also
С	(any) consonant
CJK	Common Japanese-Koguryoic
coni	conjunction
coord	coordinative
CTP	Common Tibeto Burman
CVC	consonant yowal consonant
	tonsonant-vower-consonant
der.	definite, defined
dem.	demonstrative
det.	determiner
dial.	dialect(s), dialect form
ed.	editor
eds.	editors
EMC	Early Middle Chinese
EOC	Early Old Chinese—language of the Shang oracle bone inscriptions
fem	feminine
GEN	genitive_attributive
Get	Cothia
Cult	Could
Grk	Greek
HHS	Hou Han shu
HJAS	Harvard Journal of Asiatic Studies
HS	Han shu
HSR	Historic Sinological Reconstruction
HTS	Hsin T'ang shu
id.	idem, the same
IE	Indo-European
indef	indefinite
inf	infinitive
	International Phanatia Alphabat
	$O_{max} = \frac{1}{2} $
JDB	Omodaka (1967), Jiaai betsu kokugo daijiten
JAOS	Journal of the American Oriental Society
JRAS	Journal of the Royal Asiatic Society
Kar.	Karlgren (1957), Grammata serica recensa
KS	KoryŏSa
Lat	Latin

## ABBREVIATIONS

LB	Lolo-Burmese
LBur	Literary Burmese
lit.	literally
LMC	Late Middle Chinese (T'ang Chinese)
LOC	Late Old Chinese-the language of the Classics
LW	loanword(s)
Mar.	Martin (1987). The Japanese Language through Time
masc	masculine
MChi	Middle Chinese—unperiodized reconstruction
MKor	Middle Korean
MOC	Middle Old Chinese
MMon	Middle Mongol
mrk	marker
NBur	New Burmese
MInn	New Japanese (modern standard Japanese)
MMon	New Mondorin (modern standard Chinese)
NMC	Northeastern Middle Chinese
NNIC	Notificasterii Midule Chillese
NKD ND	Ninon kokugo daljilen Nava Dhraca
NP OD	
OBur	Old Burmese
OChi	Old Chinese—unperiodized reconstruction
OEng	Old English
Olrı	Old Irish
OJpn	Old Japanese—the language of Japanese texts to ca. 1000 A.D.
OKog	Old Koguryo
OMan	Old Mandarin
ONew	Old Newari
OPyu	Old Pyu
OTib	Old Tibetan—the language of Tibetan texts written ca. 650-950 A.D.
p.	person, personal
PAN	Proto-Austronesian
p.c.	personal communication
PChi	Proto-Chinese
perh.	perhaps
pers.pro.	personal pronoun
PIE	Proto-Indo-European
PJK	Proto-Japanese-Koguryoic
PJpn	Proto-Japanese
PJR	Proto-Japanese-Ryukyuan (= Proto-Wa)
PKog	Proto-Koguryo
Pok.	Pokorny (1959). Indogermanisches etymologisches Wörterbuch
poss.	possessive
pp.	preposition
prep.	preposition
pro.	pronolin
PTib	Proto-Tibetan
PTR	Proto-Tibeto-Burman
PTP	Proto-Tibeto-Pvu
PTok	Proto-Tokharian
Pul	Pulleyblank (1991) Lexicon of Reconstructed Pronunciation in Early Mid-
i ui.	dle Chinese Late Middle Chinese and Farly Mandarin
av	and vide which see
rel	relative
1 <b>.</b> 1.	singular
з.	Singular

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## ABBREVIATIONS

Sag.	Sagart (1999), The Roots of Old Chinese
SKC	San kuo chih
SKor	Silla Korean
Skt	Sanskrit
SOV	Subject-Object-Verb
SS	Samguk Sagi
Sta.	Starostin (1989), Rekonstrukciya drevnekitayskoy fonologičeskoy sistemi
SVO	Subject-Verb-Object
Tak.	Takata (1988), Tonkô shiryô ni yoru chûgokugoshi no kenkyû
TB	Tibeto-Burman
TCTC	Tzu chih t'ung chien
Tgt	Tangut
Tok	Tokharian A and Tokharian B
TokA	Tokharian A—the East Tokharian language
TokB	Tokharian B—the West Tokharian language
trans.	translated by
v.	verb
V	Verb; (any) vowel
VP	Verb Phrase
Wat.	Watkins (2000), The American Heritage Dictionary of Indo-European Roots
ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft

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## TRANSCRIPTION AND TRANSLITERATION

Despite the great complexity of the linguistic material that is the subject of this book, and the great number of Asian languages that are cited at various points in the text, an effort has been made to simplify what can be simplified, regularize what can be regularized, and omit what can be omitted. Choices have been made that may seem mysterious, but the ultimate goal has been to make the book accessible to the largest number of readers while still maintaining the highest standards of precision. The following systems of transcription and transliteration have been used.

## KOREAN

The McCune-Reischauer system has been used throughout except for Middle Korean and earlier forms of the language (for which a modified system has been used). It is the *de facto* standard throughout general East Asian studies, in Korea, and in Korean studies except in the works of a few Koreanists, mainly linguists, who use the Yale system, or those who use the new official system. Unlike the Yale system, the McCune-Reischauer system gives an approximately correct phonetic representation of Korean that does not require specialized knowledge to interpret. The same system has also been adopted for Middle Korean, with ă for [v], ŏ for [ə], and ŭ for [u]. The usual practice of notating the tones with one subscript dot for first tone and two dots for second tone has been followed here. Proper names that have traditionally been treated within the field of Korean studies are generally given in Korean transcription in this work, although for those which occur very frequently, such as 'Koguryo', the convention of omitting diacritics after the first occurrence is followed, as in most of the published literature in English. However, nearly all Korean-area toponyms, which are usually Chinese (Sino-Koguryo or Sino-Silla), are given in Chinese transcription to emphasize the fact that the languages involved were fundamentally different from Korean and, especially, that the readings were different from the later Sino-Korean readings of Chinese characters. The latter have deliberately been omitted to avoid

perpetuating the widespread but mistaken idea that, being from Korea, they are more accurate representations of the local ancient pronunciation.

Modern Korean is the direct lineal descendant in turn of Middle Korean and Old Korean, or Silla Korean, the language of the Silla kingdom. Korean is a member of the Han 韓 family of languages, all other members of which became extinct before they could be recorded. The term Han 韓 is to be clearly distinguished from Han 漢, the name of the ancient Chinese dynasty which has been extended for various purposes to mean 'Chinese'—the Chinese people and Chinese language in general. The word Han 漢 is used here strictly to refer to the Han dynasty; it is not used in the sense 'Chinese' in this book.

## JAPANESE

For modern New Japanese citations the usual modified version of the Hepburn system, the *de facto* standard in Japan and in Japanese studies, is used throughout. The government system now preferred by some Japanologists, especially linguists, masks the modern pronunciation and also often suggests a misleading phonetic history behind the modern forms.

Due to continuing doubt about all of the major contending reconstructions,<sup>1</sup> Old Japanese examples are cited in unreconstructed form whenever possible, according to the author's Middle Chinese 'attested reading' of the *man'yôgana* character transcription, only one example of which is usually given. Such readings are marked with a star ( $^{*}$ ); the more or less standard modern reconstruction of the language is marked with an asterisk (\*). It should be noted however that the author does not agree with the 'standard' reconstruction, particularly with respect to the Old Japanese vowel system. Nevertheless, in view of the longstanding controversy among Old Japanese specialists over the reconstruction of that system, no alternative *system* has been proposed.

<sup>&</sup>lt;sup>1</sup> The dissertation of Marc Miyake on Old Japanese phonology, though announced as forthcoming, had not yet appeared in print, and I had not succeeded in acquiring the unpublished dissertation, until well after the manuscript of the present book was complete in May, 2003. It was therefore not possible to incorporate its results in this work. An examination of the dissertation when I did finally receive it revealed nothing that would have caused me to make significant changes in my analysis, but I nevertheless regret that I was unable to include any of its results in the present book.

In the consonants, Old Japanese had no phonemic distinction between fricative sibilants and affricates. Comparative evidence reveals that there was such a distinction in earlier periods of the language, but because the merger occurred before the Old Japanese period the phonetic value must be determined individually for each word. Accordingly, both forms are usually given, whether attested in transcription or not. Finally, the author uses the term 'Old Japanese' according to Japanese standard parlance to refer to the language as recorded in *man'yôgana* and collected in the standard reference dictionary for Old Japanese (*JDB*), even though some of the material included postdates the move of the capital to Kyoto (Heian) in 794 A.D.

## CHINESE

The Wade-Giles system has been used as the default system of transcription for Chinese proper names (toponyms, personal names, book titles, and so forth). It is still standard for most studies of premodern East Asia involving China, and is not only more elegant than *pinyin*, it is actually more accurate as a phonetic transcription system, particularly for syllable onsets. The few well-known toponyms of China cited in the book follow traditional English names or map spellings (e.g., 'Peking' rather than Wade-Giles 'Pei-ching' or *pinyin* 'Beijing'). For citations of modern Mandarin words or readings of Chinese characters the *pinyin* system, which is generally used by linguists today for such citations, is followed.

For T'ang Chinese, or so-called Late Middle Chinese (Pulleyblank 1984, 1991), attested forms are cited from Takata (1988) whenever possible or relevant. When interpretation is required, usually it is the author's, but Pulleyblank's Late Middle Chinese forms are sometimes cited as well.

Unperiodized reconstructed Middle Chinese, or 'Early Middle Chinese', is cited according to Pulleyblank's system, slightly modified by the present writer—the main modification being the substitution, without comment, of normal philological transcriptions for IPA transcriptions whenever this would give forms that are less opaque to non-linguists (e.g.,  $\dot{s}$  is used throughout for his c). In instances where Pulleyblank's reconstruction is not followed, the sources for the author's reconstruction are cited. Tone marks are usually omitted for Middle

Chinese. When used, Pulleyblank's tone marks for Middle Chinese are converted to superscript numerals throughout. Middle Chinese 平聲 *ping shêng* 'even tone' (unmarked in Pulleyblank 1991) is marked with the superscript numeral '1'; 上聲 *shǎng shêng* 'rising tone' (marked with an apostrophe in Pulleyblank 1991) is marked with the numeral '2'; and 去聲 *qù shêng* 'departing tone' (marked with a superscript 'h' in Pulleyblank 1991) is marked with the numeral '3'. The same tone marks are also occasionally used in Old Chinese reconstructions in this book.

All Early Middle Chinese forms, no matter who has produced them, are reconstructions, and thus call for an asterisk to mark them as such. Due to the unfortunate example set by Karlgren this is not done by Sinological linguists, despite the great differences among their reconstructions. In this book, Early Middle Chinese forms, Old Koguryo forms, and Old Japanese forms based on attested Chinese character transcriptions or (in the case of Chinese itself) character-splitting 'spellings', are always marked with a star (\*); reconstructions based on the latter or on other data are marked with an asterisk (\*). When Chinese characters are used purely phonetically as transcriptions, they are given in square brackets; when cited in semantic glosses they are given in parentheses.

The origin or phonological motivation of the large set of distinctions in Middle Chinese and possibly Old Chinese in the velars (aspirated stop : unaspirated stop : voiced stop : unvoiced fricative : voiced fricative : nasal) is unknown. This unusually large set of phonemes is also found in the dentals and affricates, though most specialists in Old Chinese reconstruction have recently opted for laterals, leaving the phonemic inventory highly unbalanced. Since the labials have the same large set, which however is generally thought not to have included fricatives until, at the earliest, Late Middle Chinese, one is hard put to explain the size of these sets, not to speak of justifying the reconstructions that have been proposed for the individual phonemes. Because loanwords, both external and internal (as reflected in the script), argue against the existence of many of these distinctions in earlier stages of Old Chinese when the characters were created, it is unclear if a phonemic distinction in aspiration should be reconstructed for any stage of the language earlier than Middle Chinese. Aspiration is accordingly not indicated in the Old Chinese reconstructions given here.

Finally, although every attempt has been made to cite the two dominant reconstructions of Old Chinese (Starostin 1989; Baxter 1992) in discussions of that language, unless otherwise noted all forms given, both for unperiodized 'Old Chinese'—i.e., the forms created by Historic Sinological Reconstruction, as in Starostin (1989), Baxter (1992), and others—and for specific periods and dialects of Old Chinese (q.v. Beckwith 2002b), are the author's.

## TIBETAN

There is no standard system of transcription or transliteration in use for Tibetan. The transliteration system used here is designed to make the cited forms as clear as possible to non-specialists. In Old Tibetan there is no phonemic distinction between the two unvoiced stop and affricate series of onset phones represented by the script. They are allophones that occur in complementary distribution. The aspirated form occurs as sole initial immediately before the nucleus (or glide and nucleus), or after a nasal, while the unaspirated form occurs in all other allowed onset positions. The allophones are often, but far from always, correctly distinguished in the script. For example,  $k^h a$  'mouth', the 'correct' Classical spelling, can be written both ka and  $k^ha$  even in the same line of the same Old Tibetan text. (The contrasting voiced phoneme is transcribed normally, e.g., g in ga 'what'.) To avoid confusion in comparisons with other languages, this allophonic distinction is ignored and all such forms are cited in a phonemic transcription (e.g., k, in ka 'mouth') without comment.

## OTHER LANGUAGES

Citation of material in other languages (Old Turkic, Mongol, Sogdian, Burmese, etc.) follows the system of the reference in all but a few cases, where the dominant philological system is used.



Map of the Korean Peninsula and Vicinity in Koguryo Times

## INTRODUCTION

This is a book on the Koguryo<sup>1</sup> language, its relationship to Japanese, and the implications of the Japanese-Koguryoic family of languages and its study for historical-comparative linguistics in eastern Eurasia. To the author's knowledge, it is the first monograph focusing on the Koguryo language, from any point of view. One of its primary aims is to further clarify the genetic relationship of Koguryo to Japanese and the question of the origins and early history of the Japanese-Koguryoic family of languages. The latter question is closely connected to the traditional problem of the origin of the Japanese language and people. Since Koguryo is known only from lexical data cited in Chinese transcriptions (of Chinese, Korean, and Japanese provenance), and since many theories have been proposed regarding its connection to Japanese and other languages based on the same lexical data, this study necessarily deals in some depth with theoretical issues of lexicallybased historical-comparative linguistics, and suggests modifications of some current scholarly views and practices.2

The Koguryo lexical corpus is recorded in historical and geographical sources written during several stages of the language's existence: Archaic Koguryo, Old Koguryo, and perhaps also post-Koguryo, i.e., forms recorded after the death of the language. Although no Koguryo sentences are preserved, some morphosyntactic features are discernible from collocations in Old Koguryo toponyms.

In order to establish the phonology of Old Koguryo, it is necessary to establish the phonology of the language which underlies the transcriptions, namely the form of Chinese spoken in Korea. It was clearly not the same as the Central dialect or language. Several divergent dialects of Chinese are already attested in some form or another in Antiquity. Because most of the Chinese speakers in the Korean Peninsula lived in the Koguryo kingdom, and since the Chinese spoken in Korea is preserved almost exclusively as phonological peculiarities of the transcriptions of the Koguryo language,<sup>3</sup> the reconstruction of both

<sup>&</sup>lt;sup>1</sup> The name is spelled 'Koguryŏ' in the Reischauer-McCune system of Korean transcription. See the remarks in Transcription and Transliteration.

<sup>&</sup>lt;sup>2</sup> See the Preface for remarks on the coverage of previous scholarship in this book.

<sup>&</sup>lt;sup>3</sup> The phonological features of this colonial Chinese dialect or language (called in

languages is heavily circular. In an attempt to overcome this limitation, reconstructions have sometimes been discussed at great length, citing recent work on the reconstruction of Middle and Old Chinese and paying much attention to variant transcriptions. However, the numerous studies of this same problem in Korean (and to some extent in Japanese) are generally flawed by their assumption that Korean or Sino-Korean either underlies the transcriptions or is to be identified with them in some other way. As it is known that the Silla kingdom was restricted to a small area of the southeastern Korean Peninsula until the seventh century, it is extremely unlikely that early Silla Korean (Pre-Old Korean) had any influence on the transcriptions of Archaic Kogurvo or on the Old Kogurvo forms recorded by the T'ang Chinese at the time of the invasion and destruction of the Koguryo kingdom. On the other hand, the toponyms that form the bulk of the Old Koguryo corpus were apparently not recorded until the time of King Kyŏngdŏk (景德王) of Silla, who in the year 755 ordered most of the place names in Paekche and the southern and central part of the former Koguryo kingdom to be changed into Chinese. The work was evidently carried out, at least in large part, by Silla-Korean speaking officials. (See chapters 3 and 8.) The record of this change, copied centuries later into the Samguk Sagi, constitutes our main source for the Old Koguryo language. As 755 is the mid-T'ang period in China, and the massive borrowing of Middle Chinese into literary Old Japanese had already taken place, the Old Koguryo toponyms recorded then or soon thereafter should theoretically reflect-at least in part-the phonology of T'ang Chinese (i.e., Late Middle Chinese, in Pulleyblank's terminology), as recognized by Kim Bang-han (1985: 112), among others. The latter period and dialect of Chinese is, or should be, comparatively well known because it is extensively recorded in segmental alphabetic scripts (mainly Old Tibetan script) and these transcriptions have been carefully studied by Sinologists, most recently by Takata Tokio (1988). However, despite some agreement with T'ang Chinese features, the transcriptions actually reflect, in the main, an archaic Chinese dialect, evidently the Chinese language once spoken in Korea by the descendants of Han dynasty Chinese settlers (see Chapter 4). In any case, reconstructions of Chinese based on ear-

this book 'Archaic Northeastern Middle Chinese') are actually attested in transcriptions from throughout the Korean Peninsula, but the Koguryo forms are by far the best and most numerous.

lier theories, such as those of Bernhard Karlgren (1957), are of little use for the present study, and works that depend on them are not further cited.

Although this is the first monograph devoted to the Koguryo language, the history of the study—or, rather, the comparative use—of the language goes back over a century. Shiratori Kurakichi and other Japanese scholars of the Meiji period already noted the Samguk Sagi glosses and used them in their work (Shiratori 1970), although they evidently did not recognize that Koguryo was a language distinct from Korean. The earliest reports on Koguryo as a language were published in the early twentieth century by Japanese scholars, in Japanese (Naitô 1907: Mivazaki 1907), and the few studies of the language over the following half century were also published in Japanese.<sup>4</sup> The modern study of Koguryo begins essentially with the work of the Korean scholar Lee Ki-moon, who in 1961 published an important study in Korean. His comparative work, and that of his successors in Korea, Japan, and elsewhere, is discussed in Chapter 1. Due to the history of the discovery of the Koguryo language, and to the form in which it is preserved, most studies of, or involving, the Koguryo language have from the beginning been inseparable from the study of Japanese and Korean. Not long after Lee Ki-moon began publishing his research, a steady succession of studies involving the Koguryo language to some extent, mostly based on the citations in Lee's publications, began to be written in Korean, often in the form of master's theses or doctoral dissertations on the Korean language, many of which have not been published.<sup>5</sup> Recent major surveys of Japanese (Shibatani 1990) and Korean (Sohn 1999; Lee and Ramsey 2000) say little or nothing about the Koguryo language, though its relationship to Japanese is mentioned.

The Koguryo language is known to have been spoken in the Korean Peninsula, southern Manchuria, and the area of what is now Liaoning Province in China. Although the Puyo-Koguryoic peoples—including the Maek or Ye-Maek and the Puyo-Paekche—are known from historical sources to have migrated to the Korean Peninsula from the Liao-hsi area of northeastern China (see Chapter 2), in Japan, Korea, and China Koguryo has always been considered to be a 'Korean' language. Studies focusing on it, its sources, and other related issues accordingly fall into the category of 國語學 'national language studies'

<sup>&</sup>lt;sup>4</sup> See the survey by Tsukamoto (1993: 87-89).

<sup>&</sup>lt;sup>5</sup> Hiroömi Kanno, p.c., 2002.

in Korea.<sup>6</sup> Of published Korean studies that deal with the Koguryo language in any significant way, including more wide-ranging comparative studies, nearly all do so within this traditional theoretical framework. In Korean 'national language studies', linguistic data from several areas which are now Korean in language and culture-principally the former Koguryo, Paekche, and Silla kingdoms, along with other minor states of the Korean Peninsula-are treated together as data for the early history of the Korean language. Moreover, regardless of the differences among individual scholars, all consider the Koguryo language to be related, ultimately, to Korean, either directly, or indirectly via one or another extended version of the Altaic language theory, in which both Japanese and Korean are included as constituent genetic members. Many Korean scholars, and a few Japanese and other specialists in Korean, have accordingly discussed the Old Koguryo toponyms in the Samguk Sagi within the assumptions of these theories, usually as a part of a more extensive treatment of Korean

While there is no doubt that Koguryo history *per se* belongs within the compass of Korean history, the traditional treatment of the Koguryo language within the framework of Korean 'national language studies', the Japanese-Korean genetic theory, or one of the 'Altaic' genetic theories (including the 'Macro-Tungusic' theory), does not accord with either ethnolinguistic history or the linguistic facts, as shown in this book. Such analyses are often based either on reconstructions of Old and Middle Chinese that can no longer be accepted or on a smorgasbord of reconstructions old and new from which a new reconstruction is produced, ad hoc, for comparative purposes. These studies often propose impossible forms. One example must suffice here.

Kim Bang-han rightly notes that the modern Sino-Korean reading *hor* of the Old Koguryo word for 'walled city, fort (城)', usually written 忽, is not a correct transcription of the Old Koguryo word. He then cites the Middle Chinese reconstruction of Chou Fa-kao (1979: 97), a modification of Karlgren's (1957), in reconstructing the word 忽 as "close to  $\chi u \Rightarrow t$ ." He concludes by comparing it to Tungusic *xoto(n)* and Mongol *qota-n* 'city' and related words (Kim 1985: 112-113).7 How-

<sup>&</sup>lt;sup>6</sup> For an extensive bibliography see Yi 1996.

<sup>&</sup>lt;sup>7</sup> Pulleyblank (1991: 126) reconstructs "xwət" for 'Early Middle Chinese' and "xut" for 'Late Middle Chinese' (i.e., T'ang Chinese). The latter form is incorrect for

ever, there are many variant transcriptions of Old Koguryo toponyms which show that the supposed dental final of Middle Chinese must have been, in fact, a liquid phonetically, as is absolutely clear from the well-known segmental foreign script transcriptions of T'ang Chinese (Takata 1988) as well as the Sino-Korean reading itself, and secondly, the Koguryo word is solidly attested already in Archaic Koguryo as \*kuru [溝凄] 'walled city, fort (城)', eliminating the possibility of any connection with the Mongol or Tungusic words. This is just one example among many, and one problem among the many problems that permeate even the best works published on Koguryo. The reconstructions of Old Koguryo and comparisons with other languages in such works are often vitiated by the fact that the underlying philology of the Koguryo toponym corpus was never done properly to begin with, and because the assumption that the language is related to Korean or 'Altaic' is nearly always present, distorting the Koguryo forms in order to make them fit the pattern of the intended Korean or Altaic comparands.

The present book is a study of the Koguryo language and related matters, not a study of the history of Korean 'national language studies'. Since quoting the lists of erroneous citations and reconstructions of Koguryo forms found in the works of that tradition or deriving from it would not only give them undeserved validity, it would certainly perpetuate and further spread them in the literature, the present writer has refrained from doing so. However, to give readers an idea of what they are like, the recent, relatively thoughtful reconstructions of Song (1999) and Ch'oe (2000) are regularly cited, without comment, even though the author considers them to be generally incorrect also.<sup>8</sup> Nevertheless, it must be stated that the present work has grown out of and is indebted to the works of previous scholars, including the insightful pioneering studies by Lee Ki-moon and important subsequent studies by Murayama Shichirô, Kim Bang-han, Toh Su-hee, and other schol-

T'ang Chinese, and in the light of the archaic Northeastern Middle Chinese dialect discussed in Chapter 4, the 'Early Middle Chinese' form is perhaps wrong as well. For discussion of comparisons with Korean, Turkic, and Tungusic words based on the Sino-Korean reading of the character as *hol*, see Chapter 8.

<sup>&</sup>lt;sup>8</sup> I have also seen little point in rehashing (and thus perpetuating in the literature) previous scholars' rehashing of their predecessors' mistake-filled word lists and comparisons with assorted languages. As just one example, consider the comparison of Old Koguryo \*key [皆] 'king (王)' with Mongol "「qaran, qan」 (帝王) " taken from Lee (1973: 564)—along with the uncorrected typographical error "qaran" for the correct *qayan*—by Mabuchi et al. (1999a: 593); see Chapter 8.

ars.<sup>9</sup> These earlier studies are discussed at length in Chapter 1; see also the Preface.

Most of this book is devoted to the Koguryo language and its history and relationships. The writer has therefore attempted to approach Koguryo as a language on its own terms and has to the greatest extent possible based all readings and reconstructions on attested ancient and early medieval forms. Since the Koguryo language is considered to be a member of the Japanese-Koguryoic family of languages, the attempt is made to reconstruct Common Japanese-Koguryoic and in a few cases even Proto-Japanese-Koguryoic forms. As the only surviving member of the family, Japanese (with the Ryukyuan languages) is of particular importance. Unlike Korean scholars, who are concerned primarily with the local linguistic history of Korea, Japanese scholars who have dealt more than casually with the Koguryo lexical material have done so either within the preconceptions of a distant relationship theory in which Japanese is believed to be related genetically to another language or language family in addition to Koguryo (Murayama 1963: Mabuchi 1999a, 1999b: Mabuchi et al. 1999).<sup>10</sup> or of some variant of the now widespread view that all genetic relationship theories involving Japanese or Japanese-Ryukyuan are mistaken (Kiyose 1991, 2002).<sup>11</sup> Works by other linguists who have discussed Koguryo at any length (Lewin 1973; Miller 1979; Whitman, 1990; Janhunen 1992, 1997; Unger 2001) involve the same or similar problems.

One of the major driving forces behind all comparative studies of Japanese, Koguryo, and Korean is the question of the location of the ultimate ancient homeland, or *Urheimat*, of the respective peoples. While to the uninitiated it may seem premature to even broach the subject, in fact it has already been broached many times and many theories have been proposed. Although the identification of the proximal, or Common Japanese-Koguryoic, homeland is demonstrated here with relative certainty, the author does not pretend to have definitively solved the very difficult problem of the Proto-Japanese-Koguryoic

<sup>&</sup>lt;sup>9</sup> Although reference is generally not made to it below, the insightful study by Yu Ch'anggyun (1976) was found to be of great help at an early stage of this study, despite the presence in it of numerous typographical errors. I would like to acknowledge my deep indebtedness to my colleague Hiroömi Kanno, who very kindly assisted me with the reading of this Korean text.

<sup>&</sup>lt;sup>10</sup> Technically speaking, these are unscientific theories. See Chapters 8 and 11.

<sup>&</sup>lt;sup>11</sup> According to Kiyose's version of this view, Japanese is not related genetically to any other language because there is no such thing as a genetic relationship (p.c., 2002).

homeland. However, a preliminary discussion has been included to suggest possible directions for future work by those interested in it.<sup>12</sup>

The fact that the Koguryo language is known only lexically necessitates consideration in this book of theoretical issues of lexicallybased historical-comparative linguistics, especially as it is practiced in the study of languages of eastern Eurasia, where comparative linguistics is almost exclusively lexical. Although many blanket objections have been raised against this form of linguistics, it is unlikely that a replacement for it will be found for scholars dealing with the myriad isolating languages of southern China, Southeast Asia, and neighboring areas. For Koguryo we have in any case no choice, because not only are there no texts, not a single sentence is preserved in the language-although, as noted above, important morphosyntactic information is derivable from collocations that occur in the Old Koguryo toponyms. Because this book covers not only Koguryo itself but also its relationship to Japanese and the putative relationships of those two languages to many other languages, issues of general comparativehistorical linguistic methodology particular to eastern Eurasia are of central importance and are given some attention.

Finally, in the concluding chapter ethnolinguistic theories involving Japanese, Koguryo, and Korean are revisited and reevaluated in the light of the material presented in the body of the book.

<sup>&</sup>lt;sup>12</sup> See Chapter 7, which includes summaries of material presented in earlier publications (Beckwith 2002a, 2002b).

### CHAPTER ONE

## KOGURYO AND THE ORIGINS OF JAPANESE

Modern scholarship on the problem of Japanese ethnolinguistic origins is over a century old.<sup>1</sup> Among the many theories that have been proposed, the most resiliant are the Korean theory; the Altaic theory, and its variant the Horserider superstratum theory; the South China coast theory; the Austronesian superstratum theory; and the Austronesian-Jômon substratum theory and its variant, the theory that Japanese are essentially just the continuation of the Jômon people, the autochthonous inhabitants of the islands since primordial times. However, due to skimpy evidence that made it difficult to choose among the competing theories, careful scholars mostly adopted a sceptical view up until very recently, when archaeological and paleoanthropological studies determined conclusively that the modern Japanese *people* are descended from the people of the Yayoi culture who first appeared in northern Kyushu and, in a virtually identical culture, in the southern tip of the Korean peninsula, in the 4th century B.C. (Nakahashi 1993; Imamura 1996; Nakahashi and Iizuka 1998; Hudson 1999).<sup>2</sup>

The origins and relationships of the Japanese *language*, though, have remained controversial. Most Japanese, Korean, and Western historical linguists argue in favor of a relationship between Japanese

<sup>&</sup>lt;sup>1</sup> Although the major modern theories are discussed briefly in this book, the literature on Japanese ethnolinguistic origins is vast and controversial, including substantial bodies of work in the fields of archaeology, paleoanthropology and genetics, architecture, folklore and religious studies, and other fields, as well as linguistics. This book is devoted to the Koguryo language and its relationship to Japanese and other languages, and also to the ethnolinguistic history of Japanese-Koguryoic in the strict sense. I have attempted to be as inclusive as possible of professional research on these particular subjects when it is accurate and relevant enough to be worth citing, and to include some reference to the wider literature, but only a separate work, or series of works, could really do justice to the whole thing. The recent book by Mark Hudson (1999) is an excellent beginning; for a similar approach by a linguist, see Rozycki (2001); cf. the Introduction.

<sup>&</sup>lt;sup>2</sup> This was applied to the history of the Japanese language in 1957 by Ôno Susumu, who speaks of an unidentified "Altaic language of southern Korea" (Lee 1963: 96). Ôno's theory was criticized in 1959 by Hattori Shirô (Lee 1963: 96-97) on the grounds that Korean and Japanese could not have separated less than four thousand years ago. Hattori's observation is certainly correct, but his assumption that Korean and Japanese are genetically related is not. See Chapters 8 and 9.

and Korean within an extended 'Macro-Altaic' family or a slightly more limited 'Macro-Tungusic' family. Other theories, especially the Altaic-Austronesian *Mischsprache* or 'mixed language' theory, also continue to have adherents. However, many linguists (especially in Japan) who are unimpressed by the arguments have adopted an agnostic view (Shibatani 1990), or simply state outright that Japanese is an isolate.

Amidst all the politics and polemics, linguists have largely ignored data known since the early twentieth century. Two Japanese scholars, Naitô Konan (1907) and Miyazaki Michizaburô (1907), followed a decade later by Shinmura Izuru (1916), published articles pointing out the existence of a dead language, Koguryo, once spoken in the area of Korea, southern Manchuria, and northeastern China, the surviving numerals of which are all relatable to the otherwise unique Japanese set (Tsukamoto 1993: 87-88; cf. Lee 1963: 98-99).<sup>3</sup> This discovery had little influence on Japanese ethnolinguistic theories, perhaps because Korea was at that time under Japanese colonial rule and Koguryo was believed to be related to Korean.

After a long hiatus with few significant publications dealing even tangentially with Koguryo, the Japanese Koreanist Kôno Rokurô published an article in which he argues that toponyms are very conservative, so the glossed Koguryo toponyms in the *Samguk Sagi*, or 'Historical Records of the Three Kingdoms', written in Chinese by  $\pm$   $\ddot{a}$   $\vec{k}$  Kim Pu-sik in 1145 on the basis of earlier sources (most of which are now lost), represent not Koguryo but the language of the people who had lived there before Koguryo (Mabuchi et al. 1999a: 145 [610]).4

<sup>&</sup>lt;sup>3</sup> The importance of this fact has been dismissed by linguists convinced of the correctness of the Altaic genetic (divergence) theory because the numerals of the hypothetical constituent members of that putative linguistic family are unrelated. It is thus taken for granted by Altaicists that the numerals of genetically related languages do not need to coincide (Lee 1963: 99). However, the non-coincidence of the numerals is relevant and may not be dismissed, especially since there is massive evidence—including other lexical evidence—against the Altaic divergence theory, and not much support for the Altaic convergence theory either, at least as a theory (see Chapter 9). By contrast, the coincidence of the numerals of any given pair of languages does not automatically prove they are genetically related, as is well known from the history of the wholesale borrowing of the Chinese numerals throughout East and Southeast Asia.

<sup>&</sup>lt;sup>4</sup> The account of Kôno's view given here is based on Mabuchi's summary, as cited; I have not seen Kôno's article. Kôno agrees that the ancestor of Korean is Silla, a Han language descended from the language of ancient Chin Han, but in his view the language spoken in the Unified Silla kingdom of Korea absorbed elements of both

Following up on these tantalizing hints, the Korean scholar Lee Kimoon began working on the glossed Koguryo toponyms in the *Samguk Sagi*. Lee realized the importance of this material for the linguistic history of both Korea and Japan. In particular he saw that, based on the *Samguk Sagi* toponym corpus, Koguryo is the language most closely related to Japanese "from a genetic point of view" (Lee 1963: 97). He communicated some of this information to the Japanese scholar Murayama Shichirô, who immediately began publishing studies on the Koguryo language and its relationship to Japanese and Korean (Murayama 1962, 1963). Although Murayama later changed his view at least twice (Murayama 1966, 1976), in his early works he agrees with Lee that a large part of the Koguryo corpus is closely related to Japanese while at the same time a good part of it is related, though more distantly, to Korean as well (Lee 1983, Murayama 1963).

All in all, the state of philological work on the Old Koguryo material and on the Chinese language underlying the characters used to transcribe the toponyms phonetically was then still too primitive for these scholars to draw correct linguistic conclusions. (See the discussion of this problem in the Introduction.) However, Murayama's publications drew attention to the Koguryo data in Japan, while Lee's work became the basis for the most widely accepted view among Korean specialists on the linguistic relationships of Korean.

Lee first published his arguments briefly in a book on the history of Korean (Lee 1961). He then presented them in full in a book on the history and formation of the Korean language (Lee 1967, 1983). According to Lee (and following him, many others), Korean is an Altaic language related most closely to the Tungusic and Mongolic languages. He and other scholars who accept this 'Macro-Altaic' theory usually include Japanese with Korean in a 'Macro-Tungusic' or 'East-Asiatic' branch of Altaic that includes Tungusic as a member or close sister (Starostin 1991; Lee 1983: 64-72, 97-100; Poppe 1977; Murayama 1963: 34). Some linguists who do not accept the Altaic genetic

languages of the former Paekche kingdom (one a Han language, the other a Puyo-Koguryoic language; for this theory see below), and also borrowed words from Koguryo, so modern Korean is basically a Han language with some elements from those other languages (Mabuchi 1999a: 145-146 [610-609]). This theory, which is similar to that of Lee Ki-moon (1967, 1983), has been adopted with few significant changes by most subsequent scholars.

theory<sup>5</sup> accept the Macro-Tungusic theory, but differ on the position of Koguryo and other ancient languages of Korea, believing the Puvo-Koguryoic languages contributed a superstratum layer to Japanese in the Kofun period (Unger 2000). This view apparently derives from Murayama's adaptation (1966) of Egami's 1949 'Horserider' theory (Egami 1964), which in one form or another (see further below) is cited by the scholars concerned, despite the fact that Egami's theory has been contradicted by archaeology (Hudson 1999: 92). Among all of these views, perhaps the most interesting variation is one of Murayama's. He argues that Japanese is a *Mischsprache*<sup>6</sup> composed on the one hand of a 'Pre-Japanese' language related to Tibeto-Burman, the speakers of which migrated from the area of southern China and came to Japan at some early date, and on the other hand Koguryo or a language related to it, which came to Japan at the end of the fourth century A.D. (Muravama 1966; cf. Lee 1968: 251). The interesting part is Murayama's connection of Japanese with Tibeto-Burman. Though not a new idea, perhaps because the subsequent attempt by Nishida Tatsuo to connect Tibetan with Japanese (Nishida 1978, 1980) was attacked by Murayama (1978: 114-188) and Miller (1980), the idea of a Tibeto-Burman connection has not received further serious attention. Recent arguments suggest that Japanese should indeed be connected typologically with the monosyllabic,7 tonal languages of southern China and Southeast Asia (Kiyose 1997, Janhunen 1997). Among these, the Tibeto-Burman languages also have verb-final sentence syntax like Japanese, as well as similar morphology and some shared vocabulary,8 although the matter is not so simple, as shown in the present book.

<sup>&</sup>lt;sup>5</sup> The most conservative version of the Altaic genetic (or divergence) theory proposes to relate the Turkic, Mongolic, and Tungusic languages together in one family descended from a common ancestor, 'Proto-Altaic'. The conservative version of the Altaic convergence theory argues that the same languages are not genetically related. Gisaburo N. Kiyose has suggested that Puyo-Koguryoic should be seen as the fourth *convergent* Altaic-type language, Korean the fifth, and Japanese the sixth (Kiyose 1997: 40-41 [205-204]).

<sup>&</sup>lt;sup>6</sup> On the idea of a *Mischsprache*, or 'mixed language', and its recent revival, see Chapter 10.

<sup>&</sup>lt;sup>7</sup> Shibatani's objection that, in contradistinction to the "predominantly monosyllabic character of the morphemes" of Tibeto-Burman languages, Japanese "favors the disyllabic morpheme shape" is not really supported by Old Japanese, not to speak of earlier stages of the language (see for example many of the reconstructions in Martin 1987), though it is true that the tendency to form disyllabic stems is strong in Old Japanese and has become more dominant over time. Moreover, Chinese and many Tibeto-Burman languages actually prefer disyllabic stems.

<sup>&</sup>lt;sup>8</sup> See Chapter 7.

Lee also argues that Koguryo is distantly, but genetically, related to Korean (1983: 79):

We can conclude that the fragments of the Koguryo language preserved today and the Silla language were quite distant. However, that the Koguryo and Silla languages may be shown to be in a close genetic relationship cannot be denied.

Following Kôno, Lee characterizes Korean as a kind of *Mischsprache* composed of distinct but related elements (1983: 80):

Modern Korean is a unique language, so some people are governed by the preconception that the languages of Koguryo, Paekche, and Silla were one unique language. But this kind of attitude must be criticized. The unique character of Korean is an achievement that began only after the Unified Silla period.

This view is followed by Murayama (1966) and many other scholars since. However, unlike others who follow Kôno's theory, Lee argues that the vocabulary of the place names in the *Samguk Sagi* does represent the language of the Koguryo people, based on comparison of the Old Koguryo place names in that source with glossed Koguryo names found in ancient Chinese sources and in the *Nihon Shoki*, and on the existence, he argues, of at least two dialects of Old Koguryo, of which the northern dialect—the language of the place names located north of the Yalü River—corresponds to the language of the *Samguk Sagi* toponyms in central Korea (Lee 1983: 82-83). His argument that the Koguryo spoken north of the Yalü is the same language as that spoken south of it, represented by the *Samguk Sagi* toponyms, is supported by the research presented in the present book.<sup>9</sup>

In his discussion of lexical data extracted from the Old Koguryo corpus in the *Samguk Sagi*, Lee suggests etymological connections with Korean, Japanese, Gilyak, Tungusic, Mongolic, and Turkic languages (1983: 83-92).<sup>10</sup> He concludes that this body of lexical material, while not rich, is sufficient to demonstrate the character of the Puyo-Koguryoic languages, and while it proves that Koguryo was not the same language as Silla Korean, a Han language,<sup>11</sup> it allows us "to infer to some extent the genetic relationship between the Han family of languages and the Puyo[-Koguryoic] family of languages" (1983:

<sup>&</sup>lt;sup>9</sup> See Chapter 12.

<sup>&</sup>lt;sup>10</sup> This is on the whole not the strongest part of his work. References to some of his etymologies are given in Chapter 8.

<sup>&</sup>lt;sup>11</sup> 'Han' refers to the Korean family; see Transcription and Transliteration, above.

93). In his view it also reveals that the Koguryo language is the only language "in an obvious genetic relationship with the Silla language" (Lee 1983: 94; cf. Lee 1963), which is the direct ancestor of Middle Korean (Lee 1983: 106, 1963: 96 n. 7) and a "definitely Altaic" language close to Tungusic and Mongolic (1983: 114).

Koguryo, Lee concludes, is especially close to the Tungusic branch of Altaic, but it is more closely related to Korean than to the other Altaic languages. Moreover, Puyo-Koguryoic is the closest of the two Korean-area groups to Tungusic, but the relationship between Silla and Puyo-Koguryo is closer than that between Puyo-Koguryoic and Tungusic (Lee 1983: 95); these ideas are contradictory and not representable in a tree diagram. He also gives two other conflicting versions of his views. In one, shown in Figure 1, Proto-Puyo-Han (Proto-Han and Proto-Puyo-Koguryoic) and Proto-Tungusic are ranked at the same level, and both had a common ancestor, Eastern Altaic.



FIGURE 1. Lee's View

Lee's other version, which is based on the theories of Nicholas Poppe (1983: 96),<sup>12</sup> concludes that 'Common Puyo-Han', by which he means the language ancestral to both the Puyo-Koguryoic languages and the Han languages (including Silla Korean, and its descendant, Middle

<sup>&</sup>lt;sup>12</sup> This schema does not exactly represent that of Poppe himself, who has 'Chuvash-Turkic-Mongol-Manchu-Tungus unity' as the left first-order branch, but 'Proto-Korean' (with a single descendant, 'Korean language') as the right first-order branch (Poppe 1977: 248).
Korean), is to be ranked at the same level as 'Common Turkic-Mongolic-Tungusic'. See Figure 2.

With regard to Japanese, Lee observes that the "surprising" closeness of Koguryo may be explained by "deep contact," by which he does not actually mean convergence but, rather, divergence. The way this happened, in his view, is that "2,300 years ago, the language of the people who arrived in Northern Kyushu bringing a new culture with them was a 'Puyo[-Koguryoic]'<sup>13</sup> language" (Lee 1983: 97).



FIGURE 2. Poppe's View According to Lee

In support of his view that the Proto-Japanese left for Japan specifically from the area of Kara, or Mimana, on the south coast of Korea, Lee cites three words which he argues are examples of the Kara language (1983: 99-100, 1963: 104-105). Unfortunately, there are philological problems with two of these examples, which are based on *Korean* 'semantic' readings rather than on direct transcriptions. For example, the idea that there is a word for 'three' which is the same as the Koguryo word *mir* (and thus the Old Japanese word *mi*, from \*mir) in a toponym from the original area of Kara is based on the *Korean* 'semantic' reading, *mil* [mir] 'to push', of the character  $\ddagger tu\hat{i}$  'to push' (Lee 1983: 99). The same character (again read by Lee as Middle Korean *mil* [mir]) is equated twice with the character  $ractions m\hat{i}$  (Late Middle Chinese *mir*) 'secret' in a place name located in Silla territory (Lee

<sup>&</sup>lt;sup>13</sup> I.e., Japanese-Koguryoic.

1963: 104-105). Because in Lee's view the language of Kara was different from that of Silla, a semantic reading should not produce a Silla equivalent. This casts further doubt on the likelihood of a semantic reading of these characters not only in Kara but in Silla. All of these comparisons are weakened even further by the fact that the actual Middle Korean form of the word 'to push' is *m i*, which presupposes a bimoraic or disvllabic word in Old Korean. It is thus far more likely that the character  $\ddagger tui$  'to push' in the Kara example is simply a mistake or doublet reading for the related word 摧 cuî 'to repress', the latter being a phonetic rendering of a Kara word for 'three', \*soi, related to the Middle Korean word for 'three', soih, which is attested also in Silla and is also to be reconstructed for Old Korean as a bimoraic or disyllabic word. It is in any event not possible to draw solid conclusions about the language of Kara based on such examples. Lee (1983) subsequently argues at great length in favor of the theory relating Japanese and Korean, but his discussion is vitiated by the same factors that doom all other arguments made for such a relationship.14

In his discussion of the development of Middle Korean, Lee gives a number of lexical examples that demonstrate the direct relationship between Silla Korean and Middle Korean (1983: 110-113). It is notable that these examples are strikingly different in character from the Koguryo examples. For example, the Silla Korean word \*na [那] 'river (11)', as Lee argues, is undoubtedly related to Middle Korean naih 'river (|||)' (1983: 110), which should theoretically be from an earlier \*narik.<sup>15</sup> But this is a long way from Old Koguryo \*mey 'river (|||), which is the same word as 'water (7/2)' in that language. While in Silla Korean there is a separate word for 'water ( $\pi$ )',  $\mathfrak{M}^*$ mur, which is virtually identical to the Middle and Modern Korean word, and this word has been widely compared to the Koguryo and Japanese words for 'water', there are serious problems with the comparison. Also, terms for 'water' have been widely borrowed (see Chapter 8) and it is easy to find look-alike cognates for the above words in many languages of Eurasia.

Finally, Lee claims that Koguryo is a substratum language of Middle Korean. Specifically, he argues that Middle and Modern Korean developed from the Korean dialect spoken in the 開城 Kaesŏng

<sup>&</sup>lt;sup>14</sup> See Chapters 8, 11, and 12.

<sup>&</sup>lt;sup>15</sup> However, according to Kôno (1987: 83) MKor *nai* 'river' is from OKor \*nari, corresponding to the Han-Paekche word for 'river', \*nari [那利].

(henceforth Kaesong) area, where Koguryo survivors continued to live after the fall of their kingdom. The latter shifted to the Silla language, but their Koguryo pronunciation habits, and some lexical items, were retained after the shift (1983: 119-121). His discussion of this process, with illustrative examples, would seem to explain most, if not all, of the Korean elements noted in Koguryo, and vice versa, and to disprove his theory of a common origin of both the Puyo-Koguryoic and Han families. That is, Korean internal linguistic history suggests that the Koguryo elements shared with Korean are intrusive (convergent) elements in Korean; they are not genetically shared (divergent) elements from a common ancestor, as argued by Lee and many others.<sup>16</sup>

In a separate article, 'The language of Kogurvo and its characteristics', Lee presents a good case for relating Koguryo and Japanese (1968; 1983: 199-258). He also remarks on, among other things, the regularity of medial \*r/\*l loss in Japanese words that have cognates in other nearby languages where the \*r (or \*l) has not been lost (Lee 1983: 229-230); cf. below on John Whitman's work on the same correspondence. Both scholars unfortunately use this phenomenon as support for the existence of a genetic relationship between the Japanese and Korean languages. Although some of Lee's Japanese-Koguryo etymologies are strong enough to survive his phonetic interpretation, most of his discussion here (as in his other works) is weakened or vitiated by the fact that his citations of Koguryo forms are based on modern Korean readings of the Chinese characters used to transcribe Koguryo words, rather than on early medieval readings (Beckwith 2000). Nevertheless, Lee is to be commended for making the first comprehensive attempt to describe the Koguryo language, including its phonology, morphology, syntax, and lexicon (1983: 199-258).

Murayama Shichirô, who began by agreeing with Lee Ki-moon's view on the relationship of Japanese and Koguryo, brought the work of Japanese philologists, especially Kôno, into the discussion, and refined or rejected a number of points (Murayama 1962, 1963). His early conclusion on the relationship of Japanese and Koguryo within the perspective of the Macro-Altaic theory is presented in Figure 3. (See above for his later view.) Note that although Murayama's figure (1963: 34) shows four lines descending from 'Common Altaic', three of them are left unidentified. These should include Turkic and Mon-

<sup>&</sup>lt;sup>16</sup> See Chapter 12 for further discussion.

golic, but the additional line is a mystery unless Murayama considers Bulgar Turkic (Chuvash) to be a separate branch of Altaic, as in the view of Poppe (1977: 248). Additionally, under 'Pre-Tungusic', three lines of descent are actually shown in his figure, but only 'Common Manchu-Tungusic' is identified.



Lewin, who has based his work on data and studies published by Lee and Murayama, argues that Koguryo is "a missing link between Japanese and Korean" (Lewin 1973: 27). He considers there to be a "remarkable correspondence with Tungus and Manchu" and gives a list of "cognates," after which he notes a few "similarities" with Mongolian and Turkic, but adds, "It is difficult, however, to decide about a genetic relationship or a secondary influence" between Koguryo and the latter two languages (Lewin 1973: 27). He concludes that Koguryo can be related "genetically closest to Japanese," then the next closest relative after Japanese is "Korean, which has developed from the Silla language." He adds, "Standing more distantly, but without doubt also related to this group, are Tungus and Manchu. The entirety of these languages form the eastern branch of the Altaic languages" (Lewin 1973: 27-28). After summarizing the usual Altaic theory he discusses, approvingly, Egami's Koguryo 'Horserider' theory (Lewin 1973: 2931). In a subsequent article on the Japanese-Korean relationship, he agrees with Murayama (1976) that there is a significant Austronesian component in both Japanese and Korean in addition to the main Altaic component, which in his view derives from a 'Puyo-Han' branch of Altaic (Lewin 1976: 408-409).

Roy Andrew Miller, a linguist specializing in the history of Japanese, argues that the language of the Koguryo toponyms is important because, he believes, the transcription character  $\vdash$  provides early attestation of phonological features of the Macro-Altaic family, specifically the change of Proto-Altaic \*l<sub>2</sub> to \*š. His theory, which is based on philological mistakes and an incorrect reconstruction of the transcription character for the period and location involved, is discussed in Chapter 4; the examples are analyzed in Chapter 8. He concludes that the Koguryo language is genetically related to Japanese, Korean, and the 'Altaic' languages (Miller 1970; cf. Miller 1971).

The Korean linguist Kim Bang-han, in an influential book (1983, 1985) and several papers, asserts that the linguistic material in the ancient Chinese accounts and the toponyms in the *Samguk Sagi* both represent the primeval, autochthonous language of the Korean Peninsula, not the languages of the Three Kingdoms.

In the ancient Korean peninsula there was an unknown language which I would like to call tentatively the primitive Korean peninsula language. The language inferred from the place names of Koguryo, which was observed to have similar words to Japanese, seems to reflect, to some extent, this unknown language. It can be presumed that the ancient Korean language had been formed through a process in which one of the Altaic languages, that is, Tungus, was imposed on this unknown language.<sup>17</sup>

Kim further argues, on the basis of ambiguous accounts in Chinese histories, that there was no real difference between the languages of the northern half of the peninsula and those of the southern half; all were Han (i.e., Korean-related) languages (Kim 1985: 106) before the Koguryo conquest (Kim 1985: 102), and the language spoken in the Koguryo homeland before the Koguryo conquered and moved southward into Korea was different from what it became afterward—a Han language (cf. Murayama 1985: II). Kim argues that the toponyms in the Koguryo section of the *Samguk Sagi* are nearly all in Central Korea, an area ruled by Koguryo for only a relatively short time, and due to the supposed conservatism of toponyms (Kim 1985: 106-108) they

<sup>&</sup>lt;sup>17</sup> Kim 1981: 174.

reflect the "unknown language" of the Korean peninsula (Kim 1985: 106, 1981: 176-177). He claims that what little is known about ancient Koguryo (i.e., 'Archaic Koguryo' in the terminology of the present book), particularly the names of the cardinal directions, indicates that the language was Tungusic (Kim 1985: 117-121; 1981: 175, 177-178).<sup>18</sup> As he rightly notes, "the language inferred from the placenames may not be considered to be a branch of the southern Tungus languages" (Kim 1981: 178). Instead, however, he believes the toponyms represent a mixture of two strata, an 'Altaic' language (evidently to be identified with Proto-Korean) and an autochthonous language (Kim 1985:244).

I presume that in the place-names there are two kinds of linguistic strata, unknown thick linguistic stratum and thin Altaic linguistic stratum. The language inferred from the place-names seems to reflect some aspects of [the] unknown linguistic stratum. It is well kown that about 30 words of this language are close to those of Japanese. . . . This leads us to presume that two separate waves of two languages from the Korean peninsula flowed into Japan one after another. Although this unknown language died early, the language might have strongly influenced the formation of Korean and Japanese. It seems to me that this would be one of the major factors which gives us trouble in comparing Korean with Japanese.<sup>19</sup>

Kim argues that since the toponyms represent the same (mixed) 'ancient language', they therefore must be treated together, not separately (i.e., as 'Koguryo', 'Paekche', and 'Silla'), as has been the practice based on the geographical division of the material in the *Samguk Sagi* (Kim 1985: 108-109). In his view, analysis of the toponyms in this way shows no linguistic difference between them except for some typically 'Koguryo' words introduced when the toponyms were recorded by Koguryo officials (Kim 1985: 109-113). Kim's conclusion is that despite the poor data, especially on Silla and Paekche, "we are able to presume that the languages of the three kingdoms are genetically related" (Kim 1981: 181), though by including the language of the Koguryo toponyms he means not the original language of the Koguryo people (which he believes to be Tungusic) but rather the autochthonous language of the central Korean Peninsula. In fact, he

<sup>&</sup>lt;sup>18</sup> This is, however, a mistake. Kim's analysis is based on misreading of the Chinese sources and on faulty reconstructions. The words in question are unrelated to Tungusic. See the discussion of the names of the cardinal directions in Chapter 6.

<sup>&</sup>lt;sup>19</sup> Kim 1981: 178-179.

states categorically that "the language extracted from the place-names of the central Korean peninsula, which has been considered to be a branch of the southern Tungus, seems to me to be a language totally unrelated to the Koguryo language, a branch of the southern Tungus language" (Kim 1981: 178). He also explicitly states that Korean is an Altaic language most closely connected to Tungusic, despite the fact that it has a non-Altaic stratum, which is the "primitive Korean peninsula language" (Kim 1985: 246). He contends that the apparent differences in comparability among the languages of the former three kingdoms and Japanese are simply "due to a lack of data" especially on the Paekche and Silla languages (Kim 1981: 181-182). Kim also argues that the autochthonous language of the toponyms is related to Gilvak (Nivkh), a Paleoasiatic language, and it is no surprise that therefore, according to him, 'elements' of Gilvak are preserved in Korean (Kim 1985: 19, 135, 246; cf. Muravama 1985: II); however, in his later paper he expresses doubts about the idea of relating Korean to Gilvak (Kim 1981: 179). He argues that Korean is 'closely related to Tungusic' (Kim 1985: 244), thus in his view ultimately connecting Korean to the Puyo-Koguryoic languages, and that there were at least two 'waves' of influence from Korea on the formation of Japanese, one being the "primitive Korean peninsula language" and the other Altaic (Kim 1985: 246). Unfortunately, there are so many errors in the data, or interpretations thereof, in Kim's book that few of his conclusions can be accepted. However, Kim's view that the Koguryo toponyms from Central Korea are actually not in a Puyo-Koguryoic language but in an otherwise unknown autochthonous language is interesting, and even if it is not supportable by the actual data there is semantic support for the idea that some of the toponyms are in origin Koguryo folketymologized phonetic imitations of existing toponyms in one or more truly unknown languages.

In 1987, Kôno Rokurô published a brilliant study in which he demonstrates that the linguistic data on the kingdom of Paekche unequivocally supports the indication of the Chinese historical sources that there were two national languages in Paekche. One was the intrusive Puyo-Paekche royal language related to Koguryo, the other the local language related to the Han languages (Kôno 1987), and thus to Silla Korean. His paper has not yet been equalled in its field.

Kôno's theory that the language of the Koguryo toponyms is actually that of a substratum language, after having been taken up by Kim

Bang-han, has continued to dominate the work of other scholars in Korea, including Toh Su-hee. In a series of monumental volumes (Toh 1987, 1989, 1994) containing papers in Korean, Japanese, Chinese, English, and other languages, Toh argues that the language represented by the Koguryo toponyms from Central Korea (the bulk of those recorded in the Samguk Sagi) is the language of the Paekche people, not the Koguryo people. Paekche, he contends, ruled the central part of the Korean Peninsula for centuries, beginning in early Antiquity (Toh 1987: 403-407), and due to the conservatism of place names, the Koguryo toponyms in the Samguk Sagi are actually Paekche in language. However, he argues that in the early period (Antiquity, in his view) the Paekche language was a Puvo-Kogurvoic language, in the 'middle period' (the central Three Kingdoms period) the Paekche language was a 'mixed' language, with both Puyo-Koguryoic and Han elements, and finally in the late period, after the Koguryo conquest of Central Korea and the Paekche move southward, the Han language prevailed, and only a Han language was actually spoken there (Toh 1987: 436, 443, 445).<sup>20</sup> According to Toh, Paekche history begins with "the founder King Onjo (18 B.C.)" (Toh 1987: 436). This tradition "is so obviously wrong that it is usually dismissed as a complete fiction" (Gardiner 1969: 43). Moreover, since everyone, including Toh, agrees that the founders of the Paekche state (the date of which founding is unknown but is evidently the early fourth century) spoke a Puyo-Koguryoic language, many, though probably not all, of the toponyms in the area of the early Paekche state, which included much of the territory of the later Koguryo realm in the central Korean Peninsula, were already Puyo-Koguryoic when the Koguryo speakers moved in. It is true that while the Koguryo toponyms are generally understood in the Koguryo language, in some cases the odd semantics suggest that what actually is given in the Samguk Sagi may be the Koguryo pronunciation and folk etymologies of earlier non-Puyo-Koguryoic names. We do not have any means of retrieving any earlier languages-such as Kim's "primitive Korean peninsula language"but the very oddness of some of the toponym glosses is one of the clearest indications that the names were nevertheless understood in Koguryo and were so recorded. Toh's greatest contribution is his as-

 $<sup>^{20}</sup>$  Toh's Han-only view for his 'late' period is contradicted by the accounts in Chinese historical sources as well as by Japanese evidence such as that discussed by Kôno (1987).

sembly of the *Samguk Sagi* data in tables and location of the toponyms on numerous maps, which are the source for the placement of most of the toponyms on the map, and for most of the few geographical comments, in the present book.

In 1987 Samuel Martin published *The Japanese Language through Time*. In some respects the most important single watershed in recent Japanese historical linguistics, it marks the beginning of a new trend in the field. In this book Martin expresses open skepticism about nearly every proposed Korean etymology cited, including many of his own proposed in an early work (1966) which is the most important single source for comparative linguists who believe in the Japanese-Korean theory. Although his book may be criticized for not providing careful, detailed coverage of Old Japanese, Martin's methodical attempt to determine the Proto-Japanese pitch accents based on dialect and textual data set a new standard for Japanese historical linguistics. His recent book on Korean consonant lenition and the Altaic relationship (1996) includes discussion of a few Koguryo etymologies.

The American historical linguist John Whitman, following up on Martin's early Japanese-Korean comparative work, discovered what appears to be a regular sound change found both in Korean<sup>21</sup> and in Japanese words thought to be related to Korean. Although Whitman's rule has problems, including the presence of exceptions, it has become one of the foundation stones of contemporary research done within the framework of the Japanese-Korean divergence theory, including the Macro-Tungusic and Macro-Altaic variants. In the same paper, Whitman briefly discusses a small selection of Koguryo words taken from the Old Koguryo toponym corpus and concludes that there is "a relationship between Koguryŏ final /l/ and Old Japanese /y/ in the same position" (Whitman 1990: 522). He then goes on to argue for a conditioned loss of \*r in medial position from an earlier form of the common language (Whitman 1990: 523). In Whitman's view the common language is Proto-Japanese-Korean.<sup>22</sup>

In two papers discussing the relationship of Japanese to Korean and other languages of the Korean Peninsula, J. Marshall Unger accepts that words found in the Koguryo toponyms are related to Japanese words, but he argues that the Japanese cognates are remnants of a Koguryo superstratum deposited at the beginning of the Kofun period

<sup>&</sup>lt;sup>21</sup> Lee Ki-moon earlier made similar observations; see above.

<sup>&</sup>lt;sup>22</sup> Cf. Chapter 12.

(4th century A.D.). He thus supports a modified version of the Horserider Theory, first proposed by Egami Namio in 1949 (Egami 1964), according to which an influx of people from Korea at that time had a revolutionary impact not only on Japanese culture but on the Japanese language as well.

Unger's view is that Japanese and Korean are genetically related via a distant Macro-Tungusic ancestor and that the Puyo-Koguryoic element is intrusive in Japanese (Unger 2001). Unfortunately, this theory, like all variants of Egami's theory, is falsified not only by the linguistic evidence itself, as shown in this book, but by the archaeological record, which simply contains no evidence whatsoever of a military conquest of Japan by a foreign people, or even of a significant post-Yayoi immigration. The artifacts found in Japanese burials of immigrants from the Korean Peninsula, while interesting, do not support the theory of an external motivation for major changes in Japan; the developments of the Kofun period in Japan were largely internal (Hudson 1999).

Other Kofun-period changes are easily explained as the result of the historically well-known early Japanese involvement on the Korean Peninsula, where Japanese soldiers must have learned how to fight continental style, using horses, armor, the latest weapons, and so forth, in order to survive. It is not possible to imagine that large armies of Japanese went to the Korean Peninsula, fought significant battles, and returned to Japan—as we know they did—without adopting as many contemporaneous continental practices as they could. Since the Koguryo kingdom was constantly involved in fighting with both the Chinese to the west and the Central Eurasian steppe peoples to the northwest, the Koguryo armies must have been 'state of the art' in military technology at the time. When the battle-hardened Japanese warriors and their aristocratic leaders brought this technology-and probably a certain 'attitude'-back to Japan with them, along with some warriors and others native to the Korean Peninsula, whichever Japanese kingdom they fought for would have had an immense advantage over all of the others. This scenario undoubtedly describes what happened, and explains all of the intrusive Kofun period developments. Significantly, a small corpus of Archaic Japanese words from the third century-i.e., before the continental involvement of the Japanese-is preserved in the San kuo chih. These words are unquestionably purely Japanese in form and, as far as they are identifiable, Japanese in etymology (Kiyose 2001b: 133). It is thus clear that the language of Japan was already Japanese before the Kofun period, the mounted warriors of which were certainly Japanese. The Horserider theory, romantic as it may be, has to bite the dust.

Mabuchi Kazuo, who has published a large number of papers on Japanese and its relationship to the ancient and medieval languages of Korea (collected in Mabuchi 1999a), follows Kôno Rokurô, Kim Bang-han, and others in arguing that the toponyms of the former Koguryo kingdom do not represent the Koguryo language but the previous inhabitants' language, which Mabuchi believes to have been a Han language (Mabuchi 1999b: 10). He even claims that the Koguryo numerals belonged to the latter (Han) language, and in his view their relationship to the Japanese numerals is further proof of the theory of the genetic relationship of Japanese and Korean (Mabuchi 1999b: 11-12). In a paper coauthored with Yi In-yeng and Ôhashi Yasuko, he discusses the Old Koguryo toponyms from the Samguk Sagi (Mabuchi et al. 1999). Unfortunately, this lengthy study, which cites and is based on earlier works of the same type, is marked by naïve philological treatment of the source material and reliance on Tung T'ung-ho's reconstruction of Chinese, which is basically just a revision of Karlgren's (Mabuchi, Yi, and Ôhashi 1999: 169, 172-184 [586, 583-571]).<sup>23</sup> Treatments of the same data by Ryu Ryŏl and Hong Kimun (1983), Kim Yŏng-bae (1984), Pak Chŏngmun (1984), Ryu Ryŏl (1990), Park Pyŏng-ch'ae (1990), Song Kijung (1999), To Suhŭi [Toh Su-hee] (1999) and Ch'oe Namhŭi (2000), among others, often contain interesting ideas, but their failure to first philologically confirm the forms in their selections from the corpus, combined with the invalidity of their reconstructions and comparisons with Korean and other

<sup>&</sup>lt;sup>23</sup> Recent work on Chinese reconstruction, Old Chinese in particular, has invalidated much of Karlgren's work. Studies that depend on them (e.g., Kim Murim 1992, 1999; Yu 1980, 1983; Ch'oe 1999, among others) are thus not cited further in this book. Although a number of Old Chinese reconstructions have been proposed in which significant advances over earlier work have been made (Starostin 1989; Baxter 1992; Sagart 1999; Beckwith 2002a, 2002b), no single reconstruction has yet managed to capture all the significant features of even the Central dialect of late Middle Old Chinese, not to speak of the many regional dialects and periods. On the transcriptions of Korean-area languages, and especially the phonology of the transcription characters, numerous studies, mainly in Korean, have been published (e.g., Yu Ch'anggyun 1976, 1980; Kim Murim 1992, 1999; Buzo 1995), but they do not treat the material as evidence for the features of the archaic Chinese dialect or language which is known to have been spoken in ancient and early medieval Korea (q.v. Chapter 4) and which was ultimately the basis for the transcriptions.

languages, have made these studies useless for the present work. The more sophisticated linguists among them, who have attempted to systematize the data, have unfortunately done so on the basis of invalid phonological premises derived from Korean, and as with all previous works on the subject their studies are also based on philologically unsound foundations. A few examples taken from the most recent works have been cited for the sake of comparison, but others could have been chosen with little difference.

The Korean scholar Sin Yong-t'ae argues that Koguryo is related not only to Japanese and Korean but to 'Ancient Asian', which he calls the 'Proto-Oracle Bone Language'. The latter he believes to be the ancestor on the one hand of the languages of Korea and on the other hand of "Yin," the language of the Oracle Bone inscriptions, which is one of two components of Old Chinese, the other being 'Sino-Tibetan'. This unusual and very interesting view (Sin 1988), summarized in Figure 3, has received practically no attention in the literature.

Among the sceptical views on Koguryo and its relationship to Japanese and Korean, the most important and well-informed work is that of Gisaburo N. Kiyose. In an early paper he examines a selection of Old Koguryo words, compares them to Korean and various 'Altaic' languages, and concludes that the material is simply an unconnected hodgepodge of words from various languages; in short, in his view, the Koguryo toponym corpus does not represent a single cohesive language (Kiyose 1991). In several recent papers, however, Kiyose argues that Japanese and Korean, along with the Puyo-Koguryoic languages, appear to represent the remnants of Altaic-type languages once spoken along the Central and South China coast, from which area the ancestors of the attested languages left for Korea and Japan in proto-historical times (Kiyose 1997, 1998, 2001b).<sup>24</sup> This view,

<sup>&</sup>lt;sup>24</sup> Kiyose, a specialist in the Tungusic languages, particularly Jurchen (Kiyose 1977) and Manchu (Kawachi and Kiyose 2002), does not believe in the 'Altaic' divergence theory, but is inclined instead to view the Altaic group as a result of convergence (Kiyose 1991, 2002). However, Kiyose's comprehensively negative theoretical stance vis-à-vis genetic (divergence) theories of linguistic relationship is difficult to maintain in face both of the overwhelming data from the relatively well-recorded European languages—particularly those for which both parent (or near-parent) and daughter languages are attested—and also (even more strongly) of modern studies of language change around the world in our own time. I follow Meillet, and other linguists since his time, in considering that both divergence and convergence are operative in any linguistic relationship.

somewhat like Murayama's 1966 theory, takes into account both the archaeological and cultural evidence that a significant component of Japanese culture is related to the culture of the Central and South China coast and also the recent linguistic arguments that Old Japanese (like modern Japanese and Middle Korean) is a heavily monosyllablic language with phonemic pitch accents (Sakakura 1993) and should accordingly be lumped together typologically with the languages of South China and Southeast Asia (Kiyose 1997, Janhunen 1997), particularly with certain Tibeto-Burman languages (Beckwith 2002b).



FIGURE 4. Sin's View<sup>25</sup>

Other scholars currently active represent one or another of the views discussed above. Perhaps the most prolific of them is Itabashi Yoshizô, who has published articles in support of more than one view (1996, 1999, 2000a, 2000b, 2001a, 2001b). Unfortunately, the arguments in his work are generally not supported by philologically or linguistically solid evidence.

While much of this recent work presents useful evidence and insights, the present book's negative view of the distant relationship theories these scholars propose is supported by sharp criticism of them

<sup>&</sup>lt;sup>25</sup> I have redrawn Sin's figure to represent more clearly the implications of his view. In the original, the Puyo, Old Han, and Yin languages descend to a horizontal line from which each of the lower level languages diverges. The implied intermediary (marked in the present figure as "? language ?") is unidentified. Especially notable is Sin's suggestion of an intrusive 'Yin' influence on the formation of Old Chinese.

by specialists in the target language families, including Altaic, Dravidian, and Austronesian (Tsuchida 2002; Shôgaito 2002; Kodama 2002).

Finally, the present writer has discussed his views in several papers on the Koguryo language and the nature of its relationship to Japanese and other languages of Northeast Asia, of which two have been published (Beckwith 2000a, 2000d). In both papers, new reconstructions of Koguryo phonology, based on the author's recent work on Old and Middle Chinese, form the foundations for reconsideration of the onomastic material itself and of previously proposed etymologies. It is argued that some of the elements in the data are grammatical in nature and are not part of the word roots (Beckwith 2000a). It is also argued that the language of the Yayoi ancestors of the Japanese people is genetically (divergently) related to the Puyo-Koguryo languages and it or its relatives spread across Korea in protohistorical times (Beckwith 2000a; see the writer's current view in Chapter 12, which is based on Beckwith 2003). In a widely circulated unpublished paper (Beckwith 2001), it is argued that Unger's explanation of the Koguryo data as evidence of a late, Kofun-period adstratum in Japanese is contradicted by the Old Koguryo data (Beckwith 2000). Additionally, the argument is made that Unger's theory of semantic narrowing of inherited basic level words which are displaced as such by loanwords (i.e., lowered from basic level terms to subordinate level terms) is not supported by the Koguryo data either. Although examples may indeed be observed in many languages, as Unger argues, this type of shift is certainly the minor case. By far the stronger tendency in convergent relationships is, rather, semantic narrowing of the borrowed forms, or borrowing of semantically restricted senses of words that have broader, more basic meanings in the donor language.

Although many of the opinions expressed in the author's earlier papers are superceded by this book, their basic view is supported not only by agreement with the arguments of earlier scholars but by the work of Kim Bang-han, who shows convincingly (though quite unintentionally) that an ancestor or close relative of the Koguryo language must underlie not only the Koguryo toponyms but also many of the toponyms of southern Korea at the time of the Three Kingdoms (Kim 1985)<sup>26</sup> that are otherwise not explainable. The view represented by

 $<sup>^{26}</sup>$  In the midst of Mabuchi's argument that the 'Koguryo' numerals are *not* Puyo-Koguryoic, he notes that the 'Japanese' numerals (i.e., those belonging to the 'Japanese' numerals (i.e., tho

the present book is illustrated in Figure 5.<sup>27</sup> For influences of Japanese-Koguryoic on Han languages and vice versa, see the discussion in Chapter 12.



FIGURE 5. The Author's View

<sup>27</sup> The figure includes only languages which have enough data attested that it is possible to determine their relationship. The term 'Pre-Kara' refers to the Wa- (or Yayoi-) related language that must have been spoken by the people of the Yayoi-type culture of southern Korea (the area which later became Paekche and Kara) at the same time as the Wa people settled in northern Kyushu in the fourth century B.C., bringing with them the Yayoi culture. (See Chapter 12.) Whether the handful of words said to be in the language of Kara (Mimana) are relatable to Pre-Kara or not is unknown.

nese set' in the terminology of this book) which were used by the ancient pre-Three Kingdoms inhabitants of Korea could only have been recorded by people who knew both these numerals and the Chinese writing system, and these people must have come from China (Mabuchi 1999b: 12). Although he goes on to argue that Han-speaking people must have learned enough Chinese to be able to invent their own 'semantic' readings using their own language—and thus Lee and Kôno's 'semantic' reading of the transcription of the numeral for 'three' as \*mir rather than  $\pm$ səi (corresponding to MKor *söih* 'three') would be justified—both of these propositions are doubtful in the extreme.

## CHAPTER TWO

## THE ETHNOLINGUISTIC HISTORY OF KOGURYO

The Puyo-Koguryoic peoples shared the same origin myth, the earliest preserved account of which, the Puyo version, is recorded in a Chinese philosophical work from the first century A.D., the 論衡*Lun Heng*, by  $\Xi$ 充 Wang Ch'ung.<sup>1</sup> Versions of the myth are found in several of the standard Chinese histories, as well as the 廣開土王 King Kwang-gaet'o memorial inscription of 414 A.D., and have been studied and translated by folklorists and other scholars (Gardiner 1982; Song 1974). The combined version of the legend presented here takes into account the main features of the different early versions, none of which include all of them.

Formerly in the north, in the country of Koryŏ (高驪),<sup>2</sup> a maidservant who was the daughter of the River Lord<sup>3</sup> (河伯) was sequestered by the king when he went out. In her chamber a beam of sunlight followed her around. Though she avoided it, eventually it touched her. When the king came back, he found she was pregnant, and wanted to kill her, but the maidservant said, 'There was a vapor (氣) like a large chicken's egg that descended from Heaven to me; that's why I got pregnant.' Later she gave birth to a large egg.<sup>4</sup> The king cast it into the pigpen, but the pigs breathed warm air on it with their snouts; he moved it to the horse corral, but the horses also breathed warmly on it; he cast it into the wilderness, but the birds covered it with their feathers. The king tried to break the shell, but did not succeed. He gave the egg back to the mother, and eventually a boy broke the shell and emerged. When he grew up, he was made to be a horseherd. He was an excellent archer, so they called him  $<math>\overline{p}$  Tüŋmeŋ, which means 'shoots well'.<sup>5</sup> The king, who was afraid

<sup>&</sup>lt;sup>1</sup> The next earliest version is a quotation from the *Wei lüeh* 魏略, a lost work, in the annotations to the *San kuo chih* (30: 842-843).

<sup>&</sup>lt;sup>2</sup> Henceforth 'Koryo'. See the discussion of this name below.

<sup>&</sup>lt;sup>3</sup> I.e., the river god.

<sup>&</sup>lt;sup>4</sup> Wei shu 100: 2213; Pei shih 94: 3114; Szczesniak 1951: 255; Courant 1898: 227 and plate. According to some later versions, she bore a child (which the king tried unsuccessfully to get rid of by casting to the pigs and other animals, as in the early versions), rather than an egg. This appears to be an attempt to rationalize the legend as history.

<sup>&</sup>lt;sup>5</sup> The word order of the Chinese gloss 善射 (lit., 'good shoot') is Chinese, not Koguryo, since the word 'good' is attested also in Old Koguryo (where in at least one instance a Chinese gloss is attested twice, once in Chinese and once in Koguryo word order; see Chapter 3). The Chinese meaning of the characters used to transcribe the

<sup>\*</sup>Tüŋmeŋ would seize the kingdom, wanted to kill him. <sup>\*</sup>Tüŋmeŋ's mother warned him and he fled south. He reached a wide river that he could not ford. He struck the water with his bow, crying out, "I am the son of the Sun, and grandson of the River Lord. My enemies are upon me. How can I cross?" The fish and soft-shelled turtles floated together to make a bridge. After <sup>\*</sup>Tuŋmeŋ had crossed over, the fish and softshelled turtles dispersed, so the pursuing army could not cross. <sup>\*</sup>Tüŋmeŋ reached the land of Puyo and ruled there as king.

The river-crossing foundation myth has connections with Japanese legend and, evidently, with the ancient 越 Yüeh region of southeast China. The reconstructed text of the ancient *Bamboo Annals* records the oldest known version (Fan 1957: 27).

37th year [of the reign of 穆王 King Mu, traditionally 899 B.C.]. He raised nine great armies to invade Yüeh. He went east to the Ninefold River, and commanded the soft-shelled turtles (竈) and the alligators (鼉) to make a bridge [so he could cross].

This is the same motif as that in the Puyo-Koguryo royal origin myth, with another kind of soft-shelled turtle,  $\underline{\mathbb{R}}$  *biê* 'soft-shelled turtle, *Amyda sinensis*', from Middle Chinese \*pyiat (Pulleyblank 1991: 38). The word  $\underline{\mathbb{R}}$  *yuán* 'soft-shelled turtle, *Pelochelys bibroni*', from Middle Chinese \*nuan (Pulleyblank 1991: 387), may be the loanword donor of Old Japanese \*wani<sup>6</sup>—an 'unidentified aquatic creature' said to look like a  $\underline{\mathbb{R}}$  *biê*, but described in the *Wamyôshô* as looking like a

name is, literally, 'east bright', so it is possible that the characters were chosen to also reflect mythological ideas, as the hero's father was the sun. But in view of the glossed Koguryo versions of the name \*Tunmen, which reflect the regular, well-attested internal Koguryo phonological change \*tu > \*tsu and \*tü > \*tsu), it is clear that the characters were used as a phonetic transcription of the Common Puyo-Koguryoic name, which accordingly must mean 'shoots [arrows] well', as glossed in the accounts of Koguryo: "They named him 朱蒙 Chû-méng. In their language, 朱蒙 means 善射 'good shoot' [or, 'shoots well']" (Wei shu 100: 2213; Pei shih 94: 3110). The first syllable, transcribed [東], may be reconstructed as \*tuŋ for LOC; its later transcriptions--[朱] (MChi \*tśu), and [鄒] (MChi \*tśuw), the latter being the form found in the 414 inscription-may be reconstructed as \*tsuw, reflecting AKog \*tun. The second syllable, [ $\mathfrak{H}$ ], may be reconstructed as \*meyn ~ MChi \*mien; the later transcription [蒙] may also be reconstructed as \*meyŋ~\*miəŋ. The 414 inscription has for the second syllable MChi \*muw [牟] (< LOC \*mew). Coupled with the fact that the OKog word for 'excellent, good, well (善)' is attested as \*mey [買], this can be interpreted to signify either that the final velar nasals found in the textual forms are relics of the AKog pronunciation, but were articulated differently-perhaps as labiovelars-or that the variant transcriptions reflect different dialects. Probably both explanations are required to explain the data; see Chapter 6.

<sup>6</sup> Written consistently with *man'yôgana* in the earliest texts, the word is later written with the character **()**( $\mathfrak{B}$ )  $\dot{e}$  'crocodile' < EMC \*ŋak (Pulleyblank 1991: 87), often in combination with other characters (*JDB*: 822).

river turtle with sharp teeth and long snout, i.e., an alligator (JDB: 822)—on the backs of which one of the Japanese founder heroes, the White Rabbit of Inaba, crossed the sea to Japan. It would seem unlikely that the Puvo-Koguryoic origin myth is a literary borrowing, given the context as a whole, the nature of the differences between the Puyo-Koguryoic and Japanese versions, and the preliterate, un-Sinified historical condition of the Puvo and early Kogurvo. Moreover, the Japanese version includes alligators, animals unknown to the Old Japanese, while in the King Mu story the animals in question are the 蘢 yuán, the 'soft-shelled turtle, Pelochelvs bibroni' and the 鼉 tuó, the 'Alligator sinensis'. Assuming that the latter two animals are closest to the archetype, it would seem that the Puvo-Kogurvoic version has converted the alligators (which are of course unknown in cold climates) into fish, while the Japanese version has retained them as mythological creatures. Regardless of transmission questions, it is clear that these stories repeat the same motif-hero with companions reaches uncrossable water, calls upon its large cold-blooded denizens to join together to make a bridge, hero crosses over. If this story was borrowed by the ancient Chinese from some local myth in the Wu-Yüeh region, it would constitute further evidence that the Japanese-Koguryoic peoples ultimately came from that region or somewhere not far away.

The different versions of the origin myth give variant names for the ancestral homeland, but textual studies have made it clear that the original name was Koryo (Koryŏ), written with the characters 稿離 or other homophonous characters. The first syllable, usually written with the character 高, may be reconstructed for OChi as \*keu.7 The syllable written 離 *li* was homophonous with驪 *li*, one of the two characters most frequently used for the last syllable of the name Koguryo. The former is reconstructed for OChi as \*ray (Starostin 1989: 566) or \*Cray (Baxter 1992: 773 \*C-rjaj). Since there are good reasons for reconstructing an initial stop for 離 *li*, taken all together it would seem clear that the name written 高離 ~ 高驪 ~ 高麗 Koryo was originally identical to that written 高句驪 or 高句麗 Koguryo. The name now pronounced in Sino-Korean reading 'Koguryŏ' is thus simply a variant phonetic transcription of the same name now pronounced in

<sup>&</sup>lt;sup>7</sup> Or, much less probably, \*keuγ, following Karlgren and others who note the fact that words in its class sometimes rhymed in OChi with words in classes that had a final velar stop in Middle Chinese (Starostin 1989: 553-558).

Sino-Korean reading 'Koryo'. This explains the doublet Koryo ~ Koguryo, both of which forms occur in early sources for the name now generally given as Koguryo. Efforts to make the many corrupt forms of the name Korvo found in the different versions of the origin myth go back to some otherwise unconnected legendary place appear to be based on late misunderstandings due to the same textually corrupt forms.<sup>8</sup> Secondly, since the kingdom to the north of Kogurvo was in fact Puyo for the early part of the period under consideration, it would be odd for the Koguryo to have said that the ancestral founder of the Koguryo kingdom fled from a northern kingdom named Koguryo. It was thus unavoidable that some loremasters would have felt the need to change the name of the ancestral homeland to that of their very close linguistic relatives, the Puyo (cf. Gardiner 1969: 29). Other versions of the Koguryo myth (Pei shih 94: 3118) retain the old story, with the kingdom called 高驪 Koryo and the ancestor's name given as 東明<sup>☆</sup>Tüŋmeŋ, the early form of the name.9

It is of course not possible to take the legendary account as reflecting fact,<sup>10</sup> as has generally been done since Antiquity. Not only is there an early version of the river-crossing motif in the *Bamboo Annals*, and an early Japanese version (in the *Kojiki*) that reflects oral folk memory of the same legend, the story of the hero's abandonment to the animals at birth is virtually identical to the legend of 后稷 Hou Chi 'Lord Millet',<sup>11</sup> which occurs in the 詩經 *Shih Ching* or *Book of Odes* and is presented in the same chapter of the *Lun Heng* immediately before the Puyo origin myth (cf. Pulleyblank 1983: 444).

<sup>&</sup>lt;sup>8</sup> See the discussion of the textual problem in the notes to the Peking edition of the *Pei shih* (*PS* 94: 3141) and in the notes to the Puyo ancestral legend in Yamada Katsumi's edition of the *Lun Heng* (Yamada 1976: 149-150).

<sup>&</sup>lt;sup>9</sup> See note 5 on the different forms of this name.

<sup>&</sup>lt;sup>10</sup> The Chinese historical sources also contain legendary accounts of thoroughly historical kings, such as that of King  $\triangle$  is Wei-kung (NKor Wigung), who was so called because when he was born he could "open his eyes and see people." Several generations back, King is Kung (NKor Kung) had done the same thing, and "in Koguryo (the word for) 'to look like' is pronounced \*wi [ $\triangle$ ]; he was similar to his ancestor so they named him  $\triangle$  is Wei-kung" (*SKC* 30: 845). The reconstruction of  $\triangle$  is problematic for Old Chinese, though it is agreed that the phonetic had a final \*-p. The etymology of Wei-kung apparently violates Koguryo word-order, suggesting it is a later folk-etymology, but the gloss of the Koguryo word is explicit. Whether or not the gloss of the name as a whole is correct, it is clear that a syllable in Archaic Koguryo pronounced [ $\triangle$ ] meant 'to look like, resemble'.

<sup>&</sup>lt;sup>11</sup> See below on the Koguryo grain god, \*Tüŋmeŋ. It is significant that in the Chinese version of this story the hero is a millet god, but in Koguryo a rice god.

The legendary account of the origins of the Puyo-Koguryoic peoples thus appears to have supplied the identity of the Koguryo homeland not only to the Koguryo but also to the Chinese historians. Although the historical sources argue-retroactively-that the Puvo-Koguryoic peoples had moved into southern Manchuria, and perhaps even northern Korea, as early as the time of 漢武帝 Han Wu-ti, it is abundantly clear that there is no reason to believe they originated there, or that all the branches of their ethnos left the proximal homeland. In fact, while the physical anthropology of the Yayoi indicates a proximal homeland on the northeastern Eurasian continent, some aspects of the material culture of the early Yayoi Japanese suggest a distal homeland in the area of the south-central China coast, as has often been remarked, and comparative-historical and typological linguistics too suggest the same thing. Japanese, the best-attested member of the Japanese-Koguryoic language family, is a heavily monosyllabic pitch-accent language (Sakakura 1993; Kiyose 1997, 2001: 135), typologically most akin to languages of South China and Southeast Asia (Janhunen 1997, Kiyose 1997), particularly the Tibeto-Burman languages (Murayama 1966), which are still found as far east as Vietnam (Bradley 2002) and include languages with lexical and morphophonological characteristics similar to those found in Japanese (see Chapter 7 below). Since there are early Old Chinese loanwords in Japanese that share some of the characteristics of early Old Chinese loanwords into Tibeto-Burman languages (Beckwith 2002a, 2002b), it is possible that the Proto-Japanese-Koguryoic home-land was in that region.

The earliest historically recorded location of the Koguryo people<sup>12</sup> is in or near  $\overline{\mathscr{B}}$   $\overline{\mathbb{B}}$  Liao-hsi, the western part of present-day Liaoning

<sup>&</sup>lt;sup>12</sup> According to the geographical monograph of the *Han shu*, the name Koguryo is attested since 113 B.C., the year after Han Wu-ti conquered Ch'ao-hsien (later identified with northern Korea) and established the commandery of 玄菟 Hsüan-t'u, one of the 'counties' (縣 *xiàn*) of which is called 高句驪 Koguryo (*HS* 28b: 2626). However, there are internal reasons to doubt that this passage is genuine. Firstly, the name Koguryo is supposed to have been recorded in 113 B.C., but the same name is recorded as Koryo in the *Lun Heng* two hundred years later. It is odd that the Chinese transcription in the *Lun Heng* reflects a more archaic form of Chinese than that in the *Han shu*. Secondly, the same chapter of the *Han shu* mentions the Wa, or protohistoric Japanese, "divided into over 100 states [國]" and "living in the sea in 樂浪 Lo-lang [commandery]." Since the first embassy sent from the Wa is dated to 57 A.D., and says only that "the king of 'the Land of Wa' (倭奴國 \*Wa-GEN kingdom) of the 東Eastern Yi sent an envoy to present tribute" (*HHS* 1b: 84; cf. Kiyose 1997: 12-13), it is extremely unlikely that the *Han Shu* description is earlier than that year. It is there-

Province, roughly the area between the Liao River (west of the Liaotung Peninsula) and modern Tientsin, extending inland from Liaotung Bay (the northwestern arm of the Yellow Sea) as far as the lands of the steppe nomads, present-day eastern Inner Mongolia. This may be inferred from an account dating to the time of the Han dynasty usurper 王莽 Wang Mang. In the year 12 A.D. he ordered the Koguryo people to attack the Hsiung-nu. When they refused, their ruler was murdered by the Chinese governor of Liao-hsi and "so the 貉 Maek [i.e., Koguryo] people raided the frontier even more" (HS: 99: 4130; TCTC 37: 1198). The Koguryo then moved further east into Liaotung. This account suggests that the Chinese considered the Koguryo to have been warlike and familiar enough with the Hsiung-nu that they could attack such a powerful steppe nomadic people. The Koguryo refusal to attack the Hsiung-nu indicates that they knew about the Hsiung-nu from personal experience and feared them. The fact that they were attacked by the governor of Liao-hsi confirms that they were living at that time in Liao-hsi.

The Puyo-Paekche—the Puyo-Koguryoic ancestors of the people who conquered Ma Han and founded the kingdom of Paekche (which was named after one of the ancient component states of Ma Han)—are also said to have been located at first in Liao-hsi, during the Chin dynasty period (mid-3rd to early 5th centuries A.D.), when the Koguryo were already located in Liao-tung (*Sung shu* 97: 2393; *Nan shih* 79: 1972; *Liang shu* 54: 804; *TT* 185: 4990).

According to Gisaburo N. Kiyose, the Wa (the Yayoi or Proto-Japanese people) migrated to both northern Kyushu and southern Korea by boat directly from the China coast area. That is, they did not first travel through southern Manchuria and the northern Korean peninsula by land. Kiyose also points out that a number of Wa fishermen from the "country [國] of the 倭人 Wa people" located to the east of the 烏侯秦水 Wu-hou-ch'in River (now the 老哈河 Lao-ha River),<sup>13</sup> one of the two main tributaries of the 遼河 Liao River, were captured

fore also unlikely that the Koguryo description is earlier. The most probable explanation is that Pan Ku (32-92 A.D.) and Pan Chao (c. 49-c. 120 A.D.) added the geographical descriptions of Wa and Koguryo to the *Han Shu* (completed in ca. 78 A.D.) from information available during their lifetimes.

<sup>&</sup>lt;sup>13</sup> See, inter alia, Mori (1985: 39). Kiyose also notes that a grave tile dating to the 170s from Anhwei Province says that some Wa continued to live in or near China as late as the second century A.D. (Kiyose 2001b: 137). He argues that some of these people migrated to the Ryukyus directly (Kiyose 2001b: 145-146).

by the Mongolic Hsien-pei to fish for them in 178 A.D. (*HHS* 90: 2994; Kiyose 2001b: 136-137). Liao-hsi is precisely the area between the Wu-hou-ch'in River and Liaotung Bay (or 'Liaodong Wan'), north of the Gulf of Po-hai (or Gulf of Chihli) in the Yellow Sea. Fishermen generally know a lot more about boats than 'Altaic' nomadic pastoralists, which there is no evidence the Wa (including the Yayoi Wa) ever were.

Gardiner argues that the Paekche kingdom was founded by Puyo refugees who had fled to Okchö (henceforth Okcho) in 286 A.D., and then fled south when Koguryo recovered and re-expanded into Okcho in the early fourth century (Gardiner 1969: 43). However, this is conjecture unsupported by anything other than the fact that the Paekche rulers themselves said they were descended, like their relatives the Koguryo, from the Puyo—such descent having been, evidently, *de rigueur* for any Puyo-Koguryoic people. Gardiner does not mention the explicit statements in the sources that the Puyo-Paekche had come from Liao-hsi, which according to the same sources they had formerly dominated.

Finally, one more bit of evidence points to Liao-hsi as the proximal homeland of the Puyo-Koguryoic peoples in the fourth century B.C., at the time of the initial Yayoi migration to northern Kyushu and the southern coast of Korea. The first historical account of a Korean kingdom is that founded by a man from the former Yen kingdom-which was located in the northeasternmost corner of Chinese cultural territory and included Liao-hsi. This was 衛滿 Wiman, who established the 朝鮮 Chosŏn kingdom in Korea in the early second century B.C. (Gardiner 1969: 9). Significantly, the Puvo-Koguryoic peoples are specifically identified in the ancient Chinese sources with the 貊 (also written 貉) Maek, a people mentioned in pre-Han Chinese sources as having lived in northeastern China (Pulleyblank 1983: 442-443). In fact, the Koguryo people are often referred to synonymously as the Maek. Although such identifications are sometimes anachronistic, in this particular case the identification is ancient, not medieval, and therefore likely to be correct. The Chinese sources note that the 濊 Ye or 濊貊 Ye-Maek, who were located to the south of Okcho, east of Koguryo, and north of Silla were a Puyo-Koguryoic people, as were the 'Little River Maek', a branch of the Koguryo living in Liao-tung.<sup>14</sup>

 $<sup>^{14}</sup>$  See Chapter 3 for discussion of the traditional Japanese name of Koguryo, *Koma*, which evidently corresponds to the name 濊 貊 Ye-Maek. The *Samguk Sagi* 

The history of the Maek as a foreign people noted in Chinese sources may thus go back as far as the Chou dynasty period, if the references to them in the *Book of Odes* as having been at that time in the kingdom of Yen are historical (Pulleyblank 1983: 442-443).<sup>15</sup> The language of the toponyms from the former Ye-Maek state appears to be indistinguishable from that found in other Old Koguryo toponyms. It is possible, therefore, that Wiman Chosŏn's conquest of the Korean Peninsula may already have included a Japanese-Koguryoic ethnic component which settled eventually in the Ye-Maek territory.

How could the intrusive early Yayoi culture of northern Kyushu and the contemporaneous, archaeologically virtually identical culture of the southern tip of the Korean peninsula both have gotten to their locations without passing southward through northern Korea, which they apparently did not do? And if the reverse, how could they have found their way to southern Manchuria without moving northward through the Korean peninsula, which they apparently did not do either? The answer to these old conundrums has been in the Chinese sources all along: they did not follow either of the above problematic routes. They are first clearly attested in the area of Liao-hsi-the region east of present-day Tientsin, beside Liaotung Bay-in contact both with the Chinese there and with the Hsien-pei and Hsiung-nu. There is no suggestion that they had just arrived there, and the apparently genuine connection of the ancient Maek with the Puvo-Koguryoic Maek suggests that they had already been living in the vicinity before the fourth century B.C. Pressed by the Chinese on the one hand and Central Eurasian powers such as the Hsiung-nu on the other, the Japanese-Koguryoic peoples came to be differentiated into farming and fishing Wa (or Yayoi) peoples and more warlike Puyo-Koguryoic peoples. In both cases, though, those who wanted to survive evidently had little choice but to move somewhere else. Firstly, whether or not some of them, the ancestors of the Ye-Maek state of eastern Korea, moved by land to Liaotung and Korea with Wiman Chosŏn, it was at about the same time that some did move by sea to the southern tip of the Korean Peninsula and to northern Kyushu; these were the Yayoi or Wa, the ancestors of the Japanese. Others

notes that their territory was the easternmost of the three former Koguryo provinces incorporated into Silla after the conquest of Koguryo.

<sup>&</sup>lt;sup>15</sup> The received *Book of Odes* is, however, a text with many layers of accretions. It spans several—perhaps many—centuries, and has yet to be convincingly periodized.

eventually moved overland into southern Manchuria to found the Puyo kingdom. Still later, the Koguryo and other Puyo-Koguryoic peoples also moved by land into Liao-tung, southern Manchuria, and Korea. The latest to move were a group of Wa, who migrated by sea to the Ryukyus at around that time,<sup>16</sup> and the Puyo-Paekche, who conquered the Ma Han area of Korea (the western south-central region, focused on the area of modern Seoul) in the mid-fourth century. See further in Chapter 12.

After their conflict with the Chinese at the time of Wang Mang, the Koguryo moved east into the commanderies of Liao-tung and Hsüant'u. The early Koguryo capital on the Yalü River was \*Orto, usually transcribed as 丸都 Wan-tu (MChi \*ywanto, NKor Hwando). This is clearly the same word as the much later attested, well-known Turkic and Mongolic word, *ordu* ~ *ordo* ~ *orda* 'royal capital; camp of a lord and his *comitatus*'. Since the Turkic and Mongolic etymologies are problematic—the word is surely a loan into Turkic, and probably into Mongolian as well—the possibility exists that it is an early Puyo-Koguryoic word.<sup>17</sup>

The other peoples in contact with the Puyo-Koguryoic peoples in Late Antiquity were the three 韓 Han. These were confederations of small states inhabited by people who spoke languages unrelated to Puyo-Koguryoic (*SKC* 30: 849-853; *HHS* 85: 2818-2820). Of these, the largest and strongest was 馬 韓 Ma Han, which was later conquered by Puyo-Koguryoic peoples and became Paekche. The second most powerful was 辰 韓 Chin Han, which later became Silla. The third was 弁 韓 Pyŏn Han (henceforth Pyon Han), later known as 加羅 Kara or 任那 Mimana, the people of which spoke a language said either to have been different from (*HHS* 85: 2820) or the same as (*SKC* 30: 853) that of the Chin Han. Finally, it is important to note that located to the northeast of Koguryo were the 挹婁 I-lou, who spoke a language explicitly said to be different from Puyo (*HHS* 85: 2812) and Koguryo (*SKC* 30: 847). Both the sources and the scholarly literature clearly identify the I-lou language as Tungusic (Kiyose 2002),<sup>18</sup> so by

<sup>&</sup>lt;sup>16</sup> The usual view that they went to the Ryukyus from Japan is contradicted by archaeology, anthropology, and linguistics (Kiyose 2001b: 145-146).

<sup>&</sup>lt;sup>17</sup> See Chapter 3 for full discussion.

<sup>&</sup>lt;sup>18</sup> Early sources state that the I-lou language was different from that of Puyo and Koguryo (*SKC* 30: 847) and its language was unique (*HHS* 85: 2812). The I-lou (*SKC* 30: 848; *HHS* 85: 2812) were the same as the 肅愼 Su-shen (*SKC* 30: 848; *HHS* 85: 2812), 勿吉 Wu-chi, or 黑水靺鞨 Hei-shui Mo-ho (*HTS* 219: 6177).

extension the Puyo-Koguryoic languages should not be Tungusic, and frequent claims to that effect in the literature are unfounded. The chapters in both sources end with accounts of the Wa, the people of Japan (*SKC* 30: 841-848), whose language is not compared to any other.

According to all accounts the Koguryo are considered to be related to the Puyo, and their language is said to be "mostly the same as that of the Puyo" (SKC 30: 843; HHS 85: 2813). The Okcho (see below) also spoke a related language (SKC 30: 846; HHS 85: 2816; TT 186: 5020), as did the Ye or Ye-Maek (SKC 30: 848; TT 185: 4987) and probably the 豆莫婁 Tou-mu-lou, a late-attested people equated with "old North Puvo" (Wei shu 100: 2222: PS 94: 3131: HTS 220: 6210 [written 達末婁 Ta-mo-lou]). Finally, the sources agree that the ruling class of Paekche was Puyo-Koguryoic in origin and spoke a language different from that spoken by the local people. On the basis of explicit Chinese claims and actual Paekche words cited in Chinese sources, as well as Paekche words recorded in contemporaneous Old Japanese sources, Kôno Rokurô has shown that there were two languages spoken in Paekche: the language of the ruling class, related to Koguryo,<sup>19</sup> and the language of the subject class, related to Silla Korean (Kôno 1987). In the Liang shu, composed in the early T'ang period, it is said that the Paekche "language and clothing styles are now about the same as those of Koguryo" (LS 54: 805).20 The Nan shih agrees on this point (NS 79: 1973), and in the companion work by the same author, the Pei shih, variant words for 'king' in the two languages of Paekche are given, and the text remarks, "Their people are mixed. There are Silla, Koryo, Wa, etc., and there are also Chinese" (PS 94: 3119). As for the languages of the other contiguous peoples, all contemporaneous or near-contemporaneous Chinese sources agree that the Silla language was different from all the others. Interestingly, the sources generally state that the Chin Han language was related to Chinese, via a story that explains the name Chin Han as 'Chinese' Han and gives some Silla Chinese words as evidence. The language of Silla is said to be intelligible only with the aid of Paekche interpreters

<sup>&</sup>lt;sup>19</sup> Despite the strangeness of most of the words Kôno discusses, other evidence, such as the form of the word 己 \*kï 'walled city, fort (城)', supports his conclusion.

<sup>&</sup>lt;sup>20</sup> It is assumed, with Kôno, that this statement refers only to the language of the ruling class. However, in the Chinese sources the Paekche words cited are all radically different not only from the Silla words for the same things but also from the equivalents in Koguryo.

(*Liang shu* 54: 806), a remark that strongly supports the theory of the bilingualism of the Paekche kingdom.

In Late Antiquity, according to the San kuo chih or 'Records of the Three Kingdoms', a history of China by Ch'en Shou (233-297 A.D.), and the Hou Han shu or 'History of the Later Han Dynasty' by Fan Yeh (398-445 A.D.),<sup>21</sup> the Puyo people were located north of Koguryo and east of the Hsien-pei (an early Mongolic confederation). The Koguryo (or Koryo) people were located east of Liaotung, north of the 韓 Han peoples and the Ye Maek of the Korean Peninsula, and west of the 沃泪 Okchŏ.<sup>22</sup> The Okcho, who lived on the northeast coast of the Korean Peninsula, were located in a thin strip along the Sea of Japan south of the Puvo. north of the Ye or Ye-Maek, and "to the east of the 蓋馬 He-ma<sup>23</sup>—'great mountains (大山)'—of Kogurvo. and along the coast of the ocean" (SKC 30: 846; HHS 85: 2816), i.e., the Sea of Japan.<sup>24</sup> The word or name 蓋馬 ☆yapma is cognate with the very well attested Old Koguryo word \*fiaip 'high mountain'25 and with the Archaic Japanese and Old Japanese word for 'mountain', \*yama. The 穢 ~ 濊 Ye or 穢貊 Ye-Maek, also bordering the Sea of Japan on the east, were located south of the Okcho, east of Koguryo, and north of Chin Han (locus of the later Silla kingdom), who occupied the southeastern corner of the Korean peninsula.

Despite an early history marked more by disastrous defeats and near annihilation than by conquests, in the middle of the fourth century A.D. the Koguryo nation recovered and again expanded south-

<sup>&</sup>lt;sup>21</sup> The subsequent ethnolinguistic accounts written before the T'ang period contain no new or useful information on these peoples. The accounts of the later (but pre-T'ang) dynasties written in the T'ang period do contain much interesting and important information, but despite the attribution of that information to earlier periods it cannot be dated with certainty to a period earlier than the T'ang itself.

<sup>&</sup>lt;sup>22</sup> The traditional name 沃沮 Okchŏ (MChi \*awktsi), could be a graphically corrupt form of 夫租 \*putsu, the form of the name recorded on bricks found at Lolang (Gardiner 1969b: 164).

<sup>&</sup>lt;sup>23</sup> This name is usually transcribed incorrectly as Kai-ma. For the correct reading,  $\Xi^{*}\gamma_{ap}$  (rather than \*kay), in this name, see the gloss to this toponym in the *T'ung tien* (186: 5020) and the textual comments in the same work on the name \* $\gamma_{apma} \sim$ \* $\gamma_{apmu}$  [ $\Xi^{\pm}$ ], the first character of which is frequently written  $\Xi^{*}\gamma_{ap}$  in the texts.

<sup>&</sup>lt;sup>24</sup> Gardiner (1982: 68 n. 26) says, "... it is scarcely possible that the chieftains of Koguryŏ were in a position to exercise any serious pressure upon either of the two main Okchŏ groups until they gained a measure of control over the mountain massif which intervenes between the upper Yalü and the north-eastern coast of Korea, the so-called Mount Kaema 蓋馬山 [sic—CIB] mentioned in *San-kuo-chih* 30..."

<sup>&</sup>lt;sup>25</sup> The disyllabic AKog form became a monosyllable in OKog through metathesis or deletion of the final vowel segment, as seen in other words attested in both AKog and OKog. Thus, AKog \* $\gamma$ apma > \* $\gamma$ app(m) > OKog \*fiaip. See Chapter 6.

ward into the Korean Peninsula, subjugating Chinese, various Puyo-Koguryoic peoples, and others, apparently including speakers of Han languages. At the same time, another branch of the Puyo-Koguryoic people moved into southwestern Korea, the area formerly known as Ma Han, and established the Paekche kingdom. The kingdom of Silla was also formed at this time in the area of the former Chin Han, at the southeastern edge of the Korean Peninsula, due to direct or indirect influence from the Koguryo or Puyo-Paekche (PS 94: 3122-3123; Wei shu 100: 2216).<sup>26</sup> Thus the Three Kingdoms of ancient and early medieval Korea came into being. The Pyon Han area of ancient Korea continued to exist as Kara<sup>27</sup> or Mimana, though not as a unified independent kingdom.<sup>28</sup> Very little is known about the area, and virtually nothing about its language, which is unknown except for four words<sup>29</sup> said to be from the original area of Kara: 梁 'door' (SS 44: 451), which has been read (Lee 1983: 99) as \*dol<sup>30</sup> (= \*[dor]) and related to Old Japanese \*tö ~ \*təw (刀·斗) ~ \*tv [吐~妬] 'door, gate (門)' (JDB: 485); 冶爐 \*yialu 'red fire (赤火)' (SS 34: 357); \*kar ~ \*kalir [加尸] 'new (新)' (SS 34: 358); and 兮 ☆yɛy 'resume, restore (復)' (SS 34: 358).

The earliest descriptions of the Koguryo describe a people living in the high valleys of the mountainous region around the upper Yalü River, warlike out of necessity since they could not produce enough

<sup>&</sup>lt;sup>26</sup> Chin Han's royal line is said to have been foreign in origin (*SKC* 30: 853). Paekche (i.e., Puyo-Paekche) responsibility for the formation of Silla appears to be referred to in a memorial from 504-508 A.D. quoted in the *Wei shu* (100: 2216). The *Pei shih* account gives several stories, one of which tells how the Silla kingdom was established by Koguryo refugees (*PS* 94: 3122-3123). In either case, the Silla dynasty would be Puyo-Koguryoic in origin.

<sup>&</sup>lt;sup>27</sup> The names Karak [伽落] and Kaya [加耶] (MChi ☆kayia < OChi \*kala), often seen in the literature, are transcriptions of the same word, \*kara. The form Kara [加羅] is attested in the oldest sources.

<sup>&</sup>lt;sup>28</sup> Assuming that the Wa, or ancient Japanese, did in fact dominate Kara until late in the Three Kingdoms period—as the contemporaneous Japanese sources indicate, and as the Chinese titles given to the Wa also indicate—would explain rather parsimoniously why it did not develop into a state like the others.

<sup>&</sup>lt;sup>29</sup> Others have been proposed, with less justification; cf. Lee 1983: 99.

<sup>&</sup>lt;sup>30</sup> This is the only word that is explicitly said to be in the language of Kara. The reading is semantic, based on Korean. In SS 34: 355 the character 梁 is glossed as M MChi  $\ddagger$ tok or  $\ddagger$ tvk (Pul. 82 reconstructs  $\ddagger$ tawk, but the Chinese word written with this character is solidly attested as part of an early loan into several Central Eurasian languages). The Middle Korean reading M dorh indicates an earlier final \*-k, supporting the Samguk Sagi phonetic gloss, though a disyllabic (or bimoraic) form is also indicated, suggesting that attempts to link this word to the Japanese word for 'door', to, may be misguided.

food for themselves in their homeland. They had walled cities or forts (城) called \*kuru [溝漊] (SKC 30: 843; TT 186: 5011), a word attested also in Old Koguryo as \*kuər (忽 ☆χuər ~ 骨 ☆kuər) 'walled city, fort (城)'. The San kuo chih relates of their Puvo relatives. "The country's elderly people themselves say they were fugitives of old; their city walls (城柵) are all circular, and have a resemblance to prisons" (SKC 30: 841; cf. HHS 85: 2811; TT 185: 4998). The Archaic Koguryo word \*kuru (and Old Koguryo \*kuər) thus may have had the original meaning 'ring-fort',<sup>31</sup> indicating a town or fort with a circular defensive wall. By contrast, it is explicitly said of the Ma Han that they had no city walls (城郭) (Chin shu 97: 2533; TT 185: 4988).32 The fact that the shrine to the Kogurvo founder hero 朱蒙 Chu-meng (i.e., \*Tünmen) in Liao-tung City contained stores of armor and weapons (HTS 220: 6191) suggests a possible etymological connection between Archaic Koguryo \*kuru 'walled city, fort (城)' and Old Japanese <sup>☆</sup>kura 'storehouse, treasury'.

Like the tribal organization of the Puyo, Koguryo's was of the Central Eurasian type: a ruler with his royal clan or 'tribe' (部 literally 'part, division') with four subsidiary rulers over the 'tribes' of the four directions (cf. Schamiloglu 1984). This is undoubtedly a reflection of the Koguryo people's contact with Central Eurasian peoples, including the Hsiung-nu, Hsien-pei, and subject peoples within the Koguryo kingdom. The account of the five 'tribes' or 'divisions' of the Koguryo in the *San kuo chih* (*SKC* 30: 843) is supplemented by important contemporary glosses added to the *Hou Han shu* account by the T'ang scholar Li Hsien (*HHS* 85: 2813; cf. *HTS* 220: 6186).<sup>33</sup>

The Koguryo have five 'tribes' (or 'divisions'). The first is called the Inner [i.e., Central] Tribe, also named the 'Yellow' Tribe, i.e., the

<sup>&</sup>lt;sup>31</sup> Cf. the Old Frankish name of the ring-fort of the Avars in Pannonia, the *Hring*, or 'ring'.

<sup>&</sup>lt;sup>32</sup> However, Chin Han and Pyon Han are said to have city walls (*TT* 185: 4988; cf. *Chin shu* 97: 2534). By the T'ang period, all three kingdoms had walled cities or forts (城). The later Paekche word for 'walled city, fort (城)', 己 \*kï, was borrowed into OJpn as \*kï (*JDB*: 236). It is significant that AKog \*kuru ~ OKog \*kuər 'walled city, fort (城)' does not occur in the toponyms from the original Silla kingdom territory. (See Chapter 8 for discussion of the attempts to relate this Koguryo word to Korean.) In fact, the word for 'walled city, fort (城)' in Silla is explicitly attested in the sources as \*konmura ~ \*gianmura [健牟羅] (*LS* 79: 1973), and in post-Silla Korean as \*ts<sup>h</sup>immura [侵牟羅] (*HTS* 220: 6202). The Middle Korean word for 'walled city, fort (城)' is *mazặr*.

<sup>&</sup>lt;sup>33</sup> The Koguryo words themselves, though unglossed, are given in both the *Hou Han shu* and *San kuo chih*, so they are Archaic Koguryo in form.

桂婁部 \*Kweru Tribe ('yellow tribe'). The second is called the Northern Tribe and also named the 'Back' Tribe, i.e., the 絕奴部 \*Ts<sup>w</sup>iar-nâ Tribe ('tribe of the back'<sup>34</sup>). The third is called the Eastern Tribe and also named the 'Left' Tribe, i.e., the 順奴部 \*źör-nâ ~ 慎奴 \*Dźir-nâ Tribe ('tribe of the left'). The fourth is called the Southern Tribe and also named the 'Front' Tribe, i.e., the 灌奴部 \*Kor-nâ Tribe ('tribe of the front'). The fifth is the Western Tribe, also known as the 'Right' Tribe, i.e., the 清奴部 \*Kör-nâ Tribe ('tribe of the right').<sup>35</sup>

Kim's claim to have found Tungusic cognates for one or more of these names, which he interprets as the names of the cardinal directions (Kim 1986: 118-121)—rather than as the deictic adjectives 'front', 'back', and so on given by the text—is incorrect. Despite his efforts to relate them, the phonology and semantics do not allow any connection with the Tungusic words. In fact, the *Samguk Sagi* actually gives the Silla Korean equivalents for the five directions (*SS* 34: 356), none of which can be related either to the Tungusic equivalents or to the Old Koguryo words for the cardinal directions. However, some of the Koguryo words are identifiable with Japanese cognates. (Cf. Chapters 3 and 6 for the attested words for cardinal directions in Old Koguryo.)

The early Koguryo state already had a Chinese-type bureaucratic structure with a number of official ranks and offices. Some of these were apparently grafted onto a common Puyo-Koguryoic tradition, since they are found in the Puyo state as well. The San kuo chih says of 夫餘 Puyo, "The country has a sovereign. They name their officials after the six [sic] domestic animals. There are Horse \*kar [加], Ox \*kar [加], Pig \*kar [加], Dog \*kar [加]" (SKC 30: 841); the fact that only four animals are so used parallels the subdivisions of the Kogurvo state, with the king in the center plus an official over each of the four directions. The Koguryo system begins the same as the Puyo one, beginning with the king, the word for whom is not directly mentioned in the standard Chinese sources but is well attested in Old Koguryo form, \*key ~ \*kay [皆], in the Samguk Sagi (SS 37: 379). Also as in Puyo, the \*kar [加] (MChi \*ka, but to be reconstructed as \*kar for archaic Northeastern Middle Chinese; see Chapter 6, s.v. OKog \*key 'king') is at the head of the list of officials, as the highest

 $<sup>^{34}</sup>$  Literally, 'back-GEN tribe'. The names of the second through fifth 'tribes', the four non-royal divisions of the state, are all constructed in the same fashion. These were both military-administrative units as well as clan or tribal units.

 $<sup>^{35}</sup>$  HHS 85: 2813. The first character of this name is written 消\*siaw in the Hou Han shu version and its glossed copy in HTS 220: 6186. Here the text is emended to 消 on the basis of the San kuo chih version.

minister (SKC 30: 843). The names of other officials in the list are mostly either Chinese or unidentifiable: 對盧 (see below), 沛者, 古雛加 (evidently a lower ranking \*kar), 主簿, 優台丞, 使者, and 卑(皁, 帛, etc. variants occur in other accounts) 衣先人, as in the list in the Wei shu (100: 2215), which is much shorter and radically different: 謁奢, 太奢, 大兄, 小兄. The mid-T'ang T'ung tien is again significantly different.<sup>36</sup> It notes that the highest of the nine official ranks in the earlier accounts, \*totuyrv~\*dat wəylu [大對盧] 'great Tuyru',37 is "also called \*t<sup>h</sup>uts<sup>w</sup>ər ~ ☆t<sup>h</sup>udzwər [吐捽]" (TT 186: 5014; HTS 220: 6186), the latter being simply a new transcription of the same name in its later Koguryo form, after regular affrication of  $*tu- \sim *tw-$  and metathesis or apocope of the final vowel in disvllabic or polysyllabic words ending in a vowel (in this case, the Koguryo title \*Tuyr $v \sim$ ☆t<sup>w</sup>əylu [對盧]). Most of the other titles are, as before, Chinese, and most of the innovations seem to be due to expansion of the bureaucracy and consequent division of offices. However, the T'ung tien also provides a list of the words for regional officials and generals (TT 186: 5014-5015; cf. HTS 220: 6186) in the late Koguryo kingdom. Several of the titles which are recorded for the first time in the T'ang sources seem to reflect another language, perhaps a dialect of Old Korean.

Like the Puyo and other related peoples, the Koguryo had a great festival late in the year, described in the *San kuo chih* (30: 844).

In the tenth lunar month they sacrifice to heaven. Their great annual festival is named  $\overline{RB}$  Tung-ming (\*Tüŋmeŋ)...<sup>38</sup> In the eastern part of their country there is a great cave, named  $\overline{\&} \cap{CSui}$  Hsüeh 'Ear-of-Rice-Grain Cave'. In the great national festival of the tenth month they invite the  $\overline{\&} \ensuremath{\overline{\mu}}$  Sui-shen 'ear-of-rice-grain god' to return to the eastern part of

<sup>&</sup>lt;sup>36</sup> A version of the same text is found, with more mistakes, in *HTS* 220: 6186.

<sup>&</sup>lt;sup>37</sup> The vowel of the first syllable [ $\pm$ ], appears problematic, but the Chinese word  $\pm$  'big' has a rounded vowel in the Wu dialect (in Shanghai it is pronounced [du]) and in some other dialects (implying a LOC \*dâ), and the syllable does appear to be a loan from Chinese—the same word was borrowed into other Central Eurasian languages in exactly the same way. The transcription in this instance could therefore suggest some affinity between Archaic Northeastern Middle Chinese and the Wu dialect.

<sup>&</sup>lt;sup>38</sup> The shorter *HHS* version reads, "In the eastern part of their country is a great cave, called eastern extreme the tenth lunar month" (*HHS*85: 2813). The fact that the sacred cave—perhaps the Koguryo ancestral cave—was located in the eastern part of the country suggests it might actually have been in either Okcho or Ye-Maek. This would support an early date for the Ye-Maek settlement of their territory, and help explain why the Japanese name Koma 'Koguryo' is evidently a transcription of the name Ye-Maek (see below).

the country and offer sacrifice up to him, and erect a wooden ear of rice grain at the god's seat.

The name 東盟 Tung-ming (\*Tüŋmeŋ) is phonetically identical to that of the founder-hero 東明 Tung-ming (\*Tüŋmeŋ), indicating that the festival was undoubtedly dedicated to him, and that the national founder-hero was also the ear-of-rice-grain god. See above on the godhero's story and its similarity to that of Hou-chi 'Lord Millet', the main ancient Chinese grain god. Shrines were dedicated to \*Tüŋmeŋ in Liao-tung city and probably in other cities as well (HTS: 220: 6190-6191). The technology of intensive rice agriculture is one of the most important features of the East Asian cultural complex, as found in Japan, Korea, and central and southern China. It is extremely significant that the Koguryo worshipped a god of rice who was also a conquering warrior hero, a horse-riding archer like those portrayed in the famous Koguryo wall painting discovered in the 'Tomb of the Dancers', at Tung-kou, Chi-lin, China, Although the name of the Kogurvo national festival is not related to that of either the Puyo festival, 迎鼓 'welcome drum' (SKC 30: 841; HHS 85: 2811), or the Ye-Maek festival, 舞天 'dance heaven' (SKC 30: 848; HHS 85: 2818), the descriptions are similar. It is probable that they were dedicated to the same god.

The Koguryo are also known in Chinese sources by another name, 貊 Maek (Pul. 218: EMC \*maijk/\*mɛijk; also written 貉; cf. Pulleyblank 1983),<sup>39</sup> which was used as a synonym for 'Koguryo' in the earliest historical account of the Koguryo, dating to the reign of Wang Mang, when they were still located in Liao-hsi and in contact with the Hsiung-nu (SKC 30: 844; HHS 85: 2814; TCTC 37: 1198). As noted above, these 貊 Maek were once in contact with Chou dynasty or Warring States era China in the area of ancient Yen (the northeasternmost extension of Chinese culture, including the modern Peking area and Liao-hsi), and the sources also describe a minor branch of the Koguryo in Liao-tung called 小水貊 'Little River Maek' (SKC 30: 844; HHS 85: 2814). In all other descriptions the Maek (or 穢貊 Ye Maek, or 穢 Ye) are distinguished from the Koguryo, but their language and customs, etc., are said to be more or less the same as that of the Koguryo. Finally, the Han shu geographical monograph has a 高句驪 Koguryo County (縣 hsien) in 玄菟郡 Hsüan-t'u Commandery (郡 chün), which is said to have been established in 107 B.C.

 $<sup>^{39}</sup>$  OChi \*mrak < \*mark  $\sim$  \*merk. For Koma, the Japanese traditional name of Koguryo, see Chapter 3.

by Han Wu-ti (*HS* 28b: 1626). However, internal evidence in the narrative account (*HS* 28b: 1658), most notably the description of Wa, or early Japan, which is described as "in the sea of Lolang [Commandery]," clearly indicates that this is a late interpolation in the *Han shu*—the earliest historical mention of the Wa is not until the first century A.D.<sup>40</sup> In short, the earliest historically solid references to Koguryo appear to be, firstly, the events in 12 A.D., when the Koguryo were in the Liao-hsi area (*HS* 99b: 4130), and secondly, the 'tribute' mission sent by the Koguryo king to the Chinese court in 32 A.D. (Gardiner 1969: 29-30).

Following their establishment of a kingdom in the former  $\pm 5$   $\pm 3$  Hsüan-t'u Commandery, the early Koguryo had an extremely unstable history for the next three centuries. They had little luck in war. On several occasions their capital \*Ortv (Wan-tu) on the north bank of the upper Yalü River was captured and sacked.

By the middle of the fourth century A.D., the Koguryo had fully recovered and rapidly established themselves as the dominant power in the Korean Peninsula as far south as P'yongyang, and probably beyond.<sup>41</sup> By the end of the fourth century, the Koguryo kingdom controlled the northern and central regions of Korea and exercized suzerainty over the emergent Silla kingdom, in which the Koguryo had stationed troops and from which Silla was forced to send hostages to the Koguryo court (Gardiner 1969: 46).

 $<sup>^{40}</sup>$  It is also unsupported by an entry in the appropriate place in the sections on Han Wu-ti in the *Shih-chi*—which book does not mention the name Koguryo at all—and the *Han shu*.

<sup>&</sup>lt;sup>41</sup> Gardiner argues convincingly that the authority of local Chinese officials in the territory of the former Chinese colony of Lolang continued after the loss of direct imperial Chinese control, though this creates an apparent contradiction in the historical record (Gardiner 1969: 40-43, 52-59). However, this does not mean the absence of the Koguryo. The continued presence of Chinese rulers in the same area as the Koguryo in the early fourth century is not problematic. It was the normal, expected Eurasian practice in late Antiquity and the Early Middle Ages (and later, in many areas) for conquerors to retain local rulers as subordinates, especially during the period immediately after the conquest.

廣開土王 King Kwanggaet'o 'the king who conquered (far and) wide', who defeated Paekche, Silla, and the Wa of Japan, were recorded in Chinese on a monumental stone in 414 A.D.<sup>42</sup>

Soon after China was reunified under the Sui dynasty, Emperor Yang-ti repeatedly attacked Koguryo between 610 and 614. Instead of rapidly conquering the much smaller country, though, Koguryo defeated the huge, well-equipped Chinese armies, helping to bring about the downfall of the Sui dynasty. Koguryo drove back the early T'ang attacks as well, and seemed to be destined to grow even more powerful over time. But in a *coup d'état* a usurper from the 'Eastern Tribe' of Koguryo interrupted the flow of Koguryo history up to that point, as related in the T'ang histories (*CTS* 199a: 5322; cf. *HTS* 220: 6188). This was 蓋蘇文 Kaesomun, whose surname 蓋 should undoubtedly be read as OKog \*fiaip<sup>43</sup> ('high mountain', from AKog \* $\gamma$ aipma [蓋馬] 'great mountain', cognate to Japanese *yama*; see Chapter 6).<sup>44</sup>

He killed [King] 建武 Chien-wu (NKor Kŏnmu) and put his younger brother's son 藏 Tsang (NKor Chang) [on the throne] as king. [Kaesomun] set himself up as \*makrikey [莫離支], which is like 'Minister of the Board of War and Director of the Imperial Secretariat' in China, and he henceforth controlled state affairs.

The title under which Kaesomun took power, \*makrikey [莫離支],45 is clearly a variant of the title \*makrikar ~ \*makripkar [麻立干],46

<sup>&</sup>lt;sup>42</sup> The Kwanggaet'o memorial inscription still stands today in Chi-an (Ji'an), China, just north of the Korean border.

<sup>&</sup>lt;sup>43</sup> See the remarks above on the reading of <sup>\*</sup>γaipma [蓋馬] 'great mountain'.

<sup>&</sup>lt;sup>44</sup> His personal name is also given in a late source in an alternate 'translated' form, 金 Kim (*HTS* 220: 6187). However, it is quite possible that this is an innovation of the *HTS* authors deriving from Korean informants of their day; see below. His 'surname' is given as 泉 Ch'üan 'spring, source' < MChi \*dzwian (Pul. 262) everywhere except in the *CTS*, which has 錢 Ch'ien 'money' < MChi \*dzian (Pul. 250). The *CTS* editors' seemingly doubtful emendation of the latter character to the usual 泉 Ch'üan (*CTS* 199a: 5341) is supported by the Old Koguryo form of Kaesomun's name recorded in the *Nihon shoki*. See Chapter 3, s.v. Ch'üan ching k'ou *hsien*. The Chinese reading of this non-Chinese name was transmitted at one point orally, by people speaking Chinese.

<sup>&</sup>lt;sup>45</sup> Probably from \*makriker. The final transcriptional character  $\pm$  represents a syllable also transcribed \*kir (with various transcriptional forms) in OKog (see Chapters 3, 4, and 6). That is, the character may actually have been read \*ker or \*kir or it may have represented such a dialect reading of the same syllable; the problem requires further study. Cf. the following note.

<sup>&</sup>lt;sup>46</sup> This title is usually cited in the modern Sino-Korean reading of the transcription characters, *maripkan*. Cf. Gardiner (1969: 45-46) on this title in Silla beginning in the fourth century. However, in Old Chinese the final of the last syllable was \*r, so in view of the specifically Koguryo version of the word, the Silla version should be read

used centuries earlier in Silla by a regicidal Silla ruler and his successors installed under Koguryo auspices. Based on the historical circumstances alone, the word evidently means something like 'regent'—in both cases the de facto ruler kept a legitimate puppet on the throne. The usage supports the historical evidence for strong early Koguryo influence in Silla (cf. Gardiner 1969: 46). In view of the transcription *makari* in Old Japanese glosses of OKog 'correct, true, right (正)', attested in the title of a Koguryo prince (Kôno 1987: 89), Kaesomun's title \*makrikey may thus be analyzed as a compound consisting of \*makri [莫離] ~ \*makari plus \*key [支] 'king' (corresponding to \*kar 'king' in the title \*makripkar), literally meaning something like 'the true king' or possibly, 'the actual ruler'. For the reconstructions and etymologies, see Chapter 6.

The *Hsin T'ang shu* records a number of high-ranking, rather un-Koguryo-sounding titles in the late Koguryo kingdom, suggesting that perhaps Kaesomun and many others already spoke Old Korean.<sup>47</sup>

<sup>47</sup> Kaesomun's personal name has been etymologized in Korean on the basis of the HTS (220: 6187), which gives 金 ☆Kim 'metal, gold' as an alternate form of ☆Somun, his personal name. This is evidently based on the resemblance of an Early Middle Korean form of MKor soi (from an earlier disyllabic form) 'metal (金)' to the first syllable of *\**somun. Based on this source, Shiratori proposes to explain the man's name as 泉中、黃金 'from a spring, yellow gold', suggesting that Kaesomun's name is a representation of his self-proclaimed origin myth (Shiratori 1970: 519-520), created to appeal to the kingdom's 'masses' he was trying to fool (HTS 220: 6187). However, this appears to be just another early false etymology: \*somun would not regularly have become MKor *soi*, Kaesomun was from the Koguryo nobility so the first two words of his name are undoubtedly Koguryo, and his full name is recorded in a supposedly contemporaneous Japanese chronicle (i.e., it is not a later invention). This particular comment may derive from Korean oral sources available to the Chinese Sung dynasty authors of the HTS. Note also the mention of a 'minister of the Koguryo dynasty (巨万朝臣 ~ 高麗朝臣)' named 'great mountain (大山)'---the gloss appar-ently given to the Archaic Koguryo word \*yapma [蓋馬]—in the Shôsôin records for the years 756 and 762 (JDB 308). If the dates are correct, why is Koguryo referred to as a 'state', despite the fact that its destruction is recorded a century earlier in Japanese records? Note also the reference to the kings of Koguryo and Paekche in the Nihon shoki under the year 720, according to the discussion of the names Koma and Kôkuri (高句麗) in NKD 1033, 1035. Are these further examples of the chronological inaccuracy of early Japanese historical sources? Whether they are or not, these could be references to Kaesomun or to members of his family. Further study is needed.

<sup>\*</sup>makripkar. Similarly, the Chinese transcription [瑕] of the Paekche form in the *San kuo chih* (Kôno 1987: 84-85) is to be reconstructed as \*kar. (All examples of this morpheme cited by Kôno in words for rulers in the kingdoms of Silla and Paekche are read in Japanese simply *ka*.) This is thus another reflex of the Common Puyo-Koguryoic word \*kar 'clan chief, high official'. In Kaesomun's title it clearly has the form of the word for 'king' in Old Koguryo. OKog \*makri, transcribed as *makari* and glossed as 'correct, true, right (正)' in Old Japanese (Kôno 1987: 82) also appears to be cognate, in part, to OJpn <sup>\*</sup>ma [麻] 'true, genuine (真)' (*JDB* 663).

There undoubtedly was a considerable Korean element in the population, alongside the known Koguryo and Chinese elements, if for no other reason than because of the frequent wars, with conquests, retreats, reconquests, and so forth, over a period of several centuries. The growth of a Korean element within the Koguryo state would help explain how the Korean language spread so quickly and thoroughly over the entire peninsula after the destruction of Koguryo: speakers of one or more Korean dialects were already there, and might have been there all the time.<sup>48</sup> The Koguryo language was thus perhaps already on the way to extinction in its homeland even before the destruction of the Koguryo kingdom.

Despite Koguryo's internal problems, however, it is unlikely that the kingdom would have been defeated by either Paekche or Silla alone. It was only when the T'ang strategists made an alliance with Silla, then still the weakest of the three kingdoms, that the balance of power in Korea was altered. Instead of attacking Koguryo, the T'ang-Silla allied forces attacked the Paekche kingdom, which made a lastminute alliance with Koguryo and also called upon its longstanding allies, the Wa of Japan (CTS 199a: 5332). The effort was in vain. The Paekche forces, and the Wa armies sent to their aid, were crushed. T'ang Chinese historical sources record the burning of the many ships of the Wa. Paekche was utterly defeated and occupied by the allied T'ang and Silla forces. Nevertheless, Koguryo withstood the T'ang-Silla alliance until 666, when Kaesomun died and his sons contested the succession (HTS 220: 6196). The T'ang strategists seized their opportunity, and with help not only from Silla but from Kaesomun's son 男生 Nan-sheng (NKor Namsaeng), who had succeeded as \*makrikey, they attacked Koguryo on two fronts-from Liao-tung in the west and from Paekche in the south (CTS 199a: 5327; HTS 220: 6196-6197). In 668 A.D. Kogurvo was decisively defeated.

Although the remnant Koguryo people subsequently attempted to restore their kingdom, they were too weakened to succeed. The territory of the Koguryo kingdom was reorganized administratively as a part of the T'ang empire, and many Koguryo people were moved from their homeland to locations deep inside China. At the same time, the Silla Koreans ejected the T'ang from Paekche and soon after consoli-

<sup>&</sup>lt;sup>48</sup> Similar arguments have been made by numerous Korean scholars, but their preoccupation with trying to connect Korean or Koguryo, or both, to other language families—especially 'Altaic'—has prevented them from drawing valid conclusions.

dated their control over the whole of southern and central Korea, including the southern part of Koguryo, while the northern part of Koguryo was absorbed by the south Manchurian kingdom of Parhae. But Parhae too eventually disappeared, and by the turn of the millenium the whole of the Korean Peninsula was dominated by Korean speakers. The Koguryo people and language had ceased to exist.
#### CHAPTER THREE

## THE OLD KOGURYO TOPONYMS

The single most important source for the Koguryo language is the toponym corpus preserved in two of the geographical chapters of the *Samguk Sagi*. Numerous studies have been devoted to the comparison of the glossed names found therein with other languages, and several scholars have discussed the phonology of the transcriptions. Nevertheless, the main obstacle to a better understanding of the Koguryo language and its relationships to other languages has been the lack of an exhaustive internal philological-linguistic analysis of the material in this text. This chapter constitutes a presentation of the Old Koguryo toponym corpus found in the *Samguk Sagi*.<sup>1</sup>

In both chapters 35 and 37 of the *Samguk Sagi* most of the toponyms are listed under the heading of one of the three new Silla provinces formed out of the southern half of the former Koguryo kingdom. The first was a northwestern province, 漢州 Han *chou*, formerly 漢山 郡 Han shan *chün* of Koguryo (*SS* 35: 359); the second was a central province, 朔州 Shuo *chou*, formerly 牛首州 Niu shou *chou*, which was composed of territory that had been south central Koguryo, though part of it had earlier been western 濊 Ye (*SS* 35: 363); the third was an eastern province, 溟 Ming *chou*, formerly 河西良 ~ 何瑟羅 \*Kasira of Koguryo—at one time or another the name of a 'capital (京)' and a 'prefecture (州)'—which was originally the territory of the 濊 Ye or 濊貊 Ye-Maek state (*SS* 35: 365).<sup>2</sup> As noted in Chapter 2,

<sup>&</sup>lt;sup>1</sup> Another important source is the *Koryŏ Sa* (*KS*), a later work that quotes many of the *SS* toponyms and their glosses verbatim. Since the text of the *KS* is based on manuscripts earlier than any now existing text of the *SS*, it often preserves earlier readings. Unfortunately, in some cases it introduces later corruptions instead. Since the toponyms are also mixed together with those of much later periods, I have used it as a check on the *SS* whenever possible, but not as a basic text for the present work.

<sup>&</sup>lt;sup>2</sup> The name of Ye-Maek is given here in the traditional Korean reading. However, the traditional Old Japanese name of Koguryo, *Koma* < OJpn \*köma ~ \*giman ~ \*güman [臣万] (*JDB* 309), is undoubtedly the same name. The first character, 濊 NMan *huò* < MChi \* $\chi$ wat would have been pronounced \* $\chi$ or in ancient Northeastern Chinese (see the discussion of the name of the early capital city, \*Ortv), and thus the full transcription represents a name \*kormak. Archaic and Old Japanese did not allow closed syllables, so syllable-final \*-r and \*-k would have been canonically dropped, giving \*koma. The relative closeness of this Puyo-Koguryoic-speaking statelet, which

the Ye or Ye-Maek spoke a dialect of the Puyo-Koguryo language. It is difficult to discern any regular differences between toponyms from Koguryo territory which originally belonged to Ye and those from other parts of Koguryo. In addition to the toponyms of these three provinces, given here in accordance with their list order in Chapter 35 of the *Samguk Sagi*, Chapter 37 of the same work has an account of the different capitals of Koguryo (*SS* 37: 377-378) and lists of cities of Koguryo north of the Yalü River (*SS* 37: 386-387) derived from T'ang Chinese sources dating to the period of the T'ang-Silla alliance against Paekche and Koguryo.

Although there are a great number of toponyms in the Samguk Sagi, most of them are unglossed,<sup>3</sup> or glossed with homonyms; in many cases all the names given for a place are Chinese. The glosses can be from Chinese to Koguryo or from Koguryo to Chinese; both occur, and no attempt is made here to straighten them all up. Most glosses, other than those giving the Koguryo word for 'walled city, fort (城)', have only Chinese words for administrative units ('city', 'county', 'commandery', etc.), while others have none. The source usually omits such Chinese words in the Koguryo side of the glosses, but even when they are not omitted they are rarely transcribed phonetically (i.e., as loanwords). Such words are discussed here only when they are so transcribed. Most of the 'glosses' in Chapter 35 and in the list of places north of the Yalü in Chapter 37 are actually presented as the former Koguryo names of places listed under their Silla Chinese names: when the latter are translations of the former (or vice versa) they are called 'glosses' here. The glosses in Chapter 37 are mostly presented as 'alternate readings'. The Chinese says  $-\overline{\Xi}$ , literally, 'one (source) says', but the sense is really that the names given are

faced Japan across the Japan Sea and had been incorporated into Koguryo, accounts for the name being used for Koguryo as a whole. For some of the many speculative etymologies of the name, e.g. *Koma* = NKor *kom* 'bear', see inter alia *NKD* 5:1035.

<sup>&</sup>lt;sup>3</sup> The King Kwanggaet'o memorial inscription of 414 includes long lists of toponyms from various places in the Korean Peninsula involved in the king's campaigns. A small number of these names are identical to names found in the *Samguk Sagi*, but unfortunately they are Chinese names. None of the toponyms that seem to contain Koguryo words are actually identical to the toponyms in the *Samguk Sagi*, with the partial exception of Mi-tsou Ch'eng [彌鄒城], in line 111 (Szczesniak 1951: 264; Buzo 1995: 885). Also, none of them are glossed, and the relative locations (not to speak of exact locations) are not given. For these and other reasons I have been unable to identify for certain any of the toponyms in the inscription with toponyms in the *Samguk Sagi*. There is no doubt, however, that the inscriptions are important and should be further analyzed.

'alternates' to the head-word. Here too, when the 'alternate reading' is a translation of the head-word it is called a 'gloss'. Since this is primarily a work of linguistics, not a geographical study,<sup>4</sup> the toponyms that do not reveal something about the Koguryo language are passed over in silence to eliminate irrelevant work and to avoid introducing more ghostwords into a field which already has more than its fair share of them.<sup>5</sup>

## THE CAPITAL CITIES OF THE KOGURYO KINGDOM

\*Ortu ~ \*Ortu [丸都]. The earliest known capital, it is better known in its modern Mandarin guise as Wan-tu (NKor Hwando). It was located on the north bank of the middle course of the Yalü River. Several versions of the origin myth say the hero <sup>\*</sup>Tünmen made He sheng ku or \*yərśinkuər [約升骨] his capital. Much energy has been spent trying to identify what seems to be a mythical place, but the problem is textual: the name is also attested as \*Ortuku $\Rightarrow$ r ~ ☆yərtəwkuər [紇斗骨] (Chou shu 49: 884), so 紇升 is just another transcription of the same name transcribed as 丸都 Wan-tu, and the character ☆śiŋ [升] is a graphic error for ☆təw [斗]. Since the last syllable, <sup>☆</sup>kuər [骨], is the Old Koguryo form of the inherited word for 'walled city, fort (城)', not the Archaic Koguryo form (see Chapter 2, and cf. Chapter 6, s.v. OKog \*kuər), these versions of the story must be later accounts. The name is the same as the Central Eurasian culture word  $ordu \sim ordo$  'capital, royal court, royal encampment', well known from medieval times on.<sup>6</sup> The correct interpretation of the myth thus is that *Tünmen* made Ortv 'the royal camp, capital', his royal camp or capital. The name 玄菟 Hsüan-t'u (MChi <sup>★</sup>ywent<sup>h</sup>v), the former Chinese commandery lo-

<sup>&</sup>lt;sup>4</sup> Numerous geographically-oriented studies of the toponyms have been published, mostly in Korean. See the Bibliography.

<sup>&</sup>lt;sup>5</sup> As a result, in the sections on the cities north of the Yalü, the number of entries discussed does not match the number of cities given in the titles of the categories.

<sup>&</sup>lt;sup>6</sup> In other languages, *ordu* occurs earliest in the Old Turkic name of the Uighur capital city, Ordubalïk. The word has deeper meaning in later Khitan culture, where it refers both to the royal bodyguard (Franke 1990: 404), which is evidently a *comitatus* (Beckwith 1984), and to its camp (Wittfogel and Feng 1949: 508-517). The word in one form or another (*ordu* ~ *ordo* ~ *orda*) is also the loan ancestor (evidently via French) of English *horde*. The name 玄菟 Hsüan-t'u (MChi ☆went<sup>h</sup>v), the former Chinese commandery located nearby at various places in the area of Korea and southern Manchuria, is probably another transcription of the same foreign word.

cated nearby at various places in the area of Korea and southern Manchuria, is probably another transcription of the same word.<sup>7</sup> All this indicates that the various names of the early capital and the name of the former Chinese commandery of Hsüan-t'u were transcribed phonetically from Koguryo pronunciation of what may be non-Koguryo names.<sup>8</sup> The city of \*Ortu is also identified, apparently incorrectly, with nearby \*Piyna [不耐].

\*Piyna [不耐]. The Koguryo name of the next capital after the one founded by \*Tüŋmeŋ (SS 37: 377), \*Piyna is often called by its Chinese name, 國內 Kuo-nei (literally 'country-inside', or 'in the country'9), which is glossed in the Samguk Sagi (SS 37: 377) and read in Sino-Korean as Kungnae.<sup>10</sup> Since the word for 'country' occurs in another toponym, the Old Koguryo word \*piy 'country, state, kingdom' is known.<sup>11</sup> The second part of the name is generally written with the character 耐, which is not one of those used to transcribe OKog \*na 'earth, land'. It is, however, certainly a pho-

<sup>&</sup>lt;sup>7</sup> Later, \*Ortv ~ Wan-tu is said to have been called 安寸忽 An ts'un hu, i.e., \*an-ts<sup>h</sup>uən [安寸] plus \*kuər ~ \*χuər [忽] 'walled city, fort (城)' (SS 37: 386). This name appears to be problematic. It undoubtedly reflects a Chinese loan reading, but probably not based on Wan-tu. The first two syllables reflect Koguryo internal phonological changes after the borrowing: loss of the initial w-, shift of AKog \*tu to OKog \*tsu. A Wan-tu based loan does not explain the final \*-n. However, another possibility is that the name is based on the Chinese administrative region name 安東 An-tung 'the Pacified East' (or, 'Pacify the East'), which would have become \*an-tsuŋ after borrowing into Archaic Koguryo. See below, s.v. An shih ch'eng.

<sup>&</sup>lt;sup>8</sup> Because Puyo towns (and thus, presumably, early Koguryo towns) had circular walls (see Chapter 2), one might suspect that the word \*ortu could originally have been Chinese Wan-tu  $\sim$  \*ortu 'round capital'. However, if the name Hsuan-t'u is genuinely attested much earlier (not by any means a certainty, considering the apparent false attribution of an equally early existence of the name Koguryo; see Chapter 2), it is surely a transcription of a foreign word.

<sup>&</sup>lt;sup>9</sup> Perhaps meaning 'just inside the border', or 'frontier'. The Chinese word  $\boxtimes guó$  is variously translated. The English word closest to it is 'country', in the sense of a 'nation'. The latter term is meant in its everyday sense here. The peculiar ideas about nationhood generated by modern Europocentric historians are irrelevant.

<sup>10</sup> There are two direct glosses, both of them corrupt: 尉那巖城 Wei-na-yen City (the word 巖 yén 'rocky, precipitous' has no equivalent in the OKog name) and 不而城 Pu-erh (a frequent error for 不耐 Pu-nai) City. The variant former name, 尉那 \*uyna, is undoubtedly yet another transcription of the same name as 不耐 \*Piyna (cf. below), with a seemingly incongruent initial (zero instead of a bilabial stop) and vowel. The incongruencies are however clearly due to the lateness of the transcription 尉那 Wei-na; see the discussion in Chapter 4.

<sup>&</sup>lt;sup>11</sup> The OKog form, usually written  $\# \Rightarrow$  piy, is identical to the OKog form of the name Puyo,  $\# \Rightarrow$  piy (EMC  $\Rightarrow$ puy), indicating that this people's ethnonym meant something like 'the Nation'. Cf. Ch'oe (2000: 134):  $p \Rightarrow rV$ .

netic transcription, and the word seems to be a homonym of the latter word. In this case, \*na [耐 ~ 那] may be taken as the Old Koguryo word for 'in, inside (內)'; see the discussion in Chapter 6. This capital is nowadays identified with the area of Chi-an (Ji'an), on the north side of the upper Yalü River.

\*Piarna ~ \*Piarnu. Better known as 平壤 P'yŏngyang (henceforth, Pyongyang), this was the capital from the early fifth century on (SS 37: 378, KS 58: 274). It had been the seat of the former Chinese commandery of Lo-lang, and was the center of a large Chinese population (Gardiner 1969). Modern Pyongyang, the capital of North Korea, is the continuation of the ancient city. The Koguryo built several capitals (i.e., walled palace compounds or 'cities') in the vicinity of Pyongyang, which remained the capital district until the fall of the kingdom in 668. It is probable that the Chinese name is originally a calque translation ('flatland') of the Koguryo name given to the place after it became the capital, though a calque in the other direction is also possible. The Koguryo name is nowhere explicitly given, but can be reconstructed as \*Piarna ~ \*Piarnu based on the transcription of the Old Koguryo word for 'level, flat  $(\Xi)$ ' and the word or words for 'land, earth (壤)'. Pyongyang is also identified in the glosses as another name for 北漢山郡 Pei Han shan chün 'North Han Mountain Commandery' (SS 35: 360; 37: 379), located in Han shan chou (the westernmost of the three former Koguryo provinces), where Pyongyang is indeed located. The text calls it 'the old ruins of today's 楊州 Yang chou' (SS 35: 360).

# 漢州 HAN CHOU

Nan ch'uan *hsien* 南川縣 'South river County' (SS 35: 359; 37: 378) is glossed as \*nammey [南買]. The well-attested Old Koguryo word \*mey ~ \*mey [買] 'water, river' is not problematic (see below), but the word for 'south' appears to be simply a copy of the Chinese word. In view of Japanese *minami* 'south', it is unclear if the word \*nam [南] 'south' is a loanword from Middle Chinese 南 \*nam 'south' into Koguryo—a real possibility—or a transcription of the Old Koguryo form of a Common Japanese-Koguryoic word which would probably be a loan from Chinese in any case.

- Chü ch'eng *hsien* 駒城縣 'Colt City' (SS 35: 359, 37: 378) is glossed as \*merv ~ \*miarv [滅烏].<sup>12</sup> This appears to be a diminutive form of the root for 'horse', \*mar, which is widespread in northeastern Eurasia (Beckwith 2002b); see the discussion in Chapter 6. The only real question here is whether the diminutive, 烏 \*v, is responsible for umlauting the vowel of the root syllable.<sup>13</sup>
- Kuo yüan ch'eng 國原城 'Nation spring City' (SS 35: 359, 37: 378) is glossed as \*miyirśeŋ ~ \*muyirśiayŋ [未乙省],<sup>14</sup> but in view of the name of the old capital 國內城, in Koguryo \*Piyna [不耐], it is clear that the character [未] should be read, irregularly, in T'ang pronounciation, \*<sup>m</sup>biy. Since the Old Koguryo word for 'spring' is attested in other toponyms, OKog \*ir [乙] is 'spring'; see Chapter 6. The third syllable, a phonetic transcription of the Old Koguryo loanform of Chinese 城 *chéng* 'city'—T'ang Chinese \*śɛŋ<sup>15</sup> ~ Middle Chinese \*dźeyŋ—is found in several other toponyms, including as a direct transcription in 奈城郡 Nai ch'eng *chün*, an imitation of the Koguryo toponym 奈生郡 Nai sheng *chün* (SS 35: 366); see Chapter 4 for further discussion.
- Huai jang *chün* 槐壤郡 'Scholar-tree land Commandery' (SS 35: 359; 37: 378) is glossed as \*miŋkirna *chün* ~ <sup>☆</sup>miŋkinna *chün* [仍斤內 郡] (SS 35: 359; 37: 378 gives the Old Koguryo name without a gloss). OKog \*kir 'tree' occurs elsewhere, so <sup>☆</sup>miŋ [仍]<sup>16</sup> is either the name specifically for the scholar tree (Sophora japonica, a large variety of locust tree) or a qualifier which together with the OKog word \*kir 'tree' means 'the scholar tree'. The transcription <sup>☆</sup>miŋ [仍] is also used for the Koguryo word meaning '*yin*, the female principle; woman (陰)' (see below), so the actual Koguryo-internal etymology could perhaps be 'woman tree'.
- Shu ch'uan *chün* 述川郡 'Transmit river Commandery' (SS 35: 359, 37: 378) is glossed as \*śiŋți mey ~ \*śiŋtśi mey [省知買].<sup>17</sup> Ac-

<sup>&</sup>lt;sup>12</sup> Cf. Ch'oe (2000: 134) mara 'colt'.

<sup>&</sup>lt;sup>13</sup> This is what happens in Old Tibetan, though only with open syllable roots, e.g., OTib *rta* 'horse', *rteu* (written *rtefiu* because of Tibetan orthographic rules) 'colt'.

<sup>&</sup>lt;sup>14</sup> It is also 'glossed' as 託長城, but this is apparently yet another Chinese name, and could be a later Silla name (SS 37: 378).

<sup>&</sup>lt;sup>15</sup> Old Tibetan texts record the word 城 as *śaŋ* and *śeŋ*.

<sup>&</sup>lt;sup>16</sup> On the reading of  $(\mathcal{D} r \acute{e}ng$  as  $\approx$  min rather than  $\approx$  nyin (Pul. 266: nin), see Ching shan *hsien* below; cf. the discussion and references in Chapter 4.

<sup>&</sup>lt;sup>17</sup> The entry in Chapter 35 is listed under a problematic later Chinese name.

cordingly, \*śiŋți ~ \*śiŋtśi means 'transmit, narrate, follow (述)'. On \*mey [買] 'river, water', see below.

- Huang hsiao *hsien* 黃驍縣 'Yellow brave County' (SS 35: 359; 37: 378 gives the Old Koguryo word without a gloss) is glossed as \*kuərnakir *hsien* ~ \*kuərnəykin *hsien* [骨乃斤縣]. The Archaic Koguryo form of the word for 'yellow', \*kweru [桂婁], allows us to identify the first syllable of this name as the Old Koguryo form, which has become a monosyllable through apocope. (See Chapter 5.) The syllable \*na ~ \*nəy [乃], the old genitive-attributive morpheme cognate to AKog \*na ~ \*nâ [奴] (see Chapter 6), here connects OKog \*kuər [骨] 'yellow' to OKog \*kir ~ \*kin [斤] 'brave'.
- Yang ken *hsien* 楊根縣 'Poplar root County' (*SS* 35: 359, 37: 378) is glossed as \*küsitšiəm ~ \*kisitšiəm [去斯斬]. The word \*küsi ~ \*kisi [去斯] consists of the word \*kü ~ \*ki [去] 'poplar, willow' plus the Old Koguryo adjective-attributive morpheme \*si [斯] (see Chapter 6). The word \*tšiəm [斬], also attested in another toponym (see Kao mu ken *hsien*), means 'root'. There are three different Old Koguryo tree words written with the character 楊 *yáng*, which in Chinese frequently refers to the willow, but also to the poplar, among other trees; complicating the issue is the fact that at least two very distinctive types of willow exist. Since one of the other Old Koguryo words translated as 楊 has a good Old Japanese cognate that clearly means 'willow', \*kü ~ \*ki [去] is translated here, purely for the sake of convenience, as 'poplar'.
- Tao hsi *hsien* (道西縣) 'Road west County' (SS 35: 359, 37: 378) is glossed as \*tufiap ~ \*tuγap ~ \*tuγəp [都盒]. The first syllable, \*tu, corresponding to 'road', has an unaffricated initial and is probably a loanword from an archaic Northeastern MChi \*du (道 EMC \*daw < LOC \*du); \*fiap ~ \*γap ~ \*γəp [盒] means 'west'.
- Yin ch'eng *hsien* (陰城縣) 'Female city County' (SS 35: 360; 37: 378) is glossed as <sup>★</sup>miŋχuər *hsien* [仍忽縣] (SS 37: 378 has only <sup>★</sup>miŋχuər [仍忽]). The word <sup>★</sup>miŋ<sup>18</sup> 'female, woman, *yin*' occurs in one other glossed toponym and the identification is thus solid. The word <sup>★</sup>χuər [忽] 'walled city, fort (城)'<sup>19</sup> is not only the most

<sup>&</sup>lt;sup>18</sup> On the phonology of the initial, see s.v. Huai jang *chün* and Ching shan *hsien*.

<sup>&</sup>lt;sup>19</sup> Ch'oe reconstructs this word (忽) as kurV (2000: 134); cf. Song (1999: 190), who has \*kol '(城)'.

well-attested Old Koguryo word, it is attested in Archaic Koguryo too, as <sup>☆</sup>kuru [溝漊].<sup>20</sup>

- Pai ch'eng *chün* (白城郡) 'White city Commandery' (SS 35: 360; 37: 378) is glossed as <sup>☆</sup>naγeyχuər [奈兮忽]. The word <sup>☆</sup>naγey thus means 'white'.
- Ch'ih ch'eng *hsien* (赤城縣) 'Red city County' (SS 35: 360; 37: 378) is glossed as \*śapukuər ~ \*śabuҳuər ~ \*śabuҳuər [沙伏忽].<sup>21</sup> Thus \*śapu ~ \*śabu [沙伏] means 'red'. The syllable-final \*-k in the second potential reading of this word could in this case be a parasite from the initial of the following word, \*kuər 'walled city, fort'. This word for 'red' occurs in another toponym with a slightly different transcription, \*śapi [沙非]; see below. On the transcriptions, see Chapter 4.
- Shui ch'eng *chün* (水城郡) 'Water city Commandery' (SS 35: 360; 37: 378) is glossed as <sup>☆</sup>meyχuər *chün* [買忽郡] (SS 37: 378 omits the 郡 *chün* in both cases). The word <sup>☆</sup>mey [買] 'water',<sup>22</sup> glossed also as 'river (川)', is one of the best-attested Old Koguryo words. See Chapters 6 and 8.
- Ch'e ch'eng *chün* (車城郡) 'Chariot city Commandery' (SS 35: 360; 37: 378) is glossed as \*dźaŋɣuər [上忽], but both SS chapters also give the alternate gloss \*tśaҳuər [車忽]. It is clear that the two glosses give the same word for 'chariot, cart' in Old Koguryo. Since Old Koguryo shows no phonemic distinction between voiced and unvoiced stops,<sup>23</sup> the word should be reconstructed as \*tśa ~ \*tśaŋ. It is evidently a loan from Middle Chinese 車 \*tśa 'chariot, cart'.
- Fu shan hsien (釜山縣) 'Cauldron mountain County' (SS 35: 360; 37: 378) is glossed as \*suntsunortar ~ <sup>☆</sup>zunts<sup>w</sup>ənγwartar<sup>24</sup> [松村活達].

<sup>23</sup> See Chapter 5.

 $<sup>^{20}</sup>$  This word occurs very frequently. See chapters 2, 6, and 8 for further discussion.

<sup>&</sup>lt;sup>21</sup> The first character in the unglossed version in SS 37: 378 is *w*, evidently a graphic corruption of the homonym *w* 'sand'. The KS lists the place under the later name 赤山縣 'Red mountain County', giving 赤城縣 as a variant, and says the name was changed by King Kyŏngdŏk to 奈隄郡 'aNa(y)dɛy Commandery' (KS 56: 235).

<sup>&</sup>lt;sup>22</sup> Cf. Ch'oe, who reconstructs *mi* 'river, water, well' (2000: 134).

<sup>&</sup>lt;sup>24</sup> The EMC reconstruction of % is "zuawŋ" (Pul. 293); in Late Middle Chinese the initial \*z- of Early Middle Chinese became *s*- (Takata 1988), but Old Koguryo undoubtedly did not have the onset \*z- to start with.

The word 'cauldron' is equated with \*suntsunor, an unusually long, phonetically irregular form for Old Koguryo and thus undoubtedly not a genuine Koguryo word, though it could be a late, unassimilated loan. The second word, åtar [tar [

- Li mu *chün* (栗木郡) 'Chestnut tree Commandery' (SS 35: 360; 37: 378) is glossed as \*tawŋsikey ~ \*tawŋsiyey [冬斯府]. This is analyzable as the word \*tawŋ [冬] 'chestnut' plus the adjective-attributive suffix \*-si [斯], and the word \*key ~ \*yey [府] 'tree, wood'. On the phonology of the transcriptions of the word for 'tree, wood', see Chapters 4 and 6.
- Ku jang *hsien* (穀壤縣) 'Grain land County' (SS 35: 360; SS 37: 378; KS 56: 231) is glossed as ☆miŋbuarnu *hsien* [仍伐奴縣]. The word ☆miŋbuar [仍伐] thus means 'grain', while the very well-attested word ☆nu [奴] means 'land, earth'.<sup>26</sup>
- K'ung yen *hsien* (孔巖縣) 'Hole cliff County' is glossed as \*tseytsipa?iy *hsien* ~ \*dzeytsipa?iy *hsien* [濟次巴衣縣] (SS 35: 360; SS 37: 378 has \*tsitsipa?iy *hsien* ~ \*dzeytsipa?iy *hsien* [齊次巴衣縣], but no gloss). The second word is well attested, so this name may be analyzed as \*tsitsi ~ \*tseytsi [濟次] 'hole, cave' and \*pa?iy [巴 衣] 'cliff, precipice'.
- Mai chao hu *hsien* (買召忽縣) \*meytśiawҳuər *hsien* (SS 35: 360; SS 37: 378). This has no semantic gloss,<sup>27</sup> but it is provided with an alternate reading, \*mitśuҳuər [彌鄒忽], which is of importance for the study of Old Koguryo and Chinese dialects.
- Chang hsiang k'ou *hsien* (獐項口縣) 'Roe-deer-nape mouth County' (SS 35: 360; SS 37: 378) is glossed as \*kvsiyaχuərtsi [古斯也 忽次]. The word for 'roe-deer' is attested in different characters in another toponym, and it has a good Japanese cognate (see Chapter 6), so the syllable \*-si [斯] is not a grammatical affix here but part of the stem, which must be 古斯 \*kvsi.<sup>28</sup> The second word is \*ya

<sup>25</sup> Song (1999: 190) has \*tal 'high mountain (高山)'.

<sup>&</sup>lt;sup>26</sup> Cf. Ch'oe (2000: 134) na 'land, earth'.

<sup>&</sup>lt;sup>27</sup> The SS 35 version includes what could be a semantic gloss, 慶原 'congratulations spring', but says 買一作弥鄒 'one [source] has \*mitsu for \*mey'. The equation of \*mitsu [弥鄒] with \*mey [買] can only be an error; the latter should be \*meytsiaw [買召].

<sup>&</sup>lt;sup>28</sup> Song (1999: 190) has \*kosaya / \*kosoə meaning 'roe-deer'.

[也] 'nape'. The third word is ☆xuərtsi [忽次] 'mouth', well attested in Old Koguryo.

- Ch'ang t'i *chün* (長堤郡) 'Long embankment Commandery' (SS 35: 360; SS 37: 378) is glossed as \*tśüputv *chün* ~ \*tśubutv *chün* [主夫吐郡]. The word \*tv [吐] 'embankment, dike' occurs in other toponyms, so \*tśüpu ~ \*tśupu ~ \*tśübu ~ \*tśubu means 'long'.
- T'ung ch'eng *hsien* (童城縣) is said to have been originally named T'ung-tzu hu *hsien* (童子忽縣). Both names mean 'Child city County', glossed as \*kusipafiiy ~ \*gusipa?iy [仇斯波衣] (SS 35: 360; SS 37: 378). A note in SS 35 adds a variant gloss, 童山縣 T'ung shan *hsien*. In view of the other Chinese glosses, the first character of this gloss is clearly a mistake for 童 'child', and the glosses may be corrected to read 'Child mountain County'. The Old Koguryo name may thus be parsed as \*ku ~ \*gu [仇] 'child' plus the adjective-attributive suffix \*-si [斯],<sup>29</sup> and \*pafiiy ~ \*pa?iy [波衣] 'mountain' (also glossed as 'crag', 'precipice', or 'cliff').<sup>30</sup>
- Fen chin hsien (分津縣) 'Separate ford County' is glossed as \*biänwifiaip hsien [(平)唯押縣]<sup>31</sup> (SS 35: 360) and, in SS Chapter 37, \*biänywəiyaip hsien [平淮押縣], glossed as \*piarśipafiiy ~ \*biarśipa?iy~ ☆piarśipa?iy [別史波衣] (SS 37: 379), with a note adding a variant reading, \*ywi [唯] for \*ywəiy [淮]. The word \*biar ~ \*piar [別] 'level, flat' seems clear, and—as in the name P'yongyang—the syllable <sup>☆</sup>biäŋ [平] 'level, flat' appears to be a Chinese loanword in Koguryo, though as noted elsewhere the final velar nasal was evidently not articulated as such in Old Koguryo, so the character probably also transcribes the phonetically and semantically close Old Koguryo word or root \*piar [別]. The first character of the new Silla-Chinese name, 分 'divide' (MChi \*bun ~ \*pun), is not close enough to 平 flat, level (MChi \*biäŋ) to be a phonetic imitation of it. The regular correspondences of the other forms ( $\overline{\Psi}$ and 別) indicate that 分 'divide' is a semantic gloss of an otherwise unattested Old Koguryo homonym, \*piar 'apart, separate', etymologically related to \*piar [別] 'fold, times, laver'. The second

<sup>&</sup>lt;sup>29</sup> Ch'oe (2000: 134) reconstructs *kusv* 仇次 'child (童子)'; however, the second syllable is a grammatical suffix; see Chapter 6 and Beckwith 2000.

<sup>&</sup>lt;sup>30</sup> Ch'oe (2000: 134) reconstructs *pa*<sub>2</sub>.

<sup>&</sup>lt;sup>31</sup> The character  $\mathfrak{P}$  is clearly a scribal mistake for  $\mathfrak{P}$ .

word, \*viy~ \*y<sup>w</sup>i [唯]~ \*ywəiy [淮] 'ford (津)', also occurs in one other toponym, as ☆u [烏] 'id.' The word for 'divide' here must be interpreted together with a transcription of the same form seen in another gloss below, where the word is transcribed with a clarifying variant, \*li~\*li [吏], of the transcription \*śi~\*śi [史]. It is therefore clear that, like the transcription character P, the character  $\pm$ just reinforces the final liquid. (See below, s.v. Po hai p'ing li hsien.) Finally, the well-known Old Koguryo word \*pafiiy [波衣] 'crag, precipice (巖), mountain (山)', is glossed here with its native Old Koguryo semantic equivalent, \*fiaip ~ ☆aip [押] (Pul. 354: \*?aip, 'Late MChi' \*?ya:p), which is also very well attested in several different transcriptions, including OKog \*kaip [岬] and \*kaip [#甲]<sup>32</sup> as well as AKog ☆yapma [蓋馬] 'great mountain (大山)' (see Chapter 2), from Common Japanese-Koguryoic \*yapma (see Chapter 6). The word \*pafity ~ \*pa?iy [波衣] is therefore undoubtedly a loan from another language, apparently Gilyak (see Chapter 8)—though of course it could have been borrowed by Koguryo from Gilyak via a Han Korean substratum language spoken by the local subject people in the territory of the Koguryo kingdom; see further in Chapter 8. The new Silla (Chinese) name has been shortened by one syllable to make a standard three-syllable Chinese name. The original Old Koguryo name must have been \*piar-viypafiiv 'Separate ford crag'.

- Huang jang hsien (荒壤縣)'Wilderness land County' is glossed as \*kuər?iynv hsien [骨衣奴縣] (SS 35: 361; SS 37: 379). This may be parsed as \*kuərfiiy ~ \*kuər?iy [骨衣] 'wasteland, wilderness, moor' plus the well-attested word \*nv [奴] 'land, earth', altogether signifying 'moor'.
- Wang feng *hsien* (王逢縣) 'King meet County' ~ Yü wang *hsien* (遇王縣) 'Encounter the king County' is glossed as \*keypaik *hsien* [皆伯縣] (SS 35: 361; SS 37: 379). The word \*key [皆] 'king' is well attested. The verb \*paik [伯] 'to encounter, meet'<sup>33</sup> is one of the few OKog verbs attested with a grammatical object. The history of the toponym is explained in the gloss to the SS 37 entry: "\*Key paik [皆伯] is the place where the Beauty of Han (漢氏美女) went to meet King Anjang (安藏王), so it was named 'Kingmeet'

<sup>&</sup>lt;sup>32</sup> For the zero-initial transcription *☆*ap see s.v. Tao lieh *hsien*.

<sup>&</sup>lt;sup>33</sup> Song (1999: 190) has \*pak 'to encounter, meet (遇, 逢)'.

(王迎)." Like the first of the glosses above, this is a strict calque following Koguryo verb-final syntax.

- Mai hsing chün (買省郡) \*meysiaiŋ chün is glossed as \*maikuər ~ \*maiχuər [馬忽] (SS 37: 379). The entry in SS 35, Lai-su chün (來蘇郡), is an unrelated new Silla name given to 買省縣 Mai hsing hsien (SS 35: 361). Since \*siaiŋ ~ \*śiaiŋ [省] transcribes the Koguryo loanform of MChi \*śeŋ ~\*dźiaiŋ [城] 'walled city, fort',<sup>34</sup> a synonym of OKog \*kuər [忽], while the new Silla Chinese name does not contain this word, \*mey [買] and \*mai [馬] could be transcriptions of the same Old Koguryo word, the meaning of which remains unknown.
- Ch'i ch'ung *hsien* (七重縣) 'Sevenfold County' is glossed as \*nanirpiar ~ \*naninpiar [難隱 別] (SS 35: 361; SS 37: 379). This important entry gives one of the four attested Old Koguryo numerals and has been much discussed (see Chapter 8). It consists of 難隱 \*nan 'seven'<sup>35</sup> plus the genitive-attributive suffix \*-ir [隱] (see Chapter 6), and \*piar ~ \*biar [別] '-fold, times; layer'.<sup>36</sup>
- Po hai p'ing li *hsien* (波害平吏) \*payaybiäŋli *hsien* (SS 35: 361) is given in KS (56: 229) as \*payaybiäŋśi *hsien* [波害平史縣] and in SS (37: 379) as \*payayyvśi *hsien* [波害乎史縣]. The latter transcription entails a scribal error<sup>37</sup> that should be corrected so as to read [波害平史縣] \*payaybiäŋśi *hsien*. It is glossed, problematically, with the single character ⁄ቒ, perhaps a mistake for a common variant of 額 'forehead'. However, even with no reliable gloss this entry can be parsed as \*payay [波害], which is probably a dialect version of the well-known word \*pafity ~ \*pa?iy [波衣] 'crag', and \*piar ~ \*biäŋśi [平史] ~ \*biäŋli [平吏] (cf. above, s.v. Fen chin *hsien*). The present form is clearly just another example of the hybrid reinforcing transcription representing OKog \*piar-'level, flat'.<sup>38</sup>

Ch'üan ching k'ou hsien (泉井口縣) 'Spring well mouth County' is

<sup>&</sup>lt;sup>34</sup> For further discussion see Chapter 4. Ch'oe (2000: 135) reconstructs this as səŋ.

<sup>&</sup>lt;sup>35</sup> Ch'oe (2000: 135) reconstructs this as *nanan*; Song (1999: 190) has \*nanin.

<sup>&</sup>lt;sup>36</sup> Ch'oe (2000: 135) reconstructs this as *parV*.

<sup>&</sup>lt;sup>37</sup> The text has a defective character ( $\stackrel{\circ}{\Psi}$  with the top line missing). Though the same word occurs elsewhere with a clear  $\stackrel{\circ}{\Psi}$ , both must be mistakes for  $\stackrel{\circ}{\Psi}$ .

<sup>&</sup>lt;sup>38</sup> The transcription character  $\not{\pm} \pm \dot{s}i$  must represent either a liquid coda (\*r), with no vowel, like the transcription character  $\not{\square}$ . See Chapter 4.

glossed as \*irmeykuair ~ \*üirmeykuair [於乙買串] (SS 35: 361; SS 37: 379). The last word, \*kuair [串], is an especially interesting transcription of the word for 'mouth', having a clear final liquid as in the first syllable of the usual transcription. ☆yuərtsi [忽次].39 The present transcription constitutes additional support for the theory that such syllables maintain Old Chinese final \*-r/\*-1. The presence of the vowel \*i- before the final regularly indicates the final is to be read \*-r, not \*-n, so the conventional Middle Chinese transcription \*kwain (Pulleyblank 1991: 114) must therefore be revised to \*kuair [串] 'mouth',40 at least for Northeastern Middle Chinese and the Old Koguryo transcriptions based on that form of Chinese. (See the discussion in Chapter 4.) Except for this word, the names cannot be matched formally syllable for syllable, since the inclusion of the Old Koguryo word \*mey [買] 'water' along with \*ir  $\sim \stackrel{\text{``uir}}{i}$  (or  $\stackrel{\text{``uir}}{i} \sim \stackrel{\text{``uir}}{i}$  plus  $\stackrel{\text{``uir}}{i}$  indicates that the four-morpheme Chinese name corresponds to a three-morpheme Old Koguryo name. However, the Old Koguryo word can be parsed into \vec{m} \sigma mey 'water' and the preceding two syllables, which together form one word, \*ir ~ ☆üir (or simply \*ür) 'spring, well', a cognate of Old Japanese \*wi [為] 'well (井)'.41 This suggests that the different Chinese transcriptions of this word are attempts to approximate a sound that did not exist in Northeastern Middle Chinese. In this connection it must be noted that—as pointed out already in 1936 by Shiratori Kurakichi, if not earlier—the Japanese chronicle 日本書紀 Nihon shoki records the murder of the Koguryo king by the Great Minister 伊梨柯須弥 Yi-li-k'o-hsü-mi or \*Irikasumi (Mabuchi et al. 2000: 596)—also read \*Orukasumi (NKD 8: 386)—who is known from Chinese sources as 泉蓋蘇文 Ch'üan Kai-su-wen (NKor Kaesomun), discussed in Chapter 2. The Nihon shoki and Chinese sources record the man's name phonetically, except for a difference in the first word, which in the Nihon shoki is a disyllabic phonetic

<sup>&</sup>lt;sup>39</sup> Ch'oe (2000: 134) reconstructs *kucv* 忽次 'mouth (□), skewer (串)'; cf. Song (1999: 190) \*koc /\*kolc 'mouth'.

<sup>&</sup>lt;sup>40</sup> Numerous Koreanists, such as Lee and Mabuchi, have proposed to read the character # 'semantically' as 'skewer', MKor *kuc* (Mabuchi et al., 2000: 595, citing Lee 1968: 118); so also Ch'oe, who also reconstructs "koch (kucV)" as a semantic reading (2000: 127). This word has then been connected to OJpn \*kusi 'skewer'. While the latter is undoubtedly a Japanese loanword from Korean, the character # in the present instance cannot be a 'semantic' reading via Korean; see Chapter 6, s.v. OKog \*kuərtsi.

<sup>41</sup> Ch'oe (2000: 135) reads 於乙買 as airVmi.

transcription, but in the Chinese is a monosyllabic translation, 'spring, source', of his Koguryo 'surname' (Shiratori 1970: 519).42 Thus it is possible to identify \*iri as a transcription of OKog \*ir  $\sim$ ☆üir [於乙] 'spring, source', confirming yet again that the reading of the Middle Chinese final of  $\mathbb{Z}$  must be a liquid \*-1 or \*-r (cf. Mabuchi et al., 2000: 596). Since OJpn had no closed syllables, and the other transcriptions all have closed syllables, the final  $\dot{a}$ -i of the Old Japanese must be a purely Japanese-internal epenthesis. Thus, the Old Japanese transcription is a representation of \*ir or \*ir (i.e., if the reading oru cited above is authentic, \*ör, the usual reconstruction of *otsu*-class readings that are actually transcribed with characters reconstructed as  $\stackrel{\alpha}{\forall} u \sim \stackrel{\alpha}{\forall} i$ ), corresponding exactly to OKog \*ir (~ \*ür) ~ \*üir [於乙] 'spring, source'. It would seem quite possible that the first part of the Puvo-Paekche word for 'king', which is transcribed in the Chou shu as \*üraka(r) ~ \*ülaka ~ \*ilaka [於羅瑕]43 and as \*üra ~ \*ira (= \*iri ~ \*üri) in the Nihon shoki transcription of the Koguryo title for their king, orikoke (Kôno 1987: 86), is simply the same word as Kaesomun's supposed 'surname', 'spring'; if he had a surname or clan name at all, it should have been \*fiaip ~  $^{\star\gamma}$ ap [蓋],44 which is undoubtedly the Old Koguryo word for 'high mountain'. This brings up the question of the significance of the word 'spring, well' in Puyo-Koguryoic royal names or titles. The first syllable of the name of the early Koguryo ruler \*Wikun, though etymologized in the Chinese accounts as \*wi [位] 'resemble, be similar to (相似)' (see Chapter 2)—certainly a clear gloss of one meaning of the Koguryo word-would seem highly likely to be the same as the element  $*ir \sim *ir$  in Old Koguryo royal titles, which may be identified as CJK \*wir 'spring, well' or, more likely, a homonym of this word. It is attested in both Koguryo and Japanese, but neither meaning seems to sound suitably 'royal' or honorific. However OJpn \*wi 'well, spring' has several homonyms, in this case most notably the well-attested verb root \*wi- [為] 'to honor, respect (禮)' (JDB 825), suggesting a Koguryo honorific royal 'prefix'; or, in view of the martial character of the Koguryo dynasty-the name of the famous Koguryo gen-

<sup>&</sup>lt;sup>42</sup> See Chapter 2 for further discussion.

<sup>&</sup>lt;sup>43</sup> The word \*ka(r) [暇] 'king' is discussed in chapters 2 and 6.

<sup>&</sup>lt;sup>44</sup> Despite appearances, the Old Japanese transcription is of little or no help in deciding the reading of this character.

eral 乙支文德 Ŭchi (<sup>\*</sup>Irkey) Mundŏk begins with <sup>\*</sup>ir [乙]—OJpn \*wi- [為] 'to lead [as an army] (率 · 將)' (*JDB* 826). Perhaps further research will clarify this problem.

- Feng ch'eng hsien (峯城縣) 'Mountain-peak city County' is glossed as \*śurnikuər hsien ~☆źwirmiyuər hsien [述介忽縣] (SS 35: 361). which is in turn glossed as <sup>☆</sup>śuwneyyuər [首泥忽] (SS 37: 379), the latter clearly being another phonetic transcription of the same name. However, there is yet another transcription, \*suwmiyuər [述彌忽] (KS 56: 230). While there would appear thus to be an insoluble problem here, all of the transcriptions clearly go back to simple graphic corruptions of a transcription of an original Koguryo name, \*taryuər 'Mountain city', written [達爾忽], with the character m, read \*ir, used as an otiose transcription of the final \*-r of the first syllable in many late transcriptions. See, for example, one of the 'alternate' transcriptions of the name Sha ch'uan hsien, below. See also the following entry, where the same Chinese gloss for 'mountain peak' is glossed in Old Koguryo as \*tar, a very well attested word. Thus the extreme corruption seen in this entry has nevertheless failed to obscure the underlying Old Koguryo form. The restored name may be parsed as \*tar ~ \*tarir [達爾]45 'mountain, mountain-peak', plus ☆yuər [忽] 'walled city, fort'. The putative Old Koguryo word \*surni (or \*suney, etc.) 'mountain peak', argued to be related to Silla and Paekche words with the same meaning, "\*sul or \*syul" (Lee 1964: 18), and widely compared to Korean (Lee 1964: 18 "Middle Korean sunirk 'ridge, mountain pass'; Lewin 1973: 26 idem; Kiyose 1991: 12 "M[iddle] K[orean] sünörk id."), simply does not exist.
- Kao feng *hsien* (高烽縣) 'High beacon County' is glossed as \*tarirśɛŋ *hsien* [達乙省縣] (SS 35: 361; 37: 379). This looks at first as if it should be parsed as \*tar [達] 'high, high mountain (高 山)', \*ir [乙] 'beacon, beacon-fire', and \*śɛŋ [省] 'walled city, fort (城)'. And indeed, the gloss in SS 37 explains, "It is the place where the Beauty of Han (漢氏美女) lit a beacon fire (烽) on the mountain top to welcome King Anjang (安藏王); as a result, it was later named 'High Beacon'." However, there are several problems. Firstly, the KS (56: 230) has 峯 'peak', a graphic variant of 峰 'peak', for the second character. Secondly, the transcription 達 乙

<sup>&</sup>lt;sup>45</sup> Ch'oe (2000: 135) reconstructs this as süri.

represents simply \*tar 'high; mountain', as is clear from other instances. Thus there is no Koguryo word corresponding to the Chinese word 'beacon'. Since the KS material on Koguryo toponyms is based on a copy of the SS earlier than any known extant version, it is extremely important. In this case, following the KS text, the toponym should be corrected to Kao feng *hsien* (高峰縣) 'High peak County'. Thus there is no OKog word \*ir [乙] 'beacon, beacon-fire', and the story in the SS 37 gloss is a later invention to explain the corrupt Chinese 'gloss' form of the name, a later embroidery of the story already mentioned in the SS 37 gloss of Wang feng *hsien* (王達縣) 'Kingmeet County' (q.v.), at which place it is said that the Beauty of Han met King Anjang (SS 37: 379).

- Chien ch'eng *chün* (堅城郡) 'Hard city Commandery' is glossed in *SS* 35 as \*maiχuər [馬忽] (*SS* 35: 361), but in *SS* 37 the place is called Pei ch'eng *chün* (臂城郡) 'Arm city Commandery', with the same gloss, \*maiχuər [馬忽] (*SS* 37: 379). *SS* 37 forms normally take precedence,<sup>46</sup> since the new Silla names in *SS* 35 often have nothing to do with the former Koguryo name, but in this case the latest name given in *SS* 35, 抱 'to embrace with the arms', supports the gloss 臂 'Arm'. OKog \*mai [馬] thus evidently means 'arm'.
- Sha ch'uan *hsien* (沙川縣) 'Sand river County' is glossed as \*na(i)rmey *hsien* ~ <sup>☆</sup>n<sup>w</sup>əirmey *hsien* [內乙買縣] (SS 35: 361; 37: 379) ~ <sup>☆</sup>n<sup>w</sup>əirmey [內爾米] (KS 56: 231, reflecting a very late reading of the transcription character 爾 as \*ir, also seen elsewhere in the KS). This may be parsed as \*nar (or \*nair) 'sand' and <sup>☆</sup>mey 'river'.
- T'ieh yüan *chün* (鐵圓郡) 'Iron circle Commandery' is glossed as \*mawrtawŋpiy ~ \*mawirtawŋpiy [毛乙冬非]. This toponym is at first glance problematic because the constituents appear to be in reverse order—i.e., instead of 'iron circle' as in Chinese, the OKog appears to have 'circular iron'. However, it occurs in a Buddhist context,<sup>47</sup> by sense it is certainly a Buddhist reference, and the Indic original clarifies the syntax. Buddhist Sanskrit *cakravâḍa*, literally 'circle-enclosure' or in other words, 'ring-wall', is according to

<sup>&</sup>lt;sup>46</sup> The new Silla names in SS 35—especially the later ones—often have nothing to do with the former Koguryo name. In this case, though, the latest name given in SS 35, 抱 'to embrace with the arms', appears to constitute support for the earlier name and its gloss (i.e., 臂 'Arm' as a gloss of 馬 \*mai.)

<sup>&</sup>lt;sup>47</sup> The second entry after this is Seng liang *hsien* 'Monk bridge County', q.v.

Indian Buddhist cosmology the name of the outermost ring of mountains surrounding our world, and the enclosure is made of iron.<sup>48</sup> The beginning, \*mawr [毛乙], is clearly a cognate of Japanese *maru* 'circle', so \*tawŋ [冬] should mean 'iron'. In fact, the phonetic in Chinese 鐵 'iron' is believed to be  $\pm$  \*<sup>a</sup>hleŋ?, which became MChi theŋ<sup>3</sup> (Sagart 1999: 201)<sup>49</sup>, indicating that the Koguryo word is related to OChi dial. \*thaŋ 'iron' (see Chapter 4). The last syllable, \*piy [非], is clearly the OKog word for 'nation, country (國)', though it corresponds in this case to 郡 *chün* 'commandery'; the definition of OKog \*piy 'nation' (q.v. in Chapter 6) must therefore be expanded to include this sense.

Seng liang hsien (僧梁縣) 'Monk bridge County' is glossed as \*pivmur [非勿] (SS 37: 379). SS 35: 361 has no gloss but says that the 僧 sêng, from Middle Chinese \*səŋ, a transcription of Prakrit sang (\*[səŋ], corresponding to Sanskrit sampha) 'the community of Buddhist monks', corresponds to OKog \*piy [非], which evidently represents the first syllable of Sanskrit bhiksu 'Buddhist monk'. The word occurs in another glossed toponym, Seng shan hsien (僧山縣) 'Monk mountain County' (q.v.), but its gloss is corrupt on at least two counts and the errors are older than the Korvo Sa, which contains the same mistakes, so that toponym cannot be used to help elucidate the present Seng liang hsien. Whatever the original name really meant, it is clear that the translator understood the first syllable, \*piy [非], to mean 'monk (僧)' and the second, \*mur [勿], to mean 'bridge, roof ridge beam (梁)', for which there is a good Japanese cognate (see Chapter 6, s.v. OKog <sup>☆</sup>mur). That the latter word is continued in later names for the place indicates that the locality was noted for a particular bridge, thus securing this word for Old Koguryo.50

<sup>&</sup>lt;sup>48</sup> I would like to thank Jan Nattier for advice in connection with this identification. However, the interpretation of the Koguryo and any mistakes I may have made are my own.

<sup>&</sup>lt;sup>49</sup> The graphically identical modern character  $\pm$  is now normally read ren < MChi\*nyim.

<sup>&</sup>lt;sup>50</sup> In other words, whether or not the translator incorrectly parsed the Old Koguryo name as two words rather than one, he or his informant etymologized it as two words, and the apparent presence of an actual bridge only confirmed it. See s.v. Seng shan *hsien*. I would like to thank Michael Walter for his advice on this toponym—though again, the interpretation of the Koguryo, and any mistakes I may have made, are mine.

- Kung mu ta hsien (功木達縣) \*kunməw kar hsien, which is glossed as Hsiung shan shan (熊閃山) 'Bear evade mountain', i.e., 'Evadethe-Bear Mountain', has typical Koguryo OV syntax (SS 35: 361; SS 37: 379). The same word for 'bear' is found outside Koguryo, in Japanese *kuma*, from OJpn \*kuma ~ ☆kuma(t) [久末] (JDB 269) and Korean kom, from Middle Korean kom (from \*koma) Previously the Japanese and Korean words have been compared to the first two syllables of the Old Koguryo name, but this is incorrect, since the word #tar 'mountain' is well attested, leaving no transcription of the verb 'evade'. Moreover, an Archaic Koguryo word of the form \*kuma would have become Old Kogurvo \*kum, or perhaps \*kum, by regular internal phonological change (see Chapter 5). The transcription syllable's final  $\Rightarrow$ -n apparently was intended to represent gemination of the following <sup>☆</sup>m- due to the lack of the syllable \*kum in Middle Chinese, so the transcription as a whole should probably be interpreted as \*kumməwk. The word for 'bear' is therefore \*kum or, possibly, \*kun, and the word for 'to evade, escape, dodge (閃)' is <sup>☆</sup>məwk or perhaps \*əwk.<sup>51</sup>
- Fu jang *hsien* (斧壤縣) 'Axe land County' is glossed as \*üsina *hsien* [於斯內縣] (SS 35: 361; SS 37: 379). This may be parsed as <sup>☆</sup>ü [於] 'axe' plus the adjective-attributive suffix morpheme <sup>☆</sup>-si [斯];<sup>52</sup> \*na [內] is the well-attested word for 'land'.
- T'u shan *chün* (兔山郡) 'Hare mountain Commandery' is glossed as <sup>☆</sup>vsiγamtar [烏斯含達] (SS 35: 361; SS 37: 379). The word <sup>☆</sup>vsiγam [烏斯含] 'hare, rabbit (兔)'<sup>53</sup> has a clear cognate in Japanese and has been much studied (Kim 1985: 211-221); see Chapter 6. The word <sup>☆</sup>tar [達] 'mountain' is attested in many examples.
- An hsia *hsien* (安峽縣) 'Peaceful gorge County' is glossed as \*atśirfiaip ~ \*atśinaip *hsien* [阿珍押縣] (SS 35: 361; 37: 379); the latter is additionally glossed as 窮嶽 Ch'iung yüeh 'Poor Mountain'. The new Silla name An hsia *hsien* is important because it is an abbreviated phonetic imitation of the Koguryo name, evidently from a conservative dialect, confirming all other indications that OKog \*fiaip ~ \*aip [押] 'high mountain (嶽)' is derived from AKog \*γapma 'great mountain (大山)', the first syllable of which

<sup>&</sup>lt;sup>51</sup> Song (1999: 190) has \*koŋ (mok) meaning 'bear'.

<sup>&</sup>lt;sup>52</sup> Song (1999) has \*əs 'axe'.

<sup>&</sup>lt;sup>53</sup> Song (1999: 190) has \*osakam 'hare, rabbit'.

was very close to  $\Rightarrow \gamma aip$  [峽]. The first word of this toponym is \*fiatśir ~  $\Rightarrow atśin$  [阿珍] 'poor'.

- Niu ts'en *chün* (牛岑郡) 'Cow hill Commandery' is glossed as \*śutśiiy [首知衣] and as 牛嶽 'Cow crag' (SS 35: 361; 37: 379). The transcription 知衣 is clearly a scribal error for the well-attested word \*pafiiy ~ \*paiy [波衣] 'crag, high mountain'. It and \*śu 'cow, cattle' are loanwords; see the discussion in Chapter 8.
- Chang hsiang *hsien* (獐項縣) 'Roe-deer nape County' is glossed as \*kvsiyakuərtsi ~ \*kvsiyaχuərtsi [古斯也忽次] (SS 37: 379), the same gloss given to Chang k'ou *chün* (q.v. above). The other Silla names given are entirely unrelated to the Koguryo ones (SS 35: 361), but they do indicate that there were two distinct places, one a county and the other a commandery, with the same name. In the present instance, assuming the text is correct, the word  $\Box$  'mouth' is missing from the Chinese name.
- Ch'ang ch'ien ch'eng *hsien* (長淺城縣) 'Long shallow city County' is glossed as \*yaya [耶耶] and \*yaŋa [夜牙] (SS 35: 361; SS 37: 379). The Old Koguryo form \*yaya ~ \*yaŋa, glossed as 'long shallow', appears to be one word. However, since there is another problematic word for 'shallow' in the very next entry, while there is an unrelated (but well-attested and clearly glossed) Old Koguryo word for 'shallow' and also one for 'long', both with good CJK etymologies (q.v. Chapter 6), this entry is problematic.
- Ma t'ien ch'ien *hsien* (麻田淺縣) 'Hemp field shallow County', the new Silla Chinese name replacing what is said to be 'originally Koguryo' Lin tuan *hsien* (臨端縣) 'Overlook point County' (SS 35: 361-362), is also glossed as \*neyśapakuər ~ \* neyśapaҳuər [泥沙波忽] (SS 37: 379). In view of the preceding entry, and because of the absence of any examples that would clarify the considerable unclarity in both of them, it is not possible to parse this toponym with any certainty except for the word \*kuər ~ \*ҳuər [忽] 'walled city, fort (城)'. However, there is some phonetic imitation in the two Chinese names. The first syllable of the putative Koguryo name \*neyśapakuər, \*ney [泥] in this case corresponds to \*mai ~ \*mɛ: (Pul. 206) [麻] rather than \*ni ~ \*ney (see the similar variants among the transcriptions discussed s.v. Feng ch'eng *hsien*), while \*ten ~ dɛn [⊞] clearly corresponds to \*tan ~ \*t<sup>w</sup>an [端]

(written  $dash t^{hw}$ an [湍] in KS 56: 229). Here it would seem likely that the underlying form of the first syllable should be older, so that it should have had an initial \*m-, though not much more can be said about it due to the conflicting data. The phonetic imitations  $dash t^w$ an ~  $dash t^{hw}$ an, i.e., \*tan, of the second syllable, 田 (Central dialect MChi  $dash dash t^{hw}$ an, i.e., \*tan, of the second syllable, 田 (Central dialect MChi  $dash t^{hw}$ an) 'cultivated field', indicate that the word was pronounced \*tan in the archaic Northeastern Middle Chinese dialect. That brings up the Old Japanese word  $dash t^{g}$ ] (JDB 408) 'cultivated field (田)', and strongly suggests that the word has been borrowed from Northeastern Chinese 田 \*tan.

- Sung yüeh *chün* (松岳郡) 'Pine mountain Commandery' is glossed as \*pusvfiaip ~ \*busvkaip [扶蘇岬] (SS 35: 362; SS 37: 379 has no gloss). What appears to be the native Koguryo word for 'pine', \*ku [仇], occurs elsewhere (see s.v. Sung shan *hsien*). The present word, \*pusv ~ \*busv [扶蘇] 'pine', also written \*pusi ~ \*busi [夫斯] (see below), is attested in the Chinese classics and is a clear loan from Chinese.<sup>54</sup> This toponym is one of several in which OKog \*fiaip 'crag, high mountain (岳 ~ 嶽)' is transcribed \*kaip [岬].
- Juo chih t'ou ch'ih hsien (若只頭恥縣) \*niaktridəwtśi hsien, is unfortunately glossed only with partial phonetic imitations of the name (SS 37: 379), which show up in the new Silla name as well (SS 35: 362), so it is not known for certain what it means. The character 若 could also be read <sup>☆</sup>źak (the T'ang reading) in view of the alternate name \*śaikdəw [朔 頭] given in the gloss (in SS 37: 379). However, this would reflect a late, devoiced pronunciation of the T'ang reading. It is followed by yet another alternate reading, \*yidəw [衣頭], which reflects even later Sino-Korean phonology. While these readings do not provide evidence for the earlier reading of 若, they do suggest that the correct name may be 若頭縣 Juo t'ou hsien, the Koguryo part of which can be reconstructed as \*niakdəw—or better, as \*niaŋdəw, in view of the fact that [若] (Early MChi \*ñiak) is used to transcribe the Northeastern Middle Chinese form of the word 壤 (Early MChi \*ñiaŋ) 'earth, land' (see Chapter 4). The apparent connection of the place with Buddhism (it

<sup>&</sup>lt;sup>54</sup> The word occurs in the *Shih ching*, Ode 84: 山有扶蘇 "[on] the mountain is the *fu-su* [tree]." The same word occurs in Korean and has been used as evidence for a genetic relationship between Korean and Koguryo.

was located in the above Sung yüch *chün*, and the 佛日寺 Fo jih szu 'Buddha Sun Temple' was built in its territory, as mentioned in the following entry) suggests that the name may transcribe a Prakrit \*ñaŋdev, corresponding to Sanskrit *jñânadeva* 'wisdom god'.<sup>55</sup>

- At this point in the text of Chapter 35 of the *Samguk Sagi*, the words 第四葉 'page 4' suddenly occur, followed by a space and the story of how 佛日寺 Fo jih szu 'Buddha Sun Temple' was built in Juo chih t'ou ch'ih *hsien*, in Sung yüeh *chün* (SS 35: 362). This suggests a certain amount of cutting and pasting by Kim Pu-sik or others involved in the production of the received *Samguk Sagi* text. Since another account of the founding of a Buddhist temple occurs after the next mention of a page number (see below), the original source, which is not cited (at least, not in Chapter 35), is probably a Buddhist history or a guide to Buddhist holy places.
- Ch'ü yü ya (屈於押) is glossed as 紅西 'red west' (SS 37: 379).<sup>56</sup> Together with the previous transcription of the word for 'west' as <sup>\*</sup>γap ~ <sup>\*</sup>γəp [盒], this transcription \*kurifiap ~ \*kurüfiap ~ <sup>\*</sup>kuriaip ~ <sup>\*</sup>kurüaip [屈於押] provides further confirmation that Old Koguryo words written with the character 押 were pronounced with an initial that did not exist in the Middle Chinese dialect underlying the toponym transcriptions. It is clear that the word had a voiced velar or laryngeal fricative initial different from <sup>\*</sup>γ. The Old Koguryo words for 'west', 'crag', and 'cave', which are all written with the same characters, are thus to be reconstructed as \*fiaip. According to the gloss, the word \*kuri ~ \*kurü [屈於] means 'red'.
- K'ai ch'eng chün (開城郡) 'Open city Commandery' is glossed as ☆tawŋpiχuər [冬比忽] (SS 35: 362; SS 37: 379 has no gloss). This

<sup>&</sup>lt;sup>55</sup> I would like to thank Michael Walter for his learned remarks on Sanskrit in connection with this toponym. He is of course not responsible for any errors or mis-interpretations I may have committed.

 $<sup>^{56}</sup>$  SS 35: 362 gives as the new Silla name 江陰縣 'River female *hsien*'. The same name is given in KS and glossed 江西 'river west' (KS 56:229). These forms are the source of a putative OKog word 屈於 'river' widespread in the literature. In view of the existence of the very well attested OKog word \*mey [買] 'river', the SS 37 gloss 紅 'red' would appear to be correct here. Although there is another Old Koguryo word glossed in English as 'red', the Chinese glosses are quite distinctive. Moreover, considering the unclarity existing in early Japanese with respect to 'red' and 'yellow' (JDB 237), it is quite possible that OKog \*kuər is simply a relative or dialect reflex of the same word glossed as 'yellow'; cf. OKog \*kuər 'yellow (黃)'. Nevertheless, since there are no other occurrences of this word, its identity remains somewhat uncertain.

important city, modern Kaesŏng, is always referred to by its Chinese name in the Chinese histories. The Old Koguryo name is particularly significant because it contains a derived form, \*tawŋpi [冬比] 'open', the root of which also occurs, as \*tawŋ [冬] 'mountain pass'.

- Te wu *hsien* (德勿縣) <sup>★</sup>təkmur *hsien* (SS 35: 362; SS 37: 379) is not actually glossed, but the new Silla Chinese name 德水縣 Te shui *hsien* 'Virtue water County' is important because the second syllable, <sup>★</sup>mur [勿], is glossed as 'water', which is the attested Silla Korean word for 'water' and the ancestor of MKor *măr* and NKor *mur*). Since the well-attested Old Koguryo word for water is <sup>★</sup>mey, the translation of <sup>★</sup>mur as 'water (水)' is undoubtedly due to the fact that the scholars responsible understood the word as if it were Korean, not Old Koguryo. This is one of several clear examples disproving Kim's theory (1985: 111) that Koguryo scholars did the work of name collecting and translating for Silla.
- At this point in the text the words 第十一葉 'page 11' occur, followed by a space and the story of how 興王寺 Hsing wang szu 'Flourishing King Temple' was built in Te shui *hsien (SS* 35: 362).
- Chin lin ch'eng *hsien* (津臨城縣) 'Ford overlook city County' is glossed as \*vfiakuər ~ ☆vaχuər [烏阿忽] (SS 35: 362; 37: 379). The new Silla name 臨津縣 'Overlooking the ford County' simply omits the word 城 'city' and reverses the Koguryo OV syntax to the VO of Chinese. This toponym supplies <sup>★</sup>v, 'ford', one of several attestations of this word, plus the verb \*fia ~ <sup>★</sup>a [阿] 'to look down at, overlook'.
- Hsüeh k'ou *chün* (穴口郡) 'Cave mouth Commandery' is glossed as \*kaipikutsi ~ \*kaippikutsi [甲比古次] (SS 35: 362; SS 37: 379). The word \*kaipi ~ \*kaippi [甲比] 'cave, cavern, hole (in a mountain)',<sup>57</sup> also attrested in another toponym, has a good Japanese cognate, as does the word \*kutsi [古次] 'mouth. See Chapter 6.
- Kao mu ken hsien (高木根縣) 'High tree root County' is glossed as ☆tarirtśiəm [達乙斬] (SS 37: 379). OKog ☆tarir [達乙] is simply a transcription of OKog \*tar 'high' with a redundant transcription of the syllable-final \*-r, as seen in many other examples. It is identical

<sup>57</sup> Song (1999: 190) has \*kappi/\*kap (六).

to the well-attested OKog word \*tar [達] 'mountain'. OKog \*tśiəm [斬] 'tree root' is also attested, as 'root', in one other toponym. The text adds 海島也 'It is an island in the sea' (SS 35: 362).

- Shui ku ch'eng hsien (水谷城縣) 'Water valley city County' is glossed as ☆meytanҳuər [買旦忽] (SS 37: 379). All three words of this toponym, ☆mey [買] 'water', ☆tan [旦] 'valley',<sup>58</sup> and ☆ҳuər [忽] 'walled city, fort', are well attested.
- Shih ku *hsien* (十谷縣) 'Ten valley County' (SS 37: 379) ~ +谷城縣 Shih ku ch'eng *hsien* (SS 35: 362) 'Ten valley city County' is glossed as \*təktankuər ~ \*təkt<sup>w</sup>ənҳuər [德頓忽] (SS 37: 379) and also imitated phonetically in the new Silla name 鎮湍縣 \*tirtan *hsien* ~ \*tint<sup>hw</sup>an *hsien* (SS 35: 362; cf. KS 58: 268). In view of the divergent coda of the Silla imitation \*tir ~ \*tin [鎮], it appears that the actual pronunciation of the numeral \*tək [德] 'ten' may have been simply \*tə. It is one of four known Old Koguryo numerals.<sup>59</sup> OKog \*tan ~ \*t<sup>w</sup>ən [頓] ~ \*t<sup>hw</sup>an [湍] 'valley' is well attested, in several different transcriptions.
- Tung yin hu (冬音忽) \*tawŋimҳuər (SS 37: 379)<sup>60</sup> is glossed as Ku chien ch'eng (鼓監城) 'Drum supervise city' (SS 37: 379). The word \*tawŋ [冬] means 'drum'; \*im [音] 'to supervise, inspect, imprison' is a verb. The collocation is in OV syntactic order.
- Tao lieh *hsien* (刀臘縣) \*tawrap *hsien* is glossed as Chih yüeh ch'eng (雉嶽城) 'Pheasant crag city' (SS 37: 379). On the basis of Old Japanese \*tew ~ \*tewri 'bird; chicken', as well as Old Koguryo \*fiaip ~ \*aip 'high mountain', \*tawrap ~ \*tawlap<sup>61</sup> must be parsed as \*tawr ~ \*tawl 'pheasant (雉)' and \*fiaip 'high mountain (嶽)'. The form of the latter word in this toponym is significant because it is a clear transcription of a zero onset.
- Pao ch'ih *chün* (瀑池郡) 'Rough-water Commandery' is glossed as \*nameykuər ~ \*n<sup>w</sup>əymeyyuər [內米忽] (SS 35: 362; SS 37: 379;

<sup>58</sup> Song (1999: 190) has \*tan/\*tun 'valley'.

<sup>&</sup>lt;sup>59</sup> Song (1999: 190) has \*tək 'ten'.

<sup>60</sup> The variant transcription Tung shan hu *chün* (冬彡忽郡) ☆tawŋ śaim χur *chün* (SS 35: 362) is apparently a mistake; one of the later names imitates the sound of 音 ☆im.

<sup>&</sup>lt;sup>61</sup> This entry is the source of the ghost-word \*sirap 'white', which seems to have arisen via a modern scholar's handwritten copy of the character  $\mathcal{T}$  and misuse of the later toponyms. See the discussion of  $\square$  in Chapter 4.

KS 58: 265). OKog \*namey ~ \*n<sup>w</sup>əymey corresponds to the Chinese gloss 瀑池 'rough water, such as the pool below a waterfall'.<sup>62</sup> There are two 'alternate' glosses, 池城 'Pool City' and 長池 'Long Pool'. The first appears to be an abbreviated version of Paoch'ih; the second reveals that somebody involved in the toponym collection and translation activity knew another etymology for the toponym, one involving an Old Koguryo word \*namey 'long', a homonym or near-homonym of OKog \*namey 'rough water'.

- Hsi ch'eng *chün* (息城郡) 'Rest city Commandery' is glossed as \*kankuər ~ \*xanxuər [漢忽] and as \*nakuər ~ \*nəyxuər [乃忽] (SS 35: 362; SS 37: 379). It is not possible to choose which is the correct Old Koguryo form.
- Hsiu yen *chün* (鵂嵒郡) 'Owlet crag Commandery' (SS 37: 379 has 鵂鶹城 Hsiu liu ch'eng 'Owlet city') is glossed as \*tsupafiy ~ \*tsupaiy [祖波衣] (SS 35: 362; SS 37: 379). OKog \*pafiiy ~ \*paiy [波衣] is a well-known word for 'crag, high mountain (嵒)', so \*tsu [祖] means 'owlet (鵂)'.
- Wu ku *chün* (五谷郡) is glossed as <sup>☆</sup>utsit<sup>h</sup>ənχuər [于次呑忽] (KS 58: 268).<sup>63</sup> This contains the numeral \*ütsi ~ <sup>☆</sup>utsi [于次] 'five'<sup>64</sup> and the noun \*tan ~ <sup>☆</sup>t<sup>h</sup>ən [呑] 'valley'.
- Chang sai *hsien* (獐塞縣) 'Roe-deer border County' is glossed as \*kvśiü [古所於] (SS 35: 363 no gloss; SS 37: 379). The word for 'roe-deer', here \*kvśi [古所], occurs twice.<sup>65</sup> OKog \*ü [於] 'border' could perhaps be etymologically connected to its homonym \*ü [於] 'crosswise' via the sense of a border as a crossing.
- Ch'ü ch'eng *chün* (取城郡) 'Take city Commandery' is glossed as \*tawŋkuər ~ \*tawŋχuər [冬忽] (SS 37: 379SS; 35: 363 has no gloss). The word \*tawŋ ~ \*tawŋ [冬] means 'to take', and \*kuər ~ \*χuər [忽] 'walled city, fort'.
- T'u shan *hsien* (土山縣) 'Earth mountain County' is glossed as <sup>☆</sup>siktar [息達] (SS 35: 363), but in view of the different entry-word

<sup>62</sup> Song (1999: 189) has \*nami (池).

<sup>63</sup> The text of the SS is corrupt here, reading 弓次云忽 (SS 37: 379).

<sup>&</sup>lt;sup>64</sup> This has been much discussed, along with the other numerals; it is generally agreed that the word is related to NJpn *itsu* < OJpn  $\pm$ itu 'five'. Song (1999: 190) has \*uc 'five'.

<sup>&</sup>lt;sup>65</sup> Ch'oe reconstructs *kase* (2000: 134); cf. Song (1999: 190) \*kosaya /\*kosoə.

form and two other phonetically varying glosses of the first syllable in Chapter 37, it is not possible to identify it securely.<sup>66</sup> The second syllable is the well-attested word \*tar [逵] 'mountain'.

- T'ang yüeh *hsien* (唐嶽縣) 'Empty crag County' is glossed as \*kaχwaaip [加火押] (SS 35: 363; SS 37: 379). This may be parsed as \*kaχwa [加火] 'T'ang (i.e., China); empty' and \*fiaip ~ \*aip [押] 'crag, high mountain'. The word \*kaχwa is reminiscent of the usual Old Japanese word for 'China', \*kara, though the phonology is obviously problematic. If the comparison is valid, the transcription character 火 is a mistake, probably for 烙 MChi \*lak, one of the usual transcriptions of the second syllable of the name Kara (e.g., KS 57: 243, among many other examples of the name),<sup>67</sup> the first syllable generally being written with the character 加 MChi \*ka or one of its derivative homonyms. See also the discussion of OKog \*kara (meaning uncertain) under Shou ch'eng *chün.*<sup>68</sup> For the present, the first part of this toponym remains problematic.
- Sung hsien hsien (松峴縣) 'Pine precipice County' is glossed as \*pusipafity hsien ~ \*busipaty hsien ~ \*pusipaty hsien [夫斯波衣 縣] (SS 35: 363) and as \*kuśi hsien ~ \*guśi hsien [仇史峴] (SS 37: 379). In the latter gloss, \*kuśi ~ \*guśi appears to consist of \*ku ~ \*gu [仇] 'pine' plus \*śi [史]. As in several other cases the character 史 represents the syllable \*li and is used here to transcribe the syllable-final liquid, \*r. The word for 'pine' in this gloss, \*kur, thus appears to be related to other Koguryo 'tree' words, so this seems

<sup>66</sup> The main entry is Chin ta [今達] \*kimtar glossed with the two alternates Hsin ta [薪達] \*sintar and Hsi ta [息達] \*siktar (SS 37: 379). The glosses seem to be rough phonetic imitations of each other and possibly even the main entry as well.

<sup>&</sup>lt;sup>67</sup> The *KS* contains much valuable information on Kara.

 $<sup>^{68}</sup>$  A still later name (not the 'new Silla name') is 中和縣 Chung ho *hsien* 'Middle Peace County' (*KS* 58: 275). It is perhaps this which has inspired Park Pyong-ch'ae, who suggests that the transcription character  $\mathcal{K}$  should be read 'semantically', in Korean (NKor *pur* < MKor *pur*'fire'), as in the word for 'green' (q.v.), giving the reading \*kapur for 'T'ang (China)'. He argues that this represents an Old Korean form \*kappil, meaning 'Middle metropolis ~ village', and means something like 'central place' thus it could be a calque of the usual interpretation of the traditional name of China, 中國 'the Middle Kingdom' (Park 1990: 190-191). The word would thus be an Old Korean loan into Old Koguryo. All this is doubtful, however. If a Korean connection were valid, it would undoubtedly be due to the process of transcription and translation, which was carried out by Silla Koreans under official Silla auspices, and then it would be difficult to explain retention of the Old Koguryo word for 'high mountain' in the toponym.

to be a genuine Old Koguryo word. The word \*pusi ~ \*busi69 [夫斯] in the other gloss also does mean 'pine', and \*pafity~\*paiy [波衣] does indeed mean 'precipice (峴)' (it is usually glossed as 'crag, high mountain'), but the name is composed entirely of loanwords, so it appears that this toponym is either an early Silla Korean name or a Koguryo name borrowed from a substratum language.

## 朔州 SHUO CHOU

Niu shou chou (牛首州) 'Cow head Prefecture' is glossed as \*vkanna ~ \*vkənnəy [烏根乃] (SS 35: 363; 37: 379) and as \*vkirna ~ \*vkinnəy (KS 58: 263). It is also glossed as \*sutsiniak [首次若], a name composed of Korean elements-including at least one early Chinese loanword, ☆niak [若] 'prefecture, province (州)' (see Chapter 8)<sup>70</sup>—given to the place in 670 A.D. (SS 35: 363), after the Silla defeat of Koguryo. It is thus a Silla Korean name, though since the word \*śu [首] 'ox, cow' is attested in another toponym it is possible that Silla took the name from a Han substratum language. Old Koguryo <sup>☆</sup>v [烏] means 'cow', \*kan (or perhaps \*ka)<sup>71</sup> ~ ☆kən [根] ~ \*kir ~ ☆kin [斤] means 'head', and \*na ~ ☆nəy [乃] means 'prefecture, province (州)'. OKog \*na is widely attested in the meaning 'land, earth', so the Silla Korean word corresponding to it, \*niak [若], also means 'land, earth'. This is confirmed by internal comparison within Chinese (see Chapter 4). The one remaining problem is the word for 'head'. Comparison with Japanese indicates that \*ka(n) corresponds well to the Old Japanese root, \*ka, of words for 'head', and the word could be etymologically related to the general Puyo-Koguryoic root for 'chief, ruler'. However, the alternate reading \*kir is problematic for this explanation and would seem rather to be related to the Old Japanese root for 'lord, ruler, king', \*ki-. See chapters 2 and 6. This problem requires further research.

 <sup>&</sup>lt;sup>69</sup> Song (1999: 190) has \*pusa/\*puso.
<sup>70</sup> Perhaps 次☆tsi 'head', from earlier \*tu-i, has also been borrowed from an Old Chinese form of 頭(MChi ☆duw) 'head'

<sup>&</sup>lt;sup>71</sup> Since Old Koguryo apparently did not allow gemination, the final \*n of \*kən could be a parasitic accretion, as seen in a few other transcriptions; the same might be true of the KS transcription.

- Fa li ch'uan *hsien* (伐力川縣) \*Buarlik river County is glossed as 綠驍縣 Lü hsiao *hsien* 'Green brave County' (SS 35: 363; SS 37: 379); the new Silla name is 春州 Ch'un *chou* 'Spring Prefecture' (SS 35: 363). This entry is problematic because of the hybrid names in which the parts do not correspond one to one, and because 驍 'brave' is given in another toponym as \*kir ~ \*kin [斤]. The syllable \*buar (or possibly \*buarlik) 'green' may be a loanword from Old Korean, or simply a Korean word. See the discussion below, s.v. Lin feng *hsien*.
- Heng ch'uan *hsien* (橫川縣) 'Crosswise river County' is glossed as \*üsimey ~ \*isimey [於斯買] (SS 37: 379). This can be parsed as \*üsi ~ \*isi [於斯],<sup>72</sup> composed of <sup>☆</sup>ü ~ \*i [於] 'crosswise (橫)' plus the adjective-attributive suffix <sup>☆</sup>si [斯], and <sup>☆</sup>mey [買] 'river (川)'.
- Nai t'u *chün* (奈吐郡) \*nat<sup>h</sup>v *chün* ~ \*nayt<sup>h</sup>v *chün* is glossed as 大堤 Ta t'i 'Big embankment' (SS 37: 379). The word \*na ~ \*nay [奈] thus corresponds to 'big (大)' and \*tv ~ \*t<sup>h</sup>v [吐] corresponds to 'embankment, dike, dam (堤)'. The unaffricated onset of the second syllable indicates it is a late loanword, probably from Middle Chinese. Since the T'ang readings of 奈 are \*<sup>n</sup>da ~\*<sup>n</sup>day, nearly homonyms of 大 \*da ~ \*day 'big', this toponym and its gloss are undoubtedly both Chinese.
- Ch'ing feng hsien (清風縣) 'Clear breeze County' is glossed as \*śamyiaryi hsien [沙熱伊縣] (SS 35: 363). The words in this name are not attested elsewhere, so it is not possible to parse it without reference to external etymologies (for which see Chapters 6 and 8). In addition to its primary sense, 'clear', the gloss 清 NMan *qîng* has the secondary sense 'cool'. The character is easily confused with 清 NMan *qìng* 'cool', especially in a hastily written text (the dots on the left of each character are connected together, making the two identical). In the present instance, it appears that the sense 'cool', rather than 'clear', is indicated, due to the regularly corresponding OJpn equivalent \*samu- ~ \*tsamu- [左牟] 'cool, cold (寒 · 冷)'. As the first two syllables of the Koguryo name thus correspond to the first syllable of the Chinese name, that leaves \*i ~ \*yi [伊] as 'breeze, wind (風)'.

<sup>72</sup> Song (1999: 190) has \*əs 'crosswise'.

- Shan ku *hsien* (善谷縣) 'Good valley County' is said to have originally been Koguryo <sup>☆</sup>meykəwk *hsien* [買谷縣] (SS 35: 363). The first word, <sup>☆</sup>mey [買], is thus glossed as 'excellent, good'. Although the second word is Chinese in both names, the graphic similarity (especially in bad handwriting, which was a serious problem in the text of the *Samguk Sagi*) of Chinese 谷 'valley' to Old Koguryo 呑 (\*tan ~ <sup>☆</sup>t<sup>h</sup>ən) 'valley', seen in variants elsewhere—precisely this pair of variants occurs in a gloss (*KS* 58: 271)—suggests this is a textual error. The original Old Koguryo name may be restored as \*meytan ~ <sup>☆</sup>meyt<sup>h</sup>ən [買呑].
- Yü ma *hsien* (玉馬縣) 'Jade horse County' is glossed as \*kvsimai *hsien* [古斯馬縣] (SS 35: 363; SS 37: 379; KS 57: 252).<sup>73</sup> In view of the good etymological connections with other languages in the vicinity, it is clear that the first word is \*kvsi [古斯], which may be parsed as \*kv 'jade' plus the adjective-attributive suffix \*si.<sup>74</sup> The word for 'jade' here, and in other languages of Eastern Eurasia, is a very old culture word of unknown origin (see Chapter 8). The word \*ma ~ \*mai [馬] 'horse'<sup>75</sup> is a late loan from Chinese, but see also the Old Koguryo word \*meru 'colt'.
- Lin feng *hsien* (鄰豐縣) 'Neighbor prosperity County' is glossed as \*ibuarkey [伊伐支] (SS 35: 363; SS 37: 380). This entry is problematic. In addition to the difficulty of parsing it, the glosses appear to be unrelated to the Silla Chinese name. The reading of the final syllable [支] as \*key instead of \*tśi is confirmed by the toponym \*ipurγey ~ \*yiχwaγey [伊火兮], glossed as 綠武 'Green martial' (KS 57: 252).<sup>76</sup> OKog \*kir ~ \*kin (斤) 'bravery; spirited horse, charger (驍)' corresponds here to \*γey [兮]<sup>77</sup> 'military, martial (武)', confirming both the identity of the latter two entries, and by extension the reading \*key [支]. That leaves \*yibuar [伊伐] ~

 $<sup>^{73}</sup>$  Chapter 35 has Wang ma *hsien* (王馬縣) 'King horse County' (SS 35: 363), but in view of the KS reading with 玉 'jade' and the good etymology for the Koguryo word corresponding to it, this must be a scribal error.

<sup>&</sup>lt;sup>74</sup> Song (1999: 190) has \*kos 'jade'.

<sup>75</sup> Ch'oe (2000: 135) reconstructs this as ma 買 'horse (馬)'.

<sup>&</sup>lt;sup>76</sup> In this transcription the character 火 'fire' is to be read 'semantically' as \*pur, as usual in Silla Korean. Accordingly, 伊火兮 \*yiχwaγey actually is to be read \*ipurγey. The first character of the variant 自伐支 \*dzibuartśi ~ \*dzibuarke (SS 37: 380) is undoubtedly a graphic error for 伊 \*yi.

\*ipur [伊火], which corresponds to the other occurrence of the word for 'green (綠)', \*buar [伐] (see above, s.v. Fa li ch'uan *hsien*), though the initial vowel here (or the lack of one in the other transcription) is problematic. In view of the Silla Korean semantic transcription in one attestation it appears that the word for 'green' here may be Old Korean or a loan from Old Korean. The very close proximity of the two places both to each other and to the Silla home territory on the map (Toh 1987: 38, 40-41, 64)<sup>78</sup> confirms this. The problems with this entry appear to have been noticed at the time of the compilation of the *Samguk Sagi*, which comments at the end of the entry, 今未詳 'Now unclear' (*SS* 35: 363), though it is now unclear to what, exactly, this remark refers.

- Shen ch'uan *hsien* (深川縣) 'Deep river County' is glossed as \*puksimey ~ \*buksimey ~ \*busimey [伏斯買] (SS 37: 379). This may be parsed as \*puksi [伏斯],79 consisting of \*puk [伏] 'deep' plus the adjective-attributive suffix \*si [斯], and 買 \*mey 'water, river'.
- Yang k'ou *chün* (楊口郡) 'Willow mouth Commandery' is glossed as \*yairkuərtsi ~ \*yawinχwərtsi [要隱忽次] (SS 37: 379); \*yair ~ \*yawin [要隱] corresponds to 'willow' and \*kuərtsi ~ \*χwərtsi [忽次] to 'mouth'. The first word may be further analyzed as \*ya ~ \*yaw [要] 'willow' plus the genitive-attributive marker \*ir ~ \*in [隱], exactly parallel to the structure of the toponym containing the Koguryo word for 'seven' (see Ch'i ch'ung *hsien*). For further discussion of OKog \*yair ~ \*yawin [要隱] and the genitive-attributive marker \*ir ~ \*in [隱] see Chapter 6.
- Chu tsu hsien (豬足縣) 'Pig foot County' is glossed as <sup>★</sup>vsiγ<sup>w</sup>əy [烏 斯迴] (SS 37: 379). This may be parsed as <sup>★</sup>vsi [烏斯], consisting of <sup>★</sup>v [烏] 'pig' plus the adjective-attributive suffix <sup>★</sup>si [斯], and <sup>★</sup>γ<sup>w</sup>əy [迴] 'foot (足)'. The initial <sup>★</sup>γ<sup>w</sup> of <sup>★</sup>γ<sup>w</sup>əy [迴] must be interpreted as <sup>\*</sup>fi, as in the Old Koguryo word <sup>\*</sup>fiaip 'high mountain, crag', which has numerous transcriptions to support it. The medial glide <sup>\*</sup>w seems generally not to have been present in Korean Pen-

<sup>&</sup>lt;sup>78</sup> It should be noted that the borders drawn on Toh's maps are approximations at best. The *Samguk Sagi* and other sources generally do not tell us which ethnic group speaking which language was to be found in a specific 'city' or other named locality. The only explicit information given by the sources, as a rule, is the location of a toponym within a given administrative, geographically organized unit.

<sup>&</sup>lt;sup>79</sup> Song (1999: 190) has \*poksa (深).

insular pronuciation, as shown by variant transcriptions of other words. The transcription thus represents OKog \*fia 'foot'.

- Wang ch'i hsien (王岐縣) 'King mountain-pass County' is glossed as \*keytsitəiŋ ~ \*keytsitɛyŋ [皆次丁] (SS 37: 364). The word for 'king' is attested elsewhere as \*key [皆], so the expected gloss for the following two syllables would be 'mountain pass (岐)'. However, the syllable \*tsi [次] is a derivational morpheme which does not occur in the first syllable in any attested examples. Moreover, the word for 'mountain pass' is separately attested as \*tawŋ [冬] (see below), so \*təiŋ ~ \*tɛyŋ [丁] here must mean 'mountain pass'. The word \*keytsi [皆次] therefore is 'king',<sup>80</sup> and must be connected to the Puyo-Paekche collocation \*konkitśi ~ \*konikitśi 'great king' (Kôno 1987), a compound consisting of the Han-Paekche word \*kon(i) 'great'<sup>81</sup> and the Puyo-Paekche word \*kitśi 'king'. It would appear that \*keytsi [皆次] is a Puyo-Paekche development of the common Puyo-Koguryoic word that is the source of OKog \*key [皆] 'king'. See Chapter 6.
- San hsien *hsien* (三峴縣) 'Three precipice County' is glossed as \*mirpayey [密波兮] (SS 37: 379). This important entry consists of the numeral \*mir [密] 'three' and \*payey [波兮] 'precipice'. The latter is an important variant transcription of the well-attested word for 'crag, high mountain', which is usually written \*pafity [波衣].
- K'uang<sup>82</sup> ch'uan *chün* (狂川郡) 'Wild river Commandery' is glossed as \*yarmey ~ \*yalirmey [也尸買] (SS 37: 379), which may be parsed as \*yar ~ \*yalir [也尸] 'wild' and \*mey [買] 'river'. On the phonology of the transcription character 尸 see Chapter 4; on the etymology of the Old Koguryo word for 'wild' see Chapter 8.
- Ta yang kuan *chün* (大楊管郡) 'Big willow tube Commandery' is glossed as \*makirfiaip ~ \*makinaip [馬斤押], which may be parsed as \*makir ~ \*makin [馬斤] 'big willow (大楊)' and \*fiaip ~

<sup>80</sup> Ch'oe (2000: 135) reconstructs kəse 皆次 'king'.

<sup>&</sup>lt;sup>81</sup> Since  $\Rightarrow$ kon 'great' has a good Korean etymology, it would appear to derive from the Han Paekche substratum language, a relative of Silla Korean (Kôno 1987). Kôno is apparently unaware of the transcriptions of \*kitsi 'king' in the *Samguk Sagi* toponyms; his article suggests that the whole word is Han-Paekche. Several other Paekche words discussed by him appear to be hybrids of the same sort.

 $<sup>^{82}</sup>$  In the sources the first character is written 2, a word for an animal of uncertain identification, but this is an ancient scribal error for 2. See Chapter 8.

\*aip [押] 'tube'. The first word looks as if it were translated into Chinese as a calque, so its constituents would be identified as \*ma [馬] 'big' and \*kir ~ \*kin [斤] 'willow, poplar, alder, etc.' But OKog \*kir is well-known as the word for 'tree, wood', and the gloss 'big willow (大楊)' would seem to refer not to a large tree but to a particular kind of tree, perhaps a variety of willow. The word \*makir ~ \*makin [馬斤] thus should be glossed as 'a kind of tree'. See the discussion of \*fiaip 'tube' and \*kaipi ~ \*kaippi [甲比] ~ \*kaip [甲] 'cave, cavern, hole (in a mountain) (穴)' in Chapter 6.

- Wen hsien *hsien* (文峴縣) 'Letter precipice County' is glossed as \*kirpafiey ~ \*kinlirpayey [斤尸波兮] (SS 37: 380). This may be parsed as \*kir ~ \*kinlir [斤尸] 'letter, writing, streaks' and \*payey [波兮] 'precipice'. Both words have non-Japanese-Koguryoic cognates and are clear loans in one direction or the other. See the discussion in Chapter 8.
- Mu ch'eng *chün* (母城郡) 'Mother city Commandery' is glossed as \*yatsikuər ~ <sup>a</sup>yatsiχuər [也次忽] (SS 37: 380). The word <sup>a</sup>yatsi [也次] thus means 'mother'.
- Ch'i ch'eng *chün* (岐城郡) 'Mountain-pass city Commandery' is glossed as \*tawŋsikuər ~ \*tawŋsiχuər [冬斯忽] (SS 35: 364). The word \*tawŋsi [冬斯] may be parsed as \*tawŋ [冬] 'mountain pass' plus the adjective-attributive suffix \*si [斯].
- Shui ju *hsien* (水入縣) 'Water enter County' is glossed as \*meyi *hsien* ~ <sup>☆</sup>meyyi *hsien* [買伊縣] (SS 37: 380). The first word, <sup>☆</sup>mey [買] 'water', is well attested, so the following verb, \*i ~ <sup>☆</sup>yi [伊] 'to enter' is clear. The latter has elicited many etymologies, on which see Chapter 8.
- Ch'ih mu *hsien* (赤木縣) 'Red tree County' is glossed as \*śapiykir ~ \*śapiykinir [沙非斤乙] (SS 37: 380; KS 58: 263). The first word, \*śapiy [沙非] 'red', is clearly identifiable because the same word is attested in a different transcription, \*śabu [沙伏] (see above).<sup>83</sup> The word for 'tree' is attested in several other transcriptions, all monsyllabic, mostly written \*kir ~ \*kin [斤]. The form \*kinir [斤乙], read in the Korean Peninsula area as \*kir ~ \*kirir (see

<sup>83</sup> Song (1999: 190) has \*sapok/\*sapi (赤).

Chapter 4), embodies a redundant transcription of the coda to indicate clearly that the word written  $*kir \sim *kin [fr]$  was to be read \*kir, not \*kin. The transcription thus represents the words \*sapiy 'red' and \*kir 'tree'.

- Chu lan hsien *hsien* (豬闌峴縣) 'Pig barrier precipice County' ~ Chu shou hsien *hsien* (豬守峴縣) 'Pig guard precipice County' is glossed as \*vseŋpafiy ~ \*vsayŋpaiy [烏生波衣] (SS 35: 364; 37: 380). The word \*v [烏] 'pig' is attested elsewhere in the corpus, as is \*pafiiy ~\*paiy [波衣] 'precipice'.<sup>84</sup> The two glosses of the word seŋ ~ \*sayŋ [生]—'barrier, railing (闌)' and 'to guard, keep (守)' —indicate the same semantic field, one nominal and the other verbal.<sup>85</sup> Since the second gloss has Koguryo OV syntax, it is probably closer to the original.
- Ch'ien ch'eng *chün* (淺城郡) 'Shallow city Commandery' is glossed as \*piriarkuər ~ \*piriarχuər [比烈忽] (SS 35: 364; SS 37: 380). The word \*piriar [比烈] thus means 'shallow'.
- Lan shan *hsien* (蘭山縣) 'Orchid mountain County' is glossed as \*śayktar ~ \*siayktar *hsien* [昔達縣] (SS 35: 364). OKog \*tar [達] is 'mountain', so \*śayk ~\*siayk [昔] means 'orchid'.
- Ching shan *hsien* (菁山縣) 'Leek-blossom mountain County' is glossed as \*kakeytar *hsien* ~ <sup>☆</sup>katśitar *hsien* [加支達縣] (SS 35: 364). This is neatly parsed into \*kakey ~ <sup>☆</sup>katśi [加支] 'leekblossom' and <sup>☆</sup>tar [達] 'mountain'. The phonetic value of the second character, 支, is clear due to parallel readings; see the discussion of the word \*kir ~ <sup>☆</sup>kin [斤] 'brave (驍); <sup>☆</sup>key [支] ~ <sup>☆</sup>γey [兮] 'military, martial (武)', and the following entry.
- Yü chih t'un (於支呑) \*ükeytan ~ \*ikeytan ~ \*ükit<sup>h</sup>ən is glossed as 翼谷 Yi ku 'Wing Valley' (SS 37: 380) and 羽谷縣 Yü ku hsien

<sup>84</sup> Song (1999: 190) has \*osa / \*osayŋ meaning 'pig'.

<sup>&</sup>lt;sup>85</sup> The word's phonetic identity and semantic closeness to the well-attested Chinese loanword OKog \*śeŋ 'walled city, fort (城)' (see Chapter 4) suggests this is a Koguryo-internal semantic development from it.

'Wing Valley County' (SS 35: 366). The meaning of OKog \*tan ~  $^{*}t^{h}$ on [吞] 'valley' is firmly established. The reading of the first word, 於支 'wing', as \*ükey ~ \*ikey (rather than \*ütśi) is confirmed by the new Silla name, which entails a Chinese phonetic imitation, \*yikkey [翊谿], of the old name; cf. the discussion in Chapter 4. Unfortunately, the gloss too is simply a phonetic imitation of the first part of the Old Koguryo name, the meaning of which is thus unknown.

- Ching ch'üan *chün* (井泉郡) 'Well spring Commandery' (SS 35: 365) ~ Ch'üan ching *chün* (泉井郡) 'Spring well Commandery' is glossed as \*irmey (~ \*ürmey) ~ \*üirmey [於乙買] (SS 37: 380; KS: 270). The same collocation \*irmey (~ \*ürmey) ~ \*üirmey [於乙買], 'spring water, well' occurs verbatim in another toponym and is also confirmed by an Old Japanese transcription; see Kuo yüan ch'eng and Ch'üan ching k'ou *hsien* above, and the discussion in chapters 2 and 6. The Old Koguryo is clearly to be parsed as \*ir ~ \*ür ~ \*üir [於乙] 'spring, well' plus \*mey [買] 'water'.
- Suan shan *hsien* (蒜山縣) 'Garlic mountain County' is glossed as \*meyrtar *hsien* ~ <sup>☆</sup>meylirtar *hsien* [買尸達縣] (SS 35: 365). This is clearly to be parsed as \*meyr ~ <sup>☆</sup>meylir [買尸] 'garlic'<sup>86</sup> and <sup>☆</sup>tar [達] 'mountain'. See the discussion in Chapter 8.
- Sung shan *hsien* (松山縣) 'Pine mountain County' is glossed as \*pusitar *hsien* ~ \*busitar *hsien* [夫斯達縣] (SS 35: 365), which is to be parsed as \*pusi ~ \*busi [夫斯] 'pine' plus \*tar [達] 'mountain'. This word for 'pine', also found in Korean, is ultimately a loan from Chinese; see s.v. Sung yüeh *chün*.
- Tung hsü hsien (東墟縣) 'Eastern mound County' is glossed as \*katśikir ~ \*katśikin ~\*katikin [加知斤] (SS 37: 380). OKog \*kati ~ \*katśi [加知] 'east' may be identified here because it has an excellent Old Japanese etymology (see Chapter 6). That leaves the word \*kir ~ \*kin [斤] 'mound; ruins of a city', which could be etymologically connected to Puyo-Paekche \*ki [己] 'walled city, fort (城)', a verbatim borrowing into Old Japanese and probably the same word as OKog \*kuər, from Archaic Koguryo \*kuru 'walled city, fort (城)'. See the discussion in Chapters 2 and 6.

<sup>86</sup> Song (1999: 190) has \*mayl 'garlic'.

## 溟州 MING CHOU

- Ching shan *hsien* (旌善縣) 'Banner Excellent County' is glossed as \*miŋmey *hsien* [仍買縣] (SS 35: 365).<sup>87</sup> SS 37 has \*nəymey *hsien* [乃買 縣] (SS 37: 380, without any gloss), but this must be a graphic error for the version in SS 35 because the KS entry gives the 'contemporary' name (今名) as Ming *chou* (冥州) 'Dark Prefecture' (KS 58: 271); the first syllable, 冥 LMC \*myiayŋ (Pul. 216), is a clear phonetic imitation of the first syllable of the Old Koguryo name, \*miŋ [仍] 'banner'. The word 買 \*mey 'excellent, good' is attested in one other toponym (see Shan ku *hsien* above) and in Archaic Koguryo.
- Lü wu *hsien* (綠武縣) 'Green martial County' is glossed as \*ipuryey *hsien* ~ \*yix<sup>w</sup>ayey *hsien* [伊火兮縣] (SS 35: 365; KS 57: 252). This name may be parsed as \*ipur ~ \*yix<sup>w</sup>a [伊火] 'green' and \*key ~ \*yey [兮] 'martial, military'. For the Silla Korean 'semantic' reading of 火 'fire' as \*pur (MKor *pŭr*) and discussion of other citations of the word for 'green', see s.v. T'ang yüeh *hsien*, Fa li ch'uan *hsien*, and Lin feng *hsien*.
- Yeh ch'eng *chün* (野城郡) 'Wild city Commandery' is glossed as \*yarkuər ~ \*yalirҳuər [也尸忽] (SS 35: 365; SS 37: 380 has 也 尸忽郡, but no gloss). See the discussion of \*yar ~ \*yalir [也尸] 'wild' in Chapter 8.
- Chen an *hsien* (真安縣) 'True peace County' is glossed as 助欖縣 <sup>\*</sup>dźilam *hsien* (SS 35: 365; SS 37: 380 has 郡 chün 'Commandery'), the latter being glossed in turn with the alternate reading <sup>\*</sup>dzəylam [才攬] (SS 37: 380). Although this entry does not provide any actual glossed words, Old Koguryo \*tśiram ~ <sup>\*</sup>dźilam ~ <sup>\*</sup>dzəylam is undoubtedly phonetically imitated by the new Silla name \*tśiran ~ <sup>\*</sup>tśinan [真 安], in which it may be noted that the coda of the first syllable, <sup>\*</sup>-n<sup>88</sup> in the Middle Chinese value of the transcription, is regularly a liquid after the vowels \*i ~ \*i in Old Koguryo.

 $<sup>^{87}</sup>$  KS 58: 271 has  $\oplus\Xi$  , supporting the reading here, though the second character is a sribal error for  $\Xi.$ 

<sup>&</sup>lt;sup>88</sup> The solution to the problem of the difference in finals ( $\pm$ -n :  $\pm$ -m, etc.) found in this and several other imitative examples in the *Samguk Sagi* may depend on the dates of the respective transcriptions.

- Chi shan *hsien* (積善縣) <sup>★</sup>tseykdźian *hsien* 'Amassed excellence County' is glossed as <sup>★</sup>ts<sup>h</sup>ɛyŋdźi *hsien* [青巳縣] (SS 35: 365). This entry does not contain any glossed Old Koguryo words, but it provides further evidence of the convergence of final <sup>★</sup>-ŋ and final <sup>★</sup>-k in the Korean linguistic area.
- Yu lin *chün* (有鄰郡) 'Have neighbors Commandery' is glossed as \*ur *chün* ~ \*ulir *chün* [于尸郡] (SS 35: 365). This entry is yet another instance of phonetic imitation without a true semantic gloss—i.e., \*ur ~ \*ulir [有鄰] is a phonetic transcription and the apparent Old Koguryo word \*ur ~ \*ulir does not really mean 'to have neighbors'.<sup>89</sup> However, it constitutes clear evidence for a syllabic interpretation or reading of the transcription character  $\square$  as \*lir, whether or not the actual pronunciation of the *Koguryo* words transcribed with the character were pronounced with such a syllable (which is highly unlikely, if not phonologically impossible, for that language). See Chapter 4 for further discussion of the phonology. The proposed external etymologies are all vitiated by the lack of an actual gloss here (among other reasons); see Chapter 8.
- Hai e hsien (海阿縣) 'Sea bank County' is glossed as \*fiaγey ~ \*aγey [阿兮] (SS 35: 365). The new Silla name is not a gloss but a phonetic imitation of the Old Koguryo name in which the order of syllables has been reversed. The first syllable of the Silla Chinese name imitates the second syllable of the OKog, \*key ~ \*γey [兮], as \*key ~ \*χəy [海], while the remaining syllable, \*fia ~ \*a [阿], has been retained unchanged.
- Wei chen *chün* (蔚珍郡) \*uyțin *chün* 'Luxuriant valuable Commandery' is simply a phonetic imitation of the 'original' Koguryo name \*üținya ~ \*uținya *hsien* [于珍也縣] (SS 35: 366; SS 37: 380 has 于珍也郡 without any gloss). Though the entry contains no glossed Old Koguryo words, the transcription provides evidence for the reading of the transcription characters for the first syllable.
- Hai ch'ü hsien (海曲縣) 'Sea bend County' or 'Bay County' is glossed as \*patsia hsien ~ \*pats<sup>h</sup>ia hsien [波且縣] (SS 35: 366); Chapter 37 adds the alternate reading 波豐 (SS 37: 380). Accordingly, either 波 \*pa means 'sea (海)' and 且 \*tsia 'bend (曲)', or the two syllables together are a word meaning 'bay (海曲)'. Some

<sup>89</sup> Song (1999: 190) has \*ul 'having neighbors (有鄰)'

linguists have silently emended \*patsia [波且] to \*patan [波旦] so the word could then be identified with Old Korean \*patər (cf. Kôno 1993: 317-318)<sup>90</sup>~ \*patir~ \*patin [波珍] 'sea'. However, there are no redundant transcriptions for this rhyme. The transcription character  $\exists$  \*tan and others rhyming with it are never read with final \*-r in Old Koguryo. If the toponym in question were to be read this way the word might best be understood as a Korean loanword in Koguryo. On the other hand, in view of the alternate reading ☆pap<sup>h</sup>uŋ [波豐] 'sea abundance', in which the second character undoubtedly intended to be read 'semantically'-corresponds to OKog śa ~ ☆siaw [肖] 'abundant, rich (豐)', the transcription ☆patsia [波月] appears to be correct as is. In any case, it is clear that the root of OKog \*patsia [波且] 'sea bend, bay', OKog \*pari ~ \*pali [波利] 'sea profit' (see below, s.v. Hai li hsien), and OKog \*paśa ~  $pap^{h}u\eta$  'sea abundance' can only be OKog pa 'sea'. Since none of these forms are relatable directly to the Korean word for 'sea', it appears that OKog \*pa [波] 'sea' was loaned into Korean, and subsequently developed within Korean into \*patar, etc., or else the correspondence is coincidental.

- Tzu ch'un *hsien* (子春縣) 'Son vernal County' is glossed as \*irfiatan *hsien* ~  $\stackrel{\diamond}{}$  iratan *hsien* [乙阿旦縣] (SS 35: 366). The syllable \*tan [且] in the Old Koguryo name suggests that the character 春 'spring' in the Silla Chinese name should be corrected to the character 呑 'to swallow', which is used in several instances to write OKog \*tan 'valley'. While  $\stackrel{\diamond}{}$  tan [且] thus undoubtedly means 'valley', the evident phonetic imitation eliminates the semantic gloss, leaving only \*irfia ~  $\stackrel{\diamond}{}$  ira [乙阿] corresponding to 'son, child (子)', which is attested only in this entry and seems not to have an identifiable Japanese cognate, so it might not be a genuine Old Koguryo word. The character \*ir [乙] could perhaps be a scribal error for \*ku [九]; if so, the syllable would correspond perfectly to a near synonym, OKog \*ku 'child (童 ~ 童子)', which occurs in another entry and has a solid Japanese cognate. Nevertheless, this leaves the syllable \*fia [阿] stranded.
- Chu hsien hsien (竹峴縣) 'Bamboo precipice County' ~ Chu ling hsien (竹嶺縣) 'Bamboo mountain-range County' (SS 35: 366) is

 $<sup>^{90}</sup>$  I am indebted to my colleague Hiroömi Kanno for this reference to Kôno's dissertation and his helpful comments on it.
glossed as \*naśeŋi ~ \*naśiayŋü [奈生於] (SS 37: 280). The first syllable seems to have an Old Japanese cognate (see Chapter 6), so \*na [奈] may be identified as 'bamboo'. It is uncertain if the second syllable of the transcription should go with 'bamboo' or with 'precipice (峴) ~ mountain range (嶺)', since there is no other example of such a word—whether \*śiayŋü [生於] or \*ü [於]—with the latter meaning. This part of the name therefore remains problematic.

- Hai li hsien (海利縣) 'Sea profit County' is glossed as \*pari hsien ~ \*pali hsien [波利縣] (SS 35: 366). As seen above (s.v. Hai ch'ü hsien), \*pa [波] means 'sea'. The second character has simply been copied verbatim in the Silla Chinese name, so it is not possible to identify it.
- Shou ch'eng chün (守城郡) 'Guard city Commandery' is glossed as \*kafiakuər ~ \*kaaxuər [加阿忽] (SS 37: 380) or \*karakuər ~ \*kalayuər [加羅忽] (KS 58: 272). In view of the KS reading, the SS reading can be corrected to the homonymous \*karakuər ~ \*kalayuər [加砢 忽]. The first word of the 'original' Koguryo name, 守城郡, is written with an unidentified 'Korean' character known only from Korean place names. It has been argued that it is an abbreviation for 邊 'border', but no convincing demonstration that this is correct has yet been presented. Moreover, the character corresponding to it in the new name, 守 'to guard', is clearly a Chinese phonetic or graphic imitation of the unknown gloss character 运, which may therefore have been read the same as 守 (MChi ☆śuw). Since the meaning of OKog \*kara ~ \*kala in this entry depends on see T'ang yüeh hsien, where 唐 'empty; T'ang (China)' may correspond to OKog \*kara. The one clear word here is the well-attested OKog \*kuər ~ ☆γuər [忽] 'walled city, fort'.
- Seng shan *hsien* (僧山縣) 'Monk mountain County' is glossed as \*śiamurtar [所勿達] (SS 37: 380; SS 35: 366 says the name 童山 縣 'Child mountain County' was originally Koguryo 僧山縣). Since \*tar [達] 'mountain' is well known, \*śiamur [所勿] should thus mean 'Buddhist monk'. It is clear that textual corruption is involved on one or two levels. In light of the transcription of the Old Koguryo name for Seng liang *hsien* (q.v.), the first character of \*śiamur [所勿] must be a scribal error for 非 [\*piy]. The parallel

variant forms 童 and 童 of the later names suggest that something else is going on here too, but it is unclear exactly what. Since the word 'monk' corresponds to one syllable, \*piy [非] (probably from a Prakrit form of Sanskrit *bhikşu* 'monk'), in Seng liang *hsien*, but to two syllables, \*piymur, in the present Seng shan *hsien*, and in both cases the second syllable is \*mur [勿], it would seem that \*mur should be part of the word for 'monk'. However, the perpetuation of the word 梁 'bridge' in the later names of Seng liang *hsien* indicates that a bridge undoubtedly existed at that place, and \*mur [勿] is the Old Koguryo word for it. Since the latter also has a good Japanese cognate (see the discussion s.v. Seng liang *hsien*), it appears to be a solid gloss. The present toponym is so corrupt, and the errors are so old—as in several other cases, the mistakes predate the text or texts used by the SS and the KS—it must remain problematic.

- Yi hsien hsien (翼峴縣) 'Wing precipice County' is glossed as \*ikir hsien ~ \*yimur hsien [伊文縣] (SS 37: 380). OKog \*ükey ~ \*ikey [於支], seemingly glossed as 'wing (翼)', is attested in another entry (see Yü chih t'un), so the present entry calls for interpretation of 峴 'precipice' (Pul. 336: Early Middle Chinese \* $\gamma$ ɛn, rather than \* $\gamma$ əin ~ \* $\gamma$ ɛn) as a phonetic representation of a Northeastern Middle Chinese pronunciation—\*kəir ~ \* $\gamma$ əin—transcribing the Old Koguryo syllable \*kir, which is written 'semantically' with the Chinese character 文 'letter, writing', OKog \*kir (see s.v. Wen hsien hsien). The apparent Koguryo gloss is thus a Chinese phonetic imitation of the Koguryo form, based on a 'semantic' reading of the second character, 文. Since the first character of the Chinese name is also evidently a phonetic imitation, there is again no clear gloss here, and the word for 'wing' in Old Koguryo remains unknown.
- Kao ch'eng *chün* (高城郡) 'High city Commandery' is glossed as \*tarkuər ~ \*tarxuər [達忽] (SS 35: 366). Both words, \*tar [達] 'high' and \*kuər [忽] 'walled city, fort (城)', are well attested.
- Chu shou hsüeh *hsien* (豬 守穴縣) 'Pig guard (?) hole County' is glossed as \*vsifiaip ~ \*vsiaip [烏斯押] (SS 37: 380), which may be parsed as \*vsi [烏斯], consisting of \*v [烏] 'pig' plus the adjective-attributive suffix \*si [斯], and the word \*fiaip ~ \*aip [押] 'hole (in a mountain), cavern (穴)'. The Koguryo words are thus clear.

However, there is nothing in the Old Koguryo form that could correspond to the Korean character  $\mathfrak{F}$  'guard (?)' except for the adjective-attributive suffix, which correspondence does not work for the other attested example of the unknown character, where it occurs in the first syllable. Since the character was evidently pronounced the same as  $\mathfrak{F}$  MChi \*suw 'to guard' (see above, where  $\mathfrak{F}$  occurs in a phonetic imitation of an earlier name with  $\mathfrak{F}$ ), it has been assumed here that the Mandarin reading would be homonymous as well.<sup>91</sup>

- Hsiu jang *chün* (休壤郡) 'Rest land Commandery' is glossed as \*kimna ~ \*kimnaw [金惱] (SS 35: 366; 37: 380), which may be parsed as \*kim [金] 'to rest' and \*na ~ \*naw [惱] 'land', the latter being a transcription of the well-attested Old Koguryo word \*na ~ \*nu 'land, earth, province'. It is however possible that the first syllable of the new name is simply a phonetic imitation (\*kiw ~ \*χuw [休]) of the first syllable of the old one (\*kim [金]), because final nasals seem not to have been fully articulated in Old Koguryo. Without a good Japanese etymology corresponding to \*kim 'to rest' this entry must remain in the unclear category.
- Tao lin *hsien* (道臨縣) 'Road overlook County' is glossed as \*tśirpu ~  $dziirp^{h}v$  [助乙浦] (SS 37: 380). The initial of the first word, OKog \*tśir ~ dziir [助乙] 'road (道)', has gone through the Koguryo internal affrication of initial \*t before high vowels, so it may be reconstructed as AKog \*tir. ~ \*tür. It thus corresponds very well to Old Japanese dzi [知] 'road' (*JDB* 452). The remaining syllable,  $p^{h}v$ , does not correspond to the other attested word for 'to overlook', \*fia (see above). It is repeated, without a gloss, in several other problematic entries (including the next) and must therefore be considered as unidentified.
- Hu p'u hsien (鵠浦縣) 'Swan river-bank County' is glossed as \*kvfiiypv ~ \*kviypv [古衣 浦] (SS 37: 380). The word \*kvfiiy ~ \*kviy [古衣] 'swan, Cygnus bewicki' is clear, but unfortunately the second character of the new Silla name is a verbatim copy of the last character of the Koguryo name, so the meaning of \*p<sup>h</sup>v [浦] here remains unknown.

<sup>&</sup>lt;sup>91</sup> See above, s.v. Chu lan hsien hsien and Shou ch'eng chün.

## 11 UNSURRENDERED CITIES NORTH OF THE YALÜ RIVER

- Pei fu yü ch'eng *chou* (北扶餘城州) 'North Puyo city Province' is glossed as \*tśiripiysɛy ~ \*dźilipiysɛy [助利非西] (SS 37: 386). In view of the fact that this toponym includes the name Puyo, transcribed as \*pɨy [非], the last syllable corresponds to 'city', here in its loanword form as \*sɛy [西] (q.v. Chapter 4). That leaves \*tśiri ~\*dźili [助利] 'north (北)', which is clearly related<sup>92</sup> to \*tsiar ~ \*ts<sup>w</sup>iar [絕], the Archaic Koguryo word for 'back' in the name of the \*Tsiar-na ~ \*ts<sup>w</sup>iar-nâ [絕奴] or 'Back Tribe', the northern division or clan of the early Koguryo nation (see Chapters 2 and 6).
- Chieh ch'eng (節城) 'Festival city' is glossed as 蕪子忽 \*mutsiҳuər (SS 37: 386), so \*mutsi [蕪子] means 'joint, section, division, festival, etc. (節)'. Unfortunately, the word 節 has so many meanings it is difficult to define OKog \*mutsi. See Chapter 6.
- Feng fu ch'eng (豐夫城) 'Rich man city' is glossed as \*śapaikuər ~ <sup>☆</sup>siawpaiҳuər [肖巴忽] (SS 37: 386). OKog \*śa ~ <sup>☆</sup>siaw [肖] thus means 'abundant, flourishing, luxuriant, rich (豐)' and <sup>☆</sup>pai [巴] means 'male person, man (夫)'.
- Tun ch'eng (敦城) 'Solid city' is glossed as \*kutsikuər ~ <sup>☆</sup>gutsi汉uər [仇次忽] (SS 37: 386). Accordingly, \*kutsi ~ <sup>☆</sup>gutsi [仇次] means 'solid, thick, honest'. This city is better known under its Silla Chinese name, 新城 Hsin ch'eng, or 'New City'.
- Ch'ao ch'eng 桃城) 'Second-growth-paddy-rice city' is glossed as \*parkuər ~ \*palirҳuər [波尸忽] (SS 37: 386), so \*par ~ \*palir [波尸] means 'second-growth paddy-rice'.
- Ta tou shan ch'eng (大豆山城) 'Soybean mountain city' is glossed as \*piytarkuər ~ \* piytarxuər [非達忽]. Since the second and third syllables are to be parsed as \*tar [達] 'mountain' plus \*kuər ~ \*xuər [忽] 'walled city, fort', \*piy [非] means 'soybean (大豆)'.
- Liao tung ch'eng *chou* (遼東城州) 'Liao tung city Province' is glossed as \*vriarkuər ~ ☆vriarχuər [烏列忽] (SS 37: 386). The Old

<sup>&</sup>lt;sup>92</sup> The phonological change from AKog to OKog in this case would seem at first glance to be the reverse of the normal development and would be problematic, except for the fact that AKog \*tsiar ~ \*ts<sup>w</sup>iar actually means 'back', not 'north' or 'northern'. OKog \*tsiri 'north' thus seems to be *derived* from the word for 'back', accounting for the additional syllable. See Chapter 6.

Koguryo word for 'east', \*kaṭi [加知] is found elsewhere in a clear gloss and has an excellent etymology (see Chapter 6), while there is no known Old Koguryo equivalent for 遼 *liáo* 'distant; the Liao River'. However, the 'original' name \*vriar [烏列] is evidently a phonetic transcription of the Koguryo pronunciation of 遼 MChi \*liaw (OChi \*lewr), the name of the Liao River, which divided Liao-hsi from Liao-tung. The Koguryo name thus means only 'Liao City'. The presence of the prothetic vowel \*v- shows that Koguryo, like Japanese and other languages of Northeastern Asia, did not allow liquids in word-initial position.

An shih ch'eng (安市城) 'Peace market city' is glossed as \*antsunkuər ~ \*ants<sup>h</sup>wənχuər [安寸忽], which is glossed in turn as 丸都城 Wan-tu ch'eng, the well-known early Koguryo capital (SS 37: 386). In view of the imitative gloss 安寸 \*antsun the character 市 is probably a mistake for 東 MChi \*təwŋ, LMC \*tung (Tak. 412) 'east', and this is the name 安東 An-tung 'Pacified East'. The name 安寸 \*Antsun is thus a Koguryo loan pronunciation of the Chinese name and there are no semantic glosses here. See the discussion of the capitals, above.

# 11 SURRENDERED CITIES NORTH OF THE YALÜ RIVER

- Hsin yüeh ch'eng (心岳城) 'Heart crag city' is glossed as \*kirfiaip ~ \*kilirkaip ~ \*kürfiaip ~ \*külirkaip ~ [居尸坤] (SS 37: 386). This can be parsed as \*kir ~ \*külir ~ \*kür ~ \*külir [居尸] 'heart' and \*fiaip ~ \*kaip [坤]. OKog \*kir ~ \*kür thus means 'heart' and \*fiaip is the well-known word for 'crag, high mountain'.
- Kuo-nei *chou* (國內州) 'Nation inside Prefecture' (i.e., 'Inside the Country Prefecture') is glossed as \*piyna *ch'eng* ~ \*piynəy *ch'eng* [不耐城] 'Piyna City'. It is also glossed as 尉那 嵒城 Wei-nayen *ch'eng*, the first two syllables of which are a late transcription, \*wina, of what was evidently a dialect or later pronunciation of OKog \*piyna. The word 嵒 *yén* 'precipitous, craggy', written with the near-homonym, near-synonym 巖 *yén* 'rocky, precipitous, dangerous' at the beginning of the same chapter (*SS* 37: 377), has no equivalent in the Old Koguryo in either occurrence. The first word is accordingly \*piy [不] 'country, nation', and the second is \*na ~ \*nəy [耐] ~ \*na [那] 'in, inside'. See the discussion of the names

of the Koguryo capital cities at the beginning of this chapter.

Hsiu yüeh ch'eng (朽岳城) 'Rotten crag city' is glossed as \*kuərfiaip ~ \*kuərliryaip [骨尸坤] (SS 37: 386). OKog \*fiaip ~ \*kaip [坤] as usual means 'crag, high mountain'. The problem with this entry is the interpretation of the irregular first character 朽, read here as 朽. If the interpretation adopted is correct, OKog \*kuər ~ \*kuərlir [骨尸] means 'rotten (朽)'; other possibilities include 'plasterer's trowel, to plaster (杇)' and 'bathing tub, large vessel (杅)'.

## 7 RENEGADE CITIES NORTH OF THE YALÜ RIVER

- Ch'ien ch'eng (鉛城) 'Lead city' is glossed as \*namurkuər ~ \*nəymurχuər [乃勿忽] (SS 37: 387). Thus, \*namur ~ \*nəymur [乃勿] means 'lead (metal)'. See the discussion in Chapter 8.93
- Ya yüeh ch'eng (牙岳城) 'Tooth crag city' is glossed as \*keyrfiaipkuər ~ \*keyliraipχuər [皆尸押忽] (SS 37: 387). This is a straightforward gloss, since there is a good Japanese cognate, \*ki ~ \*gyi [岐] 'canine tooth (牙)', for Old Koguryo \*keyr ~ \*keylir [皆尸] 'canine tooth (牙)'. See the discussion in Chapter 6.94
- Chiu yüeh ch'eng (鷲岳城) 'Vulture Peak<sup>95</sup> city' is glossed as \*kamikuər ~ \*kammiχuər [甘弥忽] (SS 37: 387). Although the word for 'crag, high mountain' is omitted in the Old Koguryo gloss, possibly because 'Vulture Peak' is a well-known Buddhist place name, the identification of \*kami ~ \*kammi [甘弥] 'vulture' seems clear.
- Mu yin ch'eng (木銀城) 'Tree silver city', is glossed as \*tśiarkuər ~ \*tśiawlirχuər [召尸忽] (SS 37: 387). The other attested form of the Old Koguryo word for 'silver', \*tśiar [折] (see below),% con-

<sup>96</sup> This alternate transcription also provides evidence against reconstruction of the initial of the Middle Chinese form of  $\vec{A}$  \*tsiaw as "driaw" (Pul. 399); cf. Mai chao hu

<sup>93</sup> Song (1999: 190) has \*namil 'lead'.

<sup>&</sup>lt;sup>94</sup> It happens that  $\overline{\mathcal{F}} y \dot{a}$  means 'royal camp' as well as 'canine tooth', and since \*key [ $\underline{\mathbb{F}}$ ] is the well known OKog word for 'king', in this example it might be thought to have the meaning 'royal', leaving \*lir [ $\overline{\mathbb{F}}$ ] to carry the sense of 'camp'. However, the Koguryo language did not allow word-initial liquids (c.f. Liao tung ch'eng *chou*), so  $\overline{\mathbb{F}}$  would have to be read, irregularly for this region, as \*śi, or else it would have to be a derivational morpheme (as erroneously argued in Beckwith 2000). In view of the perfect Japanese cognate (both phonetically and semantically) for the sense 'canine tooth', these possibilities must be rejected.

 $<sup>^{95}</sup>$  The word  $\boxplus$  is translated here as 'peak' instead of the usual 'crag' because Vulture Peak is a place in India well known from Buddhist literature.

firms that the Old Koguryo word for 'tree' is missing here, and \*tśiar~ <sup>☆</sup>tśiawlir [召尸] means simply 'silver'.

Li shan ch'eng (梨山城) 'Plough mountain city' is glossed as \*kartarkuər ~ \*kalirtarχuər [加尸達忽] (SS 37: 387). On the word \*kar ~ \*kalir [加尸] 'plough',97 see Chapter 8. The Old Koguryo words \*tar [達] 'mountain' and \*kuər 'walled city, fort' are well attested.

# 3 CAPTURED CITIES NORTH OF THE YALÜ RIVER

- Hsüeh ch'eng (穴城) 'Cave city' is glossed as \*kaipkuər ~ \*kaipχuər [甲忽] (SS 37: 387). The word \*kaip [甲] 'cave, hole (in a mountain)' is attested elsewhere in the corpus and has a good Japanese cognate; see Hsüeh k'ou *chün*.
- Yin ch'eng (銀城) 'Silver city' is glossed as \*tśiarkuər ~ \*tśiarχuər [折忽] (SS 37: 387). The word \*tśiar [折] 'silver' occurs in another transcription; see above, s.v. Mu yin ch'eng.

*hsien* above, with a pair of transcriptions of the same syllable, 召 ☆tśiaw and 鄒 ☆tśu. See the discussion in Chapter 4.

<sup>&</sup>lt;sup>97</sup> Song (1999: 190) has \*kal 'plough'.

#### CHAPTER FOUR

## ARCHAIC NORTHEASTERN MIDDLE CHINESE

The reconstruction of Koguryo depends more than anything else on the Chinese phonetic value of the characters when they were adopted as transcriptions for Koguryo forms. The Chinese language or dialect underlying the transcriptions appears to have been a direct descendant of a northeastern dialect of Old Chinese. It maintained a number of archaic features from Old Chinese until its disappearance in the Middle Chinese period, evidently around the time of the fall of the Koguryo kingdom and the spread of Silla Korean across the peninsula. This chapter constitutes a preliminary attempt to describe some of the phonological features of this language; it does not by any means constitute a description of everything that might be known or discoverable about it. Some of the material has been discussed in the extensive literature in Korean and Japanese on the phonetic value of the transcriptions in the Samguk Sagi and other texts transcribed in Chinese characters. However, these studies do not deal with the material as a reflection of the distinctive Korean Peninsular form of Chinese. Isolated from China by political changes, it preserved many archaic features lost centuries earlier in the Central dialect of Chinese. Historical and epigraphical evidence attests to the continuous presence of this large, ethnolinguistically Chinese community on the Korean Peninsula from the Former Han dynasty into United Silla times. This Northeastern Middle Chinese language or dialect provided the linguistic basis for the transcriptions of Koguryo and other non-Chinese languages spoken in the Korean Peninsula and neighboring areas.

Among the most remarkable features of Northeastern Middle Chinese are its retention of the Old Chinese \*-r coda in certain environments, and its failure to undergo the Late Old Chinese–Early Middle Chinese palatalization that so radically altered the sound of Chinese. These features are discussed under the sections on Syllable Onsets and Syllable Codas. Other features of Northeastern Middle Chinese,<sup>1</sup> including the apparent preservation of Old Chinese \*0 in some environments, are discussed in the section on Syllable Nuclei.

<sup>&</sup>lt;sup>1</sup> Abbreviated NMC in form citations below.

#### SYLLABLE ONSETS

# *OChi* \*k- > *MChi* $\Leftrightarrow$ tś- ~ *NMC* \*k-

The Old Koguryo transcription character 支 was pronounced \*key (or possibly \*ki) rather than \*tśi as in the Central dialect of Middle Chinese. This is shown by the fact that OKog 於支—though seemingly glossed as 'wing (翼)'—must be read \*ükey ~ \*üki rather than \*ütśi (the reading in both reconstructed Early Middle Chinese and in attested Late Middle Chinese) because of the new Silla name, which is a Chinese phonetic imitation, 翊谿 \*yikkey, of the old name. The same unknown word is glossed again elsewhere with another phonetic imitation in which the second syllable implies \*kir. The phonetic value of the character 支 is further established through other parallel readings, including the transcriptions of OKog \*key ~ \*ki [支] ~ \*key ~ \*γey [兮] 'military, martial (武)', probably the same word as OKog \*kir ~ \*kin [斤] 'brave (驍)'. Northeastern Middle Chinese thus clearly retained the Old Chinese value of the initial in [支].

## *OChi* \*mî- > *Middle MOC* \*myi- > *MChi* \*nyi- ~*NMC* \*mi-

The Old Koguryo syllable pronounced [仍], a word which means 'the female principle, vin, woman (陰)' and 'banner (旌)', and occurs also in the words for 'the scholar tree, Sophora japonica (槐)' and 'grain (穀), should be read  $\stackrel{\text{*min}}{=}$  rather than  $\stackrel{\text{*nyin}}{=}$  or  $\frac{2in}{as}$  would be the case if it were a standard Early Middle Chinese or Late Middle Chinese form, respectively). This is clearly shown by OKog \*min [仍] 'banner (旌)', which is phonetically imitated by the transcription \*min ~ \*myiayn [冥], and is supported by Japanese transcriptional and comparative evidence (see below). It is also supported by Chinese internal reconstruction. It has recently been shown that EMC angle ny- (> angle n'z- > LMC  $\dot{z} > z > OMan r$ -) derives not only from OChi \*n- and \*n- but also from \*m-, examples of the latter source apparently being more numerous than examples of the other sources (Beckwith 2002b). In the Central dialect of Old Chinese initial \*m- was palatalized when followed by the long high vowel \*î, eventually producing Early Middle Chinese <sup>\*</sup>nyi-, but this palatalization apparently did not occur in Northeastern Chinese, as seen in unpalatalized examples from antiquity.<sup>2</sup> It is also evident in examples from Korea, most notably the Chinese transcription of the name of the Korean Peninsula realm (Mimna (Mimna (Mimna / Mimna / Chinese transcription of the name of the Korean Peninsula realm Mimna / Mimna /

## OChi \*ti- > MChi \*tși- ~ NMC \*tśi

The two transcriptions of OKog \*tśiar 'silver', namely \*tśiar [折] (Pul. 400 <sup>☆</sup>tśiat) and \*tśiawr [召尸] 'silver', provide good evidence against reconstruction of the onset of the Middle Chinese reading of 召 as "dr" (Pul. 399 \*driaw<sup>3</sup>), assuming that Northeastern Middle Chinese was at least as conservative in this case as the central dialect of Middle Chinese. Although some Old Japanese transcriptions do reflect Chinese initials of the type  $\star t - \sim \star d - 3$ , there seems to be no evidence for such initials with vowels other than OJpn <sup>±</sup>i, suggesting that the dialects of Middle Chinese from which the Japanese acquired their loanwords and transcription system did not have a simple alveodental onset before the vowel <sup>☆</sup>i. In fact, such initials—i.e., \*d, \*t, \*t<sup>h</sup>—did not exist before \*i in any attested form of MChi (any such initials that had previously existed were affricated by Sui-T'ang times), so in order for the Japanese to transcribe such syllables in their own language they had to use the retroflex series (d, t- and so on), which in Middle Chinese-at least in the central dialect-had the same rhyme. The affricated pronunciation of 召 as \*tśiaw is confirmed by an unglossed toponym, OKog \*meytśiawkų r~ <sup>☆</sup>meytśiawχų r [買召忽], the alternate Old Koguryo reading of which, \*mitsuky r ~ \*mitsuxy r [彌鄒忽], transcribes the same syllable as ☆tśu [鄒].

<sup>&</sup>lt;sup>2</sup> Some other examples of words beginning with NMan r- from OChi \*m- are  $柔 r \acute{ou}$  (cf. 矛 máo), 乳 ru (cf. 孚  $f \acute{u}$ ), 二  $\acute{er}$  (cf. 佴  $\acute{er}$ ), 耳  $\acute{er}$  (cf. 弭 m), 而  $\acute{er}$  (cf. 而已 > 耳), and 爾  $\acute{er}$  (cf. 瀰  $m \acute{i}$ ); the last four of these show the well-known regular metathesis OMan ri > NMan er. Cf. Beckwith 2002b.

<sup>&</sup>lt;sup>3</sup> The representation of this onset as dr- in Pulleyblank's system is not justifiable for Middle Chinese if taken as a segmental transcription, as he intends in this case. This is not to say that his reconstruction is wrong *per se*, but only that it seems not to be correct for Middle Chinese. Such a reconstruction would appear to be justifiable for Old Chinese because the phonetic of the word  $\exists dtsiaw$  (Pulleyblank's driaw) 'summon' is  $\Im dtsw$  (knife'.

#### CHAPTER FOUR

# *OChi* \* $\gamma$ - > *MChi* zero- ~ $^{\diamond}$ ?- ~ *NMC* \*fi-

Ch'ü yü ya (屈於押) \*kurüfiaip is glossed as 紅西 'red west' (SS 37: 379). In view of the existence of another transcription of the word for 'west', \* $\gamma$ ap ~ \* $\gamma$  p [盒], this transcription provides confirmation that Old Koguryo words transcribed with the character 押 [fiaip] (among other phonetically related characters) were pronounced with an initial that did not exist in Middle Chinese, or at least not in the Chinese dialect known to the toponym transcribers. It is clear that the word had a voiced velar or laryngeal fricative initial different from \* $\gamma$ . The initial in question is completely omitted in the transcription in one instance, \*tawrap [刀臘], which must be parsed as \*tawr plus \*ap (see Chapter 3, s.v. Tao lieh *hsien*). The Old Koguryo words for 'west', 'crag', and 'cave', all written with the same set of characters, are here reconstructed identically, as \*fiaip.

An Old Koguryo word meaning 'steep hill, precipitous', widely equated with MKor *pahoi* 'rock, crag' (see Chapter 8)—in which the *h* derives regularly from an earlier velar stop according to Korean internal reconstruction—is written \*payei [波兮] ~ [巴兮] ~ \*pa?iy [波 衣].<sup>4</sup> The transcription 衣, rather than showing elision of the intervocalic velar \*- $\gamma$ - seen in the reconstructed Middle Chinese reading of 兮, is supported by the Middle Korean and must indicate that the Chinese word written 衣 had a velar or laryngeal onset in late Old Northeastern Chinese or Northeastern Middle Chinese. Thus the reading of 衣 is reconstructed \*fity (rather than \*?iy) for this language.

#### SYLLABLE NUCLEI

## *OChi* \*wa = foreign \*o = Northern OChi \*o > NMC \*o

The earliest Koguryo evidence for the phonology of Chinese vowels is found in the transcription of the name of the first capital city of the Koguryo kingdom, \*Orto, usually written 丸都 Wan-tu.<sup>5</sup> The name is

<sup>&</sup>lt;sup>4</sup> One unglossed name probably contains the same word, as \*payai [波害].

<sup>&</sup>lt;sup>5</sup> The pronunciation of 丸都 Wan-tu and the name of the Han period Chinese commandery established in the same region, 玄菟 Hsüan-t'u, are virtually identical in Middle Chinese (丸都 MChi \*ywantu, cf. Pul. 317, 81: \*ywant; 玄菟 MChi \*ywen-t<sup>h</sup>u, cf. Pul. 350, 312: \*ywent<sup>h</sup>). These were significantly different in Old Chinese according to current reconstructions. If the latter are correct, the word written 丸

certainly a transcription of the Central Eurasian culture word *ordu* ~ *ordo* 'royal camp, court, capital', which is well known from later times in other neighboring languages (see chapters 2 and 3). This information is early enough that it probably does not reflect any specifically northeastern Chinese features, but several Old Koguryo transcriptions indicate that the equation of Chinese \*-wa- with foreign \*-o- continued in Northeastern Middle Chinese. The most parsimonious conclusion to be drawn is that the reconstruction of Chinese transcriptions with putative \*-wa- is incorrect and that Old Chinese and Northeastern Middle Chinese, like the foreign languages transcribed by the Chinese of those periods, actually had the simple vowel \*-o- in these words.<sup>6</sup>

### *OChi* \*-u > *MChi* \*-aw ~ *NE MChi* \*-v

OKog \*tv [都] 'road (道)', due to its unaffricated initial, is problematic for Old Koguryo. It could perhaps be a dialect form irregularly retained from Archaic Koguryo, but it is much more likely to be a late loan from Chinese 道 'road', pronounced \*daw in the central dialect of Middle Chinese. The rhyme of this word is generally reconstructed with the vowel \*u for Old Chinese, which, assuming the consonant were unchanged, would give an Old Chinese form \*du. Although the vowel reconstruction is problematic enough, it has long been recognized that there is a serious problem with the initial of this word and the other words in the same phonetic series. The current solution is to reconstruct a lateral for 道 'road' (Starostin 1989: 554 \*lhû?; Baxter

<sup>6</sup> Baxter reconstructs some MChi \*-wa- as OChi \*-o-, for example 貫 MChi kwan<sup>3</sup> < OChi \*kons (Bax. 761); Starostin has OChi \*k<sup>w</sup>ânh, rhyming 'irregularly' with words having the nucleus vowel \*o that only occur in this category (Sta. 578).

should be reconstructed as  $\gamma^{w}$ ân or \*wan (Starostin 1989: 577 \*gh<sup>w</sup>â[n]; Baxter 1992: 793 \*wan), while that written  $\Xi$  should be reconstructed as  $\gamma^{w}$ în or \*g<sup>w</sup>in (Starostin 1989: 582 \*g(h)wîn; Baxter 1992: 799 \*g<sup>w</sup>in). However, as pointed out elsewhere (Beckwith 2002b), the usual HSR reconstruction of the rhymes of these syllables cannot be maintained. Firstly, crossrhymes, Tibeto-Burman cognates (whether divergent or convergent is immaterial), and foreign transcriptional evidence all agree that both Chinese syllables clearly ended in a liquid before shifting to  $\alpha$ -n, as attested in Middle Chinese. Secondly, based on the same evidence the vowel of the syllable written  $\Xi$  was evidently \*e, not \*i (and certainly not \*î) in Old Chinese. The exact phonetic value of the phone transcribed here as "t" is most unclear, as is the case for nearly all stop onsets in Old Chinese. Thus the similarity of the two toponyms—as names—in Middle Chinese exists in Old Chinese as well. However, Koreanists disagree on the identity and location of the two toponyms (Mark Byington, p.c., 2003).

1992: 753 \*lu?; Sagart 1999: 155 \*<sup>a</sup>lu?) and all the other words in the series. including the phonetic itself, 首 'head' (NMan shoŭ < MChi \*suw<sup>2</sup>), which is accordingly reconstructed \*slu? or \*hlu? (Starostin 1989: 554 \*slu?; Baxter 1992: 788 \*hlju?; Sagart 1999: \*<sup>b</sup>hlu?). Such reconstructions could not apply to Late Old Chinese because the inherited word for 'head' had by that time already been replaced by the word 頭 'head' (NMan tóu < MChi \*d w), reconstructed for Old Chinese as \*<sup>a</sup>[d]o (Sagart 1999: 155). This suggests that the new character for 'head' was introduced to transcribe a conservative dialect form where the earlier OChi initial (apparently \*d-  $\sim$  \*t- rather than \*l-  $\sim$ \*lh-) was retained, unlike the Central dialect, where it had evidently already become a fricative. In short, the probable Northeastern Chinese source of OKog \*tv [都] 'road (道)', reflects Late Old Chinese phonology. This is another indication of the conservative phonology of Northeastern Middle Chinese.7 By contrast, OKog \*tśir : \*dźir [助乙] 'road (道)', is also probably a loanform of the same Chinese word borrowed much earlier, from an Old Chinese 道 \*dur 'road'.8

NMC \* u(y) = \*i(y)

The vowel  $*u(y) \sim *v$  evidently merged with  $*i(y) \sim *i$  under certain conditions (largely unknown) in the Chinese spoken in the Korean area. This is clear from several examples, such as \*sabu [沙伏]  $\sim *sapiy$  [沙非] 'red' and \*busv [扶蘇]  $\sim *busi$  [夫斯] 'pine'.9

<sup>9</sup> The name of the important Koguryo city 不耐 \* Piyna is also transcribed as <sup>\*</sup>uyna [尉那]. This has an incongruent initial (zero instead of a bilabial stop) and appears to have variant vocalization. However, while the transcription could perhaps

<sup>&</sup>lt;sup>7</sup> Because the other words in the toponym wherein it occurs are Chinese, it is likely that the putative OKog word  $\pm$ tsi [ $\chi$ ] 'head', from earlier  $\pm$ tu-i (see the discussion of the Old Koguryo noun suffix  $\pm$ tsi [ $\chi$ ] in Chapter 6) is also Chinese, or has been borrowed from an archaic form of Chinese  $\mathfrak{M}$  thead'.

<sup>&</sup>lt;sup>8</sup> Cf. OJpn \*ți [知] 'road (路·道)' (*JDB* 452). OKog \*tv: \*t<sup>h</sup>v [吐] 'embankment, dike (堤)' is perhaps cognate to OJpn \*tu in \*tuka ~ \*d wka [豆加] 'earthen mound (冢), hill (丘)' (*JDB* 458), \*tuti ~ \*tvtï [都智] 'earth (土' 地)' (*JDB* 468), and \*tutumi ~ \*tvtxy ymi [都追美] 'embankment, dike (堤)' (*JDB* 470), but the unaffricated initial of the OKog form indicates this is also probably a loan from Chinese. The semantic and phonetic closeness of the OKog and OJpn forms to Chinese words in both cases (here, OKog \*tv: 吐 NMan *tu* 'earth', OJpn \*tuti : 土地 NMan *tudi* 'earth') suggests they are both either loans from MChi or that the original Japanese-Koguryoic words have been assimilated to the very similar Middle Chinese loans. Cf. the discussion s.v. OKog \*tśr 'road' in Chapter 6. On the final liquid, note 道 MChi \*daw<sup>3</sup> 'road', MChi 鳥 \*tew<sup>2</sup> 'bird' and 遼 MChi \*liaw<sup>1</sup> 'distant; the Liao River'; all are loanwords in Koguryo, in which language all have final \*-r, and all rhyme in T'ang Chinese.

### SYLLABLE CODAS

# OChi \*lir > LOC \*lyi > MChi \*śi ~ NMC \*lir

Among the Old Koguryo words with proposed Korean or 'Altaic' etymologies are found several written with two characters the second of which is  $\square$  NMan *shî* from Middle Chinese \*śi (Pul. 282: ci<sup>1</sup>). This character has been read by scholars as a final consonantal \*l or \*r since early in the twentieth century (Miller 1979), a usage that has been criticized for what seems to be inconsistent philological interpretation. The critics have proposed that it should be read \*ś or \*śi (Miller 1979; Itabashi 1996; Beckwith 2000).

A syllabic reading of the character  $\square$  as  $\Rightarrow$  lir is proposed for Northeastern Middle Chinese.<sup>10</sup> In one *Samguk Sagi* transcription ⊢ is phonetically imitated by the character 鄰 MChi \*lin, indicating a northeastern reading \*lir [P]; it is known from many other examples that central Middle Chinese final \*n corresponds to \*r after the vowels \*i and \*i in the Korean area. See Chapter 3, s.v. Yu lin chün. The reconstruction \*lir for  $\vdash sh\hat{i}$  does not depend simply on the Korean area transcriptional evidence. It also accords well with the history of the word within Chinese. In current internal reconstruction. Baxter reconstructs its Old Chinese form with an initial unvoiced or aspirated lateral, \*hliy (Baxter 1992: 787: \*hljij), while its rhymes in the Shih Ching or Odes are reconstructed by Starostin for Old Chinese with a low nucleus vowel followed by a glide (1989: 568). Cf. Starostin 1989: 569, where  $\square$  (a member of his  $\blacksquare$  B class) actually occurs in an 'inexact' rhyme with this class—his 脂 A—which in his system has the rhyme  $*_{5}$  y ( $*_{5}$  j"). This would give a late OChi form \*(s)] y. However, the Chinese word  $\bowtie shi$  should be reconstructed for Old Chinese not only with an initial liquid but with a final liquid as well:

simply reflect the nondistinction of  $\dot{}$ uy and  $\dot{}_{iy}$ , it undoubtedly just reflects the later Chinese onset *w*- (NMan *Wèinà*). The name should be read  $\dot{}$ Wina rather than  $\dot{}$ Uyna, and does not constitute a further example of the vowel alternation in question.

<sup>&</sup>lt;sup>10</sup> The non-syllabic reading \*r (phonetically [!]) is clearly its value *in Old Koguryo* words. There was only one liquid in Old Koguryo, as apparently in the other Korean Peninsula area languages. For example, the syllable \*ka [ $\hbar$ II] followed by \*lir [ $\square$ ], as in \*kalir [ $\hbar$ II $\square$ ] 'plough' should have been pronounced, theoretically, \*karir. However, this and similar examples were clearly pronounced as monosyllables, in this case \*kar 'plough', because a number of doublet readings exist in which one form is transcribed by a monosyllabic form with a final consonant \*r while the other is disyllabic, with  $\square$ , and still others have a redundant transcription with both. The conclusion to be drawn is that it was actually a non-syllabic liquid in Old Koguryo.

\*lir ~ \*ril. Starostin's 脂 A class includes the *Odes* rhymes 歸 *guî* 'return', 回 *huí* 'revolve', 圍 *wéi* 'encircle', and (in the rising tone subcategory) 火 *huo* "fire'; this class also includes 'inexact' rhymes with 水 *shui* "water' (a member of his class 脂 C). All of these had final \*r ~ \*l at some point in Old Chinese (on 'water', see Beckwith 2002a); thus it is clear that the word  $\square$  and the other members of Starostin's class 脂 B also had final \*r ~ \*l. If Baxter's initial is supportable, the result would be a reconstruction \*sl r ~ \*sr l (etc.) for  $\square$  in 'Old Chinese'.

It has recently been noted that several Northern Min dialects of modern Chinese have initial s- where other Chinese dialects have initial *l*- (Itabashi 1996: 15): this attests to a change \*l > s in Min Chinese. Since it is evident that the Chinese spoken in the Korean peninsula in Late Antiquity and the Early Middle Ages was highly archaic, the reconstruction of  $\square$  as \*lir is thus justifiable on the basis of dialect evidence as well, while its interpretation as a non-syllabic liquid makes good philological sense of the variant transcriptions of Old Koguryo words.<sup>11</sup> Further evidence for the value of the transcription character *□* in Kogurvo as a non-syllabic liquid includes OKog \*kir [斤尸] 'marks, lines, letters, writing (文)'. This transcription is related to that of the name 新羅Silla, the character 新 of which had a final \*-r ~ \*-l in Old Chinese, as did ff (MChi  $\ddagger$ kin); that is, in the case of the name Silla the *transcription* represents a geminate liquid, not a nasal followed by a liquid, as in the usual modern treatement of the name. Variant transcriptions also give the name with an open first syllable (the second syllable still having a liquid onset), indicating that the liquid was not in fact geminate. Another example is OKog \*meyr [買尸] 'garlic' (cognate to OJpn \*mira [美良] 'leek'), which has the characteristics of an inherited Common Japanese-Koguryoic word,

<sup>&</sup>lt;sup>11</sup> Miller's criticism is based largely on the erroneous etymology of OKog \*yar ~ \*yalir [ $\Box \square$ ] 'wild' discussed in chapters 3 and 8, while his supporting evidence is another philological mistake, the ghost-word \*sirap 'white' (Miller 1979: 358); see Chapter 3. Miller's argument is that the OKog forms "add to our Altaic materials data from yet another ancient language, in the form of written records actually older than anything previously available in the field, in which it would appear that pA [proto-Altaic] \* $l_2$  was indeed regularly represented by s or s, another fact of obvious importance for the future study of the interrelationships among the various Altaic languages" (Miller 1979: 359). However, the evidence Miller himself cites against his view (the two attested forms of the OKog word for 'silver') actually supports the traditional reading. In addition to evidence from Chinese internal reconstruction and Koguryo readings, doublet readings of Silla words also exist, supporting the traditional reading of  $\square$  shî as syllable-final \*r ~\*l.

including the regular correspondence of the first syllables (OKog mey: OJpn  $mi^{12}$ ) and of the monosyllabic CV(V)C Old Koguryo form ending in \*-r to the disyllabic CVCV Old Japanese form.

$$OChi * -(i)r > MChi \Leftrightarrow -(i)n \sim NMC * -(i)r$$

OKog \*kuair 串 is a monosyllabic form of the Koguryo word for 'mouth' in which the final liquid—corresponding to the final of the first syllable of the usual disyllabic form, \*ky rtsi ~ \* $\chi$ y rtsi [忽次] 'mouth'13—is transcribed with a form having final \*-n in the Central dialect of Middle Chinese. However, this final has been reconstructed as \*-r/\*-1 for Old Chinese (Beckwith 2002b). Moreover, since in other Old Koguryo transcriptions the final regularly is to be read \*-r, not \*-n after the vowel \*i-, it is clear that in this case too the central Middle Chinese transcription \*kwain (Pulleyblank 1991: 114) must be revised to 串 \*kuair for Northeastern Middle Chinese.<sup>14</sup>

Other examples include the semantically unrelated homonyms OKog \*kir 'tree, wood' and OKog \*kir 'military, martial', which appear in two seemingly distinctive transcriptions that were evidently not distinctive in Northeastern Middle Chinese. OKog \*kir 'tree, wood' is written \*kir ~ \*kin ~ [ $\mathcal{F}$ ] ~ \*kinir [ $\mathcal{F}$ Z] and \*key ~ \* $\gamma$ ey [ $\mathcal{F}$ ] (among other transcriptions). As noted in Chapters 2 and 3, the character  $\overline{\Sigma}$  also may represent the same syllable: OKog \*key 'military, martial ( $\mathbb{K}$ )' is written \*key [ $\overline{\Sigma}$ ] ~ \* $\gamma$ ey [ $\mathcal{F}$ ]. A probable etymological relative of the latter, OKog \*kir 'brave ( $\mathbb{R}$ )', is written \*kir ~ \*kin [ $\mathcal{F}$ ]. Thus, in Northeastern Middle Chinese the readings of the characters [ $\mathcal{F}$ ] and [ $\mathcal{F}$ ] ~ [ $\mathcal{F}$ ] ~ [ $\overline{\Sigma}$ ] were close enough that they could be be used to transcribe the same Old Koguryo syllable.

Finally, the Koguryo toponym \*tśilam ~ dźilam [助欖], the meaning of which is unknown, is phonetically imitated by the new

<sup>&</sup>lt;sup>12</sup> See below, section §3.2.

<sup>&</sup>lt;sup>13</sup> Ch'oe (2000: 134) reconstructs kug 忽次 'mouth (口), skewer (串)'; cf. Song (1999: 190) \*koc /\*kolc 'mouth'.

<sup>&</sup>lt;sup>14</sup> Several Koreanists have proposed to read the character  $\oplus$  'semantically' as 'skewer', MKor *kuc* (Mabuchi et al., 2000: 595, citing Lee 1968: 118); so also Ch'oe, who also reconstructs "koch (kucV)" as a semantic reading (2000: 127). This word has then been connected to OJpn  $\Rightarrow$ kusi 'skewer'. The word for 'skewer' may be a Korean loanword in Japanese, but the character  $\oplus$  in the present instance is clearly a phonetic transcription of the word for 'mouth' rather than an unlikely 'semantic' reading via Korean, as has been proposed.

name \*tśinan [真安], which clearly must be read as \*tśilan.<sup>15</sup> This shows that the apparent syllable-final \*-n (i.e., the Middle Chinese value of the transcription) of the first syllable, 真 \*tśin, being the alveodental coda of a syllable with a high vowel, was regularly a liquid.

$$OChi *-(a)r > MChi \ddagger-(a)n \sim NE MChi \ddagger-(a)n$$

The first capital of Koguryo, \*Orto or 丸都 Wan-tu, was later called An ts'un hu, or \*fiantsy nky r ~ \*ants<sup>h</sup>y nχy r [安寸忽] 'An-ts'un city'. The initial supports the regular weakening of Archaic Koguryo \*γV- to Old Koguryo \*fiV- ~ \*(?)V-<sup>16</sup>, while the second syllable shows the regular change of Archaic Koguryo \*tu to Old Koguryo \*tsu. It also shows the apparently gratuitous addition of final \*-n to the second syllable. These are Old Koguryo features rather than Chinese features. On the other hand, the identity of the initial syllable rhymes in all these cases, and the regularity of this rhyme's correspondences in other cases (e.g., OKog \*tan [ $\pm$ ] 'valley', cognate to OJpn \*tani [ $3\overline{m}$ ] 'id.') indicates that by the Sui-T'ang period the change of OChi \*-ar to Late OChi \*-an and MChi \*-an had occurred in Northeastern Middle Chinese as it had in the Central dialect.

### Neutralization of Velar Coda Distinctions

There are several transcriptions of the Old Koguryo loanform (or forms) of the Chinese word 城 'walled city, fort' (MChi [☆dźeyŋ], LMC śɛŋ (Takata 1988: 407)<sup>17</sup>, namely ☆sɛy [西], ☆śɛŋ ~ ☆siayŋ [省]

<sup>&</sup>lt;sup>15</sup> The problem of the incongruent word-final  $\ddagger$ -m vs.  $\ddagger$ -n is found in several other imitative examples in the *Samguk Sagi*. The solution probably involves the dates of the respective transcriptions (\*-m > \*-n within Chinese), but this needs further study.

<sup>&</sup>lt;sup>16</sup> The loss of the labial feature is problematic.

<sup>&</sup>lt;sup>17</sup> Most attested transcriptions of the word 城 'walled city, fort' in T'ang Chinese are *śeŋ* (Takata 1988: 406-407), but it is transcribed *śaŋ* in the *Old Tibetan Annals* s.v. the year 710 (Beckwith 1998), where the transcription is undoubtedly based directly on contemporary oral pronunciation. In the Lhasa Źol inscription of ca. 765, the same syllable, in the same name, is written *śeŋ*. Both instances should represent the pronunciation of courtiers from the Chinese capital, Ch'ang-an, and cannot easily be discounted. Many Old Tibetan transcriptions of words belonging to the corresponding Middle Chinese rhyme omit the final velar nasal. Takata (1988: 406-407) accordingly reconstructs this rhyme for his 'Ho-hsi pronunciation' of Middle Chinese as \*ia~.

'id.', and \*śɛŋ ~ \*siayŋ [生] 'id.'<sup>18</sup> The transcription OKog \*sɛy [西] 'walled city, fort' corresponds closely to the readings of the other transcription characters, the major difference being the absence of the velar nasal. Since other words are attested in Old Koguryo with similar variant transcriptions (e.g. OKog \*mey [買] 'good' ~ Early OKog \*m wŋ [蒙] 'id.' ~ AKog \*meŋ ~ \*miayŋ [明] 'id.'), it appears that Northeastern Middle Chinese had no phonemic distinction among the various velar codas (if any at all were articulated), but due to influence from the prestige dialect or dialects of Middle Chinese such distinctions in the finals sometimes reappeared in the local language.

An example of a Northeastern Chinese dialect reflex in \*-k of a Central Chinese dialect form in \*-n is represented by the putative Old Koguryo word \*niak ~ ☆ñiak [若] 'prefecture, province (州)', which contrasts with the actual Old Koguryo word or words, OKog \*na ~ nv (q.v. Chapter 6 and Chapter 8). The Chinese gloss of the latter Old Koguryo words, 壤 MChi \*ñian (which is also the second character in the early name P'yongyang) has a very close phonetic correspondence to 若 MChi \*ñiak, the only difference being in the finals which other examples show were mutable in the Korean area.19 Putative OKog 若 \*niak is thus actually an archaic Northeastern Middle Chinese reflex of 壤 \*nian (MChi \*ñian), which is from LOC \*nran from earlier OChi \*naran. The reading of the transcription character 若 \*niak, within Chinese, derives from late Middle Old Chinese \*nrak,<sup>20</sup> from earlier \*narak. Since 若 \*narak is identical to the regular ancestor of MKor narah 'country', OKor \*narak, it is clearly an early transcription of this Korean word, which is ultimately a borrowing from Chinese. The Korean word is in turn the loan source of OJpn \*nara  $\sim \frac{1}{2}n$  yrak [乃樂]~<sup>☆</sup>nakrak [諾樂] (*NKD* 10: 281), the name of the early Japanese imperial capital 奈良 Nara. The Old Japanese word must be a loan from a Korean Peninsular form, perhaps originally one with an articulated final velar stop as in its Korean-area pronunciation-i.e., \*narak, as reconstructed for Old Korean on the basis of the Middle Korean form. The Old Japanese transcriptions of the name are in fact consistent with the Korean readings-as is the usual transcription of

<sup>&</sup>lt;sup>18</sup> This is not a true Old Koguryo word, but it could of course have been a productive loanword. In the absence of texts we simply do not know. By contrast, the inherited Koguryo word is well attested in both Archaic and Old Koguryo.

<sup>&</sup>lt;sup>19</sup> On the occasional correspondence of MChi final α-k and final α-η in OChi dialects, see Beckwith 2002b: 145-146.

<sup>&</sup>lt;sup>20</sup> On the initial cluster \*nr- cf. Sagart 1999: 135.

later times, \*nara[ŋ] ~  $\alpha \mathfrak{g}$  yraŋ [ $\mathfrak{F} \mathfrak{R}$ ]—despite the Old Japanese disallowance of closed syllables, with the result that codas in early (pre-'on' period) loanwords are either canonically dropped or preserved with the addition of an epenthetic vowel.

The occurrence of paired transcriptions of the native word for 'earth, land' in both Koguryo and Japanese may be due to there having been two words originally, but the fact that similar pairs are found among the homonyms of this word (see the forms of the genitiveattributive morpheme, and the word for 'bamboo', in Chapter 6) suggests that the seeming contrast between unrounded and rounded vowels (or central and back vowels) may be partly an artifact of the transcription system or the underlying language of the transcriptions, Northeastern Middle Chinese. This is a difficult problem that requires much further study.

Further evidence for the convergence of final  $\diamond$ -ŋ and final  $\diamond$ -k in the Korean linguistic area is provided by the toponym collocation Chi shan (積善) 'Amassed excellence' in MChi  $\diamond$ tseykdźian, transcribed phonetically as  $\diamond$ ts<sup>h</sup>eyŋdźi [青已] but unfortunately not glossed.

An example of a Northeastern Middle Chinese final velar nasal reflex of what appears in the central dialect as a final alveodental stop —but derives from an Old Chinese velar stop—is found in a Chinese loanword in Koguryo, OKog \*tawŋ [冬] 'iron'.<sup>21</sup> The Old Chinese word for 'iron' was loaned into Proto-Taic as \*hlek (Sagart 1999: 201, citing Li 1977). It is also (partly due to this evidence) reconstructed for Old Chinese as \*<sup>a</sup>hlek (Sagart 1999: 201), the initial \*<sup>a</sup>hl- regularly giving MChi \*t<sup>h</sup>- according to Historic Sinological Reconstruction (HSR).<sup>22</sup> But the phonetic of the character 鐵 'iron' is evidently  $\pm$  MChi \*t<sup>h</sup>eŋ<sup>3</sup>, reconstructed according to HSR as OChi \*<sup>a</sup>hleŋ? (Sagart 1999: 201).<sup>23</sup> This supports direct reconstruction of a Late Old Chinese northeastern dialect form \*t<sup>h</sup>aŋ, with an unpalatalized velar coda as expected in northeastern dialect words.<sup>24</sup> Mandarin *tie* < MChi \*t<sup>h</sup>et, must be from a Late Old Chinese form \*t<sup>h</sup>êk (rather than \*t<sup>h</sup>ek), with the long vowel \*ê, one source of the palatalization that changed

<sup>&</sup>lt;sup>21</sup> See Chapter 3 for philological discussion.

<sup>&</sup>lt;sup>22</sup> For discussion of Historic Sinological Reconstruction see Chapter 11.

<sup>&</sup>lt;sup>23</sup> As an independent character  $\pm$  is now normally read *reň* < MChi \*nyim.

<sup>&</sup>lt;sup>24</sup> Compare 予/余 OChi \*lâ < \*laCa < early MOC dialect \*laya 'first person singular pronoun' and 吾 OChi \*ŋra ~ \*ŋla < \*lŋa < early MOC dialect \*laŋa 'id.', both from EOC \*laga 'id.' (Beckwith 2002b: 139-140).

Central Chinese so drastically.<sup>25</sup> The Koguryo word has thus apparently been borrowed from an archaic Northeastern Middle Chinese form  $*t^ha\eta$  'iron, from LOC  $*t^he\eta$  'id.'

<sup>&</sup>lt;sup>25</sup> All these forms for 'iron' and related words should in any case go back to an ancestral root with the vowel \*e ~ \*ê (Beckwith 2002b; cf. Sagart 1999: 200-201).

### CHAPTER FIVE

## OLD KOGURYO PHONOLOGY

The greatest problem in Koguryo linguistics is establishment of the phonology, especially the vowel system. Because the language is preserved exclusively in the form of lexical items transcribed with Chinese characters—a wholistic writing system rather than a segmental 'alphabetic' system<sup>1</sup>—the phonology can only be derived through the difficult filter of the little-known Korean Peninsular variety of the equally little-known northeastern dialect of Middle Chinese. (Even the standard dialect, T'ang Chinese or 'Late Middle Chinese', has not yet been accurately established.) It is also likely that the transcription was influenced significantly by Old Silla Korean, another language we know little about.

This chapter constitutes an attempt to define the phonemes, syllable structure, and word structure of Old Koguryo and to explain the phonological processes that changed Archaic Koguryo into Old Koguryo. Well-attested Old Koguryo forms are used to establish the phonology, and constant reference is made throughout to cognate Japanese forms.

In the present chapter selected forms are used for both Koguryo and Japanese citations. This does not mean that the forms given are the only examples, or even perhaps the best examples; it means simply that they are the representative examples used here. In cases where partial forms have been cited, complete forms, with supporting information, are available elsewhere in this book. For other examples, full citations, further information on textual forms, interpretations of transcriptions, or other philological questions, see Chapter 2 (for Archaic Koguryo) and Chapters 3 and 6 (for Old Koguryo).

### CONSONANTS

Old Koguryo has a fairly simple consonant system that is greatly obscured by the variety and complexity of the Chinese transcriptions, which themselves often have more than one reading even in Chinese.

<sup>&</sup>lt;sup>1</sup> See the discussion in Chapter 11.

It is generally agreed that there was no phonemic distinction between voiced and unvoiced obstruents in Old Koguryo; it is also evident that there was no phonemic distinction between aspirated and unaspirated obstruents, and that most of the velar fricative transcriptions (with one important class of exceptions) represent simple oral stops, as they do in Old Japanese transcriptions. It is unclear if the two classes of affricates were phonemically distinctive in Old Koguryo. They appear to be in complementary distribution, palatal \*ts before palatal vowels and apical \*ts before others. Etymologically, however, there is a three-way distinction to be made. The Old Koguryo apicodental affricate derives from AKog \*t and is cognate to OJpn \*t, both from PJK \*t. The Old Koguryo palatal affricate \*ts has two origins. In most cases it is cognate to OJpn \*ts ~ \*ts ~ \*s and thus derives from PJK \*ts ~ \*s. However, OKog \*tśu ~ \*tśü derives from AKog \*tü and is cognate to OJpn \*tö, with the simple PJK onset \*t. The rounded feature of the Koguryo vowel is clearly responsible for the affrication, and its height for the palatalization; the distinctive vowels preserved by Koguryo in this case have merged in pre-Old Japanese, to become OJpn \*ö. What appears at first to be anomalous is thus regular. The consonant inventory is, as expected typologically, different for onsets and codas, both of which disallow clusters. Many consonant phonemes can occur as the onset, but very few as the coda. The liquid is exceptional in occurring only word-finally or intersyllabically.2

Words can begin with a vowel, either as a simple V syllable or in a VC syllable. Several specific phonological changes are evident in coda position, most notably the evident merger of all final alveodentals as the liquid /r/, phonetically probably [1], after a high vowel, though etymological or 'original' final r is found after all vowels. The existence of an articulated final velar nasal /ŋ/ is uncertain. Because a number of words exist in transcriptions both with and without the [ŋ] phone, it may be a relic of Chinese transcriptional phonology. However, since the velar stop /k/ seems to be preserved as such, and loan-

<sup>&</sup>lt;sup>2</sup> When it occurs intersyllabically, it would normally be interpreted (according to theoretical phonology) as an onset—e.g.,  $\pm$ tśiran would be syllabified as tśi-ran. However, the liquid never occurs in *word*-initial onset position, and in some cases the transcription has been deliberately chosen so as to place the syllable boundary after the coda of a preceding syllable even when the following syllable has a zero onset, transcriptionally violating the Maximal Onset Principle. By contrast, the transcription has sometimes followed the Maximal Onset Principle even at the expense of obscuring the etymology; see for example s.v. Tao-lieh *hsien* in Chapter 3.

word evidence from Ryukyuan dialects indicates at least some of the final velar nasals found there are historical (Beckwith 2002b), and since some of the same words with final velar nasals in Old Koguryo transcriptions have them in Old Japanese transcriptions too (regardless of modern interpretations thereof), it appears that a final /ŋ/ phoneme existed in some Old Koguryo dialects, though it either had an allophone [w] (i.e., it was realized as [w]) or became /w/ in both languages. Old Koguryo consonant codas are absent in monosyllabic Japanese cognates, but are often preserved in longer Japanese cognates, e.g. OKog  $\Rightarrow$ puk [代] 'deep' : OJpn  $\Rightarrow$ puka [布可] 'id.' The rules for the two types of correspondence remain to be established.

The Old Koguryo genitive-attributive suffix morpheme \* $ir \sim \pi in$ [隱] is found in two toponyms that identify it with the syllable \*na in Japanese: in one instance the identification is with one of the two forms of the Old Japanese genitive-attributive marker, \*nəy [乃], and thus also with the identical Old Koguryo cognate of the latter (see Chapter 6, s.v. Grammatical Morphemes). In this respect, as in some others, Old Japanese is more conservative than Old Koguryo, which has evidently metathesized the vowel<sup>3</sup> of the morpheme (which became \*ən and then \*ir ~  $\stackrel{\text{\tiny rin}}{=}$  [隱]) in these instances. Variant transcriptions of words such as OKog \*kir 'tree' and OKog \*tsiar 'silver' reflect the merger in coda position of AKog  $and n \sim al \sim ar$  to OKog \*[1]  $\sim$  /r/. This merger is an Old Koguryo phonological feature, and appears to have happened very late. However, it is impossible to tell if the change took place over the entire Old Koguryo area, or if some of the transcriptions preserve earlier phonetic forms (i.e., if the Old Koguryo morpheme transcribed \*ir ~  $\stackrel{\text{in}}{=}$  [隱] < \*in < \*nəy [乃]) was actually still pronounced [in] in any of its attested occurrences), because the phonology of the transcriptions depends on that of the underlying Chinese dialect. Since Korean evidently shares the same development, it appears probable that either this phonetic feature of Old

<sup>&</sup>lt;sup>3</sup> The Japanese reading of this character is \*on ~ \*ön (*JDB* 891), according with the front rounded vowel suggested by the 'spellings' in the *Ch'ieh-yun* where the word is listed under the even tone 20  $\cancel{B}$  yîn rhyme. Although Baxter reconstructs OChi \*?in (1992: 803 \*?jin) for the latter word, Starostin has "?ə[n]" (1989: 579) and, significantly perhaps, the class in which he places it also rhymes with words ending in \*-r in his system. Thus the OKog reading was probably closer to \*ən ~ \*ön ~ \*ün or \*ər ~ \*ör ~ \*ür than to forms reconstructed on the basis of Pulleyblank's MChi and Baxter's OChi, which would have the vowel \*i. However, this reconstruction obscures the relationship between the Koguryo and Japanese words for 'tree', among others which have this vowel. The problem requires further study.

Koguryo was a typological feature found throughout the area or that Silla Korean, which replaced Koguryo as the dominant language of Korea from the mid-seventh century on, acquired this feature when Korean speakers expanded northward into Puyo-Koguryoic speaking areas. There is further evidence for the change of \*-n to \*-r in the Koguryo area. The Silla Chinese toponym Chen an (真安) is a phonetic imitation of OKog \*tśiram ~ dźilam [助欖]. The new Silla name dśinan [真安] must accordingly be read \*tśiran. Because dtinan[其] has the high vowel din din din dialect of Middle Chinese) was pronounced regularly as a liquid in this environment.<sup>4</sup>

OKog \*vriar (in \*vriarχuər [烏列忽], 'Liao City', a transcription of the Koguryo equivalent of the toponym Liao tung ch'eng (遼東城) 'Liao-tung city') entails a phonetic transcription of the Koguryo pronunciation of Middle Chinese 遼 \*liaw, the name of the Liao River, which divided Liao-hsi from Liao-tung. The presence of the prothetic vowel \*v- shows that Koguryo, like Japanese and other Northeastern Asian languages, did not allow liquids in word-initial position.

## **OLD KOGURYO CONSONANT PHONEMES**

р	t	k	ĥ
	ts tś		
	Ś		
m	n	ŋ	
	r		
	У		

Labials

OKog p- : OJpn p-

OKog \*piar [別] 'level, flat (平)': OJpn \*pira [比良] 'id.' OKog \*puk [伏] 'deep (深)': OJpn \*puka [布可] 'id.' OKog \*piar [別] '-fold (重)': OJpn \*piay [幣] 'id.'

<sup>&</sup>lt;sup>4</sup> The final \*n of the new Silla name corresponds to Old Koguryo final \*m, but as in other cases the \*m seems to have become \*n (as it did, later, in standard Chinese), so the two actually correspond; i.e.,  $\mathbb{R}^{\alpha}$  lam was evidently already pronounced \*lan, or there was no phonemic distinction.

OKog -p : OJpn -p-

OKog \*kaip [甲] ~ \*kaippi [甲比] 'cavern, cave, hole' (穴)' : OJpn \*kapi [賀比] 'gap between mountains (峽)'

OKog m- : OJpn m-

OKog \*mir [密] 'three (三)': OJpn \*mi [瀰] 'id.' OKog \*miŋ [仍] 'female, yin (陰)': OJpn \*mi [美] 'id.' OKog \*mey [買] 'water (水)': OJpn \*mi [美] 'water (水)'

OKog -m : OJpn -m-

OKog <sup>☆</sup>tśiəm [斬] 'root (根)' : OJpn <sup>☆</sup>tśiməw [志母] 'the [place or direction] below (下)'

Alveodentals

OKog t(a/aw)<sup>5</sup> : OJpn t(a-/ö-)

OKog <sup>☆</sup>tan [旦] 'valley (谷)': OJpn <sup>☆</sup>tani [多邇] 'id.'

OKog <sup>☆</sup>tawŋ [冬] 'to take (取)' : OJpn root \*tö(ŋ)- ~ <sup>☆</sup>təŋ- [登] ~ <sup>☆</sup>taw- [刀] 'id.'

OKog <sup>★</sup>tawr [刀(臘)] 'pheasant (雉)': OJpn \*töri ~ <sup>★</sup>təŋri [登理] 'chicken; fowl, bird'

OKog n- : OJpn n-

OKog <sup>☆</sup>na [那] 'in, inside (內)': OJpn <sup>☆</sup>na [那] 'inside, middle (中)'

OKog \*namey [內米] 'rough water (瀑池)': OJpn ☆nami [那美] 'wave (波)'

OKog ☆nv [奴] 'land, earth (壤)': OJpn ☆nv [努] 'land, moor (野)'.

OKog - (a/ə)n : OJpn - (a/ə)n-

OKog <sup>★</sup>tan [旦] ~ <sup>★</sup>t<sup>h</sup>ən [呑] 'valley (谷)' : OJpn <sup>★</sup>tani [多邇] 'id.' OKog <sup>★</sup>nan [難] 'seven (七)' : OJpn <sup>★</sup>nana [那那] 'id.'

<sup>&</sup>lt;sup>5</sup> This phoneme is only preserved as [t] before low vowels (the clearest examples of which in the data are /a/, or diphthongs beginning with [a]) and [ $\mathfrak{I}$ ].

OKog -r : OJpn -r-

OKog \*piar [別] 'level, flat (平)': OJpn \*pira ~ \*pilian [比良] 'id.'

OKog -r : OJpn -ø

OKog <sup>☆</sup>tar [達] 'high (高); mountain (山)': OJpn root \*ta- [多] 'id.'

## Velars

OKog k- : OJpn k-

OKog \*kir [斤] 'tree, wood (木)'. OJpn \*ki ~ \*ki [紀] 'id.' OKog \*ku [仇] 'child (童子)': OJpn \*kv [古] 'id.' OKog \*keyr [皆尸] 'canine tooth (牙)': OJpn \*ki [岐] 'id'.

OKog -k : OJpn -k-

OKog ☆puk [伏] 'deep (深)' : OJpn ☆puka [布可] 'id.'

ОКод -ø /-ŋ : ОЈрп -ø /-ŋ

OKog \*taw~ ☆tawŋ [冬] 'to take (取)' : OJpn ☆tawri [刀里] ~ ☆təŋri [登利] 'to take (取)'

# Affricates

OKog tsi < \*tu(i) : OJpn tu ~ ti < \*tui

- OKog ☆tsitsi [濟次] 'hole (孔)' (< \*tuitui) : OJpn ☆tutu [都都] 'pipe, tube (筒管)'
- OKog \*tsu [祖] 'owlet (鵂)' (< \*tu) : OJpn ☆tvku [都久] 'owl (木 兔)'

OKog \*kutsi [古次] 'mouth (□)' (< \*kutui) : OJpn ☆kutv- [久都] ~ \*kuti [久知] 'id.' (< \*kutui).

OKog tśü < \*tü : OJpn tö

OKog \*tśü [朱] 'to shoot with a bow (射)' < AKog \*tüŋ [東] : OJpn \*tö- [登] 'to fly (飛)'

OKog \*tśüpu [主夫] 'long (長)': OJpn \*töpö [等保] 'far (遠)'

OKog tśi : OJpn tśi ~ si

- OKog <sup>★</sup>tśiar [折] 'silver (銀)': OJpn <sup>★</sup>tśira- [志邏] ~ \*sira 'white, silver'
- OKog \*tśiri [助利] 'north (北)' ~ AKog <sup>☆</sup>ts<sup>w</sup>iar [絕] 'back, behind (後); name of the Northern Tribe of Koguryo' : OJpn \*tśiri ~ <sup>☆</sup>siri [斯理] 'back, behind (後)'.
- OKog \*fiatśir [阿珍] 'poor (窮)': OJpn \*atśi [安之] ~ \*asi 'bad, evil'

# Fricatives

 $OKog \ s-: OJpn \ s- \sim ts-6$ 

- OKog \*śur [首乙] 'storehouse, treasury (凉)': OJpn <sup>☆</sup>sü [須] ~ \*tsu 'nest (巢); home'.
- OKog \*śa:<sup>☆</sup>siaw [肖] 'abundant, flourishing (豐)': OJpn \*sa-~<sup>☆</sup>tsa [佐] 'id.'
- OKog \*śamiar [沙熱] 'cool (清)': OJpn \*samu ~ \*tsamu- [左牟] 'cool, cold (寒 · 冷)'

## Glides

OKog y- : OJpn y-

- OKog \*ya ~ ☆yaw [要] 'willow (楊)' : OJpn ☆ya [夜] 'willow (楊 · 柳)'
- OKog \*yatsi [也次] 'mother (母)' : OJpn ☆yatuku [夜都故] (< \*yatu + \*ku) 'slave (奴 · 婢)'
- OKog \*yar [也尸] 'wild (狂 ~ 野)' : OJpn ☆yabu [也父] 'overgrown place; marsh (藪)'

#### VOWELS

The unclarity of the nucleus vowel in many OKog syllables is due to the nature of the raw data. The Chinese transcriptions are wholistic rather than segmental (a partial exception to this rule is the frequent

<sup>&</sup>lt;sup>6</sup> Before the vowel [i] this is often transcribed [tśi] (e.g.,  $\pm$ tśi [ $\geq$ ]) in OJpn, but both affricate and fricative transcriptions freely alternate in OJpn.

use of various characters to transcribe the coda phoneme /r/) and are based on a little-known extinct dialect. In addition, variant transcriptions often contain contradictory data, and this is especially true for the vowels. In the present analysis, only well-attested vowels are considered to be established phonemes. Several problems remain.

The vowel transcribed \*i—in open syllables always \*iy, following Pulleyblank (1991)—occurs alongside doublet transcriptions suggesting its closeness to \*ü. Although several words with this root vowel have excellent Japanese cognates, the reconstruction difficulty also exists in Old Japanese. The onset of OKog \*tśuw [朱] 'to shoot with a bow (射)', from AKog \*tüŋ ~ \*tuŋ [東] 'shoot', appears to be explainable only if the Archaic Koguryo vowel had been both rounded (to cause the affrication) and high (to cause the palatalization), indicating a reconstruction \*tü<sup>ŋ</sup> ~ \*tü<sup>w</sup> for late Archaic Koguryo, and \*tśü<sup>w</sup> for early Old Koguryo. The correspondence of OKog \*ü to OJpn \*ö in this environment appears to be significant.

The Old Koguryo vowel corresponding to the transcription \*aw is fairly distinctive within the Koguryo vowel system<sup>7</sup> and can probably be reconstructed as \*o for the language. However, the vowel or diphthong corresponds not only to OJpn \*ö but also to OJpn \*a, depending on its environment—before transcriptional final \*ŋ or \*r it regularly corresponds to OJpn \*ö (\*aw ~ \*awŋ ~ \*əw ~ \*əŋ, etc.) but before other codas or in open syllables it just as regularly corresponds to Old Japanese \*a. Moreover, in at least one case (OKog \*mawr 'circle') the rhyme \*-awr corresponds to an Old Japanese disyllabic form, \*-arö ~ \*-arü, indicating that the \*w of the Koguryo transcription seems to preserve the premetathesized final vowel of Common Japanese-Koguryoic. For these reasons the transcriptional form \*aw is retained as such for reconstructions also.

There are only two attested Old Koguryo words with the nucleus \*əw. The word for 'bear' has a good Japanese cognate, but the reconstruction remains uncertain. Both examples have been left in transcriptional form.

The Old Koguryo nucleus transcribed \*uə occurs in several words, including the best-attested Old Koguryo word, \*kuər 'walled city,

<sup>&</sup>lt;sup>7</sup> In the case of AKog \*o and \*ö, the reconstruction is fairly clear, but in each case it is based on a single transcription plus comparative evidence from Japanese. AKog \*o changed by Old Koguryo times to something else, represented as \*uə in one word, OKog \*kuər 'yellow', which has a clear Archaic Koguryo etymology.

fort', which is attested also in Archaic Koguryo, as \*kuru. The root of another well-attested word, that for 'mouth', is transcribed with the same character, and in addition is transcribed with other characters one of which (along with the Japanese cognate) indicates the Old Koguryo vowel was perhaps simply \*u. However, for yet another well-attested word, that for 'yellow' (known also from Archaic Koguryo), the Japanese cognate occurs in three different vowel forms. The reconstruction of the Old Koguryo vowel represented by the transcription  $\alpha$  is thus not certain and it has been left in transcriptional form.

It is possible that in at least one case (the word for 'ten') the transcriptional vowel  $\Rightarrow$  actually represents a distinct phoneme. However, the uncertainty is due primarily to the fact that the Japanese cognates of two of the words with this root vowel have different root vowels. Since one of them is the word for 'ten', which is not attested in Old Japanese phonetic transcription and is generally cited in a theoretical—and highly problematic—reconstruction, solving this problem depends to some extent on solving the thorny problem of the Old Japanese vowel system.

Finally, the many semivowels found throughout are generally artifacts of the Chinese transcriptions, but sometimes reflect Koguryo features. Whenever in doubt, the decision has generally been made to err on the side of caution and not delete them in the reconstructions.

Due to remaining uncertainties, transcriptional forms are usually retained alongside the reconstructions in the present work.

# **OLD KOGURYO VOWEL PHONEMES**



OKog \*i : OJpn \*i ~ i

OKog \*kir [斤] 'tree, wood (木)' : OJpn ☆ki ~ ☆ki [紀] 'tree'.

- OKog \*i/ü : OJpn \*i/ü
- OKog \*kir ~ \*kür [居尸] 'heart (心)': OJpn ☆kikiri ~ ☆ kükürü [許許呂] (< \*kiri ~ kürü) 'id.'
- *OKog* \*u [ $\overset{\diamond}{}$ u,  $\overset{\diamond}{}$ v]: *OJpn* \*u ( $\overset{\diamond}{}$ u,  $\overset{\diamond}{}$ ü)
- OKog ☆kutsi [古次] 'mouth (口)': OJpn \*kuti ~ ☆kuti [久知] 'id.'
- *ОКод* \*u [<sup>☆</sup>u, <sup>☆</sup>v]: *ОЈрп* \*v
- OKog \*ku [仇] 'child (童子)': OJpn \*kv [古] 'id.'
- OKog \*ey [<sup>☆</sup>εy]<sup>8</sup> : OJpn \*i
- OKog \*mey ~ \*mey [買] 'water (水), river (川)' : OJpn \*mi [美] 'water (水)'
- $OKog *o ( \stackrel{\diamond}{a}w[\eta]) : OJpn *\"o (\stackrel{\diamond}{a}w[\eta], \stackrel{\diamond}{a}[\eta], \stackrel{\diamond}{a}y, etc.)$
- OKog ☆tawŋ [冬] 'to take (取)' : OJpn root \*tö(ŋ)- ~ ☆taw- [刀] ~ ☆təŋ- [登] 'id.'
- OKog \*tan ~ <sup>☆</sup>tan [旦] ~ <sup>☆</sup>t<sup>h</sup>ən [呑]) 'valley (谷)': OJpn <sup>☆</sup>tani [多邇] 'id.'
- OKog \*na ~ <sup>☆</sup>nəy [乃] 'genitive-attributive marker' : OJpn \*na ~ <sup>☆</sup>nəy [乃] 'id.'
- OKog \*kaip [甲] ~ \*kaipi [甲比] 'cavern, cave, hole' (穴)' : OJpn \*kapi [賀比] 'gap between mountains (峽)'

### WORD STRUCTURE

## Syllables

Old Koguryo has a notable preference for closed syllables, an unusual feature in East Asia and an especially remarkable one by comparison with Archaic Koguryo, which like Old Japanese apparently allows no

<sup>&</sup>lt;sup>8</sup> The vowel \*e [ $\pm \varepsilon$ ] occurs only in the transcriptional diphthong \*ey ~  $\pm \varepsilon$ y.

closed syllables. However, the usual vocalic simplicity of Old Koguryo open syllables versus the usual vocalic complexity (relatively speaking) of Old Koguryo closed syllables, and the correspondences of the latter to disyllabic Archaic Koguryo forms as well as to disyllabic Japanese forms that are evidently very old,<sup>9</sup> indicate that the complex Old Koguryo monosyllable is a late development in the language. The syllable form VC is seemingly attested in two examples of a form of the genitive-attributive suffix (OKog \*ir ~  $^{\pm}$ in []), but this morpheme occurs only as a suffix and in both occurrences it is not actually a phonological VC syllable. Affricates, which are uniate phonemes in Old Koguryo, are covered as C in the following table. Note that despite apparent cases of it in the transcriptions, gemination does not occur in Old Koguryo.

### Wordforms

V (\*i ~ \*ü 'crosswise') VCVVC (\*uriar 'Liao') VCVCVC (\*usiγam 'hare, rabbit') CV (\*na 'in, inside') CVy (\*mey 'water, river, spring; excellent') CVyC (\*meyr 'garlic') CVCVy (\*namey 'rough water') CVCVy (\*namey 'rough water') CVCC (\*tan 'valley') CVVC (\*piar 'level, flat; fold, -times, layer') CVCV (\*meru 'colt') CVCVC (\*makir 'a kind of tree') CV(C)CV<sup>10</sup> (\*tawŋpi 'to open') CVCVC (\*śamiar 'cool') CV(C)CVC<sup>11</sup> (\*miŋkir 'the scholar tree, Sophora Japonica')

Simple Old Koguryo words consist of a root with or without grammatical suffixes. Two grammatical function morphemes are attested,

<sup>&</sup>lt;sup>9</sup> See Chapter 7 and Beckwith 2002a and 2002b.

 $<sup>^{10}</sup>$  The consonant  $*\eta$  in this form was probably not articulated as such. Except for the well-attested string \*-VrCV(-) it seems that two consonants could not be in direct contact in Old Koguryo.

<sup>&</sup>lt;sup>11</sup> The consonant \*ŋ in this form was also probably not articulated as such.

the genitive-attributive morpheme (which has two allomorphs in Old Koguryo) and the adjective-attributive morpheme. Both occur as suffixes. (See Chapter 6 for description and discussion.) There are no attested examples of isolated function morphemes, and no other types of affix (such as prefixes or infixes) are attested either. Many words are attested only in compounds consisting of two or more simple roots—e.g., \*tawr 'pheasant', in OKog \*tawrap [刀臘] 'pheasant crag (雉嶽)'. Whether such words could or could not occur freely as common nouns in the spoken language is unknown. In some cases the compounds may exist purely because they are toponyms. See Chapter 3 for example collocations.

#### CHAPTER SIX

# TOWARD COMMON JAPANESE-KOGURYOIC

Because of the fragmentary and almost exclusively lexical nature of the Koguryo corpus, unless new materials are discovered in the future the reconstruction of Common Japanese-Koguryoic will never be as straightforward as the reconstruction of, for example, Common Germanic. Within these limitations, however, and with the extensive corpora of Old Japanese and Old Chinese available, it is possible to make some progress in this direction. There are more verbs in the Old Koguryo corpus than hitherto noted, and their position in the respective toponyms help secure Koguryo's identification as a language with verb-final syntax. Also, several grammatical morphemes can now be identified;<sup>1</sup> for examples of their occurrence see Chapter 3.

All clearly glossed Koguryo words not thought to be loanwords are included in the present chapter, even if they have as yet no known connection with Japanese-Ryukyuan. For uncertain forms, loanwords, and other problematic words see chapters 3 and 8.

The title of this chapter signifies that this is a preliminary attempt at reconstructing some features of the Common Japanese-Koguryoic language. It is hoped that future scholars will improve on what is offered here.

#### **GRAMMATICAL MORPHEMES**

OKog \*na: \*nəy [乃] < AKog \*nâ [奴] (MChi \*nv) 'genitiveattributive marker'. Cognate to OJpn \*nəy [乃 ~ 能] ~ AJpn \*nâ [奴] 'id.' The two NJpn reflexes of this OJpn form, *na* and *no*, are usually thought to go back to OJpn \*na (AJpn \*nâ [奴]) and \*nö (OJpn \*nəy [乃 ~ 能]) respectively. Although there is no absolutely clear transcriptional evidence of this distinction in OKog or OJpn, there may well have been two allomorphs of the marker, one with an unrounded vowel and one with a rounded vowel. Cf. the

<sup>&</sup>lt;sup>1</sup> Some of these are identified in Beckwith (2000). The present book corrects the proposals put forth there.

related form OKog \*ir ~  $\Leftrightarrow$ in [隱] below. CJK \*na 'genitiveattributive morpheme'.<sup>2</sup>

- OKog \*ir : \*in [隱] 'genitive-attributive suffix morpheme', found in two toponyms that identify it with the Old Japanese genitive-attributive marker \*na ~ \*nəy [乃], and thus also with the latter's Koguryo cognate (see OKog \*na ~ \*nəy [乃] above); the clear phonological distinction could be due to dialect differences or possibly to archaizing transcription.<sup>3</sup> In this respect, as in some others, Old Japanese is more conservative than the Old Koguryo dialect in question, which has metathesized and shifted the vowel<sup>4</sup> of the morpheme 隱 in these instances: \*nəy > \*əyn > \*in > \*ir. The variant transcriptions reflect the merger in syllable-coda position of AKog \*n ~ \*l ~ \*r to OKog \*r. This form clearly goes back to CJK \*na 'genitive-attributive morpheme'.
- OKog \*pi: <sup>☆</sup>pi [比] 'verb derivational morpheme'. This is evidently cognate to OJpn \*-pu- ~ <sup>☆</sup>-pu- [富] ~ <sup>☆</sup>-paw- [保] 'id.' (*JDB* 502). Following the reconstruction of the noun-derivational morpheme <sup>☆</sup>tsi [次] < CJK \*tu-i (q.v.), this morpheme may be reconstructed as CJK \*-pu- 'verb derivational morpheme'.
- OKog \*si ~ śi : ☆si [斯] ~ śi [史] 'adjective-attributive suffix morpheme'. Cognate to NJpn -shi- 'adjective suffix morpheme' < OJpn \*-si- ~ ☆-tśi- [之 · 志] 'adjective suffix morpheme'. Martin notes, "This [-si-] is the major adjective-stem formant, found in 247 stems" (Martin 1987: 818). It is also the main adjective-attributive suffix in Old Koguryo. CJK \*si ~ \*śi 'adjective-attributive suffix morpheme'.
- OKog \*tsi: ☆tsi [次] < \*tu-i 'noun derivational morpheme'. Cognate to OJpn \*-ti ~ ☆-ți [知] < \*tui (e.g., in OJpn \*kuti 'mouth' < PJpn

<sup>&</sup>lt;sup>2</sup> If there were two allomorphs of this morpheme in CJK the other would seem to have been \*nə, suggesting an original difference in vowel length (\*n $\hat{a} \sim$  \*na) rather than a vowel harmony-type of alternation. The problem calls for further study.

<sup>&</sup>lt;sup>3</sup> An archaizing transcription is less likely because there are so few early transcriptions. Though their existence is attested by the lists in the Kwanggaet'o Inscription of 414—which however contains no glosses—there seem to be no cases where a toponym in the inscription might be identifiable with an Old Koguryo name. In general, the native toponyms seem not to have been written down until the mid-eighth century, when most of them were changed to Chinese. For discussion of the transcription process see Chapter 3.

<sup>&</sup>lt;sup>4</sup> See Chapter 5.

\*kutui) 'id.' and OJpn \*-tu- ~  $\Rightarrow$ -tu- [都] (e.g., in OJpn  $\Rightarrow$ kutupa 'mouth bit [for a horse]' < PJpn \*kutu-) (*JDB* 263).<sup>5</sup> The morpheme  $\Rightarrow$ tsi [次] occurs in several OKog words. The clear evidence that the Koguro and Japanese forms go back to Common Japanese-Koguryoic suggests that the similarity of this morpheme to the Chinese noun-derivational morpheme  $\neq$  (MChi \*tsi), attested already in late Middle Old Chinese, may be due to early convergence. CJK \*tui 'noun derivational suffix morpheme'.

OKog <sup>★</sup>v [烏] 'diminutive suffix'. Perhaps cognate to OJpn \*-ko ~ <sup>★</sup>kv [古] 'id.', which is derived from the homonymous OJpn word for 'child'. The OKog diminutive could similarly be a reduced form of the OKog cognate \*ku ~ <sup>★</sup>gu [仇] 'child',<sup>6</sup> with loss of the initial velar intervocalically in the Archaic Koguryo period. However, since there is only one example in the corpus the derivation is uncertain.

## WORDS

- OKog \*fia: \* $\gamma^{w}$ əy [迴] 'foot (足)'. Cognate to OJpn \*a [安] 'id.' (*JDB* 1) and to several words derived from it, including \*asi [阿斯] 'id.', the modern Japanese word for 'foot, leg'. On the phonology of the transcription character and its interpretation, see Chapter 3, s.v. Chu tsu *hsien*.
- OKog \*fia: <sup>☆</sup>a [阿] 'to look down at, overlook (臨)'. No Japanese cognate has been identified.
- OKog \*fiaip: \*aip [押] ~ \*γap ~ \*γəp [盒] 'west (西)'. This word is phonetically identical to OKog \*fiaip ~ \*aip [押] 'mountain', from AKog \*γapma [蓋馬] 'great mountains (大山)'. In view of the latter word's AJpn and OJpn cognate \*yama 'mountain', \*fiaip 'west' could perhaps be cognate to OJpn \*yami 'darkness' (the connection between west—the direction of the sunset—and darkness being common cross-linguistically; cf. German *Abendland*).

<sup>&</sup>lt;sup>5</sup> I am indebted to my colleague Alexander Vovin for comments on Old Japanese and its reconstruction which caused me to change some of my earlier views and, in particular, to further examine the processes involved in the development of the OKog morpheme \*tsi [次].

<sup>&</sup>lt;sup>6</sup> The OKog diminutive could perhaps be cognate instead to NJpn *o*- < OJpn \*wo ~ \*üan ~ \*wuan [袁] ~ \*wu ~ \*γυ [乎] 'diminutive prefix (小)'.

- OKog \*fiaip : \*aip [押] ~ \*γaip [峽] ~ \*kaip [岬] ~ \*kaip [岬]<sup>7</sup> ~ \*-ap (in 刀臘, see s.v. OKog \*tawr 'pheasant') 'high mountain, crag, peak (嶽 ~ 岳)' < AKog \*γapma [蓋馬] 'great mountains (大 山)'.<sup>8</sup> The Koguryo words are cognate to the AJpn and OJpn word for 'mountain (山)', \*yama [夜麻] (JDB 767-768). The disyllabic AKog form evidently became a monosyllable in OKog through regular metathesis and apocope (or simply apocope), as seen in other words attested in both AKog and OKog. Thus, AKog \*γapma > \*γaəp(m) > OKog \*fiaip. CJK \*γapma 'mountain'.
- OKog \*fiaip: \*aip [押] 'cave, cavern, hole (穴)' ~ \*aip [押] 'tube (管)'. A homonym of OKog \*fiaip 'crag, high mountain', this word ultimately means 'a hole in a mountain'. See s.v. OKog \*kaip 'id.'
- OKog \*fiatśir : \*atśin [阿珍] 'poor (窮)'. This is evidently cognate to NJpn *ashi* 'bad, evil' < OJpn \*atśi ~ \*antśi [安之] ~ \*asi (*JDB* 20) 'id.' and thus also NJpn *iyashi* 'vile, miserable, greedy, hungry' (Mar. 1987: 830) < OJpn \*iyatśi [伊夜之] (*JDB* 105) 'lowly, inferior, cheap (賤)' < \*iya + atśi.<sup>9</sup> CJK \*fiatśir 'poor, lowly'.
- OKog \*i : \*yi [伊] 'to enter (入)'. Cognate to OJpn \*ir- ~ \*yir- [伊 礼], 'id.' (*JDB* 106-107). The stem-final -r in the Japanese form is probably from an earlier syllabic \*-ra, *pace* Martin (1987: 698); in view of the OKog form it appears that this syllable \*-ra is the verbal formative widely attested in many OJpn and pre-OJpn examples. The root of the Japanese word evidently is only \*i-. (For comparisons that have been made with various neighboring languages, see Chapter 8.) CJK \*i 'to enter'.
- OKog \*i: ☆yi (伊) 'breeze, wind (風)'. No Japanese cognate has yet been identified.

<sup>&</sup>lt;sup>7</sup> This character is not found in Morohashi or other standard dictionaries. The reading is a guess based on \*kaɨp [岬].

<sup>&</sup>lt;sup>8</sup> Or perhaps '(name of) the great mountains of Koguryo', depending on how the source is interpreted, but in view of the phonologically and semantically exact Old Koguryo cognate \*fiaip 'high mountain', and OJpn \*yama 'mountain', it seems inescapable that the word, which occurs in several toponyms in the northern Koguryo kingdom area, should be understood as meaning 'great mountain(s)'. See chapters 2 and 3.

<sup>&</sup>lt;sup>9</sup> If the proposed derivation of  $\pm$ iyatśi from *iya* 'vile, miserable, greedy, hungry' (Mar. 430, 830) were actually sound (cf. Martin's comments, 1987: 430), the word would be a contracted compound,  $\pm$ iya plus  $\pm$ atśi. This sounds like a folk etymology, but the word does seem to have been shaped partly by folk-etymological analogy, the source of which is not immediately apparent.
- OKog \*im : <sup>☆</sup>im [音] 'to supervise, imprison (監)'. No Japanese cognate has yet been identified.<sup>10</sup>
- OKog \*kaip : \*kaip [甲] ~ \*kaipi ~ \*kaippi [甲比] 'cave, cavern, hole (穴)'. This appears to be a dialect form of OKog \*fiaip [押] 'cave, cavern, hole (穴)' ~ \*fiaip [押] 'tube (管)', or the two have influenced each other due to semantic overlap. Cognate to OJpn \*kapi [賀比 ~ 可比] 'gorge, gap between mountains (峽)' (JDB 210). See further s.v. OKog \*fiaip, and cf. Chapter 8. CJK \*kapi.
- OKog \*kakey : \*kakey [加支]<sup>11</sup> 'leek-blossom (菁)'. No Japanese cognate has yet been identified, but the first syllable could perhaps be cognate to Old Japanese \*ka [加] 'scent, odor (香)' (*JDB* 170), and the second syllable to OJpn \*ki [支] 'onion (葱)' (*JDB* 237).
- OKog \*kami : \*kammi [甘弥] 'vulture (鷲)'. No Japanese cognate has been identified.
- OKog \*kan :\*kən<sup>12</sup> [根] ~ \*kɨr ~ kɨn [斤] 'head (首 ~ 頭)'. This word is problematic due to the incongruent readings. The first (SS) reading would appear to be cognate with the well-attested Japanese root of words for 'head', \*ka, as in OJpn \*kabu [加夫] 'head (頭)' (< \*ka-n-pu), \*kaube [加宇倍] 'head' (< \*kau-n-pe), and \*kapo [可抱] 'face',<sup>13</sup> and could perhaps be connected to Puyo-Koguryoic \*kar 'tribal chief, king'. However, the second (KS) reading would call for a Japanese cognate \*kɨ, and would suggest a connection with the Japanese root for 'lord, ruler', from PJK \*kɨr 'id.' The problem seems intractable. See further s.v. AKog \*kar 'tribal chief' and OKog \*key 'king'.
- AKog \*kar : \*ka [加] 'tribal chief, official, minister (官 · 相)'<sup>14</sup> ~ \*kar ~ \*kan [干] 'king'; cf. Puyo \*kar ~ \*ka [加] 'tribal chief; official (官)' ~ Puyo-Paekche \*kar [瑕] 'king' (Kôno 1987: 84-85). This word is cognate with OKog \*key 'king' (from AKog \*kar

<sup>&</sup>lt;sup>10</sup> It is perhaps cognate to OJpn \*im- [伊美] (*JDB* 101) 'to abhor, shun, abstain (忌)', but the semantic connection would need to be clarified. <sup>11</sup> This corresponds perfectly to OJpn \*kaki [加支] 'persimmon' (*JDB* 176),

<sup>&</sup>lt;sup>11</sup> This corresponds perfectly to OJpn \*kaki [加支] 'persimmon' (JDB 176), which in view of the semantics seems unlikely to be related to the OKog word.

<sup>&</sup>lt;sup>12</sup> See Chapter 3 on the transcription.

<sup>13</sup> Cf. OJpn \*kaśira ~ \*katśira [加之良] 'head', s.v. OKog \*kasira.

<sup>&</sup>lt;sup>14</sup> Attested in the ministerial title 古鄒大加 \*Kutśu Dai-Ka(r) 'Kutśu Great Ka(r)' (*HTS* 220: 6186), a title inherited from Archaic Koguryo times when \*kar (加) was the word for 'tribal chief'.

'id.'), q.v. below. In view of the fact that the Puyo and Koguryo states emerged in an area dominated by the Hsiung-nu and Hsienpei as well as by Han China, and that the name of the first historical capital of Koguryo, \*Orto, is a well attested word for the same thing later on in Old Turkic and in Mongolian (see Chapter 3, s.v. Wan-tu), it might be thought that AKog \*kar [加] 'high official, minister (相); clan chief' could be a loan from Hsiung-nu, or from a Hsien-pei Mongolic language. Compare MMon  $qa \sim qan$  (pl. qat) 'king, khan ( $\pm$ ), leader of a tribe' (De Rachewiltz 1982: 77).<sup>15</sup> The reverse loan direction (from Japanese-Koguryoic) is however also possible, especially in view of the fact that there is no good etymology for these Old Turkic<sup>16</sup> and Mongolian words.

- OKog \*kasira : ☆γaseyliaŋ [河西良] ~ ☆γaśirla [何瑟羅] 'Koguryo name of the capital of the former Puyo-Koguryoic state of Ye (or Ye-Maek)'. Undoubtedly cognate to OJpn \*kasira ~ ☆γatśiliaŋ ~ ☆γatśiliaŋ [賀之良] ~ ☆katśiliaŋ ~ ☆katśiliaŋ [可之良] 'head'. The explanation would seem to be that the name of the Ye capital city was the word 'Capital' in the sense 'head (city), chief (city)', as in Latin, English, and Chinese (compare NMan 首都 *shŏudû* 'capital', lit., 'head metropolis'). CJK \*kasira.
- OKog \*katśi: \*kaţi ~ \*katśi<sup>17</sup> [加知] 'east (東)'. Clearly cognate to OJpn \*-katśi ~ \*-katśi in \*pimukatśi [比牟加之] 'east' (JDB 622)

<sup>&</sup>lt;sup>15</sup> Also, undoubtedly secondarily, 'nature spirit, lord (of the soil, of the river, etc.)'. De Rachewiltz also gives the additional denotation 'government property', but he derives it from  $qa \sim qan$  'ruler' > 'rulership, government', etc. (1982: 77; 1984: 117; I am indebted to my colleague György Kara for these references.) The connection would seem to be that of a lord who is bound by the *comitatus* oath to another lord (Beckwith 1984), as were An Lu-shan's Khitan *châkars*, who are called in the 'Hu' (胡) language \*yerak-qa ~ \*yelak-γa [曳 落河] 'strong warriors (壯士)' (*TCTC* 216: 6905; Maejima 1977). It is theoretically possible that the correlation is a coincidence, but the fact that Koguryo culture was very similar to that of the Hsien-pei and Khitan argues strongly against the idea. If the direction of transmission was from Puyo-Koguryoic to Mongolic and Turkic, the final \*-n of the latter forms (while per-haps due to the sporadic addition of *-n* in Mongolic) suggests possible Chinese influence in the transmission of the word, since OChi \*-r > LOC \*-n (> MChi \*-n) after \*a.

<sup>&</sup>lt;sup>16</sup> Clauson notes that the *-rd-* sequence of segments is unusual and OTur *ordu* meant "originally 'a royal residence', that is 'palace' or 'royal camp'... [and] could be a loanword" (1972: 203). Clauson considers "*xağan*" (1972: 611) and "*xa:n*" (1972: 630) to be probable loanwords from some unspecified language. The same is undoubtedly true of the Mongolic forms of the same words.

<sup>&</sup>lt;sup>17</sup> The character  $\mathfrak{H}$ , read  $t \pm i$  in standard LMC, was read  $t \pm i \sim t$  in early Old Japanese. Unfortunately it only occurs a few times in the Old Koguryo corpus, and never in the first syllable of a word or toponym.

and to OJpn \*koti 'east wind (東風)' (JDB 295-6). CJK \*katśi ~ \*kati 'east'.

- OKog \*kəwm : \*kəwŋ(m)- [功(木)]<sup>18</sup> 'bear (熊)'. Clearly cognate to NJpn *kuma* < OJpn \*kuma ~ \*kuma(t) [久末] 'id.' (*JDB* 269), but since there are only two attested Old Koguryo words with the nucleus \*>w, both occurring in the same toponym (for the other see OKog \*m>wk below), the reconstruction is uncertain. Although this is a culture word found in Korean and other languages of Northeast Asia, it is very hard to imagine that the CJK people did not have a word for 'bear', whether inherited or borrowed. CJK \*kuma 'bear'.
- OKog \*key: <sup>☆</sup>key [皆] ~ ke (in the Old Japanese transcriptions of the Old Koguryo morpheme for 'king' cited by Kôno [1987]) ~ 'king  $(\pm)$ ' ~ 'ruler'. The latter sense occurs in the title \*makrikey [莫離支], the Old Koguryo form of the Archaic period title \*makrikar ~ \*makripkar [麻立干],19 evidently meaning 'regent', but literally meaning 'true ruler' (see Chapter 2). Within Koguryo, the last syllable, \*key [支], corresponds in several cases to a dialect or earlier form \*kir. Within Chinese the character belongs to Starostin's Old Chinese 脂 B class, which has cross-rhyming and etymological relationship to his 脂 A and D classes, which must be reconstructed with final \*r or \*1.20 The Chinese transcription of the Puyo-Paekche title of the Paekche king given in the San kuo chih is 瑕 (Kôno 1987: 84-85), which character is reconstructed by HSR as \*gra (Bax. 796) or \*g(h)râ (Sta. 561), but in view of the transcription of the Archaic Koguryo title for 'regent' (as bestowed upon the early Silla kingdom), \*kar  $[\mp]$ ,<sup>21</sup> the transcription of the Puyo-Paekche form of the word must be read \*kar also. In addition,

<sup>&</sup>lt;sup>18</sup> This word occurs only in a collocation interpreted as \*[kəwmməwk]; see the discussion in Chapter 3.

<sup>&</sup>lt;sup>19</sup> This title is usually cited in the modern Korean reading of the transcription characters, *maripkan*. Cf. Gardiner (1969: 45-46) on this title in Silla beginning in the fourth century. In Kaesomun's title it clearly has the form of the word for 'king' in Old Koguryo. OKog \*makri, transcribed as *makari* and glossed as 'correct, true, right ( $\mathbb{H}$ )' in Old Japanese (Kôno 1987: 82) also appears to be cognate, in part, to OJpn \*ma [ $\overline{m}$ ] 'true, genuine ( $\underline{\mp}$ )' (*JDB* 663).

<sup>&</sup>lt;sup>20</sup> However, he reconstructs  $\overline{\Sigma}$  as \*ke (Sta. 567).

 $<sup>^{21}</sup>$  This is reconstructed by Starostin with final \*n despite massive evidence indicating it had to be \*r until the Late Old Chinese period, at least in the Central dialect of Chinese.

the internal reconstruction of \*key [皆] (transcribing the Old Koguryo form of the word for 'king') according to HSR is \*kriy (Bax. 768) or \*kriv (Sta. 570), though other words in the same phonetic series are reconstructed by Starostin as \*kray. Since the wholistic HSR system cannot determine where in a syllable an \*r occurred, this reconstruction too evidently represents a syllable \*kər. All attested Old Koguryo period forms thus support the reading \*key 'king' for Old Koguryo, and all attested and reconstructable Archaic period forms support the reading \*kar for Archaic Koguryo. The latter form is identical to the Common Puvo-Koguryoic word \*kar 'tribal chief'. At the Common Puvo-Koguryoic stage, there was therefore no distinction between the two. Unless it is a loanword, PJpn \*key—AJpn \*key 'ruler' in \*keymi [雞弥] 'king('s) wife (王妻)' (JDB 246) and OJpn \*ki in \*kimi ~ \*gimi [岐美] 'lord, ruler (君 · 主)' and in \*kimu- [支无-] 'prince, duke (公)' (JDB 245-246)—is related not to Puyo-Koguryoic \*kar but perhaps to OKog \*kir 'brave', q.v.22 The word \*keytsi [皆次] 'king  $(\pm)$ '—along with the much-discussed Paekche form of the same word, a central Chinese transcription, \*kitśi [吉支] (Kôno 1987)—is a derived form in \*-tsi [次] of OKog \*key [皆] 'id.'; for its locations see the map in Toh (1987: 398).

- OKog \*key : ☆key [支] ~ ☆γey [兮] 'military, martial (武)'. This word could be related to the OKog word for 'king'; see the preceding entry; cf. OKog \*kir 'brave'.
- OKog \*keyr : ☆keylir [皆尸] 'canine tooth (牙)'. Cognate to OJpn \*ki ~ ☆gi [岐] 'canine tooth (牙)' (JDB 237). CJK \*keyr 'canine tooth'.
- OKog <sup>☆</sup>kɨ ~ <sup>☆</sup>kü [去] 'poplar, willow (楊)'. This is probably cognate to OJpn <sup>☆</sup>kɨ ~ <sup>☆</sup>ki [紀] 'tree, wood' (*JDB* 236) or to the OJpn compounding allomorph of the same word, <sup>☆</sup>kü [許] (*JDB* 285), or both. See s.v. OKog \*kɨr 'tree, wood' below.
- OKog ☆kim [金] 'to rest (休)'. No Japanese cognate has been identified. See the discussion in Chapter 3.

<sup>&</sup>lt;sup>22</sup> In the Archaic Japanese period monarchs were evidently more often women than men (see the description of Japan in the *San kuo chih*), and even in the Old Japanese period the monarchs were frequently women, so in view of the probably identical Japanese form and the rarity of gender marking in Japanese it would seem that AJpn \*keymi and OJpn \*kimi have been folk-etymologized and both forms mean simply 'monarch' or 'ruler'.

- OKog \*kir: ☆kin [斤] 'brave (驍). Perhaps cognate to the root of OJpn \*kimi ~ ☆gimi [岐美] 'lord, ruler (君 · 主)' ~ ☆kimu- [支无-] 'prince, duke (公)' (*JDB* 245-246); cf. OKog \*key 'king' above.
- OKog \*kir: \*kin [斤] 'mound; ruins of a city (墟)'. This word may be etymologically connected to the Puyo-Paekche word \*ki [己] 'walled city, fort (城)' (q.v.), which was borrowed verbatim into Old Japanese. Since the loanform is ultimately the same word as Old Koguryo \*kuər 'walled city, fort (城)', from Archaic Koguryo \*kuru 'id.' (see Chapter 2), OKog \*kir ~ \*kin 'mound; ruins of a city' is also perhaps etymologically connected to OKog \*kuərfiiy ~\*kuəriy [骨衣] 'wilderness, wasteland (荒)', q.v.
- OKog \*kir : <sup>☆</sup>kinlir [斤尸] 'marks, streaks, letter, writing (文)'. No Japanese cognate has been identified. See the discussion in Chapter 8.
- OKog \*kir: \*kin ~ [斤] ~ \*kir ~ \*kinir [斤乙] ~ \*key ~ \*γey [] 'tree, wood (木)'. Cognate to OJpn \*ki ~ \*ki [紀] 'tree' (*JDB* 236).<sup>23</sup> CJK \*kir ~ \*kuir 'tree, wood'.
- AKog \*kor: ☆kwan [灌] 'front (前)'. This corresponds formally to NJpn *ko*- 'this, previous' < OJpn \*kö ~ ☆kü [許] (*JDB* 285) < PJpn \*koi. Cf. the following entry.<sup>24</sup>
- AKog \*kör: \*kwen [涓] 'right (右)'. This corresponds formally to NJpn ko 'this, previous', from OJpn \*kö ~ \*kü [許] (JDB 285).<sup>25</sup> Cf. the preceding entry. It is possible that there were originally two distinct words in Japanese also, but due to a PJpn phonological merger the distinction was lost before OJpn). Cf. also AKog \*źwin [順] ~ \*dźin [慎] 'left (左)', as well as the discussion of OKog \*kuər [骨] 'yellow (黃)' < AKog \*kweyru [桂婁].</p>

<sup>&</sup>lt;sup>23</sup> On the variant transcriptions, see the discussion in Chapter 4.

<sup>&</sup>lt;sup>24</sup> This word could perhaps be identified instead with NJpn *kao* 'face' < OJpn \*kapaw (可抱 \*kabaw) 'id.', but the etymology of the latter is problematic even within Japanese and would seem rather to be derived from PJpn \*ka 'head'. It appears that there may have been a connection within Koguryo between the words for 'front' and 'right', as also between the words for 'back' and 'left', odd as this may seem. All of the Archaic Koguryo direction words seem to have the phonological shape of Old Koguryo words, despite their early attestations.

 $<sup>^{25}</sup>$  NJpn *migi* 'right' < OJpn \*miki 'id.' (JDB 699; cf. Martin 1987: 477) is a word with no clear etymology.

- OKog \*ku : \*gu [仇] 'pine (松)'. Perhaps cognate to the OJpn compounding allomorph of the word for 'tree', \*ki ~ \*kü [許]; cf. OKog \*ki ~ \*kü [去] 'poplar, willow (楊)', above. This is one of several tree words with similar phonology, all of which could be allomorphs (or just variant transcriptions) of the word for 'tree', as in Japanese, or as the OKog evidence suggests they might originally have been independent CJK words, and the OJpn form \*ki ~ \*kü [許] merged semantically with \*ki ~ \*ki [紀]. Cf. OKog \*kir 'tree, wood', above.
- OKog \*ku : \*gu [仇] 'child (童 ~ 童子)'. Cognate to NJpn ko 'child; small one, little' < OJpn \*kv [古] 'child (子 ~ 兒)'. Perhaps also etymologically related to OKog \*v [烏] 'diminutive suffix' (q.v. above). CJK \*ku 'child'.
- OKog \*kuər [骨] 'yellow (黃)' < AKog \*kweru ~ \*kweylu [桂婁] 'yellow (黃)', which has become a monosyllable in OKog through apocope or metathesis (\*kweru > \*kweur > \*kwuer > \*kuər) or both. The word is cognate to NJpn ki- 'yellow' < OJpn \*ki ~ \*gyi [岐] 'yellow (黃)' (JDB: 237) and its compounding forms NJpn ku-< OJpn \*ku [九] (JDB 253; NKD 4: 776) ~ NJpn ko- < OJpn \*kv [古] (JDB 253; NKD 5: 531) 'yellow', implying Pre-OJpn \*kui ~ \*koi (cf. Martin 1987: 449) < PJpn \*kuêr ~ \*kuer. CJK \*kuer(u) 'yellow'.<sup>26</sup>
- OKog \*kuər : ☆χuər [忽] ~ ☆kuər [骨]<sup>27</sup> 'walled city, fort (城)' < AKog \*kuru ~ ☆kulu [溝凄] 'id.', apparently originally referring to a town or fort with a ring-wall (see Chapter 2).<sup>28</sup> This is by far the best attested Old Koguryo word, occurring in dozens of toponyms. The word may be connected to OJpn ☆kura 'storehouse, treasury'.<sup>29</sup>

<sup>&</sup>lt;sup>26</sup> CJK \*kweyr(u)- 'yellow' is perhaps comparable to the *centum* forms of PIE \*ghel, as in English *yellow* < OEng *geolu*, and NGer *gelb* 'yellow', both from CGer \*gelwa- < PIE \*ghel- (Wat. 29). The ubiquity of this culture word across Eurasia may be connected to the popularization of gold in eastern Eurasia by Indo-European speakers.

<sup>&</sup>lt;sup>27</sup> While this form is attested in the *Samguk Sagi* only in the name of the legendary first city of Koguryo, it is well attested in T'ang histories and other sources. In other words, the two transcriptions occur in complementary distribution in the sources. Cf. Ch'oe 1999.

 $<sup>^{28}</sup>$  This suggests a possible etymological connection with the root of OJpn \*kuruma [久流末) (*JDB* 275-276) 'wheel; cart, wagon, chariot'.

<sup>&</sup>lt;sup>29</sup> The shrine to the Koguryo founder hero-god \*Tüŋmeŋ in Liao-tung City contained stores of armor and weapons (*HTS* 220: 6191), suggesting that one major func-

- OKog \*kuər : \*kuərlir [骨尸] 'rotten (朽)'. This word appears to be related etymologically to \*kuərfiɨy ~\*kuərɨy [骨衣] 'wilderness, wasteland (荒)' (see above) via the semantic connection of 'rotten, spoiled' with 'ruined, ruins, wasteland'. Both words would thus be derivatives from a common root, \*kuər , apparently cognate to the root, \*ku-, of OJpn \*kut- (*JDB* 262-263) 'to rot (腐), \*kutur- 'to die (崩)' (*JDB* 263). Cf. NJpn *kuso* 'dung', *kusa* 'smelly', *kusaru* 'to rot', *kuchiru* 'to rot' (Mar. 1987: 466, 717). However, there is some uncertainty about the gloss 'rotten (朽)'. See the discussion in Chapter 3.
- OKog\*kuərfiɨy :☆kuərɨy [骨衣] 'wilderness, wasteland (荒)'. See the preceding entry.
- OKog \*kuərtsi : ☆χuərtsi [忽次] ~ ☆kuair [串]<sup>30</sup> ~ ☆kutsi [古次] 'mouth (□)'. This is cognate to NJpn *kuchi* 'id.' < OJpn \*kuti ~ ☆kuți [久知] (*JDB* 261) 'id.' ~ ☆kutv- [久都] 'mouth- [a combining form]' (*JDB* 263) < Pre-OJpn \*kutui. The word belongs to the distinctive 'Japanese set' of lexical items.<sup>31</sup> CJK \*kurtui 'mouth'.
- OKog \*kür ~ \*kir: <sup>☆</sup>külir ~ <sup>☆</sup>kilir [居尸] 'heart (心)'. Cognate to NJpn kokoro < OJpn \*kikiri ~ \*kükürü ~ <sup>☆</sup>ҳiҳiri ~ <sup>☆</sup>ҳüҳürü [許許呂] 'id.' One of several reduplicated body-part terms in Japanese, the PJpn root reconstructed purely internally would be either \*ki ~ \*kü or \*kiri ~ \*kürü, but in view of the Old Koguryo form it should be the latter. CJK \*kürü ~ \*kiri 'heart'.
- OKog \*kutsi: <sup>☆</sup>gutsi [仇次] 'solid, thick; honest, sincere (敦)', from \*ku-. Cognate to OJpn <sup>☆</sup>kv [古] 'thick, dense' (*JDB* 284). CJK \*ku 'thick, solid'.

tion of the Koguryo \*kuər ~ \*kuru was that of a storehouse or treasury. Cf. Chapters 2 and 7. The Puyo-Paekche reflex, \*kī [己], of the same word is considered to have been borrowed into OJpn as \*kï [紀] 'fortress, castle (城 · 柵)' (*JDB* 236-237). However, an inherited form of the CJK word could also have given OJpn \*ki, with compounding forms \*ku- ~ \*ko- (as in 'yellow', above); cf. for an analysis of early Japanese readings Yun (1994). The ubiquitousness of OJpn \*kï 'fortress, castle (城 · 柵)' may thus be due to the convergence of inherited and loan forms of the same word.

 $<sup>^{30}</sup>$  Several Korean scholars have proposed a 'semantic' reading of this character as \*koc or \*kot 'skewer'. However, this is based on the erroneous reconstruction of the transcription character  $\boxtimes$  as Middle Chinese \*kuət or the like. See the Introduction and Chapter 8.

<sup>&</sup>lt;sup>31</sup> It is possible that the root of this word may have been borrowed into CJK. Note OChi  $\Box$  \*kor ~ \*kur 'mouth' (Sta. 560 \*kô?; Bax. 771 \*kh(r)o?). Compare also Sogdian *qwc*' [kûčâ] 'id.' (Gharib 1995: 1999) and other Indo-European forms.

OKog \*kutsi : ☆kutsi [古次] 'mouth (□)'. See above, s.v. \*kuərtsi.

- OKog \*kufiɨy: \*kuɨy [古衣] 'swan, Cygnus bewicki (鵠)'. Cognate to NJpn *kugui* 'swan (鵠)', from OJpn \*kukupi [久久比]. (*JDB*: 254). The source of the OJpn final syllable \*-pi is unclear. See the comments in Chapter 8 on the comparative use of words for 'swan'. CJK \*kukɨy ~ \*kukuy.
- OKog \*kusi : \*kusi [古斯] ~ \*kuśi [古所] 'roe-deer (獐)'. This is cognate to NJpn *kujika* < OJpn \*kudzika [久自加] 'roe-deer (獐)' (*NKD* 4: 825). In light of the OKog word the proposed etymology of the Japanese word as a hybrid loan (Martin 1987: 468) is highly unlikely. Instead, the latter is clearly a compound composed of \*kusi ~ \*kudzi 'roe-deer' + \*ka 'deer'. CJK \*kusi ~ \*kuzi 'roedeer'.
- OKog \*makir: \*maikin [馬斤] 'a kind of tree (大楊 [lit. 'big willow'])'. This corresponds to, and is evidently cognate to, OJpn \*maki [麻紀], a tree word with several meanings including 'Chinese black pine, *Torreya nucifera*', 'timber', and 'firewood', and various doubtful etymologies (*JDB* 668; cf. Martin 1987: 470).
- OKog \*makri [莫離] ~ makari 'true, correct, rightful (正)' (Kôno 1987: 89) < AKog \*makri(p) [麻立]. The first syllable corresponds to, and appears to be cognate to, OJpn \*ma [麻] 'true, genuine (真)' (JDB 663).
- OKog \*mawr : \*mawir [毛乙] 'round, circle (圓)'. OKog \*mawr (i.e., \*maur) is clearly a cognate of Japanese *maru* 'round (thing), circle',<sup>32</sup> and related words such as *mawaru* 'to turn around'. CJK \*maru 'round, circle'.
- OKog \*meru : ☆miäru<sup>33</sup> [滅烏] 'colt (駒)'. Indirectly cognate to OJpn ☆uma [宇麼] 'horse (馬)' (*JDB* 129), an Old Chinese loan (Beckwith 2002b), and ☆kuma [古摩] 'colt (駒)' (*JDB* 308), also based on a Chinese loan. The OKog word appears to be a diminutive form of a root for 'horse', \*mar, which is widespread in northeastern Eurasia and related to or derived from the Chinese word for 'horse',

<sup>&</sup>lt;sup>32</sup> For philological discussion see Chapter 3.

<sup>&</sup>lt;sup>33</sup> Cf. Ch'oe (2000: 134) *mara* 'colt'. Although the OTib transcriptions of 滅 (Tak. 368-369: *fibyer* ~ *fibyar*) solidly attest to a form \*myär-, this word is attested only once in the Old Koguryo corpus. It could be that the transcription \*miärv [滅鳥] simply represents an OKog form \*miarv.

itself a clear borrowing from an IE language (Beckwith 2002b). The MChi form of the word for 'horse' was evidently also borrowed into OKog (see Chapter 3). The only real question is whether the diminutive,  $\diamond v$  [烏], is responsible for umlauting the vowel of the root syllable, as it seems to have done.<sup>34</sup>

- OKog \*məwk : ☆məwk [木] 'to flicker, glitter, zigzag, dodge (閃)'. No Japanese cognate has been identified.<sup>35</sup>
- OKog \*mey : \*mey [買] 'water (水), river (川)'. This corresponds regularly to its OJpn cognate, \*mi [美] 'water (水)' (*JDB* 694). The CJK word \*mey is related in turn to words for 'water' of the form mVr ~ wVr in many other languages of Eurasia; the final \*-y of the CJK form thus undoubtedly derives from an earlier \*-r, though the specific conditions under which \*-r > \*-y > OKog \*-y instead of being retained as such (i.e., \*-r > \*-r > OKog \*-r), as is seemingly the case in other words, remain unclear. CJK \*mey 'water'.
- OKog \*mey : \*mey [買] 'excellent, good (善)' ~ (Early) OKog \*mew ~ \*muw [牟] 'id.' < AKog \*meyŋ ~ \*miayŋ [明] ~ \*məwŋ [蒙] 'id.' No obvious Japanese cognate has been identified, but the OKog word formally corresponds to—and could perhaps be related to—OJpn \*mi [美] 'exalted, honored (御)' (*JDB* 695) via an earlier sense 'excellent'. The phonological changes from AKog to OKog in this case are difficult to pin down because there are few transcriptions, the earliest of which may be semantically influenced (see Chapter 2). The OKog and Early OKog (inscriptional) forms of this word suggest that the final velar nasal found in the early textual forms was perhaps not articulated as such even in the AKog period, or if it had been articulated, by the Early OKog period it

<sup>&</sup>lt;sup>34</sup> This is exactly what happens in Old Tibetan, though only with open syllable roots, e.g., OTib *rta* 'horse', *rteu* (written *rtefiu* because of Tibetan orthographic rules) 'colt'.

<sup>&</sup>lt;sup>35</sup> Phonetically the word is very close to \*mawk-, the presumed root of OJpn \*mawkvyipiy [毛古与不] (JDB 738) 'to wriggle, wiggle along; snake' (cf. Mar. 726 s.v. *mogoyou*). The semantics are excellent too if they apply to the root as well as to the attested derived word. Phonetically, assuming the correspondences in the words for 'bear' apply here too, OKog \*məwk could correspond to OJpn \*muk- [武岐] 'to face, turn toward; to pacify, make submit (向·平)' (JDB 723) and its many derived forms, though the semantics are problematic at best. Yet another possibility is that the Old Koguryo word 'to flicker, glitter, zigzag, dodge (閃)' is only \*əwk, and should correspond to one of the many Old Japanese stems of the shape \*uk-~\*ok-.

had become a labial or labiovelar. This applies also to the other word in the collocation in which the early forms are attested, namely Early OKog \*tsúw [鄒] < AKog \*tüŋ [東] 'shoot (射)', q.v. (cf. the discussion of the name of the Puyo-Koguryoic founder hero in Chapter 3). It is also possible that the final velar nasal of the Chinese transcription was originally used to approximate a labial glide, which phone evidently did not exist (except as a medial) in Late Old Chinese and Early Middle Chinese. This would then indicate the intermediary pre-OKog forms \*meyw > \*meyu. The latter would have lost its final vowel regularly through apocope in the development to OKog. Another possibility is that the variant transcriptions reflect different dialects. CJK \*mey(ŋ) 'excellent, good'.

- OKog \*meyr: ☆meylir [買尸] 'garlic (蒜)'. Cognate to OJpn \*mira ~ ☆miraŋ [美良] 'leeks, Chinese chives, fragrant-flowered garlic (韮); shallot, scallion (薤)' (*JDB* 718). CJK \*meyra 'allium'.
- OKog <sup>☆</sup>miŋ [仍]<sup>36</sup> 'female, *yin* (陰)'. Cognate to OJpn <sup>☆</sup>mi [美 ~ 彌] (JDB 144, 164, 839) ~ <sup>\*</sup>me ~ <sup>☆</sup>mey [賣] 'id.' (JDB: 731-735) ~ <sup>\*</sup>mina (Mar. 479) 'woman, female'.<sup>37</sup> CJK <sup>\*</sup>mi(ŋ) 'female'.
- OKog \*miŋkir : \*miŋkin [仍斤] 'scholar tree, Sophora japonica (槐)' < \*miŋ + \*kir 'tree'. The first syllable, OKog \*miŋ [仍], is phonologically—and probably etymologically—identical to OKog \*miŋ [仍] 'female, yin (陰)', which is cognate to Old Japanese. (See the preceding entry.) No Japanese tree name corresponding to the Old Koguryo compound has however been identified. See s.v. OKog \*kir 'tree'.
- OKog \*miŋpar ~ ☆miŋbuar [仍伐] 'grain (穀)'. The second syllable should probably be connected etymologically to OKog \*par ~ ☆palir [波尸] 'second-growth paddy rice (桃)', which is most likely cognate to OJpn ☆par- [波里] (*JDB* 600) 'to open up a new rice paddy (墾)'.
- OKog ☆mir [密] 'three (三)'. This is cognate to OJpn ☆mi [瀰] (JDB 698) 'three (三)' (JDB 695). CJK \*mir 'three'.

<sup>&</sup>lt;sup>36</sup> For the reconstruction of the initial of this syllable see Chapter 4.

 $<sup>^{37}</sup>$  No distinction is made between the two reconstructed OJpn \*e vowels because despite their supposed difference both are often (as here) used to transcribe the same word.

- OKog <sup>☆</sup>mur [勿] 'roof-beam, bridge (梁)'. Cognate to the root, \*mu, of NJpn *mune* 'roof-ridge beam (楝)' < OJpn <sup>☆</sup>mune<sup>38</sup> [牟年 ~ 牟禰] 'id.' (*JDB* 728; cf. Martin 1987: 488). CJK \*mur 'roofbeam'.
- OKog <sup>☆</sup>mutsi [蕪子] 'section, festival (節)' < pre-OKog \*mutui. This could perhaps be cognate to NJpn *matsuri* < OJpn \*maturi 'festival, offering (祭)', but the vowel correspondence is obviously problem-atic.<sup>39</sup>
- OKog \*na : \*na ~ \*nay [奈] 'bamboo (竹)'. Cognate to OJpn \*nö ~ \*nəy ~ \*nəŋ [能] 'arrow bamboo, bamboo used for making arrows (笑 · 箭竹 · 矢竹)' (*JDB* 562; NKD 10: 753) and NJpn *shino* < OJpn \*sino ~ \*sinv [斯奴] ~ \*sino ~ tśinəy [志乃] 'small bamboo (小竹), a kind of bamboo (篠)' (*JDB* 361; NKD 6: 927); cf. *-nai* in NJpn *shinai* 'bamboo sword'.
- OKog \*na : \*naw [惱] ~ \*n<sup>w</sup>əy [內] 'land, earth (壤) ~ \*nəy [乃] 'province, prefecture (州)'. Cognate to the OJpn compounding form \*na- [那] 'earth (地)' in \*nawi [那為] 'earthquake (地震)' (*JDB* 539) and perhaps in NJpn *suna* 'sand' (cf. OKog \*nair below). Compare the parallel form OKog \*nv [奴 ~ 弩] 'land, earth (壤), below, which is cognate to NJpn *no* < OJpn \*nv [努 ~ 怒] ~ \*nəy ~ \*nəŋ [能] 'land, field, moor, plain (野)' (*JDB* 562; *NKD* 10: 753). Both \*na [內] and \*nv [奴] forms (and effectively also [弩]) occur as alternate transcriptions of the same word. See the discussion in Chapter 4 (on the vowels in Japanese) and Chapter 8 (on further etymology). CJK \*na 'earth'.
- OKog \*na : ☆na [那] ~ ☆nəy [耐] 'in, inside (內)'. Cognate to OJpn ☆na [那] 'inside, middle (中)' (JDB 512) and ☆naka ~ ☆nayka

<sup>&</sup>lt;sup>38</sup> This word is homonymous with OJpn \*mune [牟年 ~ 牟禰] 'breast (胸)', which also has the compounding form \*muna [牟那] (*JDB* 727) and has been ety-mologized as consisting of \*mu 'body [牟]'—a form of \*miy ~ \*muy [微~未], 'id' < PJpn \*mui) (*JDB* 719)—and \*ne [年~ 禰] 'ridge, peak'. Whether or not the two OJpn words are in fact etymologically connected, the OKog form makes the etymology doubtful.

<sup>&</sup>lt;sup>39</sup> There are however numerous examples of synonymous, etymologically related word pairs in Japanese where one word has the vowel *a* and the other has the vowel *u*, for example, *kabu* 'head' ~ *kubi* 'neck, head'. The motivation for this variation is unknown. Here, and in the word for 'lead', dissimilation after syllable-initial *m*- might have been a factor in a shift from a CJK \*mu- to OJpn \*ma-.

[奈加] 'inside, middle (中), in between (間), half (半)' (JDB 514) < \*na-. Cf. OKog \*piy 'country'. CJK \*na 'inside, in'.

- OKog \*nair : \*n<sup>w</sup>əir [內乙] 'sand (沙)'. It is possible that this OKog word, like NJpn *suna*, is a compound. The latter is not attested in OJpn, though OJpn \*su [須] 'sand (沙)' is attested (*JDB* 378; Martin 1987: 531 'sandbank'). The CJK word \*na 'land, earth' is evidently the base of both compounds. The OKog word appears to be a compound of OKog \*na 'land, earth' and OKog \*(w)ir 'well, spring' (q.v. below), while the OJpn word is apparently a compound of Japanese *su* 'sand' and *na* 'earth'. See above, s.v. OKog \*na 'land, earth (壤)'.
- OKog \*namey : ☆n<sup>w</sup>əymey [內米] 'rough water [such as below a waterfall] (瀑池)'. Cognate to OJpn ☆nami [那美] 'wave (波)' (*JDB* 533) and homonymous with OKog \*namey 'long' (see the next entry). CJK \*namey 'rough water, wave'.
- OKog \*namey : ☆n<sup>w</sup>əymey [內米] 'long (長)'. This is cognate to OJpn \*naga ~ ☆naγa [那賀] ~ ☆na¹ga [那我] (JDB 514) 'long (長)', an adjective derived from a root \*na- (cf. Martin 1987: 836 "naga- < \*nanka-"). CJK \*na- 'long'.</p>
- OKog \*namur : <sup>☆</sup>nəymur [乃勿] 'lead (metal) (鉛)'. Evidently cognate to OJpn \*namari ~ <sup>☆</sup>namari [奈万利] 'id.' (*JDB* 533).<sup>40</sup>
- OKog ☆nan [難] 'seven (七)'. This numeral is cognate to OJpn \*nana ~ ☆nana ~ ☆naynay [那那 ~ 奈奈] 'id.'<sup>41</sup> It occurs with the genitive-attributive suffix \*ir (q.v. above), as \*nan-ir ~ ☆nan-in [難隱], which has unfortunately caused a great deal of speculative etymologizing (q.v. Chapter 8). CJK \*nan 'seven'.
- OKog <sup>☆</sup>nu [奴 ~ 弩] 'land, earth (壤)'. Cognate to NJpn *no* < OJpn <sup>☆</sup>nv [努 ~ 怒] ~ <sup>☆</sup>nəy ~ <sup>☆</sup>nəŋ [能] 'land, field, moor, plain (野)' (*JDB* 562; *NKD* 10: 753). Compare above, the parallel form OKog <sup>\*</sup>na ~ <sup>☆</sup>naw [惱] ~ <sup>\*</sup>nəy ~ <sup>☆</sup>n<sup>w</sup>əy [內] 'land, earth (壤) ~ <sup>☆</sup>nəy [乃] 'province, prefecture (州)', which is cognate to the OJpn com-

 $<sup>^{40}</sup>$  The vowels in the second syllable are problematic, but see the discussion s.v. OKog \*mutsi, above.

<sup>&</sup>lt;sup>41</sup> The vowels correspond regularly in both attested occurrences of words with this morphophonological structure, which are this word and OKog \*ya ~ \*yaw [要] 'willow (楊)' in \*ya-in ~ \*yaw-in [要隱] 'willow-', corresponding to OJpn \*ya 'willow' in \*yana- ~ \*yanagi 'willow (楊·柳)'; cf. below, s.v. OKog \*ya 'willow'.

pounding form \*na- [那] 'earth (地)' in \*nawi [那為] 'earthquake (地震)' (*JDB* 539). CJK \*nu( $\eta$ ) 'land, earth, field, moor', but ultimately perhaps an early loanword from Chinese. See the discussion in Chapter 4.

- OKog <sup>☆</sup>pa [波] 'sea (海)'.<sup>42</sup> Cognate to <sup>☆</sup>pa [波] in OJpn <sup>☆</sup>pama [波 麻] 'seashore, beach (浜 · 水際)' (*JDB* 593; Martin 1987: 397) < \*pa 'sea' + \*ma 'place'. CJK \*pa 'sea'.
- OKog <sup>☆</sup>pai [巴] 'male person, man (夫)'. No firm OJpn cognate has yet been identified.
- OKog <sup>☆</sup>paik [伯] 'to encounter, meet (遇 ~ 逢 ~ 迎)'. No OJpn cognate has yet been identified.
- OKog \*par: ☆palir [波尸] 'second growth paddy rice (桃)'. Probably cognate to OJpn ☆par- [波里] (*JDB* 600) 'to open up a new rice paddy (墾)'.<sup>43</sup>
- OKog \*piar : \*piar ~ \*biar [別] 'level, flat (平)'. This is cognate to OJpn \*pira ~ \*pilian [比良] 'level, flat (平)' (JDB 624-625), OJpn \*pirö [比呂] 'wide, broad, vast (廣)' (JDB 627); cf. OKog \*pirar [比烈] 'shallow (淺)' and the following word. CJK \*pira 'level, flat, shallow'.
- OKog \*piar : \*piar ~ \*biar [別] '-fold, times; layer (重)'. This is homonymous with OKog \*piar ~ \*biar [別] 'level, flat' (q.v), and is cognate to OJpn \*pe ~ \*biay [幣] '-fold, times; layer (重)' (*JDB* 647) < PJpn \*pia ~ \*pira (Mar. 403 "< \*piCa"). Cf. OKog \*pirar ~ \*piliar ~ \*biliar [比烈] 'shallow (淺)', above. CJK \*pira 'layer; times, -fold'.
- OKog \*piar : ☆piarli ~ ☆biarli [別史] 'apart, separate (分)'. Cognate to NJpn *he* 'id.' from OJpn \*pe [敝] (Pul. 34: ☆byiay) 'id.' (*JDB* 648-650) from PJpn \*pia ~ \*pira. CJK \*pira 'apart, separate'.

<sup>&</sup>lt;sup>42</sup> For phonetic reasons this word cannot be directly connected to OJpn \*wata [和多] 'sea (海)' (*JDB* 819). The latter could perhaps be a loan from Korean (though the phonology is problematic), or it may simply be derived from OJpn \*wata-[和多] 'to cross, ford (渡)' (*JDB* 820), since the word is often transcribed in Old Japanese with the character 渡 'to cross, ford'. It has been said that the ancient Japanese used the sea as one place of disposal of the dead and viewed the sea as a crossing to the world of the afterlife (*JDB* 819).

<sup>&</sup>lt;sup>43</sup> Another possibility might be OJpn \*pay(u)- [波由] 'to grow, sprout up' (JDB 597).

- OKog \*pirar : ☆piliar ~ ☆biliar [比烈] 'shallow (淺)', related to OKog \*piar 'level, flat (平)' (q.v.) and OKog \*piar '-fold, times; layer (重)' (q.v.). Cognate to OJpn \*pira ~ ☆piliaŋ [比良] 'level, flat (平)' (JDB 624-625), OJpn \*piro 'fathom (尋)' (JDB 627), and OJpn \*pirö ~ ☆pilü [比呂] 'wide, broad, vast (廣)' (JDB 627). CJK \*pira 'level, flat, shallow'.
- OKog \*pɨy: \*pɨy [不] ~ \*<sup>m</sup>bɨy ~ \*mɨy [未] 'country, nation (國)'<sup>44</sup> ~ \*pɨy [非] 'commandery (郡)' ~ \*pɨy [非] 'Puyo [扶餘], name of a kingdom, people, and language closely related to Koguryo'. This word is apparently cognate to the pre-Old Japanese root \*pi ~ \*bi 'country' (Mar. 407 s.v. *hina* 'countryside; remote place'; cf. Mar. 424 *i*[-*naka*] < \*wi) which occurs in the word *hinamori* 'frontier guard', evidently from AJpn \*pinâməwri [卑奴母離] (SKC 30: 854; cf. JDB 619), where the syllable \*nâ [奴] (奴 MChi \*nv < OChi \*nâ) is thought to be the genitive-attributive marker. The OKog word occurs in the name of the early capital city, \*Pɨyna (q.v. below). The phonology of the transcriptions is paralleled in OKog \*śapɨy 'red' (q.v.). CJK \*pɨy 'country, nation'.</p>
- OKog <sup>☆</sup>piy [非] 'soybean (大豆)'. No OJpn cognate has been identified.<sup>45</sup>
- OKog \*pɨyna : ☆pɨynəy [不耐] 'domestic, national (國內; lit., inside the country)'. This seems to be directly cognate to OJpn ☆pina [比那] 'frontier region, countryside' (*JDB* 618-619). CJK \*pɨyna. Because the first morpheme is independently well attested, the word can be further parsed as CJK \*pɨy 'nation, country' plus CJK \*na 'in, inside', q.v.
- OKog \*puk : \*buk [伏] 'deep (深)'. This is cognate to OJpn \*pvka-[布可] 'deep (深)' (*JDB* 630). CJK \*puk 'deep'.
- OKog \*śa: ☆siaw [肖] 'abundant, flourishing, luxuriant, rich (豐)'. Cognate to the root \*sa 'abundance, luck, good fortune' in OJpn

<sup>&</sup>lt;sup>44</sup> What appears to be a zero initial form \*uy [尉], a phonetic imitation of the OKog word for 'country, nation (國)' that occurs in one toponym, is evidently a late transcription (see Chapter 3); cf. the alternative form of the OJpn cognate, \*wi (Mar. 424 s.v. *inaka*); it is possible that the 'irregular' T'ang Chinese transcription \*<sup>m</sup>biy ~ \*miy [未] is an attempt to transcribe the same form.

<sup>&</sup>lt;sup>45</sup> The modern Japanese word for 'soybean' has been borrowed from a Tungusic language (Rozycki 2002). Cf. Sagart's discussion of words for 'bean' in China (1999: 187).

\*sați [佐知] 'fortune, fortunate (幸), prosperous, prosperity (福)' (JDB 332), OJpn \*sapa [佐波] 'much, abundant (多)' (JDB 337), \*saki [左吉] 'fortune, fortunate (幸), prosperous, prosperity (福)' (JDB 322), and OJpn \*sakay- [佐迦延] 'flourishing (as vegetation), glory, splendor (榮)', abundant, prosperous (盛)' (JDB 321). CJK \*sa.

- OKog \*śamiar : \*śamyiar [沙熱] 'cool (清)'.<sup>46</sup> Cognate to OJpn \*samu ~ \*tsamu- [左牟] 'cool, cold (寒 · 冷)' (*JDB* 340-341). PJK \*ś and \*s—assuming there were two separate phonemes in the protolanguage—had either become non-distinctive or had merged as one phoneme, \*/s/, in CJK. The transcriptions all indicate that the Old Koguryo phone was closer to \*ś [ʃ] rather than \*s.<sup>47</sup> CJK \*sam- 'cool'.
- OKog \*śapiy ~ ☆śapiy [沙非] ~☆śabu<sup>48</sup> [沙伏] 'red (赤)'. Cognate to OJpn \*sapi ~ \*sabi ~ ☆tsapi ~ ☆tsabi [佐比] (*JDB* 338-339) 'rust; to rust; red'. CJK \*sapiy 'red'.
- OKog \*śayk : ☆siayk [昔] 'orchid (蘭)'. Undoubtedly related to OJpn \*sakura ~ ☆tsakura [佐區羅] 'cherry (櫻)' (JDB 326) and \*sak-\*tsak- [佐久] 'to bloom (開)' (JDB 324). The CJK stem \*sak appears to be a derived form \*sa-kV from the primitive root \*sa 'abundant, to flourish', q.v. above. CJK \*sak 'bloom'.
- OKog \*śiŋti : ☆śiŋti ~ ☆śiŋtśi [省知] 'to transmit, narrate, follow (述)'. No Japanese cognate has been identified.
- OKog \*śur : \*śuir [首乙] 'storehouse, treasury (凉)'. This is cognate to OJpn \*su ~ \*sü [須] 'nest (巢); home' and the related OJpn word \*sum-~ \*süm- [須美] 'to dwell (住)'. CJK \*sur.
- OKog \*tan : ☆tan [旦] ~ ☆t<sup>w</sup>ən [頓] ~ ☆t<sup>h</sup>ən [呑] 'valley (谷)'. This is cognate to OJpn ☆tani [多邇] 'id.' (*JDB* 433). CJK \*tan 'valley'
- OKog \*tar : \*tar [達] mountain (山)' is a homonym of, and etymologically related to, OKog \*tar [達] ~ \*tarir [達乙] 'high (高)', q.v. Both are in turn cognate to the root, \*ta, of OJpn \*take ~ \*takiy

<sup>&</sup>lt;sup>46</sup> See the discussion of the text in Chapter 3, s.v. Ch'ing feng *hsien*.

 $<sup>^{47}</sup>$  Transcriptions of Old Japanese reflect the existence of two allophones, [s]  $\sim$  [ts], of one phoneme which has regularly become /s/ in modern Japanese. Cf. Unger 1975.

 $<sup>^{48}</sup>$  See Chapter 3, s.v. Ch'ih ch'eng *hsien*, on the interpretation of the final of one reading of the transcription character 伏.

[多氣] 'high mountain, mountain peak (峯 · 山岳); high, long (高·長)' (*JDB* 417) from PJpn \*taka-i, and also OJpn \*taka [多加] 'high'. CJK \*tar 'high'.<sup>49</sup>

- OKog \*tar : ☆tar [達] ~ ☆tarir [達乙] 'high (高)'. See OKog ☆tar [達] mountain (山)', a homonym and etymological relative of this word, for the Japanese cognates. (In fact, there seems to be just one OKog word, with two distinct but related denotations.) CJK \*tar 'high'.
- OKog \*tawŋ [冬] ~ \*təɨŋ [丁] 'mountain pass (岐)'. Cognate to NJpn tô- 'to pass through (通)' < OJpn \*təwŋpu- ~ \*təŋpu- [登富] ~ \*təŋpaw- [等保] ~ etc. (*JDB* 501-502) < PJpn \*təwŋ; see the discussion s.v. OKog \*tawŋpi [冬比] 'to open (開)'. CJK \*tawŋ 'pass'.
- OKog ☆tawŋ [冬] 'chestnut (栗)'. Undoubtedly cognate to NJpn *tochi* 'horse chestnut' (Mar. 1987: 551) < OJpn \*toți [度知] 'horse chestnut (像)' (*NKD* 9: 1238), despite the vowels (on which see the next entry). CJK \*tawŋ 'chestnut, horse-chestnut'.
- OKog \*tawŋ [冬] 'drum (鼓)'. Cognate to OJpn \*tutumi [都都美] ~ \*tudəwmi [都豆美] 'drum (鼓)' (*JDB* 470). Although the vowel of the reduplicated root syllable (\*tw) of NJpn *tsuzumi* and OJpn \*tutumi appears to be incongruent with both the OKog vowel and also with the NJpn (one expects NJpn \*totomi or \*todomi), the transcriptions are deceptive. The vowel \*əw in the second syllable of the *second* OJpn transcription, \*tudəwmi, does correspond regularly to the vowel \*aw of the OKog (cf. OKog \*tśupu 'long' and the next entry). The existence of doublet transcriptions of the vowel in this and other words casts grave doubt on the belief that Old Japanese transcriptions distinguish completely regularly between 甲  $k\hat{o}$  and  $\angle otsu$  ('A' and 'B') type vowels. Such anomalies are important. As noted elsewhere, explaining them is often the key to new insights into the historical development of the languages involved. CJK \*tawŋ 'drum'.
- OKog <sup>☆</sup>tawŋ [冬] 'to take (取)'. Cognate to NJpn *to*(*r*)- < OJpn \*təwr- ~ \*təwŋr- ~ <sup>☆</sup>təŋri [登利] ~ <sup>☆</sup>tawri [刀里] ~ <sup>☆</sup>təwri [斗理] ~ etc. (*JDB* 510) 'to take (取)'. CJK \*taw(ŋ) 'to take'.

 $<sup>^{49}</sup>$  It is possible that the signification 'mountain' of CJK \*tar is due to loan influence from Chinese  $\amalg$  MOC \*tar 'mountain'.

- OKog <sup>☆</sup>tawŋ [冬] 'iron (鐵)'. This is evidently a loan from a Late Old Chinese dialect form 鐵 \*thaŋ 'iron'.<sup>50</sup> No Japanese cognate has been identified.
- OKog \*tawŋpi [冬比] 'to open (開)', evidently a derived form from the OKog root 冬 \*tawŋ, which also occurs (in the meaning 'mountain pass', q.v.). Cognate to NJpn *tô*(*r*-) < OJpn \*təwŋpu- ~ \*təŋpu- [登富] ~ \*təŋpaw- [等保] ~ etc. (*JDB* 501-502) 'to pass through, open (通)'. In the light of the Japanese form, the derivational morpheme in the Old Koguryo word may be reconstructed \*-pu-i, parallel to the reconstruction of the nominal morpheme \*tui. CJK \*tawŋpu- 'to open'.
- OKog \*tawr : \*tawl- [刀(臘)] 'pheasant- (雉)'. Cognate to NJpn *tori* ~ to- < OJpn \*təwri ~ \*təŋri [登理] ~ \*dəyri [苔利] ~ \*təw- ~ \*təŋ [登] 'fowl, bird (鳥), chicken (雞)' (*JDB* 508-509). This is a clear loan into Common Japanese-Koguryoic from 鳥 OChi \*təwr 'fowl, bird'. CJK \*tawr 'fowl'.<sup>51</sup> For discussion of the transcription, see Chapter 3.
- OKog \*tək : ☆tək [德]<sup>52</sup> 'ten (十)'. This numeral is cognate with OJpn \*tə, \*təwo 'id.' (there are no attested OJpn transcriptions). The vowel correspondence is perfect. Although other instances of the OKog vowel ☆ə corresponds to \*a, which corresponds to \*a in OJpn, there are no other examples of this OKog rhyme, \*ək. Moreover, there are no phonetic transcriptions of the numeral in Old

<sup>52</sup> Takata (1988: 396-397), like Pulleyblank, reconstructs \*tək for 'Late Middle Chinese'. The T'ang Chinese texts in OTib script actually write this word *tig* [tik].

<sup>&</sup>lt;sup>50</sup> For discussion of the Chinese reconstruction see Chapter 4.

<sup>51</sup> There are numerous examples of compounds constructed with OJpn \*təw-  $\sim$ ×tən [登] 'fowl, bird (鳥)', including the place name 鳥羽 Toba 'Birdfeather' < OJpn \*tupa [度波] (NKD 9: 1300) < Pre-OJpn \*towr 'bird' + \*pa 'feather'. It has often been suggested that some Old Japanese place names are actually transcriptions of earlier non-Japanese Jômon names. Thus, according to this view, Toba did not originally mean 'bird-feather', and the meaning of the putative Jômon word \*toba is unknown. This is quite possible, and in view of the oftentimes very odd semantics of some Japanese toponyms—for example, 巣鴨 Sugamo 'nest duck', or 池袋 Ikebukuro 'pond bag', both in Tokyo (if the order of constituents were reversed both would make sense, suggesting the names are calques of substratum language names)—it is indeed most probable. However, while it is undoubtedly true that some Old Japanese toponyms are originally 'phonetic' transcriptions of lost Jômon names, this is irrelevant for Japanese-Koguryoic reconstruction. The point is that the Old Japanese scribes wrote the names this way because they did not know what they meant, but they were homonymous with Japanese words; they wrote the name of the place as Toba 'Birdfeather' because it was pronounced the same as 'bird-feather' in Old Japanese.

Japanese, and the phonology of the Japanese numeral is highly irregular within Japanese. The word is ultimately clearly a loan from Old Chinese (evidently from the dialect form \*dekeb) into CJK (Beckwith 2002a: 33-35), and perhaps for that reason some residual irregularity remains. The final consonant of the Koguryo form is probably a reflex of the CJK form, though it has been lost in Japanese; the alternate Japanese form \*təwo suggests an earlier \*təywo from a CJK \*təkwo 'ten'.

- OKog \*tsitsi: \*tsitsi ~ \*tseytsi ~ \*dzeytsi [濟次] 'hole, cave (孔)' from \*tuitui ~ \*tueytui. Cognate to OJpn \*tutu ~ \*tvtv [都都] 'pipe, tube (筒管)' (*JDB* 468). For the semantics, compare the OKog synonym \*fiap, which means both 'hole, cave' and 'tube'; since the OJpn cognates of the OKog words are semantically quite distinct, it is clear that the partial semantic merger took place within Koguryo after the CJK period. CJK \*tu(i)tu(i) 'tube, hole'.
- OKog \*tsv: ☆tsv [祖] 'owlet (鵂)' < \*tv. Cognate to NJpn *tsuku* ~ *zuku* 'owl (木兔)' < OJpn ☆tvku [都久] (*JDB* 463-464). CJK \*tu 'owl'.
- AKog \*ts<sup>w</sup>iar : \*ts<sup>w</sup>iar [絕] 'back, behind (後); north (北)'. See OKog \*tśɨri 'north', above.
- OKog <sup>★</sup>tśiəm [斬]<sup>53</sup> 'root, base (根) ~ 'tree root (木根)'. Cognate to NJpn *shimo* 'the [place or direction] below (下)' < OJpn <sup>★</sup>simaw [斯毛] ~ <sup>★</sup>tśiməw [志母] (*JDB*: 370), and perhaps also to <sup>★</sup>məw in OJpn <sup>★</sup>məwtəŋ [母登] 'root (本), below (下)' (*JDB* 741). CJK \*tśiməw.
- OKog \*tśiar : \*tśiar [折] ~ \*tśiawr ~ \*tśiawlir [召尸] 'silver (銀)'. Cognate to NJpn *shira-*, *shiro* 'white', *shirogane* 'silver' < OJpn \*tśira- [志邏 ~ etc.] ~ \*tśiru [之路 ~ etc.] 'white', \*sirökane ~ \*tśirükaney [之呂加禰] 'silver (銀)'. Although it is generally agreed that the latter means 'white metal', in view of the OKog cognate it is likely that the original meaning of the CJK root was 'silver'.<sup>54</sup> CJK \*tśira-u 'silver, white'.
- OKog \*tśiri: <sup>☆</sup>dźili [助利] 'north (北)'. Derived from AKog \*ts<sup>w</sup>iar [絕] 'back, behind (後); name of the Northern Tribe (北部) of the

<sup>&</sup>lt;sup>53</sup> Cf. attested 斬 LMC *hjam* [<sup>n</sup>cham] ~ *hjyam* [<sup>n</sup>chjam] (Takata 1988: 352-353).

<sup>&</sup>lt;sup>54</sup> Cf. Mallory 1989: 121, 150 for a discussion of silver.

Koguryo people'.<sup>55</sup> Cognate to OJpn \*tsiri ~ \*siri [斯理] 'back, behind (後); rump, buttocks (尻)'<sup>56</sup> (*JDB* 374; cf. Martin 1987: 526). CJK \*tśiri 'back, behind'.

- OKog \*tśü : \*tśü ~ \*tsú [朱] 'to shoot with a bow (射)' < Early OKog \*tsů [鄒] < AKog \*tüŋ [東] 'id.' By form cognate to OJpn \*tö- in \*töp- ~ təŋp- [登夫] ~ \*töm- ~ təŋm- [等美] 'to fly (飛)' (JDB 499), and semantically no stretch (arrows fly). The evidence of the Archaic Koguryo form shows that the onset of the Early Old Koguryo and Old Koguryo forms has been affricated and palatalized due to the following rounded high vowel, \*ü. This is a regular correspondence; cf. the next entry.<sup>57</sup>
- OKog \*tśüpu : \*tśüpu ~ \*tśübu ~ \*tśvpu ~ \*tśvbu [主夫] 'long (長)'. Cognate to Old Japanese \*töpö ~ \*töpö ~ \*tə<sup>n</sup>paw [等保] ~ \*tə<sup>n</sup>pu [登富] 'long (distance), far (遠)'. Contrast OKog \*tawŋpi [冬比] 'to open (開)' ~ OJpn \*töpo- ~ \*təŋpu- [登富] (*JDB* 501-502) 'to pass through'. See the previous entry.
- OKog  $\diamond \upsilon$  [烏] 'ox, cow, cattle (牛)'. This is clearly cognate with the root,  $\ast u$ , of OJpn  $\ast usi \sim \diamond utśi \sim \diamond ütśi [宇之] (JDB 114)$  'cow, cattle (牛)' (see Chapter 8), which is undoubtedly from  $\ast u$  'ox' plus  $\ast si$ 'animal' (cf. Mar. 564  $\ast u(n)si$ ). The early Japanese are said not to have had cattle (*SKC* 30: 855), though this assertion should be confirmed by archaeology. The phonetic identity of the words for 'cow' and 'pig' in Old Koguryo (see the next entry) suggest that the animals were not very important in the Koguryo economy, or that the Koguryo speakers did not care—they did have plenty of servants and slaves, according to the Chinese accounts. It is possible that the word attested as  $\ast u$  in both languages is a loan from Late Old Chinese  $\ddagger \ast \eta \hat{u}$  'cow, ox, cattle', which exhibits the diagnostic sound change of Middle Old Chinese  $\ast \hat{a}$  to Late Old Chinese  $\ast \hat{u}$ .

<sup>&</sup>lt;sup>55</sup> OKog \*tśiri 'north' is clearly derived from AKog \*ts<sup>w</sup>iar 'back, behind' not only because of the semantics but also because AKog \*ts<sup>w</sup>iar should become OKog \*tśar ~ \*tśir. The exact derivational function of the morpheme \*-i here (and elsewhere in Japanese-Koguryoic) remains to be clarified.

<sup>&</sup>lt;sup>56</sup> Cf. OJpn \*tsö ~ \*sö (*JDB*: 399) ~ \*se (*JDB*: 396) 'back' from PJpn \*tswer.

However, the distinctive Old Japanese forms of the respective root syllables indicate that the two words existed and were distinct in Common Japanese-Koguryoic. CJK \*u 'ox, cow, cattle'.

- OKog <sup>☆</sup>υ [烏] 'pig (猪)'. Cognate to OJpn <sup>☆</sup>wi [為] 'boar, pig (猪)' (JDB 824). The Koguryo form appears to reflect false reanalysis of the protoform as \*ui, consisting of a root \*u plus the derivational morpheme \*i, and subsequent loss of the \*i. Cf. OKog <sup>☆</sup>v [烏] 'cow, cattle'. The Common Japanese-Koguryoic word might be an early loanword dating to the Proto-Japanese-Koguryoic period; see Chapter 7. CJK \*wi 'pig, boar'.
- OKog \*υ ~ \*wəy ~ \*υy : \*υ [烏] ~ \*ywi [唯] ~ \*γ<sup>w</sup>əiy [淮] 'ford (津)'. Perhaps cognate to NJpn watar- 'to ford, cross over', from OJpn \*wata- [和多] 'ford, to ford (渡)' (JDB 819-820), if analyzable as from a Proto-Japanese compound, \*u 'crossing' plus \*ata-'to reach, attain'. CJK \*u-?
- OKog <sup>★</sup>usiγam [烏斯含] 'hare, rabbit (兔)'. Cognate to NJpn *usagi* 'id.' < OJpn \*usaki ~ <sup>★</sup>utsaki ~ <sup>★</sup>ütsaki [宇佐岐] 'id.' (*JDB* 114). Japanese has metathesized the second and third vowels. The lack of an initial \*t- in this well-known culture word (related forms with initial *t*- are found in Korean, Mongolic, Tungusic, Chinese, and other languages) is an innovation found also in Tibeto-Burman (cf. OTib *yos* 'hare, *yosbu* 'bunny'). On the other hand, the final syllable—CJK \*gan<sup>58</sup>—corresponds to the final syllable, *-γan*, of OTur *tawišγan* 'id.' These two points support the hypothesized history of Japanese-Koguryoic, whereby the speakers lived in earlier times in the vicinity of the southeastern Tibeto-Burmans, but in later times, as known from historical and other sources, in Northeast Asia, in proximity to Central Eurasian peoples. CJK \*usigan 'hare, rabbit'.
- OKog ☆ü ~ ☆i [於] 'broad-axe (斧)'. Cognate to NJpn *yoki* 'broad-axe (斧)' < OJpn \*üki ~ ☆ügyi ~ ☆yigyi [与岐] 'id.' (*NKD* 13:564). CJK \*i ~ \*ü 'broad-axe'. Perhaps a semantic extension, via 'edge', of ☆ü ~ ☆i 'border'; cf. OEng *ecg* 'sword; edged weapon'.

 $<sup>^{58}</sup>$  As discussed elsewhere, it is highly probable that final nasals were not actually articulated as syllable codas. The transcriptions seem rather to reflect nasalization of the vowel. In the present case, the final \*m is reconstructed as \*n to reflect the Old Turkic evidence, since there are several other words with the same final morpheme in that language.

- OKog ☆ü ~ ☆i [於] 'border (塞)', semantic derivative of OKog ☆i ~ ☆ü [於] 'crosswise, sideways (橫)' (q.v.). See also the preceding entry.
- OKog <sup>☆</sup>ü ~ <sup>☆</sup>i [於] 'crosswise, sideways (橫)'. Cognate to NJpn *yoko* 'id.' < OJpn \*iki ~ \*ükü ~<sup>☆</sup>iχi ~<sup>☆</sup>üxü [余許] 'id.' (*JDB* 793; Mar. 1987: 576). Cf. the preceding entry. CJK \*i ~ \*ü 'crosswise, sideways'.
- OKog \*ür ~ \*ir : ☆üir ~ ☆iir [於乙] ~ ☆(<sup>m</sup>biy)ir [(未)乙] ~ 'spring, source (原); well (泉井)' ~ \*ir [伊梨] ~ \*ür<sup>59</sup> 'spring (泉)'. Cognate to OJpn ☆wi [為] 'well (井)'. The different Chinese and Japanese transcriptions of this word seem to be attempts—as seen in other words, such as the word for 'ford', above—to approximate a syllable which did not exist in Late Old Chinese or Early Middle Chinese. CJK \*wir 'spring, well'.
- OKog \*ütsi: \*ütsi ~ \*utsi [于次] 'five (五)', from PKog \*ütui ~ \*itui. Cognate with NJpn itsu 'id.', from OJpn \*itu (not attested in transcription in Old Japanese). The source of the discrepancy in the initial vowels is unclear; one language has changed the CJK \*i- or \*u-, or perhaps both have changed what was earlier a completely different vowel. CJK \*itu- ~ \*ütu- 'five'.
- AKog \*wi [位] 'to resemble, look like (相似)'. No Japanese cognate has yet been identified.
- OKog \*ya: ☆ya [也] 'nape (項)'. No Japanese cognate has yet been identified.
- OKog \*ya: \*yaw [要] 'willow (楊)'. Cognate to OJpn \*ya- 'willow'. The word occurs only in \*yair ~ \*yawin [要隱] 'willow-, willow's' in the collocation \*yawirkuərtsi ~ \* yawinχwərtsi ~ [要隱忽次] 'willow's mouth (楊口)'. The form \*yair ~ \*yawin [要隱] 'willow's' is derived from the root \*ya, to which is affixed the genitive-attributive marker \*ir ~ \*-in [隱], the OKog metathesized form of the AKog genitive-attributive marker \*nâ [奴], which is also preserved in one case as OKog \*na ~ \*nəy [乃] (q.v. above under 'grammatical morphemes'). The OJpn root \*ya occurs in \*yanagi [夜那疑] 'willow (楊 · 柳)' (JDB 764-765) with the geni-

<sup>&</sup>lt;sup>59</sup> See Chapter 3, s.v. Ch'üan ching k'ou *hsien* for a detailed discussion of the Old Japanese transcriptions and other transcriptions of the Koguryo word for 'spring, source, well'.

tive marker \*na [ $\mathbb{H}$ ], and in OJpn \*yagi 'id.' without it (*JDB* 756); the syllable \*gi (from \*ki) is the word for 'tree'. The structure of OKog \*yair 'willow-, willow's' is parallel to that of OKog \*nanir 'seven-, seven's', q.v. On the merger of AKog \*ir ~ \*in and similar forms as OKog \*ir, see Chapter 5. CJK \*ya 'willow'.

- OKog \*yar : \*yalir [也尸] 'wild (狂 ~ 野)'. Cognate to the root of OJpn \*yabu [也父] 'overgrown place; marsh (藪)' (JDB 766). CJK \*yar 'wild'
- OKog \*yatsi : <sup>☆</sup>yatsi [也次] 'mother (母)' < \*yatui. Cognate to OJpn <sup>☆</sup>yatuku [夜都故] 'slave (奴 · 婢)' minus the diminutive suffix <sup>☆</sup>-kv. CJK \*yatu-.
- AKog \*źwir :☆źwin [順] ~ \*dźir ~ ☆dźin [慎] 'left (左)'. Perhaps to be identified with NJpn *so* 'that', from OJpn \*zew ~ ☆zeŋ [曾].<sup>60</sup>

<sup>&</sup>lt;sup>60</sup> Or \*sew ~  $\pm$ seŋ. Cf. Mar. 530: "so (< ? $\pm$ zo)." In the absence of an Old Koguryo form, the Archaic Koguryo word is difficult to interpret.

#### CHAPTER SEVEN

#### THE PROTO-JAPANESE-KOGURYOIC HOMELAND

Some scholars working on the problem of Japanese ethnolinguistic origins have long argued that on the basis of certain cultural features the Japanese people should have come from a part of continental Asia further to the south than Korea or other areas near Japan. A serious linguistic argument was made in support of this position by Murayama Shichirô (1966), who cited some parallels between Japanese and Tibeto-Burman. Other chapters of this book show that the proximal homeland of Japanese is the same as that of their close genetic relatives, the Puyo-Koguryoic languages—i.e., the Liao-hsi area and vicinity—and that Japanese-Ryukyuan and Puyo-Koguryoic diverged at about the time of the Yayoi migration to Japan. However, lexical evidence presented in this chapter, together with typological linguistic evidence and some cultural evidence (see Chapter 2), indicates that the Japanese-Koguryoic people migrated to the Liao-hsi area from much further south.

Directly to the south of Liao-hsi is a vast territory that has been Chinese-speaking from Antiquity on, and indeed it has long been accepted that a small number of Japanese words are loans from Old Chinese. These are generally thought to have been borrowed during the Later Han Dynasty or afterward, via trade and political contacts with China. Among the most frequently cited of these words are uma 'horse', borrowed from an early form of Chinese 馬 mă 'horse', and ume 'plum', similarly from Chinese 梅 méi 'plum'. These etymologies have been accepted partly because neither horses nor plum trees are native to Japan and partly because both words are virtually identical to their Middle Chinese and Modern Mandarin equivalents except for the initial vowel or geminate nasal consonant of the Japanese forms. Other than these and a few other words, no Old Chinese elements have been considered to exist in Japanese. Yet it is clear that if the speakers of Proto-Japanese migrated to Japan from mainland East Asia in Antiquity, there must have been a much broader, deeper, and older loan relationship with languages there than that suggested by the above two words. To demonstrate this is not in fact very difficult (though explaining the relationship is another matter), but hitherto virtually nothing has been done on this problem. The present effort is only a beginning that barely scratches the surface of what should be a major subfield of Japanese historical linguistics.<sup>1</sup>

There are 'native Japanese' words for numerous things, including animals, plants, and cultural artifacts, which were not found in Japan before-and in some cases even after-the Yayoi migration.<sup>2</sup> Many of these words must have been brought to Japan with the Proto-Japanese Yayoi people. While some of them were clearly acquired in the Common Japanese-Koguryoic period in Northeast Asia, others, the words under consideration in the present chapter, have come from much further away in space and time. A few of the most salient etymologies are presented here with a view to locating the homeland, or Urheimat, of the Proto-Japanese-Koguryoic speakers. The phonological characteristics of most such words indicate they were borrowed into Japanese-Koguryoic from Chinese and other languages after the Shang dynasty (the Early Old Chinese period), but well before the Ch'in and Han dynasties (the Late Old Chinese period), in several stages, at least two of which are identifiable. The words belong to the 'cultural vocabulary' sector and the 'primary vocabulary'<sup>3</sup> sector of the lexicon.

#### CULTURAL VOCABULARY

#### Japanese uma 'horse'

In addition to OKog \*meru 'colt' (q.v. Chapters 3 and 6) and OJpn \*uma 'horse', some form of the root syllable of a word for 'horse', \*mar-, is found in most eastern Eurasian languages—e.g., Mongol *mori-n*, Korean *mal* [mar] (from MKor *măr*) Mandarin Chinese *mă*, Burmese *m aŋ*, and others. The Chinese word for 'horse', 馬 NMan *mă*, from MChi \*ma<sup>2</sup> (Pul. 206 \*mai<sup>2</sup>/\*mɛ:<sup>2</sup>), which was undoubtedly borrowed from the same western Eurasian source as the animal itself, is currently reconstructed by scholars working in the HSR (Historic

<sup>&</sup>lt;sup>1</sup> This chapter is essentially exploratory, and more than the ideal number of mistakes may have been committed in it. I hope that future scholars will greatly improve on what is tentatively presented here.

<sup>&</sup>lt;sup>2</sup> The same point is made, with several other examples, by G.N. Kiyose (2002).

<sup>&</sup>lt;sup>3</sup> The term 'primary vocabulary' is used here to emphasize the fact that the traditional idea of 'basic vocabulary' is at best highly suspect. See Chapter 10.

Sinological Reconstruction)<sup>4</sup> framework as \*mra? for 'Old Chinese' (Sta. 561: \*mrâ? ~ Bax. 775: \*mra?). While OJpn \*uma [宇麼] ~ \*<sup>m</sup>ma ~ \*muma [无万] 'horse (馬)' (*JDB* 129) appears to reflect an Old Chinese \*rma, from \*mra, thus supporting the current HSR form \*mra?, the Hateruma Ryukyu dialect form <sup>m</sup>maŋ ~ ?maŋ (Janhunen 1998: 422; Martin 1987: 74; Miyanaga 1981) agrees with the Tibeto-Burman forms (OTib *rmaŋ* 'horse, steed'5 ~ LBur *mraŋ* 'horse', etc.),<sup>6</sup> indicating that the loanwords to Japanese are from an Old Chinese form \*rmaŋ, derived regularly via \*mraŋ from earlier \*mraga, from Early Old Chinese \*marga.<sup>7</sup>

#### Japanese ume 'plum' and umi 'sea'

Old Japanese \*umey [有米] 'plum (梅)' (*JDB* 133) and \*umi [字美] 'sea (海)' (*JDB* 131) are also thought to have been borrowed from Old Chinese along with the word for 'horse'. In the *Odes* dialect of late Middle Old Chinese, the words for 'plum' and 'sea' rhyme. They also have the same phonetic, 每 *m*č 'each', the phonetic of which is, in turn, 母 *mu* 'mother', from MChi \*məw<sup>2</sup>. The reconstruction of the latter word is not agreed on (Bax. 778: \*m(r)o/i? ~ Sta. 548: \*mə?), but appears to go back to late MOC \*mre, from EOC \*máre.

<sup>&</sup>lt;sup>4</sup> See Chapter 11.

<sup>&</sup>lt;sup>5</sup> The usual Tibetan word for horse, *rta*, from pre-OTib \*tra (\*tr- being a disallowed sequence in OTib) evidently derives from an earlier form \*t-mra. The initial of Rgyarong *<sup>m</sup>bro* 'horse' (apparently borrowed from Chinese independently of Tibetan) reflects an OChi dialect with oralized nasals, as in OTib *fibu g* [<sup>m</sup>brug] 'dragon' (← OChi dial. \*<sup>m</sup>brug ~ \*<sup>m</sup>bru<sup>n</sup>g ~ OChi \*mruŋ 龍 'dragon'). Rgyarong has regularly lost TB final velar nasals.

<sup>&</sup>lt;sup>6</sup> The early TB peoples did not all learn about horses at the same time, but they must have learned about them from the Chinese after the breakup of PTB. This is clear because if the word for 'horse' had been borrowed directly from a western or northern source, the first syllable would have been \*mar- or \*ma- and would have been retained as such in OTib. Some TB languages have borrowed the word from even later forms of Chinese.

<sup>&</sup>lt;sup>7</sup> On the final vowel, cf. OTib *brgya* 'hundred' ← early MOC Ξ \*<sup>m</sup>berg<sup>y</sup>a < \*merg<sup>y</sup>a < \*merk<sup>y</sup>a 'id.' (> late MOC \*prak). Early Old Chinese words of the shapes CVrCV and CrVCV regularly became CrVC by MOC. On \*ŋ ~ \*γ, and for a much more detailed analysis of the words for 'horse', 'plum', 'sea', 'shell', 'mustard', 'eye', and 'ear', see Beckwith 2002b; for 'water, juice' and 'ten' see Beckwith 2002a. The account given here accords with what would be expected on the basis of a periodized reconstruction of Old Chinese and the dialect or dialects which donated the early loanwords into the Tibeto-Burman and Japanese-Koguryoic languages. For a brief discussion of the HSR approach, see Chapter 11; for a lengthier discussion see Beckwith 2002b.

The words for 'plum' and 'sea' must have been homophonous with 'mother' when each character was created (perhaps not at the same time) and before metathesis and other later changes which set them apart, indicating a reconstruction \*maré for both words for Early Old Chinese, as shown in (1) and (2).

- (1) NJpn *ume* 'plum' < OJpn \*umey, Yaeyama Ryukyuan  $^{m}mi$  < PJpn \*rmaj ← 梅 LOC dial. \*rmay < late MOC \*mrê < EOC \*maré<sup>8</sup>
- NJpn umi 'sea' < OJpn \*umi < PJpn \*rmey ← 海 LOC peripheral dial.</li>
  \*rmey (LOC Central dialect \*smey<sup>9</sup>) < late MOC \*mrê < EOC \*maré</li>

With the recent discovery of large numbers of Europoid mummies in western China dating to from around 2000 B.C. to the late first millenium B.C., the immense cultural impact of new Western imports is no longer contested by archaeologists. The imports include the domesticated horse, domesticated sheep, wheat, and barley, all identified genetically as of Near Eastern origin (Barnes 1993, Barber 1998: 653-654, Good 1998: 659), as well as advanced bronze metallurgy and the fully developed chariot-a Western invention (Drews 1988; Shaughnessy 1988; Di Cosmo 2002: 27-30)<sup>10</sup>—along with distinctive cultural practices such as horse and chariot burials. The borrowing of these and other Western things must have been accompanied by the borrowing of at least some of the Western words for them, as is normal in linguistic history in the rest of the world. It is also virtually certain that the Westerners who brought the new technology to China spoke one or more early Indo-European languages (Beckwith 2002b: 130). If the above Chinese words for 'horse' and 'sea', which were borrowed into Japanese-Koguryoic, are reconstructed back to Early Old Chinese or Proto-Chinese times, it is clear that the word for 'horse', 馬 EOC \*marga (from PChi \*marka) is fully comparable with PIE \*marko 'horse' (Wat. 51), while 海 EOC \*maré is clearly related to PIE \*mori 'sea' (Wat. 56; cf. CGer \*mari, Lat mare 'id.'). The resemblance of

<sup>&</sup>lt;sup>8</sup> LOC \*mray > MChi <sup>☆</sup>məy > NMan *méi* [mej].

<sup>&</sup>lt;sup>9</sup> This word either acquired an \*s- prefix or was compounded with some word or morpheme of the shape \*sV after the late MOC syncope and metathesis, and then the \*r was assimilated to the initial \*s, or the initial of the MOC form \*rmaj was interpreted as a prefix, for which \*s- was substituted. In either case, the new onset \*smbecame \* $\chi$ -, as it regularly did in OChi, yielding MChi \* $\chi$ əy (Pul. 118:  $\chi$ əj<sup>2</sup>) and NMan h**ǎ** [ $\chi$ aj] (cf. Pulleyblank 1995: 188-189).

<sup>&</sup>lt;sup>10</sup> There is "no doubt that the chariot did indeed enter China from the northwest at about 1200 B.C." (Shaughnessy 1988: 190). Earlier examples of the same inrusive artifact have since been found. It should be noted that there are no vehicular antecedents of any kind in China.

the Early Old Chinese forms of these words to the Indo-European forms cannot be coincidental, and requires explanation.

### Japanese sumi 'charcoal, Chinese ink'

The usual Chinese word for 'black', 黑 NMan *hêi* from Old Chinese \*smek (Sag. 213-214: \*<sup>a</sup>hmik; Sta. 551: \*smōk), is found already in the Oracle Bone Inscriptions. It is well known as the root of the word for 'Chinese ink', *mò* 墨, from Old Chinese \*sVmék (cf. Sagart 1999: 213: \*<sup>a</sup>(sə)-mɨk), which was borrowed by many nearby languages, as shown by Proto-Tai \*(h)mɨk and Burmese *hmaŋ*<sup>2</sup>.<sup>11</sup> As Chinese (or 'India') ink is made from pine soot (Sagart 1999: 213), it is clear that  $\overline{K}$  NMan *huî* 'ashes, charcoal', from OChi \*smej (Sag. 98: \*<sup>a</sup>hmɨ), is related etymologically to the words for 'ink' and 'black'.<sup>12</sup> In light of this evidence, NJpn *sumi*, from OJpn \*sümi ~ \*sumi [須美] (*JDB*: 392) 'charcoal, Chinese ink', is an obvious loan from Old Chinese that retains the initial \*s-. The vowel of the first syllable in the Japanese form allows us to reconstruct its Old Chinese ancestor as \*sumey. This suggests that for 墨 NMan *mò* 'ink' the early Middle Old Chinese form<sup>13</sup> should be reconstructed as \*sumek.

Japanese karashi 'mustard', kara- 'acrid', kuru- 'bitter', kara 'shell'

The mustard plant was introduced to Japan from China, and 'mustard' in Japanese is *karashi* [karaji], from Old Japanese \*karaci [karatji]. This is an obvious loanword from an unsyncopated form, \*karac, of  $\stackrel{\text{r}}{\xrightarrow{}}$  OChi \*krac 'mustard', the ancestor of EMC \*kəiy<sup>3</sup> ~ \*kɛ:y<sup>3</sup> (Pul. 155) and NMan *jiè*. OJpn \*karaci [karatji] 'mustard' is related etymologically within Japanese to the adjective \*kara- 'acrid, pungent', which in

<sup>&</sup>lt;sup>11</sup> The Literary Burmese form is  $mag^2$ , with unexplained voiced initial, according to Sagart, who remarks, "Voiceless initials in Siamese and Burmese suggest that the Chinese source word was an iambic form \*(sə)-mik with sə- prefix disappearing in Chinese after the borrowings were made. The initial sequence \*(sə)-m- in Chinese was presumably interpreted as sm- in Burmese, with later evolution to hm-" (Sagart 1999: 214).

<sup>&</sup>lt;sup>12</sup> OTib *nag*- 'black' and *snag* 'ink', from PTib \*neg ~ \*nek and \*sneg ~ \*snek, respectively, should also probably be related to the above words and may help provide the missing link between two of the Chinese words for 'black'— $\Re$  NMan *hêi* from OChi \*smek and  $\Re$  NMan *yì* from OChi \*lêk (Sagart 1999: 200-201: \*<sup>b</sup>lik).

<sup>&</sup>lt;sup>13</sup> It is attested in the *Shu ching* (Schuessler 1987: 427).

turn corresponds to Chinese 苦 ku°'bitter' from late Middle Old Chinese \*krâ.<sup>14</sup> In view of OTib ka 'bitter' from PTB \*ka (Benedict 1972: 18), the Chinese root for 'bitter' must also be reconstructed as \*kara for early Middle Old Chinese, and both 'mustard' and 'bitter' go back to one Early Old Chinese root, \*kara 'acrid, pungent, bitter'. The borrowing must have occurred in Proto-Japanese-Koguryoic times, from a dialect and period of Chinese which had the phonological structure of Early Old Chinese or early Middle Old Chinese.

There also seems to be a connection between Japanese *kurushii* 'bitter, painful (苦)', from OJpn \*kurusi ~ \*kuruci ~ \*küruci [久流之 ~ 俱流之], from the root \*kuru-, on the one hand, and 苦 NMan *ku* 'bitter, painful', on the other, from a period reflecting later Old Chinese phonology (after the shift \*â > \*û had already taken place, i.e., LOC \*krû < ?\*kuru < \*kara). This suggests a later reborrowing of the same Chinese word.<sup>15</sup>

Since the phonetic in 7/pie 'mustard' is 1/pie 'shell, armor', which is its homonym in Middle Chinese and Old Chinese—late MOC \*krac 'shell, armor'—the other Chinese word for 'shell, armor',  $\blacksquare$  NMan ji from EMC \*kaip ~ \*ke:p (Pul. 145), from OChi \*krap (Sta. 592: \*krap ~ Bax. 766: \*krap), must be considered. This word has long been considered to be a relative of OTib krab 'armor', and is an obvious cultural loan from the syncopated late Middle Old Chinese form. Old Japanese \*kara 'shell', too, is evidently related to the Chinese word, but to the early Middle Old Chinese form, \*kara-, the common root of both later derived words for 'shell, armor' in Chinese.

## Japanese kuruma 'car', kura 'storehouse'

The above examples bring up the correlation between Japanese 絡 kur-'to wind, reel, spin', from OJpn  $\stackrel{\circ}{}$ kur(u) ~ \*kür(u) [久流] from \*kur(a),<sup>16</sup> and kuruma 'car, chariot' from OJpn  $\stackrel{\circ}{}$ kuruma ~ \*kürüma

<sup>&</sup>lt;sup>14</sup> Via Middle Chinese  ${}^{\star}k^{h}v^{2}$  (Pul. 175: kho<sup>2</sup>). The origin of the aspiration of the initial stop in Middle Chinese in this and many other words is unclear.

<sup>&</sup>lt;sup>15</sup> At present these phonological changes are almost completely unexplained, but they are extremely important for the history of Chinese, Japanese, and the relationships between the two languages. They deserve detailed attention.

<sup>&</sup>lt;sup>16</sup> Martin's suggestion: "\*kuru- (cf. kurumu, kuruu, kuru-si) ? < kura- (the second vowel early assimilated to the first)" (1987: 716)

[久流末] 'cart, chariot' (JDB 275-276),17 on the one hand, and on the other 絡 NMan luò 'to weave, spin; woven material' from OChi \*KVlak ~ \*KVrak, from \*kula-k ~ \*kura-k 'to weave, spin (silk, etc.); woven material',<sup>18</sup> and  $\equiv$  NMan  $j\hat{u} \sim ch\hat{e}^{19}$  'chariot, vehicle, wheel', from LOC \*klû ~ \*krû from late MOC \*klâ ~ \*krâ from early MOC \*kulá ~ \*kurá.<sup>20</sup> Because the Japanese word for 'chariot, vehicle, wheel' must have been borrowed into the language along with the thing itself, as in Chinese, and the character for the word 'chariot' in Chinese is the phonetic in  $\equiv$  NMan  $k\dot{u}$  'storehouse' from late MOC \*krâ, corresponding to NJpn kura 'storehouse (倉 ~ 藏)', from OJpn \*küra [衢 羅] 'storehouse (倉 ~ 藏)', the vowels of the Early Old Chinese form are established. This brings up the evidently related 'capital; storehouse',<sup>21</sup> from OChi \*kran (Sta. 584), which should then be from \*kuran, from EOC \*kuraga; and also the word for 'cool', in the character for which 京 is phonetic, namely 涼 NMan liáng 'cool' from OChi \*gran (Bax. 773: \*g-rjang; Sag. 68: \*<sup>B</sup>Cə-ran).<sup>22</sup>

<sup>18</sup> This is perhaps a reduction of an onomatopoetic form \*kulakula ~ \*kurakura, the sound of a loom. See Sagart's extensive, illuminating discussion of words written with this word's phonetic, gè 各'each', including *luò* 落'to fall', from OChi \*<sup>A</sup>kə-lak and gê 胳 'armpit; hind-leg, haunch', from OChi \*<sup>A</sup>k-lak (Sagart 1999: 124-130; the reconstructions are his). NMan *luò* is either derived from MOC \*kula ~ \*kura 'to turn, wind, spin' (perh. ultimately  $\leftarrow$  IE \*kwel- 'wheel') or, since other words for 'to weave' and 'web, fabric' in Chinese and TB are evidently loans from IE, it is also a loan from IE. Note also OTib *fitag*- 'to weave', *tags* 'web, fabric', and *tagapa* 'weaver', all derived from  $\sqrt{tag}$ - 'to weave' < PTB \*tak- ~ \*tek, and NMan *zhi* 織 'to weave' ~ *zhi* 'fabric' < OChi \*tak ~ \*tek, both  $\leftarrow$  PIE \*tek(s)- 'to weave, build' (cf. Pok. 1058, Wat. 89). Cf. 羅 NMan *luó* 'gauze, netting, a net' < early MOC \*KVlay ~ \*KVray (Bax. 775: \*C-raj; Sta. 565: \*r(h)aj).

<sup>19</sup> The New Mandarin form  $\equiv ch\hat{e}$  reflects the Secondary Palatalization of velars that occurred in LOC (or possibly already in MOC) and is reflected in MChi palatal affricate (> some NMan retroflex affricate) initials. The Primary Palatalization, which occurred in EOC, is reflected in MChi palatal strident fricative (> some NMan retroflex strident fricative) initials.

<sup>20</sup> Cf. OTib *fikor* 'circle, wheel'  $< \sqrt{kor} < *kwar ~ *kwer \leftarrow MOC$  dial. \*kwar ~ \*kwer 'circle, wheel'  $\leftarrow$  IE dial. \*kwel, or directly loaned into PTib from IE.

<sup>21</sup> According to the 廣雅釋室 Kuang ya shih shih (quoted in JDB 272: 京倉也 '京 is [i.e., means] storehouse').

<sup>22</sup> OTib *graŋ*- 'cold' has often been cited as a cognate of this Chinese word, but the fact that it corresponds to the syncopated form, which is no earlier than late Middle Old Chinese, and the existence of many incongruent Tibeto-Burman forms, as noted by Matisoff (Benedict 1972: 39 n. 124), indicates it is a loan from Chinese.

<sup>&</sup>lt;sup>17</sup> The second vowel of the word *kuruma* may be the result of analogical reformation through folk etymological influence involving the Japanese verb *kuru* 'come', since the character  $\pm$  'cart, chariot' also occurs in an OJpn compound in which it is read \*kura ~ \*küra (*JDB* 276)

## Japanese kura 'music'

The Old Japanese word 樂\*kura 'music' is preserved in the word 神樂 kagura 'divine music'. Internally one may reconstruct kagura 'divine music' from \*ka<sup>n</sup>kura from \*kamui-kura.<sup>23</sup> It corresponds well to 樂 NMan vuè ~ lè 'music', from OChi \*gurak.24 The correspondences within this large etymologically and graphically related set of examples indicate that the labial element in the late Chinese monosyllabic forms is due to the earlier presence of a rounded vowel in the first syllable, as preserved in the Japanese forms. These and other disyllabic borrowings from Chinese into Japanese do not reflect the syncope and related changes of the Middle Old Chinese period that made Chinese into an overwhelmingly monosyllabic language morphologically. These changes had all occurred in the Central dialect of Chinese by the time of the Wa migration to Japan, so the words in question must all have been borrowed by the Proto-Japanese-Koguryoic speakers either before the syncope took place in the Central dialect or while they were still living in or adjacent to an area which preserved the earlier unsyncopated pronunciation.

# CJK \*tar ' mountain'

The word \*tar 'high (高); mountain (山)' is reconstructable for Common Japanese-Koguryoic. However, the sense 'mountain (山)' appears to reflect loan interference from Chinese 山 *shân* 'mountain'. The word 山 belongs to the 元 *yuán* rhyme in the *Odes* (Starostin 1989: 576-579), which clearly indicates final \*-r/l throughout, despite Starostin's splitting of the rhyme into sub-classes, some with \*-r and some with \*-n. Also, the initial must be reconstructed to account for the word *tàn* 炭 'charcoal', which has 山 as its phonetic. Thus 山 NMan *shân* appears to derive from a late Middle Old Chinese form \*tar ~ \*dar. This word thus seems to have been borrowed into Common Japanese-Koguryoic, where it merged with the inherited word \*tar 'high'.

<sup>&</sup>lt;sup>23</sup> Cf. Mar. 433: \*kamu-[Ci] (-n-) kura 'sacred music'. The tortuous explanation of this word—mentioned in passing within the treatment of *sakakura* 'liquor seat' as a variant of it (*JDB* 319)—has all the earmarks of a folk etymology.

<sup>&</sup>lt;sup>24</sup> The rhyme is \*-awk in the system of Sagart and Baxter (Sagart 1999: 41, 128; Baxter 1992: 801), though this rhyme is doubtful phonetically for OChi.

## CJK \*tewr 'chicken, pheasant'

CJK \*tawr 'chicken, pheasant' is clearly a loan from 鳥 OChi \*tewr<sup>2</sup> 'fowl, bird'.<sup>25</sup> The current HSR reconstruction of a glottal stop as the ancestor of all instances of the rising (second) tone in Middle Chinese is unlikely at best and in any case does not solve the problem of supposed 'crossrhymes' in the *Odes* involving words with the rising tone (attested later, in Middle Chinese) on the one hand and final oral stops (attested later, in Middle Chinese) on the other. Since \*tewr is undoubtedly related to *zhuî* 隹 OChi \*tur 'bird' (Sagart 1999: 162), we may assume that an earlier vowel-length or other distinction underlies the two divergent forms.

# Old Japanese \*miy 'snake'

The Old Japanese word \*mi ~  $\pm$ miy [ $\pm$ ] 'snake ( $\pm$ · $\Box$ )' (*JDB* 696-697), from PJpn \*mur ~ \*mwir, appears to be related to Tibeto-Burman \*mrul 'snake', which is reconstructed on the basis of OTib *sbrul* (from \*s-mrul) and LBur *mrwe* (from \*mrul) 'snake', among other forms (Benedict 1972: 111).

# Old Japanese \*si ~ \*tśi 'flesh, meat; animal, deer, pig'

The Old Japanese root  $*si \sim *t \acute{si}$  'flesh, meat (肉); game animal (獸), deer (鹿), pig (豬)' is comparable to OTib  $\acute{sa}$  'flesh, meat; deer', from PTB \*śa (Benedict 1972: 46). While the vowels are incongruent, the regular change of \*a to \*i characteristic of Qiangic branch Tibeto-Burman languages would give a protoform \*śi, which would correspond perfectly to the Old Japanese form. Unfortunately, Qiangic seems not to preserve this TB word.

# CJK \*kuma 'bear'

There used to be no shortage of bears in Japan, Korea, and neighboring regions, so it is not surprising that the same word for 'bear' occurs

<sup>&</sup>lt;sup>25</sup> MChi \*tew<sup>2</sup> ~ \*tiaw<sup>2</sup> 'bird' (the NMan reading  $\triangleq$  *nið* is a later irregular replacement, thought to be the result of taboo) < OChi \*tewr<sup>2</sup> (Sag. 162: \*<sup>a</sup>tew?).

in Japanese, Koguryo, and Korean, as has been widely noted. The fact that the word is also found in Chinese, as 能 NMan *xióng*, from OChi \*kum  $\sim$  \*gum, has been noted by James Matisoff (Benedict 1972: 168 n. 449: "gium  $\sim$  g'ium"), who remarks, "the resemblance to Japanese kuma. Korean kom 'bear' appears to be due to convergence" (Benedict 1972: 168 n. 449). Because of the divergent Tibeto-Burman form, including OTib dom 'bear' from PTB \*d-wam (Benedict 1972: 116) and other considerations, Matisoff reconstructs Sino-Tibetan \*wam or \*(w)am (Benedict 1972: 168 n. 449, 189 n. 488). Assuming the Chinese reconstruction is correct, the fact that Japanese-Koguryoic, Korean, and Chinese share the same form of the word for 'bear', while Tibeto-Burman has its own form of the word, supports Matisoff's suggestion. The convergence of Japanese-Koguryoic, Korean, and Chinese words indicates that the place and time of convergence was ancient northeastern Asia, so this word seems to date from the later, Common Japanese-Koguryoic period.

#### PRIMARY VOCABULARY

*Old Japanese* \*təwo ~ \*təw ~ \*-sv '*ten*' ~ *Old Koguryo* \*tək '*ten*'

The Old Japanese forms of the word for 'ten' make a clear distinction between the free forms and the decade marker: NJpn  $t\hat{o}$ , to 'ten', -so '-ty (ten)' < OJpn \*təwo (\*töwo ~ \*töwö), \*təw (\*tö) 'ten', \*-sv (Mar. 529: \*-swo) '-ty (ten)'. In addition to the different initial consonant, the vowel of the decade form, \*-sv, is different from that of the independent forms for 'ten', \*təwo (\*töwo ~ \*töwö) and \*təw (\*tö). Comparative evidence from loanwords, namely Pyu  $s\hat{u}$  'ten, -ty' (from CTP \*sú < PTP \*síw ~ \*síə $\beta \leftarrow$  LOC dial. \*sí $\beta$ ), OTib -sú [ʃu] '-ty (ten)' (in  $\tilde{n}is\hat{u}$  '20'<sup>26</sup> < CTP \*sú < PTP \*síw ~ \*síə $\beta \leftarrow$  LOC dial. \*sí $\beta$ ), and Thai *sip* 'ten; -ty' ( $\leftarrow$  LOC dial. \*síp), indicates that the decade form of + NMan *shi* 'ten' was unaffricated in Middle Old Chinese. The late Middle Old Chinese or Late Old Chinese decade form loaned to Proto-Taic and Proto-Japanese corresponds very well to the forms in Pyu and Old Tibetan (the earliest Tibeto-Burman lan-

<sup>&</sup>lt;sup>26</sup> It is generally believed that this form is a reduction of OTib *-tśu* '-ty' as found in the other decades, but in many languages 'twenty' is an archaic form that does not correspond regularly to the other decades—e.g., OPyu  $tp\hat{u} \sim$  Pyu  $tp\hat{u}$  'twenty' (Beckwith 2002c).

guages attested in segmental scripts), which unambiguously support a reconstruction \*śu, from \*śiw ~ \*sťə $\beta$ : PTP \*śuw ~ \*śíə $\beta$  > CTP \*śu > Pyu *sû* 'ten', OTib *śu* [ʃu] '-ty' (in '20'), (*b*)*cu* [ʃu] 'ten' : Thai *sip* < \*sťəp 'id.' : OJpn \*sv < \*śu 'id.'<sup>27</sup>

All this raises questions about previous reconstructions of the Old Chinese word for 'ten', which have been based on MChi \* dz ip (Pul. 283). Looking again at Japanese-Koguryoic, where there is no phonemic distinction between voiced and unvoiced initials, OJpn \*taw- and OKog \*tək [德] 'ten' unequivocally support an alveodental stop reconstruction for the initial of the Old Chinese free form. However, the initial consonant of the Old Japanese decade form \*-su (supported by Thai *sip*, Pyu  $s\hat{u}$ , and OTib  $-\hat{s}u$ ), indicates something else. It is thus necessary to reconstruct two roots for the Old Chinese donor dialect, namely a free form with an alveodental stop initial, reconstructed here as \*d- to accord with the voicing in Middle Chinese (OJpn \*təw  $\sim$ \*təwə (\*töwo ~ \*töwö), \*təw (\*tö) 'ten'  $\leftarrow$  OChi dial. \*dew < \*dê $\beta$  < late EOC \*devéß 'ten' < EOC \*dekeß 'ten'28), and a combining decade form with fricative initial \*s- (OJpn \*-su (\*-so) '-tv (ten)' < PJpn \*sú '-ty (ten)'  $\leftarrow$  OChi dial. \*síw < \*sê $\beta$  ~ \*dsê $\beta$  < late EOC \*desé $\beta$ 'ten, -ty' < EOC \*deke $\beta$  'ten'), both clearly derived from an original unitary form.29

#### CJK \*mey 'water' : Proto-Japanese \*tiu 'liquid'

The Japanese word *chi* [f i] 'milk; blood' from OJpn \*ti ~  $\stackrel{*}{\times}$ i 知 'milk, juice, blood' (*JDB* 452) < PJpn \*ti '(body-) juice, liquid'), and NJpn *tsu* 'spittle', from the Old Japanese root  $\stackrel{*}{\times}$ tu 'liquid, spit' (Mar. 442), attested in OJpn only in 豆波岐  $\stackrel{*}{\times}$ tubaki 'spit' (*JDB* 473),<sup>30</sup>

<sup>&</sup>lt;sup>27</sup> Pyu *s*- corresponds regularly to OTib *s*<sup>-</sup>. Pyu *h*- corresponds to OTib *s*-. Note, by contrast, Pyu  $tp\hat{u}$  'twenty', which seems to reflect an earlier \*dVpû, the first syllable perhaps deriving from the same ancestor as OTib do < \*dwa ~ \*dwe 'two'.

 $<sup>^{28}</sup>$  For details on the reconstruction of both forms, and on the common ancestor \*deké $\beta$ , which is based partly on attested TB forms supporting a CTB reconstruction \*dkêb (itself borrowed from early MOC), see Beckwith 2002a: 33-36.

<sup>&</sup>lt;sup>29</sup> In light of the comparative evidence, the finals of the Chinese forms were surely voiced, and apparently not stops, since they cannot be reconstructed as \*-p for Middle Old Chinese or earlier periods. By Middle Chinese times, however, or in the Old Chinese dialect that gave rise to Middle Chinese, the distinction between the free numeral and the decade form was lost, resulting in a single form, MChi \*dzĭp.

<sup>&</sup>lt;sup>30</sup> The similarity of OJpn \*tu 'liquid, spit' to  $\mathbb{H}$  Mandarin  $t\tilde{u}$ ,  $t\tilde{u}$  'spit' < MChi \*t<sup>h</sup>o<sup>2</sup>, \*t<sup>h</sup>o<sup>3</sup> (Pul. 312) might suggest a loan, but \*tu appears to be a genuine Japanese

appear to be derived from the same root, Proto-Japanese \*tiu 'liquid, juice'. These Japanese forms are in turn obviously related to Tibeto-Burman \*ti 'water, juice' and particularly to the special Proto-Tibeto-Pyu development \*tiw ~ \*tiə $\beta$  'water', as well as to Chinese  $\noti$  NMan  $zhi^{31}$  'juice' from LOC \*tiəp, possibly from an earlier \*ti $\beta$  or \*tia $\beta$ . Consider the Chinese forms in examples (3) through (7).

- (3)  $\ddagger zh\hat{i}$  'juice' < MChi  $\ddagger$  (Pul. 405) < LOC  $\ast$ tiəp <  $\ast$ ti-
- (5)  $\hbar x thur$  water  $\leq MOC * fwer < EOC * tiwer < * ti + * wer$
- (6) ||| chuân 'stream, river' < MChi <sup>☆</sup>tj<sup>h</sup>wian<sup>1</sup> (Pul. 60). < MOC \*tîwer < \*tî + \*wer</li>
- (7) 泉 quán 'spring, source', from MChi <sup>☆</sup>dzwian<sup>1</sup> (Pul. 262) from MOC \*dzwer (? cf. Sta. 579)

It has long been noted that the word for 'water' in many unrelated languages is 'the same word', indicating that it is a common loanword.<sup>32</sup> The Early and Middle Old Chinese forms of the word for 'water', especially the irregular or dialect form  $\not|k shui$ , and its regular doublet,  $\not|k zhui$ ' water', must be reconstructed with attention to the related word ||| chuân 'river, stream'.<sup>33</sup> The loss of the final \*-r in  $\not|k shui'$ and  $\not|k zhui'$  water' would appear to be the result of palatalization by the long vowel \*ê in Middle Old Chinese,<sup>34</sup> as shown in examples (8) and (9).

 $^{34}$  This long vowel is either a retention from EOC or a result of the syncopation of the first syllable by an accent on the (short) second syllable; this would suggest that the words in (8) and (9) are dialect forms of each other. More research is needed.

word, occurring in very early compounds, including NJpn *mizu* 'water' < OJpn  $\ddagger$ midu < CJK \*mey < PJK \*mer + (Pre-OJpn) \*tu 'liquid' (cf. Martin 1987: 483). This suggests a common origin for both  $\ddagger$ ti and  $\ddagger$ tu.

<sup>&</sup>lt;sup>31</sup> Attested only from LOC onward; it is apparently either a neologism or a loan-word.

<sup>&</sup>lt;sup>32</sup> Cf. Old Turkic  $su\beta$  'water' (su in many modern Turkic languages), a language no one thinks is related to Chinese or Tibeto-Burman. Despite the similarity to the Middle Chinese and Tibeto-Pyu forms, it is unlikely to be a traceable borrowing. See Chapter 10 on the 'non-basicness' of most so-called 'basic vocabulary'.

<sup>&</sup>lt;sup>33</sup> The latter, though placed by Starostin in an 'irregular' rhyme category (1989: 580: \**dhun*), in its only rhyming occurrence in the *Odes* rhymes with 焚 *fén* 'to burn', from MChi \*bun<sup>1</sup> (Pul. 94), from MOC \*ber, an obvious relative of 燔 *fán* 'to burn', from MChi \*buan (Pul. 89) from MOC \*bar (Sta. 579: \*b(h)ar),<sup>33</sup> which is widely compared to OTib *fibar*- 'to burn', from TB \*ber or \*bar 'to burn' (Ben. 50), although the final \*-r indicates it is probably a loanword into TB. The two Chinese words are surely dialect forms of each other, and also of 燃 (or 然) NMan *rán* 'to burn' < MChi \*ñyan (Pul. 264 pian) < late MOC \*myar < early MOC \*<sup>m</sup>ber (see Beckwith 2002b) < EOC \*b(h)er; the vowel breaking in late MOC (or LOC) remains to be explained.

- (8) NMan 水 shui~ 祢 tswej] 'water' < MChi ☆ twiy (Sag. 157) < \*tfwer<sup>y</sup> < \*tfwe<sup>y</sup> < MOC \*tfwêr < \*tîwêr</p>
- (9) NMan ||| *chuân* 'river, stream' < MOC \*tîwer

All of the above Chinese words for 'water' and 'river, stream' include the root syllables \*ti ~ \*tî and \*wer ~ \*wêr, both of which have cognates in Japanese-Koguryoic. OKog \*mey 'water, river, spring', cognate with the Old Japanese root \*mi 'water', from \*mey (cf. Martin 1987: 483), from CJK \*mey and PJK \*mer, is thus undoubtedly the same word as the Early Old Chinese root \*wer ~ \*wêr 'water'.<sup>35</sup>

Although the Chinese word for 'water', \* shui—the character for which is attested in the earliest Chinese linguistic material, the Oracle Bone Inscriptions—could be argued to derive from a simplex root \*tî, with an extension \*wer  $\sim$  \*wêr, \*tî is undoubtedly the same word as Tibeto-Buman and Japanese  $*ti \sim *t\hat{i}$  and seems to be an areal culture word. It is therefore as likely that the Proto-Chinese, Proto-Tibeto-Burman, and Proto-Japanese-Koguryoic forms were inherited from a common ancestor as it is that they were all borrowed from each other or from some other language. The same may be said of the other word for 'water', \*wer (~ \*wêr) ~ \*mer.<sup>36</sup> From the point of view of Early Old Chinese internal developments, wherein \*w regularly became \*m in certain conditions (Beckwith 2002b), these are simply different forms of the same word. Thus, the eventual Chinese word  $\pi shui \sim$ 沝 zhui 'water' is not a derived form of a native word or a root plus an extension of unknown origin and meaning. It is a compound of two words,  $*ti \sim *t\hat{i}$  and  $*wer \sim *w\hat{e}r$ , both of which are shared with Japanese-Koguryoic as well as with other language families in the area.

## CJK \*kurtui 'mouth'

The word for 'mouth' is one of the most well known members of the distinctive 'Japanese set' of words, and its Old Koguryo cognate in the *Samguk Sagi* corpus was very early recognized. By form within Japa-

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<sup>&</sup>lt;sup>35</sup> Several major TB languages do not share putative PTB \*tî, having perhaps replaced it either by borrowing or by internal shift (Beckwith 2002a). The PTP word is just as likely to be a loanword as any of the other examples cited. Thus, another possibility is that a late PTP word \*tîəw or \*tîw was simply borrowed whole from an OChi \*tîwer with canonical loss of final \*-(V)r, as generally in TB (Beckwith 2002a).

<sup>&</sup>lt;sup>36</sup> Note PIE \*wêr, \*wer 'water' > TokA *wär* TokB *war* < PTok \*wär 'id.', Skt *vâr* 'id.' (Wat. 100; Pok. 80).

nese-Koguryoic it clearly consists of the root \*kur (perhaps from \*kurV) plus the nominal affix \*-tui. This then suggests a relationship with the Chinese word for 'mouth'. The HSR reconstruction of  $\Box$  NMan *koŭ* [k<sup>h</sup>ow] is OChi \*krô<sup>2</sup>; though perhaps \*kûr<sup>37</sup> would be possible for Late Old Chinese, to which the Chinese nominal affix  $\neq$  \*tsi could have been added (it is added in the *Mencius* to the root for 'nose', giving 鼻子 NMan *bízi* 'nose'), but in view of the other evidence, particularly PTB \*ka 'mouth', it would seem difficult to support (contra Beckwith (2002b: 129 n. 30). Moreover, Sogdian *kûtśâ* [ku:fa:] 'mouth' is strikingly close to the attested Koguryo and Japanese forms, OKog \*kuərtsi ~ \*kutsi and NJpn *kuchi* [kutfi] (from OJpn \*kuti) and should not be overlooked. While the word \*kurtui 'mouth' is solidly reconstructed for Common Japanese-Koguryoic, the question of its further relationships thus remains unsolved.

## Proto-Japanese-Ryukyuan \*mika ~ \*miak 'eye'

Japanese *me* 'eye' must be reconstructed not only in view of OJpn  $\ddagger$  me (from \*maCi according to Martin 1987: 474) ~  $\ddagger$  ma- 'eye-' but also of Hateruma Ryukyuan *miŋ*, 'eye', from \*miŋa, deriving via \*miga from Proto-Japanese-Ryukyuan \*mika, which in view of the comparative evidence should be from an earlier \*miak. This is the same word as Chinese  $m\hat{u} \equiv$  'eye', from Old Chinese \*mek,<sup>38</sup> and also Old Tibetan *myig* 'eye', from Proto-Tibeto-Burman \*mêk—in Benedict's system \*mik ~ \*miak (1972: 154), where \*miak reflects the Burmese form.

The early Chinese word for 'eye',  $m\dot{u} \equiv$ , has been replaced in Mandarin and nearly all other modern Chinese languages by  $y \breve{a}n \equiv$ ,

<sup>&</sup>lt;sup>37</sup> NMan *koŭ* [k<sup>h</sup>ow] < MChi \*k<sup>h</sup>əw<sup>2</sup> (Pul. 174) < late MOC \*krô<sup>2</sup> (cf. Sta. 560: \*khô? ~ Bax. 771: \*k(r)o?). This is one of the problematic rhymes in the *Odes*, and the reconstruction of the EOC form also remains unclear. The vowel of the first syllable is probably ultimately to be reconstructed as \*a in view of the TB form, but  $\notin$  NMan *wŭ* 'to insult, ridicule' has  $\notin$  NMan *měi* 'each' as phonetic and belongs to the same *Odes* rhyme as  $\ddagger$  NMan *gŭ*, so a sequence something like \*kare > \*krô ~ \*kôr > \*krû ~ LOC dial. \*kûr > MChi \*k<sup>h</sup>uw<sup>2</sup> would be required. Since  $\ddagger$  NMan *gŭ* [ku] 'old' (which has as its phonetic  $\Box$  'mouth') is in turn the phonetic in  $\ddagger$  NMan *kŭ* [k<sup>h</sup>u] 'bitter' (cf. PTB \*ka 'bitter') and belongs to the 'fish' rhyme (which implies a liquid in the syllable) it is necessary to reconstruct \*a ~ \*â for this word and also, evidently, for 'mouth', in EOC. However, much more research is needed on this problem.

 $<sup>^{38}</sup>$  The word does not occur as a rhyme in the *Odes*, so its reconstruction is problematic.
'eye', a word that originally meant 'eyeball' (Sagart 1999: 115, 153-154).<sup>39</sup> Middle Chinese velar nasals in syllable onsets (and often those in syllable codas as well) have developed from oral velar stops in interresonant position in Early Old Chinese or Proto-Chinese (Beckwith 2002b), so LMC <sup>☆</sup>nän (~ <sup>☆</sup>nyän) 'eye, eyeball', should derive from an 'Old Chinese' \*Vkwer. In view of the existence of the simplex form  $m\dot{u} \equiv$  'eye', from late MOC \*mek, from early MOC \*<sup>m</sup>bek, from EOC \*wek<sup>40</sup> (Beckwith 2002b), it would appear that *văn* 眼, 'eyeball' may be reconstructed more precisely as EOC \*wek-wer/l or \*wekkwer/l, literally 'eye-ball'-words for round shapes in Old Chinese nearly all having as their root either \*wer/l or \*kwer/l.41 Thus, yăn 眼, 'eye' is not an unrelated replacement for the early Old Chinese word for 'eve' but a compounded extension of the same root. CTB \*mîk ~ \*miak. PJR \*mika < \*miak. and MOC  $\exists$  \*mek 'eve' (with the root of Chinese 眼, 'eve') are therefore from \*mêk ~ \*mek, a regular development from EOC \*wek.

### Proto-Japanese \*mir 'ear'

The traditional reconstruction of Old Chinese fails to explain why 耳  $\breve{e}$  'ear' (from Middle Chinese \*nyi<sup>2</sup>), was used as the phonetic in constructing 弭 *mi* \*ends of a bow' (< MChi \*myi<sup>2</sup> < OChi \*mi) and other characters with initial m-, or why  $\overline{m} \, \overline{e}$  'you' (from Middle Chinese \*nyi<sup>2</sup>) is the phonetic in  $\overline{m}$  mi 'to fill, overflowing' (< MChi \*myi<sup>1</sup> < OChi \*mi), and ⊟ rì 'sun' (< MChi \*nyit < late MOC \*myič < \*myik<sup>y</sup>) is the phonetic in  $\exists mi$  'the Mi-lo river' (< MChi \*meyk < OChi dial. \*mik). There are other similar examples. Recently it has been shown that these words, and many others beginning with r- in Mandarin, derive from an Old Chinese \*m- initial which was palatalized by assimilation (Beckwith 2002b).42 A more thorough examina-

<sup>&</sup>lt;sup>39</sup> Sagart argues that this word is derived from an \*r infixed form of  $w\check{a}$ 眼 'knob, bulge', written with the same character (1999: 115, 153-154).

<sup>&</sup>lt;sup>40</sup> This is apparently from Proto-Chinese \*ok. Cf. Indo-European \*ok<sup>w</sup>- > TokA ak, TokB ek 'eye' (Beckwith 2002b: 148).

<sup>&</sup>lt;sup>41</sup> The root \*wer/l 'round' is also represented in Japanese-Koguryoic by OKog \*mawr~\*mawir [毛乙] 'round (圓)' and OJpn \*maru ~\*marü [万呂] 'round; round thing', with the same range of meaning as in Chinese. <sup>42</sup> Thus,  $\exists$  NMan  $\dot{e}$  'ear' < late MOC \*nyrê < early MOC \*myirê < \*mîrê. The

same process, wherein earlier \*my- regularly became ny-, occurred in the history of

tion of the Chinese evidence reveals that many, perhaps most, Mandarin syllables beginning with r- (or read er in New Mandarin) once began with a bilabial nasal.

The Japanese word *mimi* 'ear, ears', from Old Japanese \*mimi (written  $\Xi \equiv$ \*mi-mi 'three-three'), from Pre-Old Japanese \*mi 'ear' (Kiyose 2001a: 111), is phonetically identical to the Old Japanese root \*mi 'three', which has an attested Old Koguryo cognate, \*mir [\*] 'three'. In view of the correspondence OKog \*ir# (< \*irV) : OJpn \*i#, the root of the Japanese word for 'ear' may be reconstructed as PJpn \*mir, from an earlier \*miri ~ \*mire, which corresponds well to early Middle Old Chinese \*mîrê 'ear' (Beckwith 2002b: 118-120).<sup>43</sup>

### A POSSIBLE HOMELAND

The third century Chinese account of Japan explicitly notes, "their land does not have cattle (牛), horses (馬), tigers (虎), leopards (豹), sheep (羊), or magpies (鵲)" (*SKC* 30: 855), but "it has rhesus monkeys (macaques) (獼猴) and black pheasants (黑雉)" (*SKC* 30: 856). The presence of distinctive 'native' Japanese words for some of these animals, and for some others not discussed here—e.g., OJpn \*tora ~ \*tawliaŋ (刀良) (*JDB* 508) 'tiger (虎)'; OJpn \*kisa ~ \*kitsa ~ \*gyitsa [岐佐] (*JDB* 239) 'elephant (象)'—and the relationship of their phonetic shapes to those of Tibeto-Burman and Chinese words, is strong evidence in favor of placing the Proto-Japanese-Koguryoic homeland somewhere in what is now south-central China, as some scholars have argued.

From the internal periodization of the Old Chinese loanwords found in Japanese-Koguryoic, together with semantic considerations, it is clear that the words were borrowed before the Yayoi migration to Japan, and that the process took place over a long period of time. This supports the observations of earlier researchers that several salient ty-

Tibetan from Old Tibetan to New Amdo Tibetan and—before non-front vowels—from Old Tibetan to New Central Tibetan.

<sup>&</sup>lt;sup>43</sup> Assuming this word has been borrowed from one language to the other, it must be noted that there seem to be no known cases of borrowing of the word for 'ear'. Though one or more examples of loaning somewhere in the world have been noticed for every truly 'basic' body-part term (i.e., not including conceptual words such as 'mouth') except 'ear' (Ramer, 1995), nearly all such examples are of poorly attested languages with short (or nonexistent) historical records. Substitution does occur, not infrequently, but so far it mostly seems to be through internal replacement.

pological characteristics of Old Japanese, including a high degree of monosyllabicity, pitch accents, and verb-final syntax (there is no information available on pitch accents in Koguryo, but the other features do apply to it as well and it is probable that Common Japanese-Koguryoic may be characterized in the same way), features characteristic of Tibeto-Burman languages, suggest an ancient homeland in south China or Southeast Asia (Kiyose, 1997; Janhunen 1997; Sakakura, 1993). The possibility of a close connection with Tibeto-Burman specifically was first argued persuasively by Murayama (1966). Though he soon abandoned the idea, the evidence presented here suggests his change of view might have been premature.

In a recent survey of the Tibeto-Burman languages, David Bradley discusses briefly the phonologically divergent Bisoid sub-branch of the Lolo-Burmese branch of the Tibeto-Burman family of languages and cites four Bisu words as typical examples of the sub-branch's characteristic sound changes (Bradley 2002: 106):

The numerous small and mainly endangered Bisoid languages . . . of Yunnan . . . Burma . . . northern Thailand . . . northern Laos and . . . northwestern Vietnam, share the development of voiced stops corresponding to certain initial nasals in other Tibeto-Burman languages; for example, 'mother' is  $[ba^{33}]$  and 'fire' is  $[bi^{21}]$ . By contrast, they are the most conservative Loloish languages for final stops and nasals; for example, 'you' is  $[nan^{55}]$  and 'warm' is  $[lum^{55}]$ .

What is striking about these four words, which for present purposes constitute random examples, is that three of them correspond closely to their Old Japanese equivalents, as shown in examples (13), (14), and (15) below. If other 'primary vocabulary' items from the Bisu and Old Japanese lexicons are compared, more such examples may be found, as shown in (12) and (16). This correlation between Japanese-Koguryoic and the Lolo-Burmese branch of Tibeto-Burman could be of great importance and should be further examined. So too should the Qiangic branch of Tibeto-Burman. Both should be investigated with an eye not to genetic relationships but to locating the Proto-Japanese-Koguryoic speakers in space and time. Consider the summary (omitting tone marks), of some of the examples discussed above, and note also examples (17) through (19).

- (10) OTib *rmaŋ* 'horse' ~ LBur *mraŋ* 'id.' : PJpn \*rmaŋ 'id.' (all ← Chinese)
- (11) CTP \*tiw 'juice, water' : PJpn \*tiu 'id.'

- (12) PLB \*miak 'eye' > Bisu \*mê [mɛ:] (Nishida 1966a: 70) : OJpn \*më ~ <sup>\*</sup>məy [梅] 'id.' < PJR \*mika < \*miak ~ \*mêk 'id.' (all < \*wêk ~ \*wek)
- (13) PTB \*ma 'mother' > LB (Bisoid branch) \*ba : OJpn \*papa [婆 婆] (JDB 589) 'id.' < \*ma < \*me; cf. PLB \*mi 'girl' (Nishida 1967: 862) > Lahu mi 'id.' ~ Bisu bi 'id.' (Matisoff 1979: 33) : OJpn \*mi 'woman' (JDB 144), OJpn \*me ~ \*mey [賣] 'woman, girl' (JDB 731) ~ OKog \*mi(ŋ) 'female' < \*mê-</li>
- (14) PTB \*mey 'fire' > Bisu *bi* : OJpn \*pï~\*buy [肥] (*JDB* 603) 'id.'
- (15) PTB \*na 'you' > LB (Bisoid branch) \*naŋ : OJpn \*na [那] (JDB 512)
   'id.' (all < \*na ~ \*naŋ; cf. LOC \*ni 'id.')</li>
- (16) PTB \*may 'good' > LB (Bisoid branch) \*mê-: OKog \*mey ~ \*mey [買] 'id.'(all < \*way)</p>
- (17) PLB \*?ryat 'eight' > Akha yeh (Matisoff 1997: 92) : OJpn \*ya 'id.' (all ultimately ← Chinese)
- (18) PLB \*gəw<sup>2</sup> > Akha γø (Matisoff 1997: 94) 'nine' : PJpn \*kö ~ \*kü 'id.' > \*kökö ~ \*kükü > OJpn \*kökönö ~ \*χüχünəŋ [許許能] > NJpn kokono- (all ultimately ← Chinese)
- (19) CTP \*sú '-ty (ten)' : OJpn \*-su < PJpn \*sú 'id.' (all ultimately ← Chinese)</li>

Japanese shares several features with late Early Old Chinese or early Middle Old Chinese. For example, in Old Japanese \*karaci 'mustard', borrowed from Old Chinese \*kara-c, the unsyncopated Early Old Chinese root is retained in Japanese. These phonological and lexical similarities occur in what are clearly loanwords. Japanese also shares specific phonological, lexical, and typological grammatical features with Tibeto-Burman languages. But it appears that they are not just any Tibeto-Burman languages, and it is not just any period of contact. Three numerals of Proto-Japanese, \*ya 'eight', \*kü 'nine, and \*təw 'ten' ~ \*-sv 'ten, -ty', correspond to Tibeto-Burman forms that were originally borrowed from Chinese. In particular, the decade forms of the numeral 'ten' in Japanese (OJpn \*-sv from Proto-Japanese \*sú) and Common Tibeto-Pyu \*sú, correspond exactly.

As has been shown above, the Proto-Tibeto-Burman bilabial nasal initial, \*m-, corresponds to Japanese initial \*m- in some words; in others it corresponds to the Japanese bilabial stop initial, \*p-. This same distinction occurs in Bisu, a sub-branch of the Lolo-Burmese branch of Tibeto-Burman. In still other cases—such as the words for 'ear' and 'charcoal'—Tibeto-Burman has root-initial \*n while Japanese has \*m. It is clear that Japanese corresponds to Chinese rather than to Tibeto-Burman in the latter two instances, and probably preserves an older form. Yet in still other cases, such as the second person pronoun, although Japanese and Tibeto-Burman appear to agree, and early forms of Old Chinese to contrast with them, in fact the initials that occur in all attested forms seem to be secondary developments from a still earlier common form which can only be reconstructed through use of data from all three language families (Beckwith 2002b: 121-127),<sup>44</sup> as suggested above for the related words 'black' and 'ink'.

If the words for various animals that are shared with Tibeto-Burman or with Chinese are compared, the domestic animal names 'chicken, pheasant', 'horse', and (probably) 'ox, cow' are rather late Old Chinese borrowings into Common Japanese-Koguryoic, while the wild animal names 'hare', 'snake', and perhaps 'tiger' are not related directly to Chinese words but to Tibeto-Burman or Austroasiatic words. Of the Common Japanese-Koguryoic words that point to a more specific area of the world, most indicate Northeast Asia ('bear', 'swan', 'roe-deer', 'chestnut', 'willow'), some of which have Chinese cognates. There is only one attested Common Japanese-Koguryoic word that specifically suggests a southerly origin ('bamboo'), but there are numerous words in Old Japanese that must come from a place much warmer than Liao-hsi, as discussed above.<sup>45</sup>

At present, the linguistic evidence suggests that the Proto-Japanese-Koguryoic people lived at one time in contact with three specific languages (or language groups): Tibeto-Burman, Old Chinese (the latter including at least three different periods or dialect areas), and latest of all, during or after the late Common Japanese-Koguryoic period, the 'Altaic' group of languages. The extensive contact with Korean seems to have occurred only at the time of, or after, the breakup of Common-Japanese-Koguryoic (see Chapter 12). None of these relationships are demonstrably anything other than convergent.

<sup>&</sup>lt;sup>44</sup> Since many of the forms discussed in this chapter also seem to be shared with Indo-European, they should be examined by a careful but open-minded scholar trained both in Indo-European comparative-historical linguistics and in East Asian languages who is not crippled by reliance on HSR. Unfortunately, in East Asian linguistic circles weighty theories continue to be based on assumptions involving Austronesian, Taic, or other language families, all of which are (and were) distant from the ancient homeland of Chinese civilization in the Yellow River valley.

<sup>&</sup>lt;sup>45</sup> It should be emphasized that the examples cited in this work do not begin to cover all the possibilities. There are many other good comparisons, both in 'cultural vocabulary'—e.g., OJpn \*ni 'red earth; red' (*JDB* 540)' : TB \*ni 'red' (Benedict 1972: 91)—and in 'primary vocabulary', which deserve further investigation. The publication of the forthcoming expanded edition of the *Conspectus* by Matisoff should be a great help for such comparative studies.

However, the closeness of Japanese and Tibeto-Burman typologically and evidently even lexically does suggest a period of intense contact at some point in remote antiquity.<sup>46</sup> The specific form of several correlations with Tibeto-Burman that are not found in Chinese, as well as with some well-attested Chinese loanwords—notably the word for 'horse' and the decade form of the word for 'ten'—in both Tibeto-Burman and Japanese indicates that the Proto-Japanese-Koguryoic people were in contact with Tibeto-Burman at about the same time as they borrowed words from the Old Chinese dialect that loaned the same words to Tibeto-Burman. This contact must have taken place long before the fourth century B.C., when some speakers of Proto-Japanese-Koguryoic migrated from or via Liao-hsi to the southern tip of the Korean Peninsula and to northern Kyushu in Japan.

<sup>&</sup>lt;sup>46</sup> This seems to support the theory of Murayama (1966) and, more recently, Kiyose (2000, 2002) and others, that the Proto-Japanese migrated ultimately from South China to Korea and Japan.

#### CHAPTER EIGHT

### KOGURYO AND THE ALTAIC DIVERGENCE THEORIES

If there is anything romantic about Japanese and Korean historical linguistics it is surely the idea that they are Altaic languages, and accordingly that the Japanese and Korean peoples are related to the Turkic, Mongolic, and Manchu-Tungusic empire-builders of Central Eurasia. This idea is so attractive that despite disproof by archeologists, and very weak linguistic arguments, it is the currently dominant theory in Korea and America on the genetic affiliation of Korean, and also, in the proponents' view, of Koguryo and the Japanese-Koguryoic languages. It even continues to be cited by some as the 'most widely accepted' view of the linguistic relationship of Japanese (e.g., Lee and Ramsey 2000: 5-6), though that is not the case outside Korea.

Altaic is a distant relationship theory that a century of energetic effort has failed to demonstrate successfully. It has been shown by specialists in the component languages that most of the proponents' comparands must be loanwords (Doerfer 1963; Clauson 1969; Róna-Tas 1971; Clark 1977; Rozycki 1994). That leaves only a typological resemblance: all the languages concerned are agglutinative, possibly due to contact (see Chapter 9) but probably because most of the world's languages are agglutinative.

Nevertheless, linguists specializing in Korean and Japanese continue to support the theory of a relationship between Korean and Japanese-Koguryoic as well as that of a relationship between the latter two families and Altaic (Turkic, Mongolic, and Tungusic) in a 'Macro-Altaic' family, or between Korean and Japanese-Koguryoic on the one hand and Tungusic, in a 'Macro-Tungusic' family, on the other. Their work is founded on the typological similarity of the languages concerned (e.g., Lewin 1976: 398-399), plus lexical etymologies. Since it is accepted that typology alone cannot demonstrate genetic relationship, and the phonology of the structurally parallel morphological elements has proved to be resistant to all scientific attempts to reconstruct them, the crucial factor in these theories can only be the etymologies. This chapter is devoted to an examination of some of the etymologies most widely-cited in attempts to establish a relationship between Koguryo and various other languages of northeastern Eurasia other than Japanese.<sup>1</sup>

Although the most well-known comparative studies of the Old Koguryo language corpus previously published<sup>2</sup> (Lee 1964, Lewin 1973, Kiyose 1991), and numerous studies (especially in Korean) derived from them, agree that much of the Old Koguryo lexicon is related to Japanese, and that Koguryo is more closely related to Japanese than it is to any other language, the same studies agree with the major monographs on the protohistorical development of Korean (Lee 1983, Kim 1985) and other comparative studies (e.g. Mabuchi 2000,<sup>3</sup> Miller 1979), to the effect that a substantial number of Koguryo words have Korean or Altaic etymologies. Most scholars have used such etymologies to attempt to prove or disprove theories of linguistic relationship connecting Japanese and other Northeast Eurasian languages -principally Koguryo, Korean, and Altaic languages, but also Gilyak (Nivkh) and others (Kim 1985).4 Others have proposed still wider relationships, but these are even less substantial than the others mentioned. most of which are already not supportable according to scientific historical-comparative linguistics. Yet, although different conclusions have been drawn about the relationship of Koguryo to languages other than Japanese based on such etymologies, no one has hitherto contested most of the etymologies per se.

Some proposed etymologies involve only two languages—such as Koguryo and Korean—while others involve more languages. Many proposals are based on incorrect philology, in particular, misinterpretation of the phonetic and semantic glosses, while others embody various linguistic mistakes. This chapter examines the most notable examples of the most widely-cited of these etymologies.

<sup>&</sup>lt;sup>1</sup> As pointed out elsewhere, examination of all of the countless etymologies ever proposed by anyone lies outside the scope of this book. Leaving aside the absence of a reasonably regular system of morphophonological correspondences, these lexicallybased theories have a serious problem: there is not a single incontestable, conclusive etymology showing that a specific lexical item must have been inherited by both Japanese-Koguryoic and the Korean or 'Altaic' languages from any common ancestor.

 $<sup>^{2}</sup>$  My first paper on Koguryo (Beckwith 2000) is much more comprehensive than these three studies, but the latter are in many ways the most influential to have been published so far. Some of the material in a more recent conference paper (Beckwith 2002d) is included here in revised form.

<sup>&</sup>lt;sup>3</sup> His views on Koguryo and Japanese are summarized in Mabuchi 1999. Cf. Chapter 1.

<sup>&</sup>lt;sup>4</sup> In a later paper (the Japanese translation of his book thus appeared after the paper) Kim expresses reservations about the Gilyak theory (Kim 1981).

### ERRONEOUS ETYMOLOGIES

### *Old Kogurvo* \*kimur

The Old Koguryo word \*kimur ~ ☆kimmur [今勿], supposedly meaning 'black',<sup>5</sup> is actually glossed as 'myriad (萬)' (SS 37: 378), not 'black', as shown in example (1).

OKog 今勿奴郡 \*kimmur \*nv Commandery, glossed as 黑壤郡 (1)'Black Land Commandery'~ 黃壤郡'Yellow Land Commandery' (SS 35: 359), and 今勿內郡 \*kimmur \*na Commandery, glossed as 萬弩 'Myriad Crossbows' (SS 37: 378).

Chapter 35 gives two names as the new ones changed under Silla rule, but shows no preference for one or the other. OKog \*kimur in one name means 'black', in the other 'yellow' (cf. Yu 1976: 133, 143). While OKog \*kimur could certainly be related to MKor kom- (Lewin 1973: 26 komul) (Lee 1964: 14 kem; Kiyose 1991: 11 kem) 'black', the fact is that the most direct gloss for the Old Koguryo word is 'myriad'6 which is therefore perhaps its meaning in the Kogurvo language. Yet the possibility also exists that the full gloss 萬弩 'myriad crossbows' is not a gloss but a non-Chinese name in whole or in part, perhaps even a Koguryo name, because the second syllable of the gloss transcription is identical phonetically to the Old Koguryo word nv [奴] 'earth, land'. In other words, it is most likely that the gloss was intended to represent a phonetic transcription \*(kim)muar. Chapter 37 thus does not contain any gloss at all for OKog \*kimur. The fact that Chapter 35 gives two, semantically different, Chinese words as the supposed new Silla name of the place suggests that the early Silla scholar who produced the original text understood two possibilities from what he was told and could not decide between them. This is because they were near homophones in his own language, Silla Korean. In other words, both translations, 'black' and 'yellow', are based on Silla Korean words that were homophonous with part or all of the Old Koguryo name. The translation 'black' in one of the two new Silla names is based on the homophonous Silla Korean word for 'black' (cf. Yu 1976: 143), which is in turn undoubtedly related to the Chinese word 黔 qián 'black' (from Middle Chinese \*giam), which itself oc-

<sup>&</sup>lt;sup>5</sup> Ch'oe reconstructs this as k m - 'black' (2000: 135).
<sup>6</sup> This is inexplicably given as a separate entry by Lee (1964: 14), immediately following his comparison of the same word with MKor kem- 'to be black'.

curs in another toponym in the text. Though the toponym which includes  $\bigotimes$  is not really glossed, it is significant that the new Silla name corresponding to  $\bigotimes$  is  $\bigoplus j\hat{n}$  'metal; gold', from Middle Chinese \*kim (Pul. 1991: 156). The two words were obviously pronounced very similarly in Korean at that time. The gloss must therefore be viewed (contra Yu 1976: 143) in the light of \*kim 'gold', a Silla loanword from  $\bigoplus$  MChi \*kim 'id.', and accordingly 'yellow ( $\underset{\alpha}{\boxplus}$ )', the other gloss of Old Koguryo \*kimur, must be understood in the same way as the gloss 'black'. All of the apparent glosses of OKog \*kimur are thus evidently pseudo-glosses and the meaning of the word is unknown.

This example demonstrates once again that Kim Bang-han's theory that the United Silla period translation of the names of the Koguryo kingdom into Chinese was done by Koguryo scholars (Kim 1985: 111) cannot be correct. Other examples confirm that the work was done by scholars whose native language was Silla Korean, or who worked through Silla interpreters. The Silla scholars apparently inquired about the mostly unwritten pre-Silla names, recorded them, and translated them to the best of their ability into Chinese.

## The problematic word <sup>☆</sup>śu

The word  $\stackrel{*}{su}$  [首] 'cow, ox, cattle (牛)', said to be an Old Koguryo word related to MKor *syo* 'id.' (Lee 1964: 18 *syo* 'cattle'; Lewin 1973: 26 *so* 'cow'; Kiyose 1991: 12 *syu* 'bull'), occurs in *SS* 37, but the gloss also gives an alternate name with a word attested elsewhere in the corpus,  $\stackrel{*}{su}$  [烏] 'cow (牛)',7 which occurs with a well-known Koguryo word, \*na [內] 'earth, land, province': the text gives two synonymous non-Chinese names for the same place. See example (2).

(2) SS 37 牛首州 'Oxhead Prefecture' 首一作頭 ("首 'head': one [source] has 頭 'head'."): \*śutsiniak [首次若] ~ \*vkana ~ \*vk nn<sup>w</sup> y [烏根 內]

The Koguryo word <sup>☆</sup>u corresponds to OJpn <sup>☆</sup>u-, the root of OJpn \*usi ~ <sup>☆</sup>utśi ~ <sup>☆</sup>ütśi [宇之] 'cow (牛)', a compound formed with the Old

<sup>&</sup>lt;sup>7</sup> The other occurrence is 鳥斯 \*usi, cited by Lewin (1973: 25)—who also cites \*śu 'cow' as Old Koguryo (Lewin 1973: 26: "*su*")—but \*usi is clearly composed of \*u 'cow' plus the adjective-attributive suffix \*-si, as in many other examples; see Chapter 6 and Beckwith 2000.

Japanese root \*si ~ \*tśi 'meat animal, meat, flesh', which as a free form occurs reduplicated in OJpn \*sisi (\*sitśi ~ \*tśisi) ~ \*tśitśi 'meat, flesh; meat animal; deer; boar'. OJpn \*uśi thus has the same structure as OJpn \*winośiśi ~ \*winotśitśi) 'boar' (from \*wi 'boar', which also has an Old Koguryo cognate, q.v. Chapter 6).8 In short,  $\alpha$  'cow' is a good Japanese-Koguryic word. By contrast, \*su 'cow' occurs in this instance together with other problematic syllables that appear to be non-Koguryo. The second and third characters, 次 \*tsi 'head' and 若 ☆niak 'prefecture', have been mistakenly joined together as one word meaning 'head' and compared with Old Japanese \*tuno 'horn' (Lewin 1973: 25; Kiyose 1991: 13). In fact, the syllable 若 ☆niak must represent the same word as Chinese # rang, from Middle Chinese \*nian, which is the usual gloss of Old Koguryo \*na  $\sim$  \*nv, as is shown below and in Chapter 4. The only other occurrence of <sup>±</sup>su 'cow' is in the supposed name \*śutśi?iy ~ \*śuti?iy [首知衣] 'Ox Peak (牛岑~ 牛峯~牛嶺)' (SS 35: 361; 37: 379), but in view of the glosses 知衣 is certainly a scribal error for 波衣 \*pa?iy 'mountain peak', which is evidently a Gilyak or pre-Silla loanword in Koguryo (see below). Moreover, <sup>☆</sup>śu 'cow' is attested in Middle Korean, as syo. It is undoubtedly a Silla Korean word. Finally, it must be noted that there is another word transcribed with the same character, 首 ☆śu 'new', in (9), which has been compared with Middle Korean sai 'new' (Lee 1964: 18; Kiyose 1991: 12), but the phonology rules out the comparison.

# Old Koguryo <sup>☆</sup>punyü

Fu p'ing *chün* (富平郡) 'Prosperous level Commandery' is glossed as \*puñü *chün* [夫如郡] (SS 35: 361; SS 37: 379 has no gloss). It is necessary firstly to compare syllable with syllable. The first syllable of the Old Koguryo toponym, \*pu [夫], is phonetically identical with the first syllable of the Silla toponym, \*pu [富] 'prosperous', indicating that this is one of the many examples where the gloss is simply a phonetic imitation of the Koguryo name, not a translation of it. Thus the Old Koguryo word is not glossed at all but simply retranscribed with a meaningful Chinese homonym or near-homonym (cf. Yu 1976: 149).

<sup>&</sup>lt;sup>8</sup> By contrast, OJpn \*śika (\*tśika) 'deer' is from \*ka 'deer' plus a prefixed compounding element \*śi ~ \*tśi, contrasting with OJpn \*meka 'female deer', where \*me is 'female' (*JDB*: 347).

The second syllable would appear to translate \*ñü [如] as 'level, flat (平)'. However, the Koguryo word meaning 'level, flat (平)' is very well attested and bears no resemblance to the syllable \*ñü here. This toponym is therefore problematic. Nevertheless, a supposed Old Koguryo word \*puñü [夫如] 'prosperous' has been equated with Mongol *bayan* (Lee 17, Lewin 28) and Tungusic *bayan* (Lee 17) 'rich'. Phonetically a connection is unlikely, as the two words do not have a single segment in common. Moreover, *bayan* is a derivative of Middle Turkic *bay* 'lord', from Old Turkic *bäg* 'id.' The Koguryo word thus has nothing in common phonetically or semantically with the Mongol, Tungusic, or Turkic words, and this etymology must be discarded as well.

### Old Koguryo \*key

One of the most convincing-looking proposals is the attempt to relate OKog  $\stackrel{\diamond}{}$ key (or perhaps  $\stackrel{\diamond}{}$ kay) [皆] 'king' with Mongol *qan* ~ *qa* $\gamma$ *an*, Tungusic yagan (Kiyose 1991: 12), and Turkic yan (Lewin 1973: 27), all having the same meaning, and with the putative Silla word<sup>9</sup>  $*\gamma$ an [翰]~\*kan [干] (Lee 1964: 14; Kiyose 1991: 12), which also means 'king'. However, the Mongol and Turkic word  $qan \sim \gamma an$  'king, khan' is a Middle Turkic contraction of Old Turkic qayan,<sup>10</sup> so the Mongol and Tungusic words must all be loanwords from, ultimately, Turkic. Moreover, the Old Koguryo word for 'king' derives from an Archaic Koguryo and Puyo word attested in Late Antiquity, \*kar [加] 'tribal chief'. In view of the fact that Silla Korean \*kar ~ \* $\gamma$ ar (not \*kan ~  $\gamma$ an) 'king' first appears in the title of the Silla king when the Silla dynasty was restored or installed by Koguryo (Gardner 1969: 46; cf. Chapter 2), and the title in question is a Koguryo title attested later in Old Koguryo (see Chapters 2, 3, and 6), the Silla word is unquestionably a borrowing from Koguryo.11

<sup>&</sup>lt;sup>9</sup> It does not occur in Middle Korean.

<sup>&</sup>lt;sup>10</sup> Cf. MMon qa'an 'id.' Note also MMon qa ~ Khitan qa 'king, khan'.

<sup>&</sup>lt;sup>11</sup> The comparativists generally omit mention of an alternate form, OKog \*keytsi [皆次] 'king'. This form is important because it supplies the missing link between the usual monosyllabic form \*key [皆] and the Paekche form \*kitśi ~ \*kiśi [吉支] 'king' (cf. Kôno 1987). The syllable 次\*tsi is a nominal affix; see Chapter 6. It is possible that the Old Koguryo word for 'head' may be related to Puyo-Koguryoic \*kar, but there are philological problems that would need to be explained.

#### CHAPTER EIGHT

### Old Koguryo <sup>☆</sup>sarγan

Shuang yin *hsien* (霜陰縣) 'Frost female County' is glossed as 薩寒 縣\*saryan *hsien* (SS 35:364). The two syllables of this name should correspond to the two syllables of the gloss, but several scholars have argued that 薩寒\*saryan is glossed by 霜 *shuâng* (from Middle Chinese \*siaŋ) 'frost', and is to be connected to various Korean and Altaic words, including MKor *seri* 'frost' and Manchu *silenggi* 'dew' (Lee 1964: 17; Lewin 1973: 26-27). However, not only is there a philological problem here—these etymologies omit a correspondence for 陰 'female' in the gloss of the Koguryo name—the Silla name 霜陰 Shuang yin is undoubtedly simply a phonetic imitation of the Koguryo original, the Chinese name having been inspired by the meaning of the transcription character 寒 'cold'. The meaning of OKog \*saryan is thus unknown.

# Old Koguryo \*ky r

The best-attested Old Koguryo word, \*ky r ~ ky r [骨] ~  $\chi$ y r [忽] 'walled city, fort (城)', has been equated on the one hand with Middle Korean kol 'village in a valley' (Lee 1964: 15 kor; Lewin 1973: 26 kol 'valley', 'village'; Kiyose 1991: 11 kur 'valley'), and on the other hand with Manchu and general Tungusic golo 'town' and with Turkic qolyan 'town' (Lewin 1973: 27), and with Manchu holo 'valley' and Turkic qulyan 'valley' (Kiyose 1991: 11).12 However, MKor kol is from an earlier bimoraic form and is undoubtedly related to the 16th century Middle Korean form koalh ~ koulh 'village (村), prefecture, county (州 ~ 縣)', from 15th century Middle Korean kaBal 'village (村)'. The word was borrowed into Old Japanese as \*köpöri [己富利] 'commandery (郡)' (JDB: 307-308). The phonology alone indicates that the Old Koguryo word is unrelated to the Korean word. It should be noted further that OKog \*ky r 'walled city, fort (城)' does not occur in the toponyms from the original Silla kingdom territory (Toh 1987: 67, 397), but the word for 'walled city, fort (城)' in Silla Korean is explicitly cited and glossed in the sources, as \*konmura ~ \*gianmura [健牟羅] (LS 79: 1973). As it is a compound of

<sup>&</sup>lt;sup>12</sup> The 'Turkic' examples in Kiyose 1991 are mainly modern Turkish (Kiyose, p.c., 2002).

SKor \*kon 'great' (Kôno 1987) and SKor \*mura, it is obviously unrelated to the Old Koguryo word. The proposed etymology between the Koguryo and Korean words must be rejected.

The Puyo-Koguryo origin myth and early descriptions of the Puyo and Koguryo peoples in Chinese historical sources tell us that the walled cities or forts (城) of Koguryo were called \*kuru [溝漊] (SKC 30: 843: TT 186: 5011), while the stockades or walls (柵) of Puyo towns were circular in plan (SKC 30: 841; HHS 85: 2811; TT 185: 4998).<sup>13</sup> The Archaic Koguryo word \*kuru thus may have had the original meaning 'ring fort',14 in which case the word may be cognate with the root \*kuru of Old Japanese \*kuruma ~ \*kürüma [久流末] 'wheel', and also the root \*kura ~ \*küra of Old Japanese \*kur(-u) ~ \*kür(-ü) [久流] 'to turn around, spin', which are cultural loanwords from Middle Old Chinese.<sup>15</sup> Another possibility is that AKog \*kuru ~ OKog \*ku r 'walled city, fort (城)' is related to OJpn \*kura 'storehouse, treasury' (see Chapters 6 and 7). In any case, the word has no semantic connection with the meaning 'valley', and all the proposed etymological connections with the Altaic and Korean words, which have the primary meaning 'river valley', must be rejected.

### Old Koguryo <sup>☆</sup>tar

One of the best-attested Old Koguryo words is \*tar [達] 'high; mountain', which is evidently related to Old Japanese \*taka- 'to be high, tall' and \*take (from \*takaCi) 'mountain' (Martin 1987: 539), both from a root \*ta- in pre-Old Japanese. The word in its sense 'mountain' has been compared to Old Turkic  $ta\gamma$  'mountain' (Lee 1964: 18:  $tar^{16}$ ; Lewin 1973: 28; Kiyose 1991: 12) and Mongol  $tolo\gamma ai$ 'head, top' (Lee 1964: 18 tolorai; Lewin 1973: 28 tolorai). However, OKog \*tar 'mountain' is either derived from its homonym \*tar ~ 'to be high, tall', or it is a convergent semantic development of the CJK word \*tar 'high, tall' with 山 OChi \*tar 'mountain' (see Chapter 7). In

<sup>&</sup>lt;sup>13</sup> See above, Chapter 2, for details.

<sup>&</sup>lt;sup>14</sup> Cf. the Germanic name of the city of the Avars in Pannonia, the *Hring*, or 'ring'.

<sup>&</sup>lt;sup>15</sup> MOC \*kura ~ \*kula < \*kware ~ \*kwere < \*kwele; cf. OTib *fikor* 'circle, wheel' < PTib \*kwar ~ \*kwer ← OChi \*kwar ~ \*kwer, OTib *mkar* 'walled city, fort (城)' ← OChi dial. \*mkar < \*kwar ~ \*kwer. On the phonology see Beckwith 2002b.

<sup>&</sup>lt;sup>16</sup> This should be  $ta\gamma$ , cf. the misprint "qaran" for qayan, cited in the Introduction.

any case, the Old Koguryo word clearly has nothing to do with the Turkic and Mongol words etymologically.

## Old Koguryo \*ur ~ \*ür

The proposed etymological connection of Old Koguryo \*ur ~ \*ür ~ \*ulir ~ \*ülir [于尸] 'having neighbors (有鄰)', with a supposed Middle Korean word *ul* (Lee 1964: 19 *ur*; Lewin 1973: 26 *ul*) 'relatives' is incorrect formally—the Chinese gloss has two constituents, a noun and a verb, while the Korean comparison consists of a single word, a noun—and the semantic correspondence is weak. But there are even more serious problems. The 15th century form of the Middle Korean word is actually *ulh*, from earlier \*ulk, and means 'fence', not 'relatives', while the supposed gloss 'having neighbors (有鄰)' is purely a phonetic imitation of the Old Koguryo word (see the discussion in Chapter 4). The meaning of the Koguryo word is unknown and the etymology must be rejected.

# Old Koguryo \*yar

OKog \*yar ~ \*yalir [也尸] has been wrongly etymologized with respect to semantics, phonology, and comparative linguistics, though the basic error is in the philology. It is glossed in one occurrence as 'tanuki (淮) [racoon dog]' and has been identified with Middle Korean yezi 'fox' (Lee 1964: 19 yezi; Lewin 1973: 26 yoži) 'fox', an impossibly irregular phonetic correspondence, as noted by Lee (1964: 19) and discussed at length by Miller (1979).<sup>17</sup> However, in its other occurrence the same word is glossed as 'wild, wilderness (野)', indicating that the character  $\mathfrak{X}$  in the first gloss is simply a miswritten form of  $\mathfrak{X}$  kuáng 'wild'.<sup>18</sup> The Old Koguryo word thus means 'wild' and has nothing whatsoever to do with tanuki, foxes, or other elusive canines.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> See the discussion of the transcription character  $\square$  in Chapter 4.

 $<sup>^{18}</sup>$  The error occurred in medieval times, because the new Silla name, given in SS 35, already has it translated as 'wolf ( $\Re$ )'.

<sup>&</sup>lt;sup>19</sup> For an extended, amusing discussion see Martin (1996:106-107), who correctly notes that the word should be read \*yal (i.e., [yar]).

#### POSSIBLE ETYMOLOGIES

After elimination of Koguryo-Korean or Koguryo-Altaic etymologies which are technically flawed due to basic philological or linguistic problems similar to those pointed out in the above examples, a number of possible etymologies remain, a few of which are certain. What must be answered in these cases is whether the items are loanwords, indicating a convergent relationship, or inherited vocabulary from a common ancestor, indicating a divergent or 'genetic' relationship.

We must assume that the Koguryo people and their relatives in Korea, southern Manchuria, and northeastern China borrowed many words from neighboring and substratum languages before the Old Koguryo language was recorded. Words for cultural artifacts such as 'plough', 'letter', 'garlic', and so forth are unlikely to be inherited from a chronologically distant protolanguage. A few words may have entered the corpus after the destruction of the Koguryo nation and are not Koguryo at all. It is only by identifying and dating all such words that we can speak confidently about further genetic relationships.

### Old Koguryo \*kar

OKog \*kar ~ \*kalir<sup>20</sup> [加戶] 'plough (犁)' has been compared to MKor *karai* 'plough' (Lee 1964: 14; Lewin 1973: 26; Kiyose 1991: 11 'hoe'), MKor *kar*- 'to plough' (Lee 1964: 14), and Manchu *halhan* ~ *halgan* 'ploughshare' (Lee 1964: 14; Lewin 1973: 27; Kiyose 1991: 11). The Koguryo word's Chinese gloss, 犁 MChi \*ley (Pul. 187) 'plough', could perhaps be reconstructed for Late Old Chinese as \*lay;<sup>21</sup> Baxter reconstructs \*CVray for an earlier stage of the language (Baxter 1992: 773).<sup>22</sup> This would appear to be correct, especially in view of the forms and semantic identity of the Manchu and Middle Korean words, and also perhaps OJpn \*karasuki 'a kind of plough'.<sup>23</sup>

<sup>&</sup>lt;sup>20</sup> For detailed discussion of the reconstruction of this and the following words in which the character  $\square$  occurs as a transcription of a final liquid see Chapter 4.

<sup>&</sup>lt;sup>21</sup> Cf. Sagart (1999: 41, 192). However, he does not actually propose a reconstruction for words belonging to the phonetic series of # l l 'sharp'.

<sup>&</sup>lt;sup>22</sup> Baxter reconstructs the phonetic  $\exists li$  as OChi \*C-rjits (i.e., \*Crits) (Bax. 773).

<sup>&</sup>lt;sup>23</sup> OJpn \*karasuki ~ \*karasükï [何羅須支] 'a kind of plough (used with draught animals)' (*JDB* 230), is thus evidently a compound consisting of \*kara 'a kind of plough' and \*suki 'plough', from \*suka- 'to plough' (cf. Whitman 1990: 522, 543 n. 8), despite the traditional etymology of the \*kara- element as 'Chinese- ~ Korean-'.

It is clear in any case that the Old Koguryo word is an old cultural borrowing. The earlier date of the Chinese artifact indicates that the ultimate source of the word is probably Old Chinese.

# Old Koguryo \*kir

OKog \*kir ~ ☆kirlir [斤尸] 'marks, lines, letters, writing (文)' is a word with no clear etymology. The similarity to Middle Korean kil (Lee 1964: 14 kir; Kiyose 1991: 11 kör; Lewin 1973: 26 kul) 'writing', and possibly Manchu hergen 'letter' (Lee 1964: 14; Lewin 1973: 26; Kiyose 1991: 11), is undeniable. But since these words are related in the sense of 'writing, letter', and the late appearance of writing among these non-Chinese languages makes any early date for this word a chronological impossibility, it must be concluded that the Old Koguryo form is a cultural loanword, not a divergent relative of the Korean or Manchu forms, and it is probably the loan source of the Middle Korean word. The transcriptions \*kir [斤] 'tree (木)', \*kirlir [斤尸] 'writing (文)', \*Sira ~ ☆Sirla [新羅] 'Silla', and others like them, however, constitute additional evidence that the Chinese dialect of Korea was very conservative in some respects. See Chapter 3 for further discussion of the philological problems involved with the transcriptions, and Chapter 4 for the underlying Chinese phonology.

# Old Koguryo \*meyr

OKog \*meyr ~ \*meylir [買尸] 'garlic', rightly compared to OJpn \*mira [美良] 'leek' (Lee 1964: 16; Lewin 1973: 24; Kiyose 1991: 11), has the characteristics of a Common Japanese-Koguryoic word, including the regular correspondence of OKog \*mey to OJpn \*mi<sup>24</sup> and of OKog \*r to OJpn \*rV or zero. By contrast, the phonology rules out a close etymological relationship with MKor *manal* 'garlic' (Lee 1964: 16 *manar*; Lewin 1973: 26 *manal*, 28; Kiyose 1991: 11 *manor*) or Mongol *mangirsun* 'wild onion' (Lee 1964: 16; Lewin 1973: 28; Kiyose 1991: 11), as rightly pointed out by Miller (1979: 355). How, or if, the Japanese-Koguryoic words are ultimately related to the other words is unclear.

<sup>&</sup>lt;sup>24</sup> Cf. below, s.v. OKog \*mey [買~米] 'water, river'.

### Old Koguryo \*namur

OKog \*namur ~ 常ŋ ymur [乃勿] 'lead (metal)' has been compared to MKor *nap* 'lead' (Lee 1964: 16; Lewin 1973: 26; Kiyose 1991: 12). The word \*namur ~ \*ŋ ymur [乃勿] 'lead' actually occurs in an Early Middle Korean text and is considered to be a Koguryo loan in Middle Korean (Lee 1964: 17 *namir*, citing the *Hyangyak Kuguppang*). But it has been further assumed that Old Koguryo \*namur and MKor *nap* are genetic cognates, although no explanation has been given for the extremely irregular correspondence of MKor *-p* to OKog \*-mur. Since words for metals are widely borrowed, and lead metallurgy is a late development, the Old Koguryo word is probably a loan from another language; in any case, it could only be indirectly related to MKor *nap*. However, OJpn \**namari* ~ \*ŋ ymuarli [奈万利] (*JDB* 533) 'lead" is clearly related to the Old Koguryo word, despite the second syllable vowel difference, on which see Chapter 6.

### Old Koguryo <sup>☆</sup>kv

OKog \*kv [古] 'jade (玉)' has rightly been compared to Manchu gu 'gem' (Lee 1964: 15; Lewin 1973: 27 "jade"; Kiyose 1991: 11) and Jurchen  $\gamma un$  'gem' (Kiyose 1991: 11). However, it has also been compared to Mongol qas ~ gas (Lee 1964: 15; Lewin 1973: 28; Kiyose 1991: 11) and MKor kusïr (Lee 1964: 15: kusir; Lewin 1973: 26-28 kusuľ; Kiyose 1991: 11 küsör) 'gem, jewel, jade' and OJpn \*kusirö ~ \*kutśirü [久志呂] (JDB 258) 'bangle, armband (usually made from gemstone)',<sup>25</sup> which comparisons entail serious phonological problems and are based on a misunderstanding of the source. In the attested form, \*kvsi [古斯], \*kv [古] is the root and \*si [斯] is the adjectiveattributive suffix (q.v. Chapter 6). Considering the importance of the commerce in jade in China already in Early Old Chinese times, and that the main sources of jade are outside the Chinese home territory, this must be an ancient culture word, and could be a loanword even in Chinese.<sup>26</sup>

 $<sup>^{25}</sup>$  The Japanese word is undoubtedly a loan from Korean, as long noted (cf. Mar. 466).

 $<sup>^{26}</sup>$  NMan  $\pm$  yù 'jade' < late MOC \*gyuC, from some unknown source. According to Miller, Murayama Shichirô in "a searching critique of the received etymology for

#### CHAPTER EIGHT

### Old Koguryo \*na ~ <sup>☆</sup>nu

OKog \*na [內~ 惱~乃]~<sup>☆</sup>nv [奴~ 弩]<sup>27</sup> 'earth, land (壤); prefecture (州)', which corresponds exactly to OJpn \*na ~ \*nö [內 ~ 乃] ~ \*nv [努 ~ 怒] 'land; field, moor (野)', has been compared to MKor narah 'country, land' (Lee 1964: 16 nara; Lewin 1974: 26 nara; Kiyose 1991: 11 narah) and to Tungusic na 'earth, soil' (Lee 1964: 16; Lewin 1973: 27: Kivose 1991: 11). However, no one has explained the irregular correspondence of the disvllabic Korean word to the monosyllabic Japanese-Koguryoic and Tungusic words. Although a reference is often made to the Japanese place name Nara, which has generally been considered to be an Old Japanese loanword from a Korean form ancestral to MKor *narah*, a direct connection of Old Kogurvo \*na ~  $\ddagger$ nu with MKor *narah*; which derives regularly from an earlier \*narak, is phonetically unlikely. By contrast, the usual Chinese gloss of this word, 壤 raňg 'earth, land', from Middle Chinese \*ñian<sup>2</sup>, corresponds closely to a transcription of a semantically equivalent non-Koguryo word, 若 \*ñiak (see Chapter 4 for detailed discussion). The reading of this transcription character.<sup>28</sup> within Chinese, is from late Middle Old Chinese \*nrak, from earlier \*narak, so the word is identical to \*narak, the regular ancestor of MKor narah, which is thus undoubtedly a borrowing from the Old Chinese dialect spoken in Korea by the Han dynasty colonists. The agreement of the Koguryo and Japanese doublet forms secures their reconstruction for Common Japanese-Koguryoic. Further connections are dubious, but in light of the Hateruma Ryukyuan form nuuŋ 'moor (野原)' the CJK words, as well as Tungusic \*na and the Chinese forms, seem not to be clearly separable from each other. This problem calls for more research.

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this form . . . effectively deleted this particular item from the corpus" (Miller 1989: 104). I have unfortunately been unable to obtain Murayama's article.

<sup>&</sup>lt;sup>27</sup> Lee says, "The Chinese characters show that the vowel of this word was rounded rather than *a*, but we keep *a* here, since we find always this vowel in their cognates in Manchu-Tungus, Korean and Japanese. This is one of those Koguryo words which must have had a rounded vowel that corresponds to the vowel a in other languages" (Lee 1964: 16). He is correct about there being a rounded vowel form in Old Koguryo, but misses its regular, true cognate in Japanese (which also has a rounded vowel) and misses the fact that there are also unrounded forms in both languages, though *na* does not occur in Japanese except in few boundforms, notably OJpn \*nawi [那為] (*NKD* 10: 9) 'earthquake' (Kiyose 1991: 11) and, probably, NJpn *suna* 'sand'.

<sup>&</sup>lt;sup>28</sup> NMan 若 *ruò*. This word is found in a transcription of a toponym that includes the Silla Korean) or pre-Silla Korean word \*su 'ox, cow', discussed above.

## *Old Koguryo* <sup>☆</sup>mey

A similar case is OKog <sup>★</sup>mey [ $\exists \sim \#$ ] 'water, river', a cognate of the Old Japanese root <sup>★</sup>mi 'water' from Pre-OJpn \*mey (cf. Martin 1987: 483) from \*mer<sup>29</sup> (Beckwith 2002a: 31, n. 12), which has been etymologized with MKor mil (Lee 1964: 16 mir; Kiyose 1991: 11 mör) 'water' (which has become NKor mul), Jurchen mü 'water' (Kiyose 1991: 11), Manchu muke 'water' (Lee 1964: 16; Lewin 1973: 27; Kiyose 1991: 11), and Middle Mongol *mören* (from the root \*mör-) 'river' (Lewin 1973: 28; Kiyose 1991: 11), among other comparisons.<sup>30</sup> Still further comparisons, with other languages, could be made, since words for 'water' and 'river' are particularly loanable. Note the virtually identical Old Chinese and Indo-European forms of the word for 'water' (Beckwith 2002a).<sup>31</sup> However, the unrounded high or midvowel of the Japanese-Koguryoic word does not correspond to the rounded or low vowels in the Korean and Altaic words; there is thus no particular reason to connect the Japanese-Koguryoic word directly with its semantic equivalents in those languages.

### Old Kogurvo \*pafiiy

OKog \*pafiiy ~ ☆payei [波兮~ 巴兮] ~ ☆pa?iy [波衣]<sup>32</sup> 'steep hill; precipitous' has been equated with MKor pahoi 'rock, crag' (Murayama 1962: 71 pahoi; Lee 1964: 17 pahoi; Lewin 1973: 26 pawi; Kiyose 1991: 12 pahui). This well-attested word seems to have no cognate in Japanese, and none have been proposed for the Altaic languages or Chinese. The phonological and semantic correspondences with Middle Korean are good, and the word is well attested in Old Koguryo. This is thus a clear cognate with Korean. However, there is

<sup>&</sup>lt;sup>29</sup> The existence of the Hateruma form  $mi\eta$  (Mar. 483) suggests that this and some of the other words with final  $\eta$  in the language (there being only one final nasal phoneme, with several allophones, in Japanese) are datable to a time after the LOC shift of MOC \*-r to -n (cf. Beckwith 2002a, 2002b). This supports the achaeological evidence that the Rvukvuans left the continent much later than the Yavoi Wa did.

<sup>&</sup>lt;sup>30</sup> Modern Tungusic languages (Lee 1964: 16), including the mysterious "Tr."

<sup>(</sup>Turkic) *mu*<sup>-</sup> 'water' (Kiyose 1991: 11), a misprint for "Tg." (Kiyose, p.c., 2002). <sup>31</sup> Cf. also OJpn \*umi 'sea' < PJpn \*rmey ← OChi dial. 海\*rmey < \*mrê < \*marê 'sea' (Beckwith 2002b: 132, 149)  $\leftarrow$  IE dial. \*mare < PIE \*mori 'id.' > Lat mare, Germanic \*mari > NEng mere 'id.', etc.

<sup>&</sup>lt;sup>32</sup> There is also one unglossed name that is probably the same word, igar (SS 35, 37).

no way to tell from the data whether the word has been loaned to or from Korean. Moreover, there is also a good Gilyak cognate, *pax*, with the same meaning (Lee 1968: 137, Kim 1985: 135). This is decisive. The word is undoubtedly a loan from Gilyak into both Koguryo and Korean (whether individually or via transmission from Koguryo to Korean, or vice versa, is immaterial here). In any case, since it belongs to the 'easily borrowed' category of nominals, it cannot by itself either support or refute a theory of genetic relationship between Japanese-Koguryoic and Korean.

# Old Koguryo <sup>☆</sup>pa

A supposed Old Koguryo word \*patan [波旦] 'sea' has been compared to various forms of MKor *paral* (15th century) ~ *patah* (16th century) 'sea' (Lewin 1973: 26 patal; Kiyose 1991: 12 patah; Martin 1966: 240: pal l; cf. Yu 1976: 155, referring to OKog \*pali [波利]) and to Old Japanese \*wata 'sea' (Kiyose 1991: 12). However, because the Old Koguryo word for 'sea' is only 波 \*pa in the sources (see Chapter 3), and Old Koguryo initial \*p- corresponds regularly to Old Japanese \*p-, the phonological correspondence between the Korean and Japanese words is highly irregular. In addition, the later Middle Korean word is not derivable directly from the earlier Middle Korean form. For this reason, Martin suggests that patah is perhaps a borrowing from Ryukyuan bata, a dialect form of Japanese wata 'sea' (Martin 1966: 240). If correct, this would eliminate any connection with the Old Kogurvo word \*pa, because Old Japanese \*wata 'sea' is undoubtedly connected etymologically with \*watari 'ferry, ford', a derivative of the verb \*watar- 'to ford, ferry, cross over', apparently a metaphoric euphemism for 'sea' in Old Japanese due to avoidance of words referring to death,<sup>33</sup> the normal word for 'sea' being <sup>±</sup>umi.<sup>34</sup> On the other hand, the correspondence of Old Koguryo  $\Rightarrow$ pa 'sea' to pa, the first syllable of both Middle Korean words, is impeccable. It would appear that if the Old Koguryo word and the root of the Middle

<sup>&</sup>lt;sup>33</sup> Cf. JDB: 819, which however introduces much confusion in its discussion of other derivatives; ccf. Martin 1987: 569. OJpn \*wata 'sea' is sometimes written with the character  $\underline{\mathfrak{B}}(d\hat{u})$  'to ford, ferry, cross over' (cf. English 'to pass away') instead of the character  $\underline{\mathfrak{B}}(hai)$  'sea' (JDB: 819-820); this seems very likely to be significant (a semantic reading, or *kunyomi*), not a *kungana* (homonym of a semantic reading).

<sup>&</sup>lt;sup>34</sup> Cf. note 33, above.

Korean words are related, it is by convergence-Korean having borrowed \*pa 'sea' from Koguryo and subsequently adding further derivational elements to it.35 (For the etymological connection of OKog  $\ddagger$  pa 'sea' to the Old Japanese root  $\ddagger$  pa, see Chapter 6.)

## *Old Kogurvo* <sup>☆</sup>kaip ~ \*kaipi

OKog \*kaip ~ \*kaip [甲] ~ \*kaipi [甲比] 'cave, cavern, hole (穴)' has been compared to 'Turkic' qapi 'door' (Lewin 1973: 27) and qapca 'ravine' (Kiyose 1991: 12). These modern Turkic words are derivatives of the verb *qap*- 'to cover, close'. The Old Koguryo word is undoubtedly cognate with Old Japanese 賀比~可比\*kapi 'mountain gorge (峽)' (JDB: 210), as has also been proposed (Lee 1964: 14; Lewin 1973: 24: Kivose 1991: 12). However, it should further be noted that the Old Japanese word's Chinese gloss, 恢 xia "mountain gorge', from EMC <sup>±</sup>χ ip/γε:p (Pulleyblank 1991: 333), also corresponds phonetically to synonyms (which may overlap phonetically as well) of the Old Koguryo word.<sup>36</sup> However, words for 'cave' and 'cavern', 'cover', 'to cover, close', 'cap', and so on are very often phonetically iconic cross-linguistically (cf. PTib \*kab 'to cover') and may be considered a near-universal, as the Latin-derived English words suggest.<sup>37</sup> While this does not rule out the possibility of the etymological relationships suggested above, it also does not rule out many more that have fortunately not been suggested. In short, phonetically iconic words cannot be used as primary support for language relationship theories, else nearly all languages in the world would be 'genetically' related.

## Old Koguryo \*kufiiy

Etymological connections have been proposed that would link OKog \*kufiiy ~ \*ku?iy [古衣] 'swan (鵠)' with Korean kohai 'swan' (Lee

<sup>&</sup>lt;sup>35</sup> The modern Korean word *pata* 'sea' is probably a dialect borrowing within Korean and has nothing to with Ryukyuan.

<sup>36</sup> This corresponds in turn to OJpn \*ap- 'to join, together (合, 和)' (JDB: 38) from Pre-OJpn \*ap or \*yap, which itself also corresponds phonetically to its usual Chinese gloss,  $合 \dot{h}\dot{e}$  (from EMC \* $\chi$  p ~ \* $\gamma$ ap). <sup>37</sup> Cf. Sinor (1998: 740) for similar remarks on the Altaic words.

1964: 14 *kohai*; Lewin 1973: 26 *kohai*; Kiyose 1991: 11 *kuhai* 'stork') and MTur *qoyu* 'swan' (Kiyose 1991: 11); as well as with Japanese *kugui* 'swan', from OJpn 久久比 \* kukupi<sup>38</sup> (Beckwith 2000). The proposed etymological connections of the Old Koguryo word with the Korean and Japanese words are undoubtedly correct. However, not only can we not neglect the close Turkic form, we can hardly fail to notice the clear relationship of the Chinese word 鵠 *hú* 'swan', from EMC \**y*awk (Pulleyblank 1991: 127), from Old Chinese \*guk (Bax. 763). In fact, the word occurs in Indo-European languages too, as in Greek *kuknos* 'swan (cygnus)' (Watkins 2000: 41).<sup>39</sup> While the latter is supposed to be derived from a root meaning 'to be white', it is obvious that it is really an onomatopoetic word, as are all the other forms. Similar words thus could occur in any language, and cannot be used as the basis for any linguistic relationship theory.

## Old Koguryo <sup>☆</sup>piar

A good example of a word that is often somewhat grammaticized but can also be borrowed like anything else is Old Koguryo \*piar [別] 'times, -fold (重)', a good cognate of Old Japanese 幣 \*pey (\*pe) 'id.' (*JDB*: 647), which has been compared to Middle Korean *pat* (Lee 1964: 17 *par*; Kiyose 1991: 12 *por*) 'id.' Apparently the same word is Chinese 倍 *bèi* 'id.' from an early Middle Old Chinese form \*pere ~ \*pele, which is comparable to English *fold*, from Indo-European \*pel-'-fold; to fold' (Wat. 63). This is undoubtedly another phonetically iconic word and thus cannot be used as primary support for any linguistic relationship proposal.

## *Old Koguryo* <sup>☆</sup>nan

It has been recognized since the time of the discovery of Koguryo that the word for 'seven' in that language corresponds to OJpn  $\ddagger$ nana 'seven', even though the Old Koguryo form is cited incorrectly, the

<sup>&</sup>lt;sup>38</sup> This Japanese word has generally been cited in what appears to be a later form, \*kopi ~ \*kopu (Lee 1964: 14: *kofu* 'swan'; Lewin 1973: 24: *kofu* 'swan'; Kiyose 1991: 11: *kopu* 'stork'), evidently following Murayama (1962: 70-71); the early form is given in JDB: 254. The source of the final syllable \*-pi is unclear.

<sup>&</sup>lt;sup>39</sup> Cf. Sinor 1998: 740, who however speaks of terms of loanwords.

actual word for 'seven' in Old Koguryo being only \*nan [難]. Moreover, the correspondence is closer than has hitherto been noted, because the character used to write the second syllable of the form in which the word appears, OKog \*nanir ~ \*nanin [難隱] 'seven-GEN', is also used to write the second syllable of OKog \*vair ~ \*vawin [要隱] 'willow-GEN'. The latter corresponds exactly to OJpn \*yana 'willow-GEN' in \*yanagi 'willow tree' (lit., 'willow-GEN tree'). The Old Japanese word for 'willow' also exists in root form, <sup>x</sup>ya (in \*yagi 'willow tree'), so it is clear that the roots of these two Old Kogurvo words are monosyllabic, <sup>∧</sup>nan and <sup>\*</sup>ya. The second syllable, <sup>\*</sup>ir  $\sim$  <sup>∧</sup>in [隱], derives from</sup> the CJK genitive-attributive suffix \*na. Old Koguryo metathesized the vowel of the second syllable in these words. As \*nan, this Old Koguryo numeral is no longer as convincing a match for the only numeral similar to it outside of Japanese, Tungusic nadan 'seven'.40 Moreover, words for 'seven' across Eurasia are mostly related, for unknown reasons, perhaps connected to taboo. It is notable that this is the only Japanese-Koguryoic numeral that is at all relatable to Tungusic or any other known language, despite many vigorous attempts, by many scholars, to relate various Japanese-Koguryoic numerals to those in other languages.

# Old Koguryo \*i

OKog \*i ~  $^{4}$ yi [伊] 'to enter' has been compared not only to OJpn \*ir-~  $^{4}$ yir- 'id.', but to Tungusic *i*- (recto, \*î-) 'id.' (Lee 1964:13; Lewin 1973: 27; Kiyose 1991: 11), to Mongol *ire*- 'to come' (Kiyose 1991: 11), and to MKor *ip* 'mouth' (Kiyose 1991: 11). While there is no problem with the Japanese comparison, the correspondence with Tungusic appears to be even closer. However, it is also undeniable that the Old Koguryo word consists, in toto, of a single vowel segment. Considering that the languages in question have relatively simple vowel systems, the chances that this correspondence is purely coincidental are too great to ignore. Thus, this comparison cannot be used as primary support for the theory of a relationship between Koguryo and Tungusic.

<sup>&</sup>lt;sup>40</sup> Words for 'seven' across Eurasia are mostly related, for unknown reasons (Denis Sinor, p.c., 1973), perhaps connected to taboo.

#### CHAPTER EIGHT

### Old Koguryo <sup>☆</sup>paik

OKog 伯 \*paiyk ~ \*pɛːyk 'to meet, welcome, encounter (逢~ 迎~ 遇)' has been compared to Turkic *bak*- 'to see' (Lee 1964: 17), and to Jurchen *ba* $\chi$ *a*- 'to get' (Kiyose 1991: 11-12) and Manchu *baha*- 'to get' (Kiyose 1991: 11-12; Lewin 1973: 27), along with other Tungusic forms (Lee 1964: 17; Lewin 1973: 27; Kiyose 1991: 11-12). However, semantics rules out acceptance of any of these comparisons.

#### A CLOSE GENETIC RELATIONSHIP

Very many more examples of various kinds of mistakes can be adduced, but there is no point in spending more time and space on them. Although they are sometimes ingenious they are wrong either philologically or linguistically or both, and the points they have been created to prove are invalid to begin with. (See the discussion of distant genetic relationship theories in Chapter 11.) It is clear that several of the Old Koguryo words discussed in this chapter are indeed shared with Korean—the words or roots for 'plough', 'crag', 'lead', 'swan', 'sea', and 'fold, -times'. Also, several Old Koguryo words are indeed shared with various Altaic languages and with Chinese. However, these etymologies do not help establish a close divergent or 'genetic' relationship between or among any of these languages because the etyma are all loanwords or linguistic universals.

By contrast, the Japanese and Koguryo comparisons mentioned in the discussion of the bogus etymologies are not only consistently close both phonetically and semantically, they exhibit shared innovations found only in Japanese and Koguryo. The Japanese-Koguryoic etymologies are of course also far more extensive, since they include all four attested Old Koguryo numerals as well as a good representation of the distinctive 'Japanese set' of lexical forms still characteristic of Japanese today, such as *kuchi* 'mouth', *nami* 'wave', *yama* 'mountain', *fukai* 'deep', and so on. Moreover, some of the words which are not usable, alone, as primary evidence for linguistic relationship proposals are undoubtedly inherited in Japanese and Koguryo from Common-Japanese-Koguryoic, and perhaps even from Proto-Japanese-Koguryoic. In short, even though this chapter is devoted to criticism of suggested Korean and Altaic etymological connections with Koguryo, the discussion has served to further strengthen the theory of an exclusive close genetic relationship between Koguryo and Japanese.

#### CHAPTER NINE

#### THE ALTAIC CONVERGENCE THEORY

Most linguists specializing in the 'Altaic' (henceforth generally in this chapter: Altaic) languages define it as consisting of the Turkic, Mongolic, and Tungusic families of languages. To this group, it has also been argued, the Japanese-Koguryoic ("Puyo") and Korean languages belong by convergence (Kiyose 1998). This theory is much stronger theoretically than the Altaic divergence theory (q.v. Chapter 8) since it is demonstrable that the lexical foundations of the Altaic divergence theory are in fact loanwords—the residue of convergence. One could hardly disagree with the convergence theory if it went no further than this. However, in practice most proponents of one or another version of the Altaic convergence theory continue to operate within question-able theoretical limits. This chapter is devoted to an examination of the theory.

Today the most commonly found view of the linguistic affiliation of Japanese, Koguryo, and Korean is that they all belong to the socalled Altaic family of languages (Sohn 1999: 18-25; Lee and Ramsey 2000: 5-7; Shibatani 1990: 94-118<sup>1</sup>; Miller 1971, 1980). This is a divergence, or genetic, theory. While the present writer and many other specialists in Central Eurasian languages (Doerfer 1963; Clauson 1969; Róna-Tas 1971; Clark 1977; Rozycki 1994) do not accept the Altaic genetic theory, few clear presentations of the overwhelming arguments against it have been published. With the relative popularity of genitive theories of relationship over convergence theories it is inevitable that the Macro-Altaic genetic theory should be popular. What is worrisome is that it is cited and defended by linguists who seem not to be aware that there are at least two opposing Altaic theories, one a divergence or genetic theory, the other a convergence or 'anti-genetic' theory. Since Korean and Japanese have been argued, explicitly, to be

<sup>&</sup>lt;sup>1</sup> Shibatani discusses all of the major theories in detail, but does not himself subscribe to any of them, concluding, "while most people feel that Japanese and Korean are related and that these two languages are related to the Altaic languages, no conclusive evidence has been presented either for such connections or for others" (1990: 118). He does not discuss Koguryo at all, though he mentions it briefly twice (1990: 100, 106) in connection with the theories of other scholars.

distantly related both to each other and to the other Altaic languages (or to Tungusic only), the theories proposed are 'distant relationship theories' by definition, as is the traditional Altaic genetic theory itself. They are thus not of scientific interest, as explained in Chapter 11.

However, the alternative view, as suggested by Gisaburo N. Kiyose, is that Korean and even Japanese may be Altaic languages by convergence. Although this is not generally noted in the literature (but see Shibatani 1990), typological arguments are nearly always prominent in presentations of the 'genetic affiliation' of Korean and Japanese (e.g., Sohn 1999: 22-23; Lee and Ramsey 2000: 6) and of both languages to Altaic. Others would like to connect these languages closely regardless of the evidence. While the divergence theory of Altaic relationship has been so devastatingly criticized by specialists that it is difficult to understand its tenacity today, the convergence theory preferred by its critics has been little examined except by divergence partisans such as Poppe (1977) who evidently do not understand the problems seen by their critics. Some fundamental theoretical problems with convergence theories are the primary focus of this chapter.

The popularity of convergence theories in recent decades has grown tremendously, to the point where some scholars dismiss even such well-established constructs as the Indo-European family of languages, among others. While there are of course good reasons for objecting to a simplistic version of the Stammbaum model of genetic relationship, the critics have justified their views by proposing a substitute theory. They argue that the data underlying the Indo-European theory and other similar theories such as the Semitic theory can be explained by convergence, and therefore the divergence theory is invalid. Yet the critics do not and cannot explain how the complex shared morphophonology of the Indo-European and Semitic languages, including declensional paradigms and suppletive forms of several kinds, can be explained by convergence. Attested examples of the borrowing of such forms are extremely rare and their loaned origin is always obvious. (See the discussion of putative examples in Chapter 10.) Thus the divergence theory, or Stammbaum model, remains as the only economical explanation for the correspondence of such morphophonological relationships.

On the other hand, traditional presentations of the Indo-European and other divergence theories have often failed to give a principled explanation for some significant unexplained points of divergence, such as the retroflex and aspirated voiced stops in Indic, the significant component of the Germanic lexicon not found in other Indo-European languages (the same problem exists for Greek and some other Indo-European languages), and the phonological divergence of the Romance languages. These points are, however, discussed in the literature, and are not considered problematic because Indo-Europeanists actually have long recognized that these changes are due to a particular variety of convergence, namely substratum influence (Meillet 1949: 25). It is abundantly clear from studies of contemporary language change that in some cases a substratum language can exert powerful forces over the superstratum language. The English dialect now spoken as a native language in the Indian subcontinent exhibits some of the same phonological features, notably including retroflex stops, that the ancient Indic language developed after its speakers invaded what became their homeland. The same kind of thing has happened to French and other languages which were spread by colonial powers to well-populated countries in Asia and Africa. In North America, by contrast, the English colonists quickly eliminated or marginalized most of the original inhabitants, speakers of American Indian languages, so there was practically no influence from the substratum on the formation of American English. Since the process observed in our own day can be extended by analogy to the situation of the Roman conquest of ancient Gaul, the Indo-Arvan conquest of ancient India, and the Germanic settlement of their ancient homeland, the linguistic changes left unexplained by a simplistic version of the Stammbaum theory are not problematic after all.

The process of change due to substratum influence can be seen in other parts of the world—in the present case, eastern Eurasia—where linguistic relationships have proved to be resistant to the *Stammbaum* model. Nevertheless, in this area the critics are mostly right—the reason Altaic and its many variants, including those versions that involve Korean and Japanese, remain problematic despite more than a century of effort by a large number of talented and energetic linguists is that the languages included by the proponents are not related by divergence at all, but by convergence. If they were related by divergence, they would exhibit significant correspondences in their declensional and other paradigms. But, other than the pronominal system of Turkic, Mongolic, and Tungusic—which has definitely been borrowed, since it is also found in the unrelated Finno-Ugric and Indo-European languages<sup>2</sup>—there are no *regular* correspondences among the morphophonological systems of the Turkic, Mongolic, and Tungusic components of Altaic, not to speak of the Macro-Altaic languages. The lexicon itself, the focus of most of the efforts of the proponents of the Altaic divergent theory, is actually one of the biggest problems, since so little corresponds other than obvious loanwords, as clearly shown by Clauson (1969).<sup>3</sup> Moreover, the regular correspondences that do exist in the lexicon have been shown to be loanwords (Doerfer 1963, Rona-Tas 1971, Clark 1977, Rozycki 1994). Accordingly, there is no longer any *scientific* justification for supporting a divergent Altaic theory.

The preceding conclusion does not mean, however, that there are no divergent relationships older than, say, Proto-Germanic, or Proto-Indic, or whatever. The Indo-European theory has been substantially supported in its fundamental premises, though of course many details continue to be worked on, as it is a large family with a long history. By contrast, while the Altaic, Macro-Altaic, and most other divergent theories that have been proposed for eastern Eurasia4 remain problematic at best, for very good reasons, that does not mean valid new relationship proposals cannot be made. The identification of the Japanese-Koguryoic family of languages, a close relationship theory, is based on the principles of traditional comparative-historical linguistics. But the same scientific principles restrict the further extension of that theory. It is thus not possible to demonstrate a close linguistic relationship (see Chapter 11) between the Japanese-Koguryoic family on the one hand and any other known language or language family on the other. Attempts to do so must so far be relegated to the category of

 $<sup>^2</sup>$  They have perhaps been borrowed from Common Germanic or Proto-Gothic. Whether borrowed individually from whatever donor, or later from each other, is not entirely clear, but there is evidence in favor of the latter scenario.

<sup>&</sup>lt;sup>3</sup> Critics of this particular article, while certainly correct in their theoretical views, completely miss Clauson's point. He shows that even in what is, for all practical purposes, a random selection of lexemes made on questionable theoretical grounds (as he notes), there is simply no demonstrable divergent relationship whatever among the three so-called Altaic languages. This is of course absolutely not the case for three related language. As pointed out elsewhere, even Tokharian, a highly divergent Indo-European language discovered in an unexpected place, was immediately recognized to be Indo-European despite the fact that it turned out to belong to a previously unknown branch of the family. Similarly, Koguryo was immediately recognized to be a relative of Japanese. Yet even after millenia of contact, and a good century of attempts to prove otherwise, the Altaic languages remain very distinctly unrelated and unrelatable to each other, as are Japanese and Korean.

<sup>&</sup>lt;sup>4</sup> For detailed discussion of the Sino-Tibetan theory see Beckwith 2002b.

distant relationship theories. Accordingly, the explanation for correspondences involving other languages beyond Japanese-Koguryoic are probably to be explained as a result of convergence. Yet this raises the same question as that raised by the Altaic convergence theory, which was developed in response to the intractable problems with the traditional Altaic divergence theory.

There is widespread acceptance today of the convergence theory, which proposes that the Turkic, Mongolic, and Tungusic language families are related not by divergence, or genetic relationship, as has long been argued, but by convergence. The argument is that they have come to resemble each other over the course of time to the point that they constitute a distinct group of languages. The convergence theory has generally not been taken to include Korean and Japanese in a Macro-Altaic convergence theory parallel to the Macro-Altaic divergence theory, but there is no good reason for this oversight. There is, however, a bad reason, and it is the same as that which determines the actual limits of the Altaic convergence theory.

The convergence theorists refer exclusively to the Turkic, Mongolic, and Tungusic languages as one special group called Altaic, and exclude other languages—even Korean and Japanese—from it. However, in the absence of an accepted divergent (or genetic) relationship, one is entitled to wonder how they know which languages to include or exclude. No reasons, or at least no linguistically sound reasons, are given for drawing a line between the Altaic and the non-Altaic. It is obvious that the divergence theory is supplying the answers here. The necessity thus arises of defining what—according to the convergence theory—'Altaic' should mean, if it is to mean anything, and agreeing on the definition.<sup>5</sup> Otherwise, one is no longer talking science, and Altaic must go into the dustbin along with Nostratic and the other fashionable concoctions of popular linguistics.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> The most famous exposition of the problem—whether we are all going to adopt and use the same definitions for words—is Humpty Dumpty's (Carroll 1960: 269):

<sup>&#</sup>x27;When I use a word,' Humpty Dumpty said, in rather a scornful tone, 'it means just what I choose it to mean—neither more nor less.'

For more on the logic, see Gardiner's discussion (Carroll 1960: 268-270).

<sup>&</sup>lt;sup>6</sup> Not only Altaic and Nostratic but many similar theories have recently been revived, some of them after having been thoroughly discredited many decades ago. For discussion of the basic problems see Campbell (1999) and the discussion of 'distant relationship theories' in Chapter 11.

In order for the term Altaic to mean something within the context of a scientific convergence theory, the idea it refers to must be precise, non-circular, and chronologically defined. In other words, the term must delimit those qualities-and only those qualities-which pertain to 'Altaic' languages, such that one should be able to examine a language for these qualities, and if it satisfies the description, one can say, "Yes, it is" or "No, it isn't" an 'Altaic' language. Secondly, under such conditions, the definition cannot include a list of qualifying languages until all known languages (or at least all Eurasian languages) have been examined. And thirdly, one must develop a schema of levels of relationship over time. All languages in contact are diverging and converging at different rates, although it has been shown to be virtually impossible to determine such things with any degree of precision for the past, present, or future (Campbell 1999: 177-186). It is clear that the very nature of a convergent relationship means that any two languages included in it at a given point in time must have been unrelated at some previous point in time-that is, either the languages had not yet formed a significant contact relationship or they were no longer in significant contact with each other, and were diverging. Since a convergent relationship is essentially a loan relationship, the fundamental problem is to clearly determine the point at which a language has borrowed enough that it becomes Altaic (however one chooses to define that), or if it has diverged far enough away from the defining model so that it has reached the point that it is no longer Altaic. In other words, one must determine to what degree a language is Altaic. This is what is (or should be) meant by 'Altaicization' and 'de-Altaicization' within a convergence model.

Now, how does this borrowing—of grammatical, phonological, and lexical elements—take place? From an already Altaicized language or from an unconnected language (substratum or superstratum) that is responsible for the Altaic features? History is one factor in determining Altaic relationships, yet unless anthropology develops new methods that allow us to discover what languages were spoken by prehistoric people, history will only be able to tell us if peoples whose linguistic relationship is already known (or rather, 'thought to be known') were in contact relatively recently.<sup>7</sup> As long as the conver-

<sup>&</sup>lt;sup>7</sup> Other extra-linguistic factors, such as geography and culture, must be considered as well, but only in that historical context which in Inner Asia is so often lacking. Clauson long ago argued that the lexical evidence indicates the Turkic and Mongolic

gence theory is followed, therefore, one can do little more than internal reconstruction within the language families universally accepted as divergent, such as Turkic, along with comparative chronological analysis of loan words between Turkic and other languages. And in fact this is exactly what is done by most practicing convergencetheory Altaicists. This brings the discussion back to Altaicization and the matter of definition. Clearly, in the context of convergence, it is impossible to speak about Altaic until one has decided what Altaic is.

As a preliminary analytical tool, a simple typological model is proposed here. It consists of a list of five features that most, perhaps all, Altaic linguists—of whatever persuasion—would probably accept as typical characteristics of an Altaic language.<sup>8</sup> This is of course a simplistic model, and lists only a few among many such features. An Altaic language includes the following features:

- 1. No word-initial consonant-clusters. Among other fairly common phonological features, so-called vowel harmony must be excluded, because too many of the prime candidates do not have it.<sup>9</sup>
- 2. Suffixing agglutinative morphology, with the exception that one intensifying prefix system is allowed.
- 3. No system of overt grammatical concord (such as gender).
- 4. Obligatory verb-final sentence syntax—i.e., SOV or OSV only.
- 5. Vocabulary items in common with other Altaic languages.

With respect to the fifth feature, the *absence* of any specific vocabulary items cannot be used to disqualify any language. The same must be true for morphology. For example, the well-developed personalpronominal system of Turkic is paralleled most closely not in, say, Mongolic languages (although to be sure some similar pronominal forms are to be found there), but rather, in Finnic and ancient Ger-

peoples did not have similar cultures when they first came into intensive contact with one another (Clauson 1962: 211-247). The same can of course be said for the Tungusic peoples.

<sup>&</sup>lt;sup>8</sup> A similar model is given (though not called a 'model') by Sohn (1999: 22-23) and by Lee and Ramsey (2000: 6), with very similar lists of features. Such models have been made by many scholars, beginning with Fujioka, whose famous 1908 list, cited by Shibatani (1990: 96), is much longer than the one given here. Fujioka's is taken from a still earlier list of Ural-Altaic features (contrasted with Indo-European ones) composed by F.J. Wiedemann, for which see Räsänen (1949: 11-12).

<sup>&</sup>lt;sup>9</sup> For an examination of the initial stop consonants of Turkic, Mongolic, and Manchu-Tungusic in a convergent context, see Róna-Tas (1991: 147-149), who notes the dangers of making one-level synchronic comparisons of phonological features.

manic. In Turkic, as in the latter two language families, verbs take personal-pronominal suffixes, another European-type feature that is absent in practically all other languages of Inner Asia. In order to make a convergence model that might work for Altaic, therefore, it is necessary to overlook some of the most fundamental and outstanding features of some of the prime candidates for membership. Obviously, this must greatly decrease the usefulness of the model.

Nevertheless, if we are to take the convergence theory seriously at all, we must test language candidates against a model. In the absence of other current proposals, the present five-point model will have to serve. The test must at first be limited to modern languages only, due to the uneven availability of comparative material. Despite this limitation, or because of it, some interesting conclusions may be drawn even from such a superficial examination.

Starting from the West and going East, we can disqualify most of the major European languages, which lack agglutination and have word-initial consonant clusters. The major Finno-Ugric languages share some but not all of the Altaic features (for example, Finnish has extensive grammatical concord and does not have obligatory verbfinal syntax), and must therefore also be ruled out. In the Middle East, Turkish and other Southwestern Turkic languages are Altaic, but Iranian and Semitic languages are not, due to phonology, morphology, and syntax, though it must be noted that Persian, especially the Tajik dialect, is very close to Altaic according to the present model. Just to the northeast of Turkish are the non-Turkic Caucasian languages, which are non-Altaic due especially to phonology. Continuing the examination to the southeast, the Indic languages are disgualified on the basis of phonology and morphology. Northward are numerous Tibeto-Burman languages, the most important of which, modern spoken Lhasa dialect Tibetan, is clearly Altaic. Burmese, to the southeast of Tibet, is a member of the Tibeto-Burman family of languages and accordingly shares a good deal of vocabulary with Tibetan (which itself contains a number of words found also in Mongolic and Turkic), so if Tibetan is Altaic then so is Burmese. (If it is objected that the chain of causation must be limited to languages that share vocabulary found in Turkic, Mongolic, or Tungusic *only*, then the entire enterprise is once again based on *a priori* parameters set by the genetic theory. The present investigation is devoted purely to testing the convergence theory proposed above.) The Southeast Asian languages beyond Burmese are

not Altaic. North of Tibetan are a number of Turkic languages, including Yugur (or 'Yellow Uighur') and some modern Uighur dialects, which due to the presence of initial consonant clusters (shared with the neighboring non-Altaic northeastern Tibetan dialects and languages) are not Altaic. Monguor, a Mongolic language in the same area, is not Altaic for the same reasons. In northern and northeastern Eurasia are the Mongolic, Siberian Turkic, Tungusic, Korean, and Japanese-Koguryoic languages, which clearly are Altaic. Chinese, however, due to morphology, syntax, and lexicon, is not Altaic, though some of the far northern and Central Asian dialects of Mandarin, such as Dungan, are perhaps close enough to the model to qualify. Finally, Russian, the most important single Central Eurasian language today, is not Altaic due to phonology, morphology, and syntax.

Taken on a purely contemporary synchronic level, then, it is quite easy to find a large number of languages that fit the proposed convergence model of Altaic. However, it has been remarked, "Without taking into consideration the history of ... [the] languages, we shall get a typological classification of very low cognitive value" (Sharadzenidze 1970: 43). Moreover, as Antoine Meillet (1949, 1984) has stressed, it is the anomalies that are really of greatest importance in comparativehistorical linguistics. The comparative study of Altaic languages, like that of most eastern Eurasian languages, has been and apparently still is based largely upon superficial similarites.

In fact, this whole procedure has only demonstrated that typological classification, no matter how general or detailed, is of very little use to the historical-comparative linguist because as very many linguists have noted it merely identifies the *type* of a language at one particular point in its history.<sup>10</sup> The language may have belonged to several different language types or 'language areas' (*Sprachbünde*) at different times. Tibetan is a good example of such type-shifting—the phonology and morphology of Old Tibetan both rule out classifying the language as Altaic. Some talk quite logically, therefore, about Altaicization as a sort of process—and indeed, if the convergence theory has any validity at all, it can only be a process: to wit, the normal process of languages in contact borrowing features (including but not limited to lexical items) from each other, a fairly innocuous process found worldwide among all languages.

<sup>&</sup>lt;sup>10</sup> Of course areal analysis, particularly with isoglosses for phonological, grammatical, and lexical features, remains extremely useful.

After all the above discussion, one is bound to ask why scholars ever lumped the Turkic, Mongolic, and Tungusic language families together, to the exclusion of all sorts of nearby languages. The answer is undoubtedly the cultural element. The early European philologisthistorians thought of Central Eurasians as nomadic or seminomadic Huns, Tatars, or 'Turco-Mongolian Steppe Warriors'. They did not really know or understand much about them, and knew even less about the non-nomadic components of these and other peoples of Central Eurasia whose history is only now becoming somewhat better known. Any people who, they thought, fit into their simplistic cultural model and had adopted an 'Inner Asian' script and shared a certain typically 'Central Eurasian' cultural vocabulary, was Altaic. The Iranian languages were excluded, despite the close cultural fit of the Scythians, because the Persians have been known to Europeans since Antiquity and their language has been known to belong to the Indo-European family since that relationship theory was first proposed. The same is true of Russian and the other Slavic languages. Chinese was very early lumped together with Tibeto-Burman and other Southeast Asian languages that are mostly tonal and spoken by 'sedentary agricultural' Mongolic-race peoples who were seen as completely alien. That left few languages unaccounted for, and the Altaic family theory remained essentially unquestioned.

But since it is accepted that Arabic and Persian are unrelated languages, how can one explain the extensive shared vocabulary and structual similarities? What was the exact process that brought about this convergence? Surely it was the participation of both peoples in a common culture based on a common religion, Islam, and a common literary language—Arabic—and time spent living together in the same places. If this can be viewed as a typical model of a convergent relationship, and if the Altaic convergence theory has any validity at all, then what is missing from the Altaic convergent model is the glue. Yet the superstratum or substratum language responsible for Altaicization has never been identified. This failure to account for the hypothetical convergence is another serious problem with the convergence theory of Altaic relationship. If there is no identifiable common stratum that can account for the convergence, there is no Sprachbund, and no convergent Altaic group. Since not only lexical but also other typological features of the Turkic, Mongolic, and Tungusic languages are unquestionably found in neighboring languages belonging to other families,
as noted above, it would appear to be impossible to restrict a convergence theory of Altaic to these three families.

The unavoidable conclusion is that no scientific reason has yet been given for retaining the idea that the Turkic, Mongolic, and Tungusic languages are specially related by convergence, such that they and they alone should be called Altaic. There does not appear to be a way to draw a line scientifically—that is, in a testable, potentially falsifiable theory—to delimit what, in a convergence theory context, is or is not Altaic. Tradition, political usefulness, and other excuses are not acceptable as science. Accordingly, the current Altaic convergence theory must be abandoned.<sup>11</sup>

Since the divergence, or 'genetic', theory of Altaic relationship is also untenable, and since non-Turkic, non-Mongolic, and non-Tungusic peoples have always been part of the Central Eurasian world—including the nomadic lifestyle, which seems to have been perfected by the Iranian-speaking Scythians and the isolate-speaking Hsiung-nu—there is no good linguistic, historical, or cultural reason for retaining the name 'Altaic' as a field of scientific linguistic scholarship. There are, by contrast, many good reasons for avoiding it and the old mistake-filled, prejudice-filled construct of the 'barbarian' that it continues. No Altaic family or group exists or has ever existed except in the minds of the European and American scholars who invented the idea and in the minds of other scholars who learned about it from them and, essentially, simply continued doing what they were told to do.

It follows that Japanese-Koguryoic and Korean, as well as Tungusic, Mongolic, and Turkic, cannot be Altaic languages.

<sup>&</sup>lt;sup>11</sup> Shibatani (1990: 97) makes a similar point, and cites earlier literature critical of the attempt to use typology to establish genetic relationships.

#### CHAPTER TEN

#### JAPANESE AND THE MIXED LANGUAGE THEORY

Among Japanese linguists, as well as some European and American linguists, the currently dominant theory on the origin of Japanese and thus, by extension, Koguryo—is that it is a *Mischsprache* or 'mixed language' (Shibatani 1990: 103-109; Itabashi 1999; Unger 2001). Although the theory of the *Mischsprache* was long ago considered to be discredited other than as a reflection of the phenomenon of borrowing, both internal and external, seen in all languages (Meillet 1984: 72-83), a recent theoretical work on convergent language phenomena, especially what are called creoles and pidgins, has brought the old theory roaring back in new guise (Thomason and Kaufman 1988).<sup>1</sup>

The revived *Mischsprache* theory has not been openly contested, evidently due to the widespread belief that 'basic vocabulary' is not borrowed. Yet the fundamental problem with the new *Mischsprache* theory (as, to a large extent, the old one) is that it is based on a preconceived notion of what so-called 'basic vocabulary' is. This chapter is devoted to an examination of the received view and to empirical demonstration that it is not well founded and must be revised to accord with the data if it is to be useful in scientific historical-comparative linguistics.<sup>2</sup>

It is a commonplace that words for body parts, fundamental verbal notions, personal pronouns, and certain other things are considered to be more 'basic' than other words. So far, no harm has been done. However, this 'basic vocabulary' is also generally thought to be somehow more resistant to borrowing than other lexical material and is supposed to reveal something about a language's divergent or 'genetic' affiliation. Accordingly, many linguists today still rely on impressionistic 'basic vocabulary' lists, particularly those compiled by

<sup>&</sup>lt;sup>1</sup> Itabashi (1999) cites extensively from this work and others that follow its views.

 $<sup>^2</sup>$  An early version of the research in this chapter was presented as a paper on lexical frequency and inheritance in a Computational Linguistics session of the Linguistic Society of America annual meeting in Chicago, January, 2000. I would like to thank all those present at that time for their positive comments and suggestions for further applications.

Swadesh and his successors, and use the data collected to make dubious judgments about the history of the languages involved.<sup>3</sup>

More seriously still, however, is the use of this assumption as the underpinning of major theoretical studies, most notably Thomason and Kaufman (1988). The authors argue that the Tanzanian language Ma'a (or Mbugu) is a Cushitic language that has retained its so-called 'basic vocabulary' but borrowed almost its entire grammatical structure, and a good deal of vocabulary as well, from the locally dominant Bantu languages. They contend that Ma'a, and even Anglo-Romani, the language of the English Gypsies, are examples—their only examples—of "two entirely distinct historical processes: inherited vocabulary, borrowed grammar" (Thomason and Kaufman 1988: 103-104).

Their reasoning is, "If Ma'a had arisen through shift from a Bantu language A to a Cushitic language B, we would expect to find-as indeed we do find-mostly Cushitic basic vocabulary" (Thomason and Kaufman 1988:227). However, they argue, the expected social circumstances for such a change are unknown and the only solution is "massive borrowing" of grammar and some vocabulary "from a Bantu language B into a (minimally maintained) Cushitic language A" (Thomason and Kaufman 1988:228). Considering the short time that anything at all has been known about the languages in question, a negative sociolinguistic argument would not seem to support their theory. They remark that both languages retain only part of the lexicon of the speakers' original ethnic language (1988: 103-104). Yet while they admit that the English Gypsies today are actually native speakers of English who have simply retained some of their ethnic Romani vocabulary for cultural reasons, they conclude that for Ma'a "the mixture in this case resulted from borrowing [of grammar] in a situation of language maintenance, rather than from shift" (Thomason and Kaufman 1988: 226).

So far, the authors' general thesis has not been carefully examined on the theoretical level. However, by Maarten Mous, a specialist in Cushitic and Bantu languages, in a recent fieldwork-based study of Ma'a, their primary example (actually, their only example) of a putative 'true' mixed language, shows it to be simply a register within

<sup>&</sup>lt;sup>3</sup> Although this practice has been devastatingly criticized by major linguists, recent examples can be found even in the most prominent linguistics journals (such as *Language*). See Campbell (1999: 177-186, 314-315) for a critical discussion of lexicostatistics and glottochronology.

Mbugu (Mous 1996). In other words, Ma'a is not an independent language. Mbugu speakers use a 'Ma'a' vocabulary set as a register within Mbugu, exactly parallel to the English Gypsy use of a Romani vocabulary set as a register within English. The study by Mous thus resoundingly disproves the foundations of the neo-*Mischsprache* theory.

Nevertheless, few seem to have noticed that it has been disproved, or else they do not wish to admit it, perhaps because they have invested too much in the disproven theory, or because they too do not question the authors' assumptions. Thomason and Kaufman's theory is therefore still widely cited.

The revived *Mischsprache* theory is largely founded on the proponents' assumption that there is such a thing as 'basic vocabulary', a concept they criticize initially (Thomason and Kaufman 1988: 6-7) but nevertheless use as one of the underpinnings of their argument. While they contend that there is no 'core grammar' that cannot be borrowed (1988: 5-20), throughout their work they assume that by contrast there *is* a 'core vocabulary' that could be but is not actually borrowed. This is precisely the opposite not only of conventional wisdom but of the experience of over two centuries of comparative-historical linguistic scholarship.

A firm connection between so-called 'basic vocabulary' and retention has never actually been demonstrated.<sup>4</sup> Although Thomason and Kaufman's reversal of the traditional view that grammar, not vocabulary, is the primary indicator of a common divergent heritage stands on shaky ground, it has nevertheless been accepted by many linguists.

Their theory is of direct relevance to the theory of a genetic relationship between Japanese and Korean, which is essentially based on the undeniable fact that the grammars of the two languages are *typologically* almost identical. The nearly total lack of any regular relationship in either lexicon or morphophonology, as noted in Chapters 8 and 11, has not deterred those who believe in the Japanese-Korean theory. Since it is argued herein that lexical data alone, when buttressed by evidence of shared innovations and other regular historical phono-

<sup>&</sup>lt;sup>4</sup> Accordingly, this theory, far from having confirmed the idea that such a *Misch-sprache* could exist, should have been considered highly suspect from the outset. Evidence showing that some grammatical borrowing can occur in situations of very close—usually multilingual—contact is given by Aikhenvald in her study of noun categorization systems (2000: 383-388). She however remarks, "We have no example of a complete system of noun categorization being borrowed" (2003: 386).

logical processes, is sufficient to demonstrate a genetic relationship, the foundations of the neo-*Mischsprache* theory must be examined.

In order to evaluate Thomason and Kaufman's argument, and claims made by other linguists about 'basic vocabulary' resistant to borrowing, it is necessary to have a method for determining what vocabulary is always, or nearly always, retained in any language.

#### WORD FREQUENCY AND RETENTION

An examination of published large corpora frequency counts reveals that the very highest frequency words—the top dozen or so, including those with a frequency of around 1% or more in most lists<sup>5</sup>—are all inherited from the protolanguage. In the English lists, all of these highest frequency words are descended from Common Germanic, and in turn from Proto-Indo-European. Adam Kilgarriff's recent lemmatized count from the British National Corpus or BNC (Kilgarriff 1999), given in example (1a), is typical. His unlemmatised counts, such as the ones given in examples (1b) through (1d), show similar results. The spoken English count given in (1e), which is based largely on a corpus of material collected from people unaware that their conversations were being recorded (Brown 1984), is similar to the others.

- (1)a British English, BNC, entire list, lemmatized (Kilgarriff 1999) *the, be, of, and, a(n), in, to, have, it, to, for, I*
- (1)b British English, BNC, entire list, unlemmatized (Kilgarriff 1999) *the, of, and, a, in, to, it, is, was, to, I, for*
- (1)c British English, BNC, conversational list, unlemmatized (Kilgarriff (1999)
  I, you, it, the, 's, and, n't, a, that, yeah, he, to
- (1)d British English, BNC, written list, unlemmatized (Kilgarriff 1999) *the, of, and, a, in, to*<sup>6</sup>, *is, to*<sup>7</sup>, *was, it, for, with*
- (1)e British English, eavesdropped conversational list, somewhat lemmatized (Brown 1984) *the, I, and, a, you, to, of, it, that, in, yes, is*

<sup>&</sup>lt;sup>5</sup> The cutoff point is not completely arbitrary. It has been chosen to combine both high percentage of occurrence and the absence of loanwords, which do not appear in any examined list until somewhat after that point.

<sup>&</sup>lt;sup>6</sup> The unexplained abbreviation used to gloss the category of *to* here is "to."

<sup>&</sup>lt;sup>7</sup> This *to* is glossed as a preposition.

These very high frequency items include only morphemes with heavy functional load and light, or 'bleached', semantic load. The same is true for the highest frequency words in French, Mandarin, Norwegian, German, Russian, Japanese, and Korean, in examples (2) through (10), and in other modern languages.<sup>8</sup>

(2)	Quebec French, conversational list (Beauchemin et al. 1983: 239)		nversational list (Beauchemin et al. 1983: 239)
	le		article
	de		genitive
	être		copula/auxiliary
	avoir	•	to have/auxiliary
	je		I
	ça		dem. pro. (that)
	ce <sup>9</sup>		dem. pro. (which/what/that)
	il		he
	on		indef. pro.
	puis		then
	pas		not
	à		at
(2)	Man	danin analsan	and written manualist (Tasi 1000)
(3)	iviano 6/2	darin, spoken	and written morpheme corpus list (1 sai 1999).
	口) 曰.	aki	gennive-autourive
	下不	SHI h.	copula
	个 手	DU Mă	not T
	找	wo	1 ang/indef ortigle
		yl 	to have/enjet/enviliant
	イモ	you dà	to nave/exist/auxiliary
	人	aa - ì:	olg
	住	zai	al
	$\stackrel{\wedge}{\rightarrow}$	ren	finite mentant
	ļ	le _h î	
	甲乙	znong	in/middle
	到	dao	to/to arrive
(4)	Man	darin, spoken	and written morpheme list (Hwang et al. 1997).
	的	de/dì	genitive-attributive/noun compounding element
	了	le/liăo	finite marker/verb compounding element
	我	wŏ	I
	在	zài	at
	是	shì	copula
	<u> </u>	vî	one/indef.article
	你	nĭ	2p.pro.
	呵	а	mood particle
	和	$h \acute{e}^{10}$	prep.

<sup>8</sup> I have provided punctuation and glosses where missing in a list.

<sup>9</sup> Glossed as a pronoun.

	不他對	bù tâ duì	not 3p.pro. prep.
(5)	Norw	egian (New N	Jorse) list (Textlaboratoriet 1999)
	den	8	pron.
	i		pp.
	og		conjunction <sup>11</sup>
	vera		V.
	ein		a.
	på		pp.
	til		pp.
	ha		V.
	med		pp.
	å		inf. mrk.
	for		pp.
	dei		pron.
(6)	Germ 11) <sup>12</sup>	an, modern	literary corpus list, unlemmatized (Hausser 1998:
	der		determiner
	die		determiner
	und		and
	in		in
	den		determiner
	von		of/from
	das		determiner
	zu		to
	des		determiner
	ist		is
	mit		with
	sich		self
(7)	Germ	an, modern li	terary corpus list, lemmatized <sup>13</sup>
. /	der/d	ie/das/des	determiner
	und		and
	in		in
	von		of/from

<sup>10</sup> Other readings listed in the source are *hè*, *huó*, and *huò*.

to be

with

to

<sup>11</sup> Glossed "k" in the source.

zu

sein

mit

<sup>12</sup> The glosses here are my own.

<sup>13</sup> The twelve most frequent words in another list by the same author, in which the words in (6), except ist, are omitted, are: ist, werden, wird, sind, hat, war, kann, haben, können, wurde, hatte, muß (Hausser 1998: 12). The list in (7) was made by combining the count in this list with the count in (6) and lemmatizing the result.

. .

	sich	self
	werden	become
	haben	have
	können	can, be able
	тиβ	must
(8)	Modern Russian,	large corpus, lemmatized (Sharoff 2002) <sup>14</sup>
	i	conj.
	v	prep.
	ne	negative
	on	3p.pron.masc.
	уа	1p.pron.
	na	prep.
	čto	conj.
	tot	det. pron.
	bït <sup>v</sup>	verb
	S	prep.
	а	conj.
	$ves^{v}$	adj.
(9)	Modern Japanese.	large corpus count, lemmatized (Halpern 2001) <sup>15</sup>
(-)	$wo (\sim o)$	particle (object marker)
	ni	particle (dative-locative marker)
	ga	conjunction (also a subject marker)
	te	particle
	de	conjunction
	to	adverb (comitative or quotative marker)
	kara	adverb (ablative marker)
	по	particle (genitive-attributive marker)
	naru	verb ('to become')
	koto	particle (nominalizer)
	va	interjection
	suru	verb ('to do')
(10)	Modern Korean.	medium corpus count, partly lemmatized (Kim and
	Kang 2000) <sup>16</sup>	T
	йі	genitive marker
	-ппйп	relative pronoun, 'that'

<sup>&</sup>lt;sup>14</sup> Several of the glosses in this list have been revised for clarity and accuracy.

<sup>&</sup>lt;sup>15</sup> I have omitted punctuation marks included as tokens in the original list. Where possible I have added clarifying notes to the glosses of the original source.

<sup>&</sup>lt;sup>16</sup> I have omitted punctuation marks included in the original list, and combined variants to get the second, third, and tenth items. These were ranked second and eighth, third and twelfth (consonant stem and vowel stem forms), and eleventh and thirteenth (vowel stem and consonant stem), respectively, in the adjusted original list. These items' ranks should undoubtedly be shifted, but without the original statistics I cannot do this; it is in any case irrelevant for the present study. I would like to thank Sahyang Kim of the UCLA Linguistics Department for providing me with this list.

-lйl, -йl	accusative marker
ta	finite sentence marker
i	demonstrative pronoun, 'this'
ha	verb stem formative, 'to do'
е	dative-locative postposition
i	nominative marker
ko	non-finite clause marker
-пйп, -йп	topic marker
-OSS	past tense finite verbal marker
-0	non-finite verbal marker

We find inherited vocabulary at the top of even the morphologically unsophisticated frequency counts typically done for highly fusional and agglutinative languages, even though the lemmatization often results in bound and free function morphemes being disregarded or incompletely counted. Thus the same results as in the examples above are found in a frequency list published for Old Icelandic, a dialect of Old Norse, in example (11), so far as the percentage of inherited vocabulary is concerned.

(11) Old Icelandic (Old Norse) list (Beck 1993: 339)<sup>17</sup>

sá	that	
hann	3p. pro. masc.	
vera	to be	
ok	and	
er	rel. pro.	
at	at/to	
skulu	shall/must	
ef	if	
maðr	man/people	
til	to	
þá	then	
eiga	have/own	

Frequency counts of ancient languages are no different. The most frequently occurring lexical items in Latin and Chinese, the only ancient languages for which frequency counts are publicly available at the time of writing, again show the same results, given in examples (12) and (13), although the corpora are very small, consisting of single texts, so that some high frequency words are atypical. Moreover, since

<sup>&</sup>lt;sup>17</sup> Although this list is skewed by the lemmatization, whereby too much grammatical morphology is omitted from the frequency count (as in most such lists done for fusional and agglutinative languages), in the dictionary portion of his book Beck does give all forms attested in his source.

the Latin list is heavily lemmatized, and the Chinese list is actually a character (root morpheme) count that ignores differences in function and meaning, it is difficult to compare the lists from the ancient languages with those from frequency counts of modern languages descended from them. Nevertheless, when we compare the Mandarin lists in (3) and (4) to the Classical Chinese list in (13), we find the genitive in first place in all three lists ( $\gtrsim zh\hat{i} < OChi *t \Rightarrow \sim in$  NMan de [tə]). In third place in both the Mandarin list in (3) and the Classical Chinese list in (13) is the usual negative ( $\pi$  bù 'not'), while further down in all three lists is the finite marker ( $\pm$  yĕ < OChi \*la  $\sim \Box$  NMan -le [lə]  $\sim -la$  [la] 'finite suffix'), and in both the Mandarin list in (3) and the Classical list in (13) the words  $\wedge$  rén 'person, people' and  $\overline{\pi}$  yǎ 'to exist, have' are found.<sup>18</sup>

(12) Classical Latin list (Purnelle 1988)<sup>19</sup> coord.conj. et in pp. sum to be to do/make facio is that what qui si if and aue where uhi aux. sum non not hene well (13) Classical Chinese list (Liu 1992a, 1992b)<sup>20</sup>  $\rightarrow$ 7hî genitive/3p. pro./go to

$\sim$	2111	Semare Sp. pro. 80
而	ér	conj.
不	bù	not
也	уĕ	finite particle
以	уї	by/to use
者	zhĕ	relativizer
其	qí	3 p. poss. pro.
於	yú	in/at
人	rén	person/people

 $^{18}$  These also occur in the Mandarin list used for example (4), but slightly further down in frequency order.

<sup>19</sup> Purnelle actually follows Classical Latin orthography and spells words given here with the vowel u with the letter v.

 $^{20}$  From the 淮南子 *Huai nan tzu* (Liu 1992a) and 禮記 *Li chi* (Liu 1992b); I have combined the two lists to get a larger corpus. The transcriptions are the modern New Mandarin reading.

為	wéi~wèi	be/do/make ~ for/on
有	уŏи	have/exist
則	zé	then/thus

Unfortunately, for Old English there seems to be no published word frequency study or accessible computerized corpus available for such a study, so it is not possible to make a similar comparison with modern English, but inspection of the unlemmatized Gothic list (Tollenaere and Jones 1976: 337) in example (14) is instructive. Six of the Gothic words are obvious cognates with their English glosses; five of them occur in the spoken English list in example (1)e.

(14) Gothic list, unlemmatized (Tollenaere & Jones 1976)<sup>21</sup>

in in not ni not du to
ni not du to
du to
<i>izwis</i> you
<i>iþ</i> but
ei so
<i>ist</i> is (3p.s. of 'to be')
<i>patei</i> that
<i>imma</i> 3p.s. pers. pro. dative
<i>þan</i> then
<i>is</i> 3p. pro.

Two conclusions may be drawn from the above presentation. First, if linguists interested in the genetic affiliations of any language do a careful word frequency count of a sizeable corpus in the target language, they can expect the top twelve most frequent words of that particular language to be inherited without exception from its genetic ancestor. Secondly, a number of these should be easily identifiable as inherited vocabulary. The implications of this for historical-comparative linguistics and for theories relating to universal grammar would seem to be considerable.

However, although the modern words are all derived from inherited ancestral forms, by no means are all of the equivalent lexemes at the top of the frequency lists ultimately the same words in both stages of the language; in several cases only a few are so identifiable. This means that a researcher cannot simply make a frequency list for a language being studied and then compare the most frequent dozen or one

<sup>&</sup>lt;sup>21</sup> The first six items have a frequency of 1% or greater.

percent of its morphemes to those from one or more possible ancestor languages in order to determine to which family the language in question belongs. It should be possible, though, to be *able* to find the ancestor of each modern form in the putative ancestral language. In all the cases examined so far, regardless of the morphological sophistication (or lack of it) employed in lemmatization, there is no question whatsoever that the top twelve most frequent items are inherited from the known ancestral language. Thus it is clear that *if* it is possible to trace the ancestor of each of these highest frequency modern forms back to the ancestral language, we can be as certain as anything in science that the languages are indeed related 'genetically'.

This brings up the question of vocabulary with a semantically heavy load such as most so-called 'basic' nouns, adjectives, verbs, etc., which constitute the bulk of the rest of the lexicon. In very large corpora word frequency counts such as those of English, there are no nouns at all among the first fifty or so highest frequency items. Consider example (15), drawn from a recently published lemmatized English list.

(15) Lemmatized English list compiled from the BNC, 50 most frequent words (Kilgarriff 1999)

1	the	det.
2	be	V.
3	of	prep.
4	and	conj.
5	a	det.
6	in	prep.
7	to	infinitive marker
8	have	V.
9	it	pron.
10	to	prep.
11	for	prep.
12	Ι	pron.
13	that	conj.
14	you	pron
15	he	pron.
16	on	prep.
17	with	prep.
18	do	V.
19	at	prep.
20	by	prep.
21	not	adv.
22	this	det.
23	but	conj.

24	from	prep.
25	thev	pron.
26	his	det.
27	that	det.
28	she	pron.
29	or	conj.
30	which	det.
31	as	conj.
32	we	pron.
33	an	det.
34	say	v.
35	will	modal
36	would	modal
37	can	modal
38	if	conj.
39	their	det.
40	go	v.
41	what	det.
42	there	pron.
43	all	det.
44	get	v.
45	her	det.
46	make	v.
47	who	pron.
48	as	prep.
49	out	adv.
50	ир	adv.

When we do finally get nouns, we find that many of the highest frequency nouns are loanwords—in several studies, the most frequently occurring noun is *people*, a loanword. The nouns found among the top 150 most frequent items in five unlemmatized lists and one lemmatized list are given in (16) through (21).

(16) Small corpus sample. Nouns among the 150 highest frequency words of Spoken British English, unlemmatized (Brown 1984: 531-532).

66	people	LOANWORD
75	thing	
84	time	LOANWORD
95	something	
99	things	
107	course	LOANWORD
108	way	
134	year	
138	years	
141	anything	

- 143 *fact* LOANWORD
- 144 work
- 147 bit
- (17) Large corpus sample. Nouns among the 150 most frequent words of Written American English, unlemmatized, by rank (Zeno et al., 1995):
  - 51 *people* LOANWORD
  - 64 *time* LOANWORD
  - 89 way
  - 95 water
  - 113 years
  - 114 *day*
  - 120 things
  - 125 man
  - 137 *place* LOANWORD
  - 141 *part* LOANWORD
  - 144 world
  - 146 *life*
- (18) Very large corpus sample. Nouns among the 150 most frequent words of Written American English, unlemmatized, by rank (Carrol et al., 1971):
  - 69 time LOANWORD 79 people LOANWORD 86 wav 90 water 95 words 113 man 128 word 132 part LOANWORD 134 place LOANWORD 140 things 143 vears 150 number LOANWORD
- (19) Huge corpus sample. Nouns among the 150 most frequent words of Written British English in the BNC, unlemmatized, by rank (Kilgarriff 1999):
  - 64 time LOANWORD 89 people LOANWORD 99 vears 100 way 110 vear 121 government LOANWORD 125 world 127 man 129 life
  - 136 work

- 141 *day* 150 *Mr*. LOANWORD
- (20) Huge corpus sample. Nouns among the 150 most frequent words of the entire BNC (written and spoken), unlemmatized, by rank (Kilgarriff 1999):
  - 68 time LOANWORD 83 people LOANWORD 98 wav 102 vears 119 vear government LOANWORD 141 149 dav 150 man
- (21) Huge corpus sample. Nouns among the 150 most frequent words of the entire BNC (written and spoken), lemmatized, by rank (Kilgarriff 1999):

60	year	
80	people	LOANWORD
89	way	
101	man	
104	day	
115	thing	
121	child	
133	government	LOANWORD
135	part	LOANWORD
137	1.0	
157	life	
140	life case	LOANWORD
140 141	life case woman	LOANWORD
140 141 146	life case woman work	LOANWORD
140 141 146 149	life case woman work system	LOANWORD

The preliminary conclusion must be that the data show the very highest frequency words to be exclusively semantically light, functionally heavy, and inherited from the proto-language. By contrast the semantically heavier, functionally light words—particularly nouns, as well as adjectives and adverbs<sup>22</sup>—are borrowed often enough that heritability is unpredictable. Though it is evident that the highest frequency nouns are relatively bleached semantically, it is unclear if this is a cause or a result of the high frequency of use.

<sup>&</sup>lt;sup>22</sup> Although several *non*-nominal loanwords occur fairly high on some lists they are mostly emphatic adverbs, including the extremely frequent words *just* and *very*, both borrowed from French. There appears to be some relationship between function and loanability in this case.

### RETENTION OF SEMANTICALLY HEAVY LEXEMES

It is clear that criteria are needed to determine which semantically heavy lexemes tend to be retained. One approach that might produce significant results would be to produce an empirically based list of semantically heavy but replacement-resistent lexemes by comparing corpora from the most anciently attested but still living languages -those with the greatest recorded time-depth being Greek (an Indo-European language), Aramaic (a Semitic language),<sup>23</sup> and Chinese and identify which words are retained, or tend to be retained, from the ancient languages. Unfortunately, this task is largely unrelated to the study of high frequency lexical items and will have to be done 'by hand' the old-fashioned way, by examining the texts themselves or concordances made from the texts. Ideally, both root morphemes and grammatical affix morphemes should be collected (the latter to complement frequency studies). Semantic and phonological shifts over time must be recognized as well. For such a task trained philologists specializing in the languages in question are needed. It is hoped that this challenging job will be undertaken in the future by specialists in one or more of these languages. Only when we have such studies from both Indo-European and non-Indo-European languages can we begin to talk about retention rates of semantically heavy lexemes. If studies such as the one suggested for Greek, Aramaic, and Chinese are done, the resulting retention rates should indicate each lexeme's tendency to be retained. It should thus constitute a strong secondary test, independent of frequency evidence, of any relationship proposal. Until such a study is done, however, we should be extremely wary of arguments using so-called 'basic vocabulary' lists as their primary evidence in favor of genetic relationship. Other means exist for helping to determine if shared vocabulary is due to divergence or convergence. These are the methods of traditional comparative-historical linguistics. which are unlikely to be supplanted by any computational method.

An additional problem is the fact that a few words which are often said to be 'basic vocabulary' appear to be frequently borrowed, but if so, at least in certain cases, the borrowing must have taken place so

<sup>&</sup>lt;sup>23</sup> There are numerous misconceptions about this language due to its many different names. Modern Aramaic (also known as Syriac, New Assyrian, or Neo-Aramaic) exists in several distinct languages, with many dialects, all seriously endangered. Aramaic may be traced directly back to the language spoken by Jesus Christ and beyond, to approximately the end of the second millenium B.C.

long ago that it is not possible to connect the languages that share that vocabulary, no matter how 'basic'. Thus the personal pronouns in Germanic, Finnic, Turkic, Mongolic, and Tungusic languages are obviously related individually and as a system-even though the languages themselves are obviously unrelated<sup>24</sup>—despite the high ranking of equivalent lexemes in large-corpus frequency studies of English and other Indo-European languages. Unfortunately, as of the time of writing morpheme frequency studies (including word frequency studies) have not vet been done (or made publicly available) for any Uralic or 'Altaic' language, so it is not possible to say if the personal pronouns would surface at the top of a frequency count list. No pronouns occur in the highest frequency Japanese lexeme list given above, and based on actual studies of Japanese oral corpora, it is doubtful that any pronouns would surface anywhere close to the top of a good corpus count. In one study of several hours of Japanese conversation not a single pronoun occurred (Downing 1996: 164, 179, 283 n. 11; cf. Beckwith 1999). The personal pronouns of many languages of southeastern Eurasia and Australasia also appear to be shared. The first person pronoun  $\eta a$  is found in many languages of that region (我 NMan wõ 'I, me', is from OChi \*na 'we, I';<sup>25</sup> similarly, Japanese  $wa \sim a$  'I, we' is perhaps from a Proto-Japanese \* na) as well as Australia and several points in between, despite the fact no one supposes the language families where this pronoun is found are related to each other in the usual sense. It would appear highly likely, therefore, that this particular word, unlike the first person pronouns in Indo-European languages and in the Uralic and 'Altaic' languages listed above, belongs to the category of iconic near-universals, alongside mama, daddy, and so forth.

All this suggests that the relative tenacity of personal pronouns in some languages may be a function of their paradigmatic forms and obligatory grammatical functions. By contrast, in most of the languages of East and Southeast Asia personal pronouns are optional. In

<sup>&</sup>lt;sup>24</sup> See Chapters 9 and 11. The 'Nostratic' theory, the proponents of which attempt to connect all the languages listed and consider the shared pronominal system to be a key item in their 'proof', is an extreme 'distant relationship theory'; see Chapter 11 and the excellent discussion by Campbell (1999).

<sup>&</sup>lt;sup>25</sup> However, it should be noted that all syllable-initial velar nasals in MChi appear to be derived from EOC oral velar stops. Thus MOC  $*\eta_a$  'we, I' must be from an EOC form  $*ege \sim *aga$  ( $\sim$  etc.) 'we, I', or the like. If so, the Chinese word is relatable to the Indo-European first person nominative singular pronoun, as in Latin *ego* 'I'.

most of these languages (including both Japanese and Korean) pronouns are simply one subset within a large set of personal deixis markers, all of which are hierarchical and connected to honorific systems, so they are actually avoided.<sup>26</sup>

It is therefore important to stress once again that the appearance of one particular word among the highest frequency words in languages belonging to two or more language families does not guarantee that the language families are genetically related. The significant fact is that a frequency count of each language within a given genetically related family reveals that the highest frequency words are all found in the protolanguage, and a number of vocabulary items at the highest frequency level are shared among the languages of that same family. If many such words were to be found in languages from families thought to be unrelated, the language families should be further investigated with a view to determining if they are or are not related.

This study provides a new criterion for judging lexically-based divergent relationship proposals. Such proposals must be backed up by the very highest-frequency morphemes, which are shown by empirical data to be impervious to replacement by borrowing.<sup>27</sup> It also supports traditional views concerning the great conservatism of grammatical features in a given language, and criticism of arguments that 'languages' such as the Ma'a register of Mbugu or the Romani register of British Gypsy English (Thomason and Kaufman 1988) are examples of mass borrowing of grammar. Despite a valiant attempt to save the neo-*Mischsprache* theory (Thomason 1997), the disproof which shows that Ma'a is simply a register of Mbugu (Mous 1996) stands. Here it must be added that even in such cases—i.e., a register within a language rather than a free-standing language of its own—a large-corpus frequency count would undoubtedly reveal the language's true 'basic vocabulary', which is the unique list of heavy functional load (but

<sup>&</sup>lt;sup>26</sup> See Chapter 11 for examples from Burmese. For a discussion of the virtual taboo on use of pronouns in Korean in many situations, see Lee and Ramsey (2000: 225-229; cf. 89-94). For honorific usage see Sohn (1999: 207-208, 407-418). Much of what is said about Korean applies also to Japanese (Shibatani 1990: 374-380), Thai, and other languages in the region.

<sup>&</sup>lt;sup>27</sup> Some readers of the paper on which this chapter is based strongly objected to this sentence, which originally included the words "without exception," though they did not, and could not, cite any exceptions. Since the statement is valid for *all hitherto published* frequency counts that I could consult there is no exaggeration involved here, it is a simple statement of fact. The lists I have been able to obtain are provided above so readers can examine them.

light semantic load) lexemes that are inherited from the language's genetic ancestor. The sociolinguistic history of the Mbugu *people* is ultimately immaterial: language affiliation is apparently always revealed by good lingistic data.<sup>28</sup>

It is argued in this book that the Koguryo linguistic corpus, although exclusively lexical, is sufficient to be able to demonstrate a close genetic relationship with Japanese. The characteristic of the evidence that has been noted consistently as one of its most convincing features is the occurrence in the Old Koguryo corpus of members of a distinctive set of vocabulary items found also, and only, in Japanese.<sup>29</sup> What is most convincing about this is of course the clear, close phonological relationship between the Kogurvo and Japanese lexemeswhich include functional morphemes, all but two of which recur (some in numerous instances) and have excellent Japanese cognates. More importantly for the distant relationship theories (see Chapter 11) that are considered in this chapter is the vivid contrast of the many obviously related Koguryo and Japanese lexical items versus the paucity of even doubtfully related Korean lexical items (few of which could ever be argued to be 'basic vocabulary' items even in the traditional sense). The same is true of Japanese-Korean linguistic comparisons that ignore Koguryo entirely. While the problems of the Japanese-Korean genetic theory are many, scholars convinced of its rectitude have always been able to point not only to the typological closeness of the two languages grammatically, but also to shared vocabulary, some of which seems in their view to be so old it must go back to a common protolanguage. Yet if Japanese and Korean were indeed genetically related, the common vocabulary would be obvious, widespread, and deeply imbedded in both languages. This is clearly not the case.

An objection often made to the Japanese-Koguryoic theory is that the Koguryo corpus is too small, or that the number of tokens of each lexeme is insufficient. In a similar vein, it has been argued that at least sixteen examples of a given sound correspondence are needed before sheer chance can be excluded. It is certainly regrettable that the corpus

<sup>&</sup>lt;sup>28</sup> The most well-known example of grammatical system borrowing is Mednyj Aleut, which has borrowed the Russian pronominal system *in toto*. However, there is no question but that the language is simply Aleut with intrusive Russian elements. A morphologically sensitive large-corpus frequency test would undoubtedly confirm this.

 $<sup>^{29}</sup>$  See Chapter 11 for discussion of the lexical set and its importance in comparative-historical linguistics.

is so small, but this sort of objection is ultimately founded on the idea that the quality of the comparisons is irrelevant and that evidence of, for example, shared innovations is irrelevant. In this connection, it has also been argued that the number of etymologies is too small to demonstrate the probability of the Japanese-Koguryoic theory, while by contrast the large number of etymologies proposed by some scholars for the Altaic or Macro-Altaic genetic theories is sufficient to 'prove' the latter two theories. The *number* of forms or citations is essentially irrelevant.<sup>30</sup> See also Chapter 11.<sup>31</sup>

The empirically based theory presented in this chapter provides a method that allows actual testing of the Japanese-Korean theory, as well as of the various Altaic theories. Hard data shows that there is one type of vocabulary which has so far turned out to be completely resistant to borrowing, and can therefore be termed truly 'basic', unlike the Swadesh-derived 'basic vocabulary' list generally used today. If linguists specializing in the Japanese and Korean languages would do very large corpora morpheme frequency counts (or even just 'word frequency' counts, not however omitting 'function words'), and if the resulting highest frequency items were comparable between the two languages, it would constitute strong evidence indeed in favor of their theory. Although only a preliminary, small sample of Japanese and Korean corpora was available for testing at the time of writing, the results do not support a relationship of any kind, whether divergent or convergent, and the sharp typological contrast between the two available lists also constitutes further evidence against both the Japanese-Korean genetic theory and the *Mischsprache* theory.

<sup>&</sup>lt;sup>30</sup> One could also recite a list of English words, with glosses in Chinese—for example, *axe* '(斧)', *banner* '(旌)', *cow* '(牛)', *deep* '(深)', *east* '(東)', *five* '(五)', and so on to the end of the dictionary. Anyone could claim there is insufficient evidence to conclude that the list is English because it contains only isolated words and they are each cited only once. However, such a conclusion would be based on fundamentally erroneous notions of how historical-comparative linguistics works. One must doubt that a trained historical linguist familiar with any other Germanic language could ever draw this conclusion.

<sup>&</sup>lt;sup>31</sup> The objections discussed in this paragraph were made by an anonymous reviewer of the manuscript of the present book. I would like to thank him or her for reading and commenting on my work.

#### CHAPTER ELEVEN

### LINGUISTIC THEORY AND JAPANESE-KOGURYOIC

It has been shown in the preceding chapters that prominent theories arguing in favor of relating the Japanese-Koguryoic languages to Korean, Tungusic, Altaic, Austronesian, or still further or linguistically more unlikely language families, are not scientifically supportable. These and many other theoretically significant 'facts' about East Asian languages that linguists working on languages in other world areas have read in publications by East Asianists are based on little more than the weight of unexamined tradition. Oftentimes, far from providing concrete typological examples of significant linguistic phenomena, they only provide misinformation. One of the main reasons for this unfortunate situation-other than that in academia no one wants to be the first to point out the bare facts about 'the emperor's new clothes'—is that a number of principles of historical-comparative linguistics are either overlooked in practice by linguists working on East Asian languages, or openly contested, in order to maintain the status quo. Although some may claim that progress is being made nevertheless, the cost of protecting 'the emperor' is too great. This chapter is an attempt to point out some of the major problems.<sup>1</sup>

#### LINGUISTIC THEORIES AND LINGUISTICS IN EASTERN EURASIA

### Linguistic Mutability

It is often noted that the one fundamental, incontrovertible fact of historical linguistics is that *all languages change, and languages are always changing*. One of the implications of this dictum is that we can never say with absolute certainty that the forms we cite from literary texts actually represent the underlying spoken pronunciation of the speaker, dialect, or period when the forms were recorded, even when

<sup>&</sup>lt;sup>1</sup> The practices, methodologies, and theories discussed here are real and widespread, and any specialist in the field could easily cite names and publications. I have deliberately avoided such citations as much as possible in order to shift the focus from issues of personalities to the scientific issue at hand: improving the situation.

we apply appropriate philological and linguistic adjustments to make the form as close as possible to what we think it should be. The fact remains that we simply cannot be certain. All language forms cited from texts recorded graphically rather than acoustically by modern recording devices are therefore only approximations of the actual underlying forms. They may be very close to the underlying forms, and after intensive study of the texts and data from other languages we may have a fairly good idea what they should be, but after everything is said and done what we have are, in fact, 'reconstructions'. As Saussure and others have argued, linguistic reconstructions are only theoretical 'constructs'; they do not correspond to any real language.

Some Sinological linguists have used this theoretical principle as an excuse for ignoring not only loanword evidence but also the earliest segmental script recordings of Chinese, which represent 'real' transcriptions of Middle Chinese phonology (whether of 'reading' or 'spoken' pronunciation is unimportant). They also argue that the citations of Middle Chinese in the late medieval rhyme books, even citations given only in the early 'character-splitting' (*fanqie*) system, far from being vague approximations at best are actually even better than citations of Greek, Latin, and other languages written in segmental alphabetic scripts, because they are presented (in the rhyme books, at least) as an organized system. These scholars are thus confident that the source material, its system, its presentation, and their interpretations of it, are generally accurate.

The errors that they or others find are indeed minor, but only if the foregoing assumptions are accepted. In fact, if these assumptions are accepted no errors could cause a believer to reject the Historic Sinological Reconstruction (henceforth HSR)<sup>2</sup> system. It is not surprising, then, that it is religiously upheld by its practitioners.

<sup>&</sup>lt;sup>2</sup> The traditional method used to reconstruct Chinese, HSR is a system of reverse chronological linguistic prediction based on a combination of chronologically and regionally incongruent materials. For Old Chinese the most important materials are 'revisions' done around nine centuries ago of a Middle Chinese rhyme book, the 切韻 *Ch'ieh yün* (written fourteen centuries ago, attested from a century later), scholars' interpretations of which form the basic structure; the rhymes of the 詩經 or *Book of Odes* (compiled perhaps twenty-three centuries ago), representing a dialect of late Middle Old Chinese; and the 'phonetic series', some of which are attested already in the Oracle Bone Inscriptions (dating to as much as thirty-four centuries ago), representing Early Old Chinese, that written in Old Tibetan alphabetic script. But there is not much room in such a system for concrete linguistic data, and indeed little is used in HSR other than information from modern dialects, all of which descend from

However, there is a great distinction to be made between 'reconstructions' of language data drawn from attested segmental script texts (those written in alphabetic or near-alphabetic scripts such as Greek, Latin, Sanskrit, Hebrew, and so on in which there is close match—as close as possible to a one-to-one correspondence-between phones and graphs) and reconstructions of language data from non-segmental script texts (texts written in scripts that consist of many partly or wholly ideographic signs corresponding largely unpredictably to many sounds, such as Chinese or Mayan), or reconstructions of a language from a period long before there is any attested data, such as Proto-Indo-European, Proto-Semitic, and so on. The first type of 'reconstruction' is actually a kind of fine-tuning of already known data-the attested texts-which due to their transcription system have already been processed to a great extent by the original transcribers. While this may make the fine-tuning difficult, it remains just that—fine tuning. The second and third varieties of reconstruction, despite claims made by Sinologists and others, are based on projections back in time from the earliest data attested in segmental scripts or other comparable form, whether graphic transcriptions or machine recordings.<sup>3</sup> This is because Chinese is written wholistically-there is a one-to-one correspondence between an entire Chinese morpheme and an entire Chinese character. There are over forty thousand Chinese characters corresponding to a total of a few hundred possible modern Chinese syllables. It is therefore impossible to determine the phonemes of the Chinese language on the basis of the characters alone. It is also impossible to determine the internal phonological structure of Chinese syllables on the basis of the characters alone. The simple fact is that Chinese characters, of whatever period, can never in themselves be as linguistically reliable as transcriptions in segmental or 'alphabetic' scripts. Even accounting for the limitations of the Old Tibetan and Khotanese Brahmi scripts for transcribing Middle Chinese, they provide this fundamental linguistic information. The idea that the HSR system can do this without reference to data outside the system is nonsense.

Middle Chinese or, at the earliest, Late Old Chinese, long after the shape of Chinese had been totally changed during the Middle Old Chinese period. Cf. Beckwith 2002b.

<sup>&</sup>lt;sup>3</sup> In the case of Chinese, for example, the first linguistically reliable sets of data appear very late, in the Middle Chinese period, with the huge sets of loanwords into Japanese and Korean, the recording of extensive texts in Old Tibetan alphabetic script, and to a much lesser extent the first systematic rhyme-dictionary, the *Ch'ieh-yün*, attested in a redaction from 706 A.D.

Judgment of the accuracy of an HSR reconstruction is not done on the basis of contemporaneous data of any kind but only on whether the practitioner has followed the rules and performed the procedure correctly. Although the few practitioners who have doubts actually do check contemporaneous segmental transcriptions, when they exist, and some have gone so far as to attempt to interpret such data as a check on their highly abstract HSR 'reconstructions', in practice the forms produced by the HSR system are preferred even in face of overwhelming, obvious evidence to the contrary. In other words, the system must be maintained at all costs. This is why general linguists have been told that Old or Middle Chinese 'has' such and such a typologically exceptional phonological form or development, which is then illustrated by one of the more exotic HSR reconstructions. The truth is that there is probably nothing exceptional about the underlying data. but only the theories and methodologies that produced the exotic reconstructions.

The rejection of even early data from outside the closed HSR system, which as noted is actually based overwhelmingly on data from the past thousand years or so, entails violation of one of the most fundamental rules of historical linguistics, derived from the first principle noted above, namely, the more things change the more they are unreconstructable. It is well known that it has proved to be impossible to reconstruct Latin-even Vulgar (spoken colloquial) Latin-on the basis of the fairly early Old French corpus and the somewhat later medieval material for the other Romance languages together with the copious and detailed information available on the modern Romance languages and their dialects. In other words, a direct link between, for example, attested Old French on the one hand and attested Vulgar Latin on the other is not completely reconstructable. The best that can be done is to reconstruct 'Proto-Romance', which is the presumed spoken language that can be reconstructed on the basis of the attested Romance languages. Similarly, it has long been understood that if modern linguists had tried to reconstruct Proto-Indo-European on the basis of modern spoken Danish (or English, or French, etc.) and modern spoken Hindi (or Sinhalese, or Russian, etc.) alone, ignoring the ancient languages-assuming they could have conceived of a divergent relationship at all on the basis of the modern languages alone-they would certainly not have been able to reconstruct Proto-Indo-European as we think we know it, simply because too many

morphophonological elements have been lost without a trace over the more than two thousand years since the earliest Indo-European languages were recorded.

While it is undoubtedly the case, therefore, that it will never be possible to reconstruct the actual Proto-Indo-European language once spoken by the real-life Proto-Indo-European people-and, despite 'post-modern' criticism, everything known about linguistic change affirms that there must have been such a people-the goal of Indo-European comparative-historical linguistics was, and among some linguists fortunately still remains, the attempt to get as close as possible to that language, Proto-Indo-European. This is analogous to the philological science of Lachmannian critical text edition, where the goal is to try to reconstruct the original text, even though it is understood that one can in fact only reconstruct an archetype, which is the earliest form of the text actually reconstructable. In the absence of the original text it will never be possible to determine how close the archetype is to the original. The same is true for historical linguistic reconstruction both in the Indo-European field and in the study of linguistic relationships in eastern Eurasia.

The point is, no matter how important the later forms of the languages involved are, historical linguistic methodology requires that the forms recorded earliest in time to the target linguistic entity be used as primary data in reconstructing it.

# Diachronic Change and Lexical Sets

A second fundamental principle of comparative-historical linguistics is that there are two main types of language change over time, divergence and convergence, and since all known languages have been in contact with other languages, they are always converging and diverging, though at different rates. Convergence means change by external influence—the acquisition of features from other languages—at one or more specific points in time. Features—especially words, or free morphemes—can be acquired singly or in sets, and have the reputation of being 'recordings' of the features they had in the donor language at the time of the borrowing. However, after the borrowing has occurred (and after the borrowing language has initially modified the loan to a greater or lesser degree in order to make it fit into its phonological or grammatical system) the loaned item changes according to the diachronic divergent patterns of the receptor language. Divergence means changing by internal development diachronically—sound change, replacement, innovation, lexical shift, and so on—occurring over time.

Scientific historical linguistics was founded on the observation that the morphophonological patterns common to ancient and medieval Indo-European languages must be retentions from an earlier unitary language, Proto-Indo-European, from which the later languages had diverged over time and space. The fact that Indo-European linguistics (and, subsequently, Semitic and Finno-Ugric linguistics) was based on diachronic study specifically of morphophonological features has greatly influenced modern theories of historical linguistics.

One diachronic peculiarity of language that was noticed very early, however, is that not all features of a language are equally subject to external or internal replacement. Grammatical or structural morphological elements, including unbound grammatical morphemes (function words), are much more resistant to external replacement by convergence (i.e., to borrowing) than elements with lighter functional load. Lexemes with heavy functional load but light semantic load have the highest frequency of occurrence in corpora and the very highest frequency items are, so far as recent research has been able to tell, impervious to change by convergence. (See Chapter 10.) As a consequence, related languages are marked by retention of shared sets of features including not only morphophonological features such as grammatical paradigms, but also a significant part of the lexicon: the distinctive collection of morphemes found in every language. Subsets of the lexicon are among the main characteristics marking a language or dialect as distinct from other languages and dialects. Each language family is thus marked by retention of its own unique lexical set. Related languages are easily recognizable by the presence of the unique set of features of the language family to which it belongs, including the lexical set. When the Tokharian languages were discovered in the early 20th century, it was immediately realized that they were Indo-European languages and that they were closely related to each other, despite the fact that they turned out to belong to a previously unknown branch of the family. This happened again when the Ebla tablets were discovered-the language was obviously Semitic. And the very same thing happened when the Old Koguryo linguistic material was discovered-the language was obviously related to Japanese.

The reason that the importance of the Old Koguryo linguistic material was immediately realized was the presence of the unique 'Japanese set' of lexical items, which indicated to Naitô and Miyazaki that the language had to be connected to Japanese. This ease of recognition of genetically related languages is not simply anecdotal. It is based on linguists' observation, conscious or subconscious, that the languages in question share the unique set of features characteristic of that specific language family. Even when, as in the case of Koguryo, one or more of the languages involved is extinct and preserved only as a short list of words, its relationship to its one well-attested relative, Japanese (which is otherwise an isolate if the Ryukyuan languages are considered 'dialects' of Japanese, as is unfortunately usual nowadays), is manifestly clear. The problem remaining is really to clarify the relationship by carefully analyzing the data and disposing of incorrect interpretations thereof, including unfounded relationship theories. This is the task undertaken in the present book.

From the above principles it follows that all languages are related to other languages both by divergence and by convergence. This does not mean that all languages are 'genetically related', but simply that after a language has come into contact with another language and convergence has occurred, the shared elements in the two languages begin to diverge. This fact is often overlooked in the study of loanwords in East Asia, where modern forms are compared to reconstructions with little attention to diachronic change since the borrowing took place.

## Linguistic Relationship Theories

All theories of linguistic relationship between two languages or language families can be divided into two types: divergence theories and convergence theories. Divergence theories—usually referred to as 'genetic relationship' theories—are most familiar from the model cases of large-scale 'close genetic theories', the Indo-European, Semitic, and Finno-Ugric families of languages, but they also apply to other families. In the context of the present book, one may note the Austronesian (or 'Malayo-Polynesian') and Tungusic (or 'Manchu-Tunguz') families as relevant, firmly established examples of close genetic relationships. The other type of divergence theory is the 'distant relationship theory', which is vague or irregular enough that it is beyond the purview of scientific comparative-historical linguistics. This is not to say that the relationships perceived, though wrongly thought to be demonstrably divergent, should be ignored. All languages in contact are both converging and diverging at the same time, and the languages involved in these hypotheses may have been in contact for a very long time, so there is much that can be learned by study of their convergences and divergences, especially if scholars are freed of the burden of having to force everything into a genetic model.

The divergence theory is virtually the only type of linguistic theory in use in the study of languages of eastern Eurasia, including the East Asian subregion. All languages that seem to share some features are usually considered to be 'genetically related', whether the common features are primarily lexical, as in the case of 'Sino-Tibetan' (Beckwith 1996, 2002c), or typological, as in the case of 'Altaic' or 'Japanese-Korean'. (In the latter two theories the shared lexicon is even more problematic than it is in 'Sino-Tibetan'.) Such theories are not precise enough to be tested and are 'distant relationship theories' (cf. Campbell 1999: 311-326).

### Substratum and Superstratum

Convergence theories include several types: substratum and superstratum theories, Sprachbund (or 'linguistic area') theories, and others. The most famous case is the Balkan Sprachbund theory, though such linguistic areas are found elsewhere. Another notable example is the widespread 'Islamic' Sprachbund, which includes numerous linguistic features drawn mainly from Arabic and Persian. In eastern Eurasia one obvious case of convergence is 'Altaic', represented by the Altaic convergence theory (which is also known by the peculiar appellation 'anti-Altaic theory'). Despite some recent, unnecessarily heated, arguments aimed at validating the old genetic theory-heat being unnecessary when a language relationship is clear and incontestible-no new formulation has been proposed to overcome the detailed, devastating criticism directed at it. A good case could be made for the 'Altaic' language group being a case of Sprachbund-type convergence. This is demonstrated by the fact that the convergent phenomena are not limited to the traditional 'Altaic' set of languages, as shown in Chapter 9. Another obvious case of convergence in the area is the East

Asian *Sprachbund* resulting from massive Chinese influence especially on Korean, Japanese, and Vietnamese, but also to a great extent on the Tibeto-Burman and Taic languages, among others.

Some linguists say there is also a third type of linguistic relationship, represented by *Mischsprache* (or 'mixed language') theories. They argue that there are languages for which the genetic ancestry is not traceable, due to convergence, so they are a special subtype of convergence theory (Thompson and Kaufman 1988).<sup>4</sup> This theory is examined in detail in Chapter 10. Its foundations and only example of a putative mixed language, Ma'a (actually a register of Mbugu), have been discredited. The *Mischsprache* theory is therefore untenable.

Although languages are diverging and converging at the same time, at different rates and with different effects on the languages involved, there is a big difference in the popularity of the two basic kinds of change *as theories*. The majority of historical-comparative linguists have an overwhelming preference for divergence, or 'genetic' theories. As noted above, in some areas (including East Asia) this is the only kind of linguistic theory or model in use. But it has generally been overlooked that there are actually two distinct types of genetic relationship theories: 'close' and 'distant'.

### Testable and Untestable Linguistic Relationships

The 'close' genetic relationship theory is distinguished by its precision. All close linguistic relationships are precise enough to be tested. Examples of 'close' genetic relationships are the Germanic theory, the Romance theory, the Semitic theory, the Turkic theory, the Mongolic theory, the Tungusic theory, and so on. Even the Indo-European theory may be said to be a close linguistic relationship. All these theories are demonstrably testable because they have specific rules—for example, morphophonological correspondences—which the languages involved follow regularly. Some of the rules are obvious, while others are less so, but the important point is that related languages follow regular rules of correspondence even if the rules are not always simple, and even if, as in the case of Koguryo, the quantity and quality of the data makes it difficult to construct the rules. Close genetic rela-

<sup>&</sup>lt;sup>4</sup> Perhaps the interesting theory of 'punctuated equilibrium' recently proposed by Dixon (1997) also belongs to this category.

tionships are potentially falsifiable (precise enough to be tested); therefore they are scientific theories.

The 'distant' genetic relationship theory is remarkable in several respects, not the least of which is its proponents' tenacity in the face of overwhelming odds. The essential feature of such theories is not that they are intrinsically wrong but that the parameters involved are bevond the limits of science. Distant relationship theories are so classified not primarily because of geographical, chronological, typological, or other distance, though these factors are often involved as well, and in many cases the relationship proposed is in the distant past, long before the creation of writing systems that could have been used to transcribe data on the early forms of the component languages: they are distant because of the unbridgeable mutual gaps in linguistic features. Relevant examples of this problematic type are the Altaic theory (including the Macro-Altaic theory, or Altaic plus Korean and Japanese), the Macro-Tungusic theory (Tungusic, Korean, and Japanese), the Japanese-Korean theory, the Sino-Tibetan theory, and so on.5 Distant relationship theories cannot be supported by regular morphophonological, lexical, and other correspondences, and thus are not falsifiable. Because they are not precise enough to be tested-and potentially disproven-they are not scientific theories.

## LINGUISTIC CONVERGENCE IN EAST ASIA

## The limits of borrowing or replacement

Among historical-comparative linguists it is popularly believed that in every language there is such a thing as a 'basic' or 'core' vocabulary resistant to borrowing (Campbell 1999: 112, 114, 314-316), an idea examined empirically in Chapter 10. In addition to the empirical disproof of the putative high retention rate of the kind of vocabulary hitherto imagined to be 'basic', however, the idea is further contradicted by considerable evidence showing almost anything can be borrowed, including the very same impressionistic 'basic vocabulary' (Campbell 1999: 117-184). Not only does evidence from the history of well-

<sup>&</sup>lt;sup>5</sup> The heated arguments that ensue when anyone criticizes the work of a proponent of any of these theories attests to their non-scientific basis. For discussion of still more distant relationship theories, such as Nostratic, Neo-Nostratic, Sino-Caucasian, Proto-World, and so on, see Campbell (1999: 311-313).

recorded languages belie the idea, the process of borrowing can be observed in our own day in many languages that are under the influence of the modern world's dominant language, English. Modern Burmese, for example, has borrowed the personal pronouns for first and second person—*aiñ* and *yu*—from English *I* [ai] and *you* [ju] respectively; these forms are said to be used primarily by young, educated speakers. The ordinary first person pronoun in Burmese for male speakers,<sup>6</sup> *cuñtó*, is not a pronoun at all but a pronoun substitute meaning 'royal slave'. The inherited Burmese first person pronoun, from Proto-Tibeto-Burman \*ŋa, is avoided (Okell 1969: 101).

Similarly, speakers of Japanese avoid pronouns in general. Male speakers often use a loanword from Chinese, *boku* 'slave', as a first person pronoun substitute. Japanese has of course many other examples of borrowings and substitutions. In addition to having made practically the entire English lexicon available for borrowing-at present the rich fund of borrowings includes nouns, pronouns, adjectives, verbs, adverbs, interjections, and (in set locutions and newly coined Japanese English locutions) prepositions and conjunctions—Japanese has also borrowed many morphological features, such as the suffixes for forming diminutives, plural nouns from singular nouns, adjectives from nouns, adverbs from adjectives, and so on. Some borrowings have become popular enough to displace older borrowings from Chinese, or even native Japanese words. Borrowings often take on a life of their own, and can be quite productive, sometimes in rather unexpected ways. Recently Japanese, which has no inherited definite or indefinite articles, has borrowed NEng the [ðə] 'definite article', as NJpn za 'definite article'. The new loanword is used freely in various Japanese media, mostly in the stressed sense, rather like the locutions the one and only . . . , or the great . . . in English. The Japanese expressions in which za occurs may be written in English (using the), in katakana, or even in a mixture of English and Chinese characters, as in a sign for a restaurant specializing in domburi (a Japanese rice dish), which calls itself The 并 [za domburi] 'the (place for) domburi'.7 This usage is now widespread even in the everyday spoken language. The article is also used in Japanese English in unexpected ways, but now the unexpected is sometimes not due simply to a Japa-

 $<sup>^{6}</sup>$  As in Thai, and in Japanese to a certain extent, the Burmese pronominal system distinguishes gender in the first and second persons.

<sup>&</sup>lt;sup>7</sup> Seen by the author in the Kansai area in 1996.

nese speaker's ignorance of the English article's correct usage but to transferrence of its stressed 'Japanese' sense back to English.<sup>8</sup>

It is known that the personal pronominal system-including not only the free form pronouns themselves but the suffix forms occurring in verb paradigms-have been borrowed wholesale on occasion from one language to another. The most famous modern case is that of Mednvi Aleut (named after Mednïy Ostrov, 'Copper Island'), an Aleutian language which has borrowed the Russian pronominal system along with a limited number of other loanwords. The discovery of this language has been trumpeted as 'proof' of one or another variety of the Mischsprache theory, but it has not been noted in this connection that many other languages which have not been considered to be 'mixed languages' also have borrowed the entire pronominal system of another language. This is obvious if one compares the personal pronouns of the Indo-European, Uralic, Turkic, and other languages of Eurasia. French has mon 'my', ton 'thy';9 Gothic has mein- 'my, mine', pein- 'thy, thine'; Finnish has min- 'first person singular pronoun (stem)', -, sin- 'second person singular pronoun (stem)'; Uzbek has men, sen 'id.', and so on. There is simply no question but that the basic system has been borrowed from unrelated language to unrelated language as a system, exactly in the same way that numeral systems are frequently borrowed wholesale from one language to another, as seen in several well known cases in eastern Eurasia, including Japanese, Korean, Taic, and so on, as well as some other cases that are now being recognized, such as the versions of the Chinese system found in various Tibeto-Burman languages.<sup>10</sup> While no one denies that Mednyj Aleut has borrowed the Russian pronominal system intact, or that the Chinese numeral system has been borrowed by several unrelated languages in eastern Eurasia, no one seems to have connected the dots here. For whatever reason, quite possibly the number-like ordering implicit in personal pronouns ('first person', 'second person', 'third person', 'singular' and 'plural' pronouns, etc.), they are clearly borrowable as a system just as numerals are. The point here is that

<sup>&</sup>lt;sup>8</sup> However, note that za 'the' does not occur in the New Japanese highest frequency list given in Chapter 10, unlike *the* in the English lists.

<sup>&</sup>lt;sup>9</sup> The complete singular paradigm in French is *mon, ton, son*, exactly the same as the singular paradigm in Sami (Lappish), *mon, ton, son* (G. Décsy, p.c.).

<sup>&</sup>lt;sup>10</sup> It must be noted, however, that in all cases cited the borrowing language has retained some or all of its earlier (presumably 'native') system alongside the borrowed Chinese system, often with more limited functions.

borrowing of numeral or pronominal systems does not make a language a *Mischsprache*.

Japanese speakers are aware of the fact that they have two numeral systems (actually, with the borrowing of the English system as well, they now have three systems) and that they are used in different ways and have different connotations. Even in cases such as Mednyj Aleut, the speakers know that their language is Aleut, not Russian. As Meillet (1984: 82) says, "Si dégénéré que puisse être son breton, l'habitant de la région de Vannes sait s'il parle français ou breton." Borrowing the Russian pronominal system has not succeeded in changing the structure of the local language as a whole—its phonology, morphology, syntax, and lexicon-from an Aleut structure to a 'mixed' one. the ancestry of which cannot be determined. Even if the existence of Russian were totally unknown, Mednyj Aleut would unquestionably be identified as an Aleutian language with some intrusive non-Aleutian features. The argument that it is a *Mischsprache* is therefore spurious. Arguments that Japanese and Korean are both mixed languages have been based on extremely weak evidence. To the extent that the evidence has been presented in a testable fashion, and carefully examined, it has been disproven (e.g., Shôgaitô, 2002; Tsuchida 2002). There is no scientific linguistic reason to support such theories.

# Exclusion of Areal Vocabulary

If the same word<sup>11</sup> occurs as native vocabulary (or what is considered to be native vocabulary) in one or more unrelated languages of eastern Eurasia, such as Japanese, Chinese, Austronesian, and so on, the word is probably an areal feature. That is, its historical origin cannot at this point be determined, but since it is common to unrelated languages it has apparently been borrowed from one language to another in the area for millenia; in any event, it cannot be used as evidence of a divergent relationship between or among these or any other languages in the area.

For example, perhaps the most frequently cited word used in establishing correspondences between Chinese and Tibeto-Burman is a

<sup>&</sup>lt;sup>11</sup> This rule also applies to grammatical features (Beckwith 1996). In the case of Japanese, it appears likely that the entire system of classifiers (with the probable exception of the ordinary animate and inanimate classifiers, *-ri* and *-tsu*) was borrowed from Chinese along with most of the classifiers themselves (Beckwith forthcoming).

word for 'to die, death' \*si. Here we have a verb as well as a noun, a 'basic' concept, a religious concept, something cultural, as well as something even the most primitive peoples experience. One might think it is certainly a primitive, primary vocabulary item. While all this may be true, and the word is indeed attested quite early in Tibeto-Burman, unfortunately this is yet another item to be weeded out. A word for 'to die: death' is found in some variation of  $si \sim \hat{s}i$  in several East and Southeast Asian languages, whether clearly borrowed from Chinese or not. In Japanese, the recognized Chinese loanword shi 'dying; death' occurs alongside a native Japanese word, the verb shinu 'to die', from \*si-.12 In fact, the word *shi* 'dving; death' is avoided in Japanese, as is the homophonous numeral shi '4', for which the word von '4', derived from the native Japanese numeral for '4', is nearly always substituted, often even when counting. It should thus be surprising to find words for 'to die; death' which are clearly unrelated to this word in other eastern Eurasian languages that have been in close contact with Chinese since high antiquity, such as the Tibeto-Burman languages. In fact, if we turn to Old Tibetan, it is significant that *shi* in the sense 'to die' does not occur at all in the earliest texts. When it does eventually occur it is as a nominal, meaning 'death; dving', in connection with China and the Chinese, or with Buddhism (which was evidently first formally introduced via China). In other words, it is patently a loanword into Old Tibetan. The ordinary, frequently occurring Old Tibetan word for 'to die' is attested as hgum (present) gum (past), which is related to the ordinary word for 'to kill', OTib dgum (future), bkum (past), both from a root \*gum, which must be reconstructed with a voiced initial for Proto-Tibetan (Beckwith 1996). These are the only attested Old Tibetan forms of the verb. It has been argued to be cognate with Chinese on the basis of OTib bkum 'killed'. but even disregarding the problematic phonology and erroneous glosses of the Tibetan, the Chinese forms cited (Benedict 1972: 175 n. 464) are exceedingly rare. The usual reconstruction of Chinese has such a small number of segments per root, and a phonological inventory so tiny, that an enterprising linguist can find a good semantic and phonological match in Classical Chinese dictionaries for nearly any root syllable in any other monosyllabic-root language-the latter category including not only Tibeto-Burman and Taic but also Indo-

<sup>&</sup>lt;sup>12</sup> Martin (1986: 752) compares this to NKor *ci*- 'die, wilt; pass by/away'.

European, Turkic, and many other language families—as has been done more than once by well-meaning investigators. Some semantic shift is allowable, and other factors may be involved, but it is in principle necessary to compare primary, well-attested vocabulary with primary, well-attested vocabulary.

## Exclusion of mutual borrowings

Modern Japanese is filled with thousands of words that appear to be related to or the same as many words found in French-for example, Japanese  $moda(a)n \sim$  French moderne 'modern'. Regular sound-laws can be fairly easily established for the relationship between the French and Japanese words. According to historical linguistics as currently practiced on East Asian languages, this means that Japanese and French must therefore be divergently related. Interestingly, many of those same words are found in Arabic, Russian, South American Spanish, Thai, and numerous other languages around the world, suggesting a wider language relationship. However, this is obviously bogus linguistics, since the Japanese words in question are nearly all loanwords from modern English, which language has had a very long convergent and divergent relationship with French (both languages having borrowed extensively from each other over the last millenium) and has influenced heavily most of the world's modern languages. including Japanese.

The above observation is a cliché among linguists, but there is still a point to it that is generally overlooked in the linguistics of the eastern Eurasian area: if two languages have borrowed the same word from a third language, the existence of this word in both languages, despite good phonological and semantic correlations, cannot be used to prove that the two languages are divergently (or even directly convergently) related. Such a relationship cannot always be ruled out, of course, since such a word may have been borrowed into the proposed proto-language. However, if the time-depth for the separation of Japanese and Korean, for example, is as deep as everyone agrees it would have to be considering the tremendous differences between the two languages, many languages could have contributed loanwords to the hypothetical Japanese-Korean proto-language, though they can probably not be identified now. One possible exception, an identifiable language that has been in the area long enough to have contributed such loans, is Chinese. There should in fact be a large number of Chinese loans in Proto-Korean and in Proto-Japanese-Koguryoic. If Chinese (or some other language) did indeed contribute an extensive fund of vocabulary, that vocabulary must not then be included in any attempt to reconstruct a Japanese-Korean protolanguage until it has been identified and periodized. Yet no attempt to identify such vocabulary has hitherto been made, though an argument for such a connection is made by Sin (1988), as noted in Chapter 1. This suggests that the poor quality of many shared Japanese and Korean comparisons which have been proposed to date by comparative linguists is due in part to some of the comparands being old loanwords from a common source.

### Exclusion of Primary Loan Vocabulary

A language or group of languages situated next to, or periodically inside the borders of, a populous, technologically advanced nation such as China, can be expected to have borrowed very many loanwords from Chinese over a period of hundreds or thousands of years. It is thus unreasonable to expect less than hundreds of loanwords from Chinese into Japanese, borrowed at many different times, sometimes more than once, even before the Wa migrated to Japan in the fourth century B.C. From that point on until the Middle Ages, Japan was nearly totally inaccessible to China, so a gap in the history of borrowing is to be expected. But in early medieval times, although only a handful of Chinese visited Japan and a similarly miniscule number of Japanese travelled to China and back, nevertheless the Japanese managed to import a huge number of Chinese loanwords. Many everyday, 'basic' vocabulary items are included in this borrowing. Even acknowledging that the Japanese made their first acquaintance with Chinese language and culture via scholars and other visitors from Korea on the one hand, and from their own forays into Korea, where Chinese was still spoken, on the other (see Chapter 2), the traditionally understood conditions for massive loan influence simply did not exist. The borrowing in this case was accomplished almost entirely through literary means. The words were borrowed into the literary language, not the spoken language, and they migrated-evidently with glacial slowness, taking many centuries to make the trip-from the literary lan-
guage and the aristocratic spoken language to the common spoken language. It is well known that the English language itself is saturated with such loanwords, not only from French, Latin, Greek, and so on, but also from other Germanic languages, particularly Dutch and Old Norse. Similarly, most Turkic languages have a great number of loanwords from Persian (which is itself as loanword-rich, mainly from Arabic, as English) and Arabic (mostly via Persian). The Taic languages, which were in Antiquity located further from the center of Chinese population than either Japanese-Koguryoic or Korean, contain a vast number of recognized Chinese loanwords, many of which bear such a strong resemblance to putative 'Sino-Tibetan' vocabulary that Taic was for long considered to be one of the four major constituent subfamilies of the 'Sino-Tibetan' family. In short, if a difference in technological or cultural levels exists, loanwords will overcome great obstacles to find their way into a language if its speakers do not have the things or concepts in question.

It is, therefore, a serious problem both theoretically and methodologically that historical linguists of Japanese and Korean do not deal with the problem of loanwords from Chinese into their languages at different periods before the early Middle Ages. The same thing is true of Tibeto-Burman. It is no good to say that one of the two major reasons for so much 'irregular' variation among compared 'Sino-Tibetan' etyma-which are assumed to be, and claimed to be, divergently related-is that there was a lot of borrowing "between related languages" (Matisoff 1994:52; italics his). If one were trying to reconstruct Proto-Indo-European via a methodology wherein most vocabulary items in each northwestern European language were assumed a priori to be inherited from the proto-language, the 'irregularities' that would be present would be beyond the best linguist's ability to explain except, indeed, via a method such as Matisoff's "allofamy." In the case of northwestern Europe the linguistic 'irregularities' are explainable, and have been documented and elucidated clearly, as mutual borrowings that have occurred over the last two millenia. Considering the great time depth for the proposed relationship of Japanese to Korean (at least four thousand years), or that proposed by Sino-Tibetanists for the separation of Chinese from Tibeto-Burman, "perhaps 6000 years" (Matisoff 1994: 55), and the correspondingly small number of probable etymologies (as compared to the large number of improbable ones) that might indicate these putative divergent language families

are valid, priority must be given to the likelihood that most, if not all, of the few good correlations so far proposed as cognates are in fact loanwords. In other words, even if the two main branches in each of these divergent relationship proposals were indeed ultimately related to each other via a common ancestor, many if not most of the identifed cognates should still be evidence of convergence rather than divergence. The nearly universal failure to deal with this problem is undoubtedly the single most serious methodological error of linguists working on the Japanese-Korean and Sino-Tibetan theories.

## DIVERGENCE THEORIES INVOLVING JAPANESE

The major modern theories attempting to account for Japanese ethnolinguistic origins differ from the point of view of the type of data and the type of theory involved. All but one are 'distant genetic relationship' theories.

## The Japanese-Austronesian Theory

The major modern proponents of this theory-notably Muravama (1976), Sakiyama (2001), and Itabashi (2001b, 2000a, 2000b)-argue that Austronesian (formerly called 'Malayo-Polynesian') is one of the 'genetic' components of Japanese, the other component being, in nearly all presentations of the theory, Altaic. In other words, this theory purports to be a hybrid of the divergence and convergence types; the term 'mixed language' is sometimes avoided by its proponents, perhaps because of the bad reputation the latter type of theory has acquired from criticism by nineteenth and twentieth-century comparative-historical linguists (e.g. Meillet 1984: 72-83). Unfortunately, although extremely little evidence<sup>13</sup> can be cited to support a relationship of any kind between Japanese and Austronesian, even a convergent one, the proponents themeselves consider theirs to be a genetic relationship theory rather than a convergence theory. The argument has been made that the substratum language spoken in Japan when the Proto-Japanese-speaking Yayoi people arrived must have been an

<sup>&</sup>lt;sup>13</sup> The little morphological evidence that has been adduced (e.g., Murayama 1976, Sakiyama 2001, Itabashi 2001b, 2000a, 2000b) is not regular or deep enough to be convincing.

Austronesian language because of the kind of phonological changes that Japanese is thought to have undergone since Common Japanese-Koguryoic times. However, the fact is that Archaic Koguryo had the same type of phonological system as Old Japanese, as shown in this book. Also, other than a purely typological similarity in phonological systems no relationship has been demonstrated to exist between the Japanese-Kogurvoic and Austronesian families. If Austronesian substratum influence is to account for Common Japanese-Koguryoic phonology, it must have taken place during Proto-Japanese-Koguryoic times. Substratum influence is one of the most well known motivators of historical linguistic change, but in all well-attested cases such influence results only in phonological influence plus a tiny number of loanwords into the adstratum language. (A classic modern example is Indian English.) This is, however, ordinary convergence—essentially, loan relationship. The Austronesian-Japanese genetic theory can only be classed as a distant relationship theory and must be set aside.

## The Japanese-Korean Theory

This is by far the most popular of the genetic theories outside Japan and Korea (Martin 1966, 1991; Whitman 1990; Unger 2001). It is based on the undeniably close, well demonstrated typological relationship between the Japanese and Korean grammatical systems. By contrast, demonstrating a convincing morphophonological relationship, even one restricted to the lexicon, has so far resisted even the best efforts (Martin 1966, 1991; Vovin 1999). The Japanese-Korean divergence theory is based on the extremely close typological similarity of Japanese and Korean morphology and syntax. Unfortunately, scholars working in this framework have generally failed to maintain the very highest standards of regular correspondences in both phonology and semantics. For the above reasons, and others, this genetic theory has remained sketchy. Since both languages are fairly well-known, seriously convincing new evidence is not likely to be forthcoming. The failure of the Japanese-Korean proponents to demonstrate a relationship beyond reasonable doubt after nearly a century of effort by linguists as prominent as Ramstedt, Poppe, and Martin indicates that the theory has the basic flaws of all distant relationship theories and must accordingly be set aside.

## The Macro-Altaic Theory

This is the most popular of the genetic theories in Korea and Japan (Lee 1983; Kim 1985), and has followers in Japan (Murayama 1963; Itabashi 2001a) and other countries as well (Miller 1971, 1980; Vovin 1999). It claims that Japanese is genetically related to Korean and to the other members of the putative Altaic or extended Altaic family of languages, including the Turkic, Mongolic, and Tungusic languages. However, since a necessary prerequisite for the connection of Japanese to Altaic is a genetic relationship between Japanese-Koguryoic and Korean, and since the latter theory has been disproven (see Chapters 8 and 9), the Macro-Altaic theory belongs to the distant relationship type and must be set aside.

## The Macro-Tungusic Theory

This recent variant of the Macro-Altaic theory has been proposed by scholars working on the Japanese-Korean theory who have been convinced of the untenability of the 'Altaic' genetic theory (Unger 1990: 552-554; 2001) but remain convinced that there is a divergent relationship connecting Japanese, Korean, and the Tungusic languages. As it is simply an extension of the Japanese-Korean theory, it too remains a distant genetic theory and must be set aside. However, there may well be a *convergent* relationship between Korean and Tungusic. This possibility deserves further study by specialists in those languages.

### The Japanese-Koguryoic Theory

This theory, first proposed by the present writer (Beckwith 2000), argues that the Japanese-Ryukyuan and Puyo-Koguryoic languages are related to each other in a close, exclusive genetic relationship; no further divergent relationship exists between them and any other known language. Most previous scholars who have written on the Puyo-Koguryoic languages have considered them to belong to Macro-Tungusic or Macro-Altaic, both of which genetic theories include Korean (Lee 1983; Kim 1985), as discussed in Chapter 1. In fact, the phonological and semantic patterns found in the Old Koguryo data made it abundantly obvious at its first discovery that the Koguryo language is genetically related to Japanese. Scholars who have studied the Old Koguryo linguistic material intensively-whether or not they believe the material represents the language of the Koguryo people or some other people, and regardless of their theories about further relationships—agree that the Old Koguryo material represents a language that is more closely related to Japanese (i.e., the Japanese-Ryukyuan languages) than to any other language. A high percentage of Old Koguryo words that are clearly identifiable can easily be related to the 'Japanese set' of uniquely and typically Japanese words, as shown in Chapters 6 and 12. These words are not found in Korean or any other known language. By contrast, there is overwhelming evidence that the Kogurvo language is unrelated to the Han languages (including Silla and Korean, as well as the autochthonous language of Paekche), as shown in Chapter 8. Due to all the above considerations, and combined with supporting evidence from extra-linguistic science (archaeology, anthropology, and genetics), the present 'strict' Japanese-Koguryoic theory may be considered established beyond reasonable doubt. What is needed now is for scholars to reject the bogus theories and begin working intensively on this one genuine relationship, to refine it and develop it beyond what is presented in this book.

## LEXICAL SETS AND GENETIC RELATIONSHIP

Since both convergent and divergent forces are operating at the same time between any two languages in contact, in order to demonstrate the existence of a genetic relationship beyond a reasonable doubt it is necessary to show that lexical comparands are not simply loanwords. For example, it is true that virtually all of the world's major modern languages share the same word for 'tea', but that does not mean they are all genetically related to Chinese or to other languages that spread this loanword—which may ultimately not be Chinese at all but a loanword from Tibeto-Burman \*la 'leaf' (Sagart (1999: 188-189). Moreover, even though the words *mama*, *papa*, *tea*, *coffee*, *chocolate*, and many other words are held in common by a large number of modern languages are all genetically related. Even if the etymological origins of these words were unknown and if it were insisted that the words in question are not borrowed, but genetically inherited in each language from a common ancestor, the chosen set of words could still not be used on its own to demonstrate a genetic relationship among the languages involved. This is because it is a *non-distinctive set*.

It has recently been shown that many lexical items in the putative 'Sino-Tibetan' set are non-distinctive—they are, arguably, found also in Japanese-Koguryoic and Indo-European (Beckwith 2002a, 2002b), among other languages. If one wished to argue that Chinese, Tibeto-Burman, Japanese-Koguryoic, and Indo-European are therefore genetically related, one must at least first show that the common lexical set is not also found in other nearby language families, such as Austronesian, Austroasiatic, Taic, and Tungusic.

When dealing with any theory of relationship in lexically-based comparative-historical linguistics it is often impossible to take similar lexical items at face value. Although many of the best-supported Sino-Tibetan etymologies appear to be shared not only with Japanese-Koguryoic but also with Indo-European, there are numerous unresolved (and perhaps unresolvable) points arguing against a common divergent relationship. For example, lexically speaking, the distinctive lower numerals and much other vocabulary of the Japanese-Koguryoic languages—what has been referred to in this book as the 'Japanese set'—are a major obstacle against relating this language family with any other. Similarly, Tibeto-Burman languages have either borrowed the Chinese system (Miller 1988, Sagart 1999), which itself may be connected to the Indo-European system (Beckwith 2002b), or they have innovated new numeral systems of their own (Matisoff 1997). For the time being, therefore, it must be assumed that any relationship existing among the Japanese-Koguryoic, Tibeto-Burman, Chinese, and Indo-European language families is simply one of shared loan influence from the same intrusive donor-perhaps one or more early Indo-European daughter languages (Beckwith 2002b; cf. Pulleyblank 1996c)-though in the nearly total absence of theoretically unprejudiced linguistic investigation of the comparands the possibility of a different kind of relationship being eventually demonstrable cannot at present be ruled out.

#### CHAPTER TWELVE

### THE JAPANESE-KOGURYOIC FAMILY OF LANGUAGES

The fundamental issue addressed by this book is that of the origins and relationships of the Japanese and Koguryo languages. The descriptive, methodological, and theoretical research results presented point not only to a solution of long-debated problems but also to a path that may be followed by future researchers of Japanese-Koguryoic languages and other areas of linguistics.

There are two major problems that remain to be discussed. The first is a theory that the language of the toponyms from the Central Korean area of the former Koguryo kingdom is not the same as the Puyo-Koguryoic language of the Koguryo people attested in Chinese sources. The second is the reconciliation of the linguistic data with the archaeological data relevant to the periodization and location of the Japanese-Koguryoic languages and their relationship with Korean.

#### THE LANGUAGE OF THE TOPONYMS

#### Introduction

About 130 clearly identifiable words and function morphemes from the area of the former Koguryo kingdom are preserved in the *Samguk Sagi*, or 'History of the Three Kingdoms', in toponyms recorded and glossed in the eighth century A.D. Based on the theory of the conservative nature of toponyms, Kôno Rokurô (1957, quoted in Mabuchi 1999: 145 [610]) and his followers argue that this language is not really the language of the Koguryo people, as maintained by Lee Kimoon (1967, 1983) and his followers, but a substratum language.

According to this theory, only the Koguryo words preserved in the ancient Chinese descriptions of Koguryo in the *San kuo chih* and *Hou Han shu* represent the true Koguryo language spoken by the Koguryo people. Thirteen words and one grammatical morpheme of this language (called 'Archaic Koguryo' in this book) are preserved. They were recorded in the third century A.D., when the Koguryo kingdom was centered on the Yalü River. The substratum theorists claim that

this language is not related to the language of the later Koguryo kingdom toponym material in the *Samguk Sagi* (called 'Old Koguryo' in this book), which is mostly (but not by any means all) from the Central Korean Peninsula area. Finally, according to this theory, the *Samguk Sagi* words from the Koguryo area north of the Yalü River do not correspond to the *Samguk Sagi* material from the Central Korean Peninsula. Kim Bang-han admits that a few words are found in both areas, but, he argues, this is only because the toponyms were recorded for the Silla government by Koguryo scholars who *introduced* these words into the toponyms (Kim 1985: 111). The conclusion most of the substratum theorists draw is that the language of the former Koguryo realm in the central Korean peninsula was a Han language, and since it is undeniable that some of the lexical material from Central Korea is related to Japanese, the attested lexicon of this unknown Han language would support the Japanese-Korean genetic relationship theory.<sup>1</sup>

# Archaic Koguryo and Old Koguryo Continuity.

Of the fourteen clearly glossed Archaic Koguryo lexemes recorded in ancient Chinese sources, seven are attested also in Old Koguryo. The Archaic and Old Koguryo lexemes are clearly related not only to each other but to Japanese as well. See examples (1) through (7) below (for source citations and detailed discussion see Chapters 2, 3, and 6). The

<sup>&</sup>lt;sup>1</sup> When the paper on which part of this chapter is based was first presented, John Whitman told me that in Roy A. Miller's view the Samguk Sagi Koguryo toponyms are an earlier form of Japanese. Whitman raised the possibility that the references to Wa in Korea found in the Kwanggaet'o Inscription of 414, and the closeness of the language of the Koguryo kingdom toponyms in the Samguk Sagi to Japanese, support Miller's view that the toponyms were late Wa-i.e., Japanese-in language. However, the only way to account for the toponyms in this theory would be a Japanese invasion and extended period of political rule over the area. Such an event would be necessary to account for the large number of cognate words in the toponyms as well as their occurrence in areas such as the former Ye-Maek territory and the Koguryo territory north of the Yalü River. Yet there is no historical or archaeological evidence for this, and linguistically the differences between Archaic Koguryo and Archaic Japanese that are already attested in the third century Chinese sources—before any known Japanese involvement in Korea-are continued and become more pronounced in the language of the toponyms, Old Koguryo. If the Samguk Sagi material were due to recent Japanese intrusion, it should be structurally closer to Japanese than the third century Chinese source material, in which Archaic Japanese and Archaic Koguryo are already distinct. By contrast, this difference may easily be accounted for by the passage of time from the fourth century B.C. to the third century A.D. I would like to thank John Whitman for mentioning this possibility, and for the discussion of my paper.

phonological changes are regular and can be observed throughout the Koguryo corpus. The most noticeable change is that of disyllabic CVCV or CVCCV words to monosyllabic CVC or CVVC words.

- OKog \*kuər 'walled city, fort (城)'<sup>2</sup> < AKog \*kuru 'id.' This word is attested both north of the Yalü River and in the Central Korean Peninsula.
- (2) OKog \*fiaip 'high mountain, crag, peak ( $rak{M} \sim fi$ )' < AKog \* $\gamma$ apma 'great mountains (大山)'. The Old Koguryo form is attested in toponyms both north of the Yalü River and in the Central Korean Peninsula.<sup>3</sup>
- (3) OKog <sup>☆</sup>key 'king (王)' < AKog ~ Puyo ~ Paekche \*kar 'king, tribal chief (王); high official, minister (相)'. OKog <sup>☆</sup>key 'king' is attested in two toponyms from the Central Korean Peninsula area.
- (4) OKog \*tśiri 'north (北)', derived from AKog \*tsiar 'back, behind (後); name of the Northern Clan (北部) of the Koguryo people'. The Old Koguryo word is attested in one toponym from the area north of the Yalü River.
- (5) OKog <sup>☆</sup>kuər 'yellow (黃)' < AKog \*kweyru 'id.' The Old Koguryo form is from the Central Korean Peninsula area.
- (6) OKog \*mey 'excellent, good (善)' < AKog \*meyŋ 'id.' The Old Koguryo form is from Central Korea.
- (7) The Archaic Koguryo genitive-attributive marker \*na is preserved in Old Koguryo in two forms. One is in a toponym from Central Korea, in which it occurs as OKog \*na. The other is as OKog \*ir ~ <sup>\*</sup>in 'genitiveattributive suffix morpheme', found in two toponyms from the Central Korean area that identify the morpheme solidly as a phonologically shifted form of \*na. This morpheme has otherwise been replaced in Old Koguryo by the adjective-attributive suffix morpheme \*si, which has evidently acquired the function of the genitive-attributive.

All but one of the Old Koguryo forms of these Archaic Koguryo lexemes are attested in the toponyms from Central Korea, which include \*kuər 'walled city, fort (城)', and \*fiaip 'high mountain, crag, peak (嶽 ~ 岳)', two of the most widespread Old Koguryo words, which occur in both areas. Significantly, the Old Koguryo lexemes occur in toponyms that involve many other lexemes not attested in the Archaic

<sup>&</sup>lt;sup>2</sup> See Chapters 2, 3, and 6.

<sup>&</sup>lt;sup>3</sup> The Koguryo words are cognate to AJpn ~ OJpn \*yama 'mountain ( $\square$ )', which could not have been borrowed from Koguryo in the Kofun period because AKog \*yapma and AJpn \*yama are both attested in the same third century Chinese historical source, the  $\equiv \overline{\boxtimes} \overline{z} \, San \, kuo \, chih$ ; i.e., they are attested *before* the Kofun period.

Koguryo corpus. In cases where these additional Old Koguryo forms have good Japanese etymologies it may be assumed that they too are inherited from Archaic Koguryo. Although they are not discussed here,<sup>4</sup> they constitute strong further evidence against the substratum theory.

# Old Koguryo North of the Yalü River and in Central Korea.

The Old Koguryo lexemes found both in Koguryo north of the Yalü and in Central Korea are given in examples (8) through (13).

- (8) OKog \*kuər 'walled city, fort (城)'; see example (1) above.
- (9) OKog \*piy 'country, nation (國)' ~ 'commandery (郡); Puyŏ ([扶餘])'.
- (10) OKog \*tar 'mountain (山), a homonym and etymological relative of OKog \*tar 'high (高)'.
- (11) OKog \*fiaip 'crag, high mountain (缶)', from AKog \*γapma 'great mountain'; see example (2) above. The word is found throughout the Koguryo territory in many toponyms and embedded within toponym collocations in ways that rule out the possibility that the transcribers simply tacked on alien forms to the supposed substratum language forms. (See Chapter 3.)
- (12) OKog \*par 'second-growth paddy-rice (桃)'. The word \*minpar 'grain (穀)', in a toponym from Central Korea, perhaps includes the same word, \*par.
- (13) OKog \*kaip 'cave, hole (in a mountain)'.

It is notable that nearly all the toponyms north of the Yalü are called \*kuər 'walled city, fort (城)', the regular Old Koguryo form of Archaic Koguryo \*kuru, with the same meaning. This word is found all over the Koguryo territory and significantly, *exclusively* in Puyo-Koguryoic speaking territory, as shown by Toh Su-hee (1987: 67, 397).<sup>5</sup> The Chinese historical sources take pains to point out specifically which of the Three Kingdoms had walled cities and which did not, and they record and explicitly gloss the word for 'walled city, fort (城)' in the local languages of the two kingdoms which had them. The Archaic Koguryo word is \*kuru [溝凄]. The Silla Korean word is \*konmura ~ \*kenmura [健牟羅]. The Silla word must be further ana-

<sup>&</sup>lt;sup>4</sup> For this material and discussion of it see Chapters 3 and 6.

<sup>&</sup>lt;sup>5</sup> There are two exceptions found in Paekche territory, but the Paekche ruling class spoke a Puyo-Paekche language, as shown conclusively by Kôno (1987).

lyzed as a compound of SKor \*kon 'great' (Kôno 1987: 79) and SKor \*mura, so the Koguryo and Silla words are completely unrelated. With regard to Kim Bang-han's argument that Koguryo scholars recorded the toponyms for the Silla government and added their word \*kuər 'walled city, fort' to the local place names, it is difficult to imagine why they should have altered only part of some names, and left others completely untouched. The Chinese sources actually say that the language of Paekche was the same as the Koguryo language, and in fact, despite their differing views, Toh Su-hee, Lee Ki-moon, and Park Pyong-ch'ae agree that the language of the *early* Paekche kingdom, when it was located in the Central Korean Peninsula Area, was a Puvo-Kogurvoic language, as was the language of the Ye-Maek kingdom (Toh 1987: 445-446; Lee 1968: 116-117 [quoted in Toh, loc. cit.]; Park 1968: 78 [quoted in Toh, loc. cit.]).6 All available evidence thus confirms that these three sets of data-the language of the early Koguryo people, the language of the northern part of the later Koguryo kingdom, and the language of the toponyms from the southern (central Korean Peninsula) part of the later Koguryo kingdomrepresent one and the same language, Koguryo. There are no significant phonological differences among the words found in toponyms from different parts of the later Kogurvo kingdom, including the former Ye-Maek and early Paekche territories absorbed by Koguryo in the fifth century. This indicates that on the whole they represent a single language, Koguryo, with only minor dialect differences, just as the Chinese historical sources say. As for the conservative nature of toponyms in Korea, we know that the Koguryo renamed at least some places because very soon after they captured Lo-lang, the old Chinese capital, they renamed it Pyongyang. But more devastating by far to the theory of conservative toponyms is the inescapable fact that *all* of the Koguryo and other local Korean names were changed by fiat to Chinese names less than a century after the Silla absorption of Paekche and Koguryo. The history of these toponyms thus constitutes one of the most powerful cases anywhere in the world against the theory. And it is the Samguk Sagi itself-the source of all our data on the toponyms from the central and southern Korean Peninsula-which explicitly and clearly shows and tells us this.

<sup>&</sup>lt;sup>6</sup> According to Toh, Paekche only became bilingual in the third century, and ended up monolingual after the early fifth century (Toh 1987). However, there is no evidence for the existence of a distinctive Paekche people or state before the fourth century (Gardiner 1969), so Toh's view of early Paekche history is unsupportable.

## The Japanese-Korean Theory

Despite, or maybe because of, the substratum theory, which would connect *Korean* more firmly to Japanese via the old toponyms from the Central Korean Peninsula, the Koguryo language is mostly ignored in the scholarship done within the framework of the Japanese-Korean theory. The data and arguments given above disprove the substratum theory. Yet *Koguryo* and Japanese are definitely in a close genetic relationship, as virtually everyone who has investigated Koguryo agrees and as the present book demonstrates. Since the most significant Korean etymologies proposed for Old Koguryo words have also been disproven (see Chapter 8), that leaves convergence as the only type of relationship possible between *Korean* and *Koguryo*.

Yet the question will undoubtedly be asked whether a distant genetic relationship between Korean and Japanese-Kogurvoic could still exist. It is agreed that at best "an enormous time-depth" (Shibatani 1990:117) separates Japanese and Korean, such that if a "genetic link, however remote, between Korean and Japanese (including the Ryukyu dialect)" (Sohn 1999: 29) ever existed, the two languages must have diverged many millenia ago-Hattori Shirô's estimate is "at least 4,700 years" ago (Sohn 1999: 35). But leaving aside for a moment the problem that distant linguistic relationships are so called because they are not close enough to be demonstrated according to the established principles of scientific historical linguistics, it is true that scholars and laymen alike are struck by the great similarity between Japanese and Korean. Many people have tried to solve this puzzle, which is made more difficult because of the linguistic and historical incongruities in the genetic theory that proposes to relate them. The essay below presents a scenario that accounts for the most outstanding problems.

Archaeologists and paleoanthropologists have demonstrated beyond doubt that Japanese culture, and the modern Japanese people, are descended from the Yayoi culture and people that appeared in northern Kyushu in the fourth century B.C. (Nakahashi 1993; Imamura 1996; Nakahashi and Iizuka 1998; Hudson 1999). They arrived, of course, by sea. What is generally overlooked is that the same culture—with slight local variations<sup>7</sup>—appeared in the southern Korean Peninsula at the same time (Hudson 1999: 121-132). Although nearly

<sup>&</sup>lt;sup>7</sup> Most of the variation is undoubtedly due to the fact that so few early sites are known (in both locations); many chronological and typological conclusions have been drawn on the basis of late sites such as that of Yayoi itself, which is in the Tokyo area.

all writers who have touched on the subject assume that the new features in the Korean archaeological record developed locally and are evidence for a Yayoi migration from Korea to Japan, there are no antecedents for this new culture in neighboring northern Korea or southern Manchuria. This is worse for the 'Korean' theory of Japanese origins than it may look.

That a distinctive new culture developed purely locally in southern Korea without any outside influence or stimulus is unlikely enough, but the idea that the new culture's bearers should also have decided to leave their homeland immediately afterward—to take an extremely dangerous journey by sea to a distant, unknown country—borders on magical thinking. The logical conclusion to be drawn is that the new culture that arrived in northern Kyushu by sea must have arrived in southern Korea by sea also. In other words, one people who were accustomed to using boats, and who spoke one language, migrated from one place and landed in two (or more) adjacent places.

The Yayoi influx was absolutely revolutionary for Japan in lifestyle, technology, everything. The Archaic Japanese words preserved in Chinese historical sources, along with Old Chinese loanwords in Japanese, indicate that the Japanese language descends from the Yayoi immigrants' language. Due to the evidence in the preserved corpus of the Koguryo language, to the fact that the Yayoi immigrants brought only northern Japonica rice with them to Japan, and to the fact that Chinese historical sources actually record Wa (i.e., Yayoi) people living in the Liao-hsi area in late Antiquity (see above, Chapter 2) and Koguryo and Paekche people as having earlier lived there also, we know that the proximal homeland of Common Japanese-Koguryoic must have been in or near the Liao-hsi area, that is, just east of modern Tientsin (Tianjin).

Despite our rather poor archaeological knowledge of the Liaoning region in general, evidence has recently been found that the prototype of at least one artifact common to both southern Korea and northern Kyushu—significantly, a sword type—comes from Liao-hsi (Miyamoto 2002). Due to differences between Japanese-Ryukyuan (Wa) and Puyo-Koguryoic culture, most notably the presence among the Koguryo of Central Eurasian-type cultural features that are missing in early Japan, it may be suggested that the two branches of the Japanese-Koguryoic family already had diverged in the Liao-hsi area before the migration of some of the Wa—due to pressure, perhaps, from warlike Central Eurasian peoples. Remarks in the recent archaeological litera-

ture suggest that there may already be further support for this theory. For example, artifacts of two archaeologically identified rituals are found in both the later Puyo-Koguryoic culture area of northern Korea and the early Yayoi culture of Japan, but not in southern Korea (Hudson 1999). These are problematic for the now dominant view.

But what happened to the Yayoi Wa relatives who landed on the south coast of Korea? In Japan, the technologically more advanced Yayoi farming people overwhelmed the relatively primitive huntergatherer Jômon, as expected on the basis of many other similar, historically attested encounters. Based on the archaeologically attested changes, we must assume that the same migratory people had a powerful impact on the inhabitants of southern Korea as well. The Han languages must also have been under tremendous linguistic influence from the Japanese-Kogurvoic-speaking Yavoi immigrants, and were undoubtedly changed radically in structure due to Japanese-Koguryoic linguistic influence. Among other things, they must have accepted many loanwords from the immigrants' language. It is even possible that some of the old toponyms in southern Korea date back to the Yayoi-related influx in the fourth century B.C. However, Korea was then technologically more advanced than Jômon Japan, and the Han languages did survive in what became the Silla and later Paekche kingdoms. The arguments that have been presented in favor of the Japanese-Korean genetic theory do not address these issues.

The archaeological record argues strongly against the possibility that the intrusive Yayoi culture which appeared on the coast of northern Kyushu and southern Korea in the fourth century B.C. could have come through the Korean Peninsula from southern Manchuria. This fact has been considered to be a stumbling block for those arguing in favor of ethnolinguistic theories connecting the Puyo-Koguryoic and Japanese peoples. However, far from constituting a problem for such theories, the archaeological and anthropological evidence only supports them. The bearers of the Yayoi culture, the Wa, a Japanese-Koguryoic people, must have settled in both places by sea, which is the only way they could have gotten to Japan in any case.

Where did they come from? The archaeological and anthropological evidence indicates that they did not travel any great distance. There appear to be direct parallels between some aspects of the material culture of early Yayoi and that of the ancient non-Chinese 'Coastal Culture' (Luo 1999), which extended along the coast as far north as the Yellow Sea, so this area is the likely source. Although the Chinese historical sources tell us nothing about the Japanese-Koguryoic peoples (under recognizable names) at the time of their migration into their historical locations, the earliest strictly historical notice on the Koguryo people is about a group of them living in Liao-hsi, a region also connected with the Puyo-Paekche people at an early date, since the Chinese sources claim that the latter lived in Liao-hsi too before moving to Korea. And finally, the only clear ancient historical record of Wa people living on the Asian mainland has them in the same area of northeastern China at about the same time. The fact that they are all noted to have been present in precisely the most probable area for the proximal Common Japanese-Koguryoic linguistic homeland (not the distal Proto-Japanese-Kogurvoic linguistic homeland, or Urheimat). which is also the most probable area for the archaeological record-strictly northern-type Japonica wet rice agriculture, Coastal Culture architecture and material culture, etc.-suggests Liao-hsi as the most likely location.

There is also no significant connection between the material culture of the area now identified as Puyo and that of the area now identified as early Koguryo. In other words, there is no reflection in the archaeological record of the close ethnolinguistic relationship between the two peoples.<sup>8</sup> The conclusion to be drawn from this is that when the Puyo-Koguryoic peoples migrated into these areas they found other people already established there. Rather than killing them all, they either subjugated them (as the Koguryo must have done, according to the Chinese descriptions) or intermarried with them (a possibility in the Puyo case, though we do not really know). Since the archaeological record indicates unbroken continuity from prehistoric times, the substratum peoples must have remained in place and their languages must have continued to be spoken for a very long time before and after the Puyo-Koguryoic conquest.

In accordance with all documented cases like this one, either the Puyo-Koguryoic people borrowed some words from the substratum languages and succeeded in maintaining their own language, eventually replacing that of the original inhabitants, or the Puyo-Koguryoic people borrowed some words from the substratum languages and eventually abandoned their own language, becoming speakers of one or more of the substratum languages. Since we know that the Puyo-

 $<sup>^{8}</sup>$  Mark Byington, p.c., 2002. I am of course responsible for any misunderstanding of his remarks.

Koguryoic languages have in fact entirely disappeared, and that after their disappearance in the Early Middle Ages the languages spoken in the areas over which they formerly ruled were Korean (in Korea), Chinese (in Liao-tung), and southern Tungusic (in Manchuria), the second scenario describes the Koguryo case and indicates that the Puyo-Koguryoic languages were intrusive in the areas where they later established themselves.

Not long after the Yayoi migration, people from northeastern China began migrating by land to southern Manchuria and the Korean Peninsula. Of these people some of the earliest seem to have been the Maek or Ye-Maek. They were Puyo-Koguryoic speakers and settled in the area of east-central Korea, along the Sea of Japan. Later, in the fourth and fifth centuries A.D., the Korean Peninsula was more or less completely overrun by Puvo-Koguryoic speaking peoples. The Puvo-Paekche settled at first in west-central Korea, but they were soon forced south by the Koguryo during the fifth century. The Puyo-Koguryoic people, especially the Koguryo, also influenced (and evidently had a hand in establishing the dynasty of) the most resiliant of the Han states, the Silla kingdom (formerly Chin Han), located in the southeastern corner of the peninsula facing the Sea of Japan. But Silla remained independent and ethnolinguistically distinct, as the Chinese sources explicitly note. It grew and became increasingly powerful while under Koguryo influence. Puyo-Koguryoic speakers even spread over most of the rest of the Korean peninsula, where they must have introduced yet another layer of loanwords into the local languages, and had at least some linguistic influence on Silla Korean. (See the discussion of the Koguryo word for 'regent' in Chapters 2 and 6.) Indeed, Korean, the direct descendant of Silla Korean and the only one of the Han languages that has survived, contains some words also found in Japanese-Kogurvoic.

The regularity of the structural-typological correspondences between Japanese and Korean, and whatever lexical-phonological correspondences that may exist, could theoretically be due to either divergence or convergence. But because it is extremely unlikely that the very coherent and distinctive Yayoi culture of Japan was bilingual, it would seem most likely that the perceived relationship between Japanese and Korean is the result of convergence brought about by the Japanese-Koguryoic-speaking Yayoi relatives' settlement in Southern Korea in the fourth century B.C. That the details of the convergence are difficult to unravel is to be expected considering the gap of about a millenium between the Yayoi influence and the recording of the Old Koguryo language.

The archaeological, historical, and linguistic evidence agrees. The Koguryo people brought their language to southern Manchuria and the Korean Peninsula and conquered the local peoples, who were kept in a subservient position. On the basis of the Chinese descriptions, it is probable that little ethnic mixing took place for centuries. At the time of the T'ang-Silla allied attack in the mid-seventh century, the Kogurvo kingdom was so severely weakened, due partly to the usurpation of Kaesomun and the succession struggle upon his death, that it was quickly destroyed by its enemies. After the T'ang Chinese forcibly removed large numbers of Koguryo survivors from the Korean Peninsula, which was gradually taken over by the Korean-speaking Silla kingdom, the Koguryo language and its close relatives became extinct. This left the Japanese-Ryukyuan languages on the Japanese archipelago as the only surviving branch of the Japanese-Koguryoic family of languages. This scenario for the development of the Japanese-Korean relationship accounts for all of the facts, both linguistic and non-linguistic, including all of the chronological problems of the other theories. It is also parallelled almost perfectly by an extremely similar, historically attested case.

The relationship among the Japanese, Korean, and Koguryo languages at the eastern extreme of Eurasia is exactly parallel to-and geographically a mirror image of-the relationship among the English, French, and Old Frankish languages at the opposite extreme of Eurasia. At the northwestern edge of Europe, the Germanic ancestors of the English migrated to Britain from the continent, where they had lived not far from their Germanic relatives, the Franks. The two tongues had already diverged enough to be distinct languages. The Franks had mostly migrated southwestward into Gaul, a former province of the Roman Empire where the local people spoke a dialect of Late Vulgar Latin, or Proto-Romance. The Frankish conquerors borrowed some words from the Romance language and continued to speak their own Germanic language for centuries alongside the local language. (Charlemagne, for example, was bilingual.) They changed the name of the country to Francia-'France'-and contributed some loanwords to the local Romance language, Pre-Old French. But there were fewer Franks than there were Romance speakers and the immigrant people ended up speaking the local native language, Pre-Old French. Old Frankish

(also called 'West Frankish') died out in France, and only a few fragments of the language—mostly isolated words—are preserved in the Frankish law codes, which are written in Latin. In France to this day people still speak 'French', a Romance language.

The Germanic Anglo-Saxons successfully imposed their language on formerly Celtic-speaking England (despite some strong competition a few centuries later from the related Germanic languages of the Old Norse-speaking Danish invaders). The country was conquered again in 1066 by the Normans. These were in origin Old Norse speaking people, but they had lived in France for a century and a half and had shifted to French before their conquest. Norman French had a tremendous impact on English, particularly through its contribution of many French loanwords. Nevertheless English, a distinct Germanic language, prevailed in England and is still spoken throughout the country today.

There are numerous Old Frankish words in French, and they can be shown to correspond to cognates in English according to regular rules. However, the relationship that is demonstrated by them is ultimately that betweeen the Germanic language English and the Germanic language Old Frankish, donor of the loanwords to Pre-Old French. The shared words do not demonstrate a direct relationship between English and French.

At the northeastern edge of Asia the Wa, a Coastal Culture fishing and rice-farming people, lived on the Asian continent in or near Liaohsi, the area along the northwest coast of Liaotung Bay in the Yellow Sea. These Japanese-Koguryoic speaking ancestors of the Japanese migrated by sea to the southern Korean Peninsula and to northern Kyushu, the southwesternmost island of Japan proper, in the fourth century B.C. They made a great cultural impact on both areas, as attested to by the archaeological and anthropological study of their remains. In Kyushu, the Wa settled and rapidly spread their genes and 'Yayoi' culture across the length and breadth of the Japanese islands along with their language, Proto-Japanese. The language of the early Wa settlers in southern Korea must have had a great impact on the local language or languages, whether Han or not, but the region was Korean-speaking by the early United Silla period, before significant records of the local languages were made.

The Japanese-Koguryoic speaking ancestors of the founders of the Koguryo kingdom lived in Liao-hsi, as did their relatives the Wa, but

the Koguryo and the Maek, Puyo, Okcho, Ye, and Puyo-Paekche gradually migrated eastward by land into southern Manchuria and northern Korea. They conquered most of the Korean Peninsula, which by the third century B.C. was already occupied by Han peoples (some of whom undoubtedly spoke Proto-Korean) and by Chinese. The Puyo-Koguryoic peoples borrowed some words from the local peoples, but in Koguryo territory, at least, they evidently continued speaking Koguryo until their kingdom was destroyed in the seventh century. The Koguryo ended up contributing their name, Koguryo ~ Koryo, i.e., 'Korea', to the country and the peninsula, and some loanwords to the local languages, including Pre-Old Korean and Old Korean, before their own language became extinct. Although Koguryo had a great impact on Korean, particularly through its contribution of numerous loanwords, 'Korean' is the language of Korea today.

Of course, English, French, and Old Frankish are all known to be Indo-European languages, so comparisons between any two of them will reveal some regular correspondences due to common inheritance from Proto-Indo-European. By contrast, Japanese and Korean are undoubtedly *not* related by divergence and it is obvious that no genetic relationship ever existed between the two languages. However, since this has not stopped proponents from continuing to work on the Japanese-Korean theory, it may be apropos to point out several major problems with it that are usually not discussed.

A century of work on the Japanese-Korean genetic relationship theory has demonstrated that there are a few shared lexemes, and they can be shown to correspond to cognates in Japanese according to exceedingly difficult and not entirely regular rules, such as that proposed by Whitman (1990).<sup>9</sup> The reason given for the difficulties, assuming the languages are related at all, is a vast gulf of time separating them (see above). Yet since archaeological and anthropological evidence shows the people and language of Yayoi to have had close relatives on the Korean Peninsula in the fourth century B.C., it is incumbent on the Japanese-Korean theorists to explain how such enormous differences

<sup>&</sup>lt;sup>9</sup> There are exceptions to Whitman's rule of medial \*r-loss (1990)—as also to Lee's earlier observations of Korean—and some examples are semantically not just 'doubtful' but 'very doubtful'. Moreover, exactly the same kind of rule can be formulated to describe changes common to Japanese and Chinese due to the massive borrowing of Chinese in the Early Middle Ages. While important, it does not by itself constitute evidence for or against a divergent relationship with Korean, Koguryo, or any other language.

could have developed within the very same culture in such an incredibly short time. Moreover, of the Japanese and Korean words usually compared—e.g., those in Whitman (1990)—not a few are also found in Koguryo (even despite its small corpus). The Japanese-Korean theory cannot explain these problems.

Assuming, as most Korean linguists do, that many Koguryo words are preserved as loans in Korean, the Japanese relationship demonstrated by them can only be one between Japanese (a Japanese-Koguryoic language) on the one hand and Koguryo (another Japanese-Koguryoic language) on the other. Since Koguryo evidently thus donated some of the linguistic material to Old Korean that has formed the basis of the Japanese-Korean genetic theory, the shared material does not demonstrate a direct genetic relationship between Japanese and Korean.

In addition, the Yayoi settlement not only of northern Kyushu but also of southern Korea must have resulted in the contribution of an earlier layer of Japanese-Koguryoic words to Proto-Korean. If the two settlements remained in close contact for a time, as they seem to have done, it may also have resulted in the passing of some Proto-Korean words to Proto-Japanese (though this is perhaps less likely, due to the great difference in cultural levels at the time of the initial settlement).

These two periods of Japanese-Koguryoic contact with Proto-Korean are more than sufficient to account for the vocabulary thought to be shared by both Korean and Japanese. In short, because all the evidence points to convergence and none to divergence, there is no reason to consider the Japanese-Koguryoic and Korean languages to be genetically related. It is time for historical linguists to begin working on the close *convergent* relationship between Japanese-Ryukyuan and Puyo-Koguryoic in the Japanese-Koguryoic family of languages.

## KOGURYO LEXICON

This list includes all clearly glossed words and grammatical morphemes that are identifiable as Koguryo, including known loanwords (the sources of which are identified) and words with no known etymology, a total of 139 items. It excludes all those which are philologically problematic and those believed not to be Koguryo words. (See Chapters 3 and 8). Discussion of the rationale for transcriptions, interpretations, and so forth are given in the body of the present book and are omitted from this list, which also gives no subperiodization other than the marking of Archaic Koguryo and Old Koguryo forms as such. Most entries have good Japanese etymologies; see Chapter 6.

## ARCHAIC KOGURYO GRAMMATICAL MORPHEMES

\*na : \*nâ [奴] 'genitive-attributive marker' (> OKog \*na ~ \*ir 'id.')

## ARCHAIC KOGURYO WORDS

\*yapma [蓋馬] 'great mountain (大山)' (> OKog \*fiaip 'id.') \*kar [加]~[干] (~ Puyo-Paekche \*kar [瑕]) 'king (王); tribal chief; high official, minister (相)' (> OKog ☆key [皆]~[支] 'king') \*kor [灌] 'front (前)' \*kör [涓] 'right (右)' \*kuru [溝漊] 'walled city, fort (城)' (> OKog \*kuər 'id.') \*kweru [桂婁] 'yellow (黃)' (> OKog \*kuər 'id.') \*makri(p)kar [麻立干] 'regent; lit., true, right (正) king (王)' (> OKog \*makrikey [莫離支] 'id.') \*meyn [明] 'good (善)' (> OKog ☆mey 'id.') \*ortu:\*ortəw [紇斗]~\*ortu [丸都] 'capital city (都)' \*tsiar~\*ts<sup>w</sup>iar [絕] 'back, behind (後); name of the Northern Tribe of Koguryo' (> \*tśir + \*i > OKog \*tśiri 'north') \*tüŋ [東] 'to shoot with a bow (射)' (> OKog ☆tśü 'id.') \*wi [位] 'to look like, resemble (相似)' \*źör [順]~\*dźir (慎) 'left (左)'

# OLD KOGURYO GRAMMATICAL MORPHEMES

\*ir: ☆in [隱] 'genitive-attributive suffix morpheme' < AKog \*na 'id.'
\*na : ☆nəy [乃] 'genitive-attributive marker' < AKog \*na 'id.'
\*pi : ☆pi [比] < \*-pu-i 'verb derivational morpheme'
\*si : ☆si [斯] ~ śi [史] 'adjective-attributive suffix morpheme'
\*tsi : ☆tsi [次] < \*tu-i 'noun derivational morpheme'
\*u : ☆v [烏] 'diminutive suffix'</pre>

## OLD KOGURYO WORDS

- \*fia:☆γ<sup>w</sup>əy [迴] 'foot (足)'.
- \*fia: ☆a [阿] 'to look down at, overlook (臨)'
- \*fiaip: \*aip [押] 'tube (管); cave, cavern, hole (穴)'; cf. \*kaipi
- \*fiaip:☆aip[押]~☆γap(盒)'west(西)'
- \*fiaɨp : \*aɨp [押] ~ \*γaɨp [峽] ~ \*kaɨp [岬] ~ \*fiaɨp [毋] ~ \*ap [in 刀臘] 'high mountain, crag (嶽 ~ 岳)' < AKog 蓋馬 \*γapma 'great mountain (大山)'
- \*fiatśir: ☆atśin [阿珍] 'poor, exhausted (窮)'
- \*i~<sup>☆</sup>yi [伊] 'to enter (入).
- ☆im [音] 'to supervise, imprison (監)'
- \*kan: ☆kən [根]~\*kir~☆kin [斤] 'head (首~頭)'
- ☆kakey [加支] 'leek-blossom (菁)'
- \*kami : ☆kammi [甘弥] 'vulture (鷲)'
- \*kaipi ~ \*kaip : \*kaippi [甲比] ~ \*kaip [甲] 'cave, cavern, hole (穴)'; cf. \*fiaip
- \*ka(r) [加] 'official, minister (官)' < AKog \*kar [加] 'id.'
- \*kar: ☆kalir [加尸] 'plough (梨)' (← OChi)
- \*kati: ☆kați [加知] 'east (東)'
- \*key: ☆key [皆]~[支] 'king (王)'
- \*key: ☆key [支]~☆γey [兮] 'military, martial (武)'
- \*keyr: ☆keylir [皆尸] 'canine tooth (牙)'
- \*kir: ☆kin [斤]~☆kinir [斤乙]~ ☆yey [ 形] 'tree, wood (木)'
- \*kir: ☆kin [斤] 'brave (驍)
- \*kir: \*kin [斤] 'mound; ruins of a city (墟)'
- \*kir: ☆kinlir [斤尸] 'letter, writing, marks, streaks (文)'
- \*ku:☆gu [仇] 'child (童~童子)'
- ☆kuər [骨] 'yellow (黃)' < AKog ☆kweru 'id.'

- \*kuər: ☆χuər [忽] ~ ☆kuər [骨] 'walled city, fort (城)' < AKog \*kuru 'id.'
- \*kuərfiiy: \*kuəriy [骨衣] 'wilderness, wasteland (荒)'
- \*kuərtsi: ☆xuərtsi [忽次] ~ ☆kuair [串] ~ ☆kutsi [古次] 'mouth (口)'
- \*kum: \*kuŋ(m) [功(木)] 'bear (熊)'
- \*kur: \*guli [仇史] 'pine (松)'
- \*kutsi: ☆gutsi [仇次] 'thick, dense; honest (敦)'
- \*ku: \*gu [仇] 'pine (松)'
- ☆kv [古] 'jade (玉)' (← OChi)
- \*kufiiy: \*kuiy [古衣] 'swan, Cygnus bewicki (鵠)'
- \*kusi: \*kusi [古斯] ~ \*kuśi [古所] 'roe-deer (獐)'
- <sup>☆</sup>kü~<sup>☆</sup>ki [去] 'poplar, willow (楊)'
- \*kür~\*kir: ☆külir~☆kilir [居尸] 'heart (心)'
- ☆məwk [木] 'to evade, escape, dodge (閃)'
- ☆mai [馬] 'arm, shoulder (臂)'
- \*makir: \*maikin [馬斤] 'a kind of tree (大楊 [lit., 'big willow'])'
- \*makri [莫離]~makari 'correct, true, right (正)'
- \*makrikey [莫離支] 'regent; lit., 'true, right (正) king (王)' < AKog \*makri(p)kar [麻立干] 'id.'
- \*mawr: ☆mawir [毛乙] 'ring, circle (圓)'
- ☆meru [滅烏] 'colt (駒)'
- ☆mey [買] 'river (川), water (水)'
- ☆mey [買] 'excellent, good (善)' < AKog \*meyŋ
- ☆meyr: ☆meylir [買尸] 'garlic (蒜)'
- \*min [仍] 'female, yin (陰)'
- \*min [仍]~[冥] 'banner, signal (旌)'
- \*minkir: \*minkin [仍斤] 'scholar tree, Sophora japonica (槐)':
- \*miŋpar: \*miŋbuar [仍伐] 'grain (穀)'
- ☆mir [密] 'three (三)'
- <sup>☆</sup>mur [勿] 'roof-ridge beam; bridge (梁)'
- \*mutsi [蕪子] 'joint, section, division, festival (節)'
- ☆nan [難] 'seven (七)'
- \*namur: ☆nəymur [乃勿] 'lead (metal) (鉛)'
- \*na : ☆na ~ ☆nay [奈] 'bamboo (竹)'
- \*na : ☆n<sup>w</sup>əy [內] ~ ☆naw [惱] 'land, earth (壤)' ~ ☆nəy [乃] 'province, prefecture (州)'
- \*na: ☆nəy [耐]~ ☆na [那] 'in, inside (內)'
- <sup>☆</sup>naγei [奈兮] 'white (白)'
- ☆nair:☆n<sup>w</sup>əir[內乙] 'sand (沙)'

- \*namey : \*n<sup>w</sup>əymey [內米] 'rough water [such as below a waterfall] (瀑池)'
- \*namey : ☆n<sup>w</sup>əymey [內米] 'long (長)'
- \*nv: \*nv [奴] ~ \*nv [弩] 'land, earth (壤)'
- ☆pa [波] 'sea (海)'
- \*pafiiy: \*paiiy [巴衣] ~ \*paiy [波衣] ~ \*paγey [波兮] 'cliff (巖), mountain (山) ~ crag (岳) ~ precipice (峴)' (← Gilyak)
- <sup>☆</sup>pai [巴] 'man (夫)'
- ☆paik [伯] 'to encounter, meet (遇~逢~迎)'
- \*par: ☆palir [波尸] 'second-growth paddy rice (桃)'
- \*piar: ☆biar~☆piar [別] 'level, flat (平)'
- \*piar: ☆biar~☆piar [別] '-fold, times; layer (重)'
- \*piar: \*biarli ~ \*piarli [別史] 'apart, separate (分)'
- ☆piriar [比烈] 'shallow (淺)'
- ☆puk [伏] 'deep (深)'
- \*pusi: ☆busv [扶蘇] ~ ☆pusi ~ ☆busi [夫斯] 'pine (松)' (← Chinese or OKor)
- \*pɨy: ☆pɨy [不] ~ ☆<sup>m</sup>bɨy [未] 'country, nation (國)' ~ ☆pɨy [非] 'commandery (郡)'
- ☆pɨy [非] 'Puyŏ (扶餘)'
- ☆pɨy [非] 'soybean (大豆)'.
- \*śa: ☆siaw [肖] 'abundant, flourishing, rich (豐)'
- ☆śamiar [沙熱] 'cool (凊)'
- \*śapu~\*śapiy: \*śaibu- [沙伏]~\*śaipiy [沙非] 'red (赤)'
- \*śayk:☆siayk [昔] 'orchid (蘭)'
- <sup>☆</sup>śayŋ [生] 'barrier, railing (闌) ~ guard, keep (守)' (perhaps the same as the following entry)
- \*śeŋ: ☆śeŋ ~ ☆śayŋ ~ ☆siaiŋ [省] ~ ☆sey [西] 'walled city, fort (城)' (← MChi 城 \*śeŋ [śiŋ ~ śaŋ] ~ ☆dźiaiŋ 'walled city, fort')
- \*śiŋți [省知] 'to transmit, narrate, follow (述)'
- \*śur: ☆śuir [首乙] 'storehouse, treasury (凉)'
- \*tan : <sup>☆</sup>tan [旦] ~ <sup>☆</sup>t<sup>w</sup>ən [頓] ~ <sup>☆</sup>t<sup>h</sup>ən [呑] 'valley (谷)'
- ☆tar [達] mountain (山)'
- <sup>☆</sup>tar [達] ~ <sup>☆</sup>tarr ~ <sup>☆</sup>tarir [達乙] 'high (高)'
- ☆tawŋ [冬] ~ ☆tɛyŋ ~ ☆təɨŋ [丁] 'mountain pass (岐)'
- ☆tawŋ [冬] 'chestnut (栗)'
- ☆tawŋ [冬] 'drum (鼓)'
- ☆tawŋ [冬] 'iron (鐵)' (← OChi dial.)
- ☆tawŋ [冬] 'to take (取)'

- ☆tawŋpi [冬比] 'to open (開)'
- \*tawr: <sup>☆</sup>tawl- [刀(臘)] 'pheasant (雉)' (← OChi)
- ☆tək [德] 'ten (十)' (← OChi)
- \*tseytsi ~ \*dzeytsi ~ \*tsitsi [濟次] 'hole, cave (孔)'
- ☆tsu [祖] 'owlet (鵂)'
- \*tśa(ŋ): <sup>☆</sup>dźaŋ [上] ~ <sup>☆</sup>tśa [車] 'chariot, cart (車)' (← MChi)
- ☆tśiəm [斬] 'root (根)~ 'tree root (木根)'
- \*tśiar: ☆tśiar [折]~ ☆tśiawlir [召尸] 'silver (銀)'
- \*tśir: ☆dźiir [助乙] 'road (道)' (← OChi)
- \*tśiri: ☆dźili [助利] 'north (北)' < \*tsir- < AKog \*ts<sup>w</sup>iar [絕] 'back, behind (後)'
- \*tśü: ☆tśü~ ☆tśu [朱] 'to shoot with a bow (射)' < AKog [東] 'id.'
- \*tśüpu : ☆tśüpu ~ ☆tśupu [主夫] 'long (長)'
- \*tv: ☆tv [都] 'road (道)' (← NMC)
- ☆v [鳥] 'cow, cattle (牛)' (← OChi?)
- ☆v[烏] 'pig(豬)'
- \*υ~\*υy~\*wəy:\*υ[烏]~\*ywi[唯]~\*γ<sup>w</sup>əɨy[淮] 'ford (津)'
- ☆υsiγam [烏斯含] 'hare, rabbit (兔)'
- ☆ü~☆i [於] 'axe (斧)'
- ☆ü~☆i [於] 'border (塞)'
- ☆ü~☆i[於] 'crosswise (橫)'
- \*ür ~ \*ir : <sup>☆</sup>üir ~ <sup>☆</sup>iir [於乙] ~ <sup>☆</sup>uyir [(未)乙] 'spring, source (原); well (泉井)'
- <sup>☆</sup>ütsi [于次] 'five (五)'
- ☆ya [也] 'nape (項)'
- \*yar: ☆yalir [也尸] ~ 'wild (狂~野)'
- ☆yatsi [也次] 'mother (母)'
- \*ya: ☆yaw [要] 'willow (楊)'

#### BIBLIOGRAPHY

#### PRIMARY SOURCES<sup>1</sup>

Ch'en, Shou (陳壽) 1959. 三國志 San kuo chih. Peking: Chung-hua shu-chü.

Chŏng, Inji (鄭麟趾) 1909. 高麗史 Koryŏ Sa. Tokyo: Kokusho Kankôkai.

Fan, Hsiang-yung (范祥雍) 1957. 古本竹書紀年輯校訂補 Ku pen Chu shu chi nien chi chiao ting pu. Peking. (Reprinted in: Yang Chia-lo (楊家駱), ed. 1967. 竹書紀年八種 Chu shu chi nien pa chung. Taipei: Shih-chieh shu-chü yin-hang.)

Fan, Yeh (范曄) 1965. 後漢書 Hou Han shu. Peking: Chung-hua shu-chü.

- Kim, Pusik (金富軾) 1943. 三國史記 Samguk Sagi. Chôsen Gakkai, ed. 三國史記 Sangoku shiki. 3rd ed., 5th printing. Tokyo: Kokusho Kankôkai. (Reprinted: Im Dong-kwun, et al., eds. 1971. Korean Folklore Texts in Chinese Characters: History and Folklore of the Three Kingdoms of Korea (Sam-guk sa-gi). Taipei: The Orient Cultural Service.
- Ling-hu, Te-fen (令狐德棻) 1971. 周書 Chou shu. Peking: Chung-hua shu-chü.
- Liu, Hsü (劉昫) 1975. 舊唐書 Chiu T'ang shu. Peking: Chung-hua shu-chü.
- Ou-yang, Hsiu (歐陽修) and Sung, Ch'i (宋祁) 1975. 新唐書 Hsin T'ang shu. Peking: Chung-hua shu-chü.
- Pan, Ku (班固) 1962. 漢書 Han Shu. Peking: Chung-hua shu-chü.
- Ssu-ma, Kuang (司馬光) 1956. 資治通鑑 Tzu chih t'ung chien. Peking: Ku chi ch'u-pan she.
- Tu, Yu (杜佑) 1988. 通典 T'ung tien. Peking: Chung-hua shu-chü.
- Wang, Ch'ung (王充) 1976. 論衡 Lun heng. Yamada Katsumi (山田勝美), ed. & trans., 論衡, 上. Ronkô, jô. (= Shinshaku Kanbun taikei 68). Tokyo: Meiji shoin.
- Wei, Cheng (魏徵) 1973. 隋書 Sui shu. Peking: Chung-hua shu-chü.
- Wei, Shou (魏收) 1974. 魏書 Wei shu. Peking: Chung-hua shu-chü.
- Yao, Ssu-lien (姚思廉) 1973. 梁書 Liang shu. Peking: Chung-hua shu-chü.

#### SECONDARY STUDIES

Adams, Douglas Q. 1999. A Dictionary of Tokharian B. Amsterdam: Rodopi.

- Aikhenvald, Alexandra Y. 2000. Classifiers: A Typology of Noun Classification Devices. Oxford: Oxford University Press.
- Barber, E. J. W. 1998. Bronze Age Cloth and Clothing of the Tarim Basin: The Kroran (Loulan) and Qumul (Hami) Evidence. *In*: Mair 1998: 647-655.
- Barnes, Gina L. 1993. China, Korea, and Japan: The Rise of Civilization in East Asia. London: Thames and Hudson.

<sup>&</sup>lt;sup>1</sup> All of the texts cited here, with the possible exception of the *Lun Heng* edition, have been photographically reprinted in various configurations many times, in many different places, generally without any reference to the original printing. I give only the original publication information, insofar as it has been discoverable by me.

Baxter, William H. 1992. A Handbook of Old Chinese Phonology. Berlin: Mouton de Gruyter.

- Beauchemin, Normand and Pierre Martel, Michel Théoret 1983. Vocabulaire du Québécois parlé en Estrie: fréquence, dispersion, usage. n.p.: Université de Sherbrooke, Recherches sociolinguistiques dans la région de l'Estrie, Document de travail No. 20.
- Beck, Heinrich 1993. Wortschatz der altisländischen Grágás (Konungsbók). Abhandlungen der Akademie der Wissenschaften in Göttingen, philologisch-historische Klasse, dritte folge, Nr. 205. Göttingen: Vandenhoeck und Ruprecht.
- Beckwith, Christopher I. 1984. Aspects of the Early History of the Central Asian Guard Corps in Islam. *Archivum Eurasiae Medii Aevi*, 4: 29-43.
- 1996. The Morphological Argument for the Existence of Sino-Tibetan. Pan-Asiatic Linguistics: Proceedings of the Fourth International Symposium on Languages and Linguistics, January 8-10, 1996, Vol. III. Bangkok: Mahidol University at Salaya, 812-826.
- 1999. Review of Downing (1996). Anthropological Linguistics 41.1: 157-161.
- 2000a. Toward Common Japanese-Koguryoic: A Reexamination of Old Koguryo Onomastic Materials. *In*: J.J. Nakayama and Charles Quinn, Jr., ed., *Japanese/Korean Linguistics*, Vol. 9. Stanford: CSLI, 3-16.
- 2000b. The Japanese-Koguryoic Family of Languages and the Chinese Mainland. Paper presented at the Association for Asian Studies, San Diego, March 9-12, 2000.
- ----- ed., 2002. Medieval Tibeto-Burman Languages. Leiden: E.J. Brill.
- 2002a. Two Pyu-Tibetan Isoglosses. In: Beckwith 2002: 27-38.
- 2002b. The Sino-Tibetan problem. In: Beckwith 2002: 113-157.
- 2002c. A Glossary of Pyu. In: Beckwith 2002: 159-161.
- 2002d. On Korean and Tungusic Elements in the Koguryo Language. Transactions of the International Conference of Eastern Studies, XLVII: 82-98.
- 2002e. Review of Sagart (1999). Anthropological Linguistics 44.2: 207-215.
- 2003. Ancient Koguryo, Old Koguryo, and the Relationship of Japanese to Korean. Paper presented at the 13th Japanese/Korean Linguistics Conference, East Lansing, August 1-3, 2003.

— Forthcoming. Mind Partitions: Classifiers, Gender, and Social Disorder.

- Benedict, Paul K. 1939. Semantic Differentiation in Indo-Chinese. HJAS 4: 213-229.
  - 1972. Sino-Tibetan: A Conspectus. Cambridge: Cambridge University Press.
- 1994. Japanese/Austro-Tai Clan, Family and Gods: A Cluster Analysis. In: Kitamura 1994: 909-914.
- Bentley, John R. 1999. The Verb toru in Old Japanese. Journal of East Asian Linguistics 8: 131-146.
- Bird, Norman 1993. The Roots and Non-Roots of Indo-European: A Lexicostatistical Survey. Wiesbaden: Harrassowitz.
- Bradley, David 1994. Tibeto-Burman. *In*: Christopher Moseley and R.E. Asher, eds., *Atlas of the World's Languages*. London: Routledge, 168-182.
  - 2002. The Subgrouping of Tibeto-Burman. *In*: Beckwith 2002: 73-112.
- Brown, Gordon D.A. 1984. A Frequency Count of 190,000 Words in the London-Lund Corpus of English Conversation. Behavior Research Methods, Instruments, & Computers 16: 502-532.

<sup>— 1994.</sup> Some Phonological Correspondences between Chinese and Tibeto-Burman. In: Kitamura 1994: 25-35.

- Buzo, Adrian 1995. Transcription Characters on Koguryö Inscriptions. In: Sogok Nam P'ung-hyön Sönsaeng Hoegap Kinyöm Nonch'ong Kanhaeng Wiwönhoe, ed., Sogok Nam P'ung-hyön Sönsaeng Hoegap Kinyöm Nonch'ong. Seoul: Taehaksa, 865-894.
- Campbell, Lyle 1999. *Historical Linguistics: An Introduction*. Cambridge: The MIT Press.
- Carrol, John B., et al. 1971. *The American Heritage Word Frequency Book*. Boston: Houghton Mifflin.
- Carroll, Lewis, ed. Martin Gardiner 1960. *The Annotated Alice: Alice's Adventures in Wonderland & Through the Looking Glass.* New York: C.N. Potter.
- Ch'oe, Namhŭi [= Choi Nam-hee] (崔南熙) 1999. Kodae kugŏ p'yogi Hanjaŭm yŏn'gu. Seoul: Pagijŏng.
- 2000. Koguryöö p'yogi Hanjaŭm ŭi hyöngsöng kich'ùnggwa kŭ öhwi yön'gu. Hangeul 249: 87-137.
- Clark, Larry V. 1977. Mongol Elements in Old Turkic? Journal de la Société Finno-Ougrienne 75: 110-168.
- Clauson, Sir Gerard 1969. A Lexicostatistical Appraisal of the Altaic Theory. *Central Asiatic Journal* 13: 1-23.
  - 1972. *An Etymological Dictionary of Pre-Thirteenth Century Turkish*. Oxford: Clarendon Press.
- Courant, Maurice 1898. Stèle chinoise du royaume de Ko kou rye. *Journal Asiatique* 210-238.
- De Rachewiltz, Igor 1982. The Secret History of the Mongols: Chapter Ten. *Papers on Far Eastern History* 26: 39-84.
- 1984. The Secret History of the Mongols: Chapter Eleven. *Papers on Far Eastern History* 30: 81-160.
- Di Cosmo, Nicola 2002. Ancient China and Its Enemies: The Rise of Nomadic Power in East Asian History. Cambridge: Cambridge University Press.
- Dixon, R.M.W. 1997. *The Rise and Fall of Languages*. Cambridge: Cambridge University Press.
- Doerfer, Gerhard 1963. Türkische und mongolische Elemente im Neupersischen, unter besonderer Berücksichtigung älterer neupersischer Geschichtsquellen, vor allem der Mongolen- und Timuridenzeit. Wiesbaden: F. Steiner.
- Downing, Pamela 1996. Numeral Classifier Systems: The Case of Japanese. Amsterdam: John Benjamins.
- Drews, Robert 1988. The Coming of the Greeks: Indo-European Conquests in the Aegean and the Near East. Princeton: Princeton University Press.
- Driem, George van 1997. Sino-Bodic. Bulletin of the School of Oriental and African Studies, 455-488.
  - 1998. Neolithic Correlates of Ancient Tibeto-Burman Migrations. *In*: Roger Blench and Matthew Spriggs, ed., *Archaeology and Language II: Correlating Archaeological and Linguistic Hypotheses*. London: Routledge, 67-114.
- Dubs, Homer H. 1944. *The History of the Former Han Dynasty*, Vol. II. Baltimore: Waverly Press.
- Egami, Namio 1964. The Formation of the People and the Origin of the State in Japan. Memoirs of the Research Department of the Toyo Bunko 23: 35-70.
- Franke, Herbert 1990. The Forest Peoples of Manchuria: Kitans and Jurchens. In: Denis Sinor, ed., The Cambridge History of Early Inner Asia. Cambridge: Cambridge University Press, 400-423.
- Gardiner, K.J.H. 1969. The Early History of Korea. Canberra: ANU Press.

- 1969b. The Hou-Han-Shu as a Source for the Early Expansion of Koguryo. Monumenta Serica 28: 148-187.
- 1982. The Legends of Koguryŏ (I): Samguk sagi: Annals of Koguryŏ. Korea Journal 22: 60-69.
- Gharib, B. 1995. *Farhang-e Sogháî. Sogdian Dictionary (Sogdian-Persian-English)*. Tehran: Farhangan Publications.
- Good, Irene 1998. Bronze Age Cloth and Clothing of the Tarim Basin: The Charchan Evidence. *In*: Mair 1998: 656-668.
- Halpern, Jack 2001. Lexical Frequency Statistics in Japanese. The CJK Dictionary Institute (= http://www.cjk.org).
- Hausser, Roland 1998. Häufigkeitsverteilung deutscher Morpheme. LDV-Forum: Zeitschrift für Computerlinguistik und Sprachtechnologie/Journal for Computational Linguistics and Language Technology 15.1: 6-26. (= http:// www.gldv.org/LDV-Forum/LDV-ForumInh1.1998.pdf)
- Hayes, Bruce 1989. Compensatory Lengthening in Moraic Phonology. *Linguistic Inquiry* 20: 253-306.
- Hudson, Mark J. 1999. Ruins of Identity: Ethnogenesis in the Japanese Islands. Honolulu: University of Hawai'i Press.
- Huang, Shudong and Xuejun Bian, Grace Wu, Cynthia McLemore 1996-1997. CALLHOME Mandarin Chinese Lexicon. [= A Frequency Dictionary]. (= http:// www.ldc.upenn.edu/ Projects/Chinese/segmenter/Mandarin.fre
- Imamura, Keiji 1996. Prehistoric Japan: New Perspectives on Insular East Asia. Honolulu: University of Hawai'i Press.
- Itabashi, Yoshizô (板橋義三) 1996. Kôkuri, Shiragi, Kudara no kodai sangoku ni okeru '尸' no onka to sono gengoteki sôi. *Gengo kagaku* 31: 15-38.
- 1999. Konsei gengo to Nihongo no keisei katei. Hikaku shakai bunka 5: 41-55.
- 2000a. Kodai Nihongo to Ôsutoroneshia shogengo ni okeru ichikeitai no dôgensei (2) [= The Morphological Cognateship between Old Japanese and Austronesian]. *Gengo bunka ronkyû* 11: 165-190.
- 2000b. Kodai Nihongo to Ôsutoroneshia shogengo ni okeru ichikeitai no dôgensei (3) [= The Morphological Cognateship between Old Japanese and Austronesian]. *Gengo kagaku* 35: 47-63.
- 2001a. Arutai shogengo (fukumu Chôsengo) to Nihongo. Gengo kenkyû 120: 106-116.
- 2001b. Kodai Nihongo to Ôsutoroneshia shogengo ni okeru ichikeitai no dôgensei (1) [= The Morphological Cognateship between Old Japanese and Austronesian (1)]. *Hikaku shakai bunka* 7: 57-68.
- Janhunen, Juha 1992. Das Japanische in vergleichender Sicht. Journal de la Société Finno-Ougrienne 84: 145-161.
- 1996. Manchuria: An Ethnic History [= Mémoires de la Société Finno-Ougrienne 222]. Helsinki: The Finno-Ugrian Society.
- 1997. Problems of Primary Root Structure in Pre-Proto-Japanic. International Journal of Central Asian Studies 2: 14-30.
- 1998. The Horse in East Asia: Reviewing the Linguistic Evidence. *In*: Mair 1998: 415-430.
- Judson, A. 1866. *English-Burmese Dictionary*. Rangoon: American Baptist Mission Press (Reprinted: New Delhi: Publications India, 1992).
  - 1893. Judson's Burmese-English Dictionary, Revised and Enlarged by Robert C. Stevenson, Burma Commission. Rangoon: The Superintendent, Government Printing Burma (Reprinted: New Delhi: Asian Educational Services, 1993).

- Karlgren, Bernhard 1957. *Grammata Serica recensa*. Stockholm: Museum of Far Eastern Antiquities.
- Kawachi, Yoshihiro (河内良弘) and Kiyose, Gisaburô Norikura (清瀨義三郎則府) 2002. Manshûgo bungo nyûmon. Kyôto: Kyôto Daigaku Gakujutsu Shuppansha.
- Kepping, Ksenia B. and Christopher I. Beckwith 2002. A Preliminary Glossary of Tangut from Tibetan Transcriptions. *In*: Beckwith 2002: 185-187.
- Kilgarriff, Adam 1999. BNC Database and Word Frequency Lists. http://www.itri. brighton.ac.uk/~Adam.Kilgarriff/bnc-readme.html
- Kim, Yǒngbae (金英培) 1984. P'yǒngan pangŏn yŏn'gu. Seoul: Tongguk Taehakkyo Ch'ulp'anbu.
- Kim, Bang-han (金芳漢) 1981. The Relationship between the Korean and Japanese Languages. *Hangeul* 173-4: 657-667.
  - 1983. Han'gugŏ ŭi kye'tong. Seoul: Minŭmsa.
- 1985. Kankokugo no keitô. Tokyo: San'ichi Shobô (Translation of Kim 1983).
- Kim, Murim (金武林) 1992. Koguryŏ Hanjaŭm koch'al (I). Hongik Ŏmun 10 · 11: 61-76.
  - 1999. 'Samguk Sagi' poksu ŭmdok chimyŏng charyo ŭi ŭmunsajŏk kwaje. Chimyŏnghak 2: 39-59.
- Kitamura, Hajime, Tatsuo Nishida, and Yasuhiko Nagano, eds., 1994. *Current Issues in Sino-Tibetan Linguistics*. Osaka: The Organizing Committee, The 26th International Conference on Sino-Tibetan Languages and Linguistics.
- Kiyose, Gisaburô Norikura (清瀬義三郎則府) 1977. A Study of the Jurchen Language and Script: Reconstruction and Decipherment. Kyoto: Hôritsu bunkasha.
- 1986. Tunguz and Other Elements in the Languages of the Three Kingdoms. *Korean Linguistics* 4. 17-26.
- 1991. Kaiyô gogen no sakusô to gengo keitôron: —Arutai shogo, ko chôsen sangokugo, Nihongo. Gogen tankyû 3: 1-14.
- 1997. Yamatökoku no gengo o ronji gen-Nippongo no kochi ni oyobu. Gogen tankyû 5: 1-43.
- 1998. Puyŏ-Koguryŏ Languages: The Fourth Altaic Stock. Paper presented at the 41st PIAC Meeting, Helsinki.
- 2000. Genealogical Relationship of Jurchen Dialects and Literary Manchu. *Central Asiatic Journal* 44: 177-189.
- 2001a. Shintai goi <mimi> <hoho> nado wa jôgo kiken de wa? Gogen kenkyû, 20 shûnen kinen tokubetsugo 110-111.
- 2001b. Wajin to wago no torai. Himeji Dokkyô Daigaku gaigokugogakubu kiyô 14: 133-148.
- 2002. The Relationship among the Languages of the Korean Three Kingdoms, Proto-Japanese, and Tungusic, Based on Historical Sources. Paper presented at the 47th International Conference of Eastern Studies, Tokyo. *Transactions of the International Conference of Eastern Studies*, XLVII.
- Kodama, Nozomi (児玉望) 2002. Ôno Susumu 'Tamirugo to Nihongo' ni taisuru komento. *Gengo kenkyû* 122-130.
- Kôno, Rokurô (河野六郎) 1957. Kojiki ni okeru kanji shiyô. In: Kojiki taisei. Reprinted in Kôno Rokurô chosakushû, 1.
  - 1987. Kudarago no nijûgosei. In: Nakagiri sensei no kiju o kinen suru kai, ed., Chôsen no kobunka ronsan: Nakagiri sensei no kiju kinen ronshû. Tokyo: Kokusho Kankôkai, 81-94. (English translation, 1987: The Bilingualism of the Paekche Language. Memoirs of the Research Department of the Toyo Bunko 45: 75-86.)
- 1993. Sangokushi ni kisareta higashi Ajia no gengo oyobi minzoku ni kansuru kisoteki kenkyû. Tokyo: Tôyô Bunko.

#### BIBLIOGRAPHY

- Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Lau, D.C. 1992b. A Concordance to the Liji. Taipei: Taiwan shang-wu yin-shu-kuan. — et al. 1992a. A Concordance to the Huainanzi. Taipei: Taiwan shang-wu yin-shukuan
- Lee, Iksop and S. Robert Ramsey 2000. *The Korean Language*. Albany: State University of New York Press.
- Lee, Ki-moon (李基文) 1961. Kugŏsa kaesŏl. Seoul: Minjungsŏgwan.
- 1963. A Genetic View on Japanese. Chôsen Gakuhô 27: 94-105.
- ----- 1964. Materials of the Koguryo Language. Bulletin of the Korean Research Center: Journal of Social Sciences and Humanities 20: 11-20.
- 1967. Han'gugö hyöngsöngsa. In: Han'guk Munhwasa Taegye V: Önö Munhaksa. Seoul: Koryö Taehakkyo Minjok Munhwa Yön'guso, pp. 21-112.
  - 1983. Kankokugo no keisei. Tokyo: Seikô shobô (Translation of Lee 1967).
- Lewin, Bruno 1973. Japanese and the Language of Koguryo. Papers of the C.I.C. Far Eastern Language Institute 4: 19-33.
  - 1976. Japanese and Korean: The Problems and History of a Linguistic Comparison. Journal of Japanese Studies 2.2: 389-412.
- Li, Fang-kuei 1977. *A Handbook of Comparative Tai* (= Oceanic Linguistics Special Publication No. 15). Honolulu: University of Hawaii Press.
- Luo, Chia-li. 1999. Coastal Culture and Religion in Early China. Ph.D. dissertation, Indiana University.
- Mabuchi, Kazuo (馬渕和夫) 1999a. Kodai Nihongo no sugata. Tokyo: Musashino Shoin.
  - 1999b. Nihongo no keitô to Kankokugo. Nihongo Nihon bungaku kenkyû 35 (separatum): 1-13.
- Mabuchi, Kazuo (馬渕和夫) and Yi, In-yeng (李寅泳), Ôhashi, Yasuko (大橋康子) 1999. 'Sangoku shiki' kisai no Kôkuri chimei yori mita kodai Kôkurigo no kôsatsu. *In*: Mabuchi Kazuo 1999a. *Kodai Nihongo no sugata*. Tokyo: Musashino Shoin, 142-199 (613-556).
- Maejima, Shinji 1977. Some Central Asian Words of the Time of the An Lu-shan and Shih Ssu-ming Rebellion. *Memoirs of the Toyo Bunko* 35: 111-122.
- Mair, Victor H., ed. 1998. *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia*. Philadelphia: Institute for the Study of Man.
- Mallory, J.P. 1989. In Search of the Indo-Europeans: Language, Archaeology and Myth. London: Thames & Hudson.
- Martin, Samuel E. 1966. Lexical Evidence Relating Korean to Japanese. *Language* 42: 185-251.
- —— 1987. *The Japanese Language Through Time*. New Haven: Yale University Press.
  - 1991. Recent Research on the Relationships of Japanese and Korean. In: Sydney M. Lamb and E. Douglas Mitchell, eds., Sprung from Some Common Source: Investigations into the Prehistory of Languages. Stanford: Stanford University Press, 269-292.
- 1996. Consonant Lenition in Korean and the Macro-Altaic Question. Honolulu: University of Hawai'i Center for Korean Studies.
- Matisoff, James A. 1979. Problems and Progress in Lolo-Burmese: Quo Vadimus? LTBA 4.2: 11-43.
- 1994. Regularity and Variation in Sino-Tibetan. In: Kitamura 1994: 36-58.
- 1997. Sino-Tibetan Numeral Systems: Prefixes, Protoforms, and Problems. Canberra: Pacific Linguistics.

- Matsumoto, Katsumi (松本克已) 2001. Nihongo no keitô: kaiko to tenbô. Gengo kenkyû 120: 89-96.
- Meacham, William 1995. "Deep-Level Reconstructions" of Linguistic Prehistory and the Return to the Nuclear Area. *In*: Wang 1995: 299-324.
- Meillet, Antoine 1949. Introduction à l'étude comparative des langues indo-européennes. Paris: Hachette.
  - 1984. La méthode comparative en linguistique historique. Paris: Champion.
- Miller, Roy A. 1971. *Japanese and the Other Altaic Languages*. Chicago: University of Chicago Press.
  - 1979. Old Japanese and the Koguryö Fragments: A Re-Survey. In: George Bedell, Eichi Kobayashi, and Masatake Muraki, eds. Explorations in Linguistics: Papers in Honor of Kazuko Inoue. Tokyo: Kenkyusha, 348-368.
- 1980. Origins of the Japanese Language. Seattle: University of Washington Press.
- 1988. The Sino-Tibetan Hypothesis. Bulletin of the Institute of History and Philology, Academia Sinica 59.2: 509-540.
- 1989. Prolegomenon to a History of Korean. *Korean Studies* 13: 92-112.
- Miyake, Marc H. 2003. *Old Japanese: A Phonetic Reconstruction*. London: Routledge Curzon.
- Miyamoto, Kazuo (宮本一夫) 2002. Chôsen hantô ni okeru Ryôneishiki dôken no tenkai. *In*: Nishitani Tadashi, ed., *Kan hantô kôkogaku ronsô*. Tokyo: Suzusawa Shoten, 177-202.
- Miyanaga, Masamori (宮良當壯) 1981. Yaeyama goi, otsu hen (= Miyanaga Masamori zenshû, 8). Tokyo: Daiichi shobô.
- Miyazaki, Michizaburô (宮崎道三郎) 1907. Nikkan ryôgokugo no hikaku kenkyû. Shigaku zasshi 18.11.
- Mori, Kôichi (森浩一) 1985. Nippon no kodai 1: Wajin no tôjô. Tokyo: Chûôkôronsha.
- Mous, Maarten 1996. Was There Ever a Southern Cushitic Language (Pre-) Ma'a? In: Catherine Griefenow-Mewis and Rainer M. Voigt, eds., Cushitic and Omotic Languages: Proceedings of the Third International Symposium, Berlin, March 17-19, 1994. Köln: Rüdiger Köppe, 201-211.
- Murayama, Shichirô (村山七郎) 1962. Kôkurigo shiryô oyobi jakkan no Nihongo-Kôkurigo on'in taiô. *Gengo kenkyû* 42: 66-72.
- 1963. Kôkurigo to Chôsengo to no kankei ni kansuru kôsatsu. Chôsen Gakuhô 26: 7, 25-34
- 1966. Gengogakuteki ni mita Nihon bunka no kigen. (Der Ursprung der japanischen Kultur vom sprachwissenschaftlichen Standpunkt aus betrachtet). *Minzokugaku kenkyû* 30/4: 301-310.
- 1976. The Malayo-Polynesian Component in the Japanese Language. Journal of Japanese Studies 2.2: 413-436.
- 1978. Nihongo keitô no kenkyû. Tokyo: Taishûkan.
- 1985. Kanshûsha maegaki. In: Kim Bang-han 1985, I-IV.
- Naitô, Konan (内藤湖南) 1907. Nihon Manshû kôtsû ryakusetsu, jô. Kozan kôenshû.
- Nakahashi, Takahiro (中橋孝博) 1993. Temporal Craniometric Changes from the Jomon to the Modern Period in Western Japan. *American Journal of Physical Anthropology* 90: 409-425.
- Nakahashi, Takahiro (中橋孝博) and Iizuka, Masaru (飯塚勝) 1998. Hokubu Kyûshû no Jômon — Yayoi ikôki ni kansuru jinruigakuteki kôsatsu. *Jinruigaku zasshi* (= *Anthropological Science*) 106.1: 31-53.

- Nihon kokugo daijiten dainihan henshû iinkai, Shôgakkan kokugo jiten henshûbu (日本国語大辞典第二版編集委員会小学館国語辞典編集部) 2002. Nihon kokugo daijiten, 2nd. ed. Tokyo: Shôgakkan.
- Nishida, Tatsuô (西田龍雄) 1966. Bisu-go no kenkyû (= A Preliminary Study on the Bisu Language — A Language of Northern Thailand Recently Discovered by Us —). *Tônan Azia Kenkyû* 4.1: 65-87.
- 1966. Bisu-go no keitô, I. *Tônan Azia Kenkyû* 4.3: 440-466.
- —— 1966. Bisu-go no keitô, II. *Tônan Azia Kenkyû* 4.5: 854-870.
- 1978. Chibetto, Birumago to Nihongo. In: Iwanami-kôza, Nihongo 12. Nihongo no keitô to rekishi. Tokyo: Iwanami, 227-300.
- 1980. Chibetto, Birumago to Nihongo. In: Ôno Susumu, ed. Nihongo no keitô. Tokyo: Shibundô, 110-136.
- Norman, Jerry 1978. A Concise Manchu-English Lexicon. Seattle: University of Washington Press.
- Okell, John 1969. A Reference Grammar of Colloquial Burmese. London: Oxford University Press.
- Omodaka, Hisataka (澤瀉久孝), et al. (= Jôdaigo jiten henshû iinkai [上代語辞典 編修委員会]) 1967. Jidai betsu kokugo daijiten, jôdaihen. Tokyo: Sanseido.
- Ôno, Susumu (大野晋) 1957. Nihongo no kigen. Tokyo: Iwanami Shoten.
- 2001. Tamirugo to Nihongo. Gengo kenkyû 120: 117-130.
- Packard, Jerome L. 1998. Introduction. *In*: Jerome L. Packard, ed., *New Approaches to Chinese Word-Formation: Morphology, Phonology and the Lexicon in Modern and Ancient Chinese*. Berlin: Mouton de Gruyter.
- Pak, Chŏngmun (朴正文) 1984. Chosŏnŏsa yŏn'gu ronmunjip. [Pyongyang]: Kyoyuktosŏ ch'ulp'ansa.
- Park, Pyŏng-ch'ae (朴炳采) 1968. Kodae kugŏ ŭi chimyŏngŏ hwigo Samguk Sagi chiriji ŭi poksu chimyŏngŭl chungsim ŭro —. *Paeksan Hakpo* 5 (Reprinted in: Park 1990: 152-231).

- Pokorny, Julius 1959. Indogermanisches etymologisches Wörterbuch. I. Band. Bern: Francke Verlag.
- Poppe, N. 1977. The Altaic Theory. In: Lee Ki-moon, ed., Kugŏhak nonmunsan. Seoul: Minjungsŏgwan 210-270.
- Popper, Karl 1968. *Conjectures and Refutations: The Growth of Scientific Knowledge*. New York: Harper & Row.
- Pulleyblank, Edwin G. 1962. The Consonantal System of Old Chinese. Asia Major, 9: 58-144, 206-265.
- 1983. The Chinese and Their Neighbors in Prehistoric and Early Historic Times. In: David N. Keightley, ed., The Origins of Chinese Civilization. Berkeley: University of California Press, 411-466.
- 1984. Middle Chinese: A Study in Historical Phonology. Vancouver: University of British Columbia Press.
- 1991. Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese, and Early Mandarin. Vancouver: UBC Press.
- 1995. The Historical and Prehistorical Relationships of Chinese. In: Wang 1995, 145-194.
- —— 1996a. Zou 鄒 and Lu 魯 and the Sinification of Shandong. *In*: P.J. Ivanhoe, ed., *Chinese Language, Thought, and Culture*. Chicago: Open Court, 39-57.
- 1996b. Chinese and Indo-Europeans. Journal of the Royal Asiatic Society 9-39.

<sup>— 1990.</sup> Kodae kugöhak yön'gu. Seoul: Koryö Taehakkyo Minjok Munhwa Yön'guso.

— 1996c. Early Contacts between Indo-Europeans and Chinese. International Review of Chinese Linguistics 1.1: 1-25.

- Purnelle, Gérald 1988. *Cato, De agricultura. Fragmenta omnia servata. Index verborum, liste de fréquence, relevés grammaticaux.* Liege: Centre informatique de philosophie et lettres.
- Ramer, Alexis Manaster 1995. Summary: Borrowing of Body Part Terms. *Linguist List* 6.915 <a href="http://linguistlist.org/issues/6/6-915.html#1">http://linguistlist.org/issues/6/6-915.html#1</a>.
- Räsänen, M. 1949. *Materialen zur lautgeschichte der türkischen Sprachen*. Helsinki: Societas Orientalis Fennica.
- Róna-Tas, András 1970. Historical Linguistics, Linguistic Typology, Linguistic Relationship. In: L. Dezső and P. Hajdú, eds., Theoretical Problems of Typology and the Northern Eurasian Languages. Amsterdam: B.R. Grüner, 145-149.
- 1971. On the Chuvash Guttural Stops in the Final Position. In: L. Ligeti, ed., Studia Turcica. Budapest: Akadémiai kiadó, 389-399.
- Rozycki, William 1994. *Mongol Elements in Manchu*. Bloomington: Indiana University, Research Institute for Inner Asian Studies.
- 2001. When Did the Japanese Language Arrive in the Archipelago? Paper given at the International Research Center for Japanese Studies, Kyoto, November 4, 2001 (to appear in: Alexander Vovin and Toshiki Osada, eds., *Perspectives on the Origins of the Japanese Language* [= *Nihongo keitôron no genzai*]. Kyoto: International Research Center for Japanese Studies).
- 2002. Two Japanese-Manchu Lexical Correspondences. Paper presented at the 47th International Conference of Eastern Studies. *Abstracts of Papers*, 17.
- Ryu, Ryöl (柳烈) 1990. Chosŏnmal ryöksa 1. [Pyongyang]: Sahoe kwahak ch'ulp'ansa.
- Ryu, Ryöl (柳烈) and Hong Kimun 1983. Senara sigi ŭi ridue kwanhan yŏn'gu saram, pyŏsŭl, kojang irŭm ŭi p'yogirŭl t'onghayŏ . [Pyongyang]: Kwahak, paekkwasajŏn ch'ulp'ansa.
- Sagart, Laurent 1995. Some Remarks on the Ancestry of Chinese. In: Wang 1995, 195-223.
  - 1999. The Roots of Old Chinese. Amsterdam: John Benjamins.
- Sakakura, Atsuyoshi. 1993. Nihongo hyôgen no nagare. Tokyo: Iwanami Shoin.
- Sakiyama, Osamu (崎山理) 2001. Ôsutoroneshia gozoku to Nihongo. Gengo Kenkyû 120: 97-105.
- Schamiloglu, Uli 1984. The Qaraçı Beys of the Later Golden Horde: Notes on the Organization of the Mongol World Empire. *Archivum Eurasiae Medii Aevi* 4: 283-297.
- Schuessler, Axel 1987. A Dictionary of Early Zhou Chinese. Honolulu: University of Hawaii Press.
- Sharadzenidze, T. 1970. Language Typology, Synchrony and Diachrony. In: L. Dezső and P. Hajdú, eds., Theoretical Problems of Typology and the Northern Eurasian Languages. Amsterdam: B.R. Grüner, 35-43.
- Sharoff, Serge 2002. Frequency List for Russian. http://www.artint.ru/projects/frqlist/ frqllist-en.asp.
- Shaughnessy, Edward L. 1988. Historical Perspectives on the Introduction of the Chariot into China. *HJAS* 48.1: 189-237.
- Shibatani, Masayoshi 1990. The Languages of Japan. Cambridge: Cambridge University Press.
- Shinmura, Izuru (新村出) 1916. Kokugo oyobi Chôsengo no sûshi ni tsuite. Geibun 7: 2-4.

- Shiratori, Kurakichi (白鳥庫吉) 1970. Shiratori Kurakichi zenshû, dai san kan: Chôsenshi kenkyû. Tokyo: Iwanami Shoten.
- Shôgaito, Masahiro (庄垣内正弘) 2002. Itabashi Yoshizô 'Arutai shogengo (fukumu Chôsengo) to Nihongo' ni taisuru komento. *Gengo kenkyû* 121: 112-121.
- Sin, Yong-t'ae (辛容泰) 1988. Wŏnsi Han-Irŏ ŭi yŏn'gu. Seoul: Tongguk Taehakkyo Ch'ulp'anbu.
- Sinor, Denis 1998. The Myth of Languages and the Language of Myth. *In*: Mair 1998, 729-745.
- 1999. Some Thoughts on the Nostratic Theory and its Historical Implications. In: Colin Renfrew and Daniel Nettle, ed., Nostratic: Examining a Linguistic Macrofamily. Cambridge: The McDonald Institute for Archaeological Research, 387-400.
- Sohn, Ho-min 1999. The Korean Language. Cambridge: Cambridge University Press.
- Song Kijung (宋基中) 1999. Kodae kugŏ yŏn'gu ŭi saeroun pangbŏp. Han'guk munhwa 24.12: 1-34.
- Song, Min (宋敏), trans. Hiroömi, Kanno (菅野裕臣) and Noma, Hideki (野間秀樹), Hamanoue, Miyuki (浜之上幸), Itô, Hideto (伊藤秀人) 1999. Kankokugo to Nihongo no aida. Korean and Japanese in Comparative Perspective. Tokyo: Sôfûkan.
- Song, Sun-hee 1974. The Koguryo Foundation Myth: An Integrated Analysis. *Asian Folklore Studies* 33.2: 37-92.
- Starostin, Sergei A. 1989. *Rekonstrukciya drevnekitayskoy fonologičeskoy sistemi*. Moscow: Nauka.
- 1991. Altayskaya problema i proisxoždenie yaponskogo yazika. Moscow: Nauka.
- Szczesniak, Boleslaw 1951. The Kôtaiô Monument. Monumenta Nipponica 7: 242-268.
- Takata, Tokio (高田時雄) 1988. Tonkô shiryô ni yoru chûgokugoshi no kenkyû [= A Historical Study of the Chinese Language Based on Dunhuang Materials]. Tokyo: Sôbunsha.
- Thomason, Sarah Grey and Terrence Kaufman 1988. Language Contact, Creolization, and Genetic Linguistics. Berkeley: University of California Press.
- 1997. On Reconstructing Past Contact Situations. In: Jane H. Hill, P.J. Mistry, and Lyle Campbell, eds., The Life of Language: Papers in Linguistics in Honor of William Bright. Berlin: Mouton de Gruyter, 153-168.
- Toh, Su-hee [=To Suhŭi] (都守熙) 1999. Han'guk chimyŏng yŏn'gu. Seoul: Ihŭi Munhwasa.
- 1987. Paekcheŏ yŏn'gu, I. Seoul: Paekche Munhwa Kaebal Yŏn'guwŏn.
- 1989. Paekcheŏ yŏn'gu, II. Seoul: Paekche Munhwa Kaebal Yŏn'guwŏn.
- 1994. Paekcheŏ yŏn'gu, III. Seoul: Paekche Munhwa Kaebal Yŏn'guwŏn.
- Tollenaere, Felicien de and Randall L. Jones 1976. Word-Indices and Word-Lists to the Gothic Bible and Minor Fragments. Leiden: E.J. Brill.
- Tsuchida, Shigeru (土田滋) 2002. Sakiyama Osamu 'Ôsutoroneshia gozoku to Nihongo' ni taisuru komento. *Gengo Kenkyû* 121: 107-111.
- Tsukamoto, Isao (塚本勲) 1993. Kôkuri, Shiragi, Kudarago no sûshi to Nihongo. In: Hanihara, Kazurô (埴原和郎), ed. Nihonjin to Nihon bunka no keisei. Tokyo: Asakura Shoten, 87-108.
- Unger, J. Marshall 1975. Studies in Early Japanese Morphophonemics. Ph.D. Dissertation, Yale University.

- 1990. Japanese and What Other Altaic Languages? In: Philip Baldi, ed., Linguistic Change and Reconstruction Methodology. Berlin: Mouton de Gruyter, 547-561.
- 2001. Layers of Words and Volcanic Ash in Japan and Korea. Journal of Japanese Studies, 27.1: 81-111.
- Vovin, A. 1997. The Comparative Method and Ventures beyond Sino-Tibetan. *Journal of Chinese Linguistics* 25.2: 308-336.
  - 1999. Altaic, So Far. Migracijske teme 15.1-2: 155-213.
- Wang, William S.Y., ed. 1995. Languages and Dialects of China. N.p.: Journal of Chinese Linguistics Monograph Series, No. 8.
- Watkins, Calvert 2000. *The American Heritage Dictionary of Indo-European Roots*. 2nd Edition. Boston: Houghton Mifflin.
- 1985. *The American Heritage Dictionary of Indo-European Roots*. Boston: Houghton Mifflin.
- Whitman, John 1990. A Rule of Medial \*-r-loss in Pre-Old Japanese. In: Philip Baldi, ed., Linguistic Change and Reconstruction Methodology. Berlin: Mouton de Gruyter, 511-545.
- Wittfogel, Karl A. and Fêng Chia-shêng 1949. *History of Chinese Society: Liao (907-1125)*. Philadelphia: The American Philosophical Society.
- Yakhontov, S.E. 1965. Drevnekitayskiy yazik. Moscow: Nauka.
- Yi, Hyönhŭi (李賢熙) 1996. Kugŏhaksa yŏn'gu 50 nyŏn (1945-1995). In: Pogo Nonch'ong 96-2 Kwangbok 50 chunyŏn kukhak ŭi sŏngkwa. Sŏngnam: Han'guk Chŏngsin Munhwa Yŏn'guwŏn.
- Yu, Ch'anggyun (俞昌均) 1976. Koguryŏ chimyŏng-p'yogi-yongjaë taehan kŏmt'o. Han'guk ŏmun nonch'ong: Uch'on Kang Poksu Paksa hoegap kinyŏm nonmunjip. [Taegu]: Kanhaeng Wiwŏnhoe, 125-165.
  - 1980. *Hanguk kodae Hanjaŭm ŭi yŏn'gu. I.* Taegu: Kyemyŏng Taehakkyo Ch'ulp'anbu.
- 1983. *Hanguk kodae Hanjaŭm ŭi yŏn'gu. II.* Taegu: Kyemyŏng Taehakkyo Ch'ulp'anbu.
- Yun, Haeng-sun 1994. Japanese Reading of the Chinese Character 城 in the Old Documents of Nihon-Shoki (日本書記)—Focusing on "ki" and "sashi"—. Chôsen gakuhô: Journal of the Academic Association of Koreanology in Japan 151: 3-4, 155-163.
- Zeno, Susan M., et al. 1995. *The Educator's Word Frequency Guide*. N.p.: Touchstone Applied Science Associates.
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## INDEX

This index does not include the words 'Koguryo', 'Korea', 'Korean', 'Japanese', 'Chinese', or their compounds and variants, such as 'Japanese-Koguryoic' and 'Puyo-Koguryoic', which occur on almost every page of this book. The numerous citations of language forms and sources, and passing references to scholars, theories, languages, and localities in the text, also have not been indexed. Since the Lexicon serves as an index to the description and analysis of the Koguryo words and function morphemes, which are listed alphabetically in Chapter 6, with a few exceptions they are not indexed here.

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