

THE CHINESE DIALECTS
OF HAN TIME
ACCORDING TO FANG YEN

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INTRODUCTION

This study of the Chinese dialects of Han time will treat some fundamental problems concerning the dialect material found in one extensive source, Fang yen, which, though generally well known, has not, till now, been methodically and thoroughly studied. One of the reasons for this reluctance among scholars of Chinese to use a source so important for the knowledge of the history of the Chinese language as Fang yen is probably the uncertainty concerning problems of its authorship and its authenticity in general. The question about the value of a collection of dialect words such as Fang yen and the possibility of using it as a source of synchronous information on the language and dialects of a given time hinge mainly on one other question. This question is whether we possess here the work of one man, reflecting a stage of language at one time and thereby throwing new light on dialects and standard language in comparison with literature or whether it is merely an amalgamation of philological notes culled from various sources, referring to various times, reflecting consequently the different viewpoints and explanations of the original notator of each individual item of information included in Fang yen.

To attempt an interpretation of the dialect material of Fang yen, before solving these preliminary questions, would indeed be an enterprise full of risks, and possibly, after completion, devoid of any value. Were this preliminary question, however, in itself unsolvable because of the lack of pertinent historical and bibliographical information, then the plausibility and consistency of the interpretation of the whole Fang yen material could still be proof of its value as synchronical linguistic material. A coherent explanation of all the parts of Fang yen, in the frame of one linguistic period, the new light which the situation of the Han dialects throws on the problems concerning the Chinese language before and after the Han period, the new facts acquired thereby in terms of the reconstruction of words in the Chinese language, the mutual influences of the dialects, the shifts in their respective importance, expansion, or conservative resistance in comparison with the history of the dialect regions and with the expansion and distribution of other elements in Chinese life at the time of Han—such results may be considered a proof a posteriori that the assumption on which such investigation started was right.

The readers can judge whether such an a posteriori argumentation from the results is convincing or not in itself, is probable, or is entirely inconclusive. Although this interpretation of Fang yen is presented in this volume without any preliminary discussions on the book Fang yen as such, the questions of the authenticity and authorship of Fang yen have not been neglected in the course of this study. There is quite an amount of information to be found in historical and bibliographical texts, spread over various early periods from Han down, which can be studied and evaluated in themselves. This has been done in a separate publication, planned to appear about the same time as this volume, entitled Fang Yen Studies I: Preliminary Problems to the Study of Fang Yen. It is sufficient here to sum up the conclusions concerning authorship and authenticity of Fang yen, obtained in this separate study:

Fang yen is a collection of dialect words for the most part defined by words taken from the standard language. Its plan and consistency show that it is not a mere compilation of philological glosses of various origin, but a synchronic word list verified by one man, exceptionally free—for an early Chinese philologist—from the usual graphical and literary preoccupations. The antiquity and authenticity of the text, its authorship, traditionally ascribed to Yang Hsiung (53 B.C.—A.D. 18), can be well vindicated against the contrary arguments, which are mainly negative and ex silentio. The tradition on Yang Hsiung's authorship agrees with all the details known from his life, as found in his biography and in other passages in Han shu and other works. The Appended Letters, easily shown to be authentic, also confirm this tradition. That Fang yen is not mentioned in the biography of Yang Hsiung and in the early bibliographical list previous to Sui shu is a mere negative factor, which does not weigh against the tradition and can be satisfactorily explained otherwise. There are many explicit and implicit quotations which establish the existence of Fang yen for periods as early as Chin, Wei, and Han. Internal evidence shows a uniqueness of material and treatment which no faker would have dared to display. Comparison of the dialects and the standard language in Fang yen shows a linguistic situation which could only emerge at the time of the traditional author, Yang Hsiung.

SCOPE AND CONTENT

This work consists of two parts. Part I deals with a specific problem in Chinese linguistics, resulting from the special system of writing Chinese; it amounts to a reconstruction of the phonetic values hidden under the Chinese graphic forms. It is an attempt to provide an apt tool for a linguistic interpretation of Fang yen.

In this discussion a general evaluation is made of the Ancient Chinese reconstruction, since this reconstruction, though not directly used to solve the problems connected with the Fang yen material, is a basis on which the Archaic Chinese reconstruction is built. The Archaic Chinese is consequently subjected to a detailed investigation.

In this connection it will be evident from careful reading of various passages, that far from being iconoclastic or revolutionary, this study has everywhere availed itself fully of all the remarkable achievements by scholars in the field of Chinese studies. The reasons for any disagreement have been stated plainly; they result from a detailed examination of the procedures and methods of reconstruction, and an evaluation of the hierarchy and importance of each different approach.

Part II presents the over-all linguistic interpretation of Fang yen, tested on various parts of the book. The dialect groups mentioned in Fang yen are first delimited and represented on a map, which also serves as a ground map for other special areal aspects and will serve also in future studies on the history of individual word groups taken from Fang yen. In this part, the Fang yen material is studied by applying the Archaic Chinese reconstruction values to the graphic units that represent the dialect words, and by envisaging the word units represented in contrast to the graphic forms. A comparison of bisyllabic and monosyllabic forms in the dialectal and standard words is made in order to distinguish, wherever possible, between younger and older word formations. An important factor in the dialect material of Fang yen is that here we deal with words, for which numerous corresponding dialect forms are given independently from the graphic representation. A comparison of these dialect words allows us therefore to attempt a reconstruction of a Pre-archaic stage, independently from the graphic analysis of the characters, on which till now the Archaic Chinese reconstructions were for a great part based. A statistical comparison of the contacts and relations of the dialects with each other and with the standard language brings out the degree of their mutual interpenetration and their respective importance in the growth of the Chinese language. These results are shown in a series of maps.

It is obvious that an approach to the study of the Ancient Chinese dialects by means of the "Sprachgeographische Methode," applied to a period as far distant as the period of the Han Dynasty, calls for a detailed discussion of the method itself. However, it was not thought necessary to explain the general method, but to discuss and show the possibility of applying the geographical method to written documents.

This volume does not include separate word studies (which will be presented in a third volume), and it has been possible therefore to set up only some of the important isoglosses which explain the general configuration of the dialects of Han time.

IMPORTANCE OF THE STUDY

Under this heading nothing more is intended than an outline of the theses fundamentales that could be enunciated as the specific results of this investigation.

Reconstruction of the Chinese Language

1. The time corresponding to the Archaic Chinese as reconstructed by Karlgren is later than Shuo wen and stands between the system of Shuo wen and that of Shih ming. If the reconstruction according to Karlgren can be shown to explain completely the Shih ching rhyme system, it is an indication that the Shih ching text and rhymes were definitely established (in the Mao version) around the middle of the Later Han dynasty.
2. What is called Archaic Chinese in this book is the system deduced from Shuo wen. The language reflected in Shih ming is called Late Archaic, and the Early Archaic or Pre-archaic are reconstructions reflected in Shuo wen only in sporadic, fragmentary, and indirect ways.
3. The dialect words of Fang yen are reconstructed according to the Archaic system of Shuo wen; many of these dialects preserved strongly archaizing features, and, through the comparison of the dialect words combined with Shuo wen indications—such as the sound phrases—a Pre-archaic reconstruction can be attempted to a limited extent.
4. The reconstruction of the Chou language is unknown until the various forms of rhyming and interchanging of graphs, found in the Chou inscriptions, have been systematically investigated and explained, and until a consistent graph analysis has been set up for the Chou script which agrees with the rules of these interchangings of graphs. It is not known either how far the Pre-archaic reconstructions go back into the period of the Chou dynasty. The remarks on the language of Chou apply a fortiori to the period represented by the Shang inscriptions.
5. In the reconstruction of the Chinese language of Han, on the basis of the Fang yen material combined with the Shuo wen analysis and other Han time material, a distinction has been made between the reconstruction of a real word form (when this can be detected) and the reading of isolated graphs.

6. In the various forms of reconstructions proposed, a distinction is made as to the various levels of certitude obtainable, according to the procedure and the basis on which every reconstructed form has been built. These levels are explained in the course of the work and indicated by corresponding sigla listed hereafter.

Chinese Linguistics in General

1. No mention is made of the possible information, confirmations, or corrections derivable from the languages related to Chinese. The question of the relationship of Chinese and its exact position within the Sino-Tibetan, Sino-Thai language groups falls completely outside the scope of this study. Furthermore, the reconstructions of the various phases of the Chinese languages are first of all to be investigated from the point of view and within the frame of the Chinese material. The results obtained can later be compared or checked with the related languages if possible.
2. An entirely new approach is made to the understanding of the linguistic situation of Han, and consequently of the history of the Chinese language in general, by investigating the role played by the dialects in the construction of the language of Han (standard and literary) and by studying the influences exerted by each one of them upon the others. The theory of an undisturbed and direct development of sounds and words from the Chou time language (Shih ching) till the Ancient Chinese period of Sui and early T'ang is entirely unfounded since the standard language of Han was for a great part Ch'in language, whereas the Chou language is supposed to have been the language spoken in the Honan region.
3. The study of the reconstructions of the words in Chinese is extremely involved because of the semantic connotations which every choice of graph automatically suggests to some extent. Every graph leads to new interpretations, etymologies, and semanticizations by scholars and writers. Since this work includes no separate word studies nor a complete investigation of a group of related words in their areal and temporal developments and their confusions with other words, the problems of semantics have pro tempore mostly been left unmentioned and untouched. These problems do not, therefore, cease to exist, but they can only be treated fully in the studies of various separate words, for which Fang yen has preserved much valuable material.

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In preparing the final copy I was assisted by Mrs. Miriam Ash; the Chinese characters have been written by Miss Janet Y. Wong (黃樣貞). The fundamental map of the dialect areas of Han time was drawn by Mr. Jack E. Hobbs; with his assistance I made the smaller maps on the basis of that general map.

ABBREVIATIONS OF TITLES

AA	Artibus Asiae. Ascona
AKM	Abhandlungen für die Kunde des Morgenlandes. Deutsche Morgenländische Gesellschaft. Leipzig.
AM	Asia Major. London.
AO	Archiv Orientalni. Journal of the Czechoslovak Academy of Sciences. Prague.
BEFEO	Bulletin de l'École Française d'Extrême Orient. Hanoi.
BMFEA	Bulletin of the Museum of Far Eastern Antiquities. Stockholm.
BSLP	Bulletin de la Société de Linguistique de Paris.
BSOAS	Bulletin of the School of Oriental and African Studies. London.
BSOS	Bulletin of the School of Oriental Studies, later BSOAS.
CESP	Centre d'études sinologiques de Pékin. Université de Paris. Pékin.
CFCES	Centre Franco-Chinois des études sinologiques, later CESP
Ch. Cl.	James Legge, The Chinese Classics. 2d edition, revised. Oxford, 1893. Wen Tien Ko Reprint. Peking, 1939.
Ch'tz	Ch'u tz'ü 楚辭.
Chuang	Chuang-tz'ü 莊子. Similar titles of works of Chinese philosophers are abbreviated in the same way: Lao, Kuan, Wen, etc.
Ch'Y	Ch'ieh yün 切韻, quoted according to SYHP.
CHHP	Ch'ing-hua hsüeh-pao 清華學報, The Tsing Hua Journal. National Tsing Hua University. Peiping.
CKT	Chan-kuo ts'e 戰國策, quoted according to Kuo-hsüeh chi-pen ts'ung-shu ed.
Compendium	Compendium of Phonetics in Ancient and Archaic Chinese, by B. Karlgren. BMFEA, 22, 1954.
Couvreur	Li Ki ou Mémoires sur les bienséances et les cérémonies. Texte chinois avec une double traduction en Français et en Latin par S. Couvreur. S. J. vols. I, II. Ho Kien Fou. 1913.
CTSW	Ching-tien shih-wen 經典釋文, Ts'ung-shu ch'eng ed. Shanghai.

- CY Chi yün 集韻. Ed. 1876. Ch'uan-tung kuan-she ch'ung-k'an 川東館舍重刊.
- CYYY Chung-yang yen-chiu-yüan li-shih yü-yen yen-chiu-so chi-k'an 中央研究院歷史語言研究所季刊. Bulletin of the Institute of History and Philology, Academia Sinica.
- CYYY Mon. Id. ac supra, Monograph Series.
- Dubs I, II, III Homer H. Dubs (with collaboration of Jen T'ai and P'an Lo-chi), The History of the Former Han Dynasty, Vol. I, London, 1938, Vol. II, Baltimore, 1944, Vol. III, Baltimore, 1955.
- Études Bernhard Karlgren, Études sur la phonologie chinoise, Stockholm, 1915-1926.
- EY Erh Ya 爾雅 ed. Kuo-hsüeh chi-pen ts'ung-shu, Commerc. Press, 1934, with commentary of Ho Yi-hang 郝懿行: Erh-ya yi-shu 爾雅義疏.
- FEQ The Far Eastern Quarterly, published by the Far Eastern Association.
- FJHC Fu jen hsüeh-chih 輔仁學誌, Peiping.
- Franke I, II, III, IV, V Otto Franke, Geschichte des Chinesischen Reiches, Berlin and Leipzig, 1930-1952.
- FY Fang yen, 方言, quoted according to CESP edition.
- GK Gengo Kenkyu 言語研究, Journal of the Linguistic Society of Japan, University of Tokyo, Tokyo.
- GS Bernhard Karlgren, Grammata Serica, Script and Phonetics in Chinese and Sino-Japanese. BMFEA, 12, 1940.
- HFTz Han-fei tzü 韓非子.
- HHS Hou Han shu 後漢書, quoted according to K'M ed.
- HJAS Harvard Journal of Asiatic Studies. Harvard-Yenching Institute, Cambridge, Massachusetts.
- HNtz Huai-nan tzü 淮南子.
- HS Han shu 漢書, quoted according to K'M.
- HYIS Harvard Yenching Institute Studies, Harvard University, Cambridge, Massachusetts.
- HYISIS Harvard Yenching Institute Sinological Index Series. Yenching University, Peiping.
- JA Journal Asiatique, Paris.
- JAOS Journal of the American Oriental Society.

- JMTT Fang Yi et al. 方毅 Chung-kuo jen-ming ta tzü-tien 中國人名大辭典 Shanghai, 1934.
- JRAS Journal of the Royal Asiatic Society, London.
- KHCK Kuo-hsüeh-chi-k'an 國學季刊, A Journal of Sino-logical Studies. National University of Peking.
- K'M K'ai-ming shu-tien ed. 開明書店 of the Erh-shih-wu shih 二十五史, Peiping, 1934.
- KY Kuang yün 廣韻, quoted according to SYHP or KYSH.
- KYa Kuang ya by Chang Yi, quoted from Wang Nien-sun, Kuang-ya shu-cheng.
- KYSH Shen Chien-shih 沈兼士, Kuang-yün sheng-hsi 廣韻聲系 Peking, 1944.
- Lg Language, Journal of the Linguistic Society of America.
- Lingua Lingua, International Review of General Linguistics. Amsterdam.
- LK W. Eberhard, Lokalkulturen im Alten China. I. Die Lokalkulturen des Nordens und Westens. Leiden, 1942. II. Die Lokalkulturen des Südens und Ostens. Peking, 1942.
- LMTT Fu Ting-yi 符定一, Lien-mien tzü-tien 聯縣字典 Peking, 1941.
- LNHP Ling-nan hsüeh-pao 嶺南學報. Canton.
- LSch'ch' Lü-shih Ch'un-ch'iu 呂氏春秋.
- MH Mémoires Historiques de Se-Ma Ts'ien, traduits et annotés par Edouard Chavannes. Vols. I, II, III, IV, V. Paris, 1895-1905.
- MS Monumenta Serica. Journal of Oriental Studies of the Catholic University of Peking.
- MSLP Mémoires de la Société de linguistique de Paris.
- MSOS Mitteilungen des Seminars für Orientalische Sprachen.
- OL, OLZ Orientalistische Literaturzeitung. Leipzig.
- Oriens Oriens, Journal of the International Society for Oriental Research. Leiden.
- Orbis Orbis, Bulletin international de documentation linguistique. Louvain.
- PHTY Po hu t'ung (yi) 白虎通(義). The Comprehensive Discussions in the White Tiger Hall. Leiden.
- PWYF P'ei-wen yün-fu 佩文韻府. Wan-yu wen-k'u ed.
- RO Rocznik Orientalistyczny. Cracow.
- RV W. Eberhard, Kultur und Siedlung der Randvölker Chinas. Leiden, 1942.

SC	Shih chi 史記, quoted according to K'M.
SCg	Shih ching 詩經.
SG	Shinagaku 支那學, Tokyo.
ShanHC	Shan-hai ching 山海經.
SM	Shih ming 釋名.
SPPY	Ssü-pu pei-yao 四部備要.
SW	Shuo-wen chieh-tzŭ 說文解字, quoted according to SWKL.
SWKL	Ting Fu-pao 丁福保, Shuo-wen chieh-tzŭ ku-lin 說文解字詁林 Shanghai, 1928.
SYHP	Shih-yŭn hui-pien 十韻彙編 Peip'ing, 1936.
Takata	Takata Tadasuke 高田周忠, Ko-chŭ-hen 古籀篇 Tokyo, 1919.
TG	Tōyō Gakuhō 東洋學報, Journal of Oriental Studies, Kyoto.
TMTT	Tsang Li-ho 臧履齋 et al. Chung-kuo ti-ming ta tzŭ-tien 中國地名大辭典, Shanghai, 1934.
TP	T'oung pao 通報, Leiden.
TPYL	T'ai-p'ing yŭ-lan 太平御覽.
Tso	Tso chuan 左傳.
TT	Tz'ŭ t'ung 辭通. Shanghai.
Wennti	Wennti papers. New Haven Connecticut. Sinological Seminar. Yale University.
WH	Wen hsŭan 文選, quoted according to the Kuo-hsŭeh chipen ts'ung-shu ed. Shanghai, 1920.
Word	Word, Journal of the Linguistic Circle of New York.
YCHP	Yen-ching hsŭeh-pao 燕京學報, Yen-ching Journal of Chinese Studies. Yen-ching University, Peiping.
YCCYY	Yi-ch'ieh-ching yin-yi 一切經音義.
YP	Yŭ p'ien 玉篇, ed. 1783.

SIGLA

AnC	Ancient Chinese
ArC	Archaic Chinese
Chch	Chia chieh 假借
fl.	flourished
Hh	Hsiang hsing 象形
Hsh	Hsieh sheng 諧聲
Hy	Hui yi 會意
ob.	died
phon.	phonetic
r.	rhyme
st.	standard
T.	Tzŭ 字
Tj	Tu jo 讀若

RECONSTRUCTIONS

AnC	no sign
ArC	* according to GS
	/* changed from GS
	√* full Hsh forms
	** based on dimidiated forms, sound phrases
	/*/ not directly based on SW, FY, SM
Pre-ArC	P*

GEOGRAPHICAL ABBREVIATIONS

Abbreviations for geographical areas are listed on pages 77-78.

PART ONE
THE PROBLEM OF RECONSTRUCTION

CHAPTER I PRELIMINARY REMARKS

RECONSTRUCTION FOR THE PERIOD OF FANG YEN

Fang yen remains closed to all linguistic interpretation, synchronical or diachronical, without a reconstruction valid for the time in which it was written. Two different sets of reconstructions exist, Ancient Chinese and Archaic Chinese. AnC, as defined by Karlgren, is a homogeneous language of Sui and early T'ang (sixth and beginning seventh century, A. D.) spoken in Ch'ang-an, and is a regular development from another homogeneous stage, ArC, presumably the language of SCg and Hsh periods (roughly 900-600, B. C.).¹ It is striking that the evolution between these two phases of language has been so slow.

It would seem simple to reconstruct the pronunciation in FY by taking an intermediate stage between ArC and AnC. The Han dialects were strongly conservative, and the ArC phonetic values would be quite apt to explain FY; consequently a discussion of AnC may seem superfluous. But for the reconstruction of ArC it is important to take AnC as a starting point; to evaluate the latter, we must know the value of the former.

Reconstructions in general.—A linguistic system now extinct can be reconstructed in two ways according to the materials available. One method starts from the living dialects and languages, supposedly related to each other, and sets up general phonetic values, from which the later linguistic forms have evolved. This method, when applied without help from other methods, becomes dangerous; it often fails to determine whether the similarities are due to mutual influences and borrowings or to a common ancestry. Theoretically, notions like those of ancestor and daughter languages in the theory of the family tree have been rightly rejected.² Yet the comparative method of reconstruction is logically based on such a theory; its results should be considered a skeletal and simplified image of some elements in the language evolution. It postulates a certain regularity of changes and a continuity of language, more or less differing in the various branches of related languages.³ Some of those branches are conservative; others changed faster and made more innovations. The study of detailed and rich material

¹For notes, see p. 243.

of some languages, covering various areas and phases, shows that a regular and normal development of all linguistic features is never obtained. Yet this method stands;⁴ the linguist, though aware of irregularities and confusions, discontinuities, and convergences in the linguistic developments, must logically set up his reconstructions in the simplest formula, explaining all the elements present in the related languages. Statistics, corroboration through parallel cases elsewhere, and the selection of a primary and basic word material are helpful, but they offer no certitude as to results obtained.⁵

In some optimum cases these reconstructions may represent more than an abstract formula of relationship⁶ and really approach the essential features of a linguistic system of earlier periods. However, we remain ignorant of the time level the reconstructed phase represents.

The second method of reconstruction starts from written documents. It amounts to the same process of analysis as for a modern language; the difference is that the analysis is not based on direct observation of speech, but on its earlier recordings. No recording can cover every detail of speech. Therefore, the nature and degree of accuracy of the writing system used for a language must be sufficiently known, the amount of documents great enough to allow a fairly complete analysis.

In written documents a distinction is made among various sorts of connected texts,⁷ loose word lists or systematic dictionaries, regional or temporal variations. In writing as in speech, complete homogeneity and unity is an abstraction. Everywhere, the same mixtures of dialectal and social levels of archaism and new creation may be expected. However, written documents may cover a long time and preserve a strong homogeneity in the script symbols, in grammar and style—less in lexical elements. In such cases, writing creates an independent linguistic system, originally built on a spoken language, then developing a fixed grammar and symbols of its own; if new words are introduced from living speech or other literatures, they are adapted and represented according to the existing system that serves as a model. This characteristic often found in literature allows philologists to interpret a whole set of various texts as uniform material; though some regional and temporal linguistic differences had existed, they have gradually been normalized to the extent as to be almost nonexistent.

The results in a reconstruction based on written documents are different from those obtained by the comparative method based on living dialects and languages. It is often possible to date the reconstruction more accurately by the written documents than by a comparative method. When rich documentation is available, distinctions can even be made according to different times, to areal and literary divisions within the same language. But the value of

the reconstructions is often more limited than when full use of the living dialects and language is possible.⁸

Combination of the two methods of reconstruction obtains better results than either of the methods used separately. But it is dangerous to suppose that the results of the two methods will perfectly coincide at the same time level. Only a general agreement can be admitted between the two, in the sense that the results from either side do not contradict or exclude each other.

THE RECONSTRUCTION IN CHINESE

The first question to consider is whether the reconstructions deal with pronunciations of characters or of real words. If the written unit in Chinese can be considered as the unit of speech, the reconstruction of a character is also that of the word. The graphic and the linguistic units in Chinese are not always the same. Since the Chinese sources on which the reconstructions are based take the graph as the unit for phonetic description, a problem arises how to reconstruct a word which does not coincide with the graphic unit. Moreover, by what criterion shall we determine when graph and word differ? The spoken language has seldom been extensively and accurately written at a time close to the AnC period. There are only sporadic indications. The literary text could by virtue of the Chinese script always dissociate itself from the spoken form, and when lexical elements from the spoken language are included, they can be changed and adapted to the literary style.

The Ancient Chinese System. Sources and Results

The dialect information available for Karlgren's *Études*, on which his AnC is based in part,⁹ was insufficient and sometimes erroneous.¹⁰ The readings in Karlgren's dialect dictionary of about 2,700 characters for twenty-one localities are not the real spoken forms of the dialects.¹¹ Graph and word do not always coincide, and when they do, the fact that the informants were reading characters and not naming the thing or the notion resulted in a learned reading according to dictionary or school tradition. Some materials were taken from various dictionaries and unified in one transcription. Such a unification, methodologically necessary, can cause accidental errors.¹²

Despite these shortcomings, the dialect dictionary has served its purpose. Among literate people there was a tradition, found in schools and based on the dictionaries. The character readings are traditional literary readings and possess a real value. They differ according to a regular pattern in the

various dialect areas. They can be used as a starting point to interpret the phonetic system of the source from which the tradition originated.¹³

The scholars who studied the reconstruction of AnC after Karlgren did not start from the modern dialects but based their improvements on the written documents. However, they seldom questioned the dialect information used by Karlgren, or they considered it unimportant.¹⁴

The sources available for the study of AnC are rich but need to be interpreted. Most important are the rhyme dictionaries with their fan ch'ieh analysis of the characters. Such was the Ch'ieh yün by Lu Fa-yen, completed in 601,¹⁵ of which the rhyme disposition and fan ch'ieh were reproduced in Kuang yün of 1008.¹⁶ The Sung dynasty rhyme tables were used as an intermediate stage between the modern readings and the Ch'Y system.¹⁷ The assumption in this process of reconstruction is that all modern dialects are direct and regular developments from Ch'Y as a common ancestor, that the reconstruction of a common language obtained from comparison of the modern dialects coincide perfectly in time with Ch'Y, and that the Ch'Y language was homogeneous. This was Karlgren's opinion, in sensu stricto, until more and more exceptions began to appear.¹⁸

The term homogeneity calls for some remarks. The Ch'Y and KY are lexicographic inventories in which the unit of description is not the spoken word but the graph, under which the phonetic classes are arranged. The interpretation of these phonetic descriptions reveals only the phonetic system; the other linguistic features are obtainable only indirectly. The Ch'Y and KY contain such an amount of characters that they obviously incorporate all the lexical material known at that time, including words of earlier dictionaries as well as those that never occur in a text, so far as we know.¹⁹ Not all characters belong to the living language of that time. Much of the material in Ch'Y and KY was built on a literary tradition, and represents a learned pronunciation, often based on analogical reading of characters. Some of the characters are found neither in literary texts nor in earlier dictionaries but may have existed in earlier texts now lost; others may have been included because they represented real words of dialectal origin. In the sense that all characters are treated in the frame of one phonetic system, the Ch'Y language can still be called a koinê, a thesaurus of the language, as read in the standard pronunciation of Ch'ang-an at that time. Yet the homogeneity of the phonetic systems of Ch'Y and KY has been questioned. The Ch'Y compilers used spellings which existed before, and they may have included distinctions of early periods or local divergences coexisting at the time of Ch'Y.²⁰ Some characters have different readings without a marked difference of meaning.²¹ Karlgren considers all distinctions in Ch'Y as real, the result of a sharp phonetic

observation. Other authors consider some distinctions as artificial and formal.²²

Since it is possible to separate only occasional cases of dialect readings, artificial and formal distinctions, from those of the Ch'Y system as such, Karlgren's opinion of Ch'Y as a homogeneous and standard phonetic system of the Chinese language of the sixth century A.D. is acceptable as a general basis of discussion.

The dialectal variations and the distinctions due to different periods within the Ch'Y language leave a wide field for investigation.²³ Attempts toward simplification and phonemicization of the Ch'Y system have brought much clarity.²⁴ In GS (Introduction) it is said that Lu Te-ming's system in the Ching-tien shih-wen corroborates the Ch'Y system with only slight divergences. But the details of Lu Te-ming's fan ch'ieh have not yet been given.²⁵ Moreover, Lu often quotes fan ch'ieh attributed to earlier authors, with readings different from the Ch'Y. Dialectal divergences in the sixth century have been found by Lo Ch'ang-pei in sources other than dictionaries, namely, the rhymes in poetry.²⁶

A third kind of material used to reconstruct AnC is the vast amount of Chinese loan words in non-Chinese languages. Karlgren, who used great caution as to the fan ch'ieh incorporated in current dictionaries, showed no concern about the relatively recent origin and the corruptions of the Sino-Japanese readings in the Japanese dictionaries.²⁷ However, some Go-on versions point to dialects distinct from Ch'Y and going back to those of Ancient Wu.²⁸ Since the modern Wu dialects are explained as a normal development from Ch'Y, ancient Wu, known only through Go-on, has no direct connection with modern Wu. It may be that they did not disappear completely and that the dialect of some isolated corner or of some social level of the South Chinese population has somehow preserved, completely or partly, the linguistic features developed from ancient Wu. Such a situation would be comparable to the Min dialects and T'ang-Min explained by Forrest.²⁹

Sino-Annamese has some irregular features, which may be explained only by supposing that it was derived from a dialect very different from the Ch'Y system, or from a more ancient period than Ch'Y as reconstructed by Karlgren.³⁰ The Sino-Korean does not seem to have been subjected to exhaustive study.³¹

These Sino-Xenic readings, loans made en bloc, differ from other transliterations of Chinese into foreign languages or vice versa. The latter are more scattered, fragmentary, of various times and regions, of different importance, and length. Tibetan transcriptions studied by Lo Ch'ang-pei admittedly point to northwest Chinese dialects.³² Uighur transcriptions offer

a material more consistent than was formerly believed. Some peculiarities are explained, not by the Ch'Y language, but by dialectal features now found in Shansi, but originally covering a wider area of North China.³³ In a similar but less far-reaching way, Turkish transcriptions studied by Karlgren showed exceptional readings in Pekinese, explained by fan ch'ieh spellings different from Ch'Y, found in Lu Te-ming's glosses, YP and CY. Karlgren thought a theory of recent dialect mixing improbable and preferred an explanation by earlier divergences from Ch'Y, even in modern mandarin dialects.³⁴ Other transliterations in hPhagspa script, Persian, and Mongolian belong to later periods of the Chinese language.

In conclusion, the results of Karlgren stand and could be proposed as faits acquis. Minor points are still open to discussion and investigation.³⁵

The theory of homogeneity in Ch'Y is not acceptable for all elements in the language; it is acceptable for the phonetic system as the standard pronunciation of that time, but some phases corresponding to different periods can be distinguished, and dialectal divergences can be traced within the frame of Ch'Y itself. There is also partial information concerning coexisting non-Ch'Y dialects; ancient Wu, northwestern dialects, and the like.

The theory of the Ch'Y language as a koinê and a common ancestor of the modern Chinese dialects caused dissension; objections have been adduced from the fact that local traditional character readings were wrongly taken as real dialect features.

Continued study of the modern dialects shows an increasing amount of exceptions and divergences from an assumed regular evolution from Ch'Y. More dialectal facts are discovered that do not go back to Ch'Y, but are older or belong to a side group of dialects. More diverging layers and archaic relics are found in otherwise "legitimate" daughter languages of Ch'Y.

The Archaic Chinese

A detailed discussion of the reconstruction of ArC is necessary because ArC forms are now used to throw light on important pre-Han literature, as found in texts traditionally handed down as well as in original inscriptions. This literature has a free style and a great variability in word composition and grammar; such features suggest a certain closeness to the spoken language, which is linguistically important. This discussion is particularly important because ArC will be dated later than is traditionally admitted and will be used as a tool to interpret the dialect material of FY.

Reconstruction of AnC was based mainly on written materials; a fortiori this will be true for ArC. The written sources for reconstructing any phase

before Ch'Y can be arranged as follows: all literary and historical texts with their commentaries and explanations; also, word lists and dictionaries of the periods of pre-Han, Han, and post-Han times.

Despite this wealth, the sources used by Karlgren are restricted. His ArC reconstructions are based on one text, the SCg, combined with the study of the Hsh and Chch characters.³⁶ What the modern readings of characters mean for the Ch'Y interpretation, the AnC values mean for the ArC. But to reconstruct ArC on the basis of the Ch'Y material only would be impossible. The use of Ch'Y to interpret the source material of ArC presupposes that ArC, too, represents a language, at least phonetically homogeneous, which is the ancestor of Ch'Y according to a regular phonetic development.³⁷ This relation of ArC and AnC (Ch'Y) is described as that of an ancestral language and its principal daughter language; yet this is not strictly necessary, for if the phonological distinctions in ArC coincide with those in AnC, it would prove a regular development which could be found in a collateral branch as well.³⁸ The Ch'Y language, although not homogeneous, offers one coherent system with scattered, partial information on dialectal divergences. On this point, ArC is markedly different. Although Karlgren tries to prove that the language of SCg and that of the Hsh and Chch are phonetically close enough to be taken as one, covering, too, the same period, ArC is essentially disparate and composite; the period covered is broad and can be doubted; the phonetic uniformity is a theory.

SCg has 2,929 characters, among which 1,815 appear in rhyming position, yielding direct phonetic information as to the finals only, and which can be arranged in rhyme groups of slightly broader range than the actual rhyme groups themselves, to coincide with the groups of Ch'Y. If then, all non-rhyming characters are read analogically, following the phonological group of Ch'Y and according to phonetic value of the rhyme group, such an analogical extension of the rhyme values to all the characters is methodologically legitimate, assuming a regular development from ArC to AnC and a uniform pronunciation in the whole SCg.³⁹ But a further extension is made: many characters not found in SCg have been reconstructed with the values of the SCg system on the basis of other rhyming texts or of the Hsh principle, which seemed to be in accordance with the rhyme distinctions of SCg and the phonological groups of Ch'Y.

The composite nature of the ArC reconstruction appears further in the fact that the reconstruction of the finals is based on the SCg rhymes and the Hsh characters, but that of the initials is based only on the Hsh characters compared with Ch'Y.

Two basic assumptions support the edifice of the ArC reconstructions.

(1). There is a regular development from ArC to AnC. The better the history of a language is known, the more irregularities are found in the evolution of particular words. Yet it is not known where, in AnC, irregularities occurred, and it is methodologically permissible to assume regularity as a starting point.³⁹

(2). The SCg text, though compiled to a certain extent from various regions, was remodeled according to one language—that of the Chou court. The rhyme system of SCg is so consistent and so rigorous that these poems could not have preserved the original dialectal aspect.

These remarks show that ArC does not have the same level of certitude for every character as the Ch'Y could give to AnC. The details of ArC will often be debatable, according to the extent to which phonetic value is analogically applied to the characters, and according to the priority given to one of the sources of information (rhyme, Hsh, or Chch).⁴⁰

CHAPTER II

PARTICULAR STUDY OF THE RHYMES

PRINCIPLE OF RHYMING AND TEXTS

Shih ching has been a model of poetry for many ages. It probably has been handed down by tradition that it has rhymes, but they had not been scientifically studied before the Ch'ing scholars, whose works were the basis for Karlgren's phonetic evaluation of the rhymes of SCg.¹

The Principle

There are various kinds of rhymes, and we define the rhyme in sensu stricto: the regular appearance of the same final sound in the last syllable of a number of rhythmically construed lines (i.e., the verse), according to a definite sequence and pattern. Chang Cheng-ming considers such final rhyme as a natural development and application of the principle of parallelism in old Chinese poetry; it is only a particular form of parallelism, which can be varied by other forms such as complete homophony (repetition of same sounds), incomplete homophony (assonance and consonance), and so on. Although the final rhymes are very numerous in SCg, such a narrow acceptance cannot completely explain all the odes of SCg.² Indeed, some parts of SCg do not rhyme or do not fit into the rhyme system. As a matter of fact, one theory proposed that the SCg originally did not rhyme, but that rhyme occurred as a secondary phenomenon.³

For a clear understanding of the question, it is necessary to distinguish between rhyme patterns and phonetic values of the rhymes. By inspecting the length of the lines, their structure and parallelism, it becomes certain that there was a definite pattern, but the exact phonetic value still remains uncertain. The rhyming values have been recognized through comparison with the Ch'Y reading of the final characters. Therefore the rhyming values can be reconstructed only according to one system, namely, that of Ch'Y. Only under the assumption that the SCg sounds have developed regularly into that of the Ch'Y can this procedure cover all the characters present in SCg. That the reconstruction set up for SCg is not satisfactory for some

¹For notes, see p. 250.

poems may be attributed to various factors: (1) the development from SCg to Ch'Y was not regular; (2) the rhyme system of SCg is not uniform, and at least for some parts there is a different system (i.e., the SCg system is not completely homogeneous); (3) some parts de facto had no rhymes, that is, they were not rhyming in the sense of our definition, but in the sense of assonances and consonances.

A closer look at the theory of regularity of the SCg rhymes is required. After distinguishing strict regular rhymes from a second sort of subsidiary rhymes and a very small number of faulty and irregular ones, Karlgren has thought the number of the strict rhymes sufficient to suppose a major and general uniformity.⁴ But sometimes regular rhymes like -ek: -iek: -iuk in SCg are not very satisfactory,⁵ and the strictness in rhyming is not necessarily the same everywhere but differs according to the pattern. If the pattern is in monorhyme, even a small detail like medial -i̇- could cause variation in the pattern. For example, Ode 304:

a. * <u>siang</u> : * <u>dziang</u>	} and {	a. /* <u>kung</u> : * <u>mung</u>
b. * <u>mwang</u> : * <u>piwang</u>		b. /* <u>liung</u> : * <u>diung</u>
a. * <u>kjang</u> : * <u>d'iang</u>		a. /* <u>d'ung</u>
a. * <u>tsiang</u> : * <u>siang</u>		b. /* <u>siung</u>
		a. /* <u>tsung</u>

Such a role of -i̇- would be less in poems that are not in monorhyme, like: -iang: -ang: -uk: -iuk: -iang: -ang, and so on. The various possible patterns of rhymes deserve as much consideration as the rhyme values and their occurrences. A different pattern may suggest a more satisfactory rhyme system (cf. p. 17ff) or may reveal more refined details in rhyming. Thus in Ode 1, stanza 2, 2d half: b. *tək / b. *b'iuk / a. (*tsəg) / b. *tsiək; b. words are supposedly rhymes; a. not. But we may ask whether the -i̇- in *b'iuk and *tsiək is not an element opposing 2 and 3, and by contrast makes a rhyme opposing *tək/*tsəg in spite of the difference of final consonants.

The Rhymed Texts

The SCg rhymes have been used to study the other texts of pre-Han literature, and all characters have been reconstructed according to the SCg system. There can be no objection to the use of the SCg values as a touchstone for other texts if used with due caution. But SCg is not the only rhymed work; Yi ching, Li chi, Tso chuan, Lun yū and other texts have occasional rhymes. Karlgren investigated the rhymes in Lao-tzū, Lieh-tzū, and other books,⁶ by applying the SCg values from sheer necessity as they were the only ones

available. This implies that these works are built on the same uniform language as SCg. It can be questioned whether the rhymes, for example in Lao-tzū, are numerous enough for an independent study of its rhyme system, but it is no reason to consider the Lao-tzū system as identical to that of SCg, and to explain the divergences as due to a more popular, less strict system of rhyming. It is possible that another phonetic system, another phase of language, or another dialect underlies these works,⁷ and if that is true, how can it be discovered without other points of comparison in addition to the information from SCg and Ch'Y groups?

PHONETIC VALUES

After accepting the uniformity of the rhyme system in SCg, it is still possible to propose different values. Lu Chih-wei differs in many instances from Karlgren. These differences depend not only on the rhyme patterns, the range of divergence permissible in the system, but also on the Ch'Y values of the characters in casu. Karlgren's procedure amounts to this:⁸ the tradition in the reading of characters, kept alive by commentators and schools, was so strong that the Sui time reading of obsolete characters in Ch'Y can be considered a faithful projection of the pronunciation of ArC. But it must be noted that the ArC represents a phonetic minimum required to make the SCg really rhyme, on the basis that the rhymes must agree with the Ch'Y distinctions and the Hsh groups to which the rhyming characters belong. It does not follow that it was the real rhyme value of the time the poem was written. A different pronunciation of later periods could still be a good rhyme. Although -an / -ar, for example, is satisfactory, it is only a minimum reconstruction; we do not know whether this was the pronunciation even at the time of the uniformization, which might have had values like -and / -ard or -anz / -arz. Karlgren also uses the evidence of the Hsh system, which he found to be in strict agreement with the rhyme classes of SCg.⁹ In fine, the reconstruction of the rhymes comes down to the problem of the Hsh. (Cf. p. 23ff.)

Some particular reconstructions of the SCg rhymes will now be discussed: the pure vocalic ending, the final -r and -m.

Pure Vocalic Ending

Words with pure vocalic ending are in a striking minority compared to those with consonantal ending. Similar disproportion is seen for words with final labials against those with dentals or velars (most numerous). This disproportion is suspect, though many ArC forms with a final consonant may be owing to

a special development, an innovation, and could sometimes be considered as a secondary condition.¹⁰ Nevertheless, some cases of pure vocalic ending in ArC, according to SCg, suggest a final consonant according to other rhyme systems or the Hsh connections. If such kinds of divergences became numerous, they would invalidate the assumption that SCg and Hsh cooperate to reconstruct one uniform ArC language. One such divergence, admitted by Karlgren, is that on the characters of the group called 路.¹¹ The characters of this group do not rhyme with group 家 kâ, but with group 故 ku. They have Hsh connections with ju sheng characters (-k), but in SCg they do not rhyme with them, as do the words with final -g; therefore it could not be simply ArC glo or glog. After having chosen a guttural implosive *glok, Karlgren, following Li Fang-Kui, finally reconstructed a glottal stop *glo, and definitely rejected Simon's -y. Yet the argument that in modern dialects the glottal stop is a common substitute for the early ju sheng -k seems irrelevant; the SCg value of 路 lu is not derived from an earlier -k but from -g as shown in the Hsh connections. It is more natural to suppose a weakening of -g, preserving its voiced quality, than a glottal stop with loss of its voiced quality.¹²

The words with pure vocalic ending in SCg are those that never rhyme and do not have any Hsh connection with ju sheng words. Such a decisive role of the connection with ju sheng as the final criterion has been criticized but not replaced by a better one.¹³ Nevertheless, following that criterion, Simon has pointed out several connections of that nature in characters with vocalic ending. A list of such cases follows:

*ts'a 差: *ts'âk 差 and 差 *ts'ai, *ts'ai < -g.

*ts'ia 且: *ts'ang, *dz'uo, *dz'o 且, *tsiak 且.

*dz'wa 坐: *dz'uk 坐.

*ko 古: *g'âk 古.

*g'u 后: *g'ang 后; possible r.: *有 giüg: 殆 *d'æg: 子 *tsiæg (Ode 303); 嶽 ngük (Ode 273).

*xwâ 化: *ngwâ - iəu < *-iôg 化.

*k'io, *xio 虚: r.: *樹 *siäk: 夜 *siæg, etc. (Ch'tz).

*pâ 巴: r. *d'âk 巴 (Ch'tz).

*g'â 下: r. *mâg, mâg 下 (Ch'tz).

*k'wâ 夸, 夸: r. *ts'âk *ts'âk (-g).

*tjâ 者: *tiak, *d'iak 者.

*zi 與: r. 莽 -ng. 與: r. 數 -k.

*g'o 户: r. 復 -k; 索 -k.

*g'o 乎: r. 獲 -k; 呼 r. 絡 -k.

*ngo: 午: ngâu < *-g 午, *xâng 午; 卸 r. 錯 -k, -g.

*o 烏: r. 格 -k, 若 -k (EY).

*lo 鹵: r. *mâg 莽 (Chuang).

*so 素: loan f. 噶 -k, r. 玉 -k (Wen).

*b'o 步: *b'âk 步.

*giwo, xiwo 羽: *-ziək 羽.

*dio 予: r. *mâg 莽, -k 服.

*nio 女: 怒 r. 數 -k, 莽 -ng. 較 -k (Kuan); 奴 nau < *-g.

*ku 莠: *kung 講, *kuk 莠, 構 r. sük 東 (Hsün).

*k'lu 寇: r. 罪 *tuk (Yi).

*g'iu 具: kiwok 具; r. 屬 -k (Ch'tz).

*lu 婁: *suk 數; r. -k (SW, ku wen 白聲 *kiuk).

*diu 欠: iəu < *diôg 欠, loan f. 鷄 *diôg. r. 裕 -k (SCg).

*diu 欠: iwok < *d- 欠, 欠 (Chuang). Tj 鍾 -ng.

*siu 須: *siwong, *siôg 須.

*miwo 母: miəu < *-g.

*miu 侮: 每 *mwæg. Tj 蒙 *müng, 睦 *muk.

These words should be reconstructed with -g in the Hsh system and rhymed texts other than SCg and with -y in SCg. Furthermore, some words, which in rhymed texts other than SCg, rhyme with words in -g, could then at least in those systems have a value -y, but in SCg still have an open syllable. Examples:

*tiu 朱: 珠 -iəu < *-g (Simon); 珠 r. diôg 由 (Wen), 鉤 -g (Hntz);

誅 r. 誅 -g (Chuang).

*k'iu 區: 區 r. 軌 -g (Chuang).

*tsu 走: r. 軌 -g (Lieh), 游 diôg (Wen).

*miwo 武: r. 錯 ts'âk, -g, 夜 siæg.

*miwo 無: r. 謀, 餒, 龜, 時, 茲 -g.

*ngio 圍: r. 度 *d'âg, *d'âk (Hftz).

*sio 鼠: r. 夜 *siæg (Hftz).

*d'o 圖: r. 子, 度, 舍, 夜 -g -k.

*k'u 口: r. 道, 葆, -g: 略 -k.

*d'o, t'o 土: 牡 *mog (SW).

These two lists are confirmed by evidences from sound equations in SM, Tj equations in SW, and by Chch. For example:

*p'o 普: Chch; 溥 *piwog (Simon, p. 278).

*sio 疏: 索 *sâk (SM).

*g'u 侯: 護 g'wâg (SM).

Some series of characters, reconstructed with pure vocalic endings according to SCg, show connections with dental finals in the Hsh or in rhymed texts other than SCg. For example:

- * g'â 可 : * kân 苛 (Simon, p. 281).
 * tâ 多 : * t'ân 痰, * tâi < -d 跬, * dz'iat 蚘.
 * ngia 宜 : * tâ 多 phon. (SW). r. 溪, 離, 夷 -r (Chou shu).
 * t'ia 宅 : r. 訾 -r, 蛇, 化, 為 (Chuang).
 * g'wâ 和 : * g'wân 桓 (Karlgren).
 * ngwâ 卧 : * diên 臣 (SW 从人臣).
 * kwâ 高, 岡 : * kwet 骨 (Simon, p. 281) * ngat 及
 * b'ia 皮 : * gwia 為 (SW). 皮 r. 訖, 蛇 (SCg), 多, 那, 何 (Tso).
 * gwia 為 : r. 離, 兒, 知, 疵 (Lao); 訾, 蛇, 化 (Chuang).
 * ngwâ 厄 : * tsiēt 尸 (Takata 25/45). r. 冤, 為, 威, 非, 幾, (Wen); 微 (Yu mo).
 * t'lia 離 : r. 窳, 此, 離 (Chou shu).

Such connections are also suggested in SM and other dictionaries:

- * ngwa 瓦 : * g'lwâr 踝 (SM).
 * d'lia 離 : * lâ 羅 (FY).

The question of how to reconstruct the words of the list given above will be answered in connection with the problem of final -r.

A group of words in pure vocalic ending in SCg shows Hsh connections with dental, as well as velar finals. Some exceptional words occur even in SCg rhymes. For example:

- * tsâ 左 : * ts'a 差 : * ts'âk 蹉. 左 * tsâ r. 儻 * nâr (GS. p. 93, Wei feng). 蹉 r. * nâr 儻.
 * dz'wâ 坐 : * dz'uk 鋸 and * dz'an, * dz'iwan 墜.
 * mæg 母 : * miug, * mwæg 每 and 敏 * miwên, 緜 * b'iwan.
 * mâ < -g 馬 and 痲 * mwan, * t'wan.
 * ts'iu 取 : * dz'wân 蕞, * dzwân 鄒.
 * d'u < -g 豆 : 短 * twân. 豆 r. * tük 斷, * dz'iôg 醜.
 * g'o 乎 : g'iei < * -r 号 : * xiek 孺. 呼 r. 絡 -k.
 * o 烏 : * iat, * ien, * ât 闕; r. 格 -k, 若 -k, 闕 -g.
 * t'o 免 : 逸 * d'iet (SW), (cognate 昆 * t'iak ?).
 * p'iu 媿 : * p'iwan.

- * sniu 烏 : * niæg 而, derivates * niuk, nâu < * -g, 鳩, * nwâr, 變 * niwan, (SW).
 * xo 虎 : 撓 (Simon p. 278) and 虜 * ngian, ~ -t, etc.

Final -r

Karlgren proposed two solutions to this problem,¹⁴ but later rejected the explanation of tâ in a group tân : tâ as dialectal tânⁿ resulting in loss of -n. These cases are so numerous that a theory of dialectal features or mixtures cannot explain the whole ArC system; one explanation must be found for all. The new solution excluded not only the possibility of -ⁿ but also of -s, -l, -d, and proposed -r.¹⁵ Here, Karlgren's list of fundamental cases is not limited to SCg rhymes or Hsh and Chch graphs, but draws from dialect notes and Han time texts, as well as from rhymes in Tso chuan, and the like, though strictly only the SCg rhymes and the Hsh connections should be taken as criteria.¹⁶ Now the -r words in SCg¹⁷ mostly rhyme with other -r words and offer no proof for any kind of reconstruction. There are also rhymes -n : -r (eleven cases), -d : -r (nine cases),¹⁸ -0 : -r (two cases).

In the rhymes -d : -r, all the -r words have AnC -i, and a phonetic value like Simon's -đ or -z would seem more satisfactory. The objection that many of these words (-r : -d) in -đ also rhyme with other ones ending in Karlgren's -r is not valid; moreover, in 皆, 爾 (Ode 169.4), in 弟 (Ode 183.1) and so on, final -r does not agree with the Hsh.¹⁹ A more serious objection is that some of those -r (~ -đ ~ -z) words also appear in rhymes with -n words (e.g., Ode 40.3: 敦 -r: 遺 -d: 摧 -r, etc.) But the rhyme pattern -r : -n can be corrected, and thus the rhyme values may change completely. In fact, the sequence in Ode 183.1 is not as in GS: 水 -r: 隼 -n: 弟 -r, but: 水 * siwâr: 海 * -æg: 隼 * siwân: 止 * tiæg: 弟 * d'ier: 友 * giüg: 亂 * lwân: 母 * mæg. Of the two possible interpretations, ab cb ab cb (strict one), ab ab ab ab (a looser one), the first is preferable; it suggests 水 / * siwæđ (-z) instead of * siwâr. Odes 222 and 299 have rhymes 芹 * g'ien: 旂 * g'ier, but the real sequence is * dz'iwan 泉 : 芹 * g'ien: 朝 * t'iôg: 旂 * g'ier: 澗 * p'iad: 嗟 * xiwæđ: 駟 * siäd: 屆 * kæđ; and 水 * siwâr: 旂 * g'ien: 止 * tiæg: 旂 * g'ier: 茂 * b'wâđ: 歲 * xwâđ: 大 * d'âđ: 邁 * mwâđ. A pattern aa b cccc seems preferable, as the non-rhyming element b cuts the stanzas in two parts. Then 旂 rhymes with -d words, and a final -đ (~ -z) is more fitting. We may object to a difference of vocalism in Ode 299, but GS has other cases with rhymes a : ə, for example, 澗 * p'iad (Ode 222) and 山 * san: 歸 * kiwâr (Ode 156).

The value 旂 *g'iəŋ* also fits in Ode 182.3 晨 -*n*: 輝 -*n*: 旂 -*ŋ* (complete sequence: 其 -*g*?, 晨, 輝 至止, 旂 i.e., x bb a [-*ŋ* 至 ?] x a). In Odes 128.3, 257.4 -*r* words rhyme with -*n*: 羣 -*n*: 鏗 -*r*: 苑 -*n* and 殷 -*n*: 辰 -*n*: 西 -*r*: 瘠 -*n*. In principle -*ŋ* (-*z*) could serve as well as -*r*, but 鏗 and 西 have *de facto* variant readings in -*n*.²⁰ In Ode 201.3, GS sets up 菟 **ngwər*: 萎 **iwər*: 怨 **iwǎn*; the complete sequence is 菟: 死 **siər*: 萎: 怨; this allows a pattern aa bb, separating 菟: 死 from 萎: 怨, because of the difference of vocalism.²¹ Rhyme 萎: 怨 must be studied with other words with -*a*-vocalism; they are mostly words with -*n*; only four of them rhyme with -*r* words, which develop into two AnC groups: -*â*, -*uâ*, or -*ie*, -*i*. This suggests two ArC forms as well, a possibility strongly rejected by Karlgren.²² Although an explanation must be found, based on the ArC system as a whole, it does not follow that only one reconstruction should exist. From the rhymes (Ode 215.3): 翰 **g'ân*: 憲 **xian*: 難 **nân*: 那 **nâ*-, (Ode 259.7) 番 **pwâ*:- 單 **t'ân*: 翰 **g'ân*: 憲 **xian*-, (Ode 212.2) 緝 **d'iəd*: 神 *d'ien*: 火 **xwâ*-, (Ode 154.1) 火 **xwâ*:- 衣 **iəd*: 華 **giwəd*, we may posit an ArC weakened -*n*. A final -*n* would also explain rhymes as (Ode 59.3) 左 **tsâ*: 瑳 **ts'â*: 儺 */*nâⁿ* and (Ode 228.1) 阿 */*âⁿ*: 難 */*nâⁿ*: 何 */*g'ân*.

It now seems logical to apply this value to the words listed on page 16. Thus we obtain a parallel set of correlated values in the dental and velar series of finals:

/*	- <i>n</i> & <i>ŋ</i>	- <i>n</i>	- <i>d</i>	- <i>t</i>
/*	<i>y</i>	- <i>n</i>	- <i>g</i>	- <i>k</i>

Final -*m*

A striking difference in Lu Chih-wei's SCg rhymes with those of Karlgren is the extent of final -*m*. In ArC some words ending in -*m* shifted to -*ng* because of dissimilation of vowel -*u*- (GS p. 28). But in SCg Karlgren admitted rhymes between -*m* and -*ng* without changing either one of the finals.

Ode 126.2 中 **t'îong*: 驂 **ts'əm*.

Ode 126.3 膺 **iəŋ*: 弓 **kiung*: 滕 **d'əŋ*: 子: 興 **xiəŋ*: 人: 音 **iəm*.

Ode 154.8 冲 **d'îong*: 陰 **iəm*.

Ode 236.7 林 **gliəm*: 興 **xiəŋ*: 心 **siəm*.

Ode 245.8 (豆 */*d'ug?*): 登 **təŋ*: 升 **siəŋ*: 歌 **xiəm*: 時 **diəŋ*: 悔 **xmwəŋ*: 今 **kiəm* (a bbb aaa b).

Ode 250.4 飲 **iəm*: 宗 **tsōŋ*.

Ode 255.1 謀 **diəm*: 終 **t'îong*.

Ode 258.2 (甚 **diəm*): 蟲 **d'îong*: 祀 - : 宮 **kiōŋ*: 瘞 - ; 宗 **tsōŋ*: 克 - : 臨 **bliəm*: 士 - : 躬 **kiōŋ*.

Ode 300.5 乘 **d'iəŋ*: 滕 **d'əŋ*: 弓 **kiung*: 萬 - : 綬 **ts'iəm*: 增 **tsəŋ*: 瘠 **iəŋ*: 徵 **d'iəŋ*: 乘 **d'iəŋ*.

Other cases were proposed by Tōdō Akiyasu²³ 藤 堂 明 保:

Ode 190.2 降 **-ōŋ*: 阿 **â*: 飲 **iəm*: 池 **d'ia*: 寢 **ts'iəm*: 訖 **ngwâ*.

Ode 192.4 林 **gliəm*: 蒸 **t'ieŋ*: 殆 - : 夢 **miung*: 定 - : 勝 **siəŋ*: 帝 - : 憎 **tsəŋ*.

Ode 240.3 宮 **kiōŋ*: 廟 **miōŋ*: 臨 **bliəm*: 保 **pōŋ* (ab ab).

Ode 240.4 式 **siək*: 入 **riəp*: 德 **tək*: 造 **tsōŋ*: 鞞 **d'âŋ*: 士 **dz'iəŋ*.

Ode 305.4 監 **klam*: 嚴 **ngiəm*: 濫 **glām*: 遑 **g'wāŋ*: 國 **kwək*: 福 **piuk*.

(Rhymes for Odes 195.3, 236.4, 236.5, 257.8, 263.3, 177.1 are less convincing.)

We can hardly consider the finals -*m*: -*ng* as rhymes unless they are differently reconstructed. For some of these words, we find that 膺 **iəŋ* has phonetic 瘠 **iəm*, and 滕 **d'əŋ* has phonetic 朕 **d'iəm*, 降 **g'ōŋ* has Hsh **k'əm* 鞞, **kəm* 鞞, 鞞 and *tâm* 鞞, *d'âm* 鞞. Here -*ng* may have developed from -*m*, but then why 膺 **iəm* > **iəŋ*, whereas 音 **iəm*, on the other hand, remained unchanged until AnC?²⁴ Curiously enough, the same characters reappear constantly: 中 and 冲, 興 (twice), 弓 (twice) 躬 and 宮 (twice), 宗 (twice), 蟲 (twice), 憎 and 增, though the Hsh connections show no trace of final -*m*. Lu Chih-wei reconstructs -*m* for the complete series of these words.

Ode 13.2 中: 宮.

Ode 14.1 蟲: 螽: 冲: 降.

Ode 3.2 仲: 宋: 冲.

Ode 35.6 冬: 窮.

Ode 36.2 虫: 躬.

Ode 48.1, 2, 3 and Ode 49.1 中: 宮.

Ode 78.3 棚: 弓.

Ode 166.3 興: 陵: 增.

Ode 166.6 恒: 崩: 承.

Ode 168.5 蟲: 蠱: 仲: 降: 仲: 戎.

Ode 173.4 濃: 沖.

(Above listed rhymes, everywhere -m.)

Ode 177.1, 2 飭 t'iap: 服 biap: 熾 tsiəb: 急 giəp: 國 kwəp: 則 tsep:
服 biap: 子 tsiəb: 里 liəb.

Ode 183.3 陵: 懲: 興.

Ode 183.6 簞: 寢: 興: 夢.

(All -m, but Karlgren -m and -ng.)

Ode 190.3 萊: 雄: 競: 崩: 肱: 弁.

Ode 192.5 陵: 懲: 夢: 雄.

Ode 193.3 騰: 崩: 陵: 懲.

Ode 195.5 止 -b: 否 -b: 謀 -b.

Odes 195.6 and 196.6 競: 冰.

Ode 226.3 弓: 繩.

Ode 237.6 陘: 薨: 登: 馮: 興: 勝.

Ode 244.2 功: 崇: 豐.

Ode 244.6 東: 蠶. (Inconsistently Lu has -ng elsewhere.)

Ode 247.3 融: 蟲: 終.

Ode 248.4 涿: 宗: 宗: 降: 飲: 崇.

Ode 256.6 繩: 承.

Ode 257.8 瞻: 相: 臧: 腸: 狂(?)

Ode 265.6 中: 弘: 躬.

Ode 269.1 公: 邦: 崇.

Ode 289.1 蜂: 蟲.

In Lu's list of -m words, the same characters, or characters belonging to the same Hsh series, reappear as in Karlgren's list: 宗 (3x), 崇 (4x), 融, 蟲 (3x), 蠶 (2x), 冬, 終, 薨, 夢 (3x), 棚, 崩 (2x), and so on.

Rai Tsutomu²⁵ distinguishes in ArC two well-separated series of final gutturals. Basing himself on the comparison of the rhyme groups 幽, 中, 侯, 東, 宵 as against the rhyme groups 佳, 耕, 之, 蒸, 魚, 陽, he proposed for the former series finals with a phonetic value either of labiovelars -gw, -kw, -ŋw, or of uvulars -G, -q, -N. Even in the supposition of uvular finals, Rai still takes them as having a labializing characteristic -Gw, -qw, -Nw. Yet labialization can often very well be considered as a concomitant feature which should be represented -^wG, -^wk, -^wŋ, and these forms could be developed into -wg, -wk and -wŋ as well as -gw, -kw, -ŋw and could also have developed from -wg, -wk, -wŋ as well as from -gw, -kw, -ŋw. Both series could have evolved from earlier forms -bg, -bk, -bŋg or -gm, -km, -ŋm or other forms that combined labial stops with

gutturals. It is interesting to note that a good number of the -m reconstructions of the SCg rhymes of Lu Chih-wei fall within the rhyme group 中 for which Rai reconstructed an ArC -ŋw ~ -Nw, namely the characters 中, 仲, 仲, 冬, 終, 蟲, 蠶, 虫, 宮, 躬, 窮, 宗, 崇, 宗, 降, 戎, 濃, 潔, 統, 豐.

Strictly speaking, only the characters that have -m in the Hsh should have ArC -m instead of -ng. Tōdō considers his extensive group of -m rhymes typical for Ch'in and Chou regions, but Lu Chih-wei takes them as pre-Chou features, later preserved in the northwestern dialects in Chou time. Their theories are based on the fact that -m (instead of -ng) is found in the poems of Ch'in feng, Pin feng, Hsiao ya, and Ta ya but are not sufficiently proved. The regional origin of Hsiao ya and Ta ya odes is not certain. Moreover, if this was a peculiarity of Ch'in or northwest Chou, how explain the cases in Ch'u tz'ü, Kuan-tz'ü, EY, and Yi ching? Ch'u tz'ü points to the Ch'u dialect.²⁶

A simple explanation may be that the cases -m instead of -ng, being still exceptional no matter how far they extended areally, represent an older phase in the SCg text. The cases -m: -ng (< -m) supported by Hsh evidence are much fewer than those suggested by rhymes alone, and the latter criterion (the frequent recurrence of the same characters in such a possible rhyming position) offers only a probability that they are real rhymes, a probability, however, which cannot be excluded. Unless the cases of -m: -ng (< -m) rhymes can be connected with poems of a particular areal origin, they must be considered as a general feature of the whole SCg collection, reflecting a definite period in the sound development of the language of SCg, where some -m finals tended to become -ng. In Han times, this phonetic evolution was completed, and in the early texts there exist some examples of personal names in -m which were written with -ng in Han texts.²⁷

TIME OF THE SHIH CHING RHYME SYSTEM

The preceding discussion touches upon the question of the time of the SCg rhyme system. An exhaustive study of such rhymes as -m: -ng may help to suggest a date when the present SCg text was fixed. According to Karlgren, the SCg rhymes represent a system based on the language of the Chou court. "The Odes were composed for the most part in Western Chou time (1027-771 B.C.), a few of them slightly later, but none later than the 6th cent. B.C."²⁸ Assuming that the uniformization was de facto made at the Chou court, it follows that the rhyme system was made uniform not later than the sixth century B.C. But the only positive fact is that the rhyme system in the text now preserved is a uniform one, and nothing tells us when

the uniformization took place. It seems that the criterion for determining the time must be found outside the SCg, that is, in the Hsh and other criteria. We cannot suppose a priori that the uniformization happened at the Chou court and conclude therefrom that the Hsh system must be contemporaneous and dated at a period of 800-600 B.C., if not slightly earlier.²⁹ Of the four schools that handed down the SCg text, one is completely preserved. The differences between the four text traditions can help us little. Inscriptions in poetical form could help if they offered enough uniform material to support the conclusion that the SCg rhymes, if identical with those of the inscriptions, are of the same period;³⁰ this does not seem to be the case.

Karlgren's final argument is that already in Chou time the great majority of the Hsh characters existed, and the Hsh principle was applied in full, for "there arose a real literature. . . . In extensive lay texts with thousands of different words . . . the ambiguity in using one and the same graph . . . would be unendurable." Agreed that a full literature requires the application of a Hsh system, did it not already exist in Shang? It must be proved that the principle was always and everywhere used for the same characters and in the same way, with a phonetic element of the same Hsh series as in the present SCg text. That the SCg rhymes have the same phonological groupings as the Hsh does not mean that the Hsh characters of Chou time were identical, but that the system of the uniformized SCg was similar to that of the Hsh which we know now. There is no proof that the SCg uniformization was of the same time as the first writing of SCg (before the sixth century B.C.). Since the SCg system agrees with the Hsh system, it is logical to look for positive indications concerning the time of the Hsh system independently from the SCg problems.

CHAPTER III

THE HSIEH SHENG SYSTEM

PRINCIPLE OF HSIEH SHENG

The term Hsh is first found in the Commentary to Chou li (ch. 26, Pao shih 保氏, pp. 49-50) by Cheng Hsüan 鄭玄 (T. K'ang-ch'eng 康成, A.D. 127-200) who quotes Cheng Chung 鄭衆 (T. Chung-shih 仲師, also called Cheng Ssü-nung 鄭司農 and Hsien Cheng 先鄭; ob. A.D. 83): 六書象形會意轉注處事假借諧聲也. This term Hsh has been used regularly by Karlgren and translated as "agreeing sounds"; it is paralleled by the term Hsing sheng 形聲 in SW, and Hsiang sheng 象聲 in Pan Ku (HS, ch. 30, K'M 434/1). Whether the difference of terms implies also a difference in the conception of the graphic analysis is not easily deduced from the sense of the terms themselves. "Agreeing sounds" may refer to a certain similarity in sound involving only the final rhyming element, but the terms Hsing sheng, 'form and sound,' and Hsiang sheng, 'picture and sound,' may be taken only as an indication that besides the full graphic sign, there is also a phonetic sign which stands for the whole word. This is certainly the meaning indicated by the definition in SW for Hsing sheng: 形聲者以事為名取譬相成江河是也 "What is called 'form and sound' [phonogram] is like the characters 江 and 河: [the sound] by which the thing is named is taken as an analogue to complete it [the graph]." This definition implies that the whole word is phonetically represented and not only the rhyme.

In this study the established usage of the term Hsh, as a synonym of Hsing sheng defined in Shuo wen, will be followed throughout. We can therefore propose a definition of Hsh: a character graphically belonging to a whole group possessing the same element to indicate the sound of the word, which is to be taken as identical or closely similar in all the graphs in that group. With the sound similarity in the same group, there may exist a semantic or etymological relation between these characters (verb: noun; transitive: intransitive; causative: passive; noun: adjective, etc.). Such cases are cognate derivatives, whereas those without any etymological or morphological relation are purely phonetic derivatives.

In the Hsh series a distinction is usually made between primary and secondary characters. The primary character is obtained by eliminating the radicals, until we get a simple, unanalyzable character without phonetic element. Often this process is unsuccessful; the ultimate element may not exist as such. Also, the radicals may be deceiving since there is no way of knowing where a historically primary graph has been enlarged by a radical (looking like a secondary character), and where a secondary character remained without the differentiating radical (looking like a primary character). For example, GS 286 敵 (sense and reading unknown) has derivatives 撤 *d'iat, *t'iat 'to remove,' *d'iat 徹 'to penetrate, to remove,' *d'iat 澈 'limpid, clear' (penetrable to the eye?); *d'iat 轍 'wheel track.' Similarly GS 428, 1238, 526, 171: 豚 *d'wən 'young pig,' but also 'to drag the feet in walking'— 涖 *d'wən 'to withdraw.' 涖 is secondary, but 豚 may be so too (cf. 427, 豕 *d'wən: young pig), and be derived from 豕 siē: 'pig, swine' (like *dziwəd 豕, a graph almost identical with 豕, and *t'wan 'running pig' 豕, where the top element is not clear).¹

Cognate Derivates

Theoretically, cognates in the same Hsh series must differ in phonetism from the word to which they are etymologically related; if the derivation is of a morphological nature, the differences must follow a definite pattern of derivation unless the derivation process had stopped being productive, and the phonetic differences as well as the semantic relation had been wiped out. But cognates are not found only within the same Hsh series, and a derivation pattern cannot be known until we also have safe results concerning the cognates belonging to different Hsh series. Karlgren has occasional remarks on the subject.²

For the cognates that reveal no morphological derivation pattern, we can think of coexisting doublets and dialect words or mere variants of the same word.³ Morphological derivation is in principle limitless but in practice is limited in all languages owing to various causes. In Chinese all morphological derivations, as yet discovered, have been applied sparingly or have disappeared in the course of the evolution. The studies of Shen Chien-shih on that problem were premature. Although able to follow the individual development of particular words, his article, wherein six main lines of development of cognates in a given phonetic series were set up, was criticized by Wei Chien-kung and Li Fang-kui, exposing the danger in setting up a general theory for all.⁴

¹For notes, see p. 257.

Purely Phonetic Derivates

These derivates, in contrast to the cognate derivates, logically demand that we look for a complete phonetic identity between derivate and primary character. The inventors of the Hsh characters had at hand a sufficient choice of identically sounding graphs to be combined with a semantic element, capable of suggesting the word. If their only aim was to follow phonetic exactness in the Hsh, there was no reason for any lack in phonetic identity between primary character and derivates.⁵ Yet in the present reconstructed readings, this is often not the case. The reason is that either the reconstruction is not exact, or there was no such identity even at the time of formation of the character. In the first supposition, it should be noted that identity of primary and secondary character is not a constant value. The Hsh characters may change with various periods and regions. In the second supposition, a situation is possible where the Hsh character was not phonetically identical with the primary character but already was firmly established in its formation. Borrowed from another area or time, where the requirement of a suitable Hsh identity was fulfilled, it remained unchanged. It is important to establish a definite period and area from whence the Hsh characters can be viewed synchronically. The only convenient source for such a study is SW. Another situation is that there was no identity among the Hsh characters but only a certain similarity. Karlgren thinks there was a shifting and enlarging process in the range of applicability of the phonetic element, attributed only to difference of time in the character formation, and called "the sound sphere of the phonetic element" in the Hsh series.⁶ But he does not give any principle to establish the limits of the sound sphere or the direction of the process of the sound range. This limit can be established only by taking a uniform source at a given time (SW), and by establishing its regular types of Hsh derivations. We may venture a theoretical explanation: although it is, for the time being, impossible to set up exact formulas of derivation of the cognates or to determine the productivity of the procedures of derivation, these derivations could result in a set of variations that were, after a time, considered as the "phonetic sphere" of all Hsh derivates. It is natural to consider the cognate derivates—first expressed by the same graph but different reading, then later graphically differentiated by addition of a semantic indicator—as the origin of the Hsh formation of all graphs. Thus initially morphological derivation could result in a phonetic sphere applied to all Hsh characters.⁷

The addition and changes of semantic and phonetic parts in the Hsh characters caused further confusion. In this way there can be different phonetic elements in the same character; they superseded each other or differed according to the authorities. (Cf. 覆, infra p. 35). But there is no certain

criterion for us to analyze by our own lights the Hsh elements and to determine their role safely. The only safe guide is a document presenting the graphic material according to the analysis of Chinese scholars, consistently applied in the light of a sufficiently ancient tradition. Such a document is the Shuo-wen chieh-tzu 說文解字.

HSIEH SHENG GRAPHS IN DIFFERENT PERIODS AND AREAS

In the earliest written documents down to the normalization of the script in SW, we find graphs that seem to be formed on the Hsh principle.

Time and Space

Probably many graphs invented by Shang scribes, or even earlier, came down to Chou and were taken over as a whole system of writing. But since the center of Shang civilization was far from the Chou center, and the writings of the Shang were centuries older than the period of Chou hegemony, this writing system could have spread to other areas as well as to Chou.⁸ These graphs could be taken over in various readings⁹ in a neighboring area or simply borrowed with another reading which did not exist in the center of invention.

The development of the Hsh system was naturally a slow one; it began as a general, hazy principle, by which a particular reading of the graph was suggested. It has been shown, at least for some characters, that the addition of small strokes, serving as matres lectionis, could well suggest a special reading.¹⁰ Such characters could be borrowed as a whole, but the additional endomorphic phonetic elements could be disregarded and the graph read according to another reading or for a different meaning. Then, new endomorphic signs could be added to the original graph. It is natural that in such a span of time, there were other directions of radiation than from Shang to Chou, and the Hsh principle was repeatedly and differently applied at various times.

It appears that there were different kinds of Hsh principles (purely mnemonic signs as the chih shih,¹¹ slight graphic changes pointing to another graph with a certain well-known reading such as the endomorphic phonetics, sounds suggested by combining the readings of different graphic elements together), different stages in the development of the principle, and different periods in the phonetic development of the language in which a Hsh was applied. To apply any one analysis to characters of widely different periods

such as Shang and Han, or any Hsh analysis without starting with uniform material, is dangerous. Many Shang and Chou graphs have been identified, but many details of analysis remain obscure. This is also true for the later graphs, but here a uniform analysis (as in SW) tells us which parts were relevant and which were not. For the slightly varying graphs of Shang and Chou there is no criterion determining what details are phonetically meaningful. We can understand the structure of Shang and Chou script only so far as it seems to be similar or identical to SW.

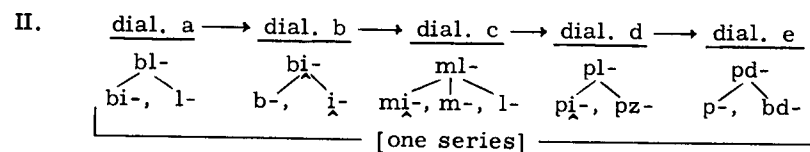
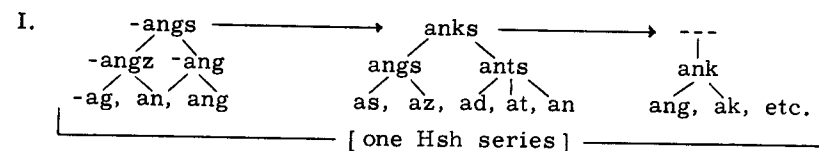
The regional factor as a cause of the differences in the Hsh principles and their application, duly stressed by some authors, was disregarded by Karlgren. His theory about the court of Chou as the center of graph formation can be differently understood. The influence of Chou is natural; however, it should not mean that it was the only center of invention of characters, but the center where the various attempts of writing were sifted and selected, rejected and accepted. When rejected, these attempts did not ipso facto die out without affecting the script in general, and when accepted, the Hsh characters were not necessarily completely true to Chou phonetism; they could be acceptable if the area of origin had a phonetism parallel to and easily transposed into the Chou dialect. Although normative, the Chou script was not necessarily exclusive of non-Chou graphs; it was probably a center rather normalizing than normative, receiving as much from outside as it gave to the outside areas.¹²

Finally, the Chou script is normative in a special kind of texts known by the bronze inscriptions. Karlgren distinguishes three periods: Early Chou (ca. 1027-900 B.C.), Middle Chou (ca. 900-600 B.C.), Huai Style period with (a) Chou centuries (600-256 B.C.) and (b) Interregnum (255-222 B.C.). Of the third period, he says this: "The . . . epoch ca. 600-222, was the decadent feudal era—decadent, not in culture generally (on the contrary this was the time of the greatest literary and philosophical activity), but in regard to the political system."¹³ The disintegration and decentralization of the empire coincides with the great literary activity—a literature so extensive as to require a script with specific phonetic and semantic elements—and thereby deviating already from the writing of the early inscriptions. This situation of disintegration lasted for centuries—that is, long enough to expect the script to become different in the various cultural centers. Such a situation is historically attested in the Ch'in period: in 221 B.C., laws, weight and measures, writing, and so on are unified. It is therefore very probable that the development of script and the application of its principles differed to various extents in all the cultural centers. In the earliest periods of Chou, the actual extension of its normative power is hard to deter-

mine. Moreover, Chou itself had inherited the Shang script, which had probably spread to other centers in the empire as well.¹⁴

Regular Patterns of Derivation
Versus
Irregular and Isolated Derivates

The foregoing remarks on the factors of time and space in the Hsh problem indicate that the phonetic sphere of similarity of sound in a Hsh series results from the telescoping of various periods and areas into one system. Therefore a Hsh series in SW, with a wide range of strongly differing phonetic values in the derivates, could be arranged in terms of various time levels. Choosing hypothetical values, phases of evolution, and dialectal variations, this can be illustrated with two schemata:



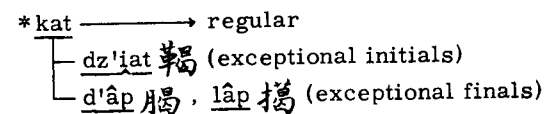
A diachronic dissection of a Hsh would consist in eliminating the most frequent, regular Hsh cases from the exceptional, rare, and inexplicable ones, which can be attributed to earlier periods. Earlier derivates would naturally become rare, as during a slow elaboration of the script, new and more transparent graphs are substituted for the older ones that had become obsolete and obscure.

Here come first the simple graphs without any derivate characters. Etymological research surely can show that words like 水, 火, 心 were not isolated, and it would be natural to find these graphs as primary characters in a Hsh series. Yet they are not. Probably the phonetism of the word was different at the time of the Hsh application; because of the phonetic evolution the sound indicator became useless; the Hsh derivate disappeared by substitution, or, if it remained, it was in some way reformed by new additions.

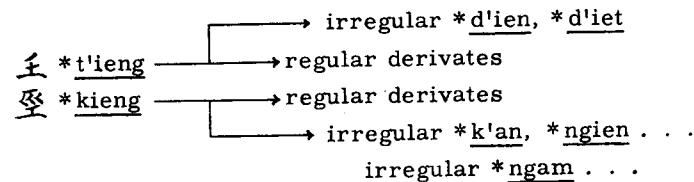
There are also isolated graphs like 遠 ngiwan, 望 (?)¹⁵ which could very well contain some phonetic indicator or a kind of endomorphic phonetic. The original composition of these graphs may differ from what the dictionaries

tell now, that is, the commentators and later lexicographers knew the meaning and applied a reading of a synonym, like 遠:原, 望:望. Once the analysis of such graphs is completed and its connection with some existing phonetic series and its reading revealed, two hypotheses, exclusive of one another, can be made: the reading is phonetically explicable in terms of an earlier linguistic phase, or the hypotheses offer no point of comparison at all. In the latter case, the same graph could stand for various readings and work as phonetic in different Hsh series.¹⁶

The study of such isolated graphs may seem premature, but the study of the irregular cases in a Hsh series is possible. Exceptional branches of a small group of derivates in a Hsh series against the main regular derivations can be observed in the finals, initials, and vocalism, separately or combined. For example, 多 tâ:駭 k'iei, or in 勾 with a majority of derivates K-a-T, but some derivates in D-a-T, D-a-P and L-a-P.



Such exceptional branches in the Hsh series are probably relic forms of older derivations. Some exceptionally extensive Hsh series possess double or triple equivalently regular branches, each with their exceptions. For example:



The real question of the Hsh is what graphs belong to a given series. Several opinions and systems have been offered.¹⁷ There is danger of circular reasoning; we discover Hsh connections on the basis of reconstructions, and then make further reconstructions on the Hsh series supposed to be proved. To avoid this mistake we could hold to a conservative set of Hsh derivates, leaving out all those that do not fit in the regular phonetic sphere. The fundamental weakness is that our present-day analysis is the starting point in classifying the Hsh series. We need light from a Chinese philological tradition, which must reach back to the older phases of language and script; it must be uniform and synchronic to give a consistent analysis of the whole script. Such a tradition is found in SW.

SYNCHRONIC VALUE OF SHUO WEN

SW, completed about 100 A.D. by Hsü Shen 許慎 (T. Su-Chung 叔重) and presented to the throne in 121 A.D., is the end result of a long process of uniformization of the Chinese script, which was hastened by the unification of the empire by Ch'in Shih-huang and the unification of writing begun and directed by Li Ssü 李斯 (ca. 221 B.C.) and his collaborators.

Shuo wen and Other Dictionaries

SW is an attempt at a complete lexicography of the Chinese language dealing with the graphical, phonetic, and semantic aspects. It is not the first lexicographic work in Chinese; Hsü Shen probably used other works of various nature, which are now lost; earlier works now extant (EY, FY) are quite different. Some works previously known directly or only by tradition are mentioned in the preface.¹⁸ SW mainly used the script called hsiao chuan 小篆 'Small Seal,' a simplification and modification of the ta chuan script 大篆 'Great Seal' by Li Ssü; it occasionally compares the hsiao chuan with the chou wen 籀文 and ku wen 古文 forms. The ta chuan is usually taken as the name of the script known now from the bronze inscriptions of Chou (according to some, Early Chou; to others, Late Chou), and identified with the chou wen forms in SW. SW notes the fact that with the decline of the power of Chou, and the rise of the feudal states, "speech was different in sound, and the script different in form," and that ku wen was the script used by Confucius and Tso Ch'iu-ming. This statement has been explained with great probability in the sense that although ta chuan was changed into hsiao chuan by Li Ssü, continuing the tradition of Chou, the eastern schools of thought had already risen to high prominence; the ku wen was not a standard script, but special to Eastern China and based on dialects different from that of the hsiao chuan.¹⁹ Besides ku wen and chou wen, SW also has forms called 'huo t'i' 或體. All these graphs often differ seriously from the Shang bones, and the relation of the bone graphs to the SW graphs has not been clearly established.²⁰

SW has been discredited because it often misunderstood the graphic structure of the characters. It quotes different opinions on sound and meaning of the words, it mentions different school traditions and sayings. Yet it shows a great consistency in its principles of analysis, the procedure and sequence in which the graphs are treated. This apparently disparate material is created by one man, according to a set of implicit and explicit principles. These principles of analysis and explanation make the SW a uniform syn-

chronic study of the Chinese language at the time of its author Hsü Shen. Even when SW is in contradiction with clear facts known from Shang and Chou inscriptions, its statements remain of value as the expression of a living tradition at a given time; its mistakes may have meaning.²¹

The Hsieh sheng Principle in the Light of the Liu shu

The Hsh principle was first clearly formulated in Han time. Its notion is clarified not only in itself, but in contrast with other principles of the liu shu 六書 or liu yi 六藝. These terms of "grammatology" and their sequence in enumeration sometimes differ according to the sources.²² Among the six principles, two regard the graphic aspect of the characters (chih shih 指事, hsiang hsing 象形), two regard the sound (Hsing sheng 形聲 = Hsh, Chch 假借), one of them regards the semantic content and etymological connections (chuan chu 轉注). One principle (Hy 會意), in spite of the usual acceptance, will require a special investigation.

Chih shih and Hsiang hsing.—Chih shih is defined in SW: 指事者視而可識察而見意 = 二是也 "What is called 'pointing at the thing' is like [the characters] 一 and 二; by looking one can recognize it, by examining one makes its meaning appear." Hsiang hsing is defined in SW: 象形者畫成其物隨體詰詘日月是也 "What is called 'picture and form' is like [the characters] 日 and 月; it depicts and forms [the image] of the object, following the sinuous outlines of its physical appearance."

Whereas Hh is simply a pictograph or morphogram,²³ showing the object by drawing its important or striking parts, the chih shih "points" at one detail rather than the whole, specifying something in the pictograph. The chih shih therefore presupposes the Hh. Yet Hsü Shen puts it before the Hh, probably because there were also chih shih which needed no pictograph as a background to mark the detail. These chih shih could be named dactylograms,²⁴ graphs representing motions or gestures of hand or fingers. Clear examples are, 八: separation. 上: upward. 下: downward. 左: left. 右: right. 〇: turn around. 𠂇: pull. 𠂈: glide off. 〇: pass through. 入: enter, wedge in. Such graphs are necessarily few and polysemic.²⁵ Polysemy can be found in any graph, but the chih shih are by nature more simple in graphical aspect and more general in semantic content.

In the Hh characters we often meet cases of substitution.²⁶ They are not without linguistic importance, though by definition they contain no phonetic element. That a word is written by different pictographs in subsequent peri-

ods or in different areas may indicate a special connotation in the meaning according to time or place. Even if the same pronunciation is indicated or supposed, it is not impossible that they originally had a different sound, etymologically related or not. Such different connotations are found in the various graphs for wei 爲,²⁷ hun 婚.²⁸

When the chih shih consists of a special mark added to an existing graph, so as to suggest a special word distinct from the underlying pictograph, it is possible that an etymological or at least a semantic relation exists with the Hh. Thus 母 is distinguished by chih shih from 女; the two words may be related. It is a legitimate question whether the chih shih as a rule are etymologically related to the underlying Hh. Then we would have groups of related words indicated by groups of graphs, like: 母 and 女, 口 and 甘, 刀 and 刃.²⁹ This shows how close the chih shih could be to the endomorphic phonetic in some archaic graphs; both may have been originally connected. Furthermore, the later enlargements of the chih shih graphs, which became definitely established in graphic usage like 左 'left' and 右 'right,' need explanation as to the choice of the particular enlargement; a phonetic role of these additions is not to be excluded a priori.³⁰

2. Hsing sheng (i.e., Hsh), though clearly described in the definition (cf. p. 23) of SW, brings some special problems. One is the meaning of yi sheng 亦聲, 'also phonetic,' which could be understood sometimes as 'quasi-phonetic' or 'incomplete phonetic.' Yet they mostly are phonetically quite satisfactory, as 中: 仲, 豈: 愷, 束: 瘵, though many Hsh seem less satisfactory. The yi sheng analysis seems to imply that these graphs belonged also to another class at the same time as to the Hsh class, namely Hy. (Cf. 4.) SW mentions also the sheng sheng 省聲 'shortened phonetic.' Often the graph with the complete phonetic element is never found in any existing source. (E.g., 冢 with 冢 as 'shortened phonetic'). It must be decided whether this analysis is a hypothesis proposed by SW, or an explanation based on facts, so that 冢 alone had also the reading ka (comparable to 亥 *g'æg), a reading later continued by the Hsh 冢, whereas the other reading of 冢 (siē) became exclusive.³¹ The latter theory often seems the right one.

Some sheng sheng analyses seem completely unnecessary. Thus 睇 has shortened phonetic 睇, and 泥 has shortened phonetic 泥. The choice cannot be without reason. Probably 尼 and 泥 were phonetically different. 尼 is nji, 泥 and 泥 are niei, all being, according to GS, from *niēr, but the SW suggests that a distinction was present in ArC as well. 希, 稀, 睇 were all xjei, from *xiēr. This distinction could involve more than one detail in the phonetism of the word.³²

Some characters in SW have different phonetic elements according to authorities often explicitly mentioned;³³ strongly diverging phonetic elements may appear. This happens in characters, for which SW has preserved the chou wen, ku wen or other variants (huot'i 或體). For example, hsiao chuan 妻 /*ts'iad ~ ku wen 妻 /*kiwəd; hsiao chuan 黎 *-t ~ huo t'i 黎 *-m; hsiao chuan 銳 /*ts'juŋ ~ huo t'i 錄 /*t'wan ~ ts'wan.

A number of characters in the present SW are not Hsh, yet not analyzed as any of the categories of SW. The Hsh analysis seemed unintelligible to the later editors, and they suppressed the character 聲: instead of 从 x, y 聲 the present text states 从 x y (y: 'suppressed phonetic'). Yet often these editors should have found the original SW analysis regular, and in other cases the suppressed phonetic is hard to maintain (e.g., 吠: 从犬口).³⁴ The explanation of such cases may well be found in an obsolete reading of the suppressed phonetic. Sometimes SW does not give a Hsh analysis whereas modern scholars found a perfect Hsh connection. Why did SW not recognize or mention this Hsh? For example, GS takes 奇 *g'ia as a regular Hsh of 可 *k'â, but SW analyzes 奇: 从大从可; this is discussed later, p. 34 and note 38.

Finally, SW analyzes some graphs as Hsh, which in older forms of writing (inscriptions) have a different construction. Such contradictions can be explained: thus 單 is analyzed in SW as having phonetic 單; the archaic graphs show an image of a cicada,³⁵ but SW has isolated part of the pictograph and interpreted it phonetically. Graphically an error, it is phonetically a witness of Han time pronunciation.

3. The Chia chieh 假借 definition in SW is as follows: 假借者本無其字依聲託事令長是也 "What is called 'borrowed [graph]' is like the characters 令 and 長: originally there is no graph, relying on sound [only] the thing meant is committed [in script]." A special study on the Chch will follow later.

4. Hui yi 會意 is defined in SW 會意者比類合宜以見指搆武信是也 "What is called 'conjunct graph' is like the characters 武 and 信: they conjoin [graphic-elements of] a fitting semantic kind and unite [them] into a congruency to show the signified [contents]." It is surprising that very few characters are explicitly analyzed by this principle.³⁶ The Chinese commentators have commonly taken as Hy all graphs not analyzed by any of the other principles, but they often failed to explain the combination of the constituent parts. All characters that do not have a simple graphic or a phonetic analysis were put in the Hy category.³⁷ The Hy class includes a mixture of difficult characters, to which none of the general principles of analysis could be applied. Since the uniformization of script came about by slow process, finally analyzed uniformly in SW, the Hy characters

are the exceptional cases, leftovers from phases before that uniformization. The reason for the exceptions was the graphic complexity, or underlying principles, hard to change to the new ones. As in any synchronic, one-plane analysis of a set of functional elements, linguistic or social, the analysis of a writing system leaves some marginal cases, residues of older systems not completely transformed into the new one. It follows that not one formula will explain all Hy characters; various principles may be used, for example, combined reading of the elements put together, either downward or sideward, or readings obtained through a sort of fan ch'ieh analysis,³⁸ imperfect obsolete sound indicators, and the like.

Against this conception of Hy one could object the apparently obvious translation of: 會意: 'combined ideas.' Outside SW this term rarely occurs in texts. In passages where it is found,³⁹ it seems to mean rather: 'to agree in sentiment, identity of feeling, commonly admitted opinion.' The latter meaning would fit with the theory that Hy are characters not easily explained according to the ordinary principles of analysis, but that in those characters some etymology was underlying the graphic structure.⁴⁰

5. Chuan chu 轉注 is defined in SW 轉注者建類一首同意相受考老是也 "What is called 'turn and derive' is like the characters 考 and 老: it establishes [various graphs of] similar categories under one head, and by their identical meaning they are mutually connected." The term chuan chu is not used in SW to explain any particular character; from the example (考, 老) it would mean that the two words are cognates. Its exact significance is explained by the Chinese scholars in various ways; the most plausible one seems to be that all characters belonging to the same division and defining each other in SW are cognates. It is true that etymologies based on the sound and meaning of a word, as known to the actual speaker, without any consideration of earlier phases of the language are subject to error. SW uses various types of definitions, and those that imply a chuan chu relation may be actually erroneous; yet, they are positive indications which deserve serious attention.⁴¹ The elaboration of a chuan chu system would put us in possession of cognates, as they were known in Han time, and show us the range of the phonetic variations among the words of the same family.⁴²

As to the meaning of the term chuan chu, Takata suggests⁴³ that the groups of characters obtained by inversion (广-宀; 邑-邑; 凡-冫) and which imply some relation to each other were probably the chuan chu characters. Chuan chu would then mean 'inverted dots' [of a graph]. This is also the explanation of L. C. Hopkins.⁴⁴ Whatever chuan chu may have meant originally in the light of examples as 邑: 冫, and so on, it does not obtain for 考 and

老; and it can only refer to the etymological side of the words. The term translated 'to turn and pour out' may best be understood as 'to roll,' that is, 'to evolve' and 'to pour out,' that is, 'to derive.'

Implicit Principles in Shuo wen

The implicit principles are those not clearly expressed because either generally accepted or only vaguely acknowledged by the Han scholars themselves. Such is, for example, the principle underlying the sequence in treating the characters in SW. Words of similar semantic content follow each other closely. Occasionally meaning and sound are defined in a way different from the Hsh or a word-to-word definition. Whole phrases or quotations may be used to describe the meaning as well as the sound of a word. Paronomastic definitions, as used in SM and in other works, are sometimes found in SW. A similar device was the Tj formula.⁴⁵

An implicit principle applied in SW, which has not received due consideration is the sound phrase. It is a paraphrase of the meaning of a word, a quotation from a book—authentic or not—, a sentence attributed to Confucius or other sages, containing some words specially intended to describe the sound of the word defined. It greatly resembles the mnemotechnic method used in schools, by which a sentence is coined to help remember the right sound of a character. This explains the unusual phrasings of some definitions, where good synonyms were at hand or some seemingly unnecessary quotations. The sound phrase, being a school technique, was based on a tradition and probably was one of the oldest methods for description of sound and meaning.⁴⁶ It would be unsafe to deduce an exact archaic reading from such indications alone, for the value of the phrases is only known to those who possess the tradition. It is a self-disguising device, and even when its existence is known, we must proceed cautiously to determine which words in the phrase are relevant and how they are to be interpreted. Moreover, such sound phrases could apply to entirely unusual readings now unknown. But by checking them with other information (fan ch'ieh, etc.), they can be useful. For example:

(1) 履 could be defined by various synonyms, yet SW has used a phrase 足所依也 "that on which the foot relies." Knowing that 履 reads like 禮 /*d'liəd, that, according to SW, some authors took 尸 as phonetic /*siəd, we can posit a reconstruction /*d'liəd - /*zliəd. Then the expression 所依 appears as another attempt to describe the sound of 履, in an older or less common form: /*siwo - iəd < #*s^w.ləd.

(2) 皇 analyzed 从白(自)从王, is defined 始皇者三皇大君也

"The so-called First Emperors are the great rulers, the Three Emperors." 自 is defined 始. This strongly suggests a combined downward reading of 自 and 王: *dz'i-g'liwang*, a reading also found in 始皇 **siæg-g'wâng* < #**sg'wâng* - #**dzg'liwang*.⁴⁷

(3) 南 has phonetic 半 *niäm*, 干 *giäm*, and a sound phrase 艸木至南方有枝任也 in which 枝任 is probably a sound description: **tiæg-niäm* < #**tgniäm* - *dgniäm*.⁴⁸

(4) 王 is defined by a phrase 天下所歸往也 (**kiwærgiawang*) and a quotation 一貫三為王 (**ngwia-giawang*).⁴⁹

(5) 競 *dz'an* is explained by SW by means of a text from EY (18/7, p. 61) 虎竊毛謂之競猫 "The tiger with short hair (**ts'iat-mog*) is called **dz'an-miog* (-*mög*) [i.e., the cruel cat]." The commentary states that 竊 is 淺 "short, shallow," which may be at the same time an attempt at semanticization, as well as to express a sandhi (-t > n-): **dz'an-miog* (-*mög*) ~ **ts'iat-mog* ~ **ts'ian*-(*tsian*)-*mög*(-*miog*); #**ts'miog* ~ *dz'miog* ~ *dzmog* ~ *tsmiog* ~ *tsmog*.

(6) 毳 **ts'iwad* 'down, feathers' but also 'cloth of the barbarians,' is also written 縞 **ts'iwad* < /**tsgiwad* ~ *tsyiwad*, and defined as 獸細毛也 'it is the fine hair of animals'; 細毛 is /**sied-mog* < #**sdmog*; 毳 is analyzed 从三毛 **sam-mog* - *siem-mog* < #*smog*; #**sdmog* ~ *smog* ~ *tsmad*.

Some definitions in SW are in reality paronomastic definitions in binomial form. For example, 為 is defined by SW 母猴也 'it is a mother ape'; this is unusual, for the sex of an animal is usually indicated by 牝. It is probably meant as a sound description **mæg-g'u* #**mgug* ~ 為 /**bgwia*. The same definition 母猴 is found in SW for 禺 **ngiu* #**mgug*.⁵⁰ Tuan Yü-ts'ai quotes the binom 獼猴 (ShanHC) **miad-g'u* #**mdgug*, confirming this reconstruction by a later binomial variant of the same word.

This shows the natural passage from *chuan chu*, binomial definitions pointing to an original cluster initial and to paronomastic definitions within the sound phrase. The sound phrase is a traditional device found also in other works, like SM and PHTY, for example, PHTY (ch. 11. Tjan Tjoe-som, p. 435) 虎之言捕討 "Tiger is said paronomastically 'to catch and chastise'"; **p'ak-t'ôg* - **piug-t'ôg* < #**pt'ôg*, a variant form of FY 9/1 伯都 **pak-to* < #**pktog*.

The idea of the sound phrase was probably indicated indirectly in the distinction made between the *wen* 文 and the *tzü* 字 in a short line in the preface of SW: 倉頡之初作書蓋依類象形故謂之文其後形聲相益即謂之字字者言華乳而浸多也. "When Ts'ang Chieh first made writing; it was by relying on

the resemblances (of things) that he depicted the forms, therefore [these graphs] are called *wen*. After that, form and sound completed each other, and these are called *tzü*. *Tzü* 字 that is to say *tzü* 孳 'to bear, to rear'; they are reared and grow numerous." Here the *wen* is described as a graph which indicates the word directly by a sign copied from nature, and is opposed to the *tzü* in which two parts are combined to complete each other's role in the representation of the word: a form and a sound. This completely agrees with the *hsing sheng* in SW. The title of SW expresses this same distinction and treatment of *wen* and *tzü*: 說文解字 "Speaking out the *wen* and splitting up the *tzü*." The separation in the *tzü* of two parts (semantic and phonetic) allowed the author of SW to give the sound and the meaning of a graph, but the *wen*, which are graphs directly representing the thing meant, had to be "spoken out" or spelled in some way, to indicate the reading of the word. It is not a mere coincidence that the sound phrases appear mostly as glosses of characters that have no phonetic element in the SW graphic explanation.⁵¹ The *hui yi* 會意 in SW, as it is analyzed (i.e., split up) according to a formula analogous to that of the *Hsh* (从 X 从 Y; 从 XY 聲) is also a *tzü*. This fact suggests that the *hui yi*, which in most cases has no sound phrase like the *wen*, must have some sort of sound indication implied by the very way in which it is split up, yet it is not of the same nature as the *Hsh*.

Shuo wen and Modern Terminology

From the previous sections on SW, it appears that its analysis of the graphs is essentially descriptive and unhistorical. SW is a dictionary where the characters are classed according to two general categories: *wen* (*hsiang hsing*) and *tzü*, and the *tzü* further grouped into *chih shih*, *Hsh* and *hui yi* as a residual group of *tzü*; *chuan chu* and *Chch* are categories which do not deal with the graphic analysis of the characters.

Modern scholars have not only the present script and that of SW, but also the various inscriptions of Chou and Shang time; they naturally are more interested in the problems of the origin and the development of the Chinese writing and have coined a terminology which does not fully coincide with that of SW. We must now compare and correlate the old and new categories, to be able to combine the good points of each approach, *nova et vetera*. The modern scholar can then study the question how the Han time explanation was possible, how it arose, and along what line of development the Chinese script evolved. It is clear that some characters may have various original forms which were ignored or confused in the course of time, and finally were ana-

lyzed in SW in a way which was historically incorrect but still legitimate in terms of the SW principles of analysis.⁵² In the following schema the correspondences are listed among the various terms, arranged in columns according to the functions and according to a sequence of development from less to more explicit differentiation and specialization in each category of functions.

Reference or value	Graphic analysis		Graphic unit	Morphology and etymology
Semantogram ^a logogram ^b	Hologram 文	Pictogram 象形 Dactylogram Phonogram Residual graphs 指事, 形聲, 會意	Monom Binom Trinom	Etymon / stem
Lexigram ^c	Tmetogram 字			Cognate 轉注 Phonetic derivates 形聲 Homonym 假借 Synonym

^aSemantogram, translation of the new term 意符字 (Shen Chien-shih in MS, XII, 1947; transl. A. Fang), is used for early graphs which could stand for different words according to circumstances; they could have variants which more or less represented specialized or determined forms, but were still easily interchanged:

月 - 夕 - 朔 - 肉 - ; 兔 - 免 - 毘 ; 舟

boat-vessel-container-footgear-advance-use-carry-ride-things, affair, employment, and so on.

This original proteic state in semantic and phonetic value is not only limited to the earliest specimens of writing; it is continued sometimes erratically, on accidental occasions in various instances until periods as late as Han time and which have to be explained along historical lines different for each separate case.

^bLogogram, though not a perfect opposite to the semantogram, stresses a more specified function opposed to the vagueness of the semantogram, in the sense that every graph, when actually used, stands always for a definite word.

^cThe lexigram is a still further step in specification; it means a definite graph which represents normally only one word or a group of words in all usages.

In the same way, there is historically no strict separation between the various stages in the other columns, though the SW has used them as separate categories exclusive of each other, within their own column. The column of the graphic unit, by which in the texts a word may be written, is a category which touches at the same time the graphic and phonetic aspects of a word in script.

PHONETIC VALUES OF THE HSIEH SHENG IN SHUO WEN

All the works on the Hsh more or less follow SW; they differ usually where SW indicates Hsh that seem inexplicable in the light of the later phonetism of the Chinese language. It is clear that for each character in SW an analysis was attempted according to the explicit principles reflecting the language of that time. Even when we accept that SW utilized some traditional elements found in quotations from a different school, sound phrases, and so on, which may go back to the earlier periods, they still probably originated at the time of the uniformization of the script by Li Ssü, and many could be accepted without contradicting linguistic facts of Hsü Shen's time. SW is consequently an analysis, based sometimes on previous traditions but mostly on contemporary principles all seen by one man, according to what was acceptable and what could be fitted in one synthesis of the language.

If the SW explanations sometimes seem unacceptable later, it may be because our knowledge does not reach all the details and particular cases of the Han time language. Some Hsh could be discarded by invoking confusions of graphs,⁵³ but the regular Hsh connections must be explained otherwise. On the other hand, connections have been found which SW does not state. A systematic revue of the Hsh in SW is needed to show their patterns, regularity, and frequency, regardless of their conformity with our actual reconstructions.⁵⁴

The Finals

In SW the following contacts can be found:

-ng / -m; 多 *siam, 彭 *b'ang, *b'ang.

-ng / -p; 走 *biwap, 駭 *piam, 曼 *piwäng.

-ng / -n; 信 *siën, 佞 *nieng (SWKE 5616).

-g / -ng; 蛙 *k'iweng ~ 'iweg, etc.

-ng / -o, -u, -a; 亡 *miang, 改 *p'iu.

-ng / -k; 凝 *ngieng, 疑 *ngiäk, etc.

-k / -t; 兒 *ngiek, 寔 *ngiet.

-k, -g / -t, -n; 而 *niäg, 魚而 *niük, 奕 *niwan, etc. 母 *mæg ~ mwæg, *miük, 敏 *miën, etc.

-k, -g / -p, -m; 魚而 *niük, 而瓦 *liap, liep. *dz'iog 就, *tsiup (TP 28, 1931 p. 51); 獨 *d'uk, 歎 *dz'äm.

-t / -n, -d / -n (Saepe GS 146, 149, 171, etc.)

Formulas of reconstruction.—The contacts listed above are so numerous that they cannot be explained as occasional or exceptional. They must belong to a stage where such contacts were regular. Although the mere existence of initial clusters does not imply the existence of final ones, it should not surprise us; methodologically, when the same conditions exist for the finals as for the initials, there must be a positive reason not to proceed in the same way for either one. Among these contacts a distinction can be made between contacts of homorganic consonants and others. The homorganic initials can be derived from one form $\underline{-n}$: $\underline{-t} < \underline{-nt}$, $\underline{t} : \underline{l} < \underline{tl}$ etc; but it must be shown why in some words $\underline{-n}$ or \underline{t} were kept, whereas in others $\underline{-t}$ or \underline{l} . Even **Hsh** contacts between heterorganic consonants can be added here, if one of them can be shown to be a later development from a homorganic consonant; thus $\underline{-p} : \underline{-n} < \underline{-mp}$, if $\underline{-n} < \underline{-m}$. This seems plausible when for instance a whole **Hsh** series shows $\underline{-m} : \underline{-p}$ with one or two $\underline{-n}$ cases. Here again it must be shown why $\underline{-m} > \underline{-n}$ in one case, either by reconstructing a particular form which always follows this development, or by invoking other causes (analogy with other words).

Although these contacts can be explained as examples of the phonetic sphere within which **Hsh** are possible, this explanation fails to show how a correspondence $\underline{-m} : \underline{-p}$ originated, or how it could sound similar enough for a **Hsh** derivation. The only explanation is that $\underline{-m}$ and $\underline{-p}$ developed from $\underline{/*-mp}$. A reason for the different developments $\underline{-m}$, $\underline{-p}$, is likely to be found in a different tonality, which led to a different final or was concomitant with it.

$\underline{/*-mp} > \text{tone a} : \underline{-mp}$, $\underline{/*-mp} > \text{tone b} : \underline{/*-mb}$; $\begin{cases} \underline{-mp} : \text{tone a} \\ \underline{-mb} : \text{tone b} \end{cases}$

The next development then consists in a denasalization of $\underline{/*-mp} > \underline{-p}$ and the loss of the $\underline{-b}$ in $\underline{/*-mb}$. The assumption of different tonality explains the evolution of the two finals; on the other hand it is no obstacle for the **Hsh** principle in Chinese. The same reconstruction applies to the cases $\underline{-n} / \underline{-t}$ and $\underline{-ng} / \underline{-k}$. Here the contacts are more complicated, for $\underline{-n} / \underline{-d}$ and $\underline{-d} / \underline{-t}$, $\underline{-ng} / \underline{-g}$ and $\underline{-g} / \underline{-k}$ are as frequent as $\underline{-ng} / \underline{-k}$, $\underline{-n} / \underline{-t}$, but in the labial series, the contact $\underline{-b} / \underline{-m} \sim \underline{-p}$ is less frequent. A solution must be found for a triple line of development.

$\underline{/*-mp} \begin{cases} \underline{-mp} (\text{tone a}) \longrightarrow \begin{cases} \underline{-mp} (\text{tone a}') & \underline{-p} \\ \underline{-mb} (\text{tone b}') & \underline{-b} \end{cases} \\ \underline{-mb} (\text{tone b}) > \underline{m} \longrightarrow \underline{-m} \end{cases}$

$\underline{/*nt} \begin{cases} \underline{-nt} (\text{tone a}) \longrightarrow \begin{cases} \underline{-nt} (\text{tone a}') & \underline{-t} \\ \underline{-nd} (\text{tone b}') & \underline{-d} \end{cases} \\ \underline{-nd} (\text{tone b}) \longrightarrow \underline{n} \longrightarrow \underline{-n} \end{cases}$

$\underline{/*\eta k} \begin{cases} \underline{-\eta k} (\text{tone a}) \longrightarrow \begin{cases} \underline{-\eta k} (\text{tone a}') & \underline{-k} \\ \underline{-ng} (\text{tone b}') & \underline{-g} \end{cases} \\ \underline{-ng} (\text{tone b}) \longrightarrow \underline{-\eta} \longrightarrow \underline{-\eta} \end{cases}$

The development has three phases:

- (a) $\underline{/*-mp}$, $\underline{-nt}$, $\underline{-\eta k} > \underline{/*-mp} \sim \underline{mb}$, $\underline{/*-nt} \sim \underline{nd}$, $\underline{/*-nk} \sim \underline{ng}$ (according to tone).
- (b) $\underline{/*-mb}$, $\underline{-nd}$, $\underline{-ng}$ first lose the final $\underline{-b}$, $\underline{-d}$, $\underline{-g}$: thus the opposition $\underline{/*-nt} : \underline{/*-nd}$, etc., is gone, but $\underline{/*-nt}$, $\underline{/*-mp}$, $\underline{/*-nk}$ is again split up according to tone.
- (c) last stage, consisting in loss of the nasalization, or loss of final voiced stop in $\underline{-mp}$, $\underline{-mb}$.

Among the contacts of heterorganic consonants in the **Hsh**, some may be results of changes due to the vocalism accompanying the finals, or to other causes such as dissimilation, for example, $\underline{-k} \sim \underline{-p} > \underline{-t}$ with front vowels; $\underline{-p} > \underline{-k}$ (with back vowels); $\underline{-ng} > \underline{-n}$, $\underline{-m} > \underline{-ng}$ (dissimilation). Others may be due to the disappearance or secondary changes of elements. E.g.:

$\underline{-t, -d, -n/-k, -g, -ng} \quad \underline{-p, -b, -m/-k, -g, -ng} \quad \underline{-t, -d, -n/-p, -b, -m}$

$k/t > kt > xt > t \quad m/k > \begin{cases} \underline{mk} > \underline{nk} > k \\ \underline{mk} > \underline{mg} > m \end{cases} \quad m/t > \begin{cases} \underline{mt} > \underline{nt} > t \\ \underline{md} > \underline{nd} > d \end{cases}$

$g/t > gt > yt > t \quad m/g > \underline{mg} > \underline{ng} \quad m/d > \underline{md} > \underline{m}$

$k/d > kd > g \sim k \quad b/g > \underline{bg} > \underline{wg} > \underline{g} \quad p/t > \underline{pt} > \underline{wt} > \underline{t}$

$g/d > \underline{gd} > \underline{g} \quad p/k > \begin{cases} \underline{pk} > \underline{wk} > k \\ \underline{pk} > \underline{p} \end{cases} \quad b/t > \begin{cases} \underline{bt} > \underline{wt} > \underline{t} \\ \underline{bt} > \underline{bd} > \underline{d} \end{cases}$

$g/n > \underline{gn} > \underline{n} \quad b/k > \underline{bk} > \underline{wk} > \underline{k} \quad p/d > \underline{pd} > \underline{p} \sim \underline{b}$

$k/n > \underline{kn} > \underline{g} \sim \underline{k} \quad p/ng > \underline{mp} > \underline{p} \quad b/d > \underline{bd} > \underline{wd} > \underline{d}$

$\quad \quad \quad b/ng > \begin{cases} \underline{bng} > \underline{ng} \\ \underline{bm} > \underline{m} \end{cases} \quad b/n > \begin{cases} \underline{bn} > \underline{wn} > \underline{n} \\ \underline{bn} > \underline{bm} > \underline{b} \sim \underline{m} \end{cases}$

These various possibilities of integrating the contacts between the different finals must of course be examined and proved by means of the existing

binoms and dialect variations of the same word. Every case is to be treated according to the individual history of the word, if such can be done.

Hsh finals and SCg rhymes.—Although there are many cases of -g : -k and -t : -d rhyming together, there is no evidence in SCg of regular rhymes between -m : -p, -ng : -k; even rhymes -n : -t are not considered regular or very satisfactory by Karlgren. The question can be raised whether rhymes with final clusters would more satisfactorily explain the SCg poems.⁵⁵ Nevertheless, the SCg rhymes, as reconstructed in Karlgren's ArC, do not have the archaic and complicated structure present in the SW system. Yet SW, in spite of archaic features preserved by a school tradition, cannot go further back than the uniformization begun by Li Ssü. SW most probably goes back to Early Han, and when it preserves archaisms no longer present in the speech of that time, to Late Chou. The SCg system, being younger, probably corresponds to Middle Han. The time level of the SCg rhyme system as found in GS will be established later in this study.⁵⁶

Initials in the Hsieh sheng of Shuo wen

In the study of the SCg, rhymes offer a check on the respective age of the SCg system and that of the Hsh in SW, but no such comparison is possible for the initials. If we take SCg as a primary source for reconstruction, we know nothing on the initials, the information on the time of the rhyme values remains uncertain. The possibility of reconstructing a more archaic rhyme system should not be excluded. If we define ArC as the pronunciation deduced from the Hsh system of SW, we obtain the same time level for both finals and initials.

Status questionis.—The initials of ArC pose two problems: the values of the simple initial consonants, and the frequency, nature, and the sequence and combination of the cluster initials.

Simple initials in ArC according GS:

Labials : p, p', b', m

Supradentals : s, ts, ts', dz'

Laryngals : ʔ

Gutturals : k, k', g, g', ng, x

These initials remained unchanged from the ArC

g (unaspirated), reconstructed from AnC j- (semivowel), and g' is from ɣ before vowel without medial vowel preceding: g'a > ya.

Palatals : t̪, t̪', d̪, d̪', ɲ, ʃ

All have been reconstructed from AnC affricates: t̪- > t̪s-, t̪'- > t̪s'-, d̪- > d̪z- > ʒ-, d̪'- > d̪z'-, ɲ- > ɲz-.

Dentals : t, t', d, d'
ts, ts', dz, dz'
n, l, s, z

d- and z- reconstructed from AnC vocalic anlaut. t, t', d', n also include some derived from palatalized dentals with -i̯. dz is from AnC z-. s, ts, ts', dz' also include the AnC supradentals before vowels like open a, ä, e, ɛ, ä.

These reconstructions are made on the plausible hypothesis of a wide palatalizing tendency which progressed according to the vocalic elements present; tempo and time of this palatalization have not been exactly determined.

These reconstructions have been variously commented. An important correction to Karlgren's ArC, made by Y. R. Chao, substituted ɣi- for ji-, a value which has been taken by some as ArC instead of gi-.⁵⁷ Furthermore, it has been proposed that AnC ɣ- (non-yodized) had two separate ArC origins, g'- and ɣ-.⁵⁸ ArC g'-, g-, d- are reconstructed on the strength of Hsh contacts which can be explained only by such velar and dental initial stops. The same reasoning applies to the initial glottal stop in ArC, a reconstruction which has been unduly criticized.⁵⁹ The ArC glottal stop appears in two kinds of Hsh series: one which has also initials of other phonological series; the other which has only initials of the velar series. In GS the Hsh series that show contacts with other consonants number about twelve, whereas those limited to the velar initials number only thirty-one. In KYSH where a greater variety of contacts is found, the latter kind still numbers thirty-one.⁶⁰ The Hsh with glottal stops that have contacts with other initial consonants must be distinguished from the others. The former group could have originated from consonants other than glottal stops or from consonantal clusters.

Cluster initials.—In the Hsh of SW, we see numerous contacts of initials:

Labials-velars-dentals. For example:

入 pat, 入 p'at, 𠵼 piën, 𠵼 piät, 𠵼 pwan, 穴 ɣiet, 𠵼 ɣiwət, 坎 dz'iuət.

Labials-velars. For example:

民, 𠵼, 母, 采, 勿, 黑, 為, 弓, 丙, 百.

Labials-dentals. For example:

B/T: 勻, 牙, 不, 平, 罪.

B/S: 算, 彡, 服, 昔.

B/N: 入, 耳, 系.

Velars-dentals (and palatals). For example:

K/T: 公, 工, 立, 是, 彘, 以, 世, 甚, 彘, 奔, 彘.

K/S: 宣, 血, 尹, 其.

K/N: 銜, 𠵼, 染, 出, 冉, 占.

K/L: 手, 亂, 來, 呂.

The solutions proposed in reconstructing the ArC clusters are of two kinds. The morphological theory considers some elements entering the reconstruction as morphological, either taking the first element as a prefix (Maspero)⁶¹ or the second element as an infix (Wulff).⁶² This cannot be applied to a great number of words; the few examples given are supposedly relics from the times when this morphological process was productive. This approach may be promising in the future, but it explains nothing in the Hsh of SW, which represents a period when this morphological role died out. The phonetic explanation does not exclude the morphological approach but discards it as a feature of higher antiquity than SW. Its basis is the fact that, for example, k-/l- does not show the similarity expected inside the same Hsh series.

Formulas of reconstruction.—Several formulas can be used; it is not necessary to "follow invariably one and the same" in all cases.⁶³ But a formula which by definition reconstructs a simple consonant in one member and a cluster in the other, *mliuk / liuk, is not more satisfactory than mjuik / liuk. Therefore, among formulas kl- / gl-, k- / kl-, rejected by Karlgren as unsatisfactory in all cases, the formula kan / klan, though not explaining why k- is dropped in one word and not in the other, still seems acoustically better than klan / lan, which is similar to ml- / l-, xm- / m-, t'l-/l-.

Karlgren admits contacts as k/l, but ignores others equally important k/t, p/k. Furthermore, among the formulas explaining k/l, he proposed only the sequence stop (continuant) + liquid or stop (continuant) + nasal. Yet other explanations have been proposed. Li Fang-kui has suggested that instead of xm-, we could equally well have mx- or even a voiceless m̥-.⁶⁴ The inverted sequence can be applied to other groups, kl- / lk-. It is a priori not impossible that various sorts of clusters existed in ArC and developed to coincide in AnC. Consequently, there are several possibilities: clusters differing in sequence → split into simple initial consonants; simple consonant → two different consonants; and clusters of two homorganic consonants (t-/l-) and others (k/l) or complicated groups (k/l / m/t) → split into simple consonants.

General principles and applications.—Although the reconstructions may differ for each word, some general principles underlying all of them are needed.

1. Since the reconstructions of initials in ArC are based mainly on the Hsh connections of the graphs, the complete Hsh list according to one source (SW) must be compared with the AnC initials.⁶⁵ It is not proved that the consonantal clusters are composed of elements identical to the consonants appearing in the simple initials. Therefore, the cluster initials as well as the simple initials must be deduced from the AnC values (Ch'Y system), compared with the connections in SW. In the first place, the complete Hsh series shows that the re-

construction of simple initial consonants from a vocalic anlaut in AnC often makes a choice between various possibilities difficult. For example, SW juët is not only in a Hsh group with 律 liuet, but also with 一 iët, 熏 ziën, 盡 tsiën, dz'iën.⁶⁶ The ArC values must explain all Hsh characters of the same series by positing the same essential phonetic elements in all the derivatives.⁶⁷

2. Loan words, foreign transcriptions, or words from related languages do not provide a safe criterion to establish the sequence of the components of a cluster. For example, Siamese gram > k'ram, although related to AnC lâm (borrowing or linguistic relationship), or Kroraimna transcribed in AnC lâu-lan 樓蘭,⁶⁸ does not mean that the ArC sequence was gl-; borrowings may be adapted to the normal sequence of the borrowing language, and linguistic relationship does not exclude a regularly differing sequence in the corresponding words. Even a sequence attested in most of the Sinitic languages does not prove that one branch (Chinese) cannot have a different one, developing or preserving elements not found in the other branches. ArC must be interpreted first as a system in itself, according to the Hsh of SW.

3. Binomial expressions are valuable in determining the sequence in the cluster initials as a secondary criterion. Binoms are not formed according to one formula; they can be reduplicated, dimidiated (split of a cluster), or inverted from the original sequence. All variants of a binom have to be checked with the Hsh before any certitude is obtained. It is difficult to determine the original form of a binom unless the sources give enough variants to reveal its formation.⁶⁹

4. The Chch that are certain (among which we reckon the paronomastic definitions of SW and other works),⁷⁰ can be checked on the reconstructions of initial clusters, but they help only indirectly to solve the problem of the reconstruction of the initials, for here too, the right sequence may not be apparent, or either one of the possible sequences could obtain on both sides of the equation.

5. The ArC clusters may be of a different phonological nature than the simple addition of ArC initials (tl- or lt-, for example). Just as affricates ts-, ts'-, etc. are considered as phonological units in AnC, it is possible that tl- was a unit and phonologically indistinct from lt-. Similarly, tn- could be posited together with nt-.⁷¹ Reversely AnC t', d' could in ArC have been realized as two phonological units (ty-, dy-) which resulted in t', d' and x-, g', y-.

The development from a cluster, as a phonological unit, to different simple consonants supposes a passage to a new analysis where the components are distinct; it implies a stage where a definite sequence of the components

is established before the split. If in ArC, lt- ~ tl- are not distinguished, any sequence can result, but one sequence according to the conditions of each word had to be fixed before the split resulted.

Like Li Fang-kui proposed m̄-,⁷² it is possible that l was phonologically one with k, t, and the like. Such a consonant l has been described for a Lolo dialect by Shirokogoroff, suggesting that it may have existed (or still exists) in Tibetan and some Thai languages.⁷³

In groups k/l, t'/l, t'/n, Karlgren takes the sequence kl-/gl-, t'n-/n-, and t'l-/l- as the only formula. With labials he proposes everywhere the same formula m-/mx-. Although a development *glâm > lâm, by loss of the g-, is natural, it is not clear how *klâm or *klan became kâm, kan. An evolution d'l-, d'n-, gm- > l-, n-, m- is readily accepted, but *t'ân > t'an, *xmæk > xæk is not so clear.⁷⁴ Another explanation is possible: considering tl-, dl-, tn-, dn- as one phonological unit, the aspiration of AnC t'an, t'ât (漢, 獺) followed it also in ArC: tl'-, dl'-, tn'-, dn'- (*tn'ân > t'ân, *t'ât > t'ât). The disappearance of -n-, l- is easily explained, since -l- and -n- are weak and only the nasal or lateral release of the stops, whereas in *dn'ân > nân, *dl'ân > lân, loss of initial d- and of the aspiration are equally natural. In the hypothesis of ArC indistinct tl- : lt- as different realizations of consonant L, an indication is needed to know the sequence of the components in the new phonological analysis before the AnC split. Such indications are found in some AnC elements like -i-, -w-. The origin of -i- < -l- was first suggested by Y. R. Chao,⁷⁵ and can be applied in many cases:

b'iwem 凡, p'iwem 汎, lâm 嵐, piung < *pium, b'iuung < b'ium 風, b'ung < *b'um 芄; pung < *pum 風 can be explained by *b'lwäm, p'lwäm, bläm, plum ~ b'lum but on the other hand, *lb'um and lpum. — miwong < *miung 烏, liwong < *liung 塗, mäng 龍, from *mlung, bliung and *lmüng. — In a series with velars: lek 確, iwäk 獲, xiwak 獲, xwäk 獲, ngwäk 獲, g'wek, wak 獲 from *glek, xlwak or g'lwak, but *lxwäk, lgnwäk, lgwek, l'wak.

The medial -i- could develop from other consonants than -l, for example, -y-. In the group 呂 : 呂, kio < *klo and lio < *lyo, the possibility kl- ~ lk-, gl- ~ ly-, as a development from L, where kl-, lk-, lg-, gl- are various phonological realizations, accounts for medial -i- in both instances as a vocalization of the second element of the cluster. In the forms *klio, *glio or *klo, *glio, the -i- is not accounted for in all the cases.⁷⁶

Thus yiap 荔, xiem, xiap 膏, ljie, liei 荔, lâp, lâp 協 from *g'lâp, xlâm, xlâp, lyieb > lyie, lyeb > -d > -i, glâp.

Also: liën, liëng 令, lien 怜, leng 冷, g'iën 鯨 from *lyën, lyëng, gläng, g'iën(g).

The medial vowel -u, -w- could be taken as a development from -g-, -y-, -m-, -b-.

Thus luong 鑿, xung 烘, yung 洪, g'iwong, kiwong 共, t'äng 蓄, from *lgung > lw-, lyung, lxung, klung, g'lung, t'lyung.⁷⁷

b'ak 白, t'ak 魄, mat 帕 from *dbak, tb'ak > tw'- > t'-, dmät.

xuâi 灰, k'uâi 恢, muâi, mâi 厥 from *xmæg > xw-, k'mæg > k'w-, gmæg > mw-, gmæg > m-.

siuët 戍, siwâi 歲, kiwâi 歲, 'uâi 歲, xuâi 識, xiwei 歲, xuât 歲, xiwät 歲, miet 歲, miei 歲, muât 歲, mat 歲, mwat 歲, miwät 歲, miät 歲 from *sýmët > sým^w-, sýmäd, skmiäd, z'mäd, sxmäd, sxmiäd, sxmât, sxmiät, smýet, zmýed, zmgât, z'mät, zm'wat, zmýwet, zmýat.

yiwei 惠, mwat 惠, ts'iwâi 惠, siwâi 總, zwi 德, iâi 聽 from *zgmjäd > zg^mwi- > g'iw-, z'mwat > mw-, tsýmäd > tsýw-, sýmäd, dzýmäd, zbýäd > bi > i-.

liuën 論, luën 論, liei 論, kwan 綸, kuæn, yuæn 論, p'iuæn 綸 from *lymen, blg(w)æn, blýe^{nz} > -ei, lkmæn, lgmæn, pýlwæn.

The realizations of ArC L as dental + l or velar + l explains Hsh groups with both AnC dental and velar initials:

liwo 旅, luo 旅, tása 者, tjak, d'jak 著, siwo 書, k'wa 書 from *dlywo-, dlygo-, tlag, tlak, dlak, slýwo-, dlkwa-.

yuos 乎, xiu 序, xuo 呼, t'uo 序, t'iuo 序, luo 序 from *dlygo, dxlu, dlxo, tlgo, tlyo, dlygo.

liu, læu 婁, kiu 婁, g'iu 婁, sæu, sâk 數, sæu 數 from *zlyu-, zglyu-, sklu-, zglyu, slgu-, sl'âk, lşyu-.

In some groups, despite the aspirates, there is no need for a reconstruction of velars in the series.

Like lâp 摺, ziap 摺, ts'iap 摺, siap 摺 from *d'lâp, dzlâp, ts'lâp, slâp.

Also: tsiāu 焦, liəu 惟, tsiak 焯, ts'iāu 雜, dz'iāu 噍, siəu 樵, tsau 瘰, tsāk 樵 from /*tslog, zliôg, tslak, ts'log, dz'log, slôg, t̩sog - lt̩sog, t̩s- - lt̩sak.

ts'iang 刑, liang 梁 from /*ts'lang, d'l(i)ang.

liei 麗, t'ie 麗, sie, siwo 麗, sie, sa, sa 麗 from /*d'liei-, t'le-, sle-, slo-, l̩seg, l̩sa-.

si 史, lji 吏 from /*slæg, zlæg.

Dentals and velars seem to be required in some groups:

siwān 宣, jiwen 垣, xiwen, xuān 豔 from /*s'ýwan, zgiwan, sxiwan, zxwān.

kji, g'ji 其, siə 斯, siei 斯 from /*skiæg, zg'iæg, s'ýæg, s'ýæg.

xan 羴, siān 羴, siwān, siə, sien 羴 from /*zxn, s'ýan, s'ýwan, s'ýenz(?) > -0.

xiwət 血, xwi 血, xiwek 血, siwət 恤 from /*zxiwet, zxiwed, zxiwek, s'ýwet.

The same formula can be used for groups with -n- instead of -l-:

yam 銜, nam 銜 from /*ngəm, gnəm.

kām 染, zīnām 染 from /*nkām, n'ýam.

n̩zi 二, n̩ji 臍, t̩s'i 次, dz'iæk 空 from /*n̩iəd, n̩iəd, t̩n̩iəd > n̩t̩, dzn'iæk > dz'í-.

n̩ziuk 肉, iuk 育, t̩s'iung 充, d̩'iəu 繇, t'uong 統, t̩s'iwān 關 from /*zniuk, dniuk > nd-, t̩n̩'iuŋ, dn̩'iog, tn̩'ong, t̩n̩iwan > n̩t̩-.

n̩ziuən 惇, d'uən 惇, ziuk 孰 from /*zniwən > n̩ > n̩z, dn̩'wən, zniuk > n̩ > n̩z-.

t̩si, n̩ziet 至 from /*t̩niəd > n̩t̩-, zniət > n̩z.

nuong 農, n̩au 穠, nung 穠, niwong 醲, n̩ang 醲, n̩ziwong 穠, d̩ien 辰 from /*dnong, dnôg, dn̩ng, dn̩ung, dnung, zniung > n̩- > n̩z-, dn̩ien > nd̩-.

na 擯, tsiwo, ts'ia 且 from /*(d)zna, tsnio > n̩t̩s-, tsn'ia > ts'í-.

siuk 未, niek 怒, tuok 督, ts'iek 戚 from /*sniuk > ns- > s-, (d)zniok > n-, tnok, tsn'iok > ts'í-.

When n- and -l- are found together in the same group, both can be taken as a realization of the same ArC element.

n̩ziəm 羊, n̩əm 南, niəm 緜, nam 諱, lām 蜀 from /*dn̩lēm, zn̩lēm > n̩- > n̩z-, dn̩əm, dn̩lēm, dn̩am, dn̩lēm.

liei, niei 懼 from /*nlie-, nle-.

Some Hsh series display a great variety of initials including labials, velars, and dentals:

liuk 六, d'uk 黠, ts'iuik, k'iwog(?) 堯, iuk 賁, tsāu 窳, luk 贖, ziwok 禱, d'iek 覲, d'əu 贛, dz'iwok 贖, miuk 睦 from √bl'ýuk, bd'uk, bts'ýluk, bklog, bdluk, b'tsôg, bgluk, b'zluk, bd'ýiek, bdgug, bdz'ýluk, m'luk (if the reading k'iwog goes as far back as ts'iuik).

lji 里, t'iuik, t'iek, xiuk 董, yai 起, tai 裡, k'uai 裡, mai 埋 from √bl'ýeg, bt'ýluk, bt'ýlek, b'xluk, bdgæg, b'itæg, dkmæg, l'mæg.

lwān, liwan 絲, lān 翮, muən 蠻, mwan 蠻, p'iwən, kiwən 蠻, p'iwān 蠻, wan 彎, siwān, swan 彎 from √zlgman, zlyman, zblan, zlmgen, zlmgan, sp'ylwan, sklman, zl'man, slman, lsman - lsban.

In some cases b'í- could be from bz-:

biuk 服, b'iæg 蟹, b'ək 蕨, tsiet 貝, suk 椶 from /*bziuk, bziæg, bzək, btsiet, bsuk.

suān 算, tsuān 纂, p'iwən 算 from /*bswān, btswān, pziwan.

pji, b'ji, b'iět 比, zie 配 from /*spiəd, bz'ýiəd, bziět, bdziəd.

b'iu 危, t̩siwān 專, jiwen 表, ngiet, ngiāt 崖, t'iang, t'ian 鞞 from √bz'ýu-, bt'ýwan, bzgiwan, bzngiet, bzngiat, bt'ýang, bt'ýan.

b'iu 鳧, kuo 股, ziu 兀, təu 啞, t'əu 跂, d'əu 投 from √bz'ýug, bskog, b'zúg, b'tug, bt'ýug, bd'ýug.

b'iān 卞, xuān 汴, suān 竿 from √bz'ýan, bzxwān, bsgwān.

xieng 軋, p'ieng 粵, d'ieng 孚, t'ieng, dieng 摺 from √bsxeng > xí, pz'ýeng, bd'ýieng, bt'ýieng, bd'ýeng.

yiet 穴, yiwet 穴, xiwet, jiət 次, dz'iuět 袂, pwat 八, p'wat, piěn, piāt 八, p'iět 匹, pwan 糞, iět 俏, iěn 消, suət, siet 屑, xiět, xiət 胛 from √bdgiət, bdgiwet, bdxiwet, bdgiət, bdz'ýiwět, spgat, spywat, spyien, sp'ýet, pz'ýet, spgan, bzgiət, bzgiěn, bsgwet, bs'iět, bsx(i)et.

yiweng 熒, ·eng 螢, weng 螢, iwāng, ·eng, p'iěng 覺, ziuěn 營 from √bzgiweng, bz·eng, bz·weng, bz·iwang, pz'ýěng, bz'ýwěn.

xai 藹, miwen 萬, mwai 藹, liāi 蟪, t'ai 藹 from √blxad, mlgwan, lmgwad, bl'ýad, bl'ýad.

In some series the labials are only weakly represented: ts'iām 餒, ts'iāp 撻, d'iēm 顛, siām 檢, tsām 饜, ngiām, g'iām 儉, kiwem 餒, k'am, k'iem 餒, kam 餒, liām 餒, lam 臉, miwem 餒.

Does such a series demand a reconstruction of m-, b- in all the words? It is possible that such exceptional derivatives are dialectal Hsh, where bl- corresponds to the standard gl-.⁷⁷

Simple inversion of the sequences with labials is found in:

mâu 冒, mək 冒, muk, muâi, muok 瑠, miuk 菴, p'iung 貝, xiuk 冒, xiwok 勛, muân 曼, mwan 獮 from /*gmog, gmək, gmuk, gmwəg, gmwək, mgwan, mgwân, m'yuk, p'yung, bxiuk, bxiok, miuən 文, miën 旻, muâi 玟, xuâi 燭, g'iân 虔, k'iën 劇, k'iân 綬, liën 吝 from /*mlgən, ml'yën, lmgwəd, blxwəg, bglan, bklän, bklan, bl'yën.

With -s-, -z- instead of -l-:

mjwei 尾, muâi 媿, mji, mjwei 媿, xjwei 媿, siei 犀, d'i 犀, nai 揮 from /*sm'ywe-, smgwe-, zm'yē-, zm'ywe-, bzxiwe-, bs'yē-, bdyē-, bz'nə-.

mjwei 未, mji 魅, mâi 昧, mwai 侏, muâi 妹, mâu 聲, lâi 慈, lij, xji, dz'i 勢 from /*z(l)m'ywe-, z(l)m'yē-, s(l)yme-, z(l)m'yē-, z(l)mgwe-, z(l)môg, b'ləg, b'l'yəg, bxleg, bdz'yəg.

Contacts between m- and n-:

niei 彌, nai 彌, níziəp 入, niet, níziət 茶, níziə 尔, mjiə, miei 弥, miei 嬰, mjiə 彌, t'siə 鞞, sie 璽, siän 獮 from /*b'znieb b'nied, bznəb > b'nəd, bz'niəp > b'niəp, bzniep > b'niet, bzniap > b'niət > niət, m'zab > m'zad > miad, m'zeb > mied, m'zab > m'zad > miad, btsniab > tsniad > tsiə, bsniab > bsniad > snied > ns- > s-, bsniamb > bsniand > ns- > s-.

mjiə 弭, miei 虜, nízi 耳, níziwong 茸, nek 聃, nai 耳, t'i 聃 from /*m'zəg > miəg, mziəg, bzniəg > zniəg > n- > n'z-, bzniung > zn- > n- > n'z-, b'dnek > n-, b'dnəg > dnəg > n-, bt'niəg > bt'- > t'-, miek, nízwi 糸 from /*m'zək, bzniwəg > zni- > n- > n'z-.

Instead of bs- one can sometimes reconstruct sb-:

siām, sam 彡, sâm 彬, ziəm 尋, t'âm 禱, dz'âm, ziām 擇, b'eng 彭, p'eng 繫, p'weng 澎 from /*sbiam > sw- > s-, sbam > swam > s-, sbām > sw- > s-, zwiəm > z-, tb'am > tw'- > t'-, dzbam > dzw- > dz'-, zbiam > zw- > z-, sbang ~ sbəm (?), spang, spwang.

miet, xiwāt, xiek, ts'iwāt 曼 from /*zm'ywat, sxmiat, bsxiek, ts'miat.

Contacts between b-, m- and s-, t-:

siāk 昔, tsiāk 借, miek, ts'āk 彪 from /*bsiak, btsiak, m'zək, btsāk > ts'-.

p'iâu 輿, p'au 穀, miâu 簾, tsiâu 腰 from /*pziog > p'-, pzog > p'-, m'zog > miog, btsiog > ts'-.

piāk, b'iāk, p'iak 辟, miek 幣, pek 檠, p'ek 檠, tsiāk 辟 from /*sbjak, b'ziak > b'-, spiak > p'-, m'zək > m'zək, sbek > p-, spək > p'-, btsiak.

Hsh series with a glottal stop initial:

mieng 嬰, 'eng, 'iang, 'ieng 嬰, 'eng 嬰, 'ieng 嬰 from /*m'yeng, b'ang, b'iang, b'eng, b'ieng.

'iet 一, kwək 號, piët 筆, iuët 聿, tsiën, dz'iën 盡, liuët 律, luät 持, luät 碑, liwan 將 from /*b'lek > iek > -t, blkwak, pl'et > pl- > pi-, blgwət > blw- > iuët, b'i'yen > t'y- > ís'-, bdz'yen > dz'y- > dz'-, bl'ywet, blgwät, bl'ywan.

ya 夏, ka 獲, 'ai, sa 嘖 from /*zga-, ska-, s'əg, s'ya- > sa.

niəp, nap 罔, nam 罔, 'ap 罔, 'iām, 'iem 罔, 'iāp 罔 from /*dn'yəp, dn'əp, dn'ləm, nt'əp, dn'iamb > nd-.

niwo 女, 'iwo, 'níziwo 寢 from /*n'yo-, n'io-, n'yo-.

'ai 毒, d'uok 毒, d'ai 毒, d'au 毒, t'au, tuok 毒 from /*d'əg, d'ywok, d'yəg, d'yôg, t'yôg, tg(w)ok.⁷⁸

kiuən 君, 'iuën 君, 't'uən 君 from /*dkiwən, d'iwən, t'ywən.

'iän, 'ien 祈, kän, 'tiäng, 't'iän 祈, d'äng 祈 from /*d'ian, d'iän, dkän, t'yeng, t'yan, d'yung.

siän 然, 'ien 然, 'yien 然, 'níziän 然, 'níziwän 然, nien, nan 然 from /*sn'yan > ns'y- > si-, zn'ien, zngien, znyän > n- > n'z-, znywän, zn'yen, zgnan > gn- > n-.⁷⁹

Value of the Hsieh sheng Reconstructions

The foregoing reconstructions illustrate a procedure based only on the Hsh derivatives. The Hsh characters of one series can be considered as elements of internal reconstruction (e.g., bō : bon < bon : bonne; Gr. legon(t) : legont-os), with the difference that in the Hsh the words need not be morphologically related or cognates of any sort, but can be brought together phonetically through a common graphic element in the character. The examples like legon(t) : legont-os cover only two or three word forms whereas the Hsh some-

times run over a group of twenty and more, so that a greater variety of phonetic developments must be accounted for, and, at the same time, a convincingly similar reconstruction must be posited for all, at one period of the language, in which the Hsh graphs were grouped together under one series. For example, AnC group 𠂔:

I	II /*		III /*
	(1)	(2)	
A. <u>b'iwam</u> 𠂔 <u>piām</u> 𠂔	<u>bgiwamb</u> <u>bgwiamb</u>		<u>bzgwamb</u> <u>zbgwamb</u>
B. <u>b'iwap</u> 𠂔 <u>b'iəp</u> 𠂔	<u>bgiwamp</u> <u>bgwiamp</u>		<u>bzgwamp</u> ~ <u>sbgw-</u> <u>bzgəmp</u> ~ <u>zbg-</u>
C. <u>kiəp</u> 𠂔 <u>g'iāp</u> 𠂔 <u>k'iwap</u> 𠂔	<u>bkiəmp</u> <u>bgiəmp</u> <u>bkiwamp</u>	<u>skiəp</u> <u>zgiəp</u> <u>skiwap</u>	<u>bskəmp</u> ~ <u>zbk-</u> <u>bzgəmp</u> ~ <u>zbg-</u> <u>bskwamp</u> ~ <u>zkw-</u>
D. <u>tʂap</u> 𠂔 <u>d'iəp</u> 𠂔 <u>d'âp</u> 𠂔	<u>tʂyəmp</u> <u>dgiəmp</u> <u>dgâmp</u>	<u>tʂyəp</u> < <u>kʂ-</u> ? <u>dgiəp</u> <u>dgâp</u>	<u>bsyəmp</u> ~ <u>bs'əmp</u> <u>bdgəmp</u> <u>bdgâmp</u>

From the monosyllabicity, to which the word reconstruction is limited by the Hsh characters and the Ch'Y readings, it appears that on the levels II or III of reconstructing the words, the hypothetical and vague nature of the values increases highly. Moreover, it is not certain whether our reconstruction should begin with the groups A and B first, then C and D, or A and D first, then B and D, and so on. It is impossible also to say whether the initial cluster should be composed according to a certain sequence invariably applied in all the cases or not. From the comparison of other simpler cases, one may proceed analogically and choose a particular sequence, for example, bʒ- > b'i- and bzg- > b'i-, but this still remains a weak criterion to determine the

sequence in all cases. Yet there are many instances where additional indication can be gained from definitions in SW and other sources, sound phrases, and paronomastic definitions, binomial constructions and correspondences between dialect forms. In any case, a fundamental objection still remains: among as many as ten different reconstructions, which are supposedly easily distinguished in a language, the entire load of relevance for each form is concentrated on some small and often weak element of contrast, bdg-: bsk-: bzg-, and the like. These reconstructions, which are deduced from the Hsh connections only and contain many slightly different forms in one and the same Hsh series, are only hypothetical and need to be confirmed and corrected by other information as indicated above. They are nothing more than a formula of structure and relationship between various monosyllabic forms of words with groups of the same Hsh series. They may very often represent a strongly reduced form of a bisyllabic word, and then they do not reveal the real aspect of the word.⁸⁰

TIME OF THE HSIEH SHENG SYSTEM OF SHUO WEN

Since SW is a dictionary of the first century A.D., with a synchronic analysis of all graphs, the reconstructions which explain the Hsh groups of SW are of the same time as the analysis of SW. The reconstructions of the most frequent and regular Hsh in SW must therefore be contemporary with SW time, that is, the first century A.D. Although using earlier dictionaries, SW is the first work to establish the Hsh principle and to apply it systematically to the graphs; where this was not possible, the graphs were analyzed under other categories (Hy, Chch, etc.). Possibly SW included early traditional school explanations, and some Hsh series could be older than the first century A.D. However, because SW is based on the graphic system as it was stabilized and uniformized by the unification of Li Ssü, the regular Hsh groups must be contemporary with Hsü Shen's time, although the more exceptional and difficult groups may go further back to earlier periods of the uniformization. Thus the reconstructions of the Hsh still would not be older than 200 B.C. and not later than 100 A.D. It is interesting to note that the first time Karlgren suggested a time level for the ArC, basing himself, then, solely on the comparison of the phonetic compounds, viz. in his article "A Principle in the Phonetic Compounds of the Chinese Script" (Asia Major [Older Series] vol. 2, Leipzig, 1925), p. 302, he set the ArC at a period around 200 B.C. "(say 200 B.C.)."

The ArC system as described and reconstructed in GS and Compendium represents a later phase than SW. It may be that the rhymes of SCg and other

pre-Han poems should be reconstructed according to a more archaic system than that of SW. Three archaic periods, clearly distinguishable, can be set up: (a) the Pre-archaic or Early ArC, that is, the pronunciation of Chinese before SW (only sporadically attained); (b) ArC simpliciter, that is, the SW system; and (c) Late ArC, as found in GS and Comp and partly represented also by SM (cf. p. 64). The results of a reinvestigation of the SCg rhymes and their reconstructions would become of special importance: they may show whether an older system of rhymes could be deduced, and whether it would be of the same phase as SW or older. They may throw new light on the problem of the editing activities concerning the SCg text in Han time, and how well the pre-Han tradition concerning SCg, its reading, and interpretation had been preserved.

The reconstructions derived from the Hsh in SW coincide sensu lato in time with the compilation of FY; they are a fitting tool for a linguistic study of the FY material.

Note. It may seem useless to propose a stage of Early ArC or Pre-ArC since no source gives a sufficiently large, consistent material for a reconstruction of this period. Although we have graphs in inscriptions on bronze and bones with almost identical or similar graphic details as those in SW, yet we are not sure how the graphs were analyzed by the scribes of Shang and Chou, how they were read, or whether the details which SW disregards as irrelevant for the analysis were so in Shang and Chou time. If the graphic construction is completely identical with that of SW, there may be a probability that the early scribes somehow analyzed and understood the meaning and the role of the parts of the graph in the same way as SW, but positive proof is entirely lacking. Even, supposing an identical analysis, an identical reading does not always follow; supposing a phonetic element of a graph in Shang and Chou inscriptions is the same as in SW, the reconstruction of the SW system still must be taken as part of a synchronic system of one period (200 B.C.—100 A.D.). Then we must expect a Shang and Chou pronunciation more archaic and markedly different from the SW system. How much information on Early ArC can be derived from the study of the inscriptions is a question for future studies. However, SW contains fragmentary information on the Pre-ArC, namely, the phonetic indications derived from Hy analysis (从 从), which can be explained as Hsh of a special kind demanding a combined reading downward or sideward, and from the sound phrases as explained above (p. 33ff).⁸¹ The comparison of the dialect words of FY provides another method to reconstruct the Pre-ArC stage.

CHAPTER IV

CHIA CHIEH AND PARONOMASTIC DEFINITIONS

THE CHIA CHIEH

In GS the Chch, as a source for Arc, are not independent from the Hsh. Karlgren takes both Chch and Hsh as phonograms, either unaltered ideograms used as phonograms, as 求, 'to pray,' or primarily simple ideograms used as phonograms and subsequently enlarged, as 求, or primarily compound ideograms, one element of which is used at the same time as phonogram, as 愁.¹ Then fundamentally there is no essential difference between the Chch and the Hsh graphs, and logically, the Chch cannot be used as a separate and independent source for reconstruction.

But there are other Chch which have no systematic grouping like the Hsh in SW. The value of the Hsh is precisely that they are found in a uniform document that analyzes all graphs according to the same principles and the same method of application. The Chch as a principle have been applied most frequently and have existed early, but in order to use these cases, it is necessary to set up a systematic grouping according to the time, and, if possible, to the linguistic area (dialect) in which they were made.

Definition

The only definition of Chch, as differing from Hsh, is that of SW: one and the same graph is used for two or more different words because of sound coincidence, and not merely because of synonymy or identity of meaning.²

By sound coincidence is meant more than mere similarity of sound, but identity or quasi-identity. Since, for a graph representing a word other than the one it originally stands for, there was only a phonetic (not graphic or semantic) requirement, it was easy for a scribe to find among a great number of similarly read graphs, one which was completely identical in sound with the word intended. Moreover, the only possibility of recognizing the word was the phonetic identity of the borrowed graph with that word. In the case of the Hsh it has been explained how graphs made at different times and regions, and falling in the same phonetic series, resulted in the elaboration of a range of sound similarity and acceptable dissimilarity for

¹For notes, see p. 290.

the Hsh principle and its application. Such an explanation cannot be given for the Chch, for the Chch do not exist in groups of graphs, but are always phonetic equations of one word to another.³ The pronunciation of these words can be detected if the time and the language (standard or dialect) in which the Chch were made are known. However, as to "identity" of the reading of a borrowed graph for another word, we must also admit a wider application when different dialects come into play.

Various Kinds of Chia chieh

a. Chch : Hsh character without any additional radical. They are not different from the Hsh characters. 舍 : 捨 .

b. Chch : equation between two characters with different Hsh. The borrowed graph is known as well as the real graph of the word meant. This is the Chch often suggested in commentaries to classics: a character in the text is explained by giving the graph which, in standard dictionaries, has the reading and meaning of the word intended. a : b (b is the real graph for the word). This kind we will call Chch in sensu stricto. Since a has a Hsh other than b, and could be used for b, it offers an additional indication for the reconstruction of b and a. The value greatly depends on the time of the commentator and the antiquity of the text itself.

c. The Chch defined in SW (although of the same kind as under b) is an equation where the element b (in a : b) is unknown. The SW states there is originally no character for the word, but another is used for it because of the sound; for example, 令 ling and 長 chang (ch'ang).⁴ Any character, whatever its graphical analysis (Hh, chih shih, Hy, Hsh) can be used as a Chch.

There are many Chch cases where the real graph for the word intended is not known or is nonexistent; for example, GS d陶 d'ôg : 'kiln,' for 'pleased' (also diog in that sense), 'anxious,' 'a kind of clothes,' and 'to gallop.' Such Chch cases do not give direct information on member b (of a : b), and provide no new facts for the reconstruction of a or b.⁵

The Chch in SW are never explicitly indicated. We can observe cases of Chch that are nothing else but a Hsh with different radical than the usual graph or with no radical, for example, 驚 for 粥 (not in SW). (SWKL 6872): 擾 for 擾 (not in SW). (SWKL 6869b). These Chch are of no special value. But there are in the literary texts some characters which do not appear in SW, yet seem so common that it is improbable that a work like SW should not mention them. Chinese philologists often were able to discover these words under other graphs, which, written with a Hsh different from

the regular graph found in the texts, offer a point of comparison for the reconstruction of ArC. For example, 憤 * tiéd : 'angry' is not in SW, nor is 憤 * tiéd, tiéd : 'cruel, nasty, angry,' but SWKL (5284b) has 鑿 : 念戾. Tj 擊 /* tiab, which suggests -b for 鑿, but 鑿 is not Hsh in SW and explained by an obscure phrase.⁶ SW has no character 恕 k'iei, found in Meng-tzŭ (not in KY but in YP); according to the Hsh under 劫, the logical reconstruction would be /* skiad. But SW quotes the Meng-tzŭ text (恕 : 51/1) using 念 xad, defined 忽 : 'careless.' Are 恕 and 念 only synonyms and cognates, and not Chch?⁷ There is no character 皓 * kôg (white, brilliant), but the word was probably written 皓 * kôg (less probably 皓 * g'ôg). There is no 結 in SW * kat, but it has 藉 * kat, identical with 藉 according to Tuan Yŭ-ts'ai (SWKL 3193).

d. Tu-jo. The Tj in SW and commentaries are not exactly Chch (kind b), for the Tj characters are usually not used in texts as Chch (cf. infra).

e. Paronomastic definitions. These equations of two characters are not the same as the Chch; they are not often found in texts as Chch for each other. Sometimes a semantic connection between a and b is implied, but the essential feature of the equation is a phonetic identity between the two characters. Thus, in the same way as the Tj in SW, they show what kind of phonetic contacts can be expected in the Chch used at the period of those paronomastic definitions and phonetic equations. Among the sources of the paronomastic definitions, the most extensive is SM by Liu Hsi 劉熙 (ob. 126 A.D.). This work reflects the Chinese language of the beginning second century A.D.⁸ Other paronomastic definitions are scattered, and do not have the value of SM, except those in SW which can still be interpreted uniformly in the light of the SW system. They can be interpreted in a reconstruction system close enough to serve as point of comparison.

Methods to Determine Chia chieh in Stricto Sensu (Kind b)

Since the Hsh reconstruction is a process of internal reconstruction, it is often difficult to determine every detail of the reconstruction for each word—clusters in initials or finals and their sequence, vocalism, and so on.⁹ The Chch can determine more closely the pronunciation of one particular graph of a Hsh series. The difficulty is to determine which characters are Chch. Thus Karlgren presented the explanation of 毛亨 Mao Heng to SCg Ode 189, 閻 : 歷 kak < * klak : liek < * liek, as a Chch. This is considered as such by later commentaries, but is not explicitly stated by Mao Heng. Later, Karlgren tacitly changed his opinion and took 歷 as a synonym: seriatim.¹⁰ Later commentators have proposed many Chch which cannot be

accepted; they are Chch explanations which must be followed with prudence. A Chch was often an easy way out of a philological problem. A glaring example is 敦:督; although a dictionary definition supports such an identification, AnC and ArC do not permit such a Chch.¹¹ When there is no early explicit statement on the Chch usage of a character, only strict phonetic identity and at the same time a similar meaning in the text can make a Chch acceptable. Yet it does not mean that a Chch *twən : *tôk is impossible. Our knowledge of ArC is not sure enough to say that our ArC possibilities are the only ones. The Hsh already show some quite exceptional pronunciations. If an early commentary clearly states a Chch case, our present knowledge of ArC cannot destroy the fact that for that period two characters were phonetically close enough to be used for each other. But early commentators seldom explicitly state that an explanation a : b is meant as Chch; perhaps, to them the equation was so obvious that it was not necessary to qualify it. Often there is no way to distinguish a Chch from a mere synonym or a cognate by the graphic or phonetic elements of the character. If it is a synonym, the similarity may be accidental and meaningless; if it is a cognate, it is by definition not identical with the other word, and the range of similarity through etymological relationship or derivation is unknown. But besides explicit statements by early commentators, other indications on Chch may be found in the names of persons and places, written with different characters but clearly meant for the same name. Even if the present ArC seems inadequate to explain the Chch, there is no reason to doubt it. Thus, 禹 *siat, name of the founder of Shang, seems to have a very "unsatisfactory" and "obscure" Chch: 契 *k'iad, k'iat. However, if we reconstruct according to the complete Hsh series of SW, *siat 禹 goes back to /*s'iat and *kiad, k'iat to /*skiad, skiat.¹² It is sufficient that the name is the same, even if this name has been applied to different persons, places, or peoples. Thus Fu Ch'ien 服虔 (fl. ca. 168 A.D., ob. ca. 189 A.D.) states that Hsün-yū 獯粥, Hsien-yūn 獯豷, Hsiung-nu 匈奴 are names for the same people at different times in history. Chao Ch'i 趙岐 (ob. 201 A.D.) partly repeats this statement, but Ssü-ma Ch'ien was not so explicit. Reasoning that nothing is certain about the historical connection of those northern neighbors of the Chinese at different times, and that there is no sufficient similarity between those names in ArC, Karlgren rejects the identification of Fu Ch'ien.¹³ However, the problem is not the history of the peoples or their identity, but whether the binoms are a representation of the same name at different periods. The theory of Fu Ch'ien deserves attention: Hsien-yūn was *xiam-ziwən; xiam was written 獯 and 豷, and in Chao Ch'i's text 獯 *gliam. 豷 is analyzed by SW as having 古 *ko < /*kug as phonetic.¹⁴

Hsiung-nu was *xjung-no; 凶 *xjung is in the same Hsh series as 兇 *tsung, hence /*dzxjung. Hsü-yū was *xiwən-diok; 熏 *xiwən has Hsh derivate 熏 *t'ijwən, hence /*dxiwən. The possibility of /*dxiwən going back to -m appears from the comparison of SW analysis of 黑 and 熏.¹⁵ Even without such a Pre-ArC ending, the endings -m, -g, -ng and -n (< -m?) have to be considered in the light of a sandhi which shows the same element in all three words: 犹 *-ziwən, analyzed as having 巨 *ziəg phonetic (SWKL 3824); 奴 -no < /*dn'og, and 粥 *-diok. Evidently Hsiung-nu is a foreign name, but it shows that in spite of apparent phonetic difficulties, the early commentators deserve serious consideration when they identify words with each other; so much the more when they discuss Chinese words.

Besides the proper names, it is difficult to be certain about a Chch by considering the character only. We still find an indication in stereotyped expressions, often repeated under different graphs. For example, the passage of Shu ching (Yao tien, Ku ming), SCg (Ode 253) 柔遠能爾 "Be gentle with the distant ones, be kind to the near ones,"¹⁶ occurs in the inscriptions Ta-k'o ting (Karlgren, Chou II, i.e., 950-770 B.C.) and Fan sheng kui, written 頤遠能猷. The graph 猷, identical with 猷 *ngiad - siad, is a Chch for 爾. According to the Hsh in SW, 爾 is ArC /*bzñiab > bzñiad > ñiad > ñziə; in the same way, 猷 has in SW a Hsh 猷 with readings b'iei, siät, tsjəp and tí (SWKL 6338), from /*bzngiab > zngiad > ngiad - /*bns'jab > ns'jab > ns > siad. These Chch values do not give any assurance that we have attained the Chou pronunciation, but show only that the SW system sufficiently explains such early Chch.¹⁷

Although the study of the inscriptions in the light of linguistics is still in its first stage,¹⁸ the word and graph substitution in classical and other literary texts has been studied in detail by the Chinese philologists.¹⁹ The Chch equations have not been systematically used to improve our knowledge of ArC. In the inscriptions which are sufficiently well deciphered, we still have no certitude about the exact readings of the graphs, except for the individual cases of binoms, fixed expressions, and clichés. In these cases we can establish a Chch equation and a reading which explains the Chch, but the reconstruction may be still later than the time of the inscription.²⁰

Chia chieh and Dialectal Variants

After distinguishing Chch from synonym or cognate, we ask whether the equated words are to be read always as identical sounds or as dialectal variations. Compared with the FY material, some Chch equations seem to imply stronger differences than the dialect words among each other. This is

unexpected. But, it is possible that Chch were made as frequently from dialect to dialect or to the standard pronunciation and vice versa, as within the standard language alone. When nothing indicates that a Chch is based on dialects, we can only study them from the point of view of the standard pronunciation. But sometimes explicit information is given for a dialect word hidden under a Chch character. Thus, in Ch'u tz'ü, 長缺 *d'iang-kiap (Ch'u word) is explained by the standard word 長劍 *d'iang-kiam. In SW 缺 means 'tongs' and elsewhere 'sword' (CKT) or 'sword handle' (Chuang),²¹ but in Late Chou and Han it was the same as 劍, represented dialectally by Chch 缺. The Hsh of 夾 and 僉 show k-, k'- as well as ts-, s-, l-, and also -m and -p: 缺 was #*tsklamp > skiap > kiap and 劍 #*tsklamb > skiam > kiam. Without the equation 缺:劍, we would have posited only #*tsklamb for 'sword' but now the Ch'u word can be derived from #*tsklamp, according to the following schema:

$$\begin{array}{l} \#* \text{tsklamp} \begin{cases} \rightarrow -mb > \text{tsklam} \rightarrow (\text{Stand.}) \\ \rightarrow -mp > \text{tsklap} \rightarrow (\text{Ch'u}) \end{cases} \end{array}$$

A more complicated case is the word for 'writing brush' in SW: Ch'u 聿 iuët, Wu 不律 piəu-liuët, Yen 弗 piuət, Stand. 筆 piët. Here all the graphs can be reconstructed according to the same SW system. The complete Hsh series (cf. p. 51 and n. 66 Ch. III, p. 45) supposes the ArC forms: 聿 /*b'lwət (< -k?), 律 /*bl'wət (< -k?), 筆 /*p'let (< -k?), 弗 /*piwət. The difficulty lies in the binom 不律 /*piuə + bl'wət. Since already by virtue of the Hsh, a labial initial of some kind is present in each word, b'l-, p'l-, piw-, there must have been a reason for the binom 不律. Probably it was to represent a dialectal bisyllabic word, as against the other forms, maybe a result of a split of initials rather than an original bisyllabic word. 不律 was different from the simple /*bl'wət, b'lwət or p'let, namely, a p- followed by a different sort of second element: #*piuə bl'wət from /*p'w'lwət (?).

THE TU-JO EXPLANATIONS AND THE SHIH MING EQUATIONS

The Tj have been studied by Lu Chih-wei, and explained according to his own reconstructions.²² Tj may belong to the same Hsh series. Although such Chch would give no additional information about the ArC reading of the word (because they are only a repetition of the Hsh information), such Tj in SW do give additional information because the Tj explanations are made by the same

SW author and presumably fit into the SW system. Thus 姑 /*t'iamb, t'iamp > ts'iām, ts'iām, ts'iap has Tj 占 *tiam (no aspiration). We know, then, that the ArC standard pronunciation was not the regular sound reconstructed from AnC; but derived from a nonstandard pronunciation. t'iām < *tiam (irregular development) or ts'iām < *t'iam, nonstandard pronunciation of tiam (SW pron.). Since the Tj are relatively rare in SW, it seems that they have been added in order to correct a pronunciation normally suggested by the Hsh, or to indicate a pronunciation which had not been described sufficiently (e.g., in sound phrase, Hy with combined reading); this could be the reason for Tj of 蔡 *siën: 華 siën. But there are a number of cases where the pronunciation (as known by fan ch'ieh of AnC and the Hsh) is the same or very close to that of the Tj character. Such indications seem to be unnecessary, but it is probable that some readings in Han time were not considered standard and were corrected in SW by means of Tj. The effect of a Tj may have been that the standard pronunciation finally prevailed and the other reading disappeared completely, so that the fan ch'ieh gave the same reading as SW. This explanation is supported by two facts: sometimes two readings have been preserved by the fan ch'ieh: one fits with the Hsh values, and one of them is the Tj reading (e.g., 蔡 *tsien and *tsiën, the latter suggested by Tj 至蔡); sometimes the fan ch'ieh gives a pronunciation different from Tj, but the Hsh indicated a pronunciation similar to the Tj, showing that the Tj reading did exist in Han time and was lost, though it was the standard pronunciation of SW. Thus 郇 is *g'wan and *siwən (< /*zg- - s'w-) has Tj 泓 *weng; the Hsh series 旬 has words *g'iweng, showing that the reading given by SW once existed and was later lost.

Tu jo 讀若

Many Tj explanations present striking phonetic differences, and provide a check on the ArC reconstructions. However, since the Tj equations involve only two characters, often from different Hsh series, the correspondences can not be expected to be as regular as the reconstructions in the same Hsh series. Examples:

- (1). 丙 t'ām, t'iem belongs to a Hsh series with 茵 d'iāi < /*d'iab and 弼 b'iët, going back to /*bt'ām, bt'iem, bdiab, bdiad, bziët. Tj equations with 丙 are 導 *d'og, 沾 *tiam, 誓 *diad. 茵 /*bdiab > *d'iad is equated with 陸 *liuk < /*bdliuk ~ b'dluk and with 綴 *tiwat, tiwad; *d'og 導 is Tj 淡 iām < *diam, 丙 t'iem and 突 d'ām < *d'əm. This shows that *t'iam was /*bt'iam

- > /*t'iəng ~ *d'ôg. *t'âm is close to *t'iam - t'iam. 丙 was read /*bdiab > *d'iad ~ diad; the b- of /*bdiab was preserved in Tj 陸 /*bdlyuk, but it had also a more developed reading *d'iad ~ tiwad.
- (2). 臉 k'am, k'iam has Tj 藍 lam < /*lyâm. k'am goes back to /*sikam, k'iam to *k'lâm < /*sklam. In the same Hsh series, 臉 is lam < /*zgliam. 臉 was probably also /*zgliam > gliam, ~ zlgâm > /*lg- > lyâm,
- (3). 戔 tsiâm < *tsiam has Tj 三 sam < *sâm and 咸 yam < *g'em. A shift *tsiam ~ sâm is easy. As to *tsiam : *g'em, Hsh series 咸 *g'em has derivatives *t'iam, *d'em, *siam, pointing to /*dg'em, (derivates /*t'yem, dyem, syem); probably there was a reading 戔 /*dz'ēm ~ /*dz'yēm.
- (4). 啗 *d'âm is described by Tj 含 *g'em < /*dg'em, and 歆 *k'em is described by 貪 *t'em < /*tyem. This shows that 啗 *d'âm was read /*dyâm, and 歆 *k'em was /*dk'em.
- (5). 蕃 liam < *bl- ~ gl- (both b- and g- are found in the Hsh). But 蕃 has Tj 甚 d'iam < /*dyiam, and 蕃 AnC iam has Tj 淫 *diem. Consequently 蕃 was *diem, and 蕃 was /*bdyem or /*bdlyem, but at the time of the Tj, the b- had dropped.
- (6). 婪 lâam has Tj 潭 *d'em < /*dyem, and is itself Tj for 嵐 lâam < /*blâm. According to its own Hsh, lâam 婪 was /*zgliam and Tj /*blâm could not have preserved the b- at the time of the Tj equation, the l- of /*lâm probably had a pronunciation like l' so that it could be taken as /*zlâm ~ l'em, and 嵐 could be compared with 潭 /*dyem.
- (7). 魚同 has three readings: *d'ung < /*ld'-, d'ieu < /*d'log, d'iwong < /*d'lung and Tj 龍 liung < /*d'liung ~ dl'ung. It proves that in SW time 魚同 was read /*d'l'ung.

Other Tj equations show that the full Hsh value was an older form no longer common. Examples:

- (1). 翺 *ts'iang < /*ts'lang, is described by Tj 創 *ts'iang, (no Hsh with -l-). 翺 /*ts'lang had already developed into *ts'iang.
- (2). 行 *g'iwan, according to Hsh /*dg'iwan, is described by Tj 銀 *ngien, (Hsh without dental initial). 行 must have lost its d- already, and had a variant *ngien (found in other derivatives of 示).

- (3). 𪔐 *xieng < /*bsxeng. One derivate, 𪔐 *d'lieng, is described by Tj 亭 *d'lieng, and 𪔐 has Tj 聲 *siang. The Hsh of 聲 has no b-, but on the other hand k-, etc. Thus, 𪔐 had already passed from /*bsxeng to /*sxieng, which was similar to 聲 *siang < sieng < /*syeng (maybe /*sxieng ~ zxieng); on the other hand, 𪔐 /*bdyeng had developed into /*dyeng, similar to 亭 *d'lieng.

When the character and its Tj belong to the same Hsh series, or Hsh series with the same sort of initials and finals, no conclusion can be made on the degree of archaism in pronunciation. Thus, 𪔐 *liên (phonetic 𪔐 *d'liên) is described by Tj 𪔐 *liên, analyzed with 𪔐 'suppressed phonetic,' < /*dz'liên. But the equation *liên : liên or /*d'liên : dz'liên is inconclusive. On the other hand, 𪔐 *d'liên < /*d'liên ~ d'liên is described with Tj *d'liên 𪔐, which shows that 𪔐 had already become *d'liên. Similarly, 𪔐 siuën < /*sýwän(g) (Hsh *g'liwëng, etc.) described by Tj 宣 *siwän < /*sýwän allows no conclusion as to the question whether the cluster was preserved or not.²³

Some Tj can be explained by adducing other information outside of SW. 塗 liung < /*bliung < /*bl'ung; 隴 liung < /*b(d)l'ung. The initial element b- was still present, as shown by the Tj of Cheng Chung 鄭象 (Ssü-nung 司農) 龍 /*bl'ung; 龍 mâng < /*lm'ung ~ lm-; 塗 was /*bl'ung, and so was probably 隴, therefore a good Tj for 塗. When comparing this group 塗 : 隴 with 魚同 : 龍 we can see that the tempo of the phonetic evolution differs from word to word. The Tj show these differences because they are not a systematic comparison like the Hsh. Nevertheless, there remains a considerable number of unexplained Tj descriptions, for example, 𪔐 mian : 𪔐 nan < /*mnan ~ bnan(?), 𪔐 ngam has Tj 𪔐 niap < dniap; /*dngamb : /*dn'yamp(?).

From the Tj equations we can conclude that some elements required by the Hsh were no longer present at the time of the Tj; the most archaic form was reflected in the Hsh connections, whereas the Tj were later indications to determine more closely the actual pronunciation. The Hsh connections were still, in most cases, valid at the time of Hsü Shen, or at least known by the traditional teachings and schools. The Tj system represents a pronunciation of the first century A.D. against an Early Han and Late Chou and Ch'in pronunciation preserved by the Hsh. When the Tj show such a simplified form, it is often possible to determine which was the sequence in the original cluster by noting which element was dropped. The Tj do not allow analogical re-

constructions to other graphs of the same Hsh series because a Tj is only a graph-to-graph, word-to-word equation, and not an analysis of a graph. This also explains some difficulties in the equations; the Tj were made according to an immediate impression of the sounds of a particular word and not according to a phonetic analysis applicable to a whole Hsh or rhyme group; they are a check on the reconstructions and show the steps in the evolution of the words.

Paronomastic Definitions of Shih ming

N. C. Bodman's investigation of SM²⁴ concludes: "Liu's glosses have enabled us to confirm many reconstructions based on entirely different evidence. . . . [They] have in many cases suggested new reconstructions. The SM data suggest the profitable use of other Han sound glosses as a valid check and amplification to the usual methods of reconstruction." Since a detailed discussion of the problems of the SM has been presented in another place,²⁵ a summary of the significance of the SM material will suffice here.

It appears from our review that at the time of the third century A.D., more initial clusters had been preserved than Bodman's study would reveal, but also that, for the majority, simple consonants as in AnC had already developed. The ArC, as reflected in the Hsh of SW, was passing from clusters to the simple consonantal initials, during Middle and Later Han. This development is apparent in the Tj as well as in SM. The SM shows that some ArC features were preserved in some special cases. It strengthens the conclusion already proposed that ArC known through the SW is that of the time of the unification of the script in Ch'in and Early Han time. The ArC system began to break down at the time of Hsü Shen and left only some elements of the clusters at the time of Liu Hsi.

The reconstructions, as found in GS, are not the phonetic values of the SCg time nor even of Late Chou.

The study of the finals in SM is not less valuable. Results from applying the ArC finals of GS to SM are that in 1,274 cases the great majority agree with the ArC system as it was derived from the rhyming system of SCg. The following exceptions can be observed. (0 = vocal final.)

-ng : -n 9 cases	-m : -p 3 cases	-g : -ng 1 case
-ng : -k 2 c.		-g : -d 1 c.
-ng : -m 1 c.		-g : -t 1 c.
		-g : -n 1 c.

-n : -g 1 case	0 : -r 11 cases	-r : -g 8 cases
-n : -ng 9 c.	0 : -g 47 c.	-r : -t 8 c.
-n : -t 2 c.	0 : -k 14 c.	-r : -d 3 c.
-n : -r 2 c.	0 : -t 3 c.	-r : -n 2 c.
-n : 0 1 c.	0 : -d 1 c.	-r : -p 1 c.
-n : -m 1 c.	0 : -n 1 c.	
	0 : -m 1 c.	

Among these exceptions to the regular finals of GS, some point to earlier archaic forms, as -m : -p, -n : -t, -n : -ng, -g : -t, -ng : -m, -n : -m. Such contacts between finals were quite numerous in the Hsh series but rare in the SCg rhymes. These exceptions are few in SM; they truly are relics of the ArC as reflected in SW. The other exceptions show contacts between the pure vocalic endings and -r, -g, -d, -n, -m, but frequently with -g and -k. These contacts are best explained en bloc by supposing that in these correspondences 0 : -d, -g, -r, the ArC finals -r (or another dental), -g, -d, -n had been lost or vocalized. The equations -k ~ -t : 0 can be explained either by a final -g, -y, or -d in the words with final 0, or a secondary reading -g, -d instead of -k, -t in the other character paired with final 0. The equations -r : -p, 0 : -m are exceptional and of little importance in this respect. The correspondences 0 : -r, 0 : -g are probably also cases where the ArC final was lost or vocalized; this is parallel to -g : -d which are best explained by vocalization of -g and -d > -i ~ -e. The archaizing final contacts in SM, as described above, amount only to twenty equations, whereas the regular passages from ArC to AnC values are about one hundred. On the other hand there is little preserved of the ArC Hsh system of SW; but the evolution ArC > AnC went at a more rapid tempo for the finals than the initials. It indicates that at the SM time all the finals were developing rapidly toward the AnC system. On the other hand, there is a great proportion of identity of SM finals with our present SCg rhyme system. Consequently, the SCg rhyme system is closer to the SM system than to the Hsh system in SW. Either SCg may have more archaic rhyme patterns (yet to be discovered) or may reflect (if the reconstruction of the SCg rhymes in GS is correct) a uniformization of the SCg rhyme from the second century A.D. to the beginning of the third. The SCg rhyme system as reconstructed now cannot represent the Chou or even the Early Han language. Either the text and readings were uniformized and reworked in Han time, or they conceal a phonetic system much more archaic than has been worked out.

CONCLUSIONS ON CHIA CHIEH AND
PARONOMASTIC DEFINITIONS

The Hsh and SCg rhymes yield a phonetic system applicable to classes of words; such a system is not yet elaborated for the Chch because they represent word-to-word, group-to-group equations. The Chch are of different time and region, and could be based on different systems. The only systematic groups of Chch according to one system are found in the Tj of SW and the definitions of SM. Though of limited number, they afford a check on the reconstructions obtained on the basis of the Hsh and the rhymes.

The Tj and SM equations show that the Hsh values are more archaic in initials and in the finals. These Chch represent an intermediary stage between ArC and AnC. The initials are mostly simplified, but clusters were preserved down to the beginning of the third century A.D. The finals are more simplified, and the SM system of finals is already close to AnC.

The phonetic values set up for the SCg rhymes by Karlgren are much younger than the Hsh values. These SCg rhymes can be elaborated into a more archaic type, or the text tradition and the uniformization of the SCg readings may have been a result of later Han philology.

APPENDIX

TONE AND ACCENT

Very little is known about tones in ArC. They are not mentioned in SW and seem to be of no relevance at all in the application of the Hsh, in the sense that tone differences as observed in AnC do not prevent any Hsh contacts. Chinese scholars became conscious of tones only at the time of Shen Yo 沈約, 440-513 A.D. (Fu Liu, *Étude expérimentale sur les tons Chinois*, Paris et Pékin, 1925, pp. 3-7.)

For the AnC period, Karlgren (*Études*, pp. 38-39) describes the Four tones p'ing ('even perdendosi'), shang ('rising perdendosi'), ch'ü ('probably falling perdendosi'), ju (ex abrupto), but then supposes that they were still further divided into two different pitches according to the voicelessness or voicedness of the initial of the word, thus positing in reality eight tones. Yet he gives no further proof for this statement; the early dictionaries do not give any such positive indication, though it is probable that a difference of tone pitch was automatically connected with the nature of the initial. The origin of the AnC inflections of tone has not been investigated. In a comparison of the paronomastic definitions of SM, according to the tone marks found in Bodman's list, it is clear that there is complete irrelevance of tonality among the equated words, and that only the elements of consonantism and vocalism are the basis of the equations. This condition is still the same as that observed in SW.

According to Ch'ien Hsüan-t'ung 錢玄同 (cf. Fu Liu, *op. cit.*, p. 2), there were two tones in SCg, the first being represented by the AnC p'ing, shang, ch'ü categories, the second by the ju-sheng words, since there are no rhymes between ju-sheng and other tones. This is certainly not true in all cases, though there are no rhymes between words ending in -m and -p. This may imply a difference of tone, and it is one of the factors which we invoked to explain the development $*-mp > -p \sim > -mb > -b$. (cf. *supra*, p. 40), but again in an earlier stage, these tones were no obstacle for free Hsh derivation. Kennedy in his short study: *Tone in Archaic Chinese* (*Wennti*, no. 2, June, 1952, Yale) gives strong evidence that a series of three or even four tones (if the traditional concept of the final occlusive—'ju-sheng' as a 'tone'

is maintained) existed in Archaic Chinese, as represented in SCg, though he observes that many exceptions still await explanation, either by reading an entirely different word than is suggested *prima facie* by the character, or otherwise. He even concludes that "if there is a tonal system in Odes, the tones are prosodically more important than the rhymes, for there are actually, in the text considered, fewer cases of perfect rhyme than there are of tonal uniformity." This statement loses some of its strength when we observe that this impression comes from the fact that our rhyme system has been reconstructed in all detail and our tones are only a general classification. Kennedy rejects Karlgren's theory that the usage of 吾 and 我 proves the existence of a nominative and accusative case in the earliest stages of Chinese, still preserved 'vestigially' down to the time of Meng-tzū in his dialect (Le Proto-chinois, langue flexionnelle, JA, 1920; *The Chinese Language*, 1949, pp. 72-76) and explains the difference of 吾 and 我 as a mere difference of tone of the same word, according to its position in the middle of a sentence or at the end, or followed by a pause, the tonal opposition being that of 'even' against 'not even.' (A Re-examination of the Classical Pronoun Forms ngo and nga 再論吾我 CYYY, 28, 1956, pp. 273-281). Another early evidence of tones in Chinese is found by F. Tôkei in the regular alternation of words with voiced and voiceless initials, and the concomitant lower and higher pitch in the tones of the words, which would seem to be the oldest form of the prosodic structure found in Shu ching and some of the oldest parts of SCg. (Sur le rythme du Chou king. *Acta Orientalia Ac. Hung.* 7, 1, pp. 77-104, 1957, and Notes prosodiques sur quelques chants de travail chinois. *Acta Orientalia Ac. Hung.* 6, 1, pp. 53-63, 1956).

Karlgren sometimes distinguishes an even tone and an oblique tone in his GS, according to the development in the modern readings and the AnC values: 馬奇 g'ia / g'jie / k'i : (even tone) 'to ride,' (oblique tone) 'rider.' This distinction is not necessarily one of tonality in ArC, and it is more probable that a more thorough ArC reconstruction could express the distinction by different consonantal elements in the initial or the final of the word, with a concomitant or better, resulting at a later date in a difference of tonality. In his "Cognate Words in the Chinese Phonetic Series" (BMFEA, no. 28, 1956, p. 2) he indicates these tones only for AnC. Chou Tsu-mo, 四聲別義釋例, "A New Interpretation of the Four Tones" (FJHC, 13, 1-2, 1945) defends the opinion that the distinction of the four tones was first propounded by the Han scholars. His study consists of a long annotated list of characters with double sounds and variants, but the cases where the Han

scholars clearly explain these differences of reading by a tonal difference with exclusion of other differences in consonantism or vocalism are very rare and exceptional. In connection with the problem of the parts of speech in Chinese, Chmielewski (Le problème de 'partie du discours' dans la langue chinoise, French abstract of an article in *Rozprawy Komisji Orientalistycznej* 4, Warszawa, 1952) finds that some tonal differences and other phonetic differences show some striking morphological oppositions between *nomen* and *verbum*, (so also Bodman, Review of Karlgren's "The Chinese Language," 1949, Lg, 26, 1950), and even in cases where the reconstruction does not yield any tonal differences as in 父 'father, to treat as father,' he concludes that there was a tonal change which the reconstruction failed to bring to light. Yet, he only shows that these differences later appear to be tonal ones. A. G. Haudricourt in "Comment reconstruire le Chinois archaïque" (*Word*, 10, 2-3, p. 358, 1954) thinks that Karlgren does not sufficiently examine the tones in his reconstruction of ArC; by leaving out the tone problem, he neglects an important means to determine more detailed differences in the readings of the words, by other phonetic factors than tones. Haudricourt supposes that developments like Vietnamese final *h* < *s*, which by its loss caused a tone corresponding to the Chinese *ch'ü sheng*, may be found in Chinese too, but he has not tried to indicate a definite value for these finals in Chinese. He maintains that Vietnamese had originally no tones, and thinks it is quite probable that Proto-Thai, Archaic Chinese, and Common Miao-Yao were toneless languages also. "L'apparition des tons engendrés par les modifications des consonnes finales et initiales a du se produire parallèlement dans les quatre langues, sous l'influence culturelle du chinois, influence dont nous avons le témoignage par les emprunts." (L'origine des tons en Vietnamien, JA, tome ccxlii, No. 1, 1954.) He repeats his doubts about the antiquity of the tones in Chinese, in his review of E. R. Hope, *Karlgren's Glottal Stop Initial in Ancient Chinese*. . . . "M. Hope est tenté de faire remonter jusqu'aux T'ang et peut-être plus haut, la distinction des deux séries tonales. Si sur beaucoup de points, je suis d'accord avec les principes énoncés par M. Hope, je ne suis pas d'accord avec l'application qu'il en fait au chinois. Je ne crois pas que ce soit faire preuve d'un euro-péocentrisme excessif, que de croire que les tons ne sont pas des catégories éternelles des langues qui en ont actuellement, ni qu'il soit interdit d'en chercher l'origine dans des mutations de consonnes" (BSLP, 50, 2, 1954, p. 215).

Similar suggestions on the origin of tones by disappearance of initial

or final consonantal elements, though to a much less degree than in Haudricourt's theory, are made for Common Thai by Nishida Tatsuo, *Tonematica Historica* (Gengō Kenkyū, Journal of the Linguistic Society of Japan, no. 25, 1954).

Still less is known on the problem of the accent in ArC. The parallel forms of binomial and monosyllabic reconstructions of words of the type *d'iang-liang < #* d'l (i)ang, or of the type *an-tsan < #* ntsan, suggest that there was an accent on the second part of the binomial reconstruction, but that is about all that can be said. Some scholars have imagined stress patterns in the reading of ancient Chinese poetry (Erkes and Karlgren for T'ien-wen; MS, VI, 273ff., OLZ, 37, Sept.-Oct. 1931, pp. 815-818), but they have not elaborated a systematic theory or procedure, nor tried to coördinate this theory with other linguistic factors in Chinese.

PART TWO

THE DIALECTS IN FANG YEN

THE DIALECTS IN FANG YEN

INTRODUCTION

In Part I a reconstruction system has been established according to the Hsh system of SW. These reconstructions represent a phase of the Chinese language which can be placed in the period of Late Chou and Early Han. Yet the reconstructions based on the Hsh connections of the graphs, analyzed and explained in SW, are such that they refer essentially to pronunciations or readings of monosyllabic forms represented by one graph. They can be checked, often completed and corrected in minor details, by using additional information derived from the rhymes in SCg and other literary works of Han and pre-Han times, from Chch usages, Tj descriptions, and paronomastic definitions.

It is important to realize that the period ascribed to the Hsh system of SW is so close to that of the FY composition that the language of the Hsh system at least partly coincides in time with the FY dialects, and the Hsh reconstructions can be safely used to interpret the material of FY. But in FY we deal with a linguistic material which, in its use of the Chinese writing system, has always tried to represent the real words of the spoken dialects in a way that goes beyond the limits of the strict one-graph-one-word system. FY extensively lists all kinds of binomial forms—reduplicative, dimidiative binoms, as well as simple compounds consisting of elements which may originally not be cognates—and which pose a new problem in the reconstruction of the binomial form as distinct from the monosyllabic form. This is one of the objects of the study of chapter ii. The other one tries to determine what specific new light for the reconstruction of an older linguistic period can be gained from the comparison of the dialect words (whether monosyllabic or bisyllabic) after their reconstruction is established according to the Hsh system of SW.

Chapter iii is a general study of the geographical method as applied to the FY material, the historical and linguistic factors at work in the various dialect areas, separately and in comparison with each other, and their respective extension and expansion.

CHAPTER I

PRELIMINARY QUESTIONS

Before discussing the problems outlined in the preceding paragraph, it is necessary to define the notion of dialect as understood in FY, and to delineate the various dialect areas mentioned in FY. Finally, a word will be said on dialect material found outside FY.

DIALECT

The term dialect is used in so many formally different senses, that a general definition would hardly contain anything more than: "a form of speech distinguished and opposed to other ones," or, if more detailed: "a form of speech, used by a certain community of speakers, distinguished from and opposed to other forms, which may be equal in standing and parallel in historical development or not, but also may be socially differing from others, like the standard or literary language as against spoken and special forms of speech used by limited social groups."¹

In the study of dialects, we can stress different aspects of speech forms found in a given community. Human speech, on whatever aspect we may choose to concentrate, is too complicated and too delicate to be exhaustively treated by any of the different approaches.

For many years the dialects were examined with the view of discovering rare and archaic words specially useful in etymological researches. Other authors stressed the areal aspect in order to trace the historical, cultural, political, or economic influences in the expansion of a dialect. All these attempts had their value, but they failed to do justice to the full reality of the language, either diachronically or synchronically. In stressing the social aspect and describing special secret languages and occupational speeches, we may reveal particular processes in the development of sound and vocabulary, grammar and syntax, but we cannot embrace the totality of speech. The structural approach delimits its object by choosing any one form of speech in a given community of a certain area and social level, and then describing its internal structure, without regard to the origin or the etymological relationship of the elements of speech.

¹For notes, see p. 299.

The definition of a dialect will depend on the point of view of the study; some of the most important acceptations of dialect have been discussed by Martinet.²

It is important to determine the dialects with which a particular one is being contrasted, and the standard language (literary or spoken) with which it is competing and by which it has been influenced or from which it could have developed. Different levels and formal aspects can be separately considered.

Historical Perspective

A dialect may appear to be in relation to other dialects, without the existence of a standard form and with no special eminence inherent in any of them. Thus, if among several equally important forms of speech there is no dialect that emerges as a center of linguistic amalgamation and expansion, we have a cluster of dialects. But more often than not, one of the dialects has attained greater importance than the others, to become the standard dialect; it influences the others but also absorbs elements of the other dialects, although these latter ones continue to live on a minor level and may slowly disappear. However, it is possible to disregard such increasing or decreasing importance, and to study any one of the dialects in its linguistic forms in comparison to the other coexisting dialects or to an older written form of language or a reconstructed form.

Areal Aspect

Dialects may be called types of speech, each limited to a certain area. Very often it is impossible to give the exact limits of a given dialect, since every feature in a dialect, whether phonological, morphological, syntactical, or lexicological, has a different limit of expansion; a dialect has a certain cohesive structure in phonology, grammar, and vocabulary, the center of which is in an imaginary nuclear area around which the most important bundles of separate lines of expansion of the linguistic features are situated. These limits of expansion are determined by extra-linguistic factors (social, political, cultural, geographical). Therefore, no dialect is exactly and clearly separated from another by one limit comprehending all the elements that constitute the dialect. They overlap and penetrate each other. This penetration may be of different degrees, so that it may be difficult to speak of two different dialects, rather than of various subforms of one dialect. Moreover, on the same

area of these different dialects, another language may be superstratified, a standard language of genetically same stock or of a different branch or a dialect of greater prestige than the others or a literary form of that same language.

Social Aspect

Different forms of speech may be used in various layers of society, which again may be etymologically related or not. A literary language may be known only by a thin upper level of the society, or a cultured language may be spoken by a separate group. There may be languages of different groups of trade and occupation, age, and so on. These different forms of speech can compenetrate and influence one another in various degrees. Although some of them may be socially and areally of little importance, historically they can be of equal importance among each other.

Dialects in a Reconstructed Language

When dealing with linguistic situations of past ages, the definition of a dialect also depends on the nature of the materials available in the source, and the picture they allow us to draw. To define those dialects more precisely by introducing facts suspected on the basis of the knowledge of modern dialects involves a danger of falsifying the true linguistic situation. Yet the modern facts may very well suggest and point to the right interpretation beyond the strict limits of the factual information on ancient dialects.

If the script of the early Chinese texts were different, we would probably know more about the language of the Chou times. The Chinese script reflects the sounds very imperfectly and fails to distinguish the dialectal readings unless it resorts to clearly different graphs and sometimes to local and rarely used graphs. Without the FY material, our dialect knowledge would amount to very little. Still, the material of FY deals only with some aspects of the language and the dialects, the words, and only indirectly with the phonetic differences. Nothing is known of the grammatical differences of the dialects, so that the problem of the mutual intelligibility remains mostly unanswered. However, if from the FY materials we can obtain a picture of the dialects which, though incomplete, is consistent in regard to the aspects of the dialects treated in the sources, and if these results coincide with the historical facts (political

and cultural), we can conclude that it depicts a real and fundamentally exact situation.

Dialects in Fang yen

The Han time dialect of FY can be described as follows: a speech variety of the Chinese language, areally centered around the most important political and cultural centers of the feudal times before the unification (definitely achieved in Han). The FY material covers all the Chinese-speaking population of the empire. Each main dialect has subvarieties, and their areas are mutually overlapping. Some of them, etymologically related, go back to the earlier periods of the Chinese language (Chou period); all have contributed—some dialects far more than others—to the formation of the literary and the standard spoken and written language of Han. Some dialects are results of expansion of a dialect into an area which preserved elements of the original language or dialect—even non-Chinese elements—mixed with literary and standard influences. The knowledge of the subvarieties and local forms within the frame of each dialect is very scant. Only the vocabulary as such is directly known, and that only to a limited extent. The phonetic differences are known indirectly, and if any laws of correspondence among the dialects are deduced, they represent a further hypothetical interpretation of the FY material. The grammatical differences among the dialects are completely unknown. Of the social aspects, we know nothing but what we can deduce from the connections and similarities of the given dialect with the literary and the standard language.³

DIALECT AREAS OF FANG YEN

Abbreviations and Conventional Spelling

Ch'-Chin: Ch'in-Chin 秦晉	Hanh: 韓
Ch'-Ch'u: Ch'en-Ch'u 陳楚	Ho-tg: Ho tung 河東
Ch-hs: Ch'ao hsien 朝鮮	Hs-Ch'u: Hsi Ch'u 西楚
Ch'-Hs: Ch'ing-Hsü 青徐	Hs-Lung: Hsi Lung 西隴
Ch-H: Chiang-Huai 江淮	Hs-N: Hsi nan 西南
Ch-Hs: Chiang-Hsiang 江湘	H-T: Hai Tai 海岱

Kn-hs: Kuan hsi 關西	Sh-tg: Shan tung 山東
Kuan erh hsi, etc. 關而西	Shan erh tung 山而東
Kn-tg: Kuan tung 關東	Sh-hs: Shan hsi 山西
Kuan erh tung, etc. 關而東	Shan erh hsi 山而西
Lsh: Lieh shui 洌水	Tg-Ch'i: Tung Ch'i 東齊
L-Y: Liang-Yi 梁益	Weih: 衛
N-Ch'u: Nan Ch'u 南楚	Yenh: 兗
P-Yen: Pei Yen 北燕	Yingh: 鄆

Terminology of Fang yen

The dialect areas in FY are mostly indicated by the names of the Chou states. At the time of the composition of FY, those states were abolished; earlier, their respective limits had been subject to many changes. What is important here is to establish the areas of the dialects which FY indicated by those names. Besides the names of the old feudal states, FY also uses terms of natural geography and of administrative divisions of Han time, which have to be identified and fitted into the frame of the general areas indicated by the former terminology. The study of FY from the point of view of dialect geography began with Lin Yü-t'ang 林語堂 (Ch'ien-Han fang-yen ch'ü-yü k'ao 前漢方言區域考)⁴ where for the first time the problem of delimitation of the dialect areas of FY was taken up. The triple terminology used in FY has lead Lin Yü-t'ang and recently also Lo Ch'ang-pei⁵ to the conclusion that the material of FY is of mixed origin and was collected at widely differing periods. The use of terms of an earlier period, as Ch'i, Ch'in, and the like, by Han scholars to indicate Han time areas, is in itself not impossible. It does not mean that words were necessarily collected in those pre-Han times. We know that Yang Hsiung used earlier documents but checked all information with contemporary facts. The use of Chou terminology is not because of the use of pre-Han sources, but simply because the author found undeniable and important relations between the dialect areas of Han and the political and cultural divisions of the Chou period.

Han Administrative Terms

The areas indicated by those terms often coincide grosso modo with a Chou state frontier, as, for example, Ch'ing 青 and Ch'i 齊, Lu 魯

and Yenh 兗; this usage may also suggest a certain shift in both periods in the center of the dialect area. Thus Ch'ing includes Tg-Ch'i as well as Ch'i; Yenh covers Lu-Sung-Wei as well as Ch'en, and so on. Whenever the Chou terminology is abandoned for the Han terms, the author probably did so in order to determine more clearly the actual distribution of the dialect words.

In the localization and limits of these Han time areas we have followed Ku Chieh-kang's map Hsi Han chou-chün t'u 西漢州郡圖.⁶ The areas mentioned in FY are: Liang chou 涼州: West Ch'in. Lung hsi 隴西: West Ch'in, south of Liang chou, including Chi[-ch'eng] 冀城. San fu 三輔: the 'Metropolitan district' (modern Kuan-chung tao 關中道), part of Ch'in. Ho nei 河內: part of Wei. Chi, that is, Chi chou 冀州: Chao. Yu chou 幽州: Yen, P-Yen, Ch-hs and Lsh. Ch'ing chou 青州: Ch'i and Tg-Ch'i. P'ing yüan 平原: northwest of Ch'i. Yenh chou 兗州: Sung-Lu-Wei and Ch'en. EY 9/1 has 濟河間曰兗州 "The region between the Chi and Ho rivers is called Yenh chou." This does not agree with the administrative area designated by that name in Han. Ju nan 汝南: part of Ch'u (northeast and east of Ch'u). Ying 潁 that is, Ying ch'uan 潁川: North Ch'u. Yü chou 豫州: part of Huai Ssü (P'ei chün 沛郡) and part of Ch'u (Ying ch'uan and Ju nan). EY 9/1 says 河南曰豫州 "South of the Ho river is called Yü chou." P'ei chün 沛郡: Huai Ssü. Hsü chou 徐州: H-T and Huai. Tg-Hai 東海: North Huai and H-T. Yi chou 益州: covers the area west of Ch'u till the Wei river in the north and past the Chiang 江 in the south. Liang 梁: part of Yi chou but centering more in Wu tu 武都, Chung Han 中漢 and Pa chün 巴郡.⁷ Shu chün 蜀郡: westernmost part of Yi chou. Pa chün 巴郡: East of Yi chou. Yang chou 揚州: southeast of Yang-tzŭ-chiang, that is, Wu, Yüeh, and Ou. EY 9/1 says 江南曰揚州 "South of the Chiang river is called Yang chou." Tan yang 丹陽: west of Wu, south of the Chiang. Hui chi 會稽: Yüeh 越.

Terms of Physical Geography

Passes and mountains.—Kuan 關 and Shan 山. Among the terms made up with Kuan, Kuan hsi 關西⁸ is the most frequent. It signifies the western dialects in general (Ch'in, Shu, Han, Hs-N, L-Y); this appears from the many instances where the formula is clarified by additional details:

4/42 自關以西秦晉之郊

5/10 自關而西晉之舊都河汾之間

1/3 自關而西秦晉之故都

7/16 關西隴冀以往

1/19 自關而西秦晉梁益之間

1/8, 10, 17, 21, 27, 28, 30; 2/2, 3, 6, 7, 9, 10, 12, 13, 18, 21-22, 24-25, 28, 30, 38; 4/38; 5/36; 6/1; 7/7; 17; 11/12, 16; 13/141.

自關而西秦晉之間

8/8 自關而西秦漢之間

13/151 自關而西秦雍之間

8/10 自關而西秦隴之間

7/30 自關而西隴冀以往

This is confirmed by the opposition of Kn-hs to the other groups. Many passages can be quoted to prove this; a sample may suffice.

1/9: Kn-hs // Kn-tg

2/4: Kn-hs // Sung, Weih, Ch'en, Ch'u.

3/8: Kn-hs // Kn-tg, Ch-Hs.

4/2: Kn-hs // Ch'i Lu.

5/40: Kn-hs // Kn-tg, Ch'en-Ch'u.

6/19: Kn-hs // Kn-tg.

8/6: Kn-hs // Kn-tg, Liang, Ch'u, Chou, Wei.

9/17: Kn-hs // Kn-tg, Chou, Lo, Hanh, Cheng, Ju Ying.

There are about six cases where Kn-hs and Kn-tg are mentioned together. Kn-hs means the whole area of the western dialects, but Kn-tg often means only part of the eastern dialect groups. This limitation of the area Kn-tg is clearly indicated by the other areas mentioned in the same passages:

2/31: Kn-hs and Kn-tg // Ch'u (Ch'u, a big area of the east, is contrasted with Kn-tg).

4/5: Kn-tg and Kn-hs // Ch-H, Wei, Sung, N-Ch'u, Ch'i, Lu.

5/7: Kn-tg and Kn-hs // Ch'en, Ch'u, Sung, Wei. 5/8: *ibid.*

8/1: Kn-tg and Kn-hs // Ch'en, Ch'u, Sung, Wei, Ch-H, N-Ch'u.

3/14: Hs-N, Kn-hs and Kn-tg // opposed to nothing; it is a passage which must be supplemented by others (cf. p. 148, no. 21).

The western dialects form a rather uniform block, designated by the general term Kn-hs, but the eastern dialects designated by Kn-tg do not

have such a unity. The west forms one group of dialects centered around and spread from Ch'in; the eastern group is formed by several cultural centers of equal importance (Chou, Lu, Ch'i, Ch'u) and each with its respective irradiations. This can be seen in passages such as :

3/25: Kn-tg // Tg-Ch'i H-T // st.

4/3: Kn-tg // Ch'en Wei // st.

11/15: Kn-tg // Chao Wei // P-Yen // st.

They are all cases where Kn-tg must be taken as a general indication of the eastern group, but limited by other eastern areas. The actual extension of Kn-tg depends in each passage on the other areas within the eastern dialect group mentioned together with it by FY. However, where the term Kn-tg occurs alone the situation is different: 1/29, 5/21, 22, 8/12, 13, 9/8 oppose Kn-tg // Kn-hs; here Kn-tg means the eastern dialects in general as opposed to the west. In cases such as 5/3, where Kn-tg is mentioned alone, it would be dangerous to supplement dialect information by adding other words with similar meaning which FY ascribes to some area; however, such a passage is not without significance for there is always the opposition dialect // standard, and, as will be clear from later chapters, Kn-hs has a great part in the lexicological make-up of the standard language, so that this particular opposition can well be interpreted as Kn-tg // Kn-hs.

Together with the terms Kn-tg and Kn-hs we must investigate the meaning of Shan tung-hsi (山東西), Shan erh tung, Shan erh hsi (山而東, 山而西). The problem is not only to localize the mountain referred to by FY, but also to establish the extension of the areas and the cultural centers to which they belong. N. L. Swann (Food and Money in Ancient China, p. 447) takes the terms Shan tung and Shan hsi in SC (K'M 277.2) as referring to the Mountain Hua 華山, but she does not indicate on what basis this identification is made, though it coincides with the dialect limit as indicated by Kn-tg // Kn-hs.

Curiously, these terms occur only in FY ch. 6 and 7 (6/2.5.6.29 and 7/2.8.16) with one case in 2/17. No commentator felt the need to explain these terms. But Kuo P'o (comm. to 7/8: 自山東五國之交) says: 六國唯秦在山西 "Of the six States only Ch'in is situated west of the Mountains." This refers to the term 'liu kuo' 六國 of SC ch. 15.⁹ Consequently, Sh-hs is identical with Kn-hs, and the other states coincide with the eastern areas, so that Sh-tg is used in the same sense as Kn-tg. This explains why in two passages (6/3.7/8) some editions have Kn-hs and Kn-tg instead of Sh-hs and Sh-tg. Another confirming

factor is given in SW s.v. 倭 (SWKL, 3593 a): 自關以西物大小不同謂之倭. 倭 is a variant of 倭; the SW definition shows an independent wording for a meaning which is the same as in FY 6/3: 陂, 倭, 表, Ch'en, Ch'u, Ching, Yang: 陂. 自關而西凡物細大不純者曰倭. Finally, to prove that Sh-tg is Kn-tg and Sh-hs is Kn-hs, we can show that the relations of Sh-hs and Sh-tg with the other dialect areas are of the same kind as those of Kn-hs and Kn-tg. FY 2/17: 逞, 苦, 了, 快也. Sh-tg 逞; Ch'u: 苦. This can be supplemented by 2/32, 2/16, 3/13, 6/22. St. 快, 疾, and 疾行. N-Ch'u: 汨, 逞 Tg-Ch'i, H-T: 速, and Sung, Cheng, Chou, Lo, Hanh, Wei, Ch'u: 逞. Ch'in: 了. Kn-hs: 快. Then, Ch'u, Ch-H, Ch'en, Yen, Ch-Hs, Lsh, Kn-tg (2/32), Sh-tg (2/17): 逞. It shows that 逞 is found as a word in the eastern dialects, with other specific dialect words (苦, 速, 較, 曉), but 快, 疾, 了, are found only in the west. The same opposition west//east is found in 6/3, 6/29, 7/8, 7/16. FY 7/2, 3 and 6/5, 2 are cases where Sh-tg and Sh-hs are mentioned together in the same way as Kn-tg and Kn-hs. In 6/2, st. 聾, is also the dialect word of Ch'-Ch'u, Ch-H; 聾 has in Sh-tg and Sh-hs, Ching, Yang a special meaning; it is phonetically similar to the dialect word of L-Y, Ch'-Chin 聾. In 6/6, the st. word is 難, whereas the other dialect words, 謦, 展, 憚 all closely related to 難, are found all over China: Ch'i Chin, Ching Wu, Ch'-Chin, Ch'i Lu. In 7/2 St. is 踞, but Chao 杜, Sh-tg and Sh-hs 踞. In 7/3, st. is 縣; the dialect words are Chao Wei, Yen Chao: 桃, Sh-tg and Sh-hs 抗. In all these cases, the words of Sh-tg and Sh-hs are either originally from or very similar to those of the west, or at least are dialect words different from the st. word, the origin of which is not apparent. In one case (6/5) the word of Kn-tg and Kn-hs seems to differ from the other words of the western and eastern dialects. St., L-Y, Ch'-Chin: 慙, but Ching Yang, Ch'-Hs: 快, Chao Wei: 恥 but Sh-tg and Sh-hs: 愬. This word may be an eastern dialect word which has spread into the west and resisted the expansion of 慙. Such an exception is rare and paralleled only by an example with the terms Kn-tg and Kn-hs (8/5): st. 豬, P-Yen Ch-Hs: 豕, N-Ch'u: 豕, but Kn-tg and Kn-hs: 豕. We can conclude that the terms Sh-tg, Sh-hs can be understood as if we had Kuan instead of Shan.

Mountain Sung Yüeh 嵩嶽. FY 4/41 and 7/17, 嵩嶽之南, 嵩嶽以南 is explained by Kuo P'o 今在河南陽城縣. According to TMTT (959/2), 南陽 was an administrative center (hsien) in Han, and remained so till after Chin; it coincides with the modern Ju-nan

hsien in Honan.¹⁰ This is in the north of Nan-yang chou (南陽州) of Han, which is the same as Nan yang (Kuo comm. 'to 8/15, 8/16) and the area Wan 宛, that is, West Ch'u.

Mountains Chiu ni (yi) 九疑. Mentioned together with Hsiang T'an 湘潭 (10/7) and Ch-Hs (10/13); the area is situated southeast of Ling ling 陵零, the southernmost part of N-Ch'u.

Rivers and Lakes

Lieh shui 洌水 is written 列水 in HS, ch. 28 hs. (K'M 426/3), where it is said to be a river in Lo-lang chün 樂浪郡 of Ch-hs; it has its source in T'un lieh 吞列 and runs westward to Nien-shan 黏蟬, where it reaches the sea. It is always mentioned together with Ch-hs, and must be considered as an irradiation of the dialect of Yen.¹¹

Ho 河 is combined with other river names: Ho Fen 河汾 for the area between the Yellow River and the affluent Fen, that is, part of Chin. Ho Chi 河濟: the area between the Yellow River and the Chi shui 濟水, that is, northwest of Ch'i and Weih or—in Han time terminology—same as Po hai, P'ing yüan, Tung chün (淳海, 平原, 東郡). Ho-yin 河陰 chih chien is (acc. to Kuo 1/31) the combined areas of P'ing yi 馮翊, Ho-tg 河東, Lung men 龍門 and Ho yang 鄆陽; that is, the eastern part of Ch'in with part of Chin till the Fen. Ho-nei chih pei 河內之北 (1/16): north of Ho nei, is an administrative division of Han, coinciding with Wei 魏.

The river Chi is mentioned with Weih: 淇衛之間 (13/141). It is a river which flows into the Wei ho (or the Huang ho) at about longitude 114°; it follows the northern boundary of the Ho-nei chün 河內郡, but cuts its northeastern corner. Ch'i Weih must be taken as a small extension of Weih to the north.

River Chiang 江. Ch-H 江淮, the area between the Huai and the Chiang, belongs mainly to the areas under Ch'u influence but is also a meeting point of the dialects of Wu (and east coast) and Ch'u. Ch-Hs 江湘 is the area between the Hsiang (center in Ch'ang sha) and the Chiang, but limited by other areas, called Chiang Yüan 江沅, (between the Chiang and the Yüan) and Yüan Hsiang 沅湘 (between the Yüan and the Hsiang). Chiang Mien 江沔 is (acc. to Kuo), the area between the Chiang and the river Mien, which passes through Hsiang yang (襄陽); Mien is the same as the Han River (漢). The term Chiang Han (江漢) is not used in FY; instead Chiang Mien is mentioned four times: 4/44 (with N-Ch'u and opposed to Hs-N, L-Y); 5/37 (opposed to Hs-N, Shu Han); 13/141 (alone); 13/142 (with N-ch'u). Chiang Mien contains the areas, called in FY, Yingh and Chien p'ing 建平. Yingh became

the capital of Ch'u in 689 B.C. and was abandoned in 282 B.C. for Ch'en chou 陳州 (Honan), close to the frontier of Sung (Franke, I, pp. 160, 194). Chien p'ing, mentioned only by Kuo P'o, is situated north of the Chiang, at the border of Pa chün 巴郡 and Nan-chiang chün 南江郡. Lin Yü-t'ang (op. cit., p. 22) gives to the area Chiang Han (Chiang Mien) an extension far beyond its real limits and takes it as an area separate from Hs-N, L-Y and Ching Ch'u. It must be considered as part of Ch'u (southeast) and of Ching (north of the Chiang).

Some areas are hard to delimit exactly: tzü Chiang erh pei 自江而北 (10/45) is opposed to N-Ch'u, Chung Hsia 中夏 and to standard; it probably refers to the Ch'u area including Ch-H and Huai. Hsi Hsia 西夏 'West Hsia' and Chung Hsia 'Middle Hsia' must refer to the same region Hsia. Chung Hsia can hardly refer to the literary expression "Central Chinese States," for as a geographical indication it is too vague. According to Ch'ien Yi (Fang-yen chien-shu, ch. 1, p. 19a) it refers to Chiang Hsia, an administrative area of Han. The Hsia river was another name for that part of the Han which passes through Chiang Hsia (HS, ch. 28 hs).

Another vague term is Chiang pin (江濱 'the shore of the Chiang'), in FY 10/7, which mentions only areas south of the Chiang (Yüan Li, Chiu yi, Hsiang T'an). It is probable that Chiang pin was meant equally for the southern shore of the Chiang. Furthermore, FY 10/7 can be supplemented by 1/6, 7, 9, 17 and 7/26, mentioning the areas Wu Yüeh, Yüan Li, Chiu yi, Hsiang T'an (south of the Chiang), Ju, Ch'u, Ch'en, Ju Ying, Hanh Cheng, Sung Lu, Weih, Fen T'ao, Kn-tg, Kn-hs, Ch'-chin, Tg-Ch'i, H-T, Chin, Wei, Chao, Yen Tai, Ch'i Lu (north of the Chiang). By elimination then, we may conclude that Chiang pin was the southern shore of the Chiang from the Wu border to the Hsiang River.

River Huai 淮. Besides Ch-H 江淮, FY also mentions Huai Ssü 淮泗, the area between the Huai and the Ssü, coinciding with P'ei chün 沛郡 of Han, part of Yü chou 豫州, and Ch'u kuo 楚國; the latter, a Han kingdom, was established by Kao ti 高帝 and abolished by Hsüan ti 宣帝. The term Huai 淮 is also mentioned as the name of an entire region in combination with other dialect areas: Wu Ch'u 吳楚 吳楚衡淮 (2/3); Ching Huai H-T tsa Ch'i 荆淮海 岱雜齊 (3/15); Ch'-Hs Huai Ch'u 青徐淮楚 (3/24); Huai-Ju chih chien 淮汝之間 (5/10, 10/14). Huai probably means the region which covered Huai Ssü as well as part of Ch-H, and was centered around the locality Chün yi 郡邑 and An feng 安風 of Han. Huai Jui 淮汭 (1/20) is defined by Kuo: 水也. TMTT (824/3) explains it:

淮水隈曲之處; SW defines 汭 as 水相入也 (SWKL 4946). The area Huai Jui is to be taken as the bend where the Ying 潁 and the Huai come together, coinciding with the center of Huai area itself.

River Hsiang 湘. Besides Ch-Hs, there is the combination Hsiang T'an 湘潭 for the area between the Hsiang and the T'an 潭, an affluent of the Yü in Yü-lin chün (鬱林郡) and Hsiang Yüan 湘沅, the area between the Hsiang and the Yüan, practically including Ch'ang sha 長沙 and Ling-ling chün 陵零郡.

River Yüan 沅. Besides Chiang Yüan, Hsiang Yüan, there are the terms Yüan Yung Fu yu 沅湧滂幽 and Yüan Li 沅澧. The latter area is practically identical with Wu-ling chün 武陵郡. The former (acc. to Ch'ien Yi) (FY 10/14) seems to cover the administrative area Ling ling 陵零 with part of Wu ling 武陵 (till the river Li) and the southern half of Kui yang. This appears from the identification of Yung as a river in Kuangtung, Ch'ü-chiang hsien (South Kui yang of Han). Fu is a river in Kui yang. As to yu 幽, it must probably be understood as a 'remote, distant' spot.

Lakes. Chiang Hu 江湖 mentioned in 2/11 (Ching-Wu Chiang-Hu chih chien 荆吳江湖之間), 2/29 (Ching Yang Chiang Hu 荆揚江湖), means the whole stretch south of the Chiang, from Ching till Wu, but probably only on the width of the T'ung t'ing lake. Wu hu 五湖 (FY 9/3) (acc. TMTT 116/1, based on SC) can be explained as 大湖東岸五灣為五湖 "On the eastern shore of T'ai hu, five bends [of the river] make the Five Lakes." N-Ch'u Wu-Hu, then, means the general area of N-Ch'u extending into Wu.

Linguistic Areas

Ch'in 秦

Ch'in was the most important state in the west. Yet it is not frequently mentioned alone: 1/2, 3, 4, 9, 31. 2/3, 7, 21. 4/38. 6/24, 35, 43. 11/1 bis. 13/151. Here must be added Ch'in chih ku-tu¹² 秦之故都 and Ch'in chih chiu tu... 舊都: 1/3, 5/10, and Ch'in chih chiao 秦之郊: 1/18. 4/42. 5/5. Total 20 times. Among the combinations with other areas, Ch'in-Chin is the most frequent: 1/11, 14, 22, 32 bis. 2/7, 8, 33, 35. 6/6, 10, 13, 18, 23, 32, 34 bis. 41, 46, 47, 48, 54. 7/1, 14. 9/25. 10/20, 35. Ch'-Chin chih ku-tu 1/3; Ch'-Chin chih chiao 2/8. 4/42. 5/5. Ch'-Chin chih chien 1/3, 4, 7, 8, 10 bis, 12 bis, 17, 21 bis, 27, 28, 30. 2/2, 3, 6, 7, 9, 10, 12, 13, 18, 21, 22, 24, 25, 28, 30, 32, 37. 3/1, 5. 4/38. 5/36, 41. 6/1 bis, 2 bis, 28, 38. 7/7, 15, 16. 9/1. 11/2, 12, 14,

16, 17. 13/141, 154. Ch'-Chin chih chien, tzü kuan erh hsi 9/11. Ch'-Chin chung-t'u... 中土 6/2. Total 85 times.

Further combinations with Ch'-Chin: Ch'-Chin hsi Hsia 8/15 bis; Ch'-Chin chih chi... 際, Ho-yin chih chien 1/31; Ch-Chin Sung Weih chih chien 1/16; Ch'-Chin chih chiao, Ch'en-Yenh chih hui 會 1/18; Ch'-Chin J.-Y chih chien 1/19, 6/5. Ch'in Han 秦漢 : 8/8 ter. Ch'in Chou 6/43.

Parts of Ch'in. West Ch'in: Hs-Ch'in 7/34, and combined with Tg-Ch'i 7/15. Ch'in chih hsi-pi 西鄙 combined with Chi Lung erh hsi 冀隴而西 7/5. Ch'in Lung chih nei 秦隴之內 8/7; Ch'in-Lung chih chien 8/10. Lung Chi yi wang 7/30. Liang chou 涼州 combined with Hs-N 3/14.

South and southeast Ch'in: Yung 雍 (combined with Liang chih hsi chiao 梁之西郊 2/12. Yung Liang 雍梁 1/22. (Here must be added San fu 三輔 12/99.)

From this list, it appears that Ch'in is very strongly represented; it was an area expanding toward the east, invading almost completely the area of Chin. But Chin is mentioned alone, and also in combination with areas other than Ch'in. Consequently, Chin was a dialect area greatly overrun and influenced by Ch'in, but still preserving signs of its original independence.

The Southwest and Central West

Han 漢 : Ch'in Han chih chien 8/28 ter; Shu Han 蜀漢 4/6. 12/99.

Hsi nan 西南 : Liang chou Hs-N 3/14, Hs-N, L-Y, 4/44, 7/5, 11/13. Hs-N, Shu Han 4/26, 5/37.

Liang Yi 梁益 . These two provinces are always mentioned together except for Liang chih hsi chiao 2/12 and Yung Liang 1/22. L-Y is mentioned alone: 1/28, 2/7, 26. 6/2, 11. 11/14. 13/72; combined: L-Y Ch'-chin 6/5.¹³

Kuan hsi (Shan hsi). Alone: 72 cases. (cf. pp. 81 and 190). Combined with Chin and Ho Fen 5/10; Ch'-Chin 1/3, 2/8, 4/42, 7/17. Ch'-Chin chih chien 1/8, 10 bis, 17, 21, 27, 28, 30; 2/2, 3, 6 ter, 9, 10, 12, 13, 21, 22, 24, 25, 28, 30, 38. 5/36. 6/1 bis. 7/7, 11/12, 16. 13/141. 2/7.

This suggests that Kn-hs must be taken together with the other western areas as one block with its center in Ch'in. This opinion is well supported by the history of the expansion of Ch'in into the southwestern regions, but the attempts of Ch'u to enter into those provinces did not succeed (cf. pp. 180-181).

Chin Chao 晉趙

Although Chin is mentioned chiefly together with Ch'in, the expansion of Ch'in has not completely wiped out the dialect of Chin. It is mentioned

alone three times (2/18. 1/2. 6/24), and even parts of Chin are mentioned separately: North Chin 1/16 bis, West Chin 7/5; Chin chih chiao... 郊 5/5, Chin chih pi... 鄙 10/9. 13/151. Here is to be mentioned as coinciding with Chin, the area Fen 汾. Though written 郿 (with radical 卩), a character which is the name of a central Ch'in locality, it has been taken as standing really for 汾 by Ch'ien Yi 錢繹 in Fang-yen chien-shu 方言箋疏 (ch. 1, no. 13), because it is connected with T'ang, Chi, and Yenh (唐冀兗) in FY 1/13, and with T'ao, Sung, and Weih (陶宋衛) in 1/17. T'ang and T'ao are two localities of which the mythical emperor Yao was once ruler (Chavannes, MH I, 93, 168, 211); yet, they cannot be taken as locations in Shantung and Hopeih (MH, I, p. 42), but, in accordance with Ch'ien Yi (based on HS, ch. 28 sh. K'M 421.3: 晉陽故詩唐國) as part of the Chin region itself. This also agrees with TMTT 867/4 which places T'ao-t'ang ku 陶唐谷 in Huo hsien, Shanhsi.

Chin is further mentioned with northern, eastern, and southern regions (with exclusion of the western areas); for example, with Sung, Wei, Cheng 2/3; Ch'i 2/23, 6/6; Ch'i, Wei, Sung, Lu, Ch'en, Yu, Ying, Ching, Ch-H 2/6; Ch'i, Ch'u 6/12; Ch'en and Yenh 1/18; Sung, Weih, Lu 1/11; Chao 2/27, 26. 6/1; Weih 1/4, 6; Wei, Yen 1/5; Wei 2/23; Wei and Ho-nei chih pei 1/16.

Chao is mentioned alone: 2/2, 3/9, 6/35. 7/2, 7/3. 13/143. In Combination: Kn-tg, Chao chih chiao 5/10, 11/16. Chin Chao 2/26, 27. 6/1. Ch'i Chao 6/44. Hanh Chao 2/23. Sung Chao Ch'en Wei 7/4. Yen Chao 2/2 ter, 11/11. Chao Tai 13/141. Chao Wei 1/2, 2/3, 3/7. 4/1 bis, 42. 5/5, 27, 36, 37, 39. 6/5. 7/3, 17. 9/18. 11/15. Tzŭ Ho erh pei Yen Chao 自河而北燕趙 9/7; Chao Yen Tai 1/3, 7.

Wei 魏

Wei has been identified on Chou Tsu-mo's map (Fang-yen chiao-chien) with the region between the Huang ho and the Fen ho. This disagrees with Lin Yŭ-t'ang, Bodde, and Wang Yŭ-ch'üan.¹⁴ Originally the state of Wei was in the southwest of modern Shansi, with its capital in An yi, but later the capital was moved eastward to Liang 梁 (modern K'ai feng), and this western part fell into the power of Ch'in. However, its territory stretched still far north of the Huang ho. This part became more and more important as a center of Wei (from 352 B.C., cf. Franke, I, p. 184 ff.). In 208 B.C. Wei was divided into West Wei and Yin 殷, the eastern part with its capital in Chao ko 朝歌; in 205 B.C., both fell into the hands of Han. This shows that in late Chou the more important center of Wei had shifted eastward, north of the Huang ho. FY

has used the term Wei for the western side, north of the Ho. The region indicated by Chou Tsu-mo was completely covered by Ch'-Chin.

Wei is seldom mentioned alone: Wei chih chiao 2/2, 3/9, 13/143. In combination: Chao Wei (cf. *supra*); Kn-tg Wei 5/10, 11/16; Chin wei 1/5, 2/23; Sung Wei 1/3, 5/27, 28, 29, 34. 11/7; Chou Wei 5/10, 8/6; Ch'en Wei 4/4. Further combinations: Chao Wei Yen Tai 1/3; Ch'i Sung Ch'u Wei 1/21; Chou Ch'i Sung Ch'u Wei 8/7; Ch'-Ch'u Sung Wei 3/5, 4/3. 5/7, 9, 11, 16, 17, 18, 20, 22, 26. 8/1, 4. 9/11; Sung Cheng Chou Lo Hanh Wei 3/13; Sung Ch'u Wei 5/4; Chou Lo Hanh Wei 5/23; Chou Lo Ch'u Wei 5/34; Chou Cheng Wei 8/8; N-Ch'u Sung Wei 4/5; P-Yen Wei 2/2; Sung Chao Ch'en Wei 7/4; Sung Wei Ch'-Ch'u Ch-H 5/33 *bis*, 31.

This list shows that Wei does not belong to the areas of Ch'in, Chin, or Chao, but has more contacts with the central area (Chou, Cheng, Lo, Hanh), the southeast, and south (Ch'u Ch-H) than with the north. We must therefore set off Chin Chao as a group which has been covered on one side by Ch'in, on the other side (via Wei) by the central and eastern dialects.

Yen Tai 燕代, Pei Yen Ch'ao-hsien Lieh-shui 北燕朝鮮涑水

According to Ikeuchi (A Study of Lo-lang and Tai-fang, Ancient Chinese Prefectures in the Korean Peninsula. *Memoirs of the Research Department of the Tōyō Bunkō, The Oriental Library*, no. 5, 1930, p. 79 ff.) there was no real occupation of permanent importance before the conquest of Wu ti 武帝 which resulted at A.D. 108 in an administrative organization of Ch'ao hsien in four prefectures Chen fan 真番, Lo lang 樂浪, Lin t'un 臨屯 and Hsūan t'u 玄菟. This territory was "occupied by a population in which the Chinese . . . predominated. . . . This scheme saw a change in the time of Wu ti's successor Chao ti 昭帝 (86-24 B.C.), when the three peninsular prefectures were united into a greater Lo lang, while Hsūan t'u was united to Liao tung and Chen fan was abolished, . . . which no doubt meant the total abandonment to the [aboriginal] Kao chū li rule in the area." There is, however, indication of earlier infiltration and political domination of Liao tung and maybe part of Hsūan t'u in *HS*, ch. 95 (K'M 605/1-3) by the state of Yen. The *Korean Studies Guide* (p. 56) sums up the relations of Korea with China: "The first actual records of Chinese contacts come from about 500 B.C. when Chou refugees founded a short-lived colony in northern Korea; the next from about 300 B.C. when exiles from the kingdom of Yen in North China settled briefly in Korea. In 108 B.C. the Han Wu emperor invaded Korea and set up four prefectures." (*MH*, II, p. 135, n. 2, III, pp. 298, 408 n. 4).

What *FY* calls Pei Yen is probably to be taken as the area between

Yen and Ch'ao-hsien, namely Liao tung and Hsuan t'u. Ch-hs in *FY* therefore refers to the Chinese speaking population which occupied Korea since the conquest of Wu ti, and was mostly centered around Lo lang and along the Lieh shui River. This appears also from E. B. McCune's M.A. Thesis (University of California, 1930-1950), *History of Lo-lang*; with special attention to the ways in which Chinese institutions were adopted by surrounding Korean tribes.

Yen is mentioned alone only four times: 2/2, 7/3, 11, 11/13. A distinction between Yen Tai and P-Yen Ch-hs has been made by Lin Yü-t'ang, but it is clear that P-Yen Ch-hs is an expansion of Yen and of Ch'-Chin over Yen Tai and of Ch'i over Yen.

Part of the contacts of Ch-hs with Ch'i and Tg-Ch'i could have been by water. Yet the center of the whole area is Yen. On the other hand Tai is never mentioned alone; once a part of Tai is mentioned alone: Tai chih pei 代之北 1/18. Thus, Tai should be logically brought together with Yen. Once it is combined with Chao 13/141. All other times we have Yen Tai 1/15 *bis*. 18. 20. 2/5, and further combinations Chao Wei Yen Tai 1/7, 3. Yen Tai Tg-Ch'i 1/20. Yen Tai Ch-hs Lsh 2/5.

Besides the combinations mentioned above, Yen is combined with Ch-hs, Lsh 3/6 *bis*; Ch'i 3/3, 5/25. 6/46. 7/21. Chin, Weih, Wei 1/5; Ch'i H-T 9/19. Yu 幽, appears in combination with Ch'ing (= Ch'i) 1/24. A part of Yen is often quoted in connection with Ch-hs, namely, P-Yen: 1/18. 2/2. 6/7. 7/10, 24: this is not a reason to isolate it from Yen or Yen Tai because it has contacts with Ch'-Chin, Ch'i, Wei, and so on, which is not possible without taking Yen as the center. Thus Yen chih pei-chiao, Ch'-Chin, 1/16. Yen, Ch'i chih pei pi 3/5 *bis*. Yen, Tg-Ch'i pei-chiao 7/22. Yen, Ch'i-Ch'u chih chiao 1/12. The rest are connections with Ch-hs Lsh: 1/8; 2/8, 2/29, 2/34; 3/7, 3/11, 12; 4/44; 5/1, 35; 7/12, 15, 18, 31; 8/2, 4 *bis*, 5; 11/16.

One part of Yen (northeast): Yen chih tung-pei is mentioned with Ch-hs Lsh: 5/11, 27, 32; 8/9 *bis*, and with southeast China: Yen chih wai-chiao 外郊, Yüeh chih chui . . . 垂, Ou Wu chih wai-pi 歐吳之外 鄙 7/30. Ch-hs Lsh is mentioned alone three times: 6/31, 7/18, 25 *bis*. Although three different directions of influences into the northeastern areas are considered, West (Ch'in, Chao, Tai), south (Wei, Ch'i) and probably by water (Tg-Ch'i, Ch'i, Wu, etc.), all these influences suppose a passage through Yen. We must therefore consider Yen as the main center which was itself expanding into Tai and northeast and at the same time receiving influences from other sides.

The antiquity of the feudal state of Yen is traditionally believed to go

back to the beginning of the Chou period. According to Ch'i Ssü-ho, this tradition, though generally accepted in Chinese historical works such as SC, is unreliable. Whenever Yen was mentioned before the Chan kuo period, it stands, in the opinion of Ch'i, for Yen in Honan (later sometimes called Nan Yen 南燕 and also written 匱 in bronze inscriptions). It is only after the Chan kuo period and later, that Yen 燕 stands for the region, called Yen in FY. Whether the early existence of Yen (as understood in the FY terminology) as a feudal state dependent from Chou is historically to be rejected or not, the rejection of this tradition would therefore not exclude all other kinds of linguistic and cultural communication and influences. The relatively late date of Yen to enter into the historical records would also mean little concerning the original language of Yen; it would only show that until late Yen was a rather isolated area, when compared to the other adjacent areas, such as Ch'i, Lu, Sung. On the other hand, Ch'en Meng-chia finds the traditional history of Yen as recorded in SC and other texts completely reliable and in accordance with the inscriptions of the Western Chou period. Moreover, recent excavations of bronzes in regions as far as the present day Jehol (熱河) and Ling yüan (凌源) prove the early contacts of the feudal state of Yen with the Chou center.¹⁵

Tung Ch'i 東齊, Hai Tai 海岱

Lin Yü-t'ang has rightly separated the two areas as independent groups of dialects. Tg-Ch'i alone is mentioned thirty-four times: 1/18, 20, 21, 2/25, 3/2, 17, 18, 19, 20, 22, 23, 24, 5/27, 6/9, 20, 34, 37 bis, 39, 40, 45, 50, 51 bis, 7/8, 13, 15, 16, 19, 22, 24, 10/9, 34, 11/12. It has no contact at all with Ch'i, two cases excepted: Tg-Ch'i Ch'-Hs 2/24, 6/4. Besides the contacts with Yen Tai (cf. supra), Tg-Ch'i is most frequently (twenty-one cases) mentioned with H-T: 1/11, 12, 17, 28, 2/10, 34, 3/12, 13, 15, 16, 21, 25, 5/10, 33, 36, 39, 7/4, 11, 19 bis, 8/9, 15. The other contacts are sporadic: Ch'-Chin: 2/8, 6/32, 7/15, 9/1; Chou Chin 10/9; Lu Weih 6/55; Ch'en Sung Sh-H 7/14, and other southern areas, Hsiang Yüan 10/4; Wu Yang 8/9.

H-T appears three times alone: 1/19, 5/11, 11/2. A part of H-T, Hai chih chiao 海之郊, appears alone three times: 7/15, 19 bis. With exclusion of Tg-Ch'i, H-T is once combined with Ching-Huai and Ch'i 荆淮海岱雜齊 3/5.¹⁶

For a complete account of Tg-Ch'i H-T we must also consider the Han term Ch'ing Hsü 青徐. It is combined with Tg-Ch'i 2/1, 24, 6/4. Other combinations: Ch'-Hs Ch'i Lu 2/15; Ch'-Hs Ch-H 3/16; Ch'-Hs Ching Yang 6/5; Ch'-Hs Huai Ch'u 3/24, Ch'-Hs Ch'u 2/30 Ch'-Hs Huai

Ssü 3/10. Ch'ing is separated from Hsü in the combinations Ch'ing Yu 青幽 1/24 and Ch'ing Ch'i Yen Ch'i 青齊兗冀 2/8. On the other hand, Hsü is separated from Ch'ing in the combinations Hsü-t'u P'ei-Ch'i (徐土邳圻 "The region of P'ei and the river Ch'i in the territory of Hsü chou") 4/44,¹⁷ Hsü Yen 4/44, Hsü Yang 7/17, Hsü Lu 8/17. Hsü alone is mentioned once: Hsü chih chiao 4/44. The contacts of Ch'-Hs southward, westward (Lu, Yen, Ch'i) and northward (Chi) do not change the general picture already obtained by comparison of Tg-Ch'i H-T, for the contacts can be explained through Ch'i. (Cf. infra).

Ch'u 楚

The extension and exact limits of Ch'u are ever-changing in the course of history and often hard to determine. As Lin Yü-t'ang observed (op. cit. pp. 34, 42-43), we cannot take Ch'u in its narrow sense of the administrative divisions of Han time, and identify it with Ch'u kuo 楚國. The extension of Ch'u as a dialect area in FY has to be delimited by comparing the use of the term Ch'u in contact and opposition with terms of other dialect areas. It is sometimes impossible to establish exact limits on any side where there is no other dialect area opposed to it. If in FY, Ch'u is mentioned in opposition with Ch'-Chin only, the extension of Ch'u in eastern and southern direction is not considered; if Ch'u is opposed only to Wu and Yüeh, the limits of Ch'u on the north and west side are not considered. In the same way as Ch'u is used in its broad sense when opposed to Wu, Yüeh, Ch'-Chin, it is used in a more narrow sense when opposed to Ching, N-Ch'u, Hs-Ch'u. Ch'u can be broad and general, and comprise smaller parts as Ju, Ying, Ching, Hs-Ch'u, N-Ch'u, N-Yang, Hsia, and so on.

The term N-Ch'u in FY is not an administrative division of Han, but used as a regional term in SC and HS. So is the term Hs-Ch'u. SC ch. 129 (K'M 277/2) identifies N-Ch'u with Chiang nan 江南, Heng shan 衡山, Chiu chiang 九江, Yü chang 豫章, and Ch'ang sha 長沙. This is a wide area, but in FY, N-Ch'u must be taken in a more narrow sense, excluding Chiu chiang, which is regularly represented in FY by the terms Ch-H, Huai, and Wu. Thus N-Ch'u is restricted to the general area south of the Chiang with exception of Wu Yang Yüeh Ou. This agrees with many passages of FY, but when N-Ch'u is opposed to Ching, Yüan Li, Yüan Hsiang, it is to be understood in a still narrower sense.

The preceding explanation of N-Ch'u creates a difficulty as the same text of SC also described limits of Hsi Ch'u and Tung Ch'u, which are unacceptable for FY. In SC, Hsi Ch'u includes the area from the Huai

river northward till P'ei, Ch'en, Ju nan; Tung Ch'u covers the area from P'eng ch'eng 彭城 (in P'ei) to Tung Hai, Wu, Kuang ling. These regions cannot be the dialect areas which FY means by the terms Hsi Ch'u and Tung Ch'u. First, Tung Ch'u of SC is named in FY, Huai Ssü, Huai, Hsü, H-T, and it is indubitable that Wu is an area, independent and opposed to Ch'u. Moreover, the rest of Ch'u, Ying ch'uan, N-Yang, Hsia, Ying, Chiang Mien are left out of the general Ch'u area. One could insist on using the SC limits of Hsi Ch'u in FY by pointing out that the area left out of Ch'u coincides exactly with that part of Ching which is north of the Chiang. But, if we reject the delimitation of Tung Ch'u given by SC, logically that of Hsi Ch'u falls too. However, one could object by claiming that N-Ch'u should be rejected too. Again, the area of N-Ch'u is clear: its delimitation is not based on the localization of Ch'u kuo 楚國 in Han time (as for Hsi Ch'u and Tung Ch'u in SC) but on that of the Ch'u center of Chou time: Yingh 郢 (capital of Ch'u till 280 B.C.). The region Chiu Chiang, north of the Chiang, is a later additional part brought in by SC, made with regard to Ch'u kuo of Han. Tung Ch'u is not mentioned in FY, but Hsi Ch'u appears in 1/21, 7/5, 11/1 and Kuo P'o explains it: 今汝南彭城 "present-day Ju nan and P'eng ch'eng." It seems bold to reject the interpretation of such an early commentator. A comparison of the words in 1/21 (supplemented by 1/25, 12, 11/2, 34) does not suggest any relative position for Hsi Ch'u, but in 7/5 and 11/1 the comparison of the words show that Hsi Ch'u should be taken as the northwestern and western part of all Ch'u.¹⁸

Ch'u alone¹⁹ is mentioned forty-eight times: 1/1, 2, 8 bis, 12, 16, 26 bis, 27, 30, 31, 2/2, 20, 29, 31, 37, 3/9, 50 bis, 4/38 bis, 40 bis, 6/13, 16, 24, 33, 47, 49, 50, 53, 54, 9/1, 10/6, 14, 16, 17, 18, 22, 27 bis, 48, 11/1, 2, 4.

In combination with other terms, Ch'u is seldom mentioned with N-Ch'u (1/31, 2/24), but more often with parts of N-Ch'u: Ch'-Ch'u Ching Yang 9/9; Ch'u Yingh Ch-Hs 10/23; Ch'u Wu Heng Huai 2/3; Ch'u Yingh yi nan 10/12; Ch'u Yingh yi nan Tg-Yang 10/33; (more general, Ch'u yi nan 10/15). As to N-Ch'u, besides the passages above, it is mentioned with parts of Ch'u, north of the Chiang: N-Ch'u Wan Yingh 9/2; N-Ch'u Chiang Mien 4/44, 13/142. It shows that Ch'u in FY is well distinguished from N-Ch'u.

A most frequent combination is Ch'en Ch'u. Alone it appears twelve times: 1/7, 10, 17, 19, 25, 31.²⁰ 2/3, 19, 24, 3/1, 5/36, 11/12. Further combinations: Ch'-Ch'u Sung Wei (18 times): 3/5, 4/3, 5/6, 7, 9, 11, 16, 17, 18, 20, 22, 26, 31, 33 ter. 8/1, 4, 9/11. Ch'-Ch'u Sung Weih 5/8,

7/7, 13/150, (Also Ch'u Sung Wei 5/4). Ch'-Ch'u Ch-H 2/8, 3/12, 26, 4/7, 5/1, 30, 6/2, 8/2. Ch'-Ch'u Sung Huai: 9/9. Ch'-Ch'u Ching Yang; 6/3. Combinations with northern areas: Ch'-Ch'u Chou nan 2/3. Ch'-Ch'u Ju Ying 2/4. Kn-tg Ch'-Ch'u 5/40. Kn-tg Ch'-Ch'u Lo Wei 5/35.

Another frequent combination, Ch'i Ch'u appears alone (1/13, 15, 23, 5/41, 6/10, 41.) and in combinations: Ch'i Ch'u Ch-H 5/29. To this must be added—though not entirely coinciding—Ch'-Hs Ch'u 2/30, and Ch'-Hs Huai Ch'u 3/24. Ch'i Ch'u Liang Sung 5/24; Ch'i Ch'u Chin 6/14; Ch'i Ch'u Sh-tg 7/46; Ch'u Ch'i Chou Wei Sung 8/7.

Combination Wu Ch'u. Alone: 2/3, 6/11, 28, and in further combination Wu Ch'u Heng Huai 2/3, Ch'-Ch'u Ching Yang 6/3. Partly coinciding with Wu Ch'u, partly extending farther south, is Yang Ch'u: 10/18, 10/16, 31.

Combination Liang Ch'u. 2/12, 6/21; and Kn-tg Liang Ch'u 2/6.

Combination Sung Ch'u. 1/2.²⁰ Further combinations cf. Ch'-Ch'u and Ch'i Ch'u.

Rarer combinations: Ching Ch'u 6/43. Cheng Ch'u 2/37. Ch'u Weih 9/14. Ch'u Wei 1/21. Ch'u Ying 1/9. Ch'u Tg-Hai 3/4 bis.

Subgroups within Ch'u.—Nan Ch'u 南楚 appears alone thirty-four times: 1/30, 3/46, 48, 49, 51, 52 bis, 5/31, 36, 6/34, 55, 7/30, 34, 8/5, 15, 9/18, 10/9, 29, 31, 35, 39, 41, 42, 43, 44, 45, 46, 47, 11/3, 4, 12/111, 13/141, 143. N-Ch'u chih wai (...之外), which can mean only N-Ch'u and south of Ch'u (and to which we must add N-Ch'u yi nan 10/25), appears sixteen times: 1/32, 2/3, 35, 3/12, 5/35, 6/22, 8/11, 14 bis, 9/11, 10/8, 11/7. Also with P'u K'uang 瀑匯 6/55 ter. Ch'u is seldom combined with northern areas (cf. Ch'u), except Ch-H: 2/5 ter, 3/8, 4/1, 2, 3, 8/1, 5/27, and in further combinations N-Ch'u, Ch-h, Kn-tg 3/15; N-Ch'u, Ch-H, Wu Yang, Wu Hu 9/3; N-Ch'u Sung Weih 2/13; N-Ch'u Sung Wei 4/5.

Within N-Ch'u itself, we have the combination N-Ch'u Ch-Hs: 1/15, 16, 3/8, 10, 4/42, 10/40. On the other hand, Ch-Hs is mentioned alone (i.e., without N-Ch'u, in sensu stricto: west of the Hsiang river): 3/11, 4/39, 5/10, 10/3, 19, 21, 28, 31, 38. Ch-Hs is also connected with Chiu yi (same as south of N-Ch'u: N-Ch'u yi nan and N-Ch'u chih wai) in 10/31.

Groups within N-Ch'u and partly coinciding with Ch-Hs are Yüan Hsiang 5/27, 10/4, 11; Chiang Yüan 10/1, 20; Yüan Hsiang chih nan 3/8; Yüan Yung Fu yu 10/41 and Yüan Li 10/5 bis, 37. These subgroups of N-Ch'u can also be considered as part of Ching as far as this area stretches south of the Chiang. Ching itself is difficult to delimit exactly; it stretches

north and south of the Chiang. However, the great majority of the contacts of Ching are with the southern areas; probably Ching should be taken as the southern part of the administrate area Ching of Han. It probably also covered Nan-chiang chūn 南江郡 and part of Chiang Hsia江夏. This appears from the fact that Ching is never mentioned alone, but always with some qualification and combination: Ching nan 10/2; Ching Yang 2/36, 6/2, 10/26; Ching Wu 6/1, 8; Ching Yang Wu Ou 1/21; Ching Yang Chiang Hu 2/11; Ching Wu Chiang Hu 2/29; Ching chih chiao Chiu yi 10/11. Further combinations include also regions north of the Chiang: Ching Ju Ch-Hs 10/10; Ching Heng Yang Hsü Weih Lu 1/30; Ching Yang Ch'-Hs 6/5; Ching Wu Huai Jui 1/20; Ching Wu Sung Weih 1/19; Ching Yang Ch'-Ch'u 6/3.

The only direct contacts of Ching with northern regions exclusive of other southern areas are: Ching Ch'u 6/43; Ching Ch'i 6/18; Ching Ch'i Ch'-Ch'u Sung Weih 7/7, and Ching H-T tsa Ch'i: 3/5. Consequently, Ching as used in FY is an area with its center, not north of the Chiang (which is Ch'u) but south of the Chiang, or close to the Chiang (Hsia, Nan Chiang) and with most of its contacts directed to the south.

Ju and Ying 汝, 穎. Ju appears alone in 1/9. A frequent combination is Ju Ying, alone in 1/6 and in further combinations: Ju Ying Liang Sung 1/5; Ju Ying Ch'-Ch'u 1/9, 2/4; Ju Ying Sung Weih 1/20; Ju Ying Ch'-Ch'u Sung Weih Lu Chin 2/16; Ju Ying Ch'-Ch'u Ch-H Kn-tg 1/9; Ju Ying Huai Ssü 10/34; Ju Ying Kn-tg Chou Lo Hanh Cheng 9/17; Ju Ch-Hs Ching 10/10; Ju Huai 10/14, 5/10. Summarized: four with Ch'-Ch'u, three with Sung and adjacents, two with Kn-tg and Chou, two with Huai area, one with south Ching, Ch-Hs.

Ying, besides the contact Ju Ying, is mentioned in Ch'en-Ying Sung nan 嵩南 7/17; Ch'en Ying 2/14. Sung Ying 2/11. Ju Ying can be taken as one subgroup; its most frequent connections are with Ch'-Ch'u, but also with northwest, east, and southeast areas.

Ch'en 陳. It is mentioned alone in 1/31, 2/20, 3/9, 6/43, 7/6. The most frequent combination is Ch'-Ch'u (cf. p. 92). Other combinations are with Ju Ying Sung Lu Ch'i Weih Chin 2/16; Sung Lu Weih 1/12; Sung Chao Wei 7/4; Ch-H Sung Tg-Ch'i 7/7, Ch'i 7/12; Cheng 1/4; Sung (including Yen 堯) 1/18, 30, 2/7; Sung Cheng Weih 2/29; Wei 4/4; Yen 1/18. These are twelve contacts in different directions where Ch'u is excluded: west and northwest (Chin, Chao, Cheng), east and northeast (Sung, Lu, Ch'i, Wei, Weih, Ch'i, Yen, Tg-Ch'i), south (Ch-H), but the contacts with Ch'u, or through Ch'u with other regions are still more numerous.

North Ch'u is mentioned 1/7 Hanh Cheng Ch'u chih pei-chiao and 8/16 Wan yeh 宛野.

Huai Areas

Ch-H 江淮 is mentioned alone 2/7, 4/5, 9/4, 25, and in combination with Ch'-Ch'u 1/17, 2/8, 3/13, 26, 4/7, 5/1, 30, 6/2, 8/2; Ch'-Ch'u Sung Wei 5/31, 33 ter; N-Ch'u 2/5 ter, 3/8, 22, 4/1, 2, 3, 5/27, 8/1. N-Ch'u Kn-tg 3/15; N-Ch'u Wu Yang Wu hu 五湖 9/3; Ch'i Ch'u 5/29; Tg-Ch'i Ch'en-Sung 4/14; Ch-Hs 3/16; Ch'i Weih Lu Ch'en Chin Ju Ying Ching 2/16; Wu Yang 2/28.

Huai Ch'u 淮楚 in Ch'-Hs Huai Ch'u 3/24 and Huai Ch'u Ch'en Sung 9/9. Huai Ju 5/10, 10/14. Huai Ssü 淮泗: Ch'-Hs Huai Ssü 3/10; Ju Ying Huai Ssü 10/34. Here must be added P'ei 沛 in Chou Cheng Sung P'ei 2/25, and Yü 豫, which is combined with Sung Weih Yen 1/18, with Yen Ho Chi 兗豫河濟 5/38.

The contacts Huai Chiang, Huai Ch'u, and Huai Ju are strongest; they can be considered as influences of Ch'u. However, there are also contacts with Ch'i, Lu, Sung, and so on, so that Huai can be considered as a transition area between Ch'u and others. Huai Ssü shows a weak connection with Ch'u, and can be excluded from the Ch'u subgroups; its contacts are mostly with the north and northeast.

The Group Wu Yang Yüeh 吳揚越

Among these three the most important area is Wu, but the widest is Yang, a province of Han, including Tan yang 丹陽, Hui chi 會稽, Yü chang 豫章, and covering Wu and Yüeh and part of N-Ch'u. Yang is not mentioned alone, but always with other areas: Wu Yang 2/33, 5/1, 6/5, 20, 43, 8/5; Wu Yang Ching Ou 甌 1/21; Wu Yang Ch-H 2/28, 24, 9/3; Nan Ch'u Wu hu 9/3; Wu Yang Tg-Ch'i 8/9. Yang Yüeh 1/30, 6/10, 10/30. (Here may be added Yang chou Hui chi 10/9 and Yang chou Tg-Yüeh 10/39.) Ching Yang 2/36, 33, 6/2, 10/26; Ching Yang Ch'-Hs 6/5, Ching Yang Chiang Hu 2/29; Ching Yang Ch'-Ch'u 6/3; Ching Yang Wu Ou 1/21; Ching Heng Yang Hsü Weih Lu 1/30. Yang Ch'u 10/18, 16, 31. Yang Hsü 7/17 and Yang Hsü Ching Heng Weih Lu 1/30.

Wu is mentioned alone 2/3, 6/52. Among the combinations, besides Wu Yang, the most frequent is Wu Yüeh 5/5, 6/7, 16, 18, 35, 42, 7/26, 27, 28, 29 and Wu Yüeh Ou Yen 7/30. Wu Ch'u 5/41, 28 and 6/11, 12, 2; Wu Ch'u Heng Huai 2/3. Wu Ching 6/8, 1 and Wu Ching Sung Weih 1/19; Wu Ching Huai Jui 1/20.

It appears that Yang has few connections which do not go with Wu; it has its most frequent contacts with or through Wu; the contacts of Yang independent from Wu are with N-Ch'u, Ch'-Hs, and Tg-Ch'i. It has more contacts with Wu than with Yüeh, but Wu has many contacts with Yüeh also. Yang is consequently a southwest extension of Wu. Yet it is opposed

to Wu hu and Chiang Hu and has a subgroup Tung Yang 10/28, 33; it has the same relation to Wu as is found, for example, between L-Y, Shu-Han and Ch'in.

Yüeh is never mentioned alone; all combinations have been mentioned above, except Ou Yüeh 6/52. Ou is mentioned together with Yüeh, Yang, and Ching; yet it is divided in Tung Ou, which corresponds to modern Wen chou, near the mouth of the river Ou in Chen chiang.²¹ Hsi Ou 西甌 is explained by Kuo P'o with the words 駱越別種 (cf. SC ch. 43 K'M 152.1) "It is another group of the Lo-yüeh people." It is mentioned together with 毒屋黃石野之門 (1/20), which is left unexplained. TMTT localizes Hsi Ou in modern Yü-lin 豫林 (Kuangsi). Lin Yü-t'ang also seems to follow this opinion in his map. The theory which puts Hsi Ou in Tonkin is less probable.²²

The linguistic material of Ou (Tung Ou and Hsi Ou) is altogether very small. It seems so close to Yüeh that it can be taken as part of Yüeh. For Wu and Yüeh, Ch'i Ssü-ho has tried to show, as for the feudal state of Yen but this time with more solid basis and historical evidence, that the Chinese culture did not penetrate into the larger part of the Yangtzu Valley until the Chan kuo period. Wherever 吳 appears in early texts, it was used as a graphic variant for 虞 in Shansi.¹⁵

The Group Chou Lo Hanh Cheng 周洛韓鄭

This group is closely connected with Kn-tg. Historically the most important area is Chou; numerically it is Cheng. As Lo洛 (the area around Lo yang) is always mentioned together with Chou, we must consider Chou Lo as one area. Chou is often mentioned without Lo; then it means the Chou area in general. It is not mentioned alone but in combinations as: Chou Lo Hanh Cheng 5/11; Chou Lo Hanh Cheng Sung Wei 3/13; Chou Lo Hanh Cheng Ju Ying 9/17; Chou Lo Hanh Wei 5/23; Chou Lo Ch'u Wei 5/35. Chou Cheng, alone in 2/30 and 3/8, is combined as Chou Cheng Kn-tg Ch'i Lu 2/14; Chou Cheng Kn-tg Hanh Wei 8/8; Chou Cheng Kn-tg 1/32; Chou Cheng Sung P'ei Kn-hs Ch'-Chin 2/25; Chou Cheng Sung Lu Ch'en Weih Ch'-Chin 1/21. Chou Chin in Chou Chin Tg-Ch'i 10/9, Chou Chin Ch'in Lung 6/55. Chou Ch'in 6/43. Chou Hanh in Kn-tg Chou Hanh Wei 8/8. Chou Wei in 5/10, 8/6, and combined with Wei Ch'i Sung Ch'u 8/7. Chou Ch'i in Kn-tg Chou Ch'i Cheng Lu 2/14.

A special term is Chou nan 周南, found in the combinations Chou nan Ch'-Ch'u 2/3, Chou nan Shao nan (邵南) Weih 1/20. Chou nan and Shao nan are names of two divisions of SCg; they are said to be songs of the people of Early Chou in Yung chou Chi shan 雍州岐山.

This is the center of Ch'in. Shao nan and Chou nan used together strongly suggest that the same region is meant as that from which the SCg odes originated. It cannot be taken, as some commentators think, to be the south of the areas of Yung chou Ch'i shan, since nan is a dialectal variant for feng 風 a 'song, tune' (cf. n. 38, ch. iii, Pt. I).

The terms Chou nan and Shao nan could mean an area close to the Chou capital, but not necessarily in the original center of Early Chou but as used in FY, rather in the Later Chou: Lo yang.²³ Cheng 鄭 (besides the combinations above) is found in Hanh Cheng P-Ch'u 1/6; Hanh Cheng Ch'-Ch'u 1/5; Hanh Cheng Sung Wei 2/5. Ch'en Cheng 1/21, 27. 11/2; Ch'en Cheng Sung Weih 2/29. Ch'u Cheng 2/37 and southwest Ch'u (Chien p'ing) Ch-Hs Ch'u-Cheng 2/37. Ch'i Cheng Kn-tg Lu 2/14.

Hanh 韓 (besides the combinations above) is found in Hanh Ch'u 6/12, Hanh Chao 2/23.

We can consider Cheng and Hanh as subareas of Chou in general but with definite influences from Ch'u, Ch'-Ch'u, as well as from the eastern areas, Sung Lu Ch'i.

The Group Sung Lu Weih Ch'i 宋魯衛齊

This area is culturally very important and must have its linguistic characteristics preserved till Han times. It is striking that Weih is mentioned only in combination with others, most frequently with Sung (fifteen times), but seldom with Ch'i (two times). The other contacts are Chin (eight), Chin Wei (three), Chou Cheng (six), Ch'u (six), Ch'en (six). We can consider Sung Weih as a subgroup, Weih being an expansion area of Sung, where other influences from the north, northwest, and west meet. Similarly for Liang Sung, where Liang is a southward expansion of Sung. Sung, then, can be taken as the center of Sung-Weih-Liang.

As to Lu, we find that it has about as many contacts with Ch'i (thirteen) as with Sung (twelve). But Ch'i too has contacts with Sung (eight). This suggests three equivalent subgroups: Sung-Weih-Liang, Lu and Ch'i, forming one group: the northeastern dialects. Politically and culturally, these areas had continuous and close contacts and exerted a mutual influence.

Ch'i appears alone ten times 1/14. 3/9, 26. 4/5. 5/5, 33. 6/28, 33, 53. 7/9. 13/151. Combinations Ch'i Ch'u 1/13, 15, 23. 6/10, 41. 7/16; Ch'i Ch'u Yen 1/12; Ch'i Ch'u Ch-H 5/29; Ch'i Ch'u Sung Weih Ching Ch'en 7/7; Ch'i Ch'u Wei 1/21; Ch'i Ch'u Chin 6/12; Ch'i Ch'u Ch'en Sung 7/30; (here must be added Ch'i Ching 6/18); Ch'i Ch'en 2/23, 6/6; Ch'i Yen 3/3, 5 bis. 5/25. 6/46. 7/21. 9/10. 10/6. 11/1; Ch'i Chao

6/44. Ch'i Yen H-T 9/19; Ch'i Chin 2/23, 6/6; Ch'i Wei Sung Ch'u 8/7.

Contacts within the northwestern dialect group: Ch'ing Ch'i Yen Ch'i 2/8; Ch'i Sung 1/1, 8, 21. 6/23; Ch'i Lu 1/7, 32. 3/9. 4/5, 8. 5/36. 6/6. 11/13; Kn-tg Chou Cheng Ch'i Lu 2/14; Kn-tg Ch'i Lu 2/14; Kn-tg Ch'i Lu Ch'-Hs 2/15; Ch'i Lu Sung Weih Ch'en Chin Ju Ying Ching Ch'i 2/16; Ch'i H-T 5/11.

It is not surprising that Ch'i had a strong influence in the north (Yen), west (Chin, Chao, Wei), south and southeast (H-T, Ch'-Hs). (Cf. p. 168 ff., 174).

Lu is found alone in 1/30, 3/9, 4/5 and in combinations: Ch'i Lu (cf. supra): Sung Lu 1/6, 6/3, 9, 26, 40. 7/1; Sung Lu Weih Chin 1/11; Sung Lu Weih Ch'en 1/12; Lu Hsü 8/17; Lu Weih 1/28.

Sung is mentioned alone 1/9, 13, and with its contact areas:

(a) Liang Sung 2/18, 6/30, 8/8; Liang Sung Ch'i Ch'u 5/24; Liang Sung Ju Ying 1/5.

(b) Sung Weih 1/10, 5. 2/4, 9. 3/22. 11/2; Sung Weih Lu Ch'en 1/12; Sung Weih Lu Ch'en Chin Ju Ying Ching Ch-H 2/16; Sung Weih Cheng Hanh 2/5; Sung Weih Cheng Chin 2/3; Sung Weih Cheng Ch'en 2/29; Sung Weih Chin 1/17; Sung Weih Ch'-chin 1/16; Sung Weih Ch'-Ch'u 5/8; Sung Weih Ch'-Ch'u Ch'i Ching 7/7; Sung Weih Ch'-Ch'u Kn-tg 13/150; Sung Weih Ju Ying 1/20; Sung Weih N-Ch'u 2/13; Sung Weih Ching Wu 1/19; Sung Weih Yen Yu 1/18.

(c) Sung Wei 1/3. 5/27, 28, 29, 34. 11/7; Sung Wei Ch'-Ch'u 9/11; Sung Wei Ch'-Ch'u Ch-H 5/21, 33 ter; Sung Wei Cheng Chou Lo Hanh 3/13; Sung Wei Chao Ch'en 7/4; Sung Wei Ch'u 1/21, 5/4; Sung Wei Ch'i Chou Ch'u 8/7; Sung Wei Ch'-Ch'u 4/3. 5/6, 7, 9, 11, 16, 17, 18, 20, 26. 8/1, 4; Sung Wei N-Ch'u 4/5; Kn-tg Sung Wei Ch'-Ch'u 3/5, 5/22.

(d) Ch'i Sung 1/1, 8, 21. 6/23; Ch'i Sung Ch'-Ch'u 7/30; Sung Ch'en 1/30, 2/7 and Ch'en Sung Tg-Ch'i Ch-H 7/14; Ch'en Sung Huai Ch'u 8/7; Sung Ch'u 1/2; Sung Ying 2/11 (part of Sung Ch'u). Chou Cheng Sung P'ei 2/25- that is, contacts with south (Huai) and west (Chou Cheng).

Weih.—Apart from combinations already listed above, we find exceptional contacts with Wu (one) and Yang (one); they do not change the situation of Weih within the group of the north-eastern dialects.

Conclusions on the Dialect Groups in Fang yen

1. We can now propose a general division of the dialect areas of FY.
 1. Western dialects: Ch'in and Ch'-Chin, L-Y, Hs-N, Kn-hs
 2. Central dialects: Kn-tg in general
 - Western group: Chou Cheng Lo Hanh
 - Eastern group: Sung-Weih (Liang)-Lu, Ch'i Wei

3. Northern and north-eastern dialects: Yen, Yen Tai P-Yen, Ch-Hs Lsh, Chin and Chao
4. Eastern dialects: Tg-Ch'i, H-T, Hsü, Huai
5. Southeastern dialects: Wu, Yang, Yüeh, Ou
6. Southern dialects:
 - Ch'u: (a) North Ch'u, Ch'-Ch'u, Ju Ying
 - (b) Ch'u Huai, Ch-H
 - (c) N-Ch'u. N-Ch'u, Ching, Hsiang Yüan, Chiang Yüan, Chiang Li.

2. Among these areas, we can distinguish:

- (a) Areas of original Chinese culture and language.
- (b) Areas of expansion of various importance and degree of absorption (Yen, Hs-N, L-Y, Huai).
- (c) Areas of non-Chinese populations: Tg-Ch'i, H-T, Wu, Yüeh, and so on.

3. All these areas are treated with equal interest. FY covers objectively the whole extension of Chinese speaking areas. This does not mean that every word listed in FY has its exact corresponding term in every dialect, nor that for every area the same amount of words has been collected, but that the information given for every area can yield, through comparison and statistical evaluation, a fair idea of its relative importance and relation with other dialects, its development and background. FY has treated the different dialects according to their historical and cultural importance. Thus, it is natural that for Ch'in, Ch'u, it lists a greater number of words than for the other dialects.

4. All dialect information in FY is grouped around the historical, cultural centers of China. In this way the particular, seemingly scattered information on small areas such as Hanh 韓, Lung 隴, Yingh 鄧 and so on, is to be considered in the light of the cultural center to which these areas belong. Otherwise, an isolated fact referring to an extremely limited area, as Wan 宛 in northwest Ch'u, would have no meaning. Together with these cultural centers (Ch'in, Ch'u, Ch'i) FY treated the respective expansion areas: western dialects with Ch'in, P-Yen Ch-Hs Lsh with Yen, N-ch'u with Ch'u.

5. In FY, non-Chinese areas (Wu, Yüeh, etc.) are treated in the same way as the central areas, that is, as real Chinese dialects. The isolated and special situation of Tg-Ch'i H-T and its slight contact with the more central Chinese areas was rightly understood by Lin Yü-t'ang as a sign that a considerable number of words were non-Chinese. However, for P-Yen Ch-hs Lsh, this does not apply.²⁴ Nevertheless, FY treats all words as being genuinely Chinese. Nowhere is it suggested

that any part of this material was felt to be non-Chinese. Yet Yang Hsiung could not be ignorant of the existence of non-Chinese speaking populations in the peripheral areas and in between the Chinese centers, in pre-Han and even in Han time. There are texts where Chinese commentators give non-Chinese words in transliteration or with translation and explanation.²⁵ It is impossible that by the terms P-Yen Ch-hs Lsh, Yang Hsiung meant that this whole area was populated by a Chinese speaking people only. Yet he never mentions the non-Chinese people. It shows that he was not interested in them, and the very fact a certain word is listed means that it was understood as a Chinese dialect word.

This fact is important. If such originally non-Chinese words had been compiled from documents and word lists older than Middle Han, it is difficult to understand why they would not have been recognized as non-Chinese and described as such. It shows that together with material collected before Yang Hsiung, a considerable, if not major, part of the material was directly collected by the author of FY. The originally non-Chinese words of FY must have been collected at a rather late date, so that they were already adapted in Chinese and felt as Chinese to the speakers of Middle Han time. This fact confirms our previous conclusions that all the material was checked in fine by the author. (Cf. Intr. p. ii).

6. On the basis of the foregoing study on the localization and delimitation of the various dialect areas of FY, a fundamental map can now be made, which will serve for all the following detailed word studies. The frontiers between the different dialect areas indicated on this map by thick black lines are not meant to show more than the general extension of these areas and general lines of contacts between the areas. It is impossible to say that all the isoglosses indicated by FY between two dialect areas did pass along this hypothetical separation line indicated on the map. Nevertheless, this limitation does not invalidate in any way the results of our studies, for the opposition of the dialects is not built on a repeatedly supposed coincidence of the isoglosses of every individual dialect word, but on the opposition of the cultural centers from which the Han dialects developed.

DIALECT MATERIAL OUTSIDE OF FANG YEN

Much material on dialectal vocabulary is found outside of FY, in early texts and commentaries on the Classics. This material has not the uniformity and the unity of concept and time as FY.

In the field of grammar, practically nothing is found in FY. Karlgren

has tried to distinguish dialectal features in the various pre-Han texts by tabulating the use and meaning of different grammatical particles. These results have in general been accepted,²⁶ but they cannot be compared with FY. Karlgren's method of studying the use of particles allowed him to attribute some texts to definite dialects or to mutually related dialects (e.g., the Kuo yū and Tso chuan), but it has not been possible to establish the areas of these dialects.²⁷ However, some of the texts have been called Lu texts (Lun yū, some chapters in Li chi, Meng-tzū).²⁸ But a term Lu, when used to classify a dialectal feature of style in a text, signifies something different from the term Lu in FY. A dialect, when deduced from the use of particles in old texts, has a wider and more general meaning; it refers not only to a grammatical feature, typical of a spoken dialect, but also to the style of writing originating in a certain cultural center and to the literary language spread from such a center and imitated by other writers. Such a literary language was built on a special dialect, and supposes that a definite style was elaborated and imitable by any writer.

Other dialect information can be obtained by extracting words from literary texts, which can be attributed to authors of a definite region (e.g., Ch'u tzū for Ch'u, Huai-nan-tzū for Huai, and probably the "Lu texts" for Lu, etc.). The hapax legomena (words found only in one text) may be suspected of being dialect words. This is a promising field for enriching our knowledge of the ancient dialects. But a difficulty awaits us: once a word has been extracted as a real hapax legomenon, and reconstructed as far as possible in its dialect reading, corresponding standard or dialect words must be found in order to make a fruitful comparison or to attempt a characterization of the dialect to which the hapax legomenon belongs.

This method, suggested first by Karlgren,²⁸ supposes a uniform text by one or several authors writing in the same dialectal style based on the language of a certain area. It has not been applied on a scale sufficiently wide to be condemned a priori for meager or unreliable results.

Another approach to the Ancient Chinese dialects is the investigation of the toponymy and anthroponymy of Ancient China. The toponymy of China offers special difficulties because of the frequent change of names of places owing to politico-religious reasons. But a careful study of the oldest place names, and in particular of Chinese hydronymy, may yield some interesting results.²⁹ No previous linguistic study of Chinese anthroponymy is known to me. However, there are many interesting cases of personal and family names occurring in the early Chinese literature which may be of some importance in this field.

CHAPTER II

THE COMPARATIVE METHOD

INTRODUCTORY REMARKS

After having determined in general the different dialects and dialect groups and their respective areas in Han time as described in FY, it is necessary to consider the dialect material itself and to study it from different viewpoints. In this chapter a general survey of the dialect material will be made, and some particular aspects of the words, listed in FY, will be studied. At this point, one will naturally ask himself what is the form and nature of the words found in FY, depending whether they belong to some specific dialect or to the standard language. It is also legitimate to ask what kind of conclusions can be drawn from the general picture of the language of Han time in relation to the pre-Han periods and the history of the evolution of the Chinese language in general. In other words: what can these dialect and standard forms of the Han time vocabulary teach us or at least indicate about the reconstruction of earlier stages of the Chinese language. Finally, in this general picture of the language of Han and the background of earlier periods, each dialect must somehow cut its own place, and must play a particular role. A statistical comparison in the light of three different viewpoints (the geographical area occupied by each dialect, the historical background and development of the dialects, and the linguistic interaction of these dialects, seen from a phonetic comparison of their corresponding dialect words) will provide us with an insight into the mutual contacts and influences, and a historical linguistic perspective into the role of these dialects in the formation of the language of Han time and later.

The first problem will be to study the general aspect of the dialect vocabulary of FY. It is clear that FY has recorded the dialect words as faithfully as possible, and that it has kept as closely as possible to the real spoken word. This raises a new problem: the reconstructions of ArC, discussed above in Part I, refer mainly to the pronunciations of isolated characters, which automatically, in the present state of knowledge, can be reconstructed only in terms of monosyllabic forms. Now it

appears from a cursory inspection of FY that many dialect words are graphically represented by binoms. As will be seen, this is true also of the standard words, though to a lesser extent; yet the importance and number of binoms in standard is further greatly strengthened by the material of SW.

This problem consists mainly in the relation between the monosyllabic forms, obtained on the basis of reconstructions of readings of one graph, and the binomial word forms. The answer will greatly depend on the value attributed to the binoms and the particular way in which the binomial forms will be reconstructed as against the more usual procedure of reconstructing the readings of the monosyllabic forms. Once this point has been solved, we can compare the monosyllabic and binomial word forms with each other, and try to determine how they are related, especially in the cases taken from FY, and whether or not the binoms are in general later formations.

All this regards principally the language as reflected in FY, and also partly that of SW, i.e., a language mainly centered in the period of the Former Han. Whatever is known of the earlier periods of the language in terms of reconstructions is extremely fragmentary, and it will be possible to make only some general remarks of rather preliminary nature.

MONOSYLLABISM AND BISYLLABISM

Reconstruction of the Binomial Forms

The reconstruction of the monosyllables based on the Hsh connections and other secondary indications, has led us to frequently complicated and sometimes hypothetical monosyllabic forms, which in some extreme cases cannot be considered as anything more than general formulae of word structures. This is due to the nature of the Chinese script which forces us to express all the Hsh contacts in terms of phonetic elements clustered around one syllabic core. The binoms, being real word units written by two graphs, can only be reconstructed on the assumption that these binoms were attempts to represent more clearly a word structure which the monosyllabic stem indicated only in forms too reduced and compact. The binoms must be reconstructed on the basis of correlations between monosyllables and binoms, standing for the same word. The method then to obtain to some extent the real word form hidden behind a binom must consist of two steps: to list according to time and sources the words written by means of two graphs, and to identify them whenever possible with a corresponding monosyllabic form, recon-

knowledge about the more archaic pronunciation was not lost at once. It is therefore natural that some enlargements of words should be based on the knowledge of the lost elements of the older cluster in the initial. The process of word enlargement then goes together with an attempt to reconstruct the lost elements of the cluster, but in a new pattern of word structure, by means of a binomial form. Examples could be easily multiplied, as the study of binoms has long since attracted the attention of Chinese and Western scholars.³ Two examples may suffice.

The Mao commentary to SCg (Ode 46) (Mao Ch'ang 毛萇 ca. 155-130 B.C. who handed down the teachings of Mao Heng 毛亨 on SCg) defined 茨 as 蒺藜, 'Tribulus.' 茨 is *dz'ier < /*dz'ied ~ /*dzn'ied and 蒺藜 is *dz'iet-lier < /*dz'iet-lied ~ dz'ied-lied < /*dz'ləd ~ dzliəd. The two words 茨 and 蒺藜 may not have been exactly the same, and a correspondence of variant readings /*dzn'ied < dzn'ləd (茨): /*dz'ləd ~ dzliəd (蒺藜) may very well indicate two forms where -n- is opposed to -l-. The same identification 茨 = 蒺藜 is also found in EY (13/86), but in SWKL 319 we find 齋 (*dz'ier < /*dz'ied ~ *dz'ier < /*dz'ied) 蒺藜也, and in the Hsh series 齋 there is no evidence of -n- as in 茨; on the other hand the binomial correspondent shows that /*dz'ied (齋) developed from /*dz'ləd. Furthermore, the binom 蒺藜 appears also in EY (15/16) as a synonym for 螂蛆 'millipede'; it is clear that 螂蛆 *tsiək-tsiə ~ *tsiet-tsiə ~ tsiēt-tsiə is a reduplicative binom (cf. infra), and that the comparison should be made between 蒺藜 /*dz'iet-lied < /*dz'ləd ~ dzliəd and 螂 *tsiet ~ tsiēt < /*tsliet ~ tsiēt only.

A last binomial correspondence must be discussed here, for the reason why SW compares 蒺藜 with 齋, is that it defines 茨 as a verb: 'to thatch,' (SWKL 421): 以茅葺蓋屋 'to cover a house with reeds.' Tuan Yü-ts'ai has corrected this definition: 茅蓋屋也 but others basing themselves on the WH commentary to the Tung-ching fu 東京賦 (p. 55) read it as: 茅茨, 蓋屋也: to thatch with reeds, is to cover a house.' But the binom 茅茨, though semanticized as 'thatch with reeds,' is probably one word for 'to thatch,' *môg-dz'ier (-d) < /*mdz'ied. This agrees with the SW phrase 匕相比次也 'Pi is to follow each other' (SWKL 720), where 比次 is a binomial construction /*piəd-tsiəd < /*ptsiəd and with SM 17/61: 屋以草蓋曰茨, 茨次也. 次比草為之也. "A house covered with straw is called 茨 (thatched). 茨 is 次. 次 is to make it by adding (layers) of straw." Here 比草 /*piəd-ts'ôg < /*ptsiəd represents a variant of /*ptsiəd. The graph 茨 can therefore be reconstructed in two dif-

ferent ways, representing two different archaic levels of development, according to the 'word' for which it stands.

This example shows that as soon as the binomial word forms are introduced into the study of the reconstructions, the procedure is immediately shifted from a rather mechanic procedure of Hsh connections of graphs to the comparison of real words, with different meanings and structures, and that a greater amount of alternations and complexities come to the surface. But not all binoms even show the simple situation of the previous example. Some binoms may show a sequence of consonant initials different from that of its monosyllabic counterpart, as reconstructed on the basis of its Hsh contacts. First of all, the Hsh contacts do not by themselves indicate any particular definite sequence, since we know that to explain the later developments observed in AnC many cases require different sequences even within the same Hsh series. Nor is the sequence obtained solely through the comparison of the Hsh contacts to be considered as representing the primary or more archaic sequence in the cluster of the ArC reconstruction. Even such cases may become more complicated by the fact that the form under which the binom appears may also well be an inversion of the original sequence which is not attested at all in any document or a dialectal sequence differing from that in the monosyllabic word. Thus 柿 *p'iwäd and 檮 *d'uk < /*bd'uk are two corresponding dialect words for 'wooden slip, tablet' (SWKL 2613). *p'iwäd < /*pziwäd shows the same sequence as bd- in 檮. Yet the binom given in SW is 札樸: *tsat-puk (-p'ük, -b'uk, -p'äk), and Tuan Yü-ts'ai cites a binom 札柿 *tsat-p'iwäd, which both indicate a different sequence. On the other hand, YCCYY (ch. 10) has 柿札 *p'iwäd-tsät, which agrees with the Hsh form of 柿 and 檮. The final may have changed according to the influence of the rhyming effect and the tendency to combine a dental final with a front vowel and a velar with a back vowel.⁴

A peculiarity often observed in the cases of dimidiated binoms is the fact that the original cluster found in the monosyllabic word is rebuilt in the binom in a reinforced way. This is perhaps an indication that the given binom is truly a dimidiation, in the sense of a later formation which arose at a time when the clusters began to disappear. Through dialectal and other alternations in the word variants, through script analysis and tradition, the original cluster was still known, though the actual monosyllabic word had lost it; then the reactive reconstruction in binomial form stressed the element which had disappeared in the monosyllabic word. Such a phenomenon may also point to false and hypercorrec-

tive binomial formation. Thus FY 11/7 and 9 list the words for 'locust': 𧈧 *māng, mwāng is both standard and dialect word (N-Ch'u). ArC of 𧈧 and its derivatives, though not expressly stated in the Hsh series of SW, seem to include in the same series 𧈧, 𧈧, 𧈧 /*dzmāng and 𧈧 *tsāng < /*tswāng < tsmāng.⁵ Probably the standard pronunciation of Han for 𧈧 was already simplified into *māng ~ mwāng ~ miwang (SW, Tj 网), and for 𧈧 was *māng, mwāng. But conversely, the same graph for a N-Ch'u word may still have served for the archaizing forms /*dzmāng ~ zmāng in the dialect pronunciation. The same word 𧈧 was also represented as a binom 𧈧 𧈧 *ts'jak-māng, and in FY as well as by Kuo P'o 𧈧 𧈧 *tāk-māk and in EY 15/26, (p.8-9) 𧈧 𧈧 *tsāk-māng (TT 1556 and 2634). Against these binomial forms with reinforced first elements, the Hsh value of the monosyllabic form has only /*dzm- ~ zm-. Moreover, it is possible that the same graph, ordinarily read without consonantal cluster in the standard language, was used in a dialect with its more archaic reading. We could therefore deduce from the binom 𧈧 𧈧 that in the standard reading the cluster began to disappear, but in N-Ch'u it still has preserved the initial cluster /*dzm-, though written with the same graph.

Such reinforcements of disappearing elements of the ArC cluster may also go together with other variations in the binomial counterpart. Thus SWKL 6773 and 484 defines 莫: 日且冥也 'The sun is on the point of getting dark'; 且冥 is *ts'ia-mieng < /*tsmieng ~ /*dzmāg ~ dzmāk.

Proclitic and enclitic elements

The dimidiation binoms are usually opposed to other binoms which came into existence through composition of two separate elements, the second being either a reduplication of the first, or an addition of a synonymous monosyllable, or the first being some semantic determining element of the second. There is, however, another kind of binom which has seldom or never been considered, namely, where a syllabic element is added before or after the monosyllable, yet is not a determining or synonymous element to the second, which in this case alone is originally bearing the main semantic load of the word. These are binoms where one element is either a proclitic or enclitic enlargement. A difficulty in proving the existence of these kinds of binoms lies mainly in the fact that all binoms, because of the very nature of the Chinese script, are preferably and generally written by graphs which in their graphic structure somehow suggest a suitable semantic content at the same time as

they give the sound. It is only natural that as soon as such a word develops a reading in two syllables, the syllable which had been added as a proclitic or enclitic element to the syllable that originally carried the semantic content of the word, was soon felt to be of the same nature as the other binomial constituents, and represented by a graph—enlarged with a fitting radical—that had all the marks of an independent monosyllabic element. It is therefore to be expected that such cases will be rather rare, as the subsequent graphic representations may soon have wiped out all indications of such an origin of the binom. Yet nothing a priori excludes such a possibility, and it is important to see whether such cases can be isolated and proved.

Proclitics.—Thus, any word, e.g., /*ntsa could be written by choosing a proper Hsh series, where initials t- and n- are constantly in contact (e.g., 且). But at the time when the initial consonant cluster nt-, nts- begins to disappear, a binom can be made which still preserves the original cluster, but does not follow the usual expected pattern na-tsa, but which, on the contrary, instead of binomial dimidiation of nt, nts into n-/t- or n-/ts-, preserves exactly the phonological unity and the particular junction of nt, nts, by a binomization through a prothetic vowel, giving a form like an-tsa.

Some cases at least seem to suggest such a binomial formation, as a careful study of the graphs themselves indicate. E.g., a dialect word 盞盞 corresponds in FY 13/47 to 盞 and 盞 'cup, goblet.' Since 盞 is not found in any text or other dictionary except for KYa, which simply copies FY and never alone but always in combination with 盞, and since on the other hand 盞 as well as 盞, its cognate, are found alone, it is very probable that 盞 is nothing but a character made ad hoc, by adding a radical 皿, to give it full graphic status, the same as the one found in 盞, to a graph which was chosen for nothing but its sound *an, and stands for a prothetic vowel in /*an-tsan, an enlarged form developed from /*ntsan ~ ntsan. The presence or absence of the glottal stop can be debated, and depends on the phonological role played by the glottal stop in ArC. Perhaps, here at least, it is entirely irrelevant, and merely a feature automatically appearing through the addition of the prothetic vowel, and the formation of the syllable *an. The value of such a hypothesis will of course depend on the number of similar cases that can be adduced and the new light which this explanation brings into the history of the language in general, and the development of each of the binoms in particular.

A parallel case to that of 盞盞 can perhaps be found in FY 10/13,

where 安靜 *an-dz'iəng corresponds to 窈 *dz'iok. In the Hsh series 爭 there is no evidence of contact with words having an initial n- in any of the derivatives, but binoms like 葦葦 and 鬚鬚 (SW) show that n- could have been present, and preserved in binoms with an inverted sequence. Moreover, 窈 stands as a special dialect variant of 窈 (Cf. *infra*, n. 34 and 58), with Hsh derivatives in n-, indicating /*dz'i- ~ dz'n- ~ ndz'-.

Enclitics.—Here two examples may suffice:

In SW 梢 is defined as 木參交以枝炊奠者 'wooden sticks crossed to support the rice wattle' (SWKL 2547). *siəng is pronounced according to SW like 馬麗駕 *liəg-ka < /*zliəg-ka. The binom may represent the word 梢 with final -k, *siəng < /*sləngk, in a denasalized form with an enclitic vowel /*zliəg-ka. The objection that 馬麗駕 is a Tj definition and not a real binom does not hold since 馬麗駕 is found in WH (ch. 1, p. 43) showing that the usage seems to be to take real words as Tj descriptions of another word. (Cf. *The Chuan chu* in *Shuo wen*, III, 5, no. 20).

Another example is FY 8/11 鶻駟 *ts'āng-kâ, a dialect word from N-Ch'u, synonym with 我鳥 *ngâ < /*zngâ and corresponding to Kn-tg 鳥我鳥 *kâ-ngâ, and standard 雁 *ngan < /*dzngan(d). In SW it is 鳥我鳥 *kâ-ngâ which is taken as the standard word (SWKL 1618). On the first sight we can be sure of the forms /*zngâ and /*dzngan(d) as dialect variants of one and the same word, where the final is a rather unstable element. On the other hand, *kâ-gnâ cannot be a dimidiation binom, and 鳥可 *kâ does not exist alone; 鶻鳥 is a dialect word, related to 我鳥 /*zngâ and 雁 /*dzngan(d). Consequently, it is *ts'āng-kâ which preserved the original sequence of the initial cluster in the monosyllabic counterpart, whereas *kâ-ngâ is a construction obtained by rearranging the preëxisting parts of other words, a formation probably due to onomatopoeic tendency. Then *ts'āng-kâ as a binom, corresponding to /*zngâ and /*dzngan(d), the final being unstable, was originally /*ts'āngk, enlarged by an enclitic vowel, and written later in binomial form with a double graph *ts'āng-kâ.

Compound words

The study of the dimidiation binoms has led to an important distinction among the binoms. One kind that represent truly indivisible word units, being either dimidiated word forms from a monosyllabic word with cluster initials, or other binomial words, where one of the constituent parts does not appear separately from the other (as *an- in *an-tsan) or both of the constituent part do not appear as separate words

(e.g., FY 2/36 葵綏 /*səm-súiwəd; both parts being inseparable as to the meaning 'big,' whatever the etymology may be). The other kind are simple compound words, being either simple reduplicative binoms, or primary syntactic word groups, composed of two monosyllabic words, each of which in most cases appear separately in texts as independent words. These are all the binoms that are analyzed as compound words, structures like noun + noun, verb + noun, adjective + noun, adverb + verb, and so on.

Reduplicative binoms are first the binoms recognized as such because of the repetition of the same graph, and secondly those that on the basis of the reconstructed sound of the two constituent parts can be recognized as a repetition of the same monosyllable. E.g., 勉勉 *mian-mian 'vigorous, energetic' is a simple repetition of the same graph, but this word appears also under other graphs, equally repeated, but showing slight phonetic differences in reading: 鹽鹽 and 媿媿 *miwər-miwər. However, this reduplication may have alternations which are represented by different characters, as 龜勉 and 閔勉 *mian-mian. The range of these alternations can sometimes be widened to a great list of different readings and variant writings: 密勿 *miət-miwət, 文莫 *miwən-mâk, 悅密 *mian-miet, 牟勉 *miōg-mian, 懋漢 *mug-mâk, 莫莫 *mâk-mâk, 漢懋 *mâk-mug, 旻穆 *miwən-miuk, 罔莫 *miwang-mâk. These reduplications, mostly when they appear to be basically a repetition of the same graph or the same syllable (with slight phonetic different alternations) and when they are used with meanings of adjectives or descriptive words, have been called alliterative binoms and explained as a purely literary device for expressiveness or even onomatopoeic effect. From this viewpoint these binoms throw little light on the problem of the binoms in general. But the reduplicative binoms become something different if they are not just descriptive words or onomatopoeic formations. Already the regular reduplicative form in which some adjectives are found in the texts in contrast to the monosyllabic form of the same word, which when used in another grammatical function is seldom repeated, may be indicative that the reduplication is not always and not only used because of the mere need for expressiveness, but may point to a tendency toward lengthening a word form;⁶ this tendency may have been in the first instances aided by the reduplication device for expressiveness, which at the same time formed a pattern of word formation. Also the phonetic alternations often cover such a wide range, that it is easily

seen that binomial forms could be developed which in the end were not longer recognized as simple reduplicative words. These binoms became de facto unanalyzed words and unanalyzable, no matter what their origin. It is well known that such reduplicative binoms are attested very early, and it is consequently possible that the alternations within the range of the reduplicated sounds could have resulted quite early, too, in binoms that were no longer analyzed.

A clear sign that these binoms were not analyzed may be found in the choice of the graphs themselves. E.g., FY 2/34 has the dialect word of Yen Ch-hs Lsh for 'fast' 搖扇 *diog-sian, of which 搖 alone is found as a dialect word of N-Ch'u (FY 6/22), written 遙 'to walk fast.' The latter script variant with 走 may have been chosen to suggest a vague semantic connotation with 'to walk,' yet, the standard meaning of 遙 is 'to wander about, distant' (SWKL 807) and has nothing to do with 'fast.' The graph 搖 is obviously taken for the sound only, even when changed into 遙, and in the northern dialects the syllable *diog- lost its meaning, unless when united with 扇 *sian; this latter element, too, though phonetically comparable to 逞 *tiēng (dialect word of Ch'u, FY 2/34), and to the standard word 疾 *dz'iet and a special word from Ch'-Chin 旋 *dziwan 'fast (ripening),' was equally ununderstandable without being joined to *diog-.

It is true that in the given example 搖扇, we have to do with a spoken dialect word. But in the literary words, we can expect that these words could easily be represented by graphs which fulfilled more satisfactorily the natural demand for a suitable graphic structure in the character, by adding a more suggestive radical to the phonetic element. This tendency, observed in the literary practice, can also result in a semantization of the original binom, and a representation of the word in terms of a simple compound. Thereby the original binom may be resolved, often falsely, into two clear independent monosyllabic constituents of a compound word.

Compound words which do not refer to descriptive words or adjectives, but to nouns (names of things, animals, etc.) surely may carry all the external marks of being new word structures, obtained by a composition noun + noun, adjective + noun, and the like. However, here too, in some cases at least, the external graphic representation may prove to be entirely illusory, in the sense that the choice of the graphs are only an attempt at a graphic semantization of a binom. Thus 野鳧, name for a water bird, seems clearly analyzable 'wild water bird,' since 鳧 itself is found as a separate word. But 鳧 *b'iu < /*b'zyug is defined

(SWKL 1307) as 舒鳧 *sio-b'iu, with a synonym 驚 *muk < /*zgm- ~ zmg-. It appears now that 野鳧 *dia-b'iu ~ (dio-) shows the same sequence of initials as 鷓鳧 and 驚, which is the inversion of the sequence found in 鳧 alone.

Even for simple compounds as 車輪 'wheel of a cart,' there is reason not to trust too much the simplicity of the graphic representation. The English 'cart wheel,' where 'cart' is an older word than 'carriage' or 'car,' and together with 'wheel' makes a lexicalized unit of more intimate cohesion, than for instance 'carriage wheel' and 'car wheel,' could be taken as a parallel case to 車輪. Similarly, we may under the graphs 車輪 have a lexicalized word unit *kio-liwən, which in its spoken form may not be analyzed too clearly. In fact, we have for the reconstruction of 車, two forms *t'ia and *kio, which go back respectively to /*t'ia(g) and /*tkio(g). According to SM 24/1 the reading *t'ia is the later reading of Han and *kio the older reading.⁷ So much the more that 車輪 *kio-liwən may equally well be felt as a dimidiation of the monosyllabic form 輪 *liwən < /*gliwən ~ l'wən (< /*bl'wən). SM also has a paronomastic definition which still points to an initial labial in 輪 (24/42): 綸; 彌綸 /*miad-l'wən 'to fully envelop' < /*ml'wən. Once the initial b- had dropped, gl- ~ l'y- was in its turn dimidiated as *kio-liwən. Yet together with *kio-liwən also *t'ia-liwən may have existed or /*s'ia-liwən (according to SM), which was also written 輿輪 /*z'yo-liwən (TT 479).⁷ The archaisms attested in FY and SM should not astonish us, for it is quite clear that not all words and word variants develop according to the same tempo. Thus 輪 /*gliwən is explained by Kuo P'o with the corresponding word of Chin time 車輅, the latter part of which is not to be explained according to any of the meanings in GS 766 n' (*glâg 'big chariot,' *g'lâk 'wooden crosspiece for attaching strings on a pole of small carriage drawn by men,' *nglâg 'to go to meet') but according to Ch'ien Yi's 錢繹 opinion that 輅 *glâg is simply a sound alternation of 輪 *gliwən. In the full Hsh reconstruction 輅 was /*bl'yâg, and though this word in the sense of 'wheel' is only found in Kuo P'o, it is not impossible that it existed earlier even in Han time, still in perfect opposition to 輪 /*bl'wən ~ /*ml'wən.

Monosyllabic Words Developed from Binoms

Fusions

Fusions or contractions of two or even three syllables, mostly forming syntactic constructions, have been discussed by several authors.⁸

These fusions are known in the modern phases of the Chinese language as well as in the older ones, and should be expected also in ArC not only between such words as pronouns, or verbs with other particles (之與 > 諸) but also between two nouns. In FY 13/149-150, the word 餽 *d'wən 'pastry, dumpling' may be a contracted form of the binomial word 餽餽 *tiang-g'wən < #* tngwən ~ dg'wən, as well as that 餽餽 is a dimidiation of the other. The hypothesis of fusion can be strengthened by the fact that the Hsh series of 屯 shows no derivatives with velar initials, except indirectly through the derivate 屯 *t'iwən which in SWKL 2402 has a variant graph 棟 *t'iwən < #* t'iwən, and that the great number of binoms with a character with phonetic 屯 as one constituent part, show the opposite sequence 昆屯?'

Other fusions may be suspected from the SW definitions of some graphs and the FY dialect correspondences. SWKL 3964 defines 𠄎 *mian as 不見 *piŋg-kian > #* pkian or *piŋg-g'ian > #* pg'ian: 'not to see, not seen.' A derivate of 𠄎, 𠄎 *mian < #* m'yan, listed in FY (6/11, 20), can this way be explained as a cognate of 𠄎 *pian < #* p'yan and of 𠄎 *g'an < #* bg'an. (Cf. infra, p. 147). Another derivate, 𠄎 is read according to SWKL 3247 as 𠄎眩 *mian-g'iwən 'poisonous' (cognate with FY 3/12, 10/31 眠眩 *miən-g'iwən > #* mg'iwən). This would point to the conclusion that 𠄎 had originally an initial cluster, developed from a fusion, which became the basis for all the derivatives of the Hsh series in 𠄎, for no Hsh derivate shows any cluster, except indirectly again, one ku wen form of 寶 *piĕn, viz. 寶 (元 *ngiŋwän) (SWKL 2761).

Other words of this type of special structure, listed in FY, are, e.g., 10/5, where the dialect words of Yüan Li 𠄎 *piĕd < #* p'zəd ~ p'yəd and 𠄎 *ts'iĕt < #* bts'iĕt, both corresponding to the standard expression 不知, perhaps standing for 不哲 'not knowing, ignorant,' and 𠄎 *māng < #* m'āng ~ m'yāng, explained by the standard expression 不肯 *piŋg-k'əng 'not willing, unwilling.' Though the standard expressions point to a fusion, another explanation could be proposed for 𠄎 *māng < #* m'āng, ~ m'yāng (and also for 𠄎), viz: a negative prefix (m-) before the stem, since here the labial element is not b- or p-, but m-. In FY 10/10 a series of dialect words meaning 'avaricious, greedy' are explained by a text 貪而不施 'to be greedy and not giving'; among the dialect words, 𠄎 #* bsiĕk, a reconstruction entirely based on the Hsh connections, could be compared to 不施 *piŋg-šia. However, it seems better to take 不施 as a later semanticization of 𠄎

#* bsiĕk, a word which perhaps preserved this b- only in its dialectal pronunciation of the south.

Hsh series based on binoms

Finally, there are some exceptional Hsh series which cannot be easily explained except by assuming that they were originally based on binomial word forms. Such Hsh series could then give us a clue to distinguish primary binoms from those that had developed from a dimidiation of initial consonant clusters in monosyllabic words. Thus the Hsh series 弋 (KYSH, no. 795, p. 924 ff.) comprises two well-separated groups, which both show only a small number of exceptions in the initials and finals of the derivatives, against a highly impressive list of 'regular' ones:

- (1) *diĕk (弋, 戮, 杙, 芑 etc.) - *t'ĕk (忒, 賁)
 - *d'æg (代, 賁, 岱, 黛, 貸, etc.) - *d'ĕk (代, 贇)
 - *šiĕk (式, 拭, etc.) - *šiĕg (試, 弑)
 - *t'liĕk (弑, 式烏, etc.)

Exceptions: *šiĕt (瑟, 颯, 璆) and *p'liĕt (also *piĕk) 颯

- (2) *piĕt (必, 玆, 秘, 泌, 必, 閔, etc.)
 - *b'liĕt (必, 必, 香必, etc.) - *piĕn (覘)
 - *piĕt (覘, 媚) - *p'liĕt (颯)
 - *b'liĕt (邲, 香必, 泌, 必, etc.)
 - *mwat (必, 儘) - *miĕt (瞞, 覘, 必烏, etc.)
 - *miĕt (盜, 宓, 密, 瞞) mjie < #* -d (瞞).

Exceptions: miĕk, mĕk, mung (盜), *piĕk (颯 also *p'liĕt), *b'liuk (處).

It has been pointed out already that in the reconstruction of Hsh derivatives in one series, it is not necessary to follow in all instances the same general formula of sequences of initial consonants in a cluster. The group (1) could simply be reconstructed with an initial cluster #* bdiĕk, bt'ĕk, bd'ĕk, bsiĕk, bsiĕg, bt'liĕk. The main difference then with the derivatives of group (2) is the final -t, since the initial could regularly be reconstructed as piĕt < #* p'zĕt. With the difference of

final -t or -k is also connected a difference of vowel -e- or -ə-; one explanation would be that in all cases of -e- the original -k final changed into -t. But this is not the only possible explanation. It is as easy to imagine a reconstruction $\text{p}^h\text{pi}^h\text{t}^k < \text{pi}^h\text{t}^k$, $\text{p}^h\text{b}'\text{i}^h\text{et}^k < \text{b}'\text{i}^h\text{et}^k$, * pien < $\text{p}^h\text{pi}^h\text{end} < \text{pi}^h\text{end}^k$, * miet < $\text{m}^h\text{mi}^h\text{et}^k < \text{mi}^h\text{et}^k$. Such a reconstruction $\text{p}^h\text{pi}^h\text{et}^k < \text{pi}^h\text{et}^k$ as opposed to bdiæk, involves the question of the accent in the binomial forms. Logically, * bdiæk must then have been from an earlier form $\text{p}^h\text{b}^h\text{di}^h\text{æk}$, and a difference of accent piétæk opposed to bédiák would explain the different lines of development in the two groups of the Hsh series. Such reconstructions can only be based on a sufficiently good number of binoms, indicating presence of bisyllabic forms as the origins of the later monosyllabic words represented in the two groups with the same Hsh element.

Many of these derivatives are characters which appeared in dictionaries later than SW, but some of the binoms used to define them (e.g., in KY) may still reflect the initial consonant cluster and the original bisyllabic form of the word represented by the given character. Thus 麥 $\text{p}^h\text{b}^h\text{di}^h\text{æk}$ is defined in KY 麥 $\text{m}^h\text{w}^h\text{ek}-\text{di}^h\text{æk} < \text{m}^h\text{d}-$, $\text{p}^h\text{b}^h\text{di}^h\text{ák} \sim \text{m}^h\text{edi}^h\text{ák}$. 黛 $\text{p}^h\text{bd}'\text{æg}$ is defined 眉黛 $\text{p}^h\text{mi}^h\text{əd}-\text{d}'\text{æg} < \text{m}^h\text{d}-$, $\text{p}^h\text{b}^h\text{ed}'\text{æg} \sim \text{m}^h\text{ed}'\text{æg}$. This character is not in SW (SWKL 6841, 6933), but is a variant of 滕 (SWKL 4535) * d'æg. 滕 belongs to the same Hsh series as 滕, which appears in FY 11/7 with other corresponding dialect words 虻 (variants 蟻, 蟻) $\text{p}^h\text{bd}'\text{æk}$, 蟻 $\text{p}^h\text{dzm}^h\text{âng}$, 蟻 $\text{p}^h\text{ts}'\text{iak}-\text{m}^h\text{âng}$ (these two latter are words with inversed sequence of the initial cluster). TT. 2729 lists binoms 蟻 蟻 and 蟻 蟻 (SCg and later works), which again show the sequence m-d-. 駝 $\text{p}^h\text{bd}'\text{æk}$ is defined 駝 $\text{p}^h\text{m}^h\text{ôg}-\text{d}'\text{æk} < \text{m}^h\text{d}'\text{æk}$, $\text{p}^h\text{m}^h\text{ed}'\text{ák} \sim \text{b}^h\text{ed}'\text{ák}$. 代 $\text{p}^h\text{bd}'\text{æg}$ is defined 更代 $\text{p}^h\text{bk}^h\text{âng}-\text{d}'\text{æg} < \text{m}^h\text{d}'\text{æg}$, $\text{p}^h\text{bx}^h\text{ed}'\text{æg} \sim \text{b}^h\text{ed}'\text{æg}$.

Some of these binoms are attested in early texts. 試 $\text{p}^h\text{b}^h\text{si}^h\text{æg}$ is paronomastically described in PHTY as 試 (Tjan Tjoe-som, op. cit., p. 459); 試 itself is explained (SWKL 997) by a sound phrase quoted from Shu ching 明試以功 "They were clearly tested by their achievements." 明試 * $\text{mi}^h\text{âng}-\text{si}^h\text{æg} < \text{m}^h\text{si}^h\text{æg}$, $\text{p}^h\text{m}^h\text{esi}^h\text{æg} \sim \text{b}^h\text{esi}^h\text{æg}$. 拭 $\text{p}^h\text{b}^h\text{si}^h\text{æk}$ appears in a binom 拂拭 (LMTT mao 250) * $\text{p}^h\text{i}^h\text{w}^h\text{et}-\text{si}^h\text{æk} < \text{p}^h\text{si}^h\text{æk}$, $\text{p}^h\text{p}^h\text{esi}^h\text{æk} \sim \text{b}^h\text{esi}^h\text{æk}$. 式 $\text{p}^h\text{b}^h\text{si}^h\text{æk}$ is part of a binom 法式 * $\text{p}^h\text{i}^h\text{w}^h\text{ap}-\text{si}^h\text{æk} < \text{p}^h\text{si}^h\text{æk}$, $\text{p}^h\text{p}^h\text{esi}^h\text{æk} \sim \text{b}^h\text{esi}^h\text{æk}$, and 模式 (TT 2705). This list is not exhaustive.

On the other hand, an equally good number of binoms should be found in the second group of this Hsh series, in order to prove the formula

pietk < piétæk, opposed to bdiæk < bédiák. Yet, this group of binoms is strikingly smaller. This is probably owing to the graphic nature of the Chinese script. The apocopes of a form piétæk > piet are seldom reflected in the binoms, because the graphic form of the first character in the binom was usually clear enough to express the meaning graphically, that a simple separation of that first character occurred instead of the apocope; it was graphically as clear to use an isolated piet or to combine it to other elements to make new binomial forms. Among the binoms of this group (2), are 閨 $\text{p}^h\text{pi}^h\text{et}-\text{ni}^h\text{ek} (\text{p}^h\text{-dn}^h\text{iek}) < \text{p}^h\text{pi}^h\text{étn}^h\text{ek}$. (TT 2718). 必定 * $\text{p}^h\text{pi}^h\text{et}-\text{d}'\text{i}^h\text{eng} < \text{p}^h\text{pi}^h\text{éti}^h\text{eng}$. 支 杪 possibly an inversion of 杪 支 * $\text{p}^h\text{pi}^h\text{et}-\text{ti}^h\text{æg} < \text{p}^h\text{pi}^h\text{éti}^h\text{æg}$. 密 靜 * $\text{mi}^h\text{et}-\text{dz}'\text{i}^h\text{eng} < \text{mi}^h\text{étsi}^h\text{eng}$. 溢 溢 * $\text{mi}^h\text{et}-\text{i}^h\text{et} < \text{mi}^h\text{et}-\text{i}^h\text{ek}$ (all other derivatives under 益 have -k) < $\text{mi}^h\text{éti}^h\text{ek}$.

In some cases a binom is possibly suggested by a definition though there is no text or dictionary to confirm it. Thus 密 * miet is defined in KY 山脊. Besides the binom 密 靜 (supra), it is possible that this definition is based on an unlisted binom 密 脊 (?) * $\text{mi}^h\text{et}-\text{tsi}^h\text{æk} (-\text{dz}'\text{i}^h\text{æk}) < \text{mi}^h\text{étsi}^h\text{æk}$. Similarly 益 is defined (already in SW) 拭 器 'sweeping instrument, broom?' pointing to 益 拭 (?) 'sweeper' * $\text{mi}^h\text{et}-\text{si}^h\text{æk} < \text{mi}^h\text{étsi}^h\text{æk}$. 益 樹 名, pointing to 益 樹 (?) * $\text{mi}^h\text{et}-\text{di}^h\text{ug} < \text{mi}^h\text{éti}^h\text{ug}$.

Other binoms in this group (2) show a final -t in the second element of the binom: 泌 澌 * $\text{pi}^h\text{et}-\text{tsi}^h\text{et}$ (泌 澌 id.). It is quite possible that -t is due to the rhyming influence (cf. infra, p. 120), as the Hsh series 即 has -k as well as -t. Same reasoning could be applied to 溢 汨 * $\text{mi}^h\text{et}-\text{ni}^h\text{et}$, and to 颶 颶 * $\text{b}^h\text{si}^h\text{et}-\text{ni}^h\text{et}$.

The exception of the Hsh series appears now to be a rather simple problem. Thus * siet < $\text{b}^h\text{si}^h\text{et}$ is well illustrated in the reduplicative binom with 瑟 as a part: 瑟 縮 * $\text{b}^h\text{si}^h\text{et}-\text{si}^h\text{ök}$ 'contracted together' (TT 2238), where the second element still has the regular final -k. As to 颶 * piet, it has also the reading * piæk < $\text{p}^h\text{z}^h\text{æk}$; this suggests that 颶 had two readings differing according to the place of the accent: $\text{p}^h\text{pi}^h\text{étn}^h\text{ek} > \text{pi}^h\text{et}$ and $\text{p}^h\text{pi}^h\text{edz}'\text{æk} > \text{p}^h\text{z}^h\text{æk}$. The case of 處 b'iuk really is no exception as the Hsh connections point to a form * bziuk.

It is only natural that not all characters in this Hsh series are parts of a binom of the nature shown in the examples above. Though probably the original form of the earliest words written by means of derivatives in this Hsh series was binomial, the fact that in SW and later dictionaries the words are described under graphical units, demanded that each graph, even when belonging to a binom, be separated from the other constituent.

This allowed other monosyllabic words to be written by graphs that were analyzed as derivatives of the same Hsh series 弋. This fact also permitted the scribes to invent reduplicative binoms with either final -t or -k, but rarely both.

Binoms in the Light of Cognates and Word Families

The study of the binoms can be further broadened by drawing material for comparison not only from the strict monosyllabic counterparts to the binoms as found in FY, SW or SM, but also from among other words of the same word families, cognate words, which are less directly connected with the binomial form in casu, but still may provide some point of comparison. Also among the binoms, we can include besides the SW and SM definitions, all combinations of two graphs in a sound phrase, which are intended to describe the sound of a word, such as 且異 for 莫 (cf. supra p. 108) or the analysis 自界 /* dz'iæd-piæd for 鼻 /* b'iæd < ##zbyæd, as against 自 /* bz'yiæd in SW, and others.

The term cognate comprises various kinds of related words: (1) dialect variants of the same word; (2) doublets or coexisting variants within the same dialect or the standard language; (3) variants, hardly different enough to be more than attempts to write one and the same word in standard or dialect; (4) truly different words in their phonetic as well as semantic aspect, but related to each other morphologically as noun : verb, adjective : noun, transitive : intransitive : causative forms of the same word stem. Of the latter kind, some interesting cases, but few and not yet systematically worked out, have been proposed.¹⁰ The cognates of types 1 and 4 can be studied through the material of FY and SW. Here we are sure of the dialectal nature of many of the words and of their corresponding forms in standard and other dialects of earlier or later stages. The reconstructions can sufficiently indicate whether these words are really variants of the same word stem or not. Similarly, the cognates of the second type (doublets) can be treated in the same way as the preceding ones (1, 4), for it is not strictly needed that we know anything about the dialectal nature of these words. It is enough to know that they can be compared on an equal level, as they exist at the same time, in order to posit an earlier reconstruction which explains their relation. However, in order to do so, they must be kept apart from the third kind of cognate words, which represent only minor variations of the same word, and might as well be regarded as different graphic attempts to represent exactly the same word. In this connection, it seems that a

more solid and detailed knowledge is required concerning the relevance and the role of the whole phonetism entering in the ArC reconstructions. But in most of the cases we are still groping for a full understanding and the elaboration of a full systematic formulation of the reconstructions. A phonology of ArC supposes that we can balance and weigh all the minor details of the posited forms. This is not the case. A premature attempt to do so could as well unduly stress or exclude as entirely irrelevant some features in the reconstructions, which still remain hypothetical and subject to many corrections and alternative solutions. It is true that any kind of reconstruction supposes some system of phonological oppositions, but the results are still uncertain and it cannot be determined at once in what the relevant features consist, without danger of wiping out other essential parts, the role of which is as yet not clear.

Secondary Changes in the Binoms

The secondary changes occurring in the binoms are a very important factor in the study of the development of the words. Some of these changes have already been mentioned passim in the previous pages: the separation of two parts of the binom and the new combination of each of them with other words, their separate reduplication, or the inversion of their order.

Other secondary changes are caused by sandhi, rhyming and alliterative, semanticizing and etymologizing influences which may cause new phonetic developments and different syllabifications. These possibilities can be combined cumulatively in multiple applications.

Sandhi

The SW standard word for 'flail' is 連枷 * lian-ka < /* dlian-ka. A normal sandhi makes this /* dliangka. A variant is SM 21/14: 羅枷 * lâ-ka ~ lia-ka (denasalization of first part). These forms agree nicely with another word 秧 * iang < /* d'iang < d'lang.¹¹ Sometimes the sandhi is already expressed by the characters chosen, though the original form (without sandhi) is seen in the variants and dialect words. Thus 'preserved fish' is 鮓 * dz'iæm, dz'iæm, siæm < /* dz'yæm, dz'yæm, syæm (dialect word of the south) corresponding to the northern 蒸 * tsäg, later written 鮓 * tsag (SM). The standard word is (SWKL 5246 a) 藏魚 * dz'âng-ngio. Clearly, the final -ng was caused by sandhi of * dz'âm ~ dz'æm + ngio. Once the first part had become * dz'âng, it was isolated and denasalized /* tsag.

Rhyme and alliteration

In a study of Shen Chien-shih 沈兼士¹² examples are found illustrating how the rhyme of the second part of a binom is changed in accordance to the first part. In 饑饉 *·ən-ngən, *·wən-ngən, the reading -ngən is caused by 饑 *·ən-, ·wən-. Shen thinks the rhyme of 饉 was 尾 -iwəd, -wəd.

The opposite happened in 玫瑰 *mwär-kwər. 玫 should be read *mjän, but is changed to *mwär- because of the following -wər. Furthermore, 磊砢 *lwər-lâ should normally have been *lwər-g'a. In 屢空 *liu-liung, the second part is read liung (in CTSW) but Shen thinks this reading is owing to 屢 AnC liu. In most of his examples, however, the proposed reading is hypothetical, whereas the reading considered secondary is often the only one found in dictionaries. His hypothesis, though not impossible, supposes that the character in question appears only in the said binomial position; this often renders his hypothesis difficult to prove.

From the examples given in the discussion of the Hsh series 弋, it can be seen that finals and vocalism of a syllable follow definite patterns of agreement or phonetic change. Thus in 拂拭 *piwət-siək < #* pəsiək > /# pəsiək ~ pəwsiək, the vocalism -iwə- may result from the influence of the -iə- of the second syllable and a syllabic pattern preferred with a final consonant -t.

Semanticization and etymologization

Semanticization is almost a direct effect of the fact that in Chinese writing characters are chosen which best satisfy phonetically as well as graphically and semantically (cf. supra, examples 野鳧 and 車輪); it naturally results in popular etymologies which may cause all sorts of changes in the sound or the syllabication of the words. An example of the latter is the word for lizard, (attested in T'ang time), 諾龍 *nâk-liung, < /# dn'âk-liung. The juncture -kl- shows that in fact a cluster kliung could be preserved which was originally part of 龍. This word for lizard can be compared to others in FY 8/15 守宮 *siôg-kiông, a dimidiation of an original cluster #* skiong ~ tkiong ~ dgiông. /# dn'âk-liung ~ d'nâ-kliung (/# dnkl) shows the same dental element before the main syllable kliung ~ kjông. The association of the "lizard" with the "dragon" made the choice of the graph 龍 easy; -k- was interpreted as the final of the character 諾.¹³ Such cases are really very numerous. The separate study of almost any kind of dialect word from FY shows these secondary changes at work on all levels and mixed together at all instances to cause some of the most unexpected changes in the words.

Monosyllabic and Bisyllabic Words in Fang yen

In the previous pages, a general discussion was made of the various viewpoints and aspects of the problem of the binoms in contrast to the monosyllabic words, and in comparison to the cognate words in general. It is now possible to proceed to a survey of the monosyllabic and bisyllabic word forms found in FY and to see in what relation the two kinds of words stand to each other in the various dialects and in the standard language of Han, such as it is reflected in FY and SW.

The standard words

A striking fact in FY is the great number of definition words written by means of one character only; according to our only procedure of reconstructions, these words written by one graph can only be read as monosyllables. However, the number of the standard terms in FY can first of all be increased by excerpting also the binomial expressions occurring in the explanatory text of FY.

Thus in the text 1/19 st. 長 is 永長; 2/2 大 is 圍大; 2/7 盛 is 肥臑; 3/48 敗 is 醜敝; 6/2 聾 is explained by 墮耳; 6/12 蹇 is 偏蹇. 6/36 滿 is 腹滿; 6/37 危 is 擗物 ~ 偽物; 6/44 去 is enlarged to 持去; 7/7 讓 is (相)責讓; 7/15 暴 is (相)暴驟; 7/18 besides 怒, the text has also 呵叱; 7/19 委痿 appears besides definitions 立 and 跪; 7/22 (相)賦歛 enlarges the definition 賦; 7/25 煩懣 for 懣; 7/26 (相)愛憐 for 愛; 10/7 (相)憐哀 for 憐; 7/21 摩鋁 for 摩; 7/31 置立 for 立; 10/14 揮棄 for 棄; 10/23 has 慙踞 whereas 6/5 has only 慙; 10/29 has 殘罵 in the text, but 7/10 has 罵 in the definition; 10/31 has 毒滿 but 3/12 only 毒; 10/38 醫治 for 治; 10/41 (相)推搏 for 推; 10/45 (相)竊視 for 視; 10/48 (相)輕薄 for 輕.

These examples seem to throw doubt on the assumption that the standard words in FY are real spoken forms. However, they are not

necessarily literary but probably standard of a somewhat higher level than the original dialect forms, and equally used in the spoken language. Moreover, among the binom-standard terms in FY, the majority belong to names of animals, birds, clothing, instruments, and tools; they are terms probably taken directly from the spoken language without change. Thus, for example, in 持去 as against 去, it appears that for words, which did not refer to concrete things, insects and animals, it was easy to reduce the word to a monosyllable and define a dialect word by a simple general term. The number of binoms among the standard terms of FY amounts only to seventy-six against four hundred and fifty monosyllabic terms.¹⁴ Among those seventy-six binoms many are of late formation, that is, compounds easily analyzed and of little significance for the problem of reconstruction.

The binomial standard words of FY can be divided in three groups:

A. Binoms easily analyzed and separable in their parts; two words, one modifying the other: 車輪 'wheel of cart'; or two words combined to express a nuance different than the two constituent parts taken alone: e.g., different binoms for 'to think,' 'to ponder,' 'to desire, to plan,' etc. 謀思, 欲思, 常思. In this series¹⁵ we cannot easily find out whether a compound has become so frequent and closely united in the usage as to have become an inseparable word. Such compounds would form a transition to the second group.

B. Compounds clearly or probably analyzable and analyzed in the mind of the speakers, but still to be considered as one word since they refer to one definite object or express a specific meaning, often recurring in ordinary usage. For example, 雙產, 亭公, 雞頭, 禪衣.¹⁶

C. Binoms not divided or analyzed as said under A and B. For example, 蕪菁, 杯茗, 箸筍.¹⁷

This division is more for practical purposes; the remarks we made before concerning analyzable binoms consisting of graphically easily separated parts in the binom, show that only a special investigation in each case of binoms can yield certain results as to their real nature.

Fang yen Compared to Shuo wen

The monosyllabic standard words in FY are equally treated as monosyllables in SW, but there are some interesting exceptions.

FY 1/12 豐 // SWKL 2091 豐滿. 1/14 往 // 812 徑行.

1/22 會 // 2226 and 3361 合會. 1/30 取 // 1253 捕取.

2/14 來 //2300 行來. 2/37 擒 //4384 狡擒.
3/6 化 //3637 教化. 3/8 荏 //245 荏荏蘇.
5/24 櫪 //2637 櫪櫪 and 揲指. 5/31 薄 //400 林薄, 蠶薄. 6/1 欲 //3872 貪欲.. 6/24 持 //5388 握持. 6/31 行 //835 步趨 (Tuan: 步行). 6/32 索 //2684 繩索. 6/41, 42 審 // 審諦. 7/6 憚 //4775 忌難. 7/7 讓 //1076 相責讓. 3/15 拔 //5462 拔取.
3/14 詐 //1064 欺; 權詐, 謬欺, 詭譎 etc.
7/13 逮 //763 唐逮(及也). 8/11 雁 //1618 嗣鵠.
9/3 矛 //6393 酋矛.

Some of these SW definitions are not agreeing with FY; thus FY 6/32 索: 繩索, where SW binom means 'rope,' but the FY word 'to lift, to pick up.' There are others as FY 8/8 鳩 // SWKL 1594 鷓鴣 where SW does not seem to refer to the same thing; also FY 6/7: 輔 'to assist' // SWKL 6466 輔: 人頰車 'jaw'.¹⁸

There is, however, a kind of SW definition which strongly suggests an original binom. These are the cases where A is defined by B, and B by AB or BA. Furthermore, literary usage often suggests that mutual definitions A B也 and B A也 were made because of the existence of a binom AB or BA though strictly speaking such mutual definitions in SW merely state a semantic and often etymological connection between the two words.¹⁹

Examples: FY 1/15 懼: 恐 but 恐 is 懼; 恐懼 (binom) is extremely frequent (LMTT 4 mao, 53-4). 1/27 跳 // SWKL 884

蹶, 跳, (no binoms). 2/13 驚 //4328 駭, defined 驚.

Binom 駭驚 is very frequent (LMTT, 10, hai 40). 2/18 愧

// 慙, in its turn defined as 愧. Binom 慙愧 (LMTT, 4,

mao 146). 2/22 選 //761 擇, defined 東選. Binom 擇選

(LMTT, 9 yu 427 and TT 4612). 3/18 及 //1245 逮, defined 及.

Binom 逮及 (TT 2748). 3/19 根 //2452 株, defined 根.

Binom 根株 (LMTT, 5 ch'en 174). 5/5 梧 //2548 梧, defined 梧 (no binoms). 5/21 扇 //5300 扇 defined 扇. Binom 扇扉 (PWYF 194, 2). 5/25 索 //2714 索 defined 索. Binom 囊索 (PWYF 2874, 2). 6/21 遠 //795 遠 defined 遠. Binom 遼遠 (LMTT 9 yu 428). 6/29 改 //1337 更, defined 改. Binom 更改 (LMTT 5 ch'en 87). 6/33 分 //492 別 defined 分解. Binom 分別 (LMTT 2 tzü 449). 施 (改) //2970: 敷, defined 改. Binom 敷施 and 敷改 (LMTT 5 mao 414) (in sense of 'spread out, continue, extend' 布施). 6/40 力 //6214 筋 defined as 力. Binom 筋力 (TT 2672). 6/47 竟 // together with 章, defined in the same way: 樂曲盡為竟; 樂竟為一章 (no binom). 7/8 皆 //1475 俱, defined 偕 (no binom). 7/10 罵 //3395 詈, defined in its turn 罵. Binom 罵詈 (LMTT, 7 wei 177). 7/21 鑠 //6252 銷, defined 鑠. Binom 銷鑠 (LMTT, 9 su 15). 7/30 儋 //3524 何, defined 儋. Binom 儋何 (TT 1473), 何儋 (TT 2190). 9/14 輶 //6434 輶, defined 輶 (no binom). 9/25 舟 //3802 船 defined 舟. 10/6 火 //SWKL 4447 燬, defined 火 (no binom).²⁰ 10/32 蘇 //245 桂桂, 桂桂蘇. Binom 蘇桂 (Kuo). 10/34 頤 //3915 頤 (no binom). 10/35 頤 //5365 頤 defined 頤 (no binoms).

If we count the clear cases of binoms, standard terms in FY, and those monosyllables which were reduced from binoms (as appears in SW), we obtain only ninety to one hundred cases out of four hundred and fifty, that is, twenty per cent. Comparing this with the words in Kuo P'o's commentary, the difference is extreme. Here the binoms are the majority, and the monosyllabic words are very few. Many of these binoms are simple compounds of the sort A and B, but even then the number of binoms remains overwhelming and surely indicates a strong tendency.²¹

Dialect Words

If we compare the number of binoms and monosyllabic words in the dialects mentioned in FY, the results are rather negative: Ch'u has forty binoms out of a total of one hundred and eighty words, that is, twenty two per cent. The other dialect groups show the following figures:

Areas	Binoms	Monos.	Total
N-Ch'u	45	83	128
Ch-Hs	15	25	40
Chiang Yüan	1	3	4
Hsiang Yüan	2	1	3
Yüan Li	1	4	5
Yung Yüan	0	2	
Chiu yi	0	2	
Ch-H and Huai	7	53	60
Wu and Chiang Hu	13	35	48
Yüeh (Hui-Chi)	5	15	20
Yang	2	29	31
Ch'in	34	117	151
Chin	31	125	156
Liang-Yi	3	25	28
Kuan-hsi (excluding Ch'in-chin)	27	67	94
Chou	8	17	25
Lo	2	6	8
Hanh	2	12	14
Cheng	5	16	21
Ch'i	11	75	86
Lu	7	27	34
Sung	28	60	88
Weih	5	30	35
Ch'en	16	69	85
Tung-Ch'i	19	58	77
Hai-Tai	12	33	45
Yen	19	49	68
Chao	21	29	50
Wei	45	46	91

These figures show that the proportion of binoms against that of the monosyllabic words cannot be used as a criterion to characterize any of the dialect areas in comparison with the others.

Old Words and New Formations

The comparison of binoms with other corresponding dialect words can help us distinguish the older binoms from the newer ones. Such an evaluation of monosyllabic words versus binoms in standard language and dialects can be revealing. It may provide a criterion to deduce a certain characterization of the dialects.

(1) 1/17 has st. 愛 and in the text 敬愛 'to love, to pity.' The dialect word of Tg-Ch'i H-T Ch'-Ch'u Ch-H is 亟. 敬愛 is a compound where 敬 can be compared to 亟; possibly 亟 enlarged by 愛 was semanticized as 敬.²² Then 敬愛 is probably a newer formation, consisting of a dialect word with the st. word.

(2) 1/8. Ch'i: 嗟 喂 'to cry' *k'iang-liang; Kn-hs Ch'-Chin 嗟 *k'iang. Ch'u: 嗷 吡 *kiog-d'og ~ kiok-t'ioŋ and 唏 *xiəd < /*dxiəd. St. 憂 *iōg. Kn-hs Ch'-Chin: 怒 *niok < /*d'niok. *k'iang-liang probably goes back to /*k'iang ~ k'l(i)ang, but *kiog-d'og, kiok-t'ioŋ, though found in literature since Han time, is comparable to *k'iang-liang (old words).

(3) 1/11. Chin Sung Weih Lu 鬱悠 'sad' *iwət-diōg. St. 思 *siəg; Tg-Ch'i H-T 靖 *dz'iəng. Ch'-Chin 怒 /*d'niok. Ch'-Ch'u Ch'-Chin 悼 *d'ōg, Chao Wei Yen Tai 悵 *liəng < /*dl-. Sung: 悴 *dz'iwəd. The binom 鬱悠 is already in Tso chuan, Shu, and probably old. Comparable to Wu Yüeh 憐職 'to pity' *liən-tiək < /*dl- (FY 7/26).

(4) 1/18 and 10/40. St. 老 'old'²³ *log < /*gl-, but Ch'-Chin Ch'en Yen 耆 耇 *ku-t'əg. N-Ch'u Ch-Hs 械 鯁 *kəg-seg, 耆 革 *ku-kek ~ (-kiək), 乾 都 *kan-tu ~ (g'ian-). Except for *ku-kek (-kiək), which is a reduplicative binom, they are old word forms of /*glog, *gliug, *g'iōg < /*gl-, etc. where -t-, -s-, -nt- correspond to -l-. Other words are Tg-Ch'i 眉 *miəd < /*ml-, Yen Tai 黎 *liəd < /*bl-, which can be compared to 12/51: 康, 黎, 老也 and to the binoms of 6/55: N-Ch'u 父老 *b'iwō-lōg < /*bwglōg; Tg-ch'i Lu Weih 僂 *sug < /*bs-.

(5) 1/15. St. 懼 'to fear,' SW 恐懼 *k'iuŋ-g'iwō(g). Ching Wu 蛩 惧 *g'iuŋ-kiung. 10/21, Ch-Hs 任 佞 *tiəng-tiung < /*-t'iuŋ. St. 惶 遽 *g'wang-g'iwâg; 怖 遽 *p'wo-g'iwâg, 窘 猝 *g'iwən-ts'wat. Ch-Hs 瀾 流 *xiok-t'iwat ~ -d'iwat, Ch'i Ch'u 齊 瀾 *xiap-xiok < /*xlăp-xiok (Sung Weih: id). Yen Tai 謾 台 *mwân-diəg (-t'əg, t'iaŋ). 6/8 st. 戰 慄 *t'ian-liət < -zl-. All these binoms show the same elements in reduplication, or combination with others. Although

appearing in pre-Han literature, in construction they are not archaic; *mwân-diəg is the only exception. The binom 嘽 嘽 *t'ân (t'ian)-xiwân can be compared with *t'ian- of 戰 慄 (supra) as well as with *g'iwən- of 窘 猝 (FY 10/21) and 1/8 Ch-Hs 嘽 嘽 *xiwân < /*zxiwân 'to cry out (in fear)!'.

(6) 1/31. St. 食 *d'iaŋ 'to eat,' Ch'-Chin 饑 饉 *ən-nŋən ~ wən-nŋən < /*-mgwəd (?). Not in literature, and dialectally isolated. Therefore old, though surely a reduplication, maybe of 饑, an element of the compound (TT 76. Chou li, Kung yang) 飡 饑 *swən-iung < /*swəŋiung: *ung-iung ~ un-nŋəŋ, 'ən-nŋən.

(7) 1/32 and 7/9. St. 勉 'to exert' *mian, 勉 努 *mian-dno. N-Ch'u 薄 努 *b'âk-dno. 食 閻 *d'iaŋ-diəm, (dziəg-), Ch'i Lu 勛 釗 *mian-kiog (-t'ioŋ). Chou Cheng 勛 茲 /*bxiuk-tsiəg. P-Yen 侷 莫 *miōg-mâg (mūg-). TT 1407 and 1772 quotes a long list of binoms in pre-Han literature. The binoms seem to be old, although easily separable into independent words: *mian, miog, mâg, mūg, b'âk, /*bxiuk, and /*dno < -g, *d'iaŋ, dz'ieŋ, t'ioŋ (kiog), tsiəg. Even d'iaŋ-diəm 食 閻 is a reduplicative binom (cf. infra. p. 160).

(8) 2/9. Kn-hs Ch'-Chin 奄 殫 'tiny, small' *iap-diap < /*iamp-. 奄 alone is found in Sung Weih: 奄 /*d'iamp. SWKL 4559 defines 奄 as 覆 'to cover' and also 欠 'to breathe, to sigh.' It is analyzed with the formula 从大从申; 欠 *kiwâm < /*skiwâmp (KYSH no. 140, p. 186) may be cognate to 奄 (FY 10/16 奄 息 也), and suggests /*d'iamp. The analysis of SW also indicates a dental in the initial: 大 *d'âd + 申 (展) *siən ~ tian; the ending -m was subject to sandhi changes; compare 奄 息 and 偃 息 (TT 2684) 'to rest' and 閻 茂 'to cover.' The binom is a late formation; the second part is comparable to 織 *siam, 揜 *sem < /*sý- ~ s'-(2/8).

(9) 2/10. Tg-ch'i H-Tai 臺 'match, pair' *d'əg, Kn-hs Ch'-Chin 臺 敵 *d'əg-d'iek (reduplicative). St. 匹 *p'iət. 12/8 築 埋 *tiök-liəg, a dimidiation of d'iek 敵. Both binoms are new formations. 2/11 Ching Wu Chiang Hu 抱 媿 *b'ōg-p'iwan. 媿 alone is used in Sung Ying, cognate to 匹 *p'iət. 抱 *b'ōg is probably a variant of 耦 *ngu < /*mgug.²⁴ Recent formation.

(10) 2/22. Kn-hs Ch'-Chin 擡 捎 *kiog-siog. St. 選, 選擇; 東 選. Not in literature. Recent compound, probably of 'lift up + take away' that is, 'to choose.'

(11) 2/29. St. 毳 'felt, wool' *ts'iwäd. Ching Yang Chiang Hu 揄 鋪. *diu- (d'u-, diog-) -p'wo (-p'iwo). Ch'u: 慳 屨 *-lam-miwo (< *glam ~ /*lyam). Ch'en Sung Cheng Weih 帔 縷 /*p'iwət-zl'ug.

Yen Ch-hs Lsh 葉翰 *diap-diu (-diog). In SW st. is defined 扇 : 毳布 *ts'iwad-pwo. The dialect words are old binoms: the phonetic elements are comparable, yet the composition of the binoms as suggested by the characters supposes a long history.

(12) 2/34. Yen Ch-hs Lsh. 搖扇 *diog-sian. St. 疾 *dz'iet 'fast'. The element 遙 is used in N-Ch'u, also 汨 *kwet < /*dkwet. 搖 (繇 in Meisheng, 遙 in HS) is comparable to 暹 *t'ien. 扇 *sian can be compared to 疾 *dz'iet, and 6/46 旋 *dziwan, dialect word of Ch'-Chin, explained as 'fast-ripening' (fruits or cereals). (Cf. HS ch. 56, K'M 495/4, comm. of Yen Shih-ku). *diog-sian is not in literature; *-sian differs from 疾 *dziwet by final and vocalism, and is rare. The binom seems to be old.

(13) 2/36. St. 大 'big.' Ching Yang 恆慨 *g'ang-(kang-) -k'ed. Tung Ou 葵綏 *sam-suiwäd, 羞繹 *suiög-diäk. Some parts in these binoms are comparable to other words for 'big' in FY: 怒 *sniö, 弩 *dno, 柳 *liam ~ liam, 濯 *d'ök, d'ög, 硯 *diäk, 僉 *tsyam. 恆慨 probably does not belong to the group of words for 'big' but originally means 'noble.' The other two binoms are listed only in FY, as dialect words in peripheral areas; they are old formations.

(14) 2/37. St. 掄 or in SW 狡掄 'clever, shrewd.' 10/3. N-Ch'u 央亡 *iang-miwang, 嚙屎 *myiwäd-t'iäd (-btñ'iäd). Ch-Hs: 無賴 *miwo-dläd. 狡掄 in Tso chuan, Hsün-tzü. 嚙屎 in Lieh-tzü. 無賴 (variant 亡賴) is in SC. *iang-miwang²⁵ (< /*d'iang-) could be an inversion of 嚙屎, 無賴. They represent old formations. Here must be added the words of N-Ch'u and East Yang: 眠媵 *mien- (/*mýän-) -d'ieng, 脈蜴 *mwëk-diek (-siek), 葵媵 *kog-d'ieg, 賜施 *siëg-(siek-)-šia (-dia), 譚謾 *t'an-mwân (~ tân-). The latter binom is cognate to 訖謾 (Ch'-tz) and to 譚謾 (SC). The others are not found in literature, except 脈蜴, (SM ch. 9, 79: 脈通 *mwëk-t'iek: 懦謾 *kiwet-t'iek. 'clever, understanding'); they are probably old formations, preserving strong dialectal divergences.

(15) 3/8, 10/39. St. 荏, 桂荏, 桂荏蘇, 草 'grass.' Yüan Hsiang: 讓菜 *niang-niög, (/*zníang-, /*-bniög?). This binom strongly differs from the other words; it is not found in literature; comparable to 荏苒 *dniem-d'niam 'weak [as] grass'; may be /*zníang-bniög (-mb-) developed from /*zniam mwâng (荏 + 苒?).

(16) 3/9. St. 蕪菁 'turnip' *miwo-tsieng (-tsieng), comparable to Ch'-Ch'u 蕪 *p'iong (SCg written as 葑, explained as 蔓菁 *mwân-tsieng) and to 蕪 *b'iuik < /*b'zük ~ *b'æk < /*bzæk of

蕪蕪. As indicated by 蕪 bz- > b', 蕪菁 *miwo-tsieng may be a dimidiation of /*mtsieng, comparable to 蕪 *p'iong < /*pziög. Kuo reads 蕪 as 蜂, and compares it to a Chiang tung form 蕪 siög and 菘 dziung < /*bs-, bz-. Like 蕪蕪 /*blgo-b'zük ~ (-bzæk), which appears under the variant 蕪蕪 /*blgo-b'iwäd (EY), the forms 菘蕪 *lap-d'ap (< /*ld'ap), 蕪菁, 蔓菁 are old, but 辛芥 *siën-kad 幽芥 *d'äd-kad, 大芥 iög-kad are new constructions.

(17) 3/10 難頭, 鴈頭, 烏頭 'thorn': popular etymologies; recent formations.

(18) 3/12 and 10/31. St. 毒 'poison, drug, drugged' *d'ök and 毒滿 *d'ök-mwân (-mwân). Ch-Hs, N-Ch'u: 頓慙 /*d'wän-mýwän (twän-) and 氏惆 *tiär-t'iög. Ch'i 眠眩 /*mýän-g'iwän (Shu) is composed of parts appearing alone in Tg-Ch'i H-T; it is probably a dimidiation binom. The other binoms belong to the same group, yet are strongly divergent and probably old formations.

(19) 3/48. St. 敗 'worn out, spoiled' *b'wad, pwad, and 醜弊 *t'iög-b'iäd, new formation. On the other hand 襁褓, though easily analyzed, appears in the old texts (Tso), and the binoms 襁褓,

挾斯, 須捷 are typical of N-Ch'u dialect; they are old words.

(20) 3/49. N-Ch'u 撲生, 撲漸, two variants for the same word. 漸 is mentioned separately but written 賜; similarly 撲 could be a separate word, because of the definition in FY: 撲, 鋌, 漸, 盡也 'to exhaust, exhausted.' However, neither of these characters is used separately in any text or dictionary independent from FY. 撲生 (~ 漸) is therefore an old dialect binom.

(21) 3/51. N-Ch'u 不斟, 何斟 'to pour, to serve.' This is probably not a binom, for 何 and 不 may be just a device to suggest a dialectal cluster, with two variations g- and p-. This word must be compared to FY 2/9 不甚 *piüg-diäm 'not excessive, not very much,' a standard expression used to explain the dialect word of Kn-hs Ch'-Chin 斃碟 *iap-diap (cf. supra p. 127) and the Sung word 斃 /*d'iam. Kuo P'o comments: 病半臥半起也 'to be sick half reclining half sitting up' i.e., to be sick but not too seriously. In the same way Kuo understands 不斟 as 斟酌益也 'to pour and serve, to add to.' Yet, in the N-Ch'u dialect word, the text explains 不斟 as 凡病少愈而加邊 'All sickness which improved a little but relapses into worse,' and again Kuo explains 雖少損無所益也 'Though there is a small damage (i.e., a slight relapse), nothing is added

(it is not really worse)! This seems to indicate that Kuo has analyzed 不斟 as 'not to add to' and 何斟 as 'What has been added?', in the light of 不甚 'not excessive, not very much.' Probably 不斟 as a dialect word, corresponding to 'to add, to pour out,' applied to sickness 'to relapse, to get worse,' was etymologically analyzed by Kuo on the basis of the characters, though the dialect word was one unanalyzed word unit (cf. *infra*, note 56).

(22) 5/3. Kn-tg 酢餹 *dz'ak-d'liôg, st. 甑 'boiler.' Not in literature, but probably a dimidiation binom which may be an old word, belonging to a dialect. (Cf. p. 152).

(23) 5/4. Sung Ch'u Wei 鈿銳 *diog (t'iog)-diwad, 'cup.' Probably old (though reduplicative, and partly comparable to 權 *d'ôg and 盪 *diang) as it is dialectal and stands alone in a big group of cognate words.

(24) 5/8 and 20. St. 梧筥 'container, basket' Ch'-Ch'u Sung Weih: 豆筥. In SW 筥 is defined 梧筥, and 梧 alone means something different 'cup' (FY 5/5); 梧筥 surely is an old word, with dialectal counterpart 豆筥 probably derived from an original monosyllable with cluster, B-L-D'-L. SW defines st. 筥 as 筥. The dialect word 牆居 *dz'liang-kio is probably related to 薰筥 /*dxiwen(g)ku, and therefore not a new formation.

(25) 5/9 Kn-hs 桶揔 *t'lung-sung. St. probably 箸筒 *d'io-d'lung.²⁶ Both reduplicative binoms are late formations since the Ch'-Ch'u Sung Weih still have 筥 *sôg, 贏 *dieng.

(26) 5/10 and 14 Kn-hs 甌甌 and st. 甌甌 *b'æg-glu, *b'æg-ngu 'earthen pot.' The former is attested in Mo-tzû, the latter in EY. Therefore it is an old binom, though a dimidiation of #*b'glu ~ b'ngu. Chou, Wei still have 甌 *miwo < /*mýwo and 缶 *piôg.

(27) 5/15-16. St. 升甌 'small pot,' on the other hand 甌 is 'big pot.' 升甌 is a compound: 'a one sheng pot.'²⁷

(28) 5/22. St. 碓機 'pestle' /*twəd-kjəd; Ch'-Ch'u Wei Sung 碓碓 /*t'ian-ngwəd, and 碓碓 /*ts'wəd. One binom is probably dimidiation from 碓, and 碓機 a later etymologization. (機 'machine')

(29) 5/23. St. 縞縵 'well rope' a compound made up of 縞 and 縵, both separate dialect words.

(30) 5/25. Kn-hs 掩篋 'bag' *i'wam-tu ~ i'äp-tu (< /*i'wamb-i'ämp-), 掩囊 *i'wam (i'äp)-dnâng, 縵篋 *(g)lu-tu. St. 囊

and SW 囊囊 /*dnâng-t'âk. The element tu corresponds to 囊 *t'âk. These binoms are apparently easily analyzed, yet dialectal, opposed to st., and probably old words (cf. pp. 159-160).

(31) 5/26. Ch'-Ch'u Sung Wei 鹿格 and 鈎格. Reduplicative binoms based on 鈎 'hook, hanger.'

(32) 5/28. Standard 杷 'rake.' Sung Wei 渠挈, 渠疏. Unanalyzable, dialectal and, consequently, old words.

(33) 5/29. Sung Wei 攝艾 'flail' *siap-diu < /*sniap-diu. 攝 is comparable to 僉 /*tsyam, and 艾 to 度 *d'äg, d'âk. The binom is old, though probably reduplicative (*diu and 艾 *sam being cognate), because of its peculiar phoneticism.

(34) 5/30. Standard 刈鈎: analyzable as 'harvest hook,' 'sickle.'

(35) 5/31. N-Ch'u 蓬薄 *b'ung-p'ak. Reduplicative; late formation.²⁸ St. 薄 'rushes, mat.'

(36) 5/34. Sung Wei 籩筥 *g'iwäg-k'iwok; Kn-hs 籩蔴 *g'iwäg-d'io 'coarse mat.' Kn-tg 蓋校 *g'âp-siam < /*dgâp-, reduplicative variant of st. 筥 *d'iam < /*d'yem. The Sung Wei word is obviously a reduplicative binom, part of which is in the Kn-hs word, which is old (SCg). St. 折 *tiad may be related to *d'io. Old binoms.

(37) 5/35. Standard 符簾 'mat' *g'äng-d'äng but N-Ch'u *d'äng < /*dyäng ~ dgäng. Kn-tg Chou Lo Ch'u Wei 倚佯 *ia-ziang, which is comparable to 簾 with inversed sequence dg- > g-d-. 符簾 and 倚佯 are probably new formations.

(38) 5/41. Wu-Ch'u 箭裏 *tsian-liæg, 簿毒 *pâk-d'ok, 紀專 *i'wän-tiwan, 匱璇 *ts'iwan-dziwan. St. 簿 *pâk 'chessboard,' SW.

局戲 *g'iuik-xia (< /*-bxia). 匱璇 is reduplicative; *ts'iwan being cognate of /*t'yiwan, we may suspect an inversion of *i'wan-tiwan; the monosyllabic form is found also in *tsian-liæg (< /*-dliæg), the second part of which is comparable to *d'ôk in 簿毒. The latter binoms do not seem analyzable; they are old words. *pâk-d'ok is a variant of *pâk-sək (-sæg) 博塞 (Chuang). The 'board': 局 *g'iuik and 曲道 *k'iuik-d'ôg (n + n) is a semantic shift from 'line on chess board' to 'crooked road.' Other words in this passage are 枰 and 廣平 (compound: adj. + noun?) for the 'container' of the dice or draughts.

(39) 6/1. Standard 被飾 (in text) corresponding to 聳 'to excite, to make follow,' 特 'to lead, to make follow,' 欲 'to desire, incite to desire' = 相勸 'to exhort,' is obviously a compound 'to cover + 'to adorn' = 'to praise, to flatter, to excite'; therefore a new formation.

(40) 6/4. Tg-Ch'i Ch'-Hs 由迪 *diôg-d'iôk. St. 正: 'to correct.' The binom. has probably no direct relation to the st. word; though phonetically analyzable as a reduplicative of *d'iôg 導 'to direct, to lead,' the choice of characters and the dialectal nature shows it to be an old binom.

(41) 6/5. Standard 慙 and 慙愧. (Already in Kuo yǔ, Kuan-tzǔ.)

(42) 6/11. Standard 瞋目 and 瞋目, enlargement and etymologization of 瞋: new formation.

(43) Standard 偏蹇 recent compound (adv. + verb) (6/12).

(44) 6/18. Ching Ch'i: 詵與 *iwam-(z)iwō (< /*zýwō) 'to talk, to chatter.' Wu Yüeh: 誣 *miwo < /*mýwō, is obviously the original form, dialectally preserved. In Han texts we have: 誣罔 *miwo-miwang* (reduplicative) variant of *miwo-miwo. With a prothetic vowel it was *â-miwo (阿誣), and through resyllabication 詵與 *iwâm-iwo. Ch'-chin 阿與 *a-ziwō can be explained in the light of 10/9 where the definition word 拏 *nâ < /*d'nâ ~ dn'â, is not st. but a dialect word of Yang, with a variant 惹 /*d'niäk. A st. word is SW 譖拏 *fa-nâ, with a definition 羞窮 (SWKL 1029). (Tuan Yü-ts'ai explains: 羞澀辭窮而支離牽引 "ashamed and poor in words, irrelevant and far fetched.") Also st. (SW) 譖謔 lân-ləu (< /*lyan-lu) with variant Tg-Ch'i Chou Chin 譖啐 lân-lôg (< /*lyan-lôg), N-Ch'u 譖謔 /*d'lien-lýu, 支註 *tiëg-tiu (-tiu), 詒謔 *tiem-d'ieg ~ (tâm-, tiäp-). Among these binoms *fa-nâ is a dimidiation of 拏 /*d'nâ, 惹 /*d'niäk, but because of the dialectal nature, all the other binoms seem old. However, *â-ziwō is a new construction by combination of â- (in *â-miwo and *iwâm-iwo) with 與 ziwo < *dziwo ~ /*d'nâ.²⁹

(45) 6/27. Sung Lu 台既 *d'ieg (t'æg)-kiäd. St. 失 'to fail, to lose.' 台既 is maybe a dimidiation of 失 /*sýët ~ dýët? Old binom.

(46) 6/36. Standard 腹滿: a popular etymology of 愒 + 滿. New.

(47) 6/37. Tg-Ch'i 倏鹽 *g'ieg-xieg and 冉鑣 /*dniam-lýam. Both are reduplicative but dialectal and probably old. St. is 椅 *k'ia 'unsteady, askew' and 偽 *ngwia 'false' (in the text), related to 危 *ngwia and 9/25 偽 *ngwia, 佗 *ngiät, xiät (不安也), and 10/20 逶逶 *tsiäk-tsiäk, 塞塞 *sək-sək, 屑屑 *siät-siät.

(48) 6/42. Wu Yüeh 讀諦 *ied-d'iad, st. 審 *siäm, and SW 審諦 *siäm-d'iad. 諦 and 讀 (under variant graph 蹙 *iad) are separate words in other dialects. Yet 讀諦 is probably an inversed form of a dimidiation of /*dýiad (諦, 誣?), and new.

(49) 6/44. Ch'i Chao 祛摸 *k'iab-mâg (-mâk). St. 去 and 持去 'to take, remove.' Old binom in dialects.

(50) 6/45. Tg-Ch'i 舒勃 *sio-b'wät. St. 展 'to extend, to unfold.' 舒勃 is comparable to 舒布 (HS), 舒泄 (SM). Dialectal, old.

(51) 6/46. Yen Ch'i 樞揄 *k'u-d'lu, k'iu-diu (-diog) < /*dk'ug, dk'tiug. St. 旋 'ripening fast' 樹稼早成熟 (cf. p. 128). Compare 7/16 酷 *k'ök. Maybe 樞揄 represents a form /*k'og-d'iôg (酷熟?).

(52) 6/50. Standard 閑, Tg-Ch'i 閑苦 *diem-siam, reduplicative, since 13/126 defines 閑 as 閑, but dialectal and may be old.

(53) 7/7. Standard 責讓 *tsək (tsëg)-niang (< /*-ziniang). Kn-hs, Ch'-Chin: 譙讓 *dz'iog-niang. 譙 is found alone in Ch'-Chu Sung Weih Ching. Many variants exist (TT 2095-6 譙讓, 譙讓, 譙讓, 譙讓 in Han texts, and 集讓 Ta Tai Li-chi), but all have 讓. The binom is old but probably a dimidiation of 讓 /*dzniang with 譙 *dz'iog as a dialect variant).

(54) 7/10. Yen 傑恂 *g'iuung-siuung. St. 罵, SW 罵詈 'to curse' Kuo P'o and YP explain it: 可憎 'detestable' which is not easier to understand, yet may suggest the same sequence of initials *k'â-tseng.

(55) 7/14. Ch'-Chin 皮傅 *b'ia-b'iwo (-piwo). Tg-Ch'i Ch'en-Sung Ch-H 彈儉 /*d'ân-tsýam (-sýiam). St. 強. Ch'ien Yi compares 皮傅 with 皮膚, which makes no sense. Probably 皮傅 is reduplicative, based on 暴 which is part of 強暴 (Yen, Hsün). 儉 alone means 'insincere' (FY text: 言非其事 "to say that there is no such thing") and is part of binoms 儉訛 /*tsýam-pia (KY) - 險訛 /*zxlam-pia

(SCg). 彈檢 /* d'ân-s'iam is a dimidiation of /* ts'iam 檢. ³⁰

(56) 7/18. Standard 怒 /* dno and 呵叱 'to curse, revile' * xâ-t'iet < /* dxâ-t'iet. Yen, Ch-hs Lsh 嬰盈 * g'iwëg-diëng (g'ien-tsiäg-) < /* zg'-tsy-. Probably all dimidiations of /* dxâd ~ t'iet ~ zgiwëg ~ zgiend ~ tsy'äg ~ dyëng.

(57) 7/19. 踉蹌 (Tg-Ch'i H-T) * d'iang-miug: st. 跪 * g'wia, k'wia and 隍企 * ngad-k'iäg: st. 委痿 * iwar-iwar 'paralysis in the legs.' The definition in FY says: 踉蹌, 隍企, 立也. TT 1164 suggests that 蹌 is a corruption of 企: 踉蹌 * d'iang-g'iäg, (KY), 長跪 * d'iang-g'wia (SC): 蹌. 'to kneel down, to be on the knees'; 擊蹌 * g'iëng-g'iäg (Chuang), 擊跪 * g'iëng-g'wia (Hsiao ching). SWKL 868 defines 蹌 as 長蹌, 長跪. There is no 蹌 in SW. 企 * k'iäg, as a monosyllabic word, 'to stand on the toes,' may have nothing to do with the compound 隍企 'paralyzed, unable to walk.' In the same way, the definition 立 'to stand,' remains unexplained. But since 企 'to stand on the toes' is part of a binom 'to be paralyzed,' probably the definition 立 'to stand' was due to a loose semantic connection 'to stand: immovable.'³¹

(58) 7/21. Standard 摩鋸 * ma-liô (< /* l'yo), 鑠. SW 銷鑠 'to melt, to cast' /* siog-s'lyok; 摩鋸 is found in Chou li written 摩鑠 (TT 767). It is an old binom, still used in the standard language, and shortened to the definition form 摩 (磨).

(59) 7/22. Standard 賦斂 'to collect taxes' (Wen); Yen Tg-Ch'i: 平均 'equilibrium.' Though found in early texts, they are analyzable compounds.

(60) 7/25. (a) Standard 煩滿 'sad, worried' * b'iwän-mwän (-mwän); Ch-hs Lsh 漢漫 * xän-mwän (< /* dnxän-). (b) Standard 顛眩 * tien-g'iwen (-niwän), Ch-hs Lsh 眩眩 * niën-g'iwen (< /* dniën-). * b'iwän-mwän is well attested in Han but reduplicative and probably a new formation; * xän-mwän, already in HNTz is dialectal, and a dimidiated inversion of /* mgwän (?). St. 顛眩 is an etymology of dialectal 眩眩. The readings of 眩 * g'iwän, xiwen, niwän, siwän, point to

/* dx-, t'y-, s'y-, s'n-; later split up in a binom. (a) and (b) are probably connected only because of a semantic attraction: 'worried, sad, dazed look.'

(61) 7/29. Wu Yüeh 煦煖 * xiu-xâ. 'warm.' Reduplicative of a variant of 火煖 * xân.

(62) 7/30. Kn-hs 負他 * b'iuug-t'â (~ -d'a), a compound: v. + v. TT

(754) gives as variants 負駝, 負馱. Chuang-tzū has 駝它 'hunchback' also written 索他 (late: Liu Tsung-yüan, T'ang). May be the word for camel 駝 (and other variants), whether originally a non-Chinese word or not, was interpreted as 'bag carrying' animal.

(63) 7/31. Yen Ch-Hs Lsh 樹植 * diu-diäk (-d'iäg) cf. 12/75 詩殖 * diäg-diäk, 'to plant, set up.' Reduplicative binoms, new.³²

(64) 8/4. Ch'-Ch'u Sung Wei 鷓鴣 * b'iek-g'iëg (< /* -dg'iëg).

St. 雞 * kieg < /* dkieg ~ dkied. Kui-lin: 割雞 * kât-kieg (< /* dkât-zkât-dkieg). 割雞 is probably reduplicative, etymologized as 'capon,' with a sandhi (dkât-dkieg > kâkkieg). 鷓鴣 is probably influenced by 鷓鴣 (8/14: water bird, duck, chicken). (鷓 + 雞 ?).

(65) 8/6. St. and Kn-hs 布穀 * pwo-kuk. Kn-tg, Kn-hs, Liang Ch'u 結誥 * kiet-kôg, Chou Wei 擊穀 * kiek-kuk. EY 結鷓 * kiet-kiuk; SWKL (1599) 結鷓 and 尸鳩. 尸鳩 * siäd-kiôg appears in SC; 雄鳩 * giung-kiôg (Ch'tz, HNTz) is explained by the commentaries as 布穀 'A bird that sings when the sowing time is near'; onomatopoeic and partly etymologized (to announce: 布, 誥).

(66) 8/8. Kn-tg, Chou Cheng (a) 鷓鴣 * lêng-kôg, (b) 鷓鴣 * b'iek-kôg. Kn-hs (a) 鷓鴣 * kiök-kiôg (b) 鷓鴣 * g'iwëk-kiôg, 鷓鴣 * g'iwäd-kiôg, 鷓鴣 * b'ioğ-kiôg, 鷓鴣 * kwät-kiôg, [鷓鴣 * kiök-kiôg]. All are compounds consisting of a monosyllable enlarged by 九鳥. * lêng-kôg and * b'iek-kôg can be explained by taking * kog as a variant of * kiôg. 鷓 alone goes back to /* bdläng ~ b'lang, and could be compared to * b'iek.

(67) 8/13. St. and Kn-hs 驪黃 *liēg-g'wāng, 黃鳥 *g'wāng-tiōg, 楚雀 *ts'io-tsiäk 'oriole.' Kn-tg 鷓鴣 *ts'āng-kāng. The latter is probably a dimidiation of /*tsyāng ~ dkāng. Then *liēg < /*dliēg ~ zliēg- of 驪黃 and *ts'io < /*tsy'og of 楚雀 show the same element combined with 黃 /*dg'wāng (variation of /*tsyāng, dkāng) and with 雀, 'small bird' as enlargements of the word. 黃鳥 is another enlargement parallel to 楚雀, obtained by combining 黃 with 鳥.

(68) 8/14. St. 野鳧 *diā-b'iu, (diō-) < /*bz'ug. SWKL (1307) 鳧: 舒鳧 *sio-b'iu, 鶩 *muk. N-Ch'u: 鶩 *b'iek-t'ieg, 鶩蹠 *kwət-d'ieg. The identity of 野(舒)鳧 and 鶩 points to a monosyllable 鳧 /*bz'ug ~ zb'ug, with a variant 鶩 muk /*gmuk < zgm- ~ zmg- (?). N-Ch'u 鶩蹠 is a dimidiation or an attempt to write a dialectal variant /*b-t'ieg. 鶩蹠 may be considered a new formation owing to confusion with other names of birds, especially 鶩鳩 (cf. no. 66).

(69) 9/11. St. and Kn-hs Ch'-Chin 枸篲 'vaulting of the carriage: cover' *ku-lu (< * -glu ~ /*-lyu). Sung Wei Ch'-Ch'u 篲籠 *k'iuŋ-liung and 篲 *k'wəg < /*kməg ~ bkəg (?), Hs-Lung 柁 *b'iwän ~ b'wän. N-Ch'u 篷 *b'ung, 隆屈 *liung-k'iuik (< /*dl'ung). 枸篲 and 篲籠 evidently belong together as dimidiations of /*klung ~ k'lung (穹 *k'iuŋ: vaulted (cover) ~ /*klug. These words do not appear in early literature; Chou li has 蓋弓 *g'āp-k'iuŋ (~ k'āp-); 蓋柁 *g'āp-lōg (HS, SW) obviously a new formation. N-Ch'u 隆曲 is an inversion of the original sequence 篲籠. The other words probably have different etymological connections.

(70) 9/18. Chao Wei 鍊鏘 *liēn-d'uā (~ -d'uāi) < /*lyān-d'wā. N-Ch'u: 鞞 *d'iad. Kn-tg, Kn-hs 鞞 *kwān. SWKL 6433 defines 鞞 with 鞞崙杏 * (kuk)-twān-d'əp. 鞞 has a definition 鞞鏘 *g'āt-g'ian (< /*zgāt-). 鞞鞞 *kwān-g'āt does not appear in pre-

Han texts. 鍊鏘 is reduplicative, or a compound 鞞 + 鞞 *kwān-d'iad ~ /*lyān-d'wā. Being dialectal, it is probably an old binom.

(71) 9/20. Names for arrows. With four-cornered points: 拘腸 'to gut'; 羊頭 'sheep's head.' But 鉞鏘 *kap-lo (< /*-lyō?) 'thin, long arrow with two holes (or hollowed out on two sides),' remains unanalyzed. 'Arrow with three corners, 6 feet long': 飛蛇 'flying snake.' 'Those with a paw(-like end) 內者: 平頭 'flat-head'³³

(72) 10/1. Chung Hsia 何為 'why, what' *g'ā-gwia, equivalent to st. 何 *g'ā < /*dg'ā, Hsiang T'an 曾 *dz'əng, 皆 *tsied < /*tsyad < bt-? 何為 may be dialectally /*dga-gwia < /*dgāg ~ /*dzgāng, contaminated by 為 (from literary 何為), comparable to *dz'əng, and the like (?).

(73) 10/13. St. 安靜 'quiet' *an-dz'iēng. (Tso, Kuo yū). Ch-Hs 寗 *dz'iōk. 安靜 could have been /*ndz'iēng.³⁴

(74) 10/16. Ch'u 戲泄 *xia-siat (ziad) < /*-s'iat ~ z'iad. St. *xiat < /*sxiat, Ch'u Yang 泄 *s'iat ~ z'iad. The Ch'u word was an inversed form of 歇 /*x-siat 'to rest,' and the Yang word still preserved the original cluster /*s'y-.

(75) 10/18. Yang Ch'u 晞曬 *p'iwəd-slēg (HS, written 暴曬). Standard 乾 'to dry things, probably by exposing to the sun'; 晞 and 曬 appear separately in 7/15; the binom is new.

(76) 10/28. Kui-lin 短矐 'short' *twan-b'ad (~ b'ēg?). Tg-Yang 疴 *b'iu. The binom is a compound of the two synonyms.

(77) 10/36. Hsiang T'an 紛怡 *p'iwən-diēg, 配己 *giēg-z'ieg. St. 喜 'to rejoice, to be happy' /*dxiēg. SW 配: 說樂 *siwät (-d, diwät)-lag < /*-lngōg(?). 配己 is probably a dimidiation of 喜, inversed g-z-. 紛怡 (怡:己) remains partly unanalyzed: old binom.

(78) 11/1. St. 蟋蟀 'sort of cicada, cricket' *d'iat-kiwet. Ch'i 蟻蟻 k'ieg-luk (< * -gl- ~ /*-ly-). Ch'u 蟻姑 /*zgiwəd-ko,

蛉 蝻 *dlieng-ko. Kn-tg 蝻 蝻 *tiog-lôg (< /*-dlog), 蝻 蝻 *d'ieg-lôg < /*dlôg, 蝻 蝻 *dian-muk. 蝻 蝻 is found in Chuang-tzû, 蝻 蝻 ibid. 蝻 蝻 and 蝻 蝻 in EY; 蝻 蝻 in Li chi (written 蝻 蝻). An old word, everywhere binomial, with the same elements in various positions.

(79) 11/2. Sung Weih 蝻 蝻 'cicada' *d'âng-d'iôg, 蝻 蝻 *lâng-diôg. St. 蝻 蝻 /*dlog, 蝻 蝻 /*d'iôg-dlôg. 蝻 蝻 is found in EY, Ta Tai Li chi; 蝻 蝻 is a variant. Old binoms.

(80) 11/3. N-Ch'u 杜 狗 'grillo-talpa' *d'o-ku, 蝻 蝻 *k'wat-lu (< /*-lyu). St. 蝻 蝻 *ko-tio, 杜 蝻 *d'o-kāk (< /*-lkāk), 蝻 蝻 *glu-ko, 蝻 蝻 *glu-tiet, 蝻 蝻 *dziang-lieng. None of these words are found in literature; they are probably dimidiations, variations and in-versions of #*dkug ~ lkug.

(81) 11/4. St. 蝻 蝻 'cricket' /*ts'iêng-d'liat. Ch'u 蝻 蝻 *siet-slwet, 蝻 蝻 *kiung. N-Ch'u 蝻 蝻 *g'iwang-swên. 蝻 蝻 (EY), 蝻 蝻 (SCg, EY, HNTz, LSch'-ch'), 蝻 蝻 (HNTz, written 公 蝻; LSch'-ch'). Though early attested, they show clearly a reduplication or a composition of 蝻 with 蝻 (variant of 蝻).

(82) 11/11. Yen Chao 蝻 蝻 *mung-ung. St. 蝻 蝻 *p'iuung 'wasp.' 蝻 蝻 is probably a dimidiation of #*m-ung ~ mp'iuung.

(83) 11/13. St. 蝻 蝻 'ant' *b'iæd-b'iôg. Ch'i Lu 蝻 蝻 *xu-dziang (-siang) ~ (g'iu-). Hs-N L-Y 蝻 蝻 *g'iwên-xu (-g'iu). Yen 蝻 蝻 *ngia-ziang (< /*zngia-). EY 蝻 蝻 is found in Ta Tai Li chi. Although 蝻 蝻 is attested early (Li chi), it is reduplicative; so is 蝻 蝻, which is a combination of elements found in the other binoms.

(84) 11/14. St. 蝻 蝻 'grub' *ts'iët-dz'iôg. Kn-tg 蝻 蝻 *dz'iog-ts'iët, 蝻 蝻 *kiwan-diuk (-tiuk), 蝻 蝻 *xiwan-g'uk, 蝻 蝻 *tiët-tiet-kāk. Ch'-Chin: 天 蝻 t'ien-lu (< * -glu ~ /*lyu). 蝻 蝻 and 蝻 蝻 (EY, SCg, Chuang) show a free interchanging of sequence of the two components; they are reduplicative. All the words, being dialectal, probably are old binoms.

(85) 11/15. Kn-tg and st. 蝻 蝻 *diôg-gian (< /*zg-) and 入 耳 (new word with etymology: 'entering the ear: worm') *niæp-niæg, 蝻 蝻 *d'iang-dlieg; Chao Wei 蝻 蝻 *b'iwo-iu. P-Yen 蝻 蝻 /*dzniuk-d'niæd. 蝻 蝻 and 蝻 蝻 /*diên-zgian (Kn-tg) are found in Ch'tz, EY, Chou li. They are early binoms (probably reduplicative), to which 蝻 蝻 (also reduplicative) is comparable. 蝻 蝻 is reduplicative (new formation). 蝻 蝻 is probably a dimidiation from #*b'iwo, although not found in any other variant form.

(86) 11/16. St. and Kn-hs, Ch'-Chin 蝻 蝻 'spider' *tiu-miug (-môg, -miog). Kn-tg Chao Wei 蝻 蝻 *tiëg-tiu, 蝻 蝻 *tiuk (diuk)-diu (-d'iu). (The comparison 侏 儒 is an attempt at an etymology: 'dwarf, small'). P-Yen Ch-Hs Lsh 蝻 蝻 *d'ôk-dzio. 蝻 蝻 is already in LSch'ch; 蝻 蝻 in EY. Except for 蝻 蝻 which is unexplained (perhaps from #*tmiug?) they are all reduplicative binoms, but early attested.

(87) 11/17. St. 蝻 蝻 'ephemerida' *b'iôg-liôg (< /*-dl-). Ch'-Chin 蝻 蝻 *g'io-liāk (< /*-lyāk). TT 1058 rightly compares these words with 蝻 蝻 (-diôg < /*dl-) (SCg, EY, HNTz, Hsün), obviously a dimidiation of #*b'liôg ~ bd'liôg. 蝻 蝻 is a dialect variant, and probably also old.

(88) 11/18. St. 馬 蝻 'centipede' *ma-g'iwên. P-Yen 蝻 蝻 *tsio-g'io, and 馬 蝻 *ma-diôg; 馬 蝻 is also written 馬 蝻 (*-g'iwân) (Hntz), 馬 蝻 (*-kiwân) (EY). A word not mentioned in FY, is 蝻 蝻 (Chuang), a reduplicative; by separation of 蝻 and rejoining it with 蝻, the other binom 蝻 蝻 was obtained. 馬 蝻 is constructed by adding 馬, used in many names of insects.

(89) 13/141. Ch'-Weih 牛 筐 'basket' *ngiüg-k'iwang, probably etymologization of 簾 *g'iwag and 筐, variants of the same word.

(90) 13/149-150. St. 餠 餠 'cake, sweets' *tiang-g'wân, 餠 *d'wân.

餵鯉 may be a dimidiation of 餵 ; Kn-tg Ch'-Ch'u Sung
 Weih 餵鯉 * fiang-g'wâng (Ch'tz) is probably a dimidiation of 餵
 * siang, 餵 * ziang, 餵 * d'âng.

Conclusion

In the foregoing discussion of the binoms of FY, for which dialect correspondents are given, it was possible by arranging them in ninety groups, to determine their construction—reduplicative, dimidiated, or simple synonym compounds. The synonym compounds found in the standard language give little evidence for their antiquity. It is a priori not certain whether the other two groups are new constructions or not. In general, dimidiation binoms are old, but it is hard to establish that definitely since the practice of dimidiation may have been continued for a long time. Similarly, reduplication could have been applied at any time. But, if the binoms are attested in early literature or in presumably archaizing dialects, they are old word forms. But again, this criterion is not certain.

Some binoms seem easily analyzable because the scribes happened to have found or chosen a graph that suggested a fitting semantic content; yet they may go back to an old phase. If such a "semantically clear" graph had not been used, we would normally consider the word as unanalyzable and consequently as old. The comparison between the dialect forms and early text usage can provide a basis for distinguishing old and new constructions.

A binom ab with variants phonetically comparable, and the parts of which are found as separate words in the dialects, can be considered a later formation. If among dialects and standard language we have a binom ab, but also monosyllabic words with clusters explaining the sequence ab, or its inversion ba, it is probable that the binom is a new formation.

Some of the binoms mentioned in a group may not be etymologically related, but may have been subject to confusion and contamination through semantic and phonetic similarity.

Among the one hundred sixty-one binoms of dialectal origin in FY listed above, there were one hundred seven old and fifty-four new formations, but among the eighty-eight of the standard language, there were thirty-three old and fifty-five new formations. As is natural, the archaic forms are found in the dialects more frequently than in the standard language.

RECONSTRUCTION OF PRE-ARCHAIC CHINESE ON THE BASIS OF THE FANG YEN DIALECTS

Method

In the conclusion of Part I it was stated that the oldest level of reconstruction which our methods have reached is generally speaking Early Han and Middle Han. In exceptional cases, and only indirectly, where some special sound descriptions are found in the SW analyses or definitions of a given graph, can we expect to obtain some fragmentary information on Late Chou. The language of the Chou period in general can be given the name of Pre-ArC. (Cf. supra, p. 53 ff.)

Moreover, all the reconstructions which are based on the Hsh connections of the graphs, or the Chch, or the paronomastic definitions in SW and SM, the Tj indications and the rhymes, remain essentially reconstructions of readings of characters. In the preceding pages of this chapter, the investigations of the binoms in relation to the monosyllabic words and of their different ways of development, their possible origin and antiquity, have brought new important aspects. The fact that we could list binoms of all sorts as parallel and corresponding word forms to the monosyllabic words, that can be shown either to be variations of the same word stem as the binomial form or simply cognates to it, has raised our reconstructions derived from these comparisons between binoms and monosyllables, from essentially readings of graphs to reconstructions of words. Yet there, too, our study was mainly one regarding the language of Han and that of FY in particular.

One method to obtain some information on the Pre-ArC period of Chinese is to posit reconstructions derived from the comparisons of the different dialect words of FY and their cognates known to have existed at the same time. The premises and process are the same as for the reconstruction of any ancestral form of language obtained by comparing the dialect forms of a word, or the word forms in different languages that are supposed to have developed from one and the same ancestral language. The reconstruction of a Pre-ArC system starting from the Han time dialect information is a hypothetical, yet tempting approach, and not without entirely new and interesting results, which, of course, must be evaluated according to the premises, the process of reconstruction and the value of the actual phonetic reconstructions which are being compared.

The necessary conditions for such a study on the FY words will be:
 (a) the dialectal words have an ArC reconstruction and a semantic con-

tent which are of such a nature that they can be safely considered as related words or variations of the same stem. As to the meaning, if it appears not to be exactly the same in all the words compared, at least it must be possible to explain their particular development, and reduce them to the same original semantic content.³⁵ (b) The dialect words must not have been subject to confusions, attractions, or contaminations with other words, shifts and deviations due to etymologizing tendencies of speakers or writers, and other factors influencing the 'normal' development of these words.³⁶ In such cases, it must first be possible to eliminate to some extent the secondary changes which have occurred.

It is necessary to stress again, at this point, that though the words with which we will deal are surely dialect forms of the same time, they are reconstructed in a way which is subject to many restrictions. Often the reconstructions are based on complicated procedures which rend the results disputable and very hypothetical. We may, however, be confident that the ArC reconstructions of the Han time dialect words is not too far off, as long as we deal only with words with initial and final clusters that combine no more than two elements, and remain within the frame of the monosyllabic words.

Despite these restrictions, such reconstructions of ArC are legitimate. So much the more, these reconstructions will be based on ArC elements, of which we can be more sure and not on the finer distinctions of the posited forms. Thus, taking for example, ArC words *d'iet, *led, *tl'at, whether the Hsh methods or other indications found in SW or SM allow any clusters or not for the readings of the graphs, their identification in FY as corresponding dialect words, and their partial similarity in the ArC reconstruction will allow us to reconstruct P* d'iet, P* dled, and P* tl'at. In such a reconstruction, however, it will not be possible to determine how far back the posited forms are supposed to reach in the Pre-ArC period which by definition covers the whole historical period of Chou. Only a special study of the Chou language itself will perhaps provide more points d'appui and points de repère in this problem.

It is not intended here to give a reconstruction of all the FY words, but only of some cases taken at random. If these reconstructions have some value, then, for the first time, word forms are obtained independently from the specific graphic aspect in which the Chinese words have been molded. The Pre-ArC reconstruction of the binoms of FY in their binomial forms offers new and special difficulties. Only a small number of such binoms have been considered, and the majority of the Pre-ArC reconstructions which have been attempted and are taken up below are

monosyllabic word forms. Even, in many instances the constituent parts of reduplicative binoms have been considered in isolated position so as to offer material for comparison with the other monosyllables. This fact, however, does not imply that the binoms as such did not exist in the Pre-ArC period, for the plain fact that binomial forms do appear in literature and have long been recognized is there to prove the contrary, but only that at this point of our studies such a reconstruction still remains extremely difficult to handle.

Pre-Archaic Reconstructions

Monosyllabic Words

Various forms of reconstructions can be made: (a) reconstruction formulas can be posited separately for initials, finals, and medial elements of the words, for example, -g- / -ŋ- / -r- // * -y- (Bloomfield, Language, p. 310, for some medial consonants in the Indonesian languages). (b) formulas can be posited as hypothetical original forms for a stem to explain a series of words, for example:

** BSUG: 木 muk, 宋 suong, 相 siang, 桑 sâng, 樹 ziu

** KOG: 孩 g'âg, 穀 g'uk, 穀 k'âu, 穀 k'âu, etc.

** G^WLuG: 祿, 福, 榴, 禱, 祚, 祖, 祐, 祝, 宗, 禦
(Boodberg, HJAS. vol. 2, 1937, p. 343, 350, 369).

This study consists only in grouping words, supposedly belonging to the same etymon (on the basis of FY and the ArC reconstructions), and in reconstructing a Pre-ArC form for some words in order to bring their phonetism close enough to prepare later studies concerning more detailed formulas. We will treat here not only those words which are graphically represented by one character in FY, but also those elements of binoms which can be taken separately and individually, as well as the monosyllabic reconstructions derived from binoms.

Some cases chosen at random.

(1) 3/1 'twin'

* sŭng (of 雙生), * b'liəd (of 釐孳), * d'liën (of 健子)

and * siwan, * swan (of 孿生).

P* blsung / bzliang (兩) // zbliand / bslwand ~ slmand /
bdliend ///

(2) 1/1, 3/51 'to know, to heal!'

知 * tiэг, 黨 * tang, 曉 * xiog, 哲 * tiat;治 * tiэг, 俞 * diu, 差 * ts'a, 問 * kan, 蠲 * kiwən.P* tэг / tang / ts'ag / dnxiog / diug // tiat // kan / kiwən ///
< (tý-, tk-?)

(3) 1/8-10 'to suffer!'

痛 * t'ung, 憂 * iog, 灼 * tiok, 啼 * dxiэг, 啞 * xiwän,嗟 * k'iang < /* sklang, 嗟 嚷 * k'iang-liang < /* sklang,慎 * diən < /* dýən, 暗 * iəm, 濕 * siэг, ts'iэг, dziэг,濟 * tsied, 怒 * dn'iok.P* sýəmp ~ tsyiəmp ~ dzýəmp / d'iəmb > iəm // dýən / zxiwän / tsýənd // d'iog > iog / dn'iok / dxiэг / týok / t'ung / -d'og 咄, -t'iog // sklang / sklog > kiog- ///

(4) 1/18, 6/55, 10/40 'old!'

老 * glög, 舊 * giug ~ giog, 考 * k'ög, 俊 * siög ~ sug< /* b-, 艾 * ngäd, 公 * skung, 翁 * z'ung, 父 * b'iwo,父老 * b'iwo-lög, 耆 革 * ku-kək (-kiək), 乾 都 * kan-to(g'ian-), 械 颯 * keg-sэг, 耜 * d'iet, 眉 * miэд, 黎* bliэд, 耆 鮒 * ku-t'эг.P* mləd / bliэд / bdlet > d'iet / mgäd > ngäd (?) // b'iwog / bgwlög > b'iwo-lög / bslög ~ bslug // glög / kl'ög / g'lug ~ g'lög / ktýэг / ksэг / klək / kntog ~ g'ntog // skung / z'ung ///

(5) 1/20, 7/11 'sincere, truthful!'

信 * siən, 允 * ziwən, 恂 * siwən, 展 * tian, 惇 * twən, 諒* liang < /* lý-, 訖 * ziəm, 摺 * miök < /* m'lök.P* m'lök / blýank // sýən / zýwən / sýwən / týan / tgwən // zýəm(g)?? ///

(6) 1/32, 7/9 'to exert!'

勉 * mian, 勉 怒 * mian-dn'og, 釗 * kiog ~ tiog, 薄 * b'äk,薄 奴 * b'äk-dn'og, 勗 釗 * mian-kiog (-tiog). 勗 茲/* bxiuk-tsiэг, 食 閩 /* d'iək-dýəm (dziэг-), 憇 憇 * siung-
diung, 倂 莫 * miog (mug)-mäg (-k).P* bxiuk- / b'äk / mýog ~ m'ug ~ mäg ~ mâk // dn'og / d'iək-
dziэг / -tsiэг / týog ~ tkiog / dziung // d'iəmk ~ dziəmg / -dýəm ///

(7) 2/6, 8, 9 'small!'

細 * sied < /* bs-, 少 * siog < /* bs-, 杪 * miog < /* mzog,恍 swi < /* siwəd, swâ < /* swâd, şwa < siwad, 私 /* siэд,蔑 * miat < /* mzat, 微 /* mýwəd, 靡 * mwia < /* mýwad,嬰 * g'iwэг < /* zg'-, 猥 * diэг, 笙 * səng, 綾 * liəng< /* dl-, 擎 * dz'iog, 揜 * sem, 織 * siam, 殫 * iap,殫 碟 * iap-diap, 蓂 * tsung, 策 * ts'ək.P* s'əmb / sýamb / d'iəmp // bsiog / mzog / bts'ək / bdsəng
// btsung // bsied / bsiэд / bsiwəd ~ bswâd ~ bsiwad / mzat
/ mýwəd / mýwad // diэг > diэг / dliəng / zglwэг / dz'lög //

(8) 2/12, 13 'uneven, unequal!'

奇 * kia < /* tk-, 倚 * ia < /* d'ia, 踦 * k'ia < /* tk'-, 蹇* kian, kiän, 踰, 踰 * t'äk < /* t'ök.P* tkia / d'ia / tkia // tkian // týök ///

(9) 1/16, 2/16, 3/24 'to kill!'

殘 * dz'än, 殺 * sat, säd, 散 * sän < /* bs-, 虔 * g'ian </* bglan, 欺 * k'əm ~ k'əp < /* skəmb ~ skəmp, 釗 * liög< /* dliög, 憚 * d'ləm.P* bsänd / bsant / bdz'änd // bglan // bdliög // bskəmb ~ -p / bd'ləm ///

(10) 6/33, 34 'to divide, to separate!'

散 * sän < /* bs-, 分 * b'iwən, 分別 * b'iwən-b'iat (-piät),斷 * siэг < /* sýэг, 嬰 /* bxiən ~ mýwən, 改 * b'iэд </* bziэд, 披 * p'ia < /* pgwia, 離 /* dliä-, 釗 liei <

* dlegd(?), 參 * ts'əm, ts'iəm, siəm.

P* bsand / bziənd / bziwənd > b'iwən // bxiənd ~ m'wənd /
bdlegd / pgwiad / pyät? // ts'əm ~ ts'iəm ~ siəm (< -mg) /
s'yəg ///

(11) 6/16, 21, 24 'far, distant.'

遠 * giwän, 越 * giwät, g'wät, 遠 * diog, 劍 * kiog, tiog,
超 * tiog, 仵 * miwəd < /* mlw-, 貌 māk < /* dmok.

P* giwänd / giwänt / g'wânt < gm-? // mlwəd // dmok ///
tkiog ~ t'ýog / t'ýiog / d'ýog //

(12) 6/5, 2/18, 10/23 'to be ashamed.'

慙 * dz'âm, 慙 𪛗 * dz'âm-siəp, 愧 * t'ien < /* t'lem?,
恥 * mwat, 悔 * mwəg < /* mg-, 懼 * niēt < /* dniēt,
愧 * bd'nied, 報 * d'nän, 忸 * d'niuk, 恥 * tn'iəg,
感 * tsiuk, 咨 * tsnied, 慙 * zniuk ~ zniək.

P* dz'âm / s'ýəmp > siəp / t'lemb? // zniək ~ zniuk / tn'iəg /
d'niuk / < b- // mgwəg // mgwat // bd'nied / btsnyəd /
bdnyəd / bdn'ýet / bd'nand //

(13) 3/12 'to poison, poisoned, drugged.'

毒 d'uok < /* dgmok (ku wen 毒 * piuk, b'iük), 毒 𪛗
/* dgmok-mwän (-mwən), 痢 * d'lât < -nt, 癆 * lôg <
/* d'lôg, 慙 * -miwən < /* m'wən, 頓 * d'wən ~ twən, 氏
* tiəd, 惆 t'iôg, 眠 * miən < /* m'wən, 冥 * mien.

P* m'wən / m'wən / m'wən > mien // mgwän ~ mgwən // bdlôg /
dgmok ~ bd'ôk / btlôg > t'lôg > t'iôg // d'lânt / tlənd > tiəd /
dl'wən ~ ltwən > d'wən ~ twən ///

(14) 6/11, 53, 7/18 'to be angry, to revile.'

怒 * d'nog, 馮 b'iəng, 𪛗 g'ad, 苛 * g'â < /* dg'â, 戲
* xia, 憚 * d'ân < /* dg'ân, 𪛗 * zg'iwəd-, 盈 * iəng,
呵 * dxâ, 叱 * t'iēt; 12/53 漢 * xan < /* dnxan, 赫 * xāk
< /* dxāk.

P* d'nog // dg'â / dxâ / dnxan / zg'iwənd / t'yiēt // b'iəng /
b'iəng / bg'ad / bdxia ///

(15) 6/11, 20 'to look.'

𪛗 * mian, 𪛗 * t'ien, 轉 * tiwan < /* t'ýwan, 𪛗 * 'an <
/* 'and, 𪛗 * lâk < /* lyâk; 𪛗 * d'iəd ~ t'iəd, 視 * diəd,
𪛗 * dxiənd, 𪛗 * g'an (門 𪛗 pian), 𪛗 * kwän <
/* tk-, 𪛗 * d'ung /* ld'-.

P* m'yan / p'yan / bg'an // bld'ung? / lyâk < blyâk // d'ýiəd,
t'ýiəd, d'ýəd / dxiənd / d'and? / tkwän / t'ýwan / t'ýien ///

(16) 1/13, 14, 22, 29, 3/18, 7/13. 'to go, to reach, to come.'

往 * giwang, 嫁 * kâ, 假 * kâ, 會 * g'wäd < /* -əb, 徂
kek < /* lkāk, 𪛗 * k'iēg, g'iēg, 來 * ngləg (行來 * g'äng-
ləg), 儀 * zngia, 懷 * g'wəd < /* dg'wəb, 𪛗 * k'â < /* skāg
- kai < /* skēg; 𪛗 * diəd, 徂 dz'o, 𪛗 * tiek, siək, tiək,
抵 * tiəd, 𪛗 * d'iəd, 登 * təng, 𪛗 * tiēt, 𪛗 * tsiəd,
𪛗 * dniap, 𪛗 * tiam < /* t'ýam, 及 * g'iap < /* zgiap,
迨 * d'æg, 𪛗 * d'əp < /* dgəp, 𪛗 * diəd, 𪛗 * g'ât.

P* glwang / ngləg // lkāg / tkāg / lkāk / kieg ~ dgiēg / skāg
~ skēg // zngia / dz'og / t'ýək ~ s'ýək / d'ýəg // tsywəd //
diəd / d'iəd / tiēt / tsiəd / dlid > lied; all < -b? // dg'abt
> g'ât // dg'wəb / dg'wəb / zgiap / dgəp / nd'ýap > dniap //
t'ýam // t'əmg > təng? ///

(17) 1/4, 2/30, 3/49 'left over, remainder.'

𪛗 * ngat, 𪛗 * ngät < /* zngânt, 𪛗 * ngiat < /* zngiat,
烈 * liat < /* dl'ýat - dnglat, 子 * kiät, 𪛗 * diēn < /* dlēnd
~ d'ýwənd < /* bd-, 𪛗 * dz'iēn < /* dz'ýlēnd < bd-, 𪛗
* diəd, 𪛗 * p'uk-səng < /* pksəng, 𪛗 * p'uk-siēg <
/* pksieg, 𪛗 * siēg, 𪛗 * d'ieng ~ t'ieng < /* d'ý- ~ t'ý-.
P* znglat / dnglat / d'ýəd / d'ləd // zngânt / d'lend // bs'ýəg >

siěg / bdyěng ~ btyeng / pksěng / pkslěg // bdywend /
bzýlend < -g? ///

(18) 1/19, 6/39 'long.'

長 * d'iang, 充 * t'îông, 永長 * g'iwǎng-d'iang, 鬲虫 * diông,
脩 * siog, 迨 * dian, 弋 * siên, 呂 * liwo < /* lýwog,
尋 * dziəm.

P* dglwǎng > g'iwǎng / dlýwog / t'lông / dlông / slog //
sýen / dýan // bd'lang > d'lang // bdziəm ///

(19) 2/217, 3/11, 10 'thorn, prick.'

策, 刺 * ts'ieğ, ts'ieğ, 棘 * kiæk < /* bk-, 慄 ts'ëk, 梗
* kǎng < /* bk-, 壯 * tsiang, 歲 /* skiwad, 茨 * g'iam, 蓂
* giëk ~ giwëk ~ giwag, 雞 * kieg < /* tk-, 頭 * d'u <
/* dyug-, 刺 * d'lât, 茨 /* dz'led ~ dzn'ləd.

P* bkǎng / bkiengk > bkiæk // sklmad // dyug / dgiëk ~ dgiwëk
~ dgiwag / kieg // dg'iam // d'lât / dz'led / dzn'ləd ///

(20) 1/30, 6/19, 10/17, 47 'to take, to grasp.'

取 * ts'iu < /* bts'iu; 求 * g'îog, 攫 * kian, 挺 * dieng,
t'ieŋ < /* dý-, t'ý-, 擗 * dz'iam, 掩 * iam, 撫 * tiäk,
狙 * tsâ, dziâ, tsiâ, 狙 * ts'io, 攬 * nâ < /* dznâ, 略
/* lýak, 搜 * siôg < /* bs- ~ sug < /* bsug, 索 * suk <
/* bsuk, 纂 * tswân < /* tsmân.

P* bdziəm / bz'iam // bts'iu; / bsiôg / bsug / bsuk // blýak //
btýěng ~ bdyeng // tsmayn // t'ýäk / tsâg / dzýäg / tsýog //
dzn'äg / zgiog // tkian ///

(21) 1/2, 3/14, 10/25, 33 'clever, shrewd.'

慧 /* zg'iwəd ~ dg'iwəd, 諍 t'wâ < /* tywâ, 蹶 * kiwät,
g'iwät, kiwad < /* tk-, 粟 * tsiog, 媧 * g'wat, g'wät, 獮
* kwäd < /* -b, 逮 * dz'iap, 蕪 * gwia < /* bgwia, 滑 * kwət,
猾 * g'wat, * g'wət, 謾 * mwân, 獯 mai < /* lm'eg, k'uai

< /* lkmæg, li < /* blýөг, 黠 * g'at, 鬼 * kiwəd < /* dk-,
欺 * skiæg < /* tskiæg, 姪 * d'ieŋ < /* d'yieng, * d'ien
< /* dyien, 膠 k'ao < /* k'og < /* blkog, nau < /* nog <
/* b'nog, yau < /* g'og < /* bng'og, 膠 miəu < /* mliôg <
/* mlýôg, 度 * g'ian < /* bg'lan, 懼 lieg, nieg < /* nlieg,
nleg, 眠姪 * miən-d'ieŋ < /* md'ieŋ, 脈蛄 * mwək-
diek, 脈蛄 * mwək-tëk < /* mdiek, mtëk, 嚙屎 /* mýæk-
tnýөг, 無賴 * miwo-lâd < /* mýwog-dlâd < /* mglând,
譚謾 * t'ân-mwân ~ mwân-t'ân < /* mt'ân, 央亡 * iwang-
miwang < /* md'lang, 讀 g'wəd < /* dg'-, 詒 * diæg, d'æg,
t'æg < /* dýөг, dyөг, t'æg, 謬欺 /* mlýog-k'ieğ < /* mklæg?,
詐 tsag, 權詐 g'iwân-tsag, 便惠 b'ian-dz'iap <
/* bdz'iap.

P* md'ieŋ / bdyieŋ / md'lang / mdiek ~ mtëk // mklæg /
blkog ~ b'nog ~ bng'og / mlýôg / blýөг ~ lm'eg ~ lkmæg //
mýæk / btnýөг / bnleg ~ bnlieg // bdz'iap / kmâb > kw- //
mt'ân / mglând / bg'lan / bdyieŋ / mgwân // bgwia //
bg'wât ~ bg'wat ~ kmət / bg'at // tskiæg / tsiog / tsag /
dýөг ~ dyөг ~ t'æg / dg'wəd / dkiwəd / zg'iwəd ~ dg'iwəd /
tkiwät ~ dgiwät ~ tkiwad ///

(22) 1/12, 21, 25, 2/2, 36 'big.'

廓 * k'wâk, 廣 * kwâŋ, 夥 g'wai < /* lg'wəd ~ g'wa <
/* lg'wad, 訖 xiwo, 京 * kläng, 巨 * kiwo ~ g'io, 寇 * k'u,
夏 * g'â, 蝦 * kâ, 豐 * p'iuŋ, 膜 * mâg, 懣 * miwo <
/* mýug, 摸 * mâg, 蒙 * müŋ, 厖 * mâŋ, 毋 /* -mýug,
般 * pwân ~ b'wân, 墳 b'iwân-, 紛 p'iwân, 大 /* t'âd ~ d'âd, 杼
* d'io ~ d'io, 弩 /* d'nog, 碩 diäk, 戎 * zniŋg, 濯 * d'ök
~ d'ög, 繹 * -diäk, 將 * tsiang ~ ts'iang, 劍 * kiwam,
僉 /* tsýam, 柳 * tiəm < /* ltýəm, 葵 * siəm-,

敦 * d'wən ~ twən, 介 * kâd < /* bk-, 綏 /* sniwəd ~ sniwäd
~ zwxia < /* zxiwad ~ tn'wäd, 羞 /* sniôg, 襪 /* dg'wâ-.

P* k'mâk / k'mâng / bkläng / klmog ~ bglog // m'âg / km'ang /
m'üng / m'yug / m'ywog // pzung // pgwân ~ bywân / byiwän /
pyiwän // bkâd // dgiwog ~ dxiwog / d'yiog ~ d'yiog / d'yäk /
dyök ~ dyög // sn'yog / sn'yôg / zn'yong / ts'yang ~ ts'yang //
tkiwäm / ts'yam / lt'yəm / lt'yəm / s'yəm // sn'ywəd / sn'ywäd /
tn'ywäd // lg'wəd ~ lg'wäd / dg'wäd / dk'äd / tyäd ~ dyäd ///

(23) 2/16, 32, 3/13, 6/22 'fast, rapid.'

疾 * dz'iet < /* dz'iet, 速 * suk < /* bs-, 逞 * t'liëng <
/* tyiëng, 快 * k'wad < /* k'm-, 曉 * xioq < /* snxiog, 苦
k'o < /* dkog, 校 * g'ög < /* bg-, 了 * liog < /* dliog, 汨
* kwät ~ g'wät < /* sk- ~ zg'-, 遙 * diog < /* nd'yog.

P* dz'iet / skwät ~ zg'wät / sxiwand 恒 (Kuo) // snxiog /
d'liog / ndyog / dk'og ~ tkog // kmad // bg'ög / bsuk /
btyiëng ///

(24) 1/6, 7, 9, 17, 7/26, 10/7 'to pity.'

哀, 愛 * 'äd, 貴 * k'iwəd < /* tk-, 憐 /* dzliëng(g), 矜
* g'ien, kiäng < /* dgiem, tkiäm, 思 * siäg, 怒 /* d'niok, 悼
* d'og < /* dn'og, 傷 * siang, 悴 dz'iwəd, 懷 * liëng <
/* dliäng, 愁 * liäg < /* bl'yäg, 憂 * iôg < /* d'iôg, 職
-tiäk, 寫 * -siäk, 無 /* m'yug, 無 /* m'yog ~ bxwog, 牟
miôg, 唾 kiäk ~ kiäg ~ kiäng, 掩 * iwäm.

P* d'äd / tkiwəd / dz'ywəd / dz'lyënd // tiäk / siäk / siäg /
siang / dliäng / dzliëng // dn'og / dn'iok // d'iwam / tkiäm /
dgiäm / tkjäv > kiäg // bxwog ~ m'yog / m'yôg / bl'yäg ///

(25) 2/4 'lovely.'

容 iwong < /* dz'yung ~ z'yuk, 奕 * ziäk < /* z'yäk, 傑 * diap,
xiap, xiäp < /* d'yap, dxiap.

P* dz'yumb > dz'yung / dxap ~ dyap / z'yuk / z'yäk.

(26) 10/22 'to lift up, to rise up.'

舉 * kio < /* skio, 翥 * tio < /* lt'yo, 攀 iwo < /* zio,
軒 * xiän, 騫 * k'ian.

P* skio / lt'yo / z'yo // zxiän / skian ///

(27) 3/46 'country bumpkin.'

儻 -d'æg, 靸 * b'æk < /* bzæk, 辟 * piek, b'iëk, b'iek <
/* p'zæk, b'ziëk, b'ziäk, 僕 * b'uk, b'ök, p'uk.

P* bd'æg / bzæk / p'zæk ~ b'zæk ~ b'ziäk / bzuk ~ bzök ~ pzuk ///

(28) 5/29 'flail.'

斂 /* ts'ylam, 攝 sniap-, 芟 * -diu < /* bd- (芟 * sam <
/* bsam), 梧 p'æg < /* pzæg, 梯 * piwät, 梲 * b'wät,
秧 * iäng < /* d'iäng, 度 * d'äg, d'äk, 連加 lian-ka <
/* d'liängk, 羅加 liä-ka < /* dliäk, 加杖 * ka-diäng <
/* kd'iäng, 槲杖 * kwa-diäng < /* k'w'diäng.

P* ts'ylamb / s'nlamp / lsamb // d'liängk / d'lang / ld'äg ~
ld'äk / kd'iäng > dk- / dkwiäng > kwd- // bd'yug ~ bsamb /
pzæg // pziwägt / b'wägt / pgwägt ///

(29) 10/15 'to revile.'

詆 * tük, 責 * tsëk, 愬 * sâg, sëk, 譖 tsiam.

P* tük / twsëk / dsâg / dsëk // ts'yäm ///

(30) 3/11, 6/24, 25, 12/8 'couple, pair.'

耦 * ngu, ngiu < /* mgiug, 抱 * b'ôg < /* bzôg, 媿 * p'iwän,
p'iuq, 妯 * liäg < /* bl'yäg, 匹 * p'iët < /* pz'yënt, 特 d'æk
< /* bd'æk, 乘 d'iäng, 雙 s'ung.

P* p'zywand / p'zyënt // mgiug ~ bngug / pz'yug / bzôg / bd'æk /
bl'yäg // bd'yäng / bs'ung ///

Words from Fang yen, chapter 5.—The preceding cases were chosen from FY passages that are supplementary to each other. Here follows an attempt to apply this method to all the words of one chapter of FY, namely, chapter 5.

(1) 5/1, 2 'cauldron.'

鑊 * piuk, 鑊 * tien, t'ien, 鑊 * piëng, 鑊 /* dg'ia ~ dngia,

鑊 ləu < /* zlyug, 鑊 /* lkək ~ lyək, 鑊 * b'iwo.

P* bgiwog / p'yuk ~ pywək / p'yëng // dngia ~ dg'ia / tlend / t'lend // zlyug / lkək ~ lyək // (all from bd-, bt-, bz-, bl-?)

(2) 5/3 'steaming pot.'

甌 * tsiəng, 甌 * ngian ~ ngiän < /* zngland, 甌 * dziəm,

dz'iam < /* dz'yəmb ~ dzyiəmb, 甌 * dz'äk-liog < /* dz'liog ~ dz'l'äk, 甌 * tia < /* tiand (Kuo).

P* tsyëng / dz'l'äk ~ dz'liog / dz'yəmb ~ dzyiəmb // tlangm ///

(3) 5/4, 5, 6, 13/147 'cup, pot.'

盃 * giwo < /* bzgiwog, 盃 /* wand, 盃 * g'iwan < /* bgiwan(k),

盃 * k'iwan < /* bkiwan(k), 盃 * kâ < /* dkâ, 盃 * d'ög,

盃 * diog- ~ t'iog-, 盃 * -diwad, 盃 /* znga, 盃 * xa

< /* dxa, 盃 * diang, 盃 * tsän, 盃 * tsän < /* tsän,

盃 * tsiën < /* btsyën(k), 盃 * g'iog, 盃 * pwæg, 盃

* g'em < /* dg'emb, 盃 p'iwäm < /* pzgwämb, 盃 * g'em

< /* bg'emb, 盃 * mâ, mwâ < /* gmâ, mgwâ, 盃 liei <

/* dlýed, lwâ < /* dlgwâd, ljie < /* dlyied, 盃 * tân, 盃

* xia < /* bzxia, 盃 b'iog < /* bzïog, 盃 * g'wo < /* bzgwo.

P* pgwæg / bzýog / bzgiwog / bzgwog // bzxia // bgiwan(k) / bkiwan(k) / btsyenk // bg'emb / pzgwämb / bdgämb // btân / bldýed, blgwâd, bldyiäd / tsyënd / btsänd / b'ntsänd / btsyënd / bdywad // mând > wând / mgwâd // dyang / dýog ~ týog // zngâ / dkâ /// < (b-?)

(4) 5/8, 20 'basket for dishes.'

居 * -kio < /* klo, 箕 * ku < /* tkug, 竹箕 * tiök-ku <

tkug, týök, 箕居 * dz'iang-kio < ## dzñkiog, 箕 * kəm

< /* lkəmb, 箕 kōng < /* lkong.

P* tkug / dklog / týök / dzñklog // dlkəmb / dlkomb > -ng /

(5) 5/9 'bucket.'

箸 * dýo, 甬 * d'ung, 甬 siog, 甬 diëng, 甬 * t'ung,

甬 * sung.

P* dýog / dsýog // dýëng / t'ung / d'ung / dsung ///

(6) 5/10, 11, 12, 13, 14, 15 'jar.'

甌 * ãng < /* b'ëng, 甌 /* mýug, 甌 * piög, 甌 * b'æg-

glu < ## bglug, 甌 * ãng < /* bz'ëng, 甌 * d'iang <

/* bd'lang, 甌 * u < /* bz'ug, 甌 * ngiæg < /* dniæg,

甌 * d'iëng < /* -nk, 甌 * diog < /* dn-, 甌 * dz'üng,

甌 * ung < /* z'ung, 甌 * diu-, 甌 * ziu < /* bzïug,

甌 * d'wia < /* dgwia, 甌 * ung < /* d-mb?, 甌

* təm, 甌 * tām, təm, 甌 * pien, 甌 * d'ieg.

P* b'ëng / bz'ëng / bdlang // pýen / bgiwän // btəm / btâm / bd'umb // bzýug / bzug / pyög / bglug / mýug // z'ung / dzýug // dnýog / dniæg / dgiwag / dýug / dyieg ///

(7) 5/17, 18 'decanter.'

甬 * lkək, 甬 * lâ, 注甬 * tiu-k'iæg < ## tkieg.

P* tklæg / zlkək / zgläg ///

(8) 5/19 'sieve.'

(炊) 箕 ## tsklæg, 筲 * siök, 箕 * sug, 筲 * dziwan < /* -nd.

P* tsklæg / syök / lsug // dzýwand ///

(9) 5/21, 2/29 'screen.'

扇 * śian, 扇扉 * śian-piwəd < /* -pʒ-, 箒 śiap, śap, 筭 * tsiap, śap, 醫 * iei < /* d'ied, 幢 * d'ung < /* ld-, 幃 * d'ôg.

P* śiap - sýamp - śýamp - tsýamp / śýamb > śian // d'iab // ld'ung / ld'og ///

(10) 5/22 'pestle, mill.'

槌 * t'ian < /* t'ýand, 石磑 * ngwəd < /* mgwəd, 石妻 * ts'wəd, 碓 * twəd < /* tgwəd. SW 磑礮 * ngwəd-mgwâ.

P* tsgwəd / tgwəd / t'ýand // mgwəd / mgwâd ///

(11) 5/23 'well rope.'

縴 * kiwet, giwet, 纜 * kǎng < /* bkǎng, 絡 lâk < /* lyâk.

P* bkǎng / blgâk / bg'weg (SW 纜 * g'iweg - g'wěg) // tkiwet / zgiwet ///

(12) 5/24 'horse trough.'

櫪 * liek (SW 櫪櫪 * liek-sieg; 押指 * b'ied-tiəd,

檨櫪 * b'ied-sieg), 栲 * śiök - śuk, 阜 * dz'og.

P* bglik / bl'iæg > d - blsieg - bgsieg / bslök / blsuk / bdzyög ///

(13) 5/25 'sack.'

索 * t'âk, 囊 * dnâng, 帳 * tian < /* -ng, 筩 * -tu <

/* tug, 襖 * iwǎmb- - * iǎmb-, 幞 ləu < * glu - /* lyug,

liu < /* lyug; SW 襖 * dgwemb.

P* dnâng / t'ýang - tn'ýang / t'âk / tug / dl'ug // d'iwǎmb- - d'iwǎmp / dgwemb ///

(14) 5/26 'hook.'

鈎 * ku < /* bkug - bskug, 鈎格 * ku-lkâk, 鹿角 luk-kək,

金徽 * miwəd < /* mýwəd.

P* mýwəd // bkug - bskug / blkug / blkâk ///

(15) 5/27 'plow.'

耜 * ts'âp < /* tsyâp, 耨 * t'iog < /* bt'ýog; 鍤 * g'wâ < /* -b,

鍤 * giwəd < /* zgiwəd; 耨 * ts'iog, 耨 * ts'âp <

/* tsyâmp, 耨 * sôg, 耨 * pwən, 耨 * b'ien - b'tien, 耨

* p'iet, 耨 * liæg < /* bdl'ýag, 鍤 * bzgiug.

P* bt'ýog / bsôg / bzgiug / bdl'ýag / b'zieng // bdgwâb //

btsyâp / btsyâmp // pgwend / b'ziend / p'zient / bzgiwəd ///

(16) 5/28 'rake.'

耙 b'a - b'wai < /* -d?, 渠犁 * g'io-nâ < /* -dn'âg <

/* gdnâg, 渠疏 g'io-śio < /* -s'ýog < /* gsiog, SM 耙:播

* pwâ < /* pgwând.

P* byad - bgwad / pgwând // bgnâg / bsyog ///

(17) 5/31, 32, 34 'mat.'

薄 * b'âk, 曲 * k'iuik, 麩 * k'iök < /* tkiök, 蓬薄 * b'ung-

b'âk < -mb-, 撲曲 * p'uk-k'iuik < /* pkiuk, 僕 * p'âk, 簞

* d'iəm < /* dgiem, 筴 * sěng, 薪 * t'iad < /* b'tiad, 簞

* piwǎd (Kuo), 蓋 * g'âp < /* bg'âmp, 椶 * diam < /* d'ýam,

簞 * g'iwǎg, 除 * d'io < /* -g.

P* bg'âmp / bgiemb / bd'ýamb // bt'ýab > -d / p'ýwǎb > -d //

b'âk / p'âk / p'uk / b'ung / pkiuk // bsěng // tkiök / d'yiog / tkiuk / dg'iwag ///

(18) 5/30 'sickle.'

刈鈎 * ngiad-ku, 鈎 * t'io < /* t'ýog; 鈎 * kwâ < /* lkwâ,

鎌 * lyam, 鈎 * k'iet < /* skiat.

P* skug / t'ýog / lkwâg // lyam // skiat / zngiad ///

(19) 5/32 'stake, peg.'

椶 * g'iwǎt, SW 弋 * d'iek < /* bdiäk, 椶 * d'wân, 椶

* k'at-d'iek (Kuo).

P* dg'iwǎnt / dk'at / dgwând // bd'wagn / bd'ýek ///

(20) 5/33 (a) 'support of silkworm mat.'

槌 * d'iwäd ~ d'iwäd, 样 * zýang, 植 * diäk, d'iaeg, 持 * t'ek.

P* | dgiwäd ~ dgiwäd / dzýang / dyëk ~ dyëg / t'ëk ///

(b) 'horizontal support.'

槌 * d'iam ~ d'iang, 带 * tag, 持 t'ek. 綫 * zlyam,

纜 * siwan < /* sýwan, 環 * g'iwän, 環 * g'wan <

/* dg'wan, 筭 * siwän < /* sýwän.

P* dýäm / zlyam // sýwän / sýwan / dg'iwän / dg'wan ///

(21) 5/36 (a) 'bed.'

牀 * dz'iang, 簧 * tsëk, 第 * tsiäd.

(b) 'support of bed.'

樹 * diu, 杠 kung, 趙 * d'iog ~ d'iog, 梓 siën.

(c) 'board.'

板 * pwan, 牒 d'iap, 扁 pien.

P* dz'iang / tsëk // tsiäd // sýëng / dkung / dýug / dgiog ///
pgwan / pýen // dgiap < bgiap? ///

(22) 5/17, 37 'table.'

俎凡 tsiö-kied < /* tskied, 社 siëg, 程 * diëng, 施 * dia-,

案 ân, 檣 * siag, 虛 * k'io ~ xio, 宜 * ngia < /* dngia.

P* tsiog / siëg / siäg // dýëng // k'log ~ xlog // dngia / dia /
d'ân / tskied //

(23) 5/40 'bolt.'

鑰 * diok, 鍵 * g'ian, 竹管 * tiok-kwân < /* tkwân.

P* g'lan / tkwan // dlok ///

(24) 5/41 'chessboard.'

博 * p'äk, 敵 * piäd, 毒 -d'uok < /* d'mok, 妃專 * iwan-

tiwan < /* t'iwan, 箭 * tsian-, 裏 * liæg < /* bdläg,

博 * ts'iwan-, 璇 * -dziwan, 基 /* skiæg, 棋 * zg'iaeg.

P* dmbk / dpäk / dpiæg > piäd // bdlyæg // t'iwan / tsyan /
tsyiwan / dzýwan // skiæg / zg'iaeg ///

Binomial Expressions

Striking examples in this paragraph will naturally be much more rare. Once a word is represented by two graphs, the script immediately leads the semantic analysis of a word on new roads, and it is not always possible to trace the binom back to its original form.

1. FY 3/46 compares the binom 田儻 * d'ien-d'æg, a dialect word of N-Ch'u with st. 庸賤, 'lowly slave' (cf. FY 3/5 庸 ~ 庸 and other depreciatory names for 'slave' with 儻 * d'æg < /* bd'æg and other words of N-Ch'u 嚴 /* bzæk (read by Kuo as 𪔐 * b'æk < /* bzæk ~ bzæk ~ p'zæk ~ p'yæk; cf. The Study of Chuan chu in Shuo wen, note 14), 辟 /* p'zæk ~ b'ziëk ~ bziëk. 辟 is also a standard word, a depreciatory name for 商人, and explained by Kuo as 僻僻 (* p'iaek, read like 孽 * p'ek), 便黠貌也: "Having the external appearance of deceitful cleverness"; this explanation suggests that 商人 was probably understood as 'merchant,' though Liu Chieh 劉節 in his article 古代成語分析 舉例 Ku-tai ch'eng-yü fen-hsi chū-li, Specimens of Analysis of Chinese Compounds, (LNHP, 10, 1. 1949, pp. 85, 87-88) understands it as 'men of Shang-Yin' i.e., the remnants of the Shang people, reduced to slaves and occupying the lower levels of society (merchants?). Kuo's explanation of 田儻, 林儻, 驚鈍貌. 或曰僕臣儻. 亦至賤之號 "External appearance of a 'lin-t'ai,' useless and blunt (rough, coarse, inferior); some say 'the servant [makes] the helper [his servant]'; this is also an expression for 'the lowest kind of people,'" refers to Tso chuan, Chao, 7th y., fu 1 (Ch. Cl. viii, p. 616, col. 1). Liu Chieh compares 儻 with 陪儻 (Tso, Chao 7, fu 1) * b'wæg-d'æg < /* bd'æg 'servant,' which he takes to be a variant of 僕儻 * b'uk- (b'ök-, p'uk-)d'æg < /* pdæg, bd'æg, and 嚴儻 * b'æk-d'æg < /* bd'æg. All these variations in binomial form confirm the reconstruction 儻 P* bd'æg, made solely on the comparison of the FY words (cf. supra, p. 151). But Liu Chieh goes so far as to relate 僕 and 僕儻 to another group of words meaning 'to offer respectfully' (like a slave), such as 美對, 對揚 etc. This question is too involved to be so summarily treated as he does. He also, here, however, with good probability, related 儻 and 田儻 to the words of FY 2/10: 臺敵 (Kn-hs and Ch'Chin word for 凡力同者

'all that [do work] with united strength = in pairs'), 臺 (Tg-Ch'i, h-T word, used alone) and standard 匹 * p'iet < /* p'z'iet 'couple of field working peasants' (also written 匹, and mistakenly copied as 匹).

Maybe the Tg-Ch'i H-T word 臺 was still pronounced /* bd'æg, though in 臺敵 * d'æg-d'iek, the initial labial of 臺 had probably already been lost, and the word simply reduplicated. But then 臺 must also be related with FY 2/11, which opposes Ching-Wu Chiang-Hu 抱媯 and Sung-Ying 媯 to standard 耦 * ngu < /* mgug 'two ploughers working together, a pair.' 媯 * p'iwān was also read according to Kuo like 赴, and was used as Chch for 孚 by Ts'ai Yung 蔡邕 (Po-chieh 伯喈; 133-192 A.D.), so that alongside the reading * p'iwān we have also * p'iuŋ < /* p'zūŋ and * p'og < /* p'zōŋ. Then, 抱媯 * b'ōŋ-p'iwān, reduplicative binom with variant finals -g ~ -n, * b'ōŋ-p'og (-p'iuŋ), was probably a recent formation. (Cf. *supra*, p.127).

But a binom which cannot be explained by any literary text is the one given by Kuo: 林儻 * ləm-d'æg > /* d'ləm-bd'æg. This binom cannot be explained by comparing it to 儻 /* bd'æg alone, but to the compound 田儻 /* d'len-bd'æg, which through sandhi became /* d'lem-bd'æg. In the spoken language, independent from the semanticizations due to graphic forms (田儻, 臣儻), /* d'lem-bd'æg simply developed into AnC ləm-d'ai, while the written form * d'ien-d'æg, under the influence of the graphic elements, shows a separate development for each part of the binom, resulting from the loss of the b- in /* bd'æg, regardless of the sandhi that developed in the spoken language.

2. FY 2/29. 毳 * ts'iwad < /* ts'iwand, originally 'down, feathers' but here in the sense of 'felt cloth of the barbarians.' Also written 縑: * ts'iwad < /* tsgiwad ~ ts'iwad. 毳 is defined by SW: 獸細毛也 'the thin hair of animals,' a sound phrase * sied-mōŋ, and analyzed 从三毛 * sam-mōŋ - siem-mōŋ < /* s'imōŋ ~ ts'imōŋ; these forms suggest that besides or before /* ts'iwand, there was a form /* ts'ymōŋ. The dialect form 榆鋪 * diu-p'iwō ~ d'u-p'wō, (diok-) can be easily explained as a dimidiation of a form, parallel to 毳 /* ts'ymōŋ: /* dp'iwog ~ dp'wog. The same result is obtained with the Ch'u word 縑 縑 * lām-miwo < /* l'ām-m'ýwog, which can also be taken as a dimidiation of /* lm'ýwog ~ /* dlmog. As to the binom of Yen, 葉榆 * diap-diog (-diu), with sandhi: diabiog or diapziog, was a dimidiation of /* dpziog ~ dbziog. Ch'en Sung Cheng Weih has 帳縑 /* p'iwat-l'ýu, a form probably strongly influenced by the literary word 帳 'wand with silk pennons carried in ritual dances.' This dance was the 帳舞 * p'iwat-miu < /* -m'ýug,

a binom phonetically close enough to 榆鋪 and 縑 縑 to cause confusion and contamination. However, only 帳 was combined with 舞 because the compound was too clearly analyzed as 'pennon-dance.' The binom 帳縑 was originally also /* p'wɔdl'ýug > p'iwɔdl'ýug > p'iwat-l'ýu; here the sequence t-m ~ l-m ~ d-p of the other forms is inverted to p-d because of the influence of the literary p'iwat 帳. The original sequence is still found in the SW definition of 縑: 西胡毳布 * ts'ýwand-pwo.

3. In FY 2/31 and 5/21, 扇扉 * śian-piwəd < /* śiampiwəd, the Hsh series 非 suggests a form 扉 /* p'ziwəd (罪). This reconstruction agrees with the separate reconstruction of 扇 /* s'ýamb - ts'ýamp but then the choice of /* p'ziwəd can also be explained as a compound of two synonymous words 'screen + doorleaf, screen' (扇 + 扉). Probably the FY word 翳 * ·ied < /* d'ied may be considered a variant of 扉; /* s'ýamb + /* d'ied > /* śiambd'ied ~ /* śiampziwəd. (Cf. *The Study of Chuan chu in Shuo wen*, III, 5, no.11.)

4. FY 5/8 opposes two binoms 梧落 * pwəŋ-lâk < /* pwəŋlâk ~ /* pwəlyâk and 豆筥 * d'u-kiwo < /* d'uklwog. They were originally two dialectal binomial forms of the same word /* pwlyâk ~ pwglâk // /* dwklog.

5. FY 5/35 compares three words: 符簾 * g'āŋ-d'āŋ, 倚佯 /* d'ia-dz'ýang, 簾 /* d'ýāŋ 'a coarse mat.' 符簾 is an inversion of 簾 and 倚佯 is a reduplication of the original word, keeping the old sequence /* d'iaŋ - dz'ýang ~ d'ýāŋ, forms which can be compared to FY 5/34 筥 sēŋ - dsēŋ - ds'ēŋ < bs-?

6. To FY 5/39. 輶車 /* zgwədt'yo (-tkio), 道軌 * d'ōŋ-kiwəŋ, 輶車 /* l'ýekkiō - 鹿車 /* l'ukkiō must be compared to SW 輶車 * p'iuŋkiō < /* p'lugkiō. The binom * d'ōŋ-kiwəŋ is probably not directly comparable to the other words, but is a dimidiation of /* dkiwəŋ ~ dkiog: 'cart, reel,' a word derived from 車, /* tkiog ~ t'ýog. The other words are compounds of verb + noun 輶 /* zgwəd, 輶 /* l'ýek, 鹿 /* l'uk + 車 (/* tkio ~ t'ýo). P* p'lug / bl'ýek ~ bl'uk / bzgwəd < -g? ///

7. In the group of FY 5/25, the results of the comparison of the separate words (cf. p.154) suggested a correspondence between words in -g, -ng, -k, and -m and a possible change -ng > -n. But this problem is connected with the binoms in which graphs appear as constituents. Only 帳 is found alone.

For 襜褕 we can read /* iwāmbdnāŋ and for 襜褕 /* iwāmp'tūŋ. Both binoms appear to be plain compounds made up of two synonymous elements. Yet this analysis may be the result of a semanticization, for which the graph 襜 had been chosen. For the thing meant is not simply 'bag,' but 'feeding-

bag (for horses).¹ In SW 食 has phonetic Δ * dz'iæp : * d'iæk < /*'iæmk, * dziæg < /* dziæwg < dziæmg. 食囊 /* d'iæm-dnâng was etymologized and graphically represented as 襖囊 /* d'iwãmbdnâng, and 食筩 /* d'iæmk-tũg as 襖筩 /* d'iwãmp-tũg. The semanticization of 'feeding-bag' as a reduplicative binom was probably strengthened because of the existing cognates like 襄 (SWKL 3706) /* dgweb < -mb and 囊 * t'âk < tn'âk. As to 帳 * tiæn < /* t'niæn, a development -ng > -n is already suggested through the Hsh series 因 /* siæn : 農 /* znông, and the connection between 辰 and 農 (SWKL 6629b),³⁷ and cognates 囊 and 囊. On the other hand, a cognate form 襄 /* dgwëmb and a compound 食囊 /* d'iæm-dnâng or 襖囊 /* d'iwãmbdnâng can also explain 帳 as an element separated from a binom 帳囊 /* t'niæm-dnâng < tiæn-dnâng. Compare also 襖 interchanged with 襖 (SWKL 3745) (Cf. *supra*, p. 127, 8).

The examples discussed above show that a new approach is possible by comparing dialect words and standard words of FY. Since little can be established on the Pre-ArC pronunciation of words found in pre-Han literature and inscriptions, only the comparative method as attempted here, together with detailed investigations on the different word forms found in the texts, will reveal to us some of the facts on the linguistic situation of the Pre-ArC period.

From what has been said already before on the value of the reconstructions indicated by the respective signs *, /*, #*, #/, /*, as so many levels of reconstructions, each representing another step farther away from the immediate data given in the Chinese script and therefore including at each level new factors of uncertainty, it is clear that the results on Pre-ArC reconstructions must *a fortiori* be viewed as hypothetical. Nevertheless, they provide, in our opinion, a definite and positive view on the earliest stage of the Chinese language. In case of the seven examples of bisyllabic words, we have not ventured to propose any reconstructed forms of bisyllabic stems in terms of Pre-ArC Chinese, yet these cases and others clearly indicate their existence in this period.

Monosyllabic and Bisyllabic Words in the Pre-Archaic Period

It is a generally accepted fact that in the literature and documents of the pre-Han times, or what is called here in terms of historical linguistics, the Pre-Archaic period, binoms for sure do occur, and that they are not

solely binoms of the category of simple onomatopoeia or compounds, the constituent parts of which can be easily separated, and are often found in isolated position. The frequency of such true binoms has not been studied yet, and their significance in the frame of the linguistic situation of the Chou language as such is still to be clarified.

On the basis of the appearances of the Chinese writing itself, the binoms have been simply considered as extremely rare exceptions, and it is generally accepted that the language of the Pre-ArC period had as a rule words that were strictly monosyllabic. This has been ably exposed and strongly defended by Chmielewski.³⁸ In his discussion, he rightly makes a distinction between the language of the documents of the Chou era and the classical language of subsequent times, maintaining that the latter should be excluded from our linguistic investigation in this particular problem. We are also in accord with his conceptions concerning the word formative asyllabic elements contained in the words, whenever these forms are monosyllabic. But on the other hand, some of his assumptions call for serious remarks and restrictions. Admitting his distinction between authentic Chou documents and subsequent literary classical products, the question remains that there cannot be a sudden change from the Chou literature to the post-Chou texts, so as to call the latter nothing but artificial and syncretic without any basis in the living speech of the epoch. If, as is admitted, the Chou literature had great normative influence on the later literary products, it will be a question as to what extent the spoken language still made itself felt even in later times, in spite of the normative and moulding force of the early texts. Karlgren's studies³⁹ have shown that the spoken language clearly exerted its influence in the use of grammatical auxiliaries in Han time. Wang Ch'ung 王充 for instance, "preserves and employs out of the arsenal of auxiliaries and pronouns occurring in Chou and early Han texts, such as were still familiar to him, in his own spoken language and refrains from employing those that had become obsolete in his colloquial." On the other hand, a scholar so interested in dialects as Yang Hsiung 揚雄 deliberately avoids all colloquialism of his time; the study of his *Fa yen* 法言 makes "us realize that it is the ancient Lu dialect texts which in the main have served as model for Yang." If this be the case for grammatical features, there is no reason to think that the vocabulary, whether in monosyllabic or bisyllabic structure, would make exception. We find many of the dialectal words of FY actually used in literary compositions of Han time, Yang Hsiung's writings included, and later. It is one of the important desiderata to investigate and determine to what extent colloquial

words crept into the later 'classical' literary products and sift out these cases from what is more artificial and syncretic.

Similarly, while the later classical documents are said to reflect nothing of the living speech of the epoch, the Chou documents are said "to reflect to a considerable extent the living linguistic usage of the time." (P. 74). Again, the question is to what extent? Karlgren, as early as 1926, and later in 1951 maintained "that the Chou-time texts are reproductions of the spoken language."⁴⁰ This general assertion concerns a literature which covers an immense stretch of time, from the earliest documents as found in inscriptions, Shu Ching (Early Chou) and Shih ching (ante 600 B.C. even 771 B.C.) till Confucius (551-479), Meng-tzū 孟子 (traditionally 371-289 B.C.), Chuang-tzū 莊子 and Ch'ü Yüan 屈原 (traditionally 332-295 B.C.), and it is clear that there must be great differences between the language of the earliest group and that of the later.

The arguments of Chmielewski for the Chou language as consisting of words that are as a rule monosyllabic are, strictly speaking, not based on his criteria (a) of the definite semantic values associated with each single monosyllable, and (b) that each of these monosyllables are performing functions in the sentences, corresponding to subject, object, predicate, etc. For he begins already from the conception that each character was a monosyllable, and continues: each character in the text stands for a word unit, therefore each word unit was monosyllabic. The point is that Chmielewski assumes that any graph must always be and a priori always was used for one syllable. This question precisely remains open. The question whether or not a text of Confucius as it stands was intelligible to the hearer at that time, or whether or not, when putting the text in the phonetic values, proposed by Karlgren in GS, there is little homophony to interfere with such direct intelligibility is not the point. To the first question, the answer is we do not know. To the second, homophony (studied from the point of intelligibility) is in itself an elusive thing, differing from language to language, and difficult to evaluate on the basis of reconstructed values. We have already stated before that the ArC reconstruction of GS is not a pronunciation of Chou time.

No matter how the Pre-ArC language must have been pronounced, we must now formulate the problem from the point of view of monosyllables versus bisyllabic words in Pre-ArC. It is true that the procedure of reconstructing the AnC and consequently also ArC yields directly only the reading of a syllable, which may be a word in itself or not, but the comparison between binomial and monosyllabic forms in ArC has led us to distinguish in the one a reduced form of the same word from a lengthened

form in the other. The early writing system with its use of pictographs and other graphs (derived by means of chih shih, composition of pre-existing graphic element, endowed with phonetic role in various ways) was a system which allowed the scribes to represent any word with one graph only. In the earlier stages of writing, before ArC, we cannot a priori know whether a word was monosyllabic or not, though represented by one graph.

It is not impossible, however, that there were in Pre-ArC bisyllabic or even trisyllabic words, along with monosyllabic ones, and that each word could be expressed in writing by means of one graph. It is also possible that a given word stem had variants, of different levels of reduced and fuller word forms, which could be represented in writing by the same graph. As soon as the writing began to develop specific phonetic elements then one graph began to be associated with one variant reading.

This development toward the use of specific graphs for each particular reading of a word form must have been a slow process, until the formula, one graph: one syllable, became the rule. Once the association, one graph: one syllable, was established, it was natural that a clearly preserved bisyllabic word was written with two graphs. At the same time, because of the pictographic nature of the writing, one graph could also be used as a short sign for any word even bisyllabic or trisyllabic in a written document.

The written language could write binoms when needed; but the literary documents could also reduce such bisyllabic words to one graph, which in the stage of evolution of the language, represented already a monosyllabic reading, not only by choosing an existing monosyllabic synonym or a reduced word variant, but by just artificially choosing one part of the binom, which because of its graphic features, would unequivocally stand for the same bisyllabic word.

It is at this point that we may ask to what extent the Chou literature represents the spoken word forms in its graphic representations. If we can say that in grammar the Chou literature is one and the same with the spoken language, it remains still debatable how far in terms of vocabulary, one graph could only represent one syllable, and not any word, whether it was read in reduced form as a word stem or in a more extended form.

The slow development versus a general rule, one graph: one syllable, could allow for many exceptional cases according to the nature and the antiquity of the documents in Chinese literature. This relation

of graph and word can be represented in three main stages; the passage from one to the other, which was probably slow and complicated, spread over a long time:

Stage I	Stage II	Stage III
Monosyllabic word: 1 graph	Monosyllabic word: 1 graph	Monosyllabic word: 1 graph
Bisyllabic word: 1 graph	Bisyllabic standard: 2 graphs Archaic or dialect level: 1 graph	Bisyllabic word: 2 graphs
Trisyllabic word: 1 graph	Trisyllabic word: 2 or 3 graphs	Trisyllabic word: 3 graphs, etc.

STATISTICAL COMPARISON AMONG THE FANG YEN DIALECTS

Method

Fang yen constitutes a collection of dialect words, seemingly collected at random, covering all sorts of subjects and notions. It is legitimate to ask: What is the significance of this material in view of the general picture of the language at that time? It is known that even the modern dialect atlases have been criticized for their poverty of material or for their lack in density of geographical covering. Those deficiencies occurred in dialect geography in spite of careful planning and preparation.⁴¹ Obviously, FY has not been collected from the viewpoint of modern dialectology. Besides the obvious value which may be found in some exceptional passage with many different dialect words or a great number of variants for one particular word study, what significance can be derived from all FY passages, including those which contain only one or two dialect words?

The method used here was devised in order to try to find the significance of any dialect or standard form with at least one dialectal counterpart, in the frame of the whole language in general. It will consist of a computation of all cases when a dialect word is listed as identical or similar in sound to the standard or another dialect word in FY. As some dialects are mentioned more often than the others, a comparison can be made of all the relations between any dialect with the others.⁴² Our figures will represent simply the computation of the identical graphs for different dialects in the FY text and the computation of the number of phonetically similar readings of the graphs of the dialect words, as reflected in AnC and ArC. The similarity of these words

is not decided on the finer points or disputable elements of these reconstructions, but on the presence or absence of initials and finals belonging to the same articulatory series: k, g', y, x, and so on; the elements compared are limited to those that are safely established. This way, we can deduce not only which dialect is closely related to another, but also the geographical direction of its expansion or the influences it received.⁴³

Some difficulties are inherent in this method and its application to the FY material. One is that this statistical study deals with the sound of the dialect words. In Part I the method of reconstructing the readings of the Chinese characters for Han time was discussed. This reconstruction system is the same for all the characters in all dialects. Yet we can be sure that if FY uses the same character for a northern as for a southern dialect, they were not necessarily read in exactly the same way. If they differed (cf. p. 108), the distinction is mostly unattainable by our methods.

Consequently, when the same character is used for different dialects, it means that the same type of word occurred in these areas; the same character is presumably read alike in all dialects except for the differences typical for each dialect. The words written by the same character for the same thing were etymologically the same in the mind of the author, or they sounded to him similar enough to propose the same character for all, irrespective of the real etymology of the dialect words.⁴⁴ On the other hand, when FY writes different characters, it means that a word was considered as phonetically so different as to require another graph; this word could belong to an entirely different type, or be somehow related to the other.

The degrees of phonetic similarity between the readings of the characters can be taken as various degrees of etymological relation among the dialect words. But a greater variety can be observed in the initial clusters of the Hsh reconstructions than in the finals. Consequently, after the cases of identity of graph, a greater importance must be attributed to the initials than to the finals. Thus, four degrees of similarity can be set up: (1) same graph or same reading of two different graphs (踣 and 敬); (2) similarity in the initials and finals, belonging to the same series of articulation; (3) similarity in the initials only; (4) similarity in finals only. The importance of the vocalism in the Hsh contacts seems almost nil, and can therefore be disregarded in establishing the degrees of similarity. This sort of gradation is not the only one possible, but it is the simplest. In the review of each dialect area separately, one set of global similarity, of initials and finals, will be considered. In the comparison of the standard language with all the dia-

lects together, a more detailed gradation of similarity was used.

Such a comparison of the words of FY also depends on the extent in which the Hsh system as found in SW has been applied to reconstructions. For the purpose of this study, the reconstructions compared are more conservative; only clusters of two consonants have been considered, for example, no bdyl, but only bl, bd, and b', bg, by-, and the like. In cases of identity or quasi-identity in the initials only, the difference of the finals could sometimes be disregarded, where the final dental (-n, -d, -t) with front vowels (-a, -e, -i, etc.) can be taken as a phonologic counterpart of -g, -k, -ng with back vowels (-ə, -u, -o, etc.).

Another difficulty when using this statistical method lies in the fact that for some dialect areas the figures obtained are very low. Unless these low figures could be counted together with other ones, and both united under a broader unit of dialect groups (e.g., the figures counted for Tung Ou and Hsi Ou together with those of Yüeh), they cannot be included. Nevertheless, these figures have always been given, for, although they do not enter in the statistical computation, they still can help to provide a general idea concerning the relations of the dialects described in FY.

This method can also provide us with a criterion for distinguishing the possible non-Chinese words in FY. Several authors have supposed that in the Chinese language of Han and pre-Han times, and particularly in the dialect words of FY (Lin Yü-t'ang) many non-Chinese words were borrowed and remained as part of the Chinese vocabulary under the disguise of the Chinese graphs.⁴⁵ Chinese, in that respect, is no exception from any other language, but the study of the loan words in Chinese is more difficult than in other languages because, unless the Chinese sources tell us a given word is non-Chinese,⁴⁶ there is no safe criterion to distinguish the loan words from the others.⁴⁷ However, the statistical method as described above and applied to the FY material, can show that a certain dialect has an extremely low degree of similarity or identity cases with any of the other Chinese dialects. Such a situation cannot be explained except by assuming that this dialect had a great number of non-Chinese words, although their inclusion in FY proves that the speakers were not conscious of this. More than this cannot be concluded on the strength of FY, for the material of FY cannot be compared to any non-Chinese language, even if we knew which non-Chinese language came into play. We do not know these languages nor can we determine how they were spoken; the dialect words are not known in their actual pronunciation but disguised under the appearance of Chinese characters.

Review of Some Dialectal Areas

Yen

The dialect relations can be summed up as follows:

	Identical graph	Graph with similar reading	Similarity only	
Ch'i	8	4	Sung	6
Tg-Ch'i	4	3	Lu	1
Chao	4	2	Kn-hs	5
Wei	2	4	Kn-tg	4
Ch'-Chin	2	3	Ch'en	2
Tai	5	0	Huai-	1
Ch'u	2	2	(nan)	
N-Ch'u	0	4		
Wu	1	2		
Yüeh	1	0		
None	2	5		

From these figures it is clear that, from the point of view of identity, the strongest contacts are with Ch'i, Tg-Ch'i, Chao (Tai is considered as part of Yen). Subsequently we listed Wei, Ch'-Chin, and Ch'u.

As to similarity, the western dialects (Ch'-Chin and Kn-hs) show a strong influence, followed by Ch'i and Wei and Sung Lu Ch'en. The role of N-Ch'u is interesting; this influence, however, should not be exaggerated, as it is based on the infiltration of the standard (e.g., 雞頭, 鴈頭, 烏頭 3/10) as well as of the dialects (5/36 趙) in N-Ch'u and Yen.

As to possible non-Chinese words, if there were any they would be expected in the passages referring to P-Yen and Ch-hs Lsh. But only 涅 (3/6) seems to offer some difficulty; yet it can still be compared to the literary words 鰲 and 卵 (*t'uân ~ *lwân // *ńjět < /*đń-). Also 鷓 (8/9) seems at first sight to be isolated, but can be compared with 鷓鴣.⁴⁸ 豨 (8/5), isolated as a dialect word, is well attested in literature (Tso). 班 (3/20) 'to separate, to divide' *pwân is close to literary and standard 半 'half' *pwân, 八 'to divide' /*pwât. Thus there seems to be no evidence supporting the theory of non-Chinese words in Yen, P-Yen, and in the extreme northeast provinces (Korea). The two strongest connections of Yen are with Ch'i and with Ch'-Chin Kn-hs. Ch'i by far surpasses the influence of the western dialects, and since it is

historically and culturally earlier, and geographically nearer, the relation of Yen with Ch'i is more fundamental and older, whereas that with Ch'-Chin Kn-hs is owing to infiltrations from a younger political and cultural center, Ch'in, which passed through Chao, Tai and Wei.

Ch'i

	Identical graph	Graph with similar reading	Similarity only	
Ch'u	17	7	Wu	4
Lu	10	0	Cheng	1
Sung	10	2	Shu	1
Yen	8	4	L-Y	1
Weih	3	1	Ying	1
Ch-H	3	1	Ch-Hs	1
Kn-tg	2	3		
Ch'en	2	1		
Chou	1	1		
Tg-Ch'i	2	2		
H-T	2	1		
Ch'-Chin	1	5		
Kn-Hs	0	5		
Standard	1	15		
Chao	1	2		
N-Ch'u	1	1		

The most important relation of Ch'i is with Ch'u. But the two areas are not contiguous; in between are the central dialects and the frequency of their contacts with Ch'i diminishes in direct proportion as we move from east to west (Lu, Sung, Weih, Ch'en, Chou). The exclusive relation Ch'u: Ch'i is not owing to the cultural, political, or literary activities, because the areas Lu, Sung, Weih were not less active or less involved in the political and cultural events than Ch'u and Ch'i. It can only be explained as the result of a parallel development of Ch'i and Ch'u from a common group, whereas the intermediate area Lu Sung Weih developed a number of characteristic features, different from Ch'i and Ch'u.⁴⁹ The political expansion of Ch'i showing a stronger thrust toward the north may also prove to be a significant factor.

The foregoing conclusions, based on the identity cases, are paralleled by those of the similarity cases, except for the connections with Wu, the

Western dialects, and the standard language. The different dialects all had their share in building up the standard language of Han, but Ch'i was among the poorest contributors (cf. p. 190), whereas Ch'-Chin is the highest, followed by Ch'u. Then it seems that the similarity of Ch'i with standard is to be explained as a reflection of the relation of Ch'i to Ch'u; this will be discussed in connection with Wu Yang Yüeh (Ou). (Cf. p. 172 ff.)

Tung Ch'i

	Identical graph	Graph with similar reading	Similarity only	
H-T	20	3	Ch'u	6
Yen	4	3	N-Ch'u	1
Ch'i	2	2	Chao	3
Ch'in	3	7	Wei	4
Ch'en	1	2	Cheng	1
Sung	1	4		
Chou	1	0		
Chin	1	0		
Lu	1	0		
Weih	1	1		
Ch-H	1	1		
Wu	1	2		
Yang	1			
Yüeh	1			

The most striking fact is the weak relation with an important and near-by center, Ch'i.

The frequent contacts with H-T are contrasted by the scattered contacts with the other geographical areas. Yen and Ch'in excepted, all the dialects have vague, rather accidental contacts of very low frequency with Tg-Ch'i. This picture, obtained by identity cases, is not changed by similarity contacts with Ch'u, Chao, and Wei, for they are not paralleled by identity cases, as happens for Ch'in.

Furthermore, there are eleven cases where no identity contact of Tg-Ch'i is found. These cases are:

2/8: 綾 'thin, delicate,' 3/18: 迨 'to reach, arrive,' 3/19: 葦
and 杜 'root,' 3/22: 醜 'to gather, unite,' 6/20: 睽 'to look,'
6/45: 舒勃 'to unfold,' 7/8: 胥 'all,' 6/32: 鋪頒 'to take up,

pick up (?), 6/37: 倏 盪, 冉 錄 'unsteady, askew,'

6/50: 閤 管 'to open,' 7/13: 竭 'to reach.'

But the lack of cases of identical graphs in other dialects does not exclude the possibility of similarity of cases. It is always in some way possible to find comparable words from other dialects, or to point out literary words that could have been the origin of these dialect words in Tg-Ch'i. For example, for 綾 *liang* (cf. p.145 no. 7), 迨 *d'æg* and 竭 (cf. p.147 no.16), 舒 勃 *siō-b'wət* (cf. p.133, no.50), for 睽 (cf. p.147 no.15), we proposed comparisons and reconstructions which in themselves seem all right. Furthermore 胥 'all' is literary (SCg Odes 215, 257, etc., Karlgren's Glosses no.564). But in the light of this statistical approach these comparisons and reconstructions may be suspect. Are they non-Chinese words for which suitable characters were proposed (FY 6/20, 32, 37, 45, 50)? Then, a reconstruction as 睽 *and* < *d'and* falls to the ground. Are they words, originally non-Chinese, which were represented by some character, vaguely similar in reading and meaning, and which finished by being pronounced in the "correct" Chinese way, gradually losing the non-Chinese phonetism? Such could be the case for 3/18 and 22:

original word → imperfectly rendered by a Chinese
 * ? character 迨 *d'æg*, 醜 *t'iog*,
 → the Chinese reading → scattered contacts
 becomes prevalent. with other dialects.

Such possibilities are not probable in dialects like Yen, Ch'i. But for Tg-Ch'i the lack of any consistent, frequent contact, except with H-T, shows that it is different and probably non-Chinese. It is known that this region was once inhabited by the Tung Yi 東夷 and Lai Yi 萊夷 (RV, p.385, 407.), and though FY ignores all non-Chinese words, SW still preserved signs of a consciousness of them, although for words easily explained, e.g.: 𠄎 (FY 2/25).⁵⁰

The relation Tg-Ch'i: Yen cannot be explained through Ch'i, since Ch'i has too little in common with Tg-Ch'i. Probably, Tg-Ch'i communicated with Yen by sea, and Yen too, originally could have had non-Chinese elements, although so few that the FY material shows no trace of them.

The cases 胥 'all' and probably 醜 ~ 蒐 'to assemble, to gather,' show that one of the factors in sinicization was the literary

influence. Furthermore, since the dialects still reflect such a strong dialectal (non-Chinese) resistance, it can be supposed that the sinicization was relatively recent, and naturally the most frequent similarity cases are with the dialects that had the greatest role in the standard language: Ch'in and Ch'u.

Hai Tai

	Identical graph	Graph with similar reading	Similarity only
Tg-Ch'i	20	0	Ch'en Cheng 1
Huai	5	3	Sung Weih 1
Ch'i	2	0	Ch'u 3
Yen	2	0	
Chou	1	0	
Kn-hs	1	0	

These figures completely supplement and strengthen the conclusions proposed for Tg-Ch'i: contacts with Yen and Kn-hs (standard); close connection, almost unity with Tg-Ch'i, and sharp isolation from the other dialects.

Huai

Among all combinations with Huai, Ch-H is the most important; it is the area of strongest Ch'u influence; the other subareas are: Huai Ssü (Huai Jui, Huai Ju, etc.) and east of it: Huai simpliciter.

	Identical graph	Graph with similar reading	Similarity only
Ch'u	15	2	Kn-hs 5
Ju	2	1 (Ju Ying)	Kn-tg 3
N-Ch'u	10	0	L-Y 1
	(Ch-Hs)	1	Ch'-Chin 4
Ch'en	11	1	Chou 1
Ch'i	3	1	Ch-Hs 1
Hsü	5	1	Weih 2
Sung	3	3	Yen 1
Wu	3	2	Standard 9
H-T	5	3	
Lu	2	2	
Tg-Ch'i	1	1	

The most frequent contacts are with Ch'u, Ch'en, and N-Ch'u. Following next are Ch'i, Hsü, Sung, and Wu Yang.

Hsü is a big area including H-T, Tg-Hai, and part of Huai; this can only mean a special contact with H-T, and consequently, an intense relation within an area of an originally non-Chinese population. Nevertheless, the Huai words are clearly Chinese words. Some of them are found in literature: 亭公, 褚 (3/4); 靡 (4/43); 整 (8/17).⁵¹

The contacts with northern areas are not frequent; also the contacts with the contiguous southern areas (Wu Yang) are relatively rare. The relations with Ch'u, Ch'-Ch'u may well be owing to a cultural and literary influence that has been successful in wiping out whatever non-Chinese language was spoken originally. The region of Huai was once inhabited by the Huai Yi (淮夷) (Franke, I, p. 38) and Ssü Yi (泗夷) (RV p. 396). The fact that Huai and H-T (Hsü, Tg-Hai) happen to have the same literary words (cf. p. 174) points to a sinicization process they underwent together. But it must be stressed that the Huai dialect in FY has not preserved any striking sign of non-Chinese forms as we found in H-T and Tg-Chi.⁵² That the relation to Ch'u and Ch'-Ch'u was owing to cultural influences rather than original dialect relations, appears from the cases of similarity only, where standard and western dialect words prevail. The western dialects and Ch'u being predominant in the standard language of Han, naturally Huai was first influenced by Ch'u (identity cases) and later (with the unification under Ch'in) by the western dialects.

In the contacts of Huai with N-Ch'u, all the words can be proved to be genuine Chinese words, as appears from literature: 被, 掩 'to cover up in one group,' = 'to gather, to unite,' or from comparison with other dialects: 襍, 禮, 李耳, 於虎兒 (cf. p. 177), 畜 (cf. p. 177).

The words of FY 2/5: 頰, 曝, 順 'moist, glistening,' are suspect, but hard to prove in either sense.⁵³

Wu Yang Yüeh (Ou)

These regions have always been known as originally non-Chinese areas.⁵⁴ But little is known on how long the non-Chinese language resisted before being absorbed and integrated in the Chinese language. We can easily imagine that in Han time there were non-Chinese peoples which FY simply did not consider.⁵⁵ The dialect words of Wu in FY were all thought to be Chinese; yet the figures of the connections of these dialects, Wu Yang Yüeh, with others can shed new light on this problem.

Wu	Graph with similar reading		Similarity only	
	Identical graph			
Yang	11	0	Standard	9
Yüeh	11	1	Kn-hs	2
Ou	1	0	Kn-tg	1
Ch'u	6	4	Ch'i	4
Ching	7	1	H-T	1
N-Ch'u	2	0	Ch'en	1
Huai	3	1		
Ch'-Chin	2	Ch'in 1 Chin 2		
Kn-hs	1	2		
Sung	1	1		
Weih	1	1		
Lu	1	1		
Wei	1	0		
Chao	1	1		
Yen	1	2		
Tg-Ch'i	1	2		

Wu is found alone (6/52) 厲 * blýad // standard 為 * gwia < * bgwia (cf. p. 267). Wu proves to have various scattered contacts on one hand, against one strong line of connection on the other; this is a situation similar to Tg-Ch'i. The majority of identity cases are with Yang, Ching, and Ch'u, the rest are scattered and thinly spread out. The relation Wu: Ching is represented by genuine Chinese words, as appears from the comparison with other dialect words. For example, FY 1/20 展 * tian < * týan 'sincere' (compare the dialectal variants 信 * siën < * sýën, 恂 * siwën < * sýwën, 允 * ziwën < * zgwën, and 6/6 展 'difficult' comparable to 焯 * tian < * týan, 憚 * tân < * nt.ân ~ * d'ân < * dyân, 難 * nan < * dn.ân, 蹇 * g'ian - 蹇 * kian and so on. The contacts

Wu: Ch'u do not all represent literary words, but some show dialectal words with variants in other areas. The connections of Wu with Ching and Ch'u probably reflect the oldest influence from Ch'u, independent from literature and standard influence, (e.g., 騷 * sôg ~ 遼 * t'ök in 6/12, or 娃 * eg - 好 * xog - 竊 * iog in 2/3).

The relations of Tg-Ch'i, H-T, and Ch-H with Ch'i are weaker than those between Ch'i and Wu; the contact Wu: Ch'i is not so much owing to direct contact, as probably to literary infiltration from Ch'u as the original center (which is closely connected with Ch'i) into Wu. This way the said similarity could result without contact through intermediate areas (Ch-H, H-T, Huai).

Yang

	Identical graph	Graph with similar reading	Similarity only
Wu	11	0	Standard 10
Ch'u	11	3	Kui lin
Ching	5	0	(N-Ch'u) 2
Yüeh	4	0	Ch'en 1
Hsü	2	1	Sung 1
Huai	2	1	Ch'-Chin 2
Lu-Weih	1	0	L-Y 1
Kn-hs	2	0	Tg-Ch'i 1

The contacts of Yang: Wu and those of Yang: Ch'u are equally frequent; but the relations Yang: Yüeh are weak.

All other contacts are scattered and reveal no significant feature, except the connections with standard words (similarity cases) and Kn-hs (identity cases), which may be owing to influences more recent than those appearing in the contacts with Ch'u and Ching.

As in the case for Wu, but in lesser degree, Yang has some contacts with Huai, Hsü, Tg-Ch'i, which may be old vestiges of relations before the influence of the Ch'u dialect and literature (e.g., 1/30 擷 'to take,' and 7/17 飪 'to cook, ripen'). However, judging from what appears in FY, the two areas of non-Chinese populations (Tg-Ch'i Hai-Tai, and Wu Yang Yüeh) have too little in common to be originally related languages.

Yüeh (Tung Ou and Hsi Ou)

	Identical graph	Graph with similar reading	Similarity only
Wu	11	1	Standard 8
Yang	4	0	Tg-Ch'i 2
Yen	1	0	Ch'u 3
Ch'-Chin	1	1	Ching 1
Kn-hs	1	1	

The figures concerning Yüeh confirm the conclusions already drawn for Wu and Yang; only the isolation of Yüeh appears more definite. All connections besides those with Wu and Yang are still weaker and more scattered.

Nan Ch'u

Nan-Ch'u in sensu stricto is the region south of the Yang-tzu, from lake T'ung t'ing till the regions of Wu Yang. In sensu lato it is the region south of Ch'u (cf. p. 91). To evaluate the relations of this wide area, the following division of the subgroups within N-Ch'u sensu lato will be made:

A.	B.
East: N-Ch'u	West: Ching, Ch-Hs
Hsiang T'an	a) Chiang Mien
Chiu yi	Ying and Hsia
Kui lin	b) Yüan Li
Ling ling	Hsiang Yüan
	P'u K'uang

[Yüan Yung is overlapping east and west. Ching and Chiang Hu (Chiang pin) covers the whole area].

Nan-Ch'u.—The passages where N-Ch'u is mentioned alone are quite numerous, namely, 33, that is, about half of all mentions of N-Ch'u in FY. Here can be added the passages where other southern areas within N-Ch'u are mentioned alone (Kui lin, etc.). The combinations of N-Ch'u with other southern areas (Ch-Hs, etc.) strengthen the impression of an isolated and strongly differentiated dialect. Immediately we may be inclined to conclude that N-Ch'u originally was a non-Chinese language, but a closer scrutiny of these words strongly contradicts this first impression, though not for all cases.⁵⁶

By comparing the corresponding dialect words in other areas, and the N-Ch'u words found in literature, much of the N-Ch'u vocabulary, apparently suspectable as non-Chinese, can be discarded as words of archaic nature or with a special dialectal characteristic in N-Ch'u.

Thus, the words in 3/48 襪裂 and 襪襪, 12/111 蜀 * diuk, 5/31 蓬薄 b'ung-b'âk (cf. p. 131 and 155), 5/35 簷 (cf. p. 159), 6/22 汨, 遣 (cf. p. 108), 6/34 叟 (cf. p. 145), 6/55 父老 (cf. p. 144), 8/15 蛇醫 and 蝶 螭 (cf. Orbis, 1952, p. 491), 8/14 鷺 鷗 (cf. p. 135), 8/11

駢, 鷓鴣 (cf. p. 110), 8/5 稀, 10/35 領, 10/45 關 (literary), 11/3 杜狗, 蛙螻, 11/4 虹孫, (cf. p. 138), 11/7 螭蟒, 蝮, 螻 (cf. pp. 108, 116), 13/147 萼, 13/142 萼, 13/143 筍, 筍, must be considered as genuine Chinese words.

But a number of words look strange and suspect: 3/52 差, 間, 蠲; 3/48 須捷; 5/36 趙 (?); 6/55 媼, 母(父)媼; 7/34 祭; 10/9 支註, 詿詭; 10/45 曖, 藉; 10/43 欵, 醫; 10/41 攔, 秘, 摠 10/29 鉗, 痲. Although phonetic comparisons are possible, they are not too similar and leave doubts.

This list must be completed by adding Kui lin, Hsiang T'an, and the combinations N-Ch'u Ch-Hs, Hsiang T'an Ching nan. Thus Kui lin 10/26: 猛: 兄,⁵⁷ 8/15 守宮, 8/4 割雞 are Chinese, though 8/4 蹤 is suspect. Hsiang T'an 10/36 紛怡 remains partly unexplained (cf. p. 137) and is suspect. 10/2 Hsiang T'an Ching nan 曾, 訾 (cf. p. 137), N-Ch'u Ch-Hs 10/40 械鯢, 乾都, 蒿草 (cf. p. 144, no. 4, p. 126 no. 4), 3/8 莽, 蘇 (蘇 also in Kn-tg, Kn-hs, and as to 莽 cf. p. 108), 10/31 頓愍 (cf. p. 129, no. 18); 3/10 鴈頭, 雞頭, 烏頭 (clearly Chinese and new formations), 4/42 帽頭 (cognate to 絡頭), 1/15 嘩啞 (cf. p. 127, no. 5), all these words although appearing isolated are genuine Chinese words.

The words of N-Ch'u and subareas discussed above, have the following similarity contacts:

Standard	17	Sung	4	Yang	2
Ch'-Chin	15	Kn-tg	2	Lu	1
Literary	10	Ch'en	2	Wei	1
Ch'u	9	Weih	2	Chou	1
Kn-hs	4	Ch'i	2	Lo	
Yen	4	Tg-Ch'i	2	Wu	1
		H-T			

The next group of words to be investigated are those of N-Ch'u combined with Ching, and parts of Ching. 10/15 詠 (懇), 9/1-2 匣較 [partly identical with standard, 較 similar to Ch'u and Ch'-Chin (鈞)], and comparable to literary 匣兵 (TT 912) and 10/33 眠睫, 脈,

竭, 賜施, 焚媼, 譴謾, 懼也. Standard 欺謾 (cf. p. 148), are real Chinese words. So is 4/43 麤 *ts'lo, as appears from standard 覆 /*zliəd, dliəd, etc. Again, 9/3 N-Ch'u and Wu Yang 鉤 (*sia), 鉞 (*dian), 鉞 *ts'iung; standard 矛 *miog, SW 酋矛 *dz'iog-miog, SM 夷矛 *diəd-miog #* dzmiog, dmiog, are Chinese words. (SWKL 6393). FY 2/11, 2/29 lists words from Chiang Hu (i. e., N-Ch'u) Ching Yang Wu 抱媼 (cf. p. 158) and 揄鋪 (cf. p. 158) which are evidently Chinese words.

Among the N-Ch'u contacts with the north, those with Ch-H are most important: 3/22 掩: 'to unite' is literary, and is related to Kn-tg 掩 'to take, gather' (6/19), Ch'u 葉 (3/50). 3/15 戎, though difficult to explain phonetically with meaning 'to pull out' (拔) is also found in Kn-tg. 4/1 裨葉 can be explained in the light of the literary word 深衣. 4/2 and 3 禮裕 and 禮 can be compared to Kn-hs 祇裯, 禮福. 6/25 畝 is SW 黠 (cf. p. 155). 8/1: the Ch-H N-Ch'u words 李耳 and 於麤 can be compared to that of Ch'en-Ch'u Wei Sung 李父 and that of Kn-tg, Kn-hs 伯都. These words are real Chinese. In one case, (2/5) 顛, 睽, 順 (cf. p. 172), we can suspect a non-Chinese word.

Further contacts are found with Ch'-Chin (1/32), with Sung Wei (4/5), Sung Weih (2/13), with Ch'-Ch'u (1/31, 2/23), with Ch'-Ch'u Ch'i Sung (7/3), Ch'u (1/30, 10/17).

Similarity connections of N-Ch'u: standard 9, Ch'u 3, Kn-tg 3, Kn-hs 2, literary 2, Yen, Ch'en, Sung Cheng, Weih 1.

Ching and its parts.—Parts of Ching (Ch-Hs, Chiang Yüan, Yüan Li, Yüan Hsiang) are mentioned alone, but Ching itself is not. Chiang Yüan coincides with the part of Ching, south of the Chiang; it has several words: 10/1 媼, 媼媼: standard 遊. 媼 is similar to standard, but 媼媼 can be suspected as non-Chinese. 10/20 迹迹 clearly corresponds to Ch'-Chin 屑屑, 塞塞, 省省. Yüan Li is in the middle of Ching: 10/37 滌 *g'âm, standard 或 *giwək, 'possibly, perhaps,' explained by Kuo as a phonetic variant of 慙 *g'âm, xâm; the variation -k ~ -m is not infrequent or exceptional among Chinese cognates. 10/5 諫, 言

(cf. p. 114), 10/7 嘖, 無寫 (= standard 憐) (cf. p. 150) are genuine Chinese words.

The words of Ch-Hs are also regular Chinese words 4/30 禮, 莆 執; 5/10 瓮 (cf. p. 153); 10/3 擲, 無賴 (cf. p. 148); 3/11 棘 10/21 灑 流, 征 公 (cf. p. 126). 10/19 蕪, 猝; standard 卒 'sudden.' (SW has 匪卒, which is comparable to 蕪:) But 10/34 頰 standard 頰, and 10/28 踞, 瘡: standard 短 could be suspected as non-Chinese though some phonetic similarity can be found with other words. In combination, Ch-Hs appears with Ch'u Ying (10/23 忸怩, 戚 咨 'ashamed') and Ching Ju (10/10 飢, 嗇 'greedy, stingy'), where we surely have Chinese words; in Ch-Hs Chiu Yi (10/13), the special graph 冢 for 冢 'quiet' may indicate a dialectal reading.⁵⁸

The words of Yüan Hsiang alone are 10/4 崽 'child, offspring'; 10/11 龜 comparable to Ching Chiu yi 龜: standard 淫 'licentious'; 5/27 畚 'plow.' They are all Chinese; the second is derived from 'floating, broad'; 畚 is the special name of a plow, used to sow at the same time as the plowing is done⁵⁹ 蒲器 (SWKL 5744b).

Ching is mentioned in combination with Ch'u (6/43), Ch'-Ch'u Wu (6/3), but mostly with Wu Yang Ou (1/21), with Wu Chiang Hu (2/11, 27), with Wu Huai Jui (1/20), Wu Sung Weih (1/19), Wu simpliciter (6/8, 1, 6), with Yang (2/34), and Yang Kn-tg and Kn-hs (6/2); in all these passages the words of Ching are Chinese. However, there are two words (1/30 擗, 6/5 擗), found in combination with Ch'-Hs and Heng Weih Lu Yang Hsü, which may be non-Chinese in origin; in these cases, these words became accepted even in central Chinese areas like Ch'i and Lu-Weih.

Connections which are revealed through the similarity of the words (for Ching and its parts) are:

Ch'u	5	Sung	2	L-Y	1
Standard	4	Kn-hs	1	Weih	1
Ch'-Chin	4	Chao	1	Ju	1
Ch'i	4	Lu	1	Ying	1
		Tg-Ch'i	1		

The foregoing facts give a different picture than for Wu Yang Yüeh and Tg-Ch'i H-T. In spite of the number of words found in the southern areas only, comparison shows that the majority are undoubtedly Chinese; many of them, compared with literary and other dialect forms, reveal that these southern areas have preserved extremely archaic forms. It

explains why many of them were found in those areas only. It indicates that these areas had Chinese-speaking communities from the older pre-Han periods, which separated early to follow a different line of development, with an archaizing tendency. But other connections show that the same influences from the northern areas on the N-Ch'u dialects continued all the time, through literature, through contact with Ch'u, and in the latest periods through the standard language and its strongest contributor Ch'-Chin Kn-hs.

The possible non-Chinese words are very few; the position of N-Ch'u is entirely different from Tg-Ch'i and H-T, which in Han time could still keep a barrier against the influences from Chinese dialects like Ch'i, Ch'u, and from Wu and Yang, which began to assimilate the Chinese culture. N-Ch'u has several words which must be explained by supposing an early center of Chinese speaking people. The nearness and contacts with Ch'u explain this adequately: N-Ch'u was originally a branch from early Ch'u.

Ch'u

Ch'u has multiple contacts in various directions and from various points of place and time. It will be easier to study first the contacts of the Ch'u dialect and its expansion from the point of view of identity cases, and then from the point of view of the cases of similarity.

Identity Cases

	South	North		West			
N-Ch'u	5	Ch'en	44	Wei	17	Standard	17
Ching	5	Sung	26	Ch'i	17	Ch'-Chin	4
Yingh	5	Weih	7	Liang	4	Kn-hs	1
		Yen	4	Lu	2	Ch'in	1
	Central	East		Within Ch'u			
Kn-tg	5	Ch-H	14	Hsü		Ju Ying	5
Cheng	5	Wu	6	Tg-Hai	2		
Chou Lo		Yang	2	Huai	1		
Hanh	2						

In the above figures we can distinguish two main directions:

The northeastern directions: Ch'en and Sung into Wei and Ch'i. Northward from Sung, parallel with the influence observed of Ch'i into Ch'u, we observe some connections between Lu Weih Ch'u, yet fewer than between Ch'u and Ch'i. The Lu Weih areas show a degree of identity with Ch'u, which seems to be of the same strength as that of Chou Lo Hanh

Cheng. Ch'en is an area where the Ch'u influence is strongest, but comes to a stop immediately beyond.

The contact of Ch'u and western dialects is still weaker; it is to be explained not as the result of the expansion of Ch'u, but as that of the western dialect into Ch'u. (Cf. p. 190 ff.).

The second important line of Ch'u influences goes eastward: over Ch-H into Wu Yang and Huai Hsü Tg-Hai (H-T). The penetration into H-T is very weak. But the influence of Ch'u in Ch-H is so strong that Ch-H can be taken as an expansion area of Ch'u, but it diminishes rapidly when passing to Wu Yang Yüeh.

The contacts of Ch'u with N-Ch'u and Ching call for a short comment. The number of identity cases with N-Ch'u and Ching are comparatively very weak, but these two areas show archaic forms that can be compared with the archaic reconstruction of literary words. Therefore, on one hand the identity with Ch'en shows a shift of the Ch'u center toward the northeast within the Ch'u area, but the contacts with N-Ch'u and Ching represent what may be the oldest layer of the Ch'u vocabulary, partly lost and renewed while the shift east and northeast took place.

From the previous pages, it appears that the areas south of Ch'u have their center in N-Ch'u and Ch-Hs; this center has fewer contacts with Wu and Yang than Ching. On this fact the following hypothesis can be proposed:

(a) Before Ch'u expanded north and eastward (Ch'en, Huai), its main center was the region around the capital Yingh; from there it expanded first southward to the regions of T'ung t'ing, that is, N-Ch'u and Ch-Hs. By this expansion Ch'u cut into a non-Chinese area, which was related (or had been in contact) with Wu Yang Yüeh so as to possess an amount of common (or mutually borrowed) words.

(b) When Ch'u moved more northward and eastward, its cultural center moved too, leaving N-Ch'u Ch-Hs as a more independent subgroup, which preserved some of the oldest vocabulary features but also developed new trends of its own.

Similarity Cases

Standard	45	Kn-tg	12	Wei	8	Tg-Ch'i	12
Ch'-Chin	25	Chou Lo	4	Cheng	7	Yüeh	4
Kn-hs	20	Hanh	4	Weih	6	Yang	4
Literary	14	Ch'i	14	Ch'en	5	Chao	4
L-Y	4	N-Ch'u	12	Wu	8	Yen	4
Hs-N	4	Ching	7	H-T	7	Lu	3
Shu	4	Sung	9	Huai	6	Yüan Li	2

It is important to see how far the similarity connections will confirm or contradict the conclusions drawn from the identity cases.

The number of similarity cases from the point of view of Ch'u is greater than from the point of view of the other areas; this is because the absolute number of Ch'u words is much higher than that of the other areas, so that the points of contacts from the point of view of Ch'u are more numerous too. With this in mind, the frequency of similarity cases for standard Kn-tg, Chou Lo, Cheng, Wu Yü Yang appears normal in comparison with the identity cases.

The highest figures point to Kn-hs, Ch'-Chin, and L-Y. Although the western dialects exerted some influence on Ch'u, the similarity cases do not necessarily reflect such an influence but rather that the western dialects and Ch'u are more closely related than the identity cases reveal. The frontier between the two dialects was clearly drawn but they were not of different origin.

Another exceptional unexpectedly low figure concerning Ch'en should not be misunderstood: it is simply because Ch'en is seldom mentioned apart from Ch'u, so that the identity cases are the great majority.

As a conclusion of the comparison of the N-Ch'u and Ch'u contacts, we can propose the following hypothesis concerning the general development of Ch'u in its widest extension:

(1) The condition of Ch'u as shown in FY reflects the result of different phases in development of the subareas of Ch'u. The most important movement is seen in the expansion of Ch'u into the northeast: Ch'u Ying, Ch'u Ch'en, Ch'u Ju, an expansion by which Ch'u comes in contact with Sung-Lu and Ch'i. Parallel with this expansion is another one northward toward Chou Cheng Lo Hanh. But on this side, Ch'u was invaded by the western dialects, and the Ch'u expansion in Chou Cheng Lo Hanh clashed with that of the western dialects.

(2) Probably at the time when the expansion into the northeast took place, invading small states as Ch'en, Ts'ai (蔡), and assimilating dialects which were of Chinese stock, Ch'u also moved into the east, Huai Ssü and Ch-H, where it wiped out the non-Chinese element but was slowed down in its infiltration into Wu Yang Yüeh.

(3) These two movements of expansion suppose a core, which in Han time was the northern half of the province Ching (荆), northeast of the Han River; in earlier periods, it was more in the western corner, between the Chiang and the Han (Mien), centering around Yingh (郢). Before its expansion north, east, and northeast, Ch'u branched off into N-Ch'u, where it developed on its own while the northern expansion was carried out.

Central Areas

Kn-tg, Chou, Cheng.—The central areas in general are called Kn-tg. Lao Kan 勞幹 in his article Population and Geography in the two Han Dynasties 兩漢戶籍學地理之關係 CYYY, 5, 2, 1935, (E-tu Zen Sun and John De Francis, Chinese Social History. Translations of Selected Studies. Washington, 1956, p.87), delimitates the Kn-tg area as follows: "Kuan-tung [East of the Pass] by definition should include all areas east of the Han-ku pass [in Honan]. But contemporary usage was otherwise. For our purpose Kuan-tung will be defined as that area enclosed by the Huai River in the South, the Han-ku Pass and T'ai-hang Range in the west, and the old territories of Yen and Tai in the north. In the main this region consisted of a great plain which did not exceed 200 [Chinese] feet in elevation, and was best suited to the development of agriculture and pastoralism." This delimitation of the Kn-tg area which follows the political and physical geography of Han times and indicates one area, geographically and economically, does not coincide with dialect area Kn-tg of FY in all cases, since often Kn-tg is mentioned in opposition with the northern regions Chin and Wei, Yen and Ch'i, and is often restricted by other central areas (Ch'en, Sung, Lu, Weih) or by independent areas opposed to the western dialects as a whole (Kn-hs), like Ch'u. The limits of Kn-tg may be undefined on its eastern side, but the limits on the west are always clean-cut. When Kn-tg is opposed to Kn-hs only, we may consider this as an opposition east:west, where the limits on both extreme sides are not indicated.

Such an opposition involves first the contiguous areas on either side of the frontier: Ch'-Ch'in L-Y / Chou Lo Hanh Cheng and Ch'u. Such cases are 9/8 馘 against 盾; 9/4 矢 against 箭; 8/3 獾 against 獾; 8/11 駟 against 駟; 8/10 服 against 蝙蝠; 5/21 扇 against 箒; 3/7 協 against 汁; 1/29 逆 against 迎, 逢; 3/11 梗, 歲 against 刺; 8/13 鶻 against 鶻, 黃, 黃鳥. Cases where Kn-tg is limited on the eastern side by other dialect areas are, for example: 11/1 虫 against 虫, 蜈 against 蜈, 蜓 against 蜓, 蛛 against 蛛, 螭 against 螭, 蛉 against 蛉 and Ch'i 螭 against Ch'in and standard 蛛. 4/3 甲 against Ch'en Wei Ch'u Sung 襦, 禪 against Ch-H N-Ch'u 曾 and Kn-hs 祇 against standard 汗. 4/4 襪 against Ch'en Wei 帔 and standard 帔. 1/30 and 6/19 掩

against Ch'en Sung 撫, Weih Lu Yang Hsü Ching Heng 擣, Ch'u N-Ch'u 擣 and Kn-hs 索, 狙, 纂, standard 取.

When Kn-tg and Kn-hs have the same word, it is usually the result of the infiltration of Kn-hs into Kn-tg. This is proved by the cases where within the Kn-tg area some small areas still preserved the original word, or a limit is set to this Kn-hs Kn-tg identity by a different word in subareas or adjacent areas of Kn-tg. Thus 3/14 (and other passages, cf. p. 80) Kn-tg and Kn-hs: 謫 against West: Liang chou and Hs-N 膠, Ch'-Chin 檜, Chin 謾, 獯 and standard 詐, 慧, 檜, 姑, 猾, 儼, 欺, 謾, and South: Ch'u 謫, 剽, Ch'u Sung: 便, Ch'u Cheng: 為, 姑, Ju nan: 讀, 詒; North: Kn-tg Chao Wei: 黠, 鬼. Many of those words are phonetically comparable, but the differences found in parts or adjacent areas of Kn-tg are striking and show that the word 膠 in Kn-tg Kn-hs is from the west. Similar explanations apply to 3/9, 4/1, 5/7, 8, 16.⁶⁰ In 3/8, Kn-tg Kn-hs 還, 及 is opposed to st. 及, Tg-Ch'i 迨; here we have two words in Kn-tg, showing that 還 is the dialect word, and 及 came from the west.

The other connections of Kn-tg show the following cases of identity:

Kn-hs	18	Lu	4	Lo Hanh	2	Ying	1
Ch'u	10	Weih	4	Ch-H	2	Wu	1
Wei	8	Chao	4	Ching	2	Yang	1
Ch'en	7	Sung	2	N-Ch'u	2		
Chou	5	Ch'i	2	Ju	1		

The contacts with Kn-hs must be partly understood as influences from the west, so that Kn-tg and Ch'u are both almost equally related to the western dialects. It could be partly owing to the fact that Kn-tg and Kn-hs have dialect words which had originated locally in either area before Kn-hs rose to prominence and expanded through all China. Such words differ from the standard forms in FY (3/8, 4/44) and from the dialect forms in adjacent areas (8/1, 5).⁶¹

The similarity cases are the following:

Standard	28	Ch'u	8	Wei	12	Chou	4	Wu	1
Kn-hs	16	Sung	4	Ch'i	7	Cheng	3	Yang	1
Ch'-Chin	13	Lu	1	Yen	4	Lo,		Hsü	1
L-Y	2	Ch'en	4	Chao	5	Hanh	1	Tg-Ch'i	2
		Ying	1			N-Ch'u	7	H-T	2

Most striking among these connections is that with Yen, Wei, Chao; it shows that the connection Kn-hs: Yen, discussed above, did not only pass through Chin Chao Wei, but also through Kn-tg Wei Ch'i. The impact of the western dialects in Kn-tg, already observed before, becomes stronger now in the light of the similarity cases.

Some Kn-tg words show no or only a very weak similarity with words of other dialects; but they are old literary words: thus for example, FY 9/8 千 (SCg), 餓 (Yi-chou shu), 8/7 鳴 (Li, EY), 5/23 綆 (Tso).⁶²

The center of Kn-tg being Chou Hanh Lo Cheng, it is necessary to consider the passages where these areas are mentioned without Kn-tg and see their relations to other areas.

							Chou: Identity			
Cheng	6	Kn-hs	1	Lo	2	Tg-Ch'i	1	Ch'i	1	
Ch'u	2	Weih	1	Hanh	2	H-T	1			
Ch'in	2	Wei	2	Sung	2	Huai	1			
							Chou: Similarity			
Kn-hs	6	St.	5	Chao	2	Ch'en	1	Tg-Chi	2	
Ch'-Chin	5	Ch'u	2	Sung	3	Yen	1	H-T	1	
Wei	4	Ch'i	2	Wei	1	N-Ch'u	1			

							Cheng when mentioned without Chou			
			Identity		Similarity					
Ch'en	4	Sung	1	Ch'u	3	Lu	1			
Hanh	3	Wei	1	St.	3	Wei	1			
Ch'u	1			Ch'-Chin	3	Yen	1			
				Sung	2	Kn-hs	1			
				Weih	2					

Hanh when mentioned without Chou

Chao	1
Standard	1

The figures for both Chou and Cheng together show the same kind of connections: (1) West, (2) Ch'u, (3) Sung-Lu-Wei, (4) Wei.

In addition, they indicate that the relation with Ch'u went along two lines: one connecting Chou directly with Ch'u; the other, more important, via Cheng Ch'en. The contact with Ch'u was a result of the expansion of Ch'u through Ch'en, Cheng; it weakened more and more as it reached Chou.

The eastern central areas: Lu Sung Weih Wei

Connections of Sung

									Identity		
Weih	27	Wei	29	Ch'-Chin	5	Standard	3	Chin	3		
Ch'en	26	Lu	13	Kn-hs	4	Kn-tg	3	Ying	3		
Ch'u	23	Ch'i	10	Cheng	3	Ching	3	Ch-H	2		

Chou, Ju, N-Ch'u, Wu all 2.

Chao, Yen, Hanh, Hsü, Huai, Tg-Ch'i, Yang, Yüeh, all 1.

Similarity

Stand.	39	H-T	3	Ch'i	8	Lu	5	Lo	4
Ch'-Chin	14	Chin	1	Yen	6	Wei	3	Hanh	3
Kn-hs	13	Ch'u	13	Kn-tg	6	Weih	2	Huai	3
L-Y	1	Ju	4	N-Ch'u	4	Chou	4	Wu	1
Tg-Ch'i	10	Ying	2	Ching	2	Cheng	4	Yang Yüeh	1

The most frequent contacts are with Weih, Wei, Ch'en-Ch'u; next comes Lu, which is essentially a subarea of Sung Lu. The contacts with Kn-tg and the western central areas are weak, as with the western dialects (Kn-hs, Ch'-Chin). Lu Sung is sharply opposed to Kn-tg and clearly resists all influences from the west.

In the similarity cases, the role of the standard language and the western dialects is somewhat stronger. It reflects only a relation existing between dialects of the same stock, for the frequency of these contacts is too low to be interpreted as a result of the spread of the standard language, and the western dialects.

Lu Sung is archaizing and conservative. The cases of similarity with Kn-tg (Chou Lo Hanh) are slightly higher than the identity cases; but they do not alter the conclusion already made. Only the similarity connections with Ch'i and Ch'u seem to be equally numerous and important as identity cases. The low figure of similarities with Wei, Lu, Weih is of no significance, for it is owing to the fact that all mentions of Weih and Lu are combined with Sung.

In Lu, besides the contacts listed above, we have:

									Identity		
Sung	13	Weih	7	Huai	2	Yang Wu	1	L-Y	1		
Ch'i	10	Hsü	2	Tg-Ch'i	1			Ch'-Chin	1		

		Similarity							
Sung	5	Ch'u	3	Stand.	4	Wei	1	N-Ch'u	1
Ch'-Chin	3	Ch'en	2	Huai	2	Ying	1		
Hs-N, L-Y	2	Chao	1	Yen	1	Tg-Ch'i	1	H-T	1

The figures confirm the connections already stated in Ch'i and Weih, but the contact with Sung is still the highest. Lu is the point where the influences of Sung and Ch'i compete and mix. This proves that Lu Sung is one group together with Weih. The connections with Tg-Ch'i and H-T are cases where genuine Chinese words are listed: (7/17 經: 熟), but the contact with Yang has one word that may be non-Chinese (擇 1/30).

Weih has the following contacts:

		Identity						Similarity							
Sung	27	Yen	1	Standard	3	Huai	2								
Lu	13	Chou	1	Sung	2	N-Ch'u	2								
Chin	3	Chao	1	Chao, Wei	1	Ju Ying	1								
Wei	3	Tg-Ch'i	1	Ch'i	1	Ch'u									
Ch'i	3	Ch'-Chin	1	Ch'en Cheng	1	(Ching)	1								
				Ch'in	1	Tg-Ch'i	1								
				Ch'-Chin	1										

Weih too is only a subarea of Lu-Sung-Weih, and is the meeting point of influences of Sung with Wei and Chin. The other contacts can be explained in the light of Ch'u (Ju, Ying), Ch'i (Yen), Wei (Chao, Chin). The western dialects and the standard language have only contacts through similarity cases.

The position of Ch'en and Wei.—Ch'en is in close contact with Ch'u, and offers a passage from Ch'u to Kn-tg (Chou Lo Hanh Cheng), and to Lu-Sung-Weih. But Ch'en is sometimes mentioned alone, or in combinations exclusive of, or beyond Ch'u.

		Identity						Similarity							
None	4	Ch'i	1	Standard	4	Literary	2								
Sung	4	Ch'-Chin	1	N-Ch'u	3	Wei	1								
Wei	1	Lu	1	Ch'-Chin	2	Ch'i	1								
Weih	1			Kn-tg	2	Ch-H	1								
				Ch'u	2	Wu	1								
						Tg-Ch'i	1								

These connections show that Ch'en is the point of contact between Ch'u and Kn-tg and between Ch'u and the northeast: Sung, Ch'i.

Wei is more independent and more important than Ch'en:

		Identity					
Chao	30	Chou	4	Ch-H	3	Cheng	1
Sung	25	Lo		Chin	3	Ch'-Chin	1
Ch'-Ch'u	17	Weih	4	Ch'i	2	Wu	1
Kn-tg	8	Yen	4	Hanh	1	N-Ch'u	1
Ch'u	5						

The most frequent contacts are with Chao, Sung, Ch'-Ch'u. The connections with Weih are to be seen in the light of Sung, of which Weih is a subarea. The direct connection with the west-central areas (Kn-tg, Chou Lo) is weak, and still more so with Ch'-Chin, which is possible only through Chao and Chin. So far as Wei is connected with the southern adjacent areas, it is part of the eastern central dialects and sharply distinguished from Kn-tg dialects.

		Similarity					
Stand.	30	Kn-tg	5	Ch'en	3	Chao	1
Kn-hs	11	Ch'i	4	Ch-H	3	Sung	1
Ch'-Chin	9	Tg-Ch'i	4	Yen	2	Cheng	1
Ch'u	9	H-T		Lit.	2	Chou	1
N-Ch'u	8	Ju	4				

The similarity cases with Ch'u, Ch'i form a parallel with the figures of identity cases. Chao and Sung are rarely mentioned because, wherever named, they were identical with Wei. Wei was strongly influencing Chao, rather than the opposite. Chao received from Wei and Ch'in, and was an intermediary between Wei and the western dialects. The similarities of Wei with the standard language and the western dialects can be explained by the fact that they belong to the same stock, or as later influences from the west through Chin and Chao (not through Kn-tg, for Wei has little in common with Kn-tg, i.e., western central areas). Wei is related to the group Lu-Sung-Weih, but still more closely to Chao. We can propose a grouping like northern-central (Wei-Chao) and eastern-central (Lu-Sung-Weih), both sharply distinguished from the western and western-central dialects.

Standard Language and Dialects in Fang yen

In the preceding review of the dialects the absolute figures of identity or similarity contacts for each separate dialect group sufficiently reveal the relations of each dialect area with the others. In this study all dialects are taken together and compared to the standard language. Some of the dialects were mentioned very frequently and others less often; a percentage is calculated for every area on the comparison of the total number of words in a dialect area with that of the cases of identity and similarity with the standard language. The direct result will not show how much of each dialect entered into the standard language, but what role each dialect has comparatively played in the construction of the standard language, the real extent of which is not directly attained. As in the preceding study, decisive weight is attributed to the identity cases. The similarity cases are explained in the light of the identity cases; if they contradict the former figures, they may alter the general picture. It is not surprising that some similarity figures do not yield a readily interpretable situation; in such cases, it is better to avoid exaggerated evaluation of the similarity connections.

Furthermore, the comparisons are between so many different readings that a gradation of five levels of similarity will be used:

Similarity 1: Finals and initials in the standard and dialect words agree in the articulation series of the consonants (as in Karlgren's Word Families: K-G includes k-, k'-, g'-, g-, x-, :- and -ng, -g, -k) together with similarity of vowels (a, ä, wa, e, ia, iwa, ie, etc., against o, ö, u, ü, wo, etc.).

Similarity 2: Different vocalism only, or initials and finals do not belong to the same articulation series but a further reconstruction is possible to bring them together. (e.g., *k- : *s- < /*sk- : /*sy-, and *-n : -t < /*-nd : /*-nt). A unification of the identity cases with those of similarity 1, and of the cases of similarity 1 with those of similarity 2 can be used also.

Similarity 3: Similarity exists only between either the initials or the finals. The results of similarity 2-3 can be lumped together also.

Similarity 4: These are doubtful cases of similarity 2 or 3, for which there is only weak evidence.

Similarity 0: These are cases of phonetically entirely different words.

Comparisons Between Identity Cases and Five Levels of Similarity

Areas	Iden.	Sim. 1	Sim. 2	Sim. 3	Sim. 4	Sim. 0	Total
Ch'u	13	25	33	34	24	32	161
N-Yang	1		1				2
Hsia	2	1			1	1	5
Ju	1	4	4	1	1	3	14
Ying	1	3	2	3	1	4	14
N-Ch'u	7	17	19	18	27	31	92
Parts	3	4	12	15	4	9	47
Ching		4	4	2	5	6	21

Central China: west

(Chou)	(3)	(3)	(6)	(6)	(4)	(3)	(28)
Kn-tg	16	14	11	19	25	16	101
Cheng	3	4	5		5		18
(Hanh)	(1)		(3)	(2)	(4)		(10)
(Lo)	(1)		(1)	(2)	(2)		(6)

Central China: east

Sung	3	12	17	26	27	17	102
Lu	1	8	5	18	10	2	44
Weih		8	6	10	18	3	45
(Yenh)	(1)	(4)	(2)	(1)			(8)
Ch'en	4	13	13	16	22	10	68

Northern China

Chao	6	6	7	9	10	14	52
Wei	6	11	15	12	12	25	81

Eastern China

Ch'i	4	13	18	22	17	11	85
Tg-Ch'i	4	11	9	13	19	21	75
H-T	2	6	5	7	7	10	37
Huai	1	6	4	4	13	7	35
Hsü (overlapping H-T and Huai)		2	3	5	4	1	15
Wu	3	5	9	9	14	24	64
Yang-Yüeh (Ou)		6	3	2	9	15	35

Western China

Kn-hs	46	11	12	21	18	21	139
Ch'-Chin	33	19	29	24	17	31	120
Chin		4	5	8	5	5	27
Hs-N, L-Y	2	4	3	6	2	10	27

The general results derived from the absolute values of the identity cases show a decreasing order in the role played by the dialects in the standard language:

Kn-hs	46	N-Ch'u	10
Ch'-Chin	33	Chao and Wei	6
Ch'u	18	Ch'en, Ch'i,	
Kn-tg (with		Tg-Ch'i	4
Chou Cheng)	19	Wu	3

Comparing identity with Similarity 1, almost the same gradation and sequence is found:

Kn-hs	57	Sung, Tg-Ch'i	15
Ch'-Chin	52	Chao	12
Ch'u	43	Lu, Weih	9
Kn-tg	28	Wu, Chou	6
Wei, Ch'en,			
Ch'i	17		

However, these values are not fully understood unless we keep in mind that, as was shown above (pp. 80-82, 182-183) some words in Kn-tg and Ch'u happen to be the same as in Kn-hs and in the standard language: in that case we have not a dialect word but a new word coming from the west. Kn-tg has seven such cases, and Ch'u has four. This does not increase the number of words of the western dialects, but diminishes that of Kn-tg to twelve, and that of Ch'u to fourteen, and the part of Kn-hs in the standard language becomes greater. Furthermore, the cases of Hs-N, L-Y (4/44, 7/5) and Ch'-Chin (10 cases) do not duplicate Kn-hs; they must be added; they bring the words of the western dialects up to fifty-eight.

In comparing similarities 1 and 2 with similarities 3 and 4, we obtain the following sequence:

Similarities 1 and 2

Ch'u	73	Kn-hs	23
N-Ch'u	60	Tg-Ch'i	20
Ch'-Chin	48	Wu	14
Kn-tg	34	Chao	13
Sung	32	H-T	11
Ch'i	31	Huai	10
Wei	26	Yang Yüeh	9

Similarities 3 and 4

N-Ch'u	71	Tg-Ch'i	32
Ch'u	65	Wei	24
Kn-tg	55	Wu	23
Sung	53	Chao	19
Ch'-Chin	41	Huai	17
Kn-hs, Ch'i	39	Yang Yüeh	11

In these two lists, as for the list of similarity 0, we see that in general the figures of similarities 1 and 2, similarities 3 and 4 and similarity 0 increase according to an inversed sequence of the areas listed according to similarity 1 and the identity cases.

The proportionate values of the identity and similarity cases in the dialect areas are given in the following table:

Areas	Iden.	Sim. 1	Id. & Sim. 1	Sim. 2	Sim. 3	Sim. 2 & 3
Kn-hs	33.08	7.91	41.00	8.63	15.09	23.74
Ch'-Chin	27.50	15.83	43.33	23.33	20.00	43.33
L-Y & Hs-N	7.40	14.81	21.48	11.11	21.48	33.33
Cheng	16.66	27.22	44.44	27.22		27.22
Kn-tg	15.84	13.86	29.70	10.89	18.81	29.70
Wei	11.53	21.15	32.69	13.46	17.30	30.76
Chao	11.53	12.33	23.07	13.46	17.30	30.76
Ch'u	9.34	16.50	25.82	20.87	19.23	40.10
Ch'en	5.88	19.11	25.00	19.11	23.52	42.00
Tg-Ch'i	5.33	14.66	20.00	12.00	17.33	29.33
Ch'i	4.70	14.11	18.58	21.17	25.88	47.05
Wu	4.37	7.81	12.46	14.05	14.05	28.12
Huai	2.85	14.28	20.00	11.42	11.42	22.85
Lu	2.12	17.02	19.57	12.76	40.42	53.17
Ching		18.57	18.57	18.57	9.52	28.57
Weih		18.36	18.36	14.56	22.44	36.73
Chin		9.09	9.09	13.18	31.81	45.04

If we list the areas in every column according to a decreasing gradation, we obtain:

Iden.	Sim. 1	Id. & Sim. 1	Sim. 2	Sim. 3	Sim. 2 & 3
Kn-hs	[Cheng]	[Cheng]	[Cheng]	Chin	Lu
Ch'-Chin	Wei	Ch'-Chin	Ch'-Chin	Ch'i	Ch'i
Hs-N	Ch'en	Kn-hs	N-Ch'u	Sung	Chin
Cheng	Ching	Wei	Ch'i	Ch'en	Ch'-Chin
Kn-tg	Weih	Kn-tg	Ch'u	N-Ch'u	Sung
Chao	Lu	Ch'en	Ch'en	Weih	Ch'en
Wei	Ch'u	Chao	Ching	Hs-N	Ch'u
Ch'u	Ch'-Chin	N-Ch'u	Sung	Ch'-Chin	Hs-N
Ch'en	N-Ch'u	Huai Tg-Ch'i	Weih	Ch'u	Chao Wei
N-Ch'u	[Hs-N]	Lu	Wu	Kn-tg	Kn-tg
Tg-Ch'i	Tg-Ch'i	Ching	Chao- Wei	Tg-Ch'i	T-Ch'i
Ch'i	Huai	Ch'i	Chin	Wei	Ching
Wu	Ch'i	Weih	Lu	Kn-hs	Wu
Huai	Chao	Sung	Tg-Ch'i	Wu	[Cheng]
Lu	Chin	Wu	Huai	Huai	Kn-hs
	Kn-hs	Chin	Kn-tg	Chin	N-Ch'u
	Wu		Kn-hs		Huai

The list of identity cases has been explained. In the other lists, areas between square brackets have such a small number of words that a percentage may be deceitful unless it is understood in the light of a bigger area of which it is a subarea, for example, Hs-N and Shu with Kn-hs. But even so, the sequence in the column of similarity 1 shows the central dialects far ahead, the western dialects in the middle and the northern dialects far below. In the column of similarity 2 this is partly the same, but with a greater mixture of the Ch'u and central dialects. In the column of similarity 3, again the central and eastern dialects are on top, and the western dialects in the middle or at the bottom. Similarity 2 & 3 is not quite clear, though it shows the majority of the central dialects on top, and the western dialects spread out till the end of the list.

Summing up these facts: the percentage lists of similarity for the central areas (and with them the east [Ch'i], northern and north-eastern Ch'u) are the closest to the standard language of FY, whereas the western dialects (and with them northern areas), are more remote. But in

the absolute and proportionate figures, the western dialects are on top. There seems to be no other explanation but this: since the western dialects have such a predominant role in the standard language, yet the part of its vocabulary that is not identical but only similar to the standard language is proportionately more remote from the standard language than the other dialects, it is possible that where the other dialects (Kn-tg and Ch'u) contribute words to the standard language, the western dialects were almost completely excluded. Then, originally those words which the western dialects did not bring into the standard language, were strongly differing from the other dialect words. This situation would still be partly reflected in the sharp opposition Kn-hs // Kn-tg, though the dialects on both sides belong to the same Chinese stock.⁶³

Conclusion

The foregoing discussion shows that there were many mutual influences, changes, and interactions among the dialects, and that from the dialectal interferences a new standard language was produced in which the western dialects were prominent.

In the accepted theory of the ArC reconstruction going back to the times of Chou (from 1028 B.C. or 800-600 B.C.), and in the supposition that this ArC language is the ancestor of the AnC (Ch'Y) of 601 A.D., the picture of the Han time dialects and their intermingling, with the emerging of a new standard language, creates a great difficulty. However, we could answer that the so-called Chou standard language was after all very close to the western dialects geographically and phonetically. But such an answer is a purely theoretical one, since we do not know much about the Chou standard language, and it does not solve the difficulties arising from other dialectal influences (Ch'u, central eastern dialects). A standard language supposes a certain freedom and facility of intercommunication; it was the unification of China by Ch'in which created this new condition, and it was the dialect of Ch'in which was predominant. If, before Ch'in, the Chou language was a model, it was still largely restricted in its expansion, and, to begin with, only through and for literature. Yet we know Ch'i and the states Sung, Lu, and later, Ch'u became equally active in that field.

These difficulties disappear in the theory exposed in Part I, where it was proposed that the earliest reconstruction system we have been able to reach is the Hsh system of SW, which reflects the situation of the Chinese language from the beginning of the unification till Middle Han. The SCg system, as it.

has been reconstructed, is probably a uniformization of the rhymes of a later time. Maybe another, better elaborated, system of the SCg rhymes will lead to a more archaic reconstruction than we have now.

The reconstruction of a Pre-ArC stage can be attempted by comparing the various dialect forms of FY. In view of this reconstruction a question arises concerning the possibility of characterizing the various Han time dialects phonetically. If that were possible a comparative study of pre-Han literature might yield new results. Unfortunately, it seems that in the light of the present results such a characterization is not possible. The same word, given for several dialects and written with the same graph, may have been differently read, but still remained recognizable. For the words that were different enough to call for different graphs, our reconstruction is always built upon the same Hsh and rhyme system; in this way, many striking differences are automatically wiped out. Before FY and SW, there is no general and uniform source comprising a sufficiently extensive material of the Chinese language; yet, one of the possible approaches for studying the pre-Han language is the study of the individual words.

CHAPTER III

THE GEOGRAPHICAL METHOD

LINGUISTIC GEOGRAPHY

APPLIED TO WRITTEN MATERIAL

Linguistic geography or dialect geography, as a method in linguistics, has caused, and still causes, much debate; in works on general linguistics, a chapter is usually devoted to dialect geography. Essentially it consists in the study of linguistic facts from the point of view of stratigraphy. The geographical distribution of the various types of words, of grammatical or phonetic features, shows, by its configuration, which type of word, which grammatical or phonetic feature is older in comparison to others and which one is newer. Once the comparatively old and new forms are established, an explanation for such diachronic changes coinciding with stratigraphic and areal limits can be found by studying these areas themselves in relation to historical, cultural, economic, psychological, and other extralinguistic factors.

It has been admitted that the dialect geography provides a complementary approach to the historical study of language, as was done before by means of the comparative method. Dialect geography has brought new light to the study of the modern dialects and languages and has resulted in a set of new ideas concerning language in general. The first expositors of the geographical method went as far as to consider the accepted theory concerning the sound laws as a faillite, and the conception of the "Neo-grammarians school" on the development of the languages, as obsolete and mistaken. The geographical method followed more closely the extremely complicated nature of linguistic evolutions in individual words, creating often the impression of complete confusion; it stood in sharp contrast to the simple and rigid formulation of "sound laws" of the Neo-grammarians. But the first theoretical exaggerations of the dialect geographers have been abandoned in favor of a more moderate position.¹ The axiom in dialect geography: "every word has its own history," compared to the concept of sound laws—even in the sense of general tendencies or formulas of development—means rather, that against the background of regular sound evolution, there is a considerable number

¹For notes, see p. 322.

of exceptions owing to mutual attractions of words, contacts, and mutual influences of different dialects and speech communities.

The concept of a dialect becomes now different: a certain area of more or less uniform speech habits contained within a bundle of boundaries of various linguistic features, which do not exactly coincide but may follow the same general configuration. Now, the assumption of the former comparative school of "uniform parent languages and sudden, definitive cleavage,"² failed to provide a complete explanation of the linguistic facts. What is valid for modern language is also valid for earlier periods. The correction and supplementation introduced by the dialect geography should therefore also be applied to the older stages of language, such as, the Germanic, Indo-European, and so on. That the comparative school did not come to the conclusions of the dialect geographers was simply because the comparative school, dealing with the oldest phases of the language, did not possess that rich and readily coordinated linguistic material that is provided in a modern dialect atlas.

Not all parts of the linguistic world provide good material for linguistic geography; not even when the most up-to-date procedures and preparations learned through previous extensive explorations in Europe are applied. The European countries have a long history of various political and cultural unities, areally well separated, more or less independent, centered on themselves and well entrenched for considerably long periods of time, so that they naturally created the required conditions for the development of specific linguistic features characteristic in one determined area.³

But new situations arise where the areal circumscription of features and geographical diversity are no longer of the same significance and importance. The new world is an extremely moving one, with continuing immigration and population movements. This raises extreme difficulties for the method of linguistic geography, when applied in a mechanical imitation of European approaches. Glenna R. Pickford made some very interesting remarks indicating the neglect of factors in American linguistic geography other than mere geographical distribution, permissible only in more stable areas of Europe, and the slanted predilection for regionalistic features at the expense of a true picture of the linguistic situation, which considers as well the problems of class composition and other segments of the total population rather than a supposedly, certainly minor, even often unreal segment of the "native" speakers. She states that "future research in American speech must be used to determine more significant questions and bring the professedly sociological branch

of linguistics up to date on social theory and scientific method."⁴

As the method of dialect geography developed, it began to be applied to older periods too. The application of the method of dialect geography passed apparently through three different phases. The first application of dialect geography was of course to the modern dialects in the world. The conclusions not only showed the confusing interaction of words and meanings, of areas and communities, of social and cultural, political and economic factors in the language, but, by elaborating a stratigraphy of the language evolution, they also permitted the reconstruction of a historical development thus revealing a condition of former times and going sometimes back to a highly archaic period, which the comparative method ignored.

The second application followed naturally: if such a stratigraphy could be worked out from the modern material, it was to be expected that, in the written documents of regions with a literary tradition, some material could be found which fitted in a given stratigraphic level, and confirmed or corrected and supplemented the first results. At the same time, a definite period could be attributed to the linguistic stage which the geographical method had isolated stratigraphically. In this way the comparative and philological school and that of dialect geography could meet and combine their specific approaches to obtain a more complete picture of the historical evolution.

But the conjunction of both methods was far from complete. Dialect geography often obtained results which philology could not confirm, and vice versa. Thus, a twofold picture of the situation of a former phase was obtained although the congruence or combination of the two kinds of results was not visible. This was due to the deficient material on both sides. A most complete dialect atlas could not yield a stratigraphic picture that gives a coherent explanation of all the related facts found in written material. On the other hand, cases were soon found where the written material was sufficient to be organized synchronically and geographically, reflecting a situation in terms of areal distribution and stratigraphical significance of which the modern geographical atlas did not show any trace.⁵

With this step, geographical linguistics applied to written material was born. Phonetic and grammatical features, as well as separate words, were subjected to these new investigations. But the studies which combined modern dialect facts with the written materials were of course more numerous.⁶ However, the method did not have the same success or the same striking results everywhere. The most conclusive and fruitful studies were those limited to individual words, rather than to the

other aspects of language. However, the patient perusal of documents of the same period and region provided material for investigations on grammatical and phonetic aspects.⁷ Obviously, the special nature, the degree of uniformity, the extensiveness and wealth of the written material greatly determine the success and special kind of results as well as the various ways of applying the method of dialect geography. A limited kind of material such as Gothic, but treated statistically and geographically, yielded interesting results.⁸ In some fields, the linguistic material combined with epigraphic, protohistorical data, written traditions and legends, resulted in a stratigraphic view of the past stages of a language.⁹ In principle the geographical method can be applied to any period of language and to any kind of material that offers a certain synchronism and that can be somehow areally circumscribed and compared. But every kind of application can have a different significance. Some features can be considered as fairly conclusive, analogous to a compact bundle of isoglosses in a modern dialect atlas; others resemble only an unimportant line between two usages of a specific word in a small area of a subdialect.

The richer the written material and its variety, the greater also the possibility will be to weigh out the specific significance of its areal distribution. In such an evaluation of the material, much help is gained by the elaboration of general laws of interpretation.¹⁰ By such laws, we often try by logic and by establishing a certain hierarchy among the known facts and the logic processes, to determine the significance of the smallest detail and the most tiny indication. Such are the laws of the areal linguistics of Bartoli.¹¹

This development in linguistic geography, developed by Bartoli and called Neo-linguistics, has been defended and attacked with equal fervor. It has been shown that Bartoli's laws of areal distribution and their significance are a scientific, coherent body of principles which have often and long before been applied accidentally and unconsciously by the students of comparative linguistics.¹² The objections to Bartoli's laws of areal linguistics are mostly based on some unwarranted applications of the principles.¹³ There is, besides the question of sufficient material, the question of sufficient density and communication between the early linguistic groups.

Linguistic geography, applied to modern dialect material, developed strict methodological procedures and requisites. It was considered important that the inquiry be carried out from a synchronic point of view, by a uniform approach to all the geographical points, and that these points form a closely meshed network covering the whole area under

study.¹⁴ The choice of the linguistic feature (lexical, grammatical, or phonetic) to be studied and mapped is important; some words are more revealing than others. A serious objection may seem to rise to the application of this method to written material, since it is not possible to obtain a material from written documents sufficiently rich and varied to cover an area with the same density as is possible in modern dialect geography. Moreover, the further back in time the application of the method is made, the wider and vaguer the area studied *in casu* usually becomes. However, it may be pointed out that the degree of information concerning the area investigated is not absolute but is in reversed relation with the extension of that area. The smaller the area, the closer must be the points of observation in order to determine the lines where the significant distinctions between different subareas will appear. The wider the area, the wider the checking points may be. Yet it is *a priori* not known where the limits are between the various areas dialectally opposed within the region under study, and modern dialect geography sets up a network with checking points as close to each other as possible in order not to miss any important areal distinction. Once the material is complete and compared, the multiplicity of linguistic forms can be reduced often to a simple expression of two or three competing areas with small scattered and isolated localities around and between.¹⁵

Linguistic geography, when based on written documents, does not obtain such results through the reduction of a multiplicity of material; it is supposed that this result can be obtained directly on the basis of two assumptions: that a well-represented and locally differing literature normally preserved the main forms which correspond to the various types of forms obtained in modern dialect geography, and that the political and cultural divisions or unifications, two great factors of separation or intercommunication and union of linguistic communities, are normally reflected in, and coincide with, the linguistic facts. This is the crux of the problem, that the philological evaluation of the documents and their respective significance in connection with the areal variation, can determine (hypothetically at least) to what degree the picture obtained corresponds to the real situation during a past period of a language.

To fulfill the condition of synchronism, the written documents must at least represent a span of time which is fairly uniform from the point of view of the linguistic feature investigated. The historical method can be combined here to reduce somehow the various documents to a common denominator by means of reconstruction of various forms corresponding

to a certain time level. The more such reconstructions are resorted to, the more the results are hypothetical. The preliminary philological work required for the geographical method and its degree of certitude varies with every language, the period, and every type of document in question.






It is now our duty, not to try to decide on the particular questions of linguistic geography in connection with the Indo-European language,¹⁶ but to show whether or not and under what conditions the FY material admits a treatment according to the geographical method, in order to shed new light on the language and dialects of Middle Han. The preceding chapters gave a substantiated answer to that question. From different sides emerged the conclusion that the FY is a uniform material of Middle Han with a sufficient amount and variety of words covering all the important cultural centers of Chou, and the dialect areas of Han, resulting from the early historical conditions. One serious obstacle lies in the phonetic difficulties. The different methods of reconstruction have been explained; they remain hypothetical and doubtless fail to uncover many phonetic details which the graphs were meant to convey. However, one definite, positive point can be mentioned: although one and the same system of reconstructions is to be applied for all the words in FY, regardless of the dialect to which the characters in FY refer, all these reconstructions are fundamentally based on the SW analysis, and correspond in time fairly well with the period of the dialects described in FY. Against this uniform reconstruction, a variety of sources (Chch in literature, Tj and paronomastic definitions, phonetic descriptions of higher and later antiquity than the uniform Hsh reconstructions, the mutual supplementation on phonetic elements provided by the comparison of the various dialect words themselves, commentaries and explanations as Kuo P'o's, etc.) provide means to check these reconstructions in each case.

GENERAL MAPS OF DIALECT AREAS




Maps are not always needed except for clarity in representing some specific linguistic problems strictly related with the areal distribution. As an example of summing up the facts by a visual method, maps are drawn here showing the relations among the various dialects discussed in the previous chapter. They bring no new facts. However, other maps which combine the particular results of each separate map or isolate a particular aspect of these maps, to compare it to other linguistic aspects or to other cultural elements, can lead to new insights and raise new problems.

The first eight maps show the contacts of one dialect area with the

others. In every case a gradation has been set up to indicate four different degrees of frequency of contacts.

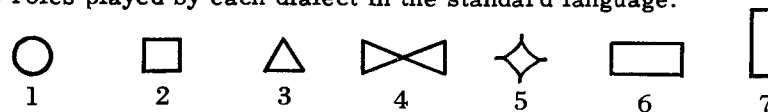
The area compared with all the others is represented in black (i.e., 100 per cent).	
The next grade 2 is represented by heavy slanted lines.	
Grade 3 is represented by lighter slanted lines only.	
Grade 4 is represented by vertical striae.	
Grade 5 is represented by broken striae.	

In the application of these visual devices, the fact that we show a gradual thinning out of the striae or the lighter slanted lines, is not based on the figures given in the statistical comparisons of the previous chapter, since these figures apply to any area as a whole.¹⁷ It represents only an interpretation of how the contacts can possibly be understood, and thereby imply already a theorization as to how the various areas were related. The white areas are those that are not mentioned in FY in relation with a given area, and are ipso facto of little importance.





























In map 8 for the regions of Ching and Nan Ch'u, the heavy slanted lines in the black areas express the relations of the contiguous southern areas with each other. Furthermore, the  undulating lines express the same kind of contacts with Ching only as the striae do for N-Ch'u;  stands for  of N-Ch'u.

Maps 9 and 10 are different from the preceding ones. Map 9 shows the evolution of Ch'u, senso lato (including the southern Ch'u area), in terms of areal expansion and shows the shift of the center of the Ch'u area.

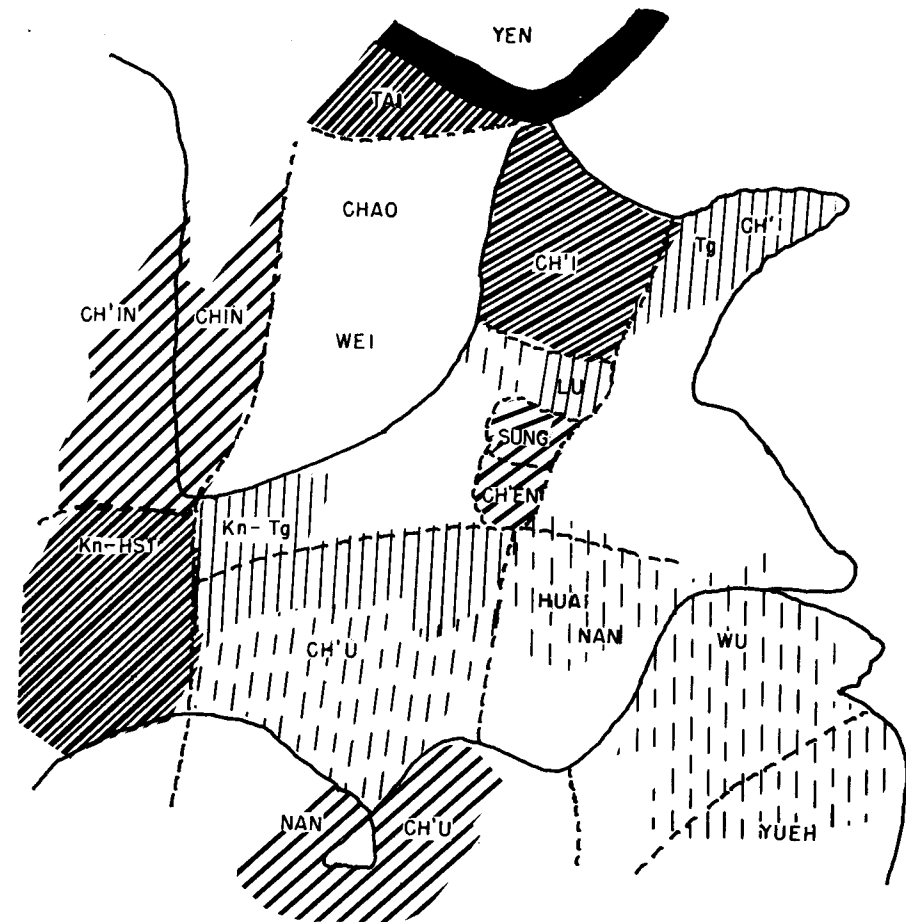
As to our map 10, we use various signs to indicate the decreasing order of the roles played by each dialect in the standard language:



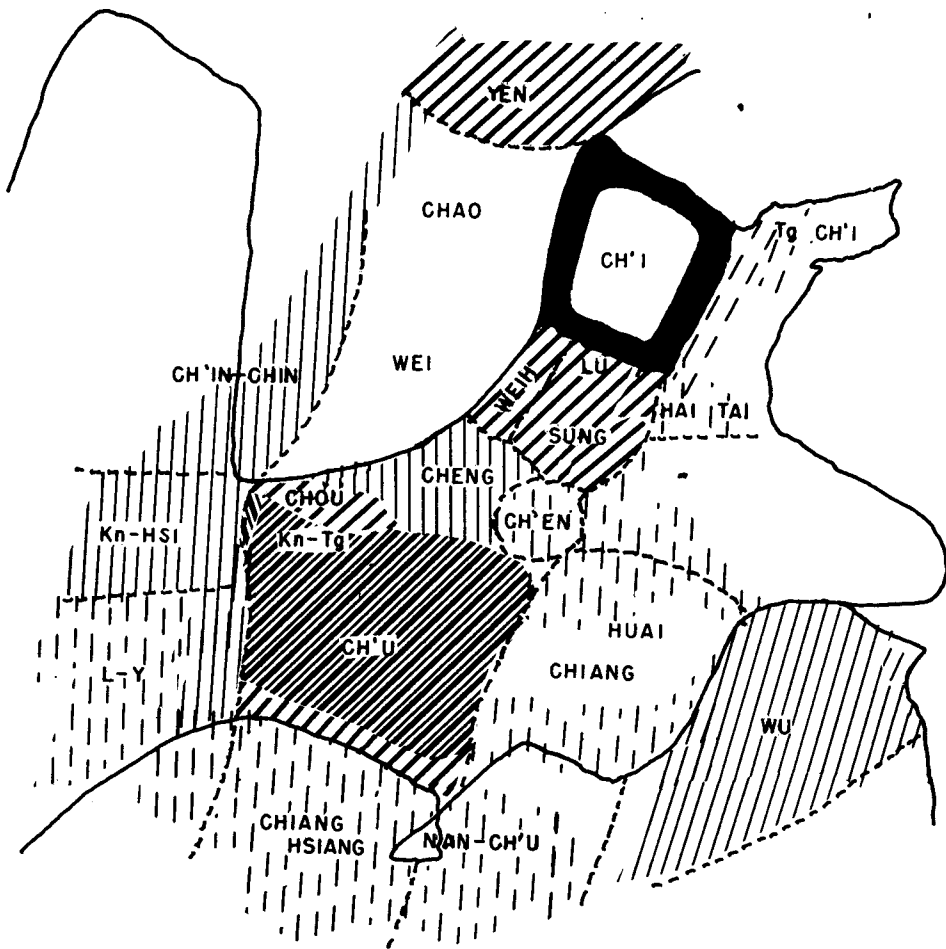
When they are in full black, these signs express the absolute figures of identity; when half-black they refer to the percentages; when filled with striae they express the combination Id + S 1; when white they mean S 1 + S 2. Thus:

			
Kn-hs Ch'-Chin	Kn-hs Ch'-Chin	Kn-hs Ch'-Chin	Ch'u N-Ch'u
			
-----	-----	Ch'u	Ch'u Sung
			
Kn-tg	Kn-tg Cheng	Kn-tg	Ch'i
			
N-Ch'u	Ch'u Wei Chao	Ch'i Ch'en Wei	Ch'i Wei
			
Wei Chao	L-Y Tg-Ch'i Ch'en	Sung Tg-Ch'i	Chao Wu
			
Ch'i Ch'en	Ch'i Wu Ch-H Lu, H-T	Weih Lu Chao	-----
			
-----	Chao Wu Yang Yüeh	Chao Wu	Wu

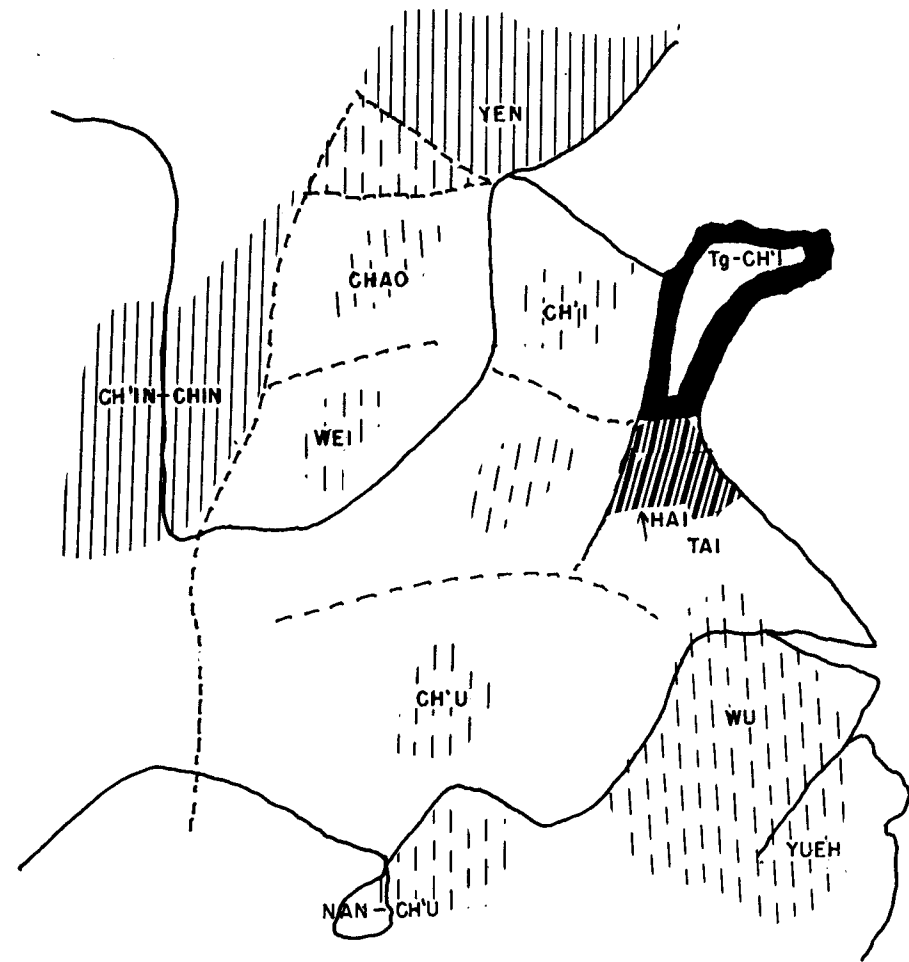
Map 11 is another interpretative map, combining the same figures and facts provided in the previous chapters on the relations between the various dialects and showing the respective strength and influence of



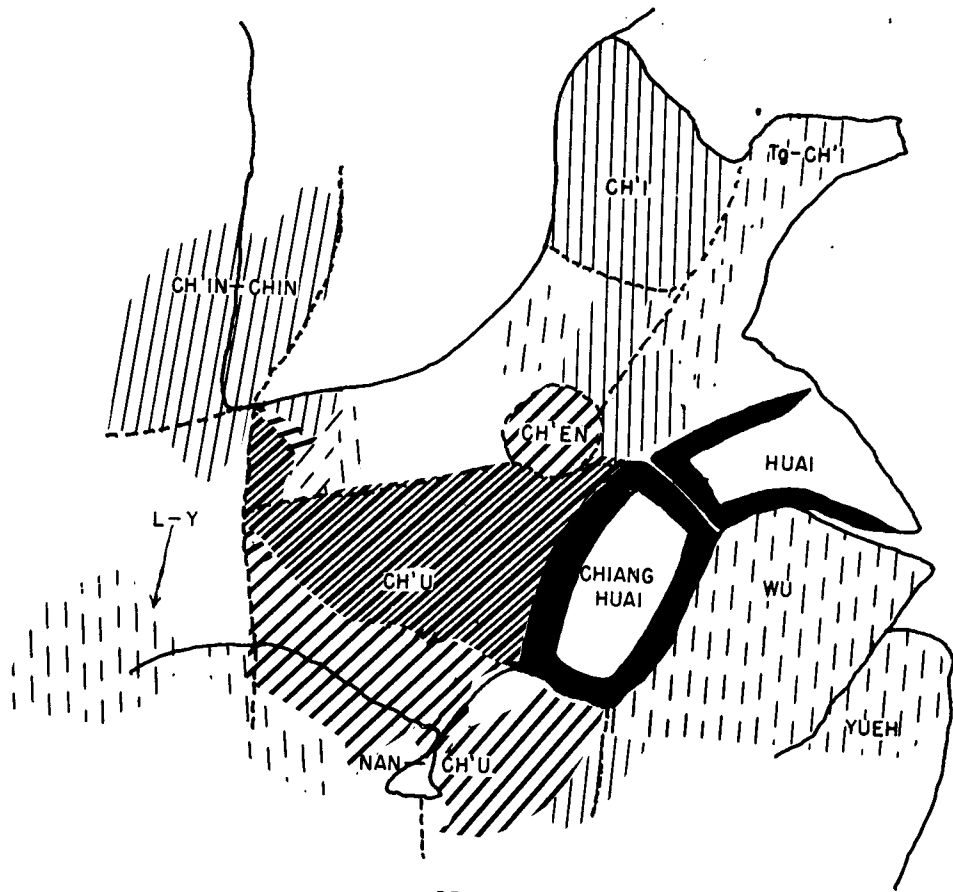
Map 1
Relations of Yen with other dialects.



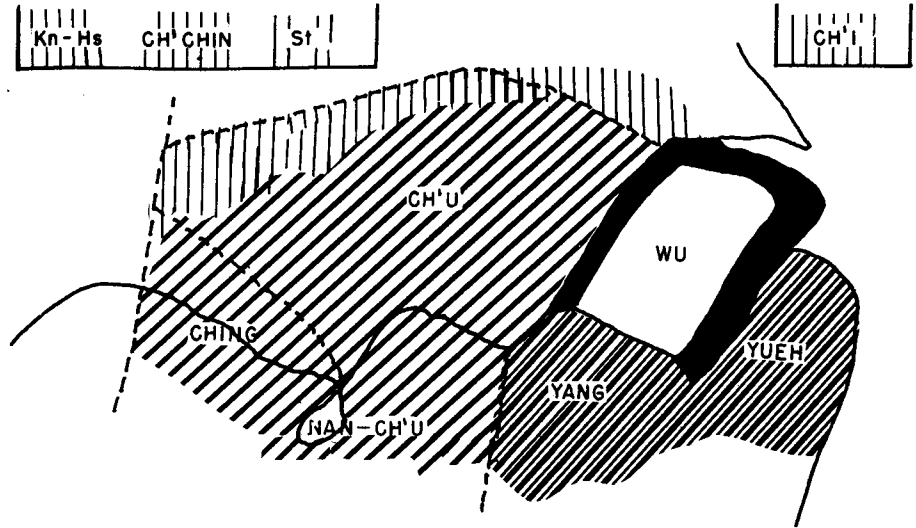
Map 2
Relations of Ch'i with other dialects.



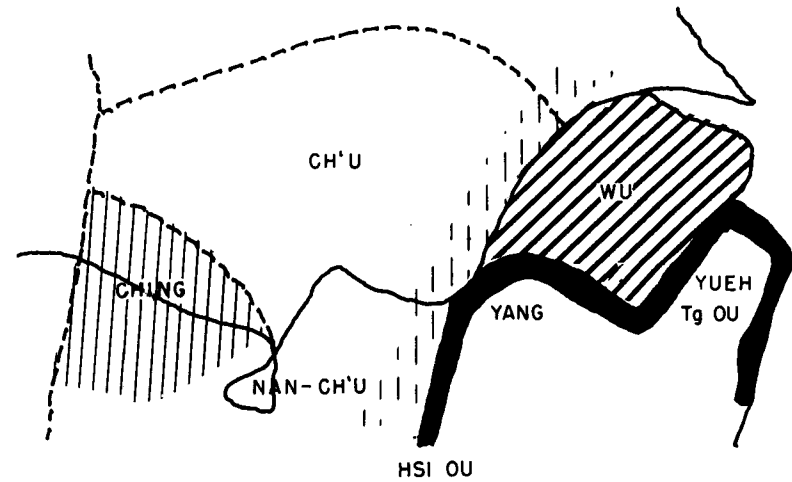
Map 3
Relations of Tung-Ch'i and Hai-Tai with other dialects.



Map 4
Relations of Huai and Chiang Huai with other dialects.



Map 5
Relations of Wu with the other dialects.

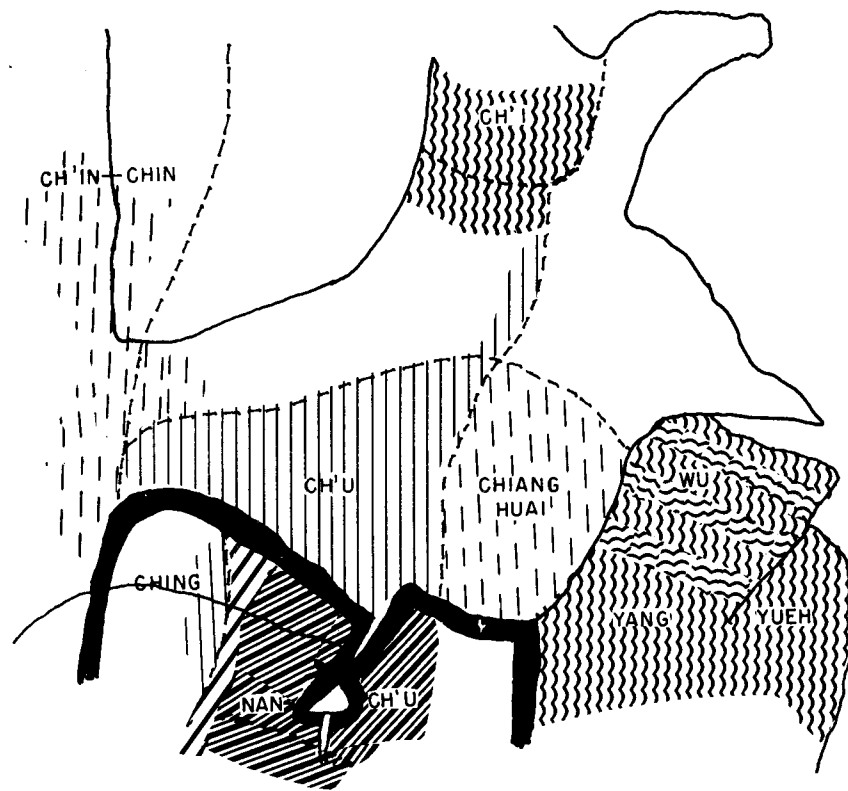


Map 6
Relations of Yang Yüeh with the other dialects.



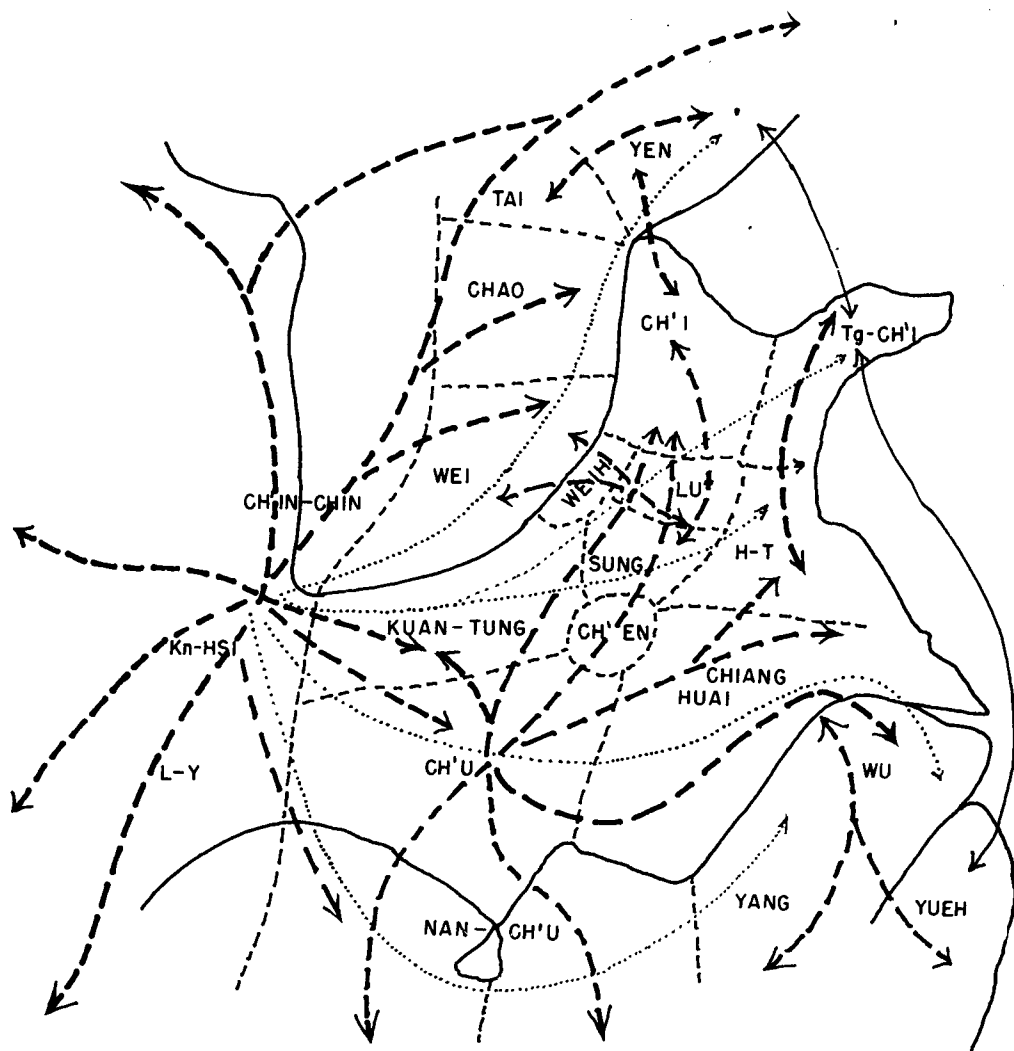
Map 7

Relations of the Ch'u dialect with the other dialects.



Map 8

Relations of Ching and Nan-Ch'u with the other dialects.



Map 11

Main directions of the mutual influences of the dialects.

every dialect in the others. In this map, the dialect areas have been considered under more broad groupings, and are seen from the point of view of dynamic factors of pressure and invading influence among the various areas. In order to express this, the heavy arrowed lines show the direction and importance of the dialectal influences. The dotted arrow lines indicate the influx of the standard language into a given dialect area.

SOME ISOGLOSSES AND TYPES OF LINGUISTIC AREAS

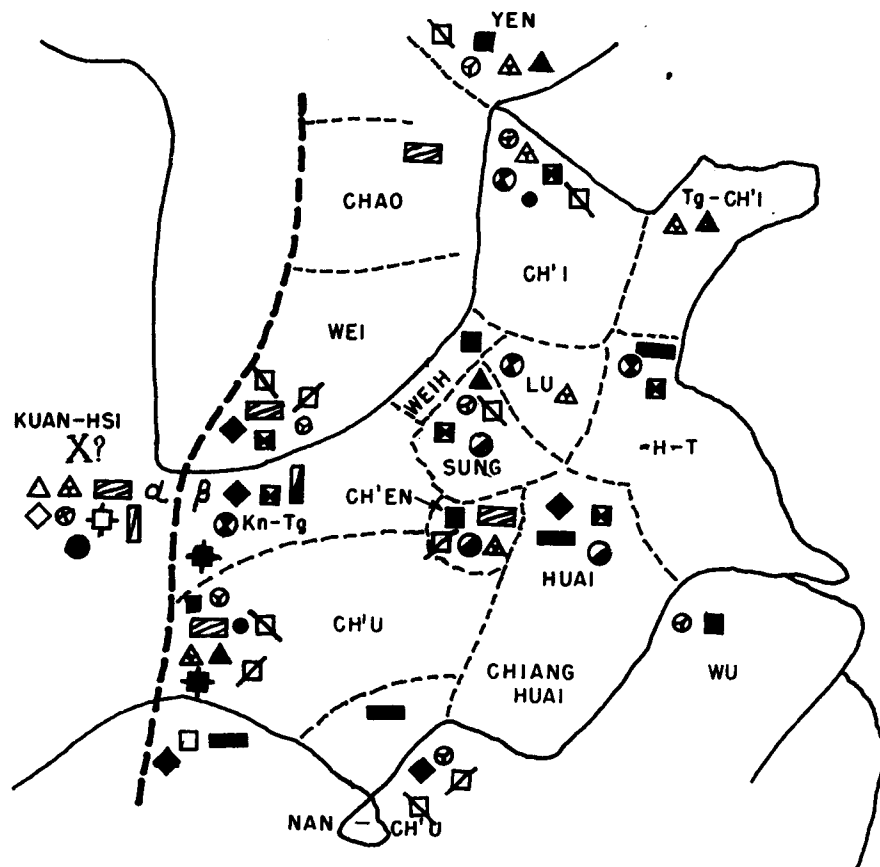
Maps 10 and 11 show by various signs how the relations of the dialects with each other can be dynamically represented and how their relations to the standard language in Han time varied from area to area. In map 10, the most prominent role in the standard language is played by Ch'-Chin, followed by Ch'u in a considerable lesser degree: there is also a gradual diminution of that role in each dialect as one moves eastward.

All these preceding maps express only what was already contained in the statistical data of chapter ii. They represent, therefore, general and broad evaluations. It is naturally to be expected that by the elaboration of the results of the separate word studies and the superposition of a number of separate word maps, many new details will emerge. At the same time a certain configuration of important border lines between some dialect areas must be expected. Already now, some significant isoglosses can be determined and the various types of dialect areas can already be described.

Isoglosses Kn-hs // Kn-tg

Among these isoglosses comes, first of all, the one expressing the opposition Kn-hs // Kn-tg. Some of these cases are explicitly stated in **FY** in terms so clear that it is hardly necessary to represent them on a map.

In other passages, this Kn-hs // Kn-tg opposition is not explicitly stated but results naturally from a careful consideration of the other dialect words mentioned. From the analogy with the passages where Kn-hs is explicitly mentioned, from the fact that the Kn-hs dialect is so frequently identical with the standard language, from the similarity of the configurations where the Kn-hs // Kn-tg opposition is explicit, and mostly because the Kn-tg words are not identical with the standard word, it is possible for many passages, where Kn-hs is not mentioned,



Map 12
Opposition Kuan-hsi // Kuan-tung.

to conclude that the Kn-hs word is the same as the standard one.

A third configuration by which the opposition Kn-hs // Kn-tg emerges is one which shows great diversity and various kinds of areal divisions in the Kn-tg area against the united block of the western group of dialects.

On map 12, the letters α and β represent the cases 8/3, 9/4, 7, 8 (cf. p.182) with clear Kn-hs // Kn-tg opposition. The other signs show the various oppositions where Kn-hs is not explicitly mentioned. $X?$ stands for the Kn-hs words, which can be supposed to be the same as the standard words and to correspond to the various eastern dialect words:

1/15 \odot (3 words, 3 areas), standard 懼, Yen 謾台, Ch'i Ch'u
Sung Weih 齋鬪, N-Ch'u 嘽咍.

1/23 \bullet (2 words, 2 areas), standard 賊 Ch'i Ch'u 華, 莠.

2/29 \blacksquare (4 words, 4 areas), standard 堯, Ching Yang Chiang Hu

揄鋪, Ch'u 幪屺, Ch'en Sung Cheng Weih 幪縷,

Yen Ch-Hs Lsh 葉輸.

6/16, 21; 7/24 \blacktriangle (4 words, 4 areas),

10/34 \blacksquare (3 words, 3 areas)

8/4 \square (2 words, 3 areas)

9/9 \circ (1 word, 4 areas)

The opposition of one western block against the divided eastern group is shown by the signs in white on one side corresponding to those in black, representing various forms and areas in the east:

2/6, 8, 9 \triangle (3 words, 4 areas)

2/14 \otimes (2 words, 5 areas)

3/1 \square (2 words, 4 areas)

3/5 \boxtimes (2 words, 6 areas)

7/30 \square (2 words, 6 areas)

8/12 \blacksquare (1 area, 3 words)

9/17 \square (3 words, 3 areas)

5/10, 14 \diamond (8 words, 5 areas)

(The characters are given only in the first three cases and omitted for the others, as the signs on the map suffice to show the oppositions.)

Expansion of Kn-hs

The Kn-hs expansion can be observed in the various degrees and the extension to which the dialect words of Kn-hs have invaded the eastern areas. In some cases the eastern dialects preserved their own words, but at the same time the Kn-hs word infiltrated and became a synonym of equally frequent use. Or the Kn-hs word has been added to the local dialect word of the eastern areas. For example, 2/29 and 5/2, 8/13, 5/23. Thus in 1/8-11, among the four words given for the western dialects, one (慎) is used as a synonym with the dialect word in Sung Wei, and another (溼) appears as a synonym with the dialect word in Ch'-Ch'u. (Ch'-Chin 慎, 溼, 怒, 唳, / Chin Sung Weih Lu 鬱悠 / Yen Ch-Hs Lsh 叵 / West Ch'i 唳 叵 / Ch'i 唳, 怒 / Wei Sung Lu 瞞 / Ch'-Ch'u 溼, 濟 / Ch'u 叵 吡).

All the passages where the Kn-hs word is identical with the standard word show to a certain degree the expanding force of the western dialects. For the fact that a Kn-hs word has become the standard word is a sign that it became widely known and used. Even in cases where FY indicates special words for any other area, it is understood ipso facto that in all areas the Kn-hs word is being used, if not on the level of the ordinary patois, at least on a higher social level of officialdom, schools, trade.

On map 13, showing the expansion of Kn-hs, black signs refer to Kn-hs words in the west and the east; white signs refer to eastern dialect words coexisting with the invading Kn-hs words. The signs within the box are coexisting standard words in the east; among them must be counted also □. The various symbols refer to the following FY words:

5/23 ● 綆, 絡

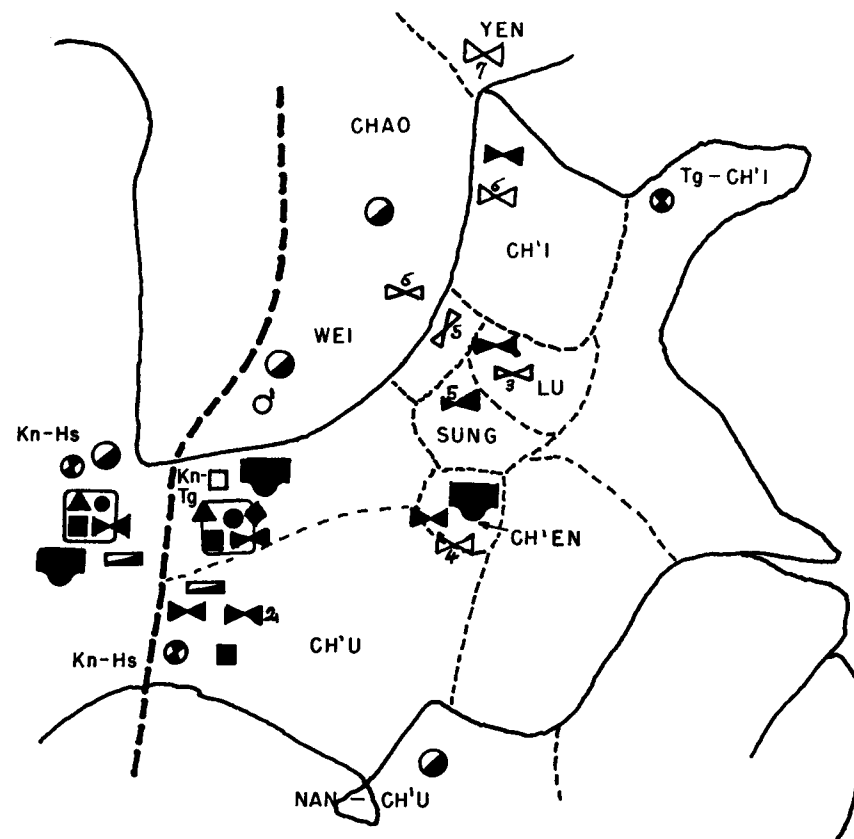
2/29 and 5/21 □ 扇, 策, 幢壽

1/8, 9, 10, 11 ◀ 慎, ▶ 溼

8/10 ◆ 蝙蝠

8/13 ▲ 麗黃

The figures added to some signs indicate the number of different words in eastern areas.



Map 13
Expansion of Kuan-hsi.

Expansion of Kn-hs Words

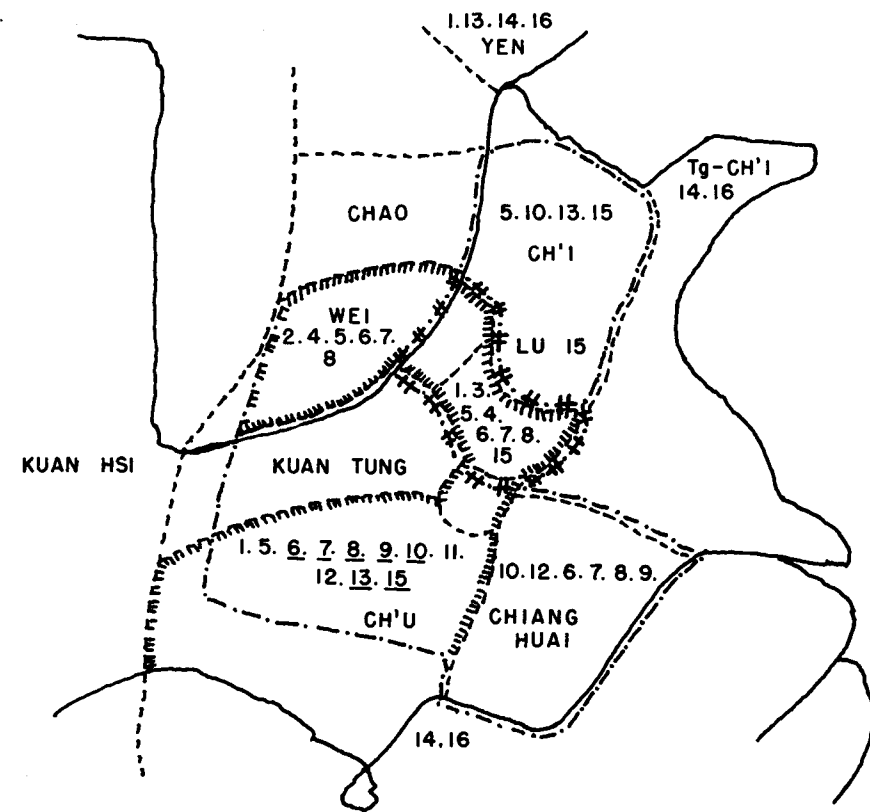
We can observe various ways or directions of expansion of the Kn-hs words.

- (1) Through Kn-tg, with areas of resistance in Ch'-Ch'u, Tg-Ch'i (11/12) ⊗, ⊙, Chao Wei, N-Ch'u (9/18) ●.
- (2) Through Chou, with areas of resistance Kn-tg in general, and Ch'-Ch'u (6/40).
- (3) Infiltration in Hsi Ch'u with opposition in the standard form and Ch'i (7/5, 11/1).
- (4) Expansion into N-Ch'u and the standard language (2/16 and 32, 6/22 - 2/18, 6/5, 10/23 - 5/35).
- (5) Expansion over Chin, Chao, Wei (1/6, 7, 9, 17 and 6/26 and 10/7).
- (6) Expansion through standard and northern areas-into Yen Ch-hs Lsh with Ch'i, Tg-Ch'i and N-Ch'u as resistance areas (3/12, 5/27, 10/31), or southern areas with Kn-tg, Yen, Huai as resistance areas (3/10, 11 and 11/20). Sometimes the Kn-hs word (or the standard word) has wiped out almost completely all dialect forms in the other areas (5/28, 11/7, 11/16, 5/36).

Areas of Resistance and Conservativeness

One of the most frequently mentioned areas, preserving a strikingly dialectal characteristic against the rest of the areas, which yielded to the pressure of the western dialects, is the group Ch'-Ch'u Sung Wei (or Weih) (14 cases), sometimes restricted to North Ch'u and Liang Sung (5/24), Ch'en Cheng Sung Weih (11/2) or Wei Hanh Chou Cheng (8/8), but also expanding eastward: Ch'-Ch'u Sung Wei Ch-H (2/30, 5/31, 33), Ch'-Ch'u Ch-H (5/1), Ch'u Ch'i Sung Wei Kn-tg (6/7), or Kn-tg Sung Weih (5/34). The eastern areas may be covered completely with only two dialectal areas left: Ch'i and Ch'u (6/10, 41, 42). They may also push forward to the north: Ch'i-Ch'u Sung Ch'i Yen (7/7-8), or Ch'-Ch'u Ch'i Lu (5/36 b) or may be entirely wiped out to the line Yen Tg-Ch'i and N-Ch'u (5/36). On map 14, dealing with the aspect of conservativeness, the line $\text{---}\text{---}\text{---}$ represents a strong isogloss based on FY 5/6, 7, 8, 9, 11, 12, 13, 15, 17, 18, 20, 22, 26 and 9/11. The figures inside the areas refer to smaller or wider areas than Ch'-Ch'u Sung Wei (---):

1 (5/24)	4 (5/34)	7 (2/30)	10 (6/10)	13 (7/7-8)
2 (8/8)	5 (6/7)	8 (5/33)	11 (6/41-42)	14 (5/36)
3 (11/2)	6 (5/31)	9 (5/33)	12 (5/1)	15 (5/36)



Map 14

Areas of resistance and conservativeness.
 Widest limits of resistance area $\text{---}\text{---}\text{---}$
 Strongest isogloss of resistance $\text{---}\text{---}\text{---}$
 Narrowest limits of resistance $\text{---}\text{---}\text{---}$
 Ch'u numbers underlined are also valid
 for Ch'en

The areas Ch'-Ch'u, Sung Wei, sometimes wider, sometimes smaller, remain in general fixed on the same center and preserve the same general direction: Ch'u → northwest → Sung and Ch'i. It is clear that Hsi Ch'u was the first region that was overrun by Kn-hs, together with the spaces between Chou and Cheng. The words in this conservative area are often hard to explain and rare (e.g., FY 6/7定甲);¹⁸ this fact proves that we have here an archaizing area. These areas are also the old regions where the ancient philosophers flourished, and literature was intensely cultivated. We may therefore suppose that the resistance of this old cultural center against the new trends and influences from the west was a conscious one, derived from a sense of pride in an old cultural tradition. These areas consequently are entirely different from the expansion areas as Liang Yi, Shu Han, or the colonization areas P-Yen, Ch-hs Lsh, or the areas where the Chinese culture and language was brought in by immigration or prestige and on each level was assimilated in various degrees, as Tg-Ch'i, H-T, Wu, Yang, Yüeh. Here the literary words, as well as the Middle Han standard words—strongly colored by the western dialects—were equally accepted.

Some passages of FY, however, are not easily explained in terms of general types of configuration and demand a more detailed investigation for each word. There still remains a wide and rich field for further study and examination.

DISTRIBUTION OF LINGUISTIC AND OTHER CULTURAL OR HISTORICAL FACTORS

The maps illustrating the relations and contacts among the different dialect areas entirely disregard the aspect of populations, their densities, and migrations. FY tells us nothing directly about these aspects. The white spaces on the foregoing maps mean only that a certain region is not mentioned in connection with the areas, from the point of view of which the investigation has been made; the filled-up spaces only indicate a proportion in which the respective areas have been mentioned in connection with the other areas.

If we now consider the Han time geography from the point of view of population and density, we obtain a picture which at first sight may seem to contradict the previous maps. But keeping in mind the remark made on the significance of white or filled spaces, it can be ascertained that in all the regions mentioned by FY, there was a sufficient population of Chinese speaking communities to allow Yang Hsiung to speak of their

dialects, as the dialect of such or such an area (e.g., Wu, Yüeh, Kui lin, etc.). From Yang Hsiung's letter to Liu Hsin¹⁹ it is known that one of the most important sources of information for his FY material was his personal inquiries, made not on the spot, but gathered from the civilian and military officials who had left the provinces and local administrative departments, all over the empire, to report to the capital. It was therefore possible that he received a rich amount of material even from the most distant regions, and from those where the Chinese speaking population was comparatively small. Yet it is not surprising that the least well-represented dialect areas are those like Hsi Ou and Tung Ou, and that the information of regions such as that south of Ch'ang sha is offered under a rather scattered terminology: Hsiang Yüan, Ling ling, Chiu yi, and so on.

With these preliminary remarks in mind, we can now proceed to compare the various dialect areas and their geographical configurations with other factors of historical, physical-geographical, demographical, and cultural nature.

Dialects and Communication and Transportation System of Han

That the development of the transportation and communication system during the Han dynasty is of far-reaching importance for the true understanding of the development and mutual influences of the different dialects described in FY is clear to everyone. However, at the present time, not too many, and only preliminary monographic studies concerning communication and transportation during Han, have been written. One is the article of Lao Kan 勞翰: The Land and Water Transportation of the Han Dynasty (論漢代之陸運及水運) (CYYY, 16, 1947, pp. 69-91). In the first part he studies the existing routes and the system of communication and transportation on land, and continues the research already started before him by Sun Yü-t'ang 孫毓棠: Han-tai-ti chiao-t'ung 漢代的交通 [The Communications of the Han Dynasty] (Bulletin of the Institute of Social and Economic History, Academia Sinica, 中國社會經濟史集刊 or formerly 中國近代經濟中研究集刊, vol. 7, no. 1, 1944). Lao Kan has provided much additional material on the history of the construction, repair and maintenance of routes and bridges, the modes of transportation, the establishment of public inns, hostleries and post stations, the system of passports,

status and facilities for messengers and merchants, and so on. However, the general description of the centers of trade and communication as given by Sun Yü-t'ang (op. cit. p. 27 ff.) is still valid and provides a clear picture of the net work of routes, their directions and respective importance. A summary of Sun's description follows here:

The central plain had the city of Lo yang as its center; it communicated westward through the Hsiao han 穀函 strong pass with the Kuan chung region (關中 = Shensi). Southward, it communicated with Nan yang, and in the south east there were many roads leading to the region of Huai Ssü and P'ing yang [?]; in the northeast, the roads passed through Ch'en-liu chün (陳留) toward Lin tzü 臨淄 and Hai Tai; crossing the Huang Ho river, it communicated with Han tan 邯鄲, and further north with Ho tung and Shang tang. Lo yang had an immense population with a flourishing trade and many connections with minor centers of trade all around.

Among them, Lin tzü in T'ai shan province (泰山), was a center of communication with the north. Northward it was connected with Yen and Chao, in the south with Huai Ssü; it was the main center of textile works, salt production, and trade of fish from the Po hai 淳海. In the west, its road went to Ching ching (井陘 = present day Pao ting 保定). North of the Huang Ho were the centers of Han tan, Cho hsien 涿縣, and Chi ch'eng 薊城; by way of Ching ching they entered Ping chou, and in the north communicated with Liao tung and Ch'ao hsien. They had important trade activities with the peoples of the northwest.

In the southeast on the river Huai, Shou ch'un 壽春 was the greatest center. In the south, roads passed the region of Kuang ling 廣陵 and crossing the Chiang River they communicated with Hui chi 會稽. Shou ch'un was the pivot of the communications between Wu, Yüeh, and East Ch'u.

The region north and south of the Huang ho, and that between the Huang ho and the Huai basin had the most important network of routes. South of Lo yang, the first important town was Nang yang (Wan 宛). From Nan yang, roads went westward and entered Kuan chung, and eastward, through Ying ch'uan it was connected with the Huai region. Southward, it could communicate with Chiang ling 江陵 (region of Yingh 鄧 of early Ch'u) and from Chiang ling southward the roads went through Ch'ang sha, Kui yang till P'an yü 番禺 in Nan hai 南海, the center of trade in the southernmost part of the Han empire.

The region of Kuang chung had Ch'ang an as its great center, the

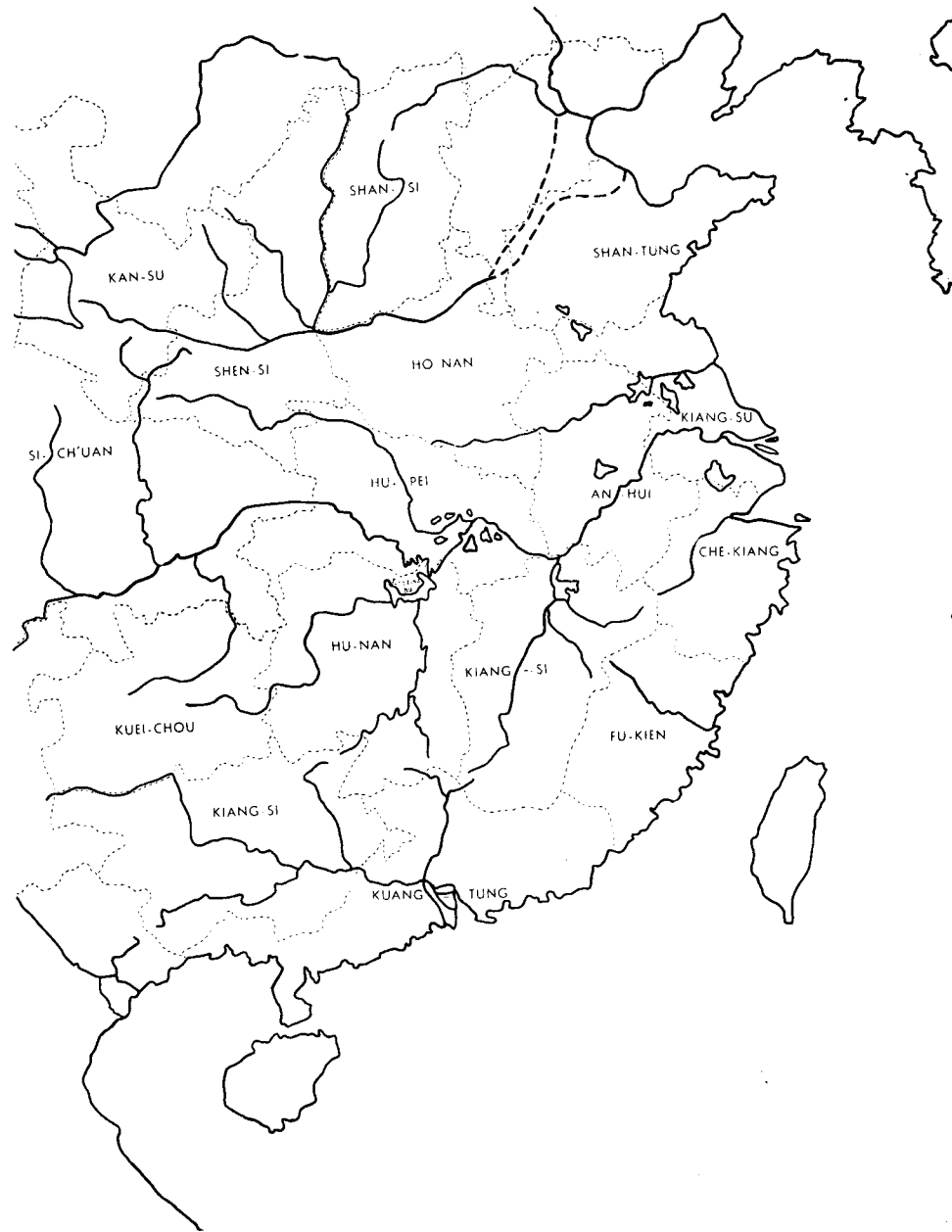
Capital of the Former Han Dynasty. In the north it was connected with Shang chün and the East through the region of Chin with Ping chou. An yi 安邑 in Ping chou and T'ai yüan 太原 in Shang tang, were already second rate centers of trade. From Ch'ang an to the west, the roads passed by T'ien shui and more northward went through Wu wei, Chang yeh, Chiu ch'üan and Tun huang. [On this particular region and its importance, cf. Lao Kan: Economic Life of the Kansu Corridor as Recorded on the Wooden Slips of the Han Dynasty, CYYY vol. 11, 1947, pp. 61-75 漢簡中的河西經濟生活]. From Ch'ang an southward the communications went through the southern mountains by means of the Pao hsieh 褒斜 and the Tzü-wu 子午 routes. (Pao-hsieh tao was built by Ch'in Shih-huang, repaired during Han time; the Tzü-wu tao was built by Wang Mang.) Farther southwest the road passed by Chien ko 劍閣 and reached Ch'eng tu 成都. From Ch'eng tu, westward, following the Chiang river, through Chiang ling, the roads lead into the most southwestern regions. During the two Han dynasties the regions of Yi chou and San fu were connected with roads which constituted the astounding achievement of the time.

On the communications by water and sea, Lao Kan's article adds a great amount of new and interesting material taken from the historical texts. Although, except on the east coast, the land routes were the most important ways of transportation, texts show that the importance of river transportation increased gradually even in other areas than the coast (p. 84). Several texts prove also the seafaring activities of the peoples of Ch'i, Wu, Yüeh and their continuing relations with Liao tung and Korea, as well as with the southern coastal regions, from Lang ya 郎邪 till Hai lin 海臨, Tan yang and Hui chi. Also the inner waterways, along the Chiang river, from Ch'ang sha to Hui chi, and from Huai southward by water to the Chiang attained increasing importance.

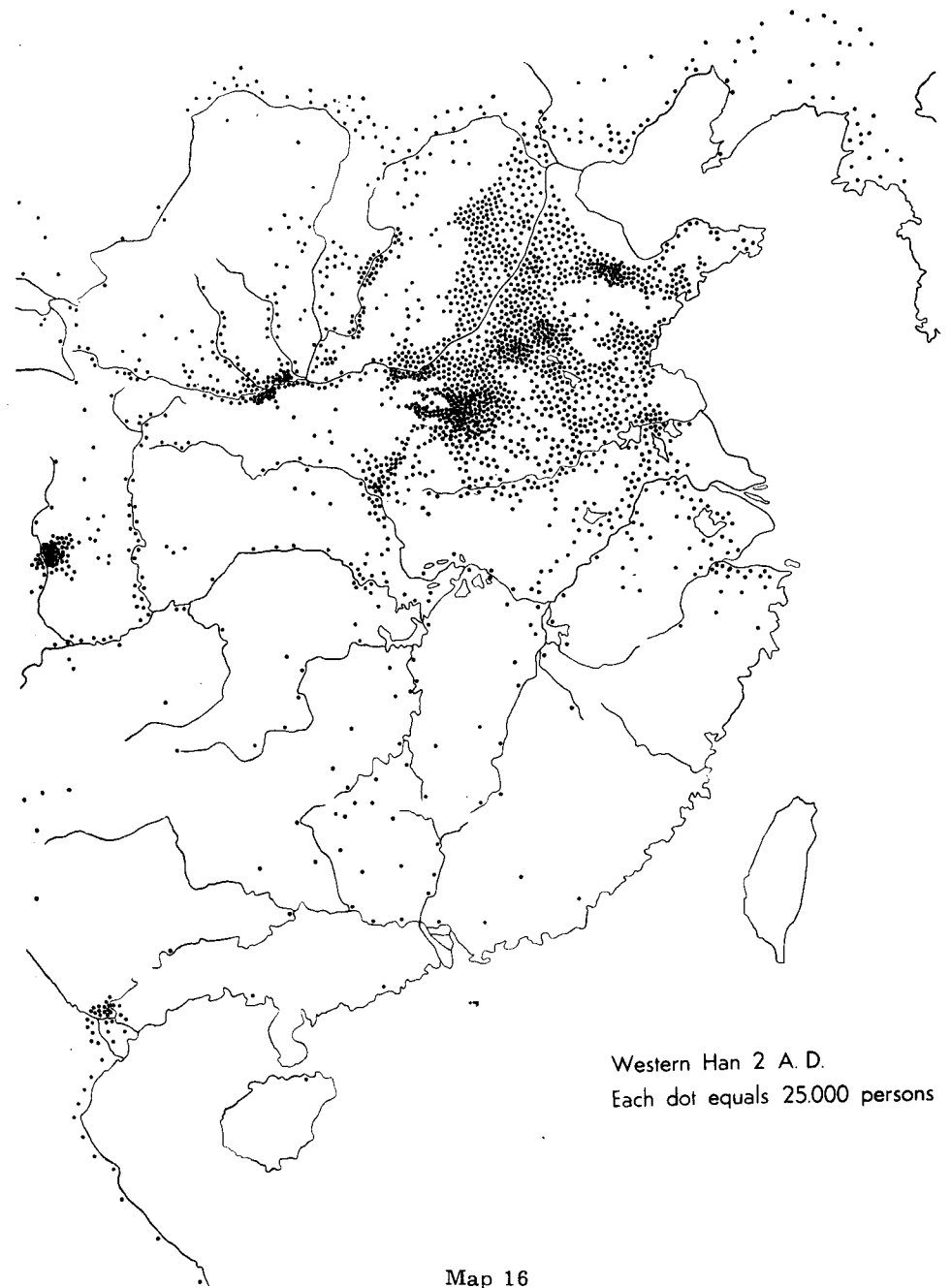
This description of the communications on land and by water clearly shows a close parallelism with the division and connections established for the various dialect areas of FY.

Dialects and History of Population and Migrations

From the study and the maps of Hans Bielenstein, on the population census made in 2 A.D., it is possible to make a comparison between the facts on population and density and the linguistic maps based on the FY material.²⁰ The period referred to by both the census during the Western Han dynasty and the FY material may be considered roughly



Map 15



Western Han 2 A.D.
 Each dot equals 25,000 persons

Map 16

Maps 15 and 16 reproduced from Hans Bielenstein: *The Census of China During the Period 2-742 A.D.* *BMFEA* 19, 1947. With kind permission of the editors of *BMFEA*.

the same. Since each dot in Bielenstein's map equals 25,000 Chinese persons, we find even from Hunan down to Kuanghsi and Tonkin enough such dots to warrant our previous conclusions that FY listed only the speech of the Chinese speaking inhabitants, and that, besides the special dialectal nature of the speech in those areas, the number of speakers was sufficiently high to have these areas listed as separate dialect areas.

It is interesting to note that in FY, as well as in the census figures, Kuangtung, Fuchien, West and South Kuanghsi, Kuichow are regions that are left completely blank and unmentioned. Similarly, Bielenstein pointed out that the population was extremely sparse on the stretch south of the Yang-tzŭ Chiang; this agrees with the rare mention of the same region in FY, called Chiang pin (江濱). "The population thins out in the north westerly direction"; similarly the western regions (Lung hsi, Liang chou, etc.) are rarely mentioned in FY.

Furthermore, Bielenstein's map has served to do more than just show the localization and density of the population. It allowed him to follow the routes of the immigrations. As to the centers of large concentrations of people on the great plain, from where the emigrations had started, "it is possible, to a certain extent, that they still show the sites of the old feudal states, although great changes must have taken place since then." Thus writes Bielenstein, entirely concurring with our theory that the centers of the old feudal states were also the centers (Kernlandschaft) of the Han time dialects.

Bielenstein mentions the population belt all along the Chinese frontier in the north, and rightly explains this in the light of the policy of Shih Huang-ti, continued by the Han emperors, of having military settlements established all along the frontier up to Liao tung. But what he did not see, or at least failed to point out, is the fact that a continuous line can be followed in that configuration of his population density dots, from the Ch'in center, northward through Chin (along the Fen River), Tai, Yen, and along another branch, through Chin, Wei, Chao, Ch'i, Yen, as far as Korea.

Bielenstein also speaks of "the track to Ssŭ-ch'uan, starting from the Wei valley," in two main branches, one along the Chia-ling Chiang, and one in the Min ho region. This expansion of Ch'in and immigration of populations, according to FY (which considers the west of the Pass as one dialect block) and history, must have happened long before the composition of FY. Bielenstein sees a third line of emigration from the Wei valley, but much weaker than the former two, and going southeast along the Han Chiang, along the old invading road "so long defended by Ch'u

against the state of Ch'in"; this migration is well reflected in the expansion and influences exerted by Ch'in in the Ch'u dialect at the northwestern corner of its area.

From "the largest population center of Honan," Bielenstein follows the immigrants "between Ch'in-ling shan and Huai shan southwards towards the Hupei plain [where] they were joined by the colonists who came along the Han River." This seems to contradict the picture obtained before and shown on map 9, according to which the population figures should be explained as a movement in a direction from the southwest (the earliest center of Ch'u) to the northeast. First of all, it would be a mistake of oversimplification to consider all migrations as following only one direction, from the north to the south, as if before Han the regions of Ch'u were entirely empty. Bielenstein notes an interesting detail, for which, it seems, a sufficient explanation is not offered by the considerations of the physical geography: "From here [the point where the southward migration came to cross the Han River], the immigrants did not follow the Han Chiang towards its mouth, but crossed it," and "turned slightly to go directly down to the Yang-tzŭ Chiang." This direction of the migration, however, becomes entirely clear in the light of our map, where the center of Ch'u is shown to have shifted from the southwest (Chien p'ing and Yingh) toward the northeast, so that they had to cross the Han River at that point. Furthermore, this concentration of people in North Hupeh and South Honan coincides with our region of the strongest center of the Ch'u dialect: part of Nan yang, Ju, Ying, and Ch'en, where Ch'u met the borders of the central eastern dialect areas. It is hereby not inferred that the only direction of the migrations went northward from Ch'u, but that this latter direction of movement was more important linguistically, and that the population migrating from the north into the Ch'u area was assimilated by Ch'u.

The same map of the Western Han time census of 2 A.D. also shows a gradual continuation of the Ch'u populations eastward along the Huai River. In the previous pages, the close connection between Ch'u and Chiang Huai has been pointed out on several occasions. Comparing these facts with the census map, we can conclude that Chiang Huai, though being in general (as described before) the region between the Yang-tzŭ and Huai Rivers, was densely populated only along the regions near the rivers, with a comparatively empty space between. The southern line of density dots, north of the Yang-tzŭ River, passing gradually into the Wu region, explains clearly the contacts which we mentioned between Ch'u, Chiang Huai and Wu, but not beyond.

Dialects and Some Cultural Factors

In N. L. Swann's work, Food and Money in Ancient China (Princeton, 1950), a footnote (p. 219) deals with the interesting problem of the distribution of different types of money in Ancient China; it probably summarizes the article of Wang Yü-Ch'üan 王毓銓, The Distribution of Coin Types in Ancient China (The American Numismatic Society Museum Notes, 3, pp. 131-151. No date given by Swann.) and refers the reader to two maps made by Wang Yü-ch'üan (pp. 10-11: Coin Type Distribution ca. 800-500 B.C., and Coin Type Distribution ca. 500-250 B.C.). Wang's aforementioned article could not be consulted, but it may be presumed that his conclusions have been included and improved upon in a later, more complete work, Early Chinese Coinage (New York, 1950) wherein the second map is reproduced again with slight changes (p. 254).

Recently, the same author has published a new extensive study on the subject: 我國古代貨幣起源和發展 Wo kuo ku-tai hua-pi ti ch'i-yüan ho fa-chan [Origins and development of the Ancient Coinage of China] (Shanghai, 1957; abbreviated: Wang, 1957), where all the factual evidence available from recent findings has been evaluated. (It is astonishing that his Early Chinese Coinage, though considered a work of high scholarship—cf. TP, 41, 1952, pp. 394 ff., review by W. A. C. H. Dobson—is nowhere mentioned in the Chinese book, maybe to avoid any recollection of earlier days of association with the capitalistic world.) Wang's two maps in Swann's book, the second according to the later version of his Early Chinese Coinage, and both with added marks to show some changes made in the latest study of 1957, are reproduced here together (with the kind permission of The American Numismatic Society, New York.) as maps 17 and 18.

These maps refer to a period quite distant from and anterior to that of the FY dialects. Yet, when compared with the FY maps, keeping a due historical perspective, it is possible to see some peculiar aspects in the distribution of coins which throw new light on the facts obtained on the dialect areas of FY. For though the dialect areas reflect a linguistic situation which must be dated at the Middle Han period, it is a situation which came about as the result of historical factors of political, economical and cultural nature, which had been at work for a long period of time; the various processes of pressure and expansion, overlapping and mixture, retreat and resistance observed in the different dialects may be found to coincide with some of the phases of the geographical distribution of other, entirely different cultural factors, such as the types of coins and their areal spreading.

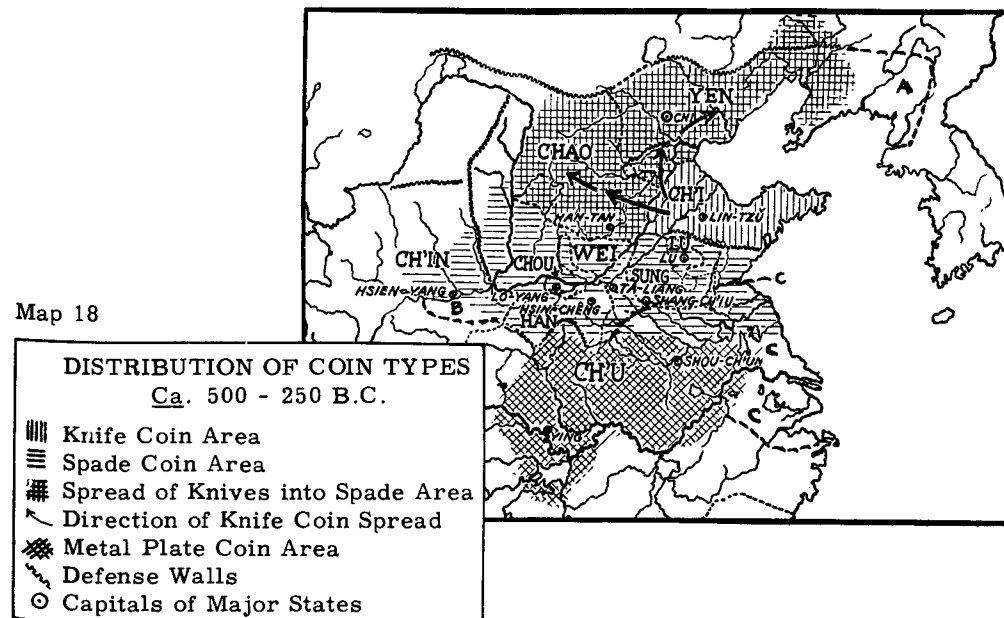
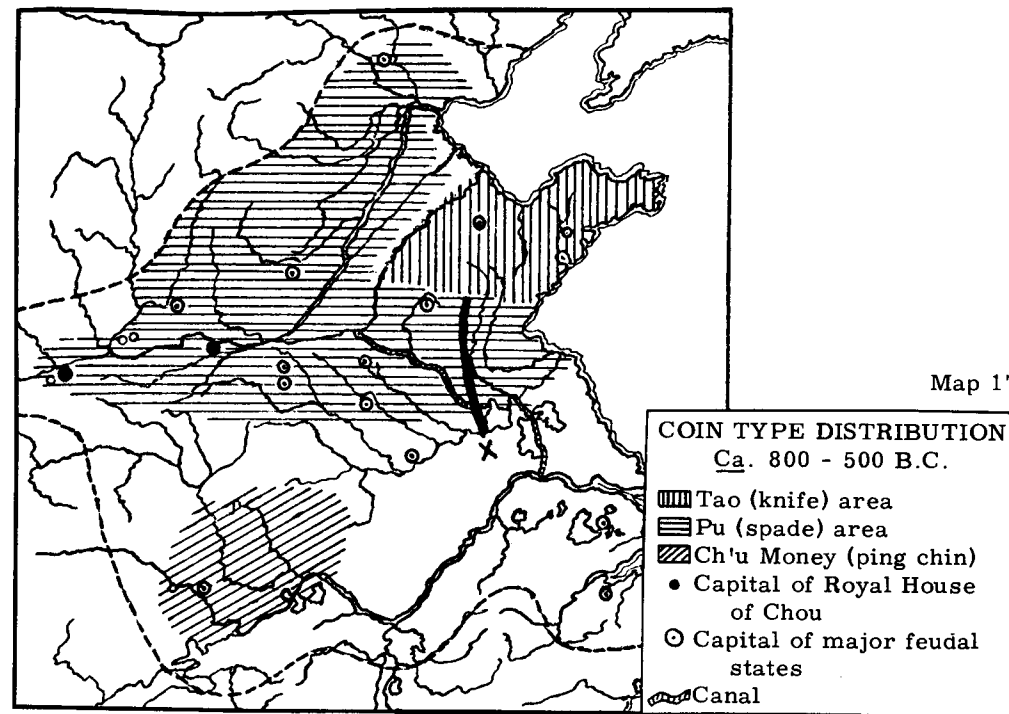
Thus on the map showing the Coin Type Distribution ca. 800-500 B.C., we find three main types of coins: the knife type coin, tao 刀, in Ch'i, the spade type coin, pu 布 (= 鑄) in Ch'in, Chin, Chao, Wei and Yen, and the central states, Chou, Hanh, Cheng, Lu, Weih and Sung. According to this map, the spade coin distribution stretches until the coast, but in the later study of Wang (1957, map p. 47) it stops at the frontiers of the H-T dialect area (approximately indicated here by a thick vertical line x.) The metal plate (ping chin 餅金) coin type, characteristic for the Ch'u area is centered around the old Ch'u capital, Yingh.

In accordance with Wang (1957, p. 41 ff., pp. 63-72) the following changes are made in the second map: broken line A, showing the distribution of knife and spade coins till Korea; broken line B, further expansion of the spade coin westward; broken line C, expansion of metal plate coin of Ch'u northward till the borders of Ch'i and Sung, and southeast into Wu. The origin of the spade coin is to be located in the early (Western) and later (Eastern) Chou centers. From there, it spread to the northwestern Ch'in and the states Wei (Ta liang), and Sung and eastward as far as Yi 益 (modern Yi-tu hsien 益都縣 in Shantung, close to the Ch'i region, Lin-tzü 臨淄), and in the north to Chao and Yen (till Korea). Since this situation reflects a time, when Ch'in was still far away from its political dominant position and linguistic impact on the other regions in China, there is only little in the FY material that would go back to this early situation, namely the exceptional instances, where some words of Kn-tg could be explained only as vestigial relics of an early dialect stage, in which Kn-hs (Ch'-Chin) has not yet emerged as an important linguistic center, but did receive from Kn-tg (cf. supra pp. 183-184, n. 61 and 62). Among the different kinds of spade coins, at least four varieties can be distinguished, each older and more archaic than the other. It is only in the third variety that Ch'in begins to emerge slowly to some importance in independent coin casting, and in the fourth variety that a typical coin of Ch'in begins to spread into areas like Chao, Yen, Liao ning, and others.

At the end of the Chan kuo period (300-200 B.C.), together with the spade and knife coins in the northern states, were also found round coins with different characteristics. Type a: round coins with square hole, raised rim on one side of the coin, and the character 化 hua, the name of the money unit, typical for the eastern regions, with center of origin in Ch'i. Type b: round coins with round hole, no rim, and the character 鉏 chin, name of the money unit, typical for the spade coin areas Chou, Hanh and Wei. Type c: round coins with round hole, no rim, but the character

兩 liang, the money unit of Ch'in. Among the types b, new varieties are found with rim but round hole, indicating mixed features that originated in the west and the east respectively. Wang (1957, pp. 73-78) considers the appearance of the round coins, and the different combinations of eastern and western characteristics as the first step towards the money unification, achieved with the domination of Ch'in. This first step was accomplished in the northern areas only, and still left the Ch'u region, with its entirely different coins, completely untouched. This situation is paralleled by the contacts of the central dialect areas with Ch'in and Ch'i. If this coincidence proves to be correct, the dating of the types of round coins can help us to set a relative time of the dialect contacts of the central dialect areas with Ch'in and Ch'i. However, from the previous pages, we know that the contacts of the central dialect areas with Ch'i were much weaker than is the case of the round coins of Chou, Hanh and Wei.

Turning to the Ch'u type coins, the map seems at first sight to give an impression of complete isolation of Ch'u from the rest of the Chinese regions. Yet, finds of some spade coins in the southern areas as well prove that a definite contact existed between the northern and southern regions, even at the time of the early spade coins. (Wang, 1957, p. 46, n. 1). On the other hand, the finds of Ch'u money and molds for Ch'u coins, in the region of the old capital Yingh and further south in Ch'ang sha, (in tombs together with vessels of a type that points to the years ca. 500 B.C.), establish another striking parallel between the early center and later spreading of the Ch'u type money with that of the dialect of Ch'u. When comparing the first map of coin type distribution with the second, we see that the spreading of Ch'u type coins follows the same direction as the successive transfers of capitals (Wang, 1957, p. 81-88) and the general expansion of the Ch'u dialect described in the previous pages. The dialect contacts between Ch'i and Ch'u, which we have explained by means of a common political frontier on the easternmost side, through and over the H-T dialect area, are confirmed by finds of Ch'u type money in places as far as the region of Lin-tzŭ and Tse-hsien 嶧縣 in Shan-tung. (Wang, 1957, p. 87). Ch'u type coins were found recently also in Chiangsu (Wang, 1957, p. 94) confirming on the other side the contacts of the Ch'u dialect with Wu. This money of Ch'u consisted of small square gold plates, separate or melted together, each carrying one or more, and sometimes half a section of a seal impression, which indicated the place of origin: 郢爰, 陳爰, 專爰, 穎爰, and so on. Wang (1957, p. 89) points out that the regions of gold mining of Ancient China were all in the realm of the state of Ch'u.



Maps 17 and 18 reproduced with kind permission of The American Numismatic Society (New York) from N. L. Swann, *Food and Money in Ancient China* (p. 10) and Wang Yü-ch'üan, *Early Chinese Coinage* (p. 254).

Within the big Ch'u type coin area, there is another type of money called 'ant nose money' (螞鼻錢), a term coined by the early descriptions of Sung time and very inappropriate. The center of this kind of money seems to have been Anhui. It is also found in Shantung and in places as far as Ch'ang sha, possibly also in Ssüch'u'an. However, the finds in Ch'ang sha have been dated to the Chan kuo period (Wang, 1957, p. 93). But the fact that the great bulk of 'ant nose money' comes from Anhui (Shou ch'un), Honan (Ku-shih hsien 固始縣, close to the border of Honan and Anhui) and the neighborhood of Nanking (Shih-ku t'an 師古灘) points to a sort of typical local product. Wang suggests that since this kind of coin appears in big quantities (hundreds and thousands together in jars or baskets), it was probably used as small change money together with the more regular wide spread money of Ch'u (Wang, 1957, p. 94). He also points out that this 'ant nose money' combines characteristic features of late cultural levels (such as characters, which when identified, may indicate the money value or the origin) with other features of archaic nature. In spite of the name, these coins have nothing to do with the shape of ants, or the ancient graphs for 'ant,' but are copper-made imitations of cowry money. The archaic shape of the money itself together with the concentration of the finds in Anhui suggest that this money may be a late survival of the times when cowry was the only or the most important kind of money used in Huai and Chiang-Huai. It is, therefore, also a relic of times when this area (Huai, Ch-H) was not yet assimilated by the Chinese dialect of Ch'u.

Finally, the most obvious conclusion to be drawn from the comparison of the two maps concerning the distribution of the coin types, is the expansion of the knife type coins of Ch'i into Chao and Yen. (On recent discoveries of knife type coins, see Ch'en Meng-chia, *Dating of Western Chou Bronzes*, *K'ao-ku hsüeh-pao*, 10, 1954, pp. 127-128.) This spread stops short at the border of Ch'-Chin and of the central areas of Chou Lo Hanh, Cheng, Wei, Lu Sung Weih. Such a configuration of spreading can be explained by the same factors which we observed in the linguistic maps of FY: firstly, the growing influence of the Ch'-Chin area, fanning out toward the East; secondly, the conservative tendency of the central areas, Chou Hanh Lo Cheng, and Lu Sung Weih. This conservativeness also explains how the Ch'u coin type area stopped clear before the resistance of the central areas; the contact with Ch'i was achieved only by turning around the area of Sung and by a common border with Ch'i. This central conservative area will be more and more narrowed by the final thrust of the Ch'in expansion and by the continuation of the Ch'u pressure, so

that the core of the conservative regions will be centered in Lu Sung Weih.

Thirdly, there is the great impact of the Ch'i dialect northward into Yen, P-Yen, Ch'-Hs. Wang (1957, p. 63-72) distinguishes four successive stages in the evolution of the knife coins, among which the third stage is again subdivided in three types. The first and oldest stage of knife coins is found only in Ch'i (and Tung Ch'i), but the second stage is already represented in Chao and Yen, and the third stage is mostly found in Yen, P-Yen and Korea. The fourth stage is most typical for Chao. This spread of knife coins from Ch'i to the north west, north and northeast, and the local varieties and developments of the knife type coins in Chao, Yen (and Korea) are considered by Wang (1957, p. 69 ff.) as a later phenomenon which came to be added to the spade type coins already in use before in those areas. Such a chronology seems contradictory to what was said before on the dialect contacts of Yen and Ch'i being more fundamental and older than those of Yen with Ch'-Chin (cf. *supra*, pp. 167-168). However, it should be observed that the earliest spade coin expansion had little to do with the rise of Ch'in and that the Ch'in domination began only during the later stages of the development of the spade type coins. Then, it may be said, that the Ch'in and Ch'i influences (from the point of view of coin types) at least were meeting on equal footing in the territories of Chao and Yen at about the same time, if not with a slight headstart for Ch'i. (As concluded for the dialect influences of Ch'i in Yen). Moreover, though the coincidence of different cultural factors in their processes of expansion and geographical distribution are expected to go together, there is no necessity that they should always exactly follow the same speed, but rather the same general direction.

The distribution of the coin types in the northern regions of China has been compared in some aspects by Sekino Takeshi with the distribution of the semicircular eaves tiles (Pan-wa-tang 半瓦當) in Hopeh, Shantung, Shansi and Jehol.²¹ Sekino comes to the conclusion that the original center of the eaves tiles was Yen, and that this type of tiles spread into the other surrounding regions, Pei Yen, Ch'i and the San Chin 三晉 of the Chan kuo period (i.e., Chao, Wei and part of Chin of the FY areas). However, we can not follow him when he concludes further that the knife type coins had originated in Yen too. The exhaustive study of Wang Yü-ch'üan convinces us that this part of the theory of Sekino is incorrect. There are, therefore, two kinds of expansion movements to be considered, one from Yen into Ch'i and the other areas,

one from Ch'i into Yen and the other regions north of Ch'i. Consequently, this double exchange movement and double direction of influences give additional evidence and a historical background to bear out the close connection observed in FY between Yen and Ch'i, as well as between Yen, Chao and Wei. We may be sure, however, that Ch'i was linguistically more important and stronger than Yen, so that the former was rather the giver than the receiver, as in the case of the coin types.²²

The Dialect of Ch'u and the Bronze Vessels of Ch'u Origin

Ch'en Meng-chia divided the bronze vessels of Ch'u in three classes according to the shifting of the capital of Ch'u.²³

(1) the bronzes dating from 278-241 B.C., when the capital of Ch'u was in Ching.

(2) the vessels of South Ch'u found in Ch'ang sha and dating from the years 328-278 B.C.

(3) the vessels of Huai, found in Shou hsien (壽縣) and corresponding to the time when the capital of Ch'u was in Shou ch'un (壽春), near Huai (241-221 B.C.).

They must then be set up on three different levels: South Ch'u, Ching, Huai; this completely fits with the subareas within the Ch'u dialect and with the scheme proposed for the historical development of the Ch'u dialect, and the shift of the dialect center of Ch'u. It suggests that the early separation of the subdialects of Nan-Ch'u from Ch'u must have already begun very early, before the third century B.C.

Conservative Dialect Areas and the Shang Fiefs

In the previous pages, it has been shown that the central eastern dialects, called Lu Sung Weih, are to be considered as areas closely related to each other, forming one main area of dialects as opposed to the others (cf. *supra*, p. 185ff.), and furthermore that the conservative areas can be generally described as Ch'-Ch'u Sung Wei. (Cf. *supra* p. 219). The reason for this line of resistance against the influx from the west has been partly explained through the change of the political and cultural center of Ch'u and its northeastern expansion. It seems that in this way the resistance of Ch'u was somehow combined with the forces of the other areas of Lu Sung Weih and Wei. But this factor of the Ch'u dialect does

not entirely explain the zone of resistance as far as the dialects of Lu Sung Weih and Wei are concerned. In spite of the long interval of time between the destruction of the Shang and the period of the FY dialects (Middle Han), it is not impossible that the conservativeness and strong resistance against the influences from the west in the areas of Lu Sung Weih and Wei are partly, at least, rooted in the history of these regions, as the regions which had longest preserved the traditions of Shang. Though this hypothesis does not imply any attempt to ascertain to what extent these dialect areas had preserved any particular features of the Shang language (since we know so little about the language of the Shang), it provides a historical basis to explain why they distinguished themselves more strongly in various cultural aspects from the other regions, and had in this way, built up a closed in area of conservativeness, which also showed in a dialectal particularism that survived till Han times. Yet, in Yin-hsü pu-tzŭ tsung-shu 殷虛卜辭綜述 (Peking 1956, pp. 81 and 624) Ch'en Meng-chia finds striking parallels in the distribution of 往 and 徂 (FY 1/13, 14) in the Han time dialects on one hand and the bone texts as opposed to the usage in the Chou bronzes, and in the distribution of 臺 or 𡵓 and 庸 or 公 in FY (3/46, 47) compared with bone texts and pre-Han texts.

When the Shang dynasty was overthrown by Chou, its territory was divided into three fiefs: Yung 庸, Pei 邶 and Yin 殷. Later Pei was added to Yen 燕, Yung became Sung and Yin became Weih. Cf. Ch'en Meng-chia, Hsi Chou t'ung-ch'i tuan-tai 西周銅器斷代 A Chronological Study of Western Chou Bronzes, K'ao-ku hsüeh-pao, 9, 1955, pp. 142-144.) The state of Pei was situated in the northeast corner of Honan and coincides then with the dialect area of Wei of FY.

Another example is that of Huang Sheng-chang 黃盛章 in Pao-yu ming ti shih-tai yü shih-shih 保貞銘的時代與史實 The Dating and Historical Datum of Pao-yu Vessel. (K'ao-ku hsüeh-pao, no. 17, Autumn 1957, pp. 51-56) which compares the usage of the words 及, 逮, 迨, and 逌 in the different periods of bronze inscriptions, early literature and the dialect materials of FY (3/18). He shows a striking accordance between the appearance of 及 in later periods of Western Chou inscriptions and Ch'in literature, and the appearance of 逌 (逌) in bones and early bronzes, with the intermediate forms of 逮, 逌, 迨, and on the other hand the use of 及 in the Kn-hs region (moving into Kn-tg, used as standard word) whereas 逌 and 迨 are dialect words still representing the same linguistic level attested by earlier inscriptions and literature.

CONCLUSION

In this book the material of Fang yen has not been exhaustively treated; some sections and passages have been investigated and analyzed from various points of view. There emerges a picture of the Han dialects in constant clash with each other. After a long period of more or less independent existence, with the written language of Chou as the strongest unifying factor, the old feudal political borders broke down because of the unification of the empire, but the dialects still remained vigorous in the same areas; then a change is noticeable in the respective importance, areal extension, and activity ad extra of these various dialects.

1. The Ch'in center had already strongly influenced the southwestern regions and invaded the north and northeast (Chin) before it unified the empire, so that in FY the western dialects appear as one block with Ch'in-Chin, not Ch'in, as the center. After the unification, Ch'in's expansion power is seen in its importance in the standard language and in the numerous invasions of individual words in the eastern, southeastern, and northeastern parts of China.

2. The next important dialect is Ch'u. It is not only prominent by the role it played in the standard language, but by its expansion south and eastward into the originally non-Chinese areas of Huai, Wu, Yt'eh, and Nan-Ch'u. As a result of the pressure from Ch'in and its own vitality, a shift occurred in the Ch'u center itself, moving from the southern capital Yingh in the direction of the northeast to Ch'en. This direction coincides with a strong line of resistance on the axis Ch'u-Ch'en Sung-Lu-Wei Ch'i-Wei. On one hand, Ch'u yielded to the pressure of Ch'in, but, on the other hand, it exerted its influence on the eastern centers and coöperated in building a resistance line against the expansion of Ch'in.

3. Besides this broad outline of the original Chinese dialect configuration, we observe an expansion into non-Chinese areas by means of probably compact and continuous immigrations that established strong Chinese areas such as Yen, Tai, Pei Yen, Chao-hsien, and Lieh shui. Other expansions into non-Chinese areas proceeded by slow penetration and infiltration, so that the previous population is partly absorbed but also to a certain extent contributed originally non-Chinese words, which are Sinitized and accepted, partly disguised by means of a convenient Chinese

graph, and finally felt as a real Chinese word—a process differing in tempo and depth according to the social level, political importance of the areas and population, and the time factor involved in the language contacts. Thus Chiang-Huai is further and earlier assimilated than Wu, and Wu is more receptive than Yüeh and Tung-Ch'i Hai-Tai.

In the reconstruction, it has been shown in Part I that Karlgren's Archaic Chinese corresponds to our late Archaic, and that our Archaic, based on the graphic analysis of Shuo wen as a primary source, checked and completed by the Shih ching rhymes and the Chia chieh characters, dates only from a period of Ch'in and Early Han (221 B.C.—100 A.D.). This is the oldest complete system of pronunciation which we can reach. We have only incomplete and vague information on the pre-Shuo wen or Chou system, called Pre-Archaic.

1. Through comparison of the binomial and monosyllabic forms in Fang yen and in the pre-Han literature, it appears that the Fang yen material in many cases provided words highly interesting either for their archaism or novelty of construction. The comparison of the dialect forms allows a tentative reconstruction of a Pre-Archaic stage. A further investigation in this line of all the dialect words may yield more complete and more certain results. Combined with the study of hapax legomena and other dialect forms in literature and inscriptions, the basis provided by Fang yen may lead us further back into the Pre-Archaic. The comparison of Fang yen with sources such as Shih ming and the dialect notes of Kuo P'o for the Chin period provide another point of comparison for the study of the later stages of evolution in Chinese.

2. In terms of the general history of the Chinese language, Fang yen belongs to the Archaic period. Fang yen shows that there was no homogeneous Archaic language from which another homogeneous ancient language developed. The standard language of Han as reflected in Fang yen is a continuously changing and heterogeneous entity because of the contributing role of the dialects. The succession of different dialects in the leading role in literature and the standard language, the changes of the areal extensions of the dialects, owing to historical and cultural events, are factors which make the conceptions of a homogeneous Archaic language, and of a regular sound evolution towards another homogeneous stage untenable.

3. The regular sound evolution appears from the reconstructions of the reading of the characters only. It is true that some part of the reality is obtained in that way, as the gradual simplification of the sounds appears more clearly in the evolution of the monosyllabic forms. But the study of the Fang yen words, written sometimes in monosyllabic form, sometimes in binomial form, alters this picture greatly. Moreover, it is to be expected and has already been shown in a limited number of separate word studies, that beyond and even against the regular sound development, the factors of areal distribution, popular etymology, scholarly semanticization with specially chosen graphs and binomial variants, and phonetic and semantic attractions of words of different etymological groups can greatly disturb the normal pattern of the evolution of a language. The exclusive study of characters only, without due stress to the word, has hidden the numerous complications of the linguistic reality.

These conclusions are drawn from a part of the Fang yen material only. Further study of separate dialects may yield sufficient material for a characterization of one dialect in comparison to another, a problem that could not be solved here. Additional studies of individual words of Fang yen alone or together with other sources will give more and new facts which may confirm or change in some small detail the general results obtained from this work.

NOTES

PART ONE

NOTES TO CHAPTER I

Preliminary Remarks

(Pages 3-10)

¹Different dates are indicated, though they all, in fact, point to the same periods in general: Études p. 693 ff.; GS, p. 3 ff. Compendium, p. 212, n. 2. H. Francke, Sinologie, Bern, 1953, p. 51. Lu Chih-wei, YCHP, 26, 1939, p. 283, thinks AnC as found in Ch'Y and KY represents pre-Sui phonology and not Sui or T'ang. Ch'en Yin-ko 陳寅恪 in his Ts'ung shih-shih lun Ch'ieh-yün 從史實論切韻 [Discussing the Ch'ieh-yün from the point of view of historical facts], (LNHP, 9, 2, pp. 1-18), quoted according to Chou Fa-kao, Studies on the Bilabials in the Rimes of the Third Division based on their First Fan-ts'ie Characters 三等韻重唇音反切上字研究 (CYYY, 23, pp. 403-407), concludes that the language of Ch'Y does not reflect the phonetic system of the language of Chang-an, but the 'old pronunciation' of Lo yang of an earlier period. However, Chou Fa-kao holds with Karlgren that Ch'Y, as well as Lu Teming's fan-ch'ieh analyses in Ching-tien shih-wen 經典釋文 (published before 630 A.D.) and Hsüan Ying's 玄應 Yi-ch'ieh ching-yin-yi 一切經音義 (ca. 650 A.D.), together with the later additions of Hui Lin 慧琳 (ca. 850), do truly reflect the language of Ch'ang-an of that period, with occasional dialect forms and dialect words. Yet Chou finds that Ch'en Yin-ko's findings have a positive value: they show that these dictionaries may very well describe a language system which originally spread from the region of Lo yang, though they were truly based on the language of Ch'ang-an at that time. This is an important remark for the problem of the historical connection between AnC and ArC. (Cf. Introduction, p. v., paragr. 2).

²G. Bonfante, American Journal of Philology, 67/4, 1946, p. 296 ff., JAOS, 65, p. 261 and 66, p. 264; V. Pisani, Lingua III, 1, p. 1 ff.; AO, XVII, p. 251 ff.

³R. A. Hall, Studies in Linguistics, VII, 3, 1949, p. 60, Terminological notes; H. M. Hoenigswald, The Principal Step in Comparative Grammar, Lg, 26/3, 1950, p. 357 ff.; A. W. de Groot, Structural Linguistics and phonetic Law, Lingua 1/2, p. 175 ff., especially p. 198; Y. Malkiel, Etymology and Historical Grammar, Romance Philology 8/3, 1955, p. 187 ff.;

I. Fónagy, *Über den Verlauf des Lautwandels*, Acta Linguistica Academiae Scientiarum Hungaricae, 6/1-3, 1956, pp.173-278.

⁴Ernst Pulgram, *Family Tree, Wave Theory and Dialectology*, Orbis 2/1, 1953, p. 67 ff.; *Neogrammarians and Soundlaws*, Orbis, 4/1, 1955.

⁵Cf. Pisani, n. 2.

⁶G. Bonfante, *On Reconstruction and Linguistic Method*, N. 2. Word I/1, p. 83 ff.

⁷Differences of style and grammar are most apparent between poetic (rhythmical) texts and others, between any sort of "gebundene Sprache" and others. Sometimes a distinction between formal, official documents and informal kinds of texts can be made.

⁸Cf. S. Egerod, *Review of S. Martin, The Phonemes of Ancient Chinese*, Lg, 31, 1955, p. 477.

⁹On the written documents: Études p. 23 ff.; GS, p. 7 ff.

¹⁰On the sources for dialect material: Études ... pp. 11-13 and pp. 708-711. Cf. Compendium, p. 230, n. 1.

¹¹This criticism is sharply brought out in Grootaers, *La Géographie Linguistique en Chine*. MS 8, 1943, 10, 1945, pp. 109-112. Later dialect information suffers from the same erroneous assumptions as that of Karlgren: the reading of the character is taken as the word. Cf. Orbis, I, 1., pp. 211-212 (1952).

¹²Many such characters are found, e.g., in Ch. Rey, Dictionnaire Chinois-Français. Dialecte Hacka; A. Grainger, Western Mandarin, and others.

¹³The same kind of tradition of character reading in schools supposedly existed at the time between the ArC and AnC. (GS p. 10; cf. also, *On the Script of the Chou Dynasty*, p. 165, BMFEA, 9, 1936.)

¹⁴Studies like that of G. B. Downer, *A Problem in Chiehyunn Chinese* (BSOAS, 19, 3, 1957, pp. 515-525) are rather exceptional. Most of the descriptions of Chinese dialects, besides the regular descriptions of sounds and the sound system, illustrate the pronunciations by listing readings of characters arranged according to the tables of the Ch'Y initials and finals. Some dialect studies show so much influence from Karlgren's works that the reconstructed AnC values are regarded as the best 'point de départ' from which the dialect should be described. Thus, e.g., Gerty Kallgren, *Notes on the Kiahsien dialect*, BMFEA 27, 1955, pp. 11-40. In his study, *Une caractéristique phonologique du dialecte chinois de la Mongolie Centrale*, TP 23, 1924, pp. 67-89, J. L. M. Mullie takes one special feature in the character readings of one dialect to explain its particular development from the viewpoint of AnC. As a matter of fact, the dialect material which is not derived from character reading can hardly be integrated in a study of Ch'Y

in the way it has been done for dialectal character readings, since then we obtain only words of various lengths, the strict identification of which with any written character or group of characters is often an insoluble task. The usage of such dialect material for the reconstruction of earlier Chinese stadia can only proceed from comparisons between words of one dialect with those of other dialects and from there to older hypothetical forms. S. Egerod in his historical study of The Lungtu Dialect. A descriptive and Historical Study of a South Chinese Idiom, Copenhagen, 1956, comes to some interesting conclusions on the various linguistic strata and dialectal mixtures, not excluding some cases of hybrid word formations. Yet these conclusions are based on a rather limited vocabulary of the dialect, and it is quite probable that a richer material of texts would disclose still more unsuspected irregularities.

¹⁵On Lu Fa-yen and the authorship of Ch'Y, cf. Ch'en Yüan, *The Ch'ieh Yun and its Hsien-pi authorship*. MS, I, 1935-1936, p. 245 ff.

¹⁶Études, pp. 30-31.

¹⁷Ibid., pp. 33-34 and 41; Compendium, p. 215. Some authors consider that the study of the Ch'Y system should be conducted entirely independently of the Sung dynasty rhyme tables. Cf. Mineya Tôru 三根谷徹 *On the III and IV Divisions of the Yun Ching*. Gengô Kenkyû. Journal of Linguistic Society of Japan, nos. 22-23, 1953.

¹⁸Small and unimportant exceptions are admitted, Études, p. 692. But in *Problems in Archaic Chinese*, JRAS, 1928, strong divergences are noted. In The Chinese Language, 1949, and Compendium, p. 230, n. 1, Karlgren still holds the basic attitude expressed in Études. Cf. Demiéville, TP, 1951, p. 56 n.

¹⁹In ZH Guide: An Introduction to Sinology, Yale University, Far Eastern Publications, 1953, G. A. Kennedy compares the number of characters in literary works, e.g., Tu Fu's poems, with the number of characters of KY. But there is hardly any author who uses all the literary or living words of a language in his work. The comparison is not conclusive. But on pp. 157-158 he rightly says: "In the composition of KY it is improbable from a consideration of many definitions, that even a combination of scholars knew the meaning and readings of all the graphs. Probably the majority of the readings were inherited from earlier notes and glosses through the medium of reverse cutting. The conclusion is then that the material in Kuang-yun must be a composite not only of several dialects, but also of several historical stages of the language."

²⁰Cf. Maspero, *Le Dialecte de Tch'ang-ngan sous les T'ang*, BEFEO, 20, 1920, p. 110. On some dialect words and dialect readings inserted in

KY and (predominantly) in Hsüan Ying's YCCYY, cf. Chou Fa-kao, Studies of the Fan-tsie in Hsüan ying's 'Yi-tsie Ching yin-yi' 玄應反切考 (CYYY, 20, 1948, pp. 378-385).

²¹E.g., 窰 has three readings: *ts'iwad, *t'iwad, and *t'iwān 'hole, cave, pit.' Acc. to Cheng Hsüan 鄭玄, comment. to Chou li, Hsiao tsung-po 周禮小宗伯 (ch. 36, p. 52) in Nan-yang 南陽 this character is read as 脬 of 腐脬 *ts'iwad. It shows that a dialect pronunciation (North Ch'u) with final -d was incorporated in Ch'Y with the standard form in -n.

²²Cf. Wang Li 王力: Nan-pei-ch'ao shih-jen yung-yün k'ao 南北朝詩人用韻考 A Study of Ancient Chinese Vowels from the Rhyming of Poets of the 5th to 6th Centuries. CHHP 11.3. 1936, pp. 783-842, and also Demiéville in TP, 40, 1951, p. 55, n. 2, perhaps too strongly: "c'est que la phonologie du Ts'ie yun ne constitue qu'un système artificiel . . ."

²³Such a study is G.A. Kennedy's Ancient -an, -on and the J-Bomb, 1954 (Yale University) Wennti, no. 6.

²⁴S. E. Martin, The Phonemes of Ancient Chinese. Supplement to JAOS, no. 16, 1953, where all previous studies are also mentioned. S. Egerod, Lg, 31, 1955, p. 420; H. Henne, FEQ, xv, 1955, p. 119; A. G. Haudricourt, BSLP, 50, 1954, pp. 213-214. Also Mineya Tôru: An Attempt to interpret [sic] the Tsie-Yün Finals. (中古漢語の韻母の體系一切韻の性格), Gengo Kenkyû, Journal of the Linguistic Society of Japan, 31, 1956, pp. 8-21, which lists other Japanese studies on AnC reconstruction. Chou Fa-kao 周法高, A Study of the Phonemes of Ancient Chinese 論古代漢語的音位. (CYYY, 25, 1954, pp. 1-19); G. B. Downer, A Problem in Chiehyunn Chinese. (BSOAS, 19, 3, 1957, pp. 515-525).

²⁵On Ching-tien shih-wen, cf. Yu Wen, The Similarities and Dissimilarities of Fan-ts'ieh in the Ching-tien shih-wen and Kuang-Yun. Sun Yat-sen University Bulletin of Inst. of History and Language, vol. 1, no. 1, 1931 (incomplete?).

²⁶This work and The Northwestern Dialects of Tarng and Five Dynasties CYYY. Monogr. A. no. 12 (Shanghai 1933), by Lo Chang-pei were severely criticized by Maspero in BSLP 1936, p. 205 ff. But for the first article Examen de la valeur des rimes -io et leur prononciation dialectale (1930), Maspero makes the important remark: "Le point intéressant de l'article est dans la thèse de M. Lo elle-même. Il est dans la longue étude des rimes des poètes des Six dynasties. M. Lo examine en les classant par pays d'origine les auteurs qui font ou ne font pas rimer ensemble les mots de ces deux rimes, et il constate que la confusion

ne se produit jamais chez les poètes originaires du Bas Yang-tzeu, auteur de Nankin, tandis qu'elle est constante chez ceux de toutes les autres provinces. Cette confusion est conforme à ce que dit Yen Tcheu-t'ouei, auteur du vi siècle. Mais, si ici encore les conclusions de M. Lo me paraissent peu acceptables, ses recherches elles-même l'amènent à établir assez exactement la frontière linguistique de la prononciation de ces deux rimes vers le vi siècle, et à délimiter ainsi au moins sur un point particulier l'aire du dialecte de Wou . . . Une enquête complète sur les rimes des écrivains des Six Dynasties donnerait sans aucun doute des résultats très intéressants." Cf. also Wang Li 王力, 南北朝詩人用韻考 A Study of Ancient Vowels from the Rhyming of Poets of the 5th to 6th Centuries, CHHP 11.3. 1936, pp. 787 ff. 812.

²⁷Cf. S. Yoshitake. The Phonetic System of Ancient Japanese. 1934, p. 13 n. Also Kamei Takashi 龜井巍, On the Authenticity of On-readings in Sino-Japanese. The Annals of the Hitotsubashi Academy, 5, 1, 1954, pp. 97-105.

²⁸GS, p. 65 ff., Ancient Chinese and Sino-Japanese.

²⁹R. A. D. Forrest, The Chinese Language, London, 1948, pp. 232-234, 225.

³⁰Paul Nagel, Beiträge zur Rekonstruktion der Ch'ieh Yün Sprache auf Grund von Ch'en Li's Ch'ieh-Yün K'ao. TP, vol. 36, 1942, pp. 125-128.

³¹Korean Studies Guide, compiled for the Institute of East Asiatic Studies, Univ. Calif. by B.H. Hazard, Jr., J. Hoyt, H. T. Kim, and W. W. Smith, Jr., ed. by R. Marcus, 1954, Univ. Calif. Press, quotes several dictionaries with Chinese characters and the Sino-Korean readings, but no special studies on Sino-Korean as such; neither are there any such studies mentioned in F. Vos's Review of Korean Studies guide, TP, 63, 1955, p. 408 ff. Studies, like Ogura Shimpei 小倉進平, On the Laryngal Explosive of the Korean Language, Gengō Kenkyū, Journal of the Linguistic Society of Japan, pp. 22-23, 1953, prove that important factors for AnC may come to light through the knowledge of Sino-Korean. Cf. Heinrich F. J. Junker, Koreanische Studien. Abhandlungen der Deutschen Akademie der Wissenschaften, Klasse für Sprachen, Literatur und Kunst, 1953, Nr. 5, Berlin 1955, pp. 35-81 Sino-Coreanica. p. 61." In dem Gewicht einiger Beispielserien, irrt sich freilich auch Karlgren, so wenn er aus seinen Reihen - kiei / kiei/kai/kai - eine grössere Verwandtschaft des Kor. mit den erschlossenen nordchinesischen Formen und dem Kan-on folgert." . . . "Aus alledem folgt . . . dass das Karl-

grensche Schema wohl doch zu einfach ist." p. 63. "Somit blieben also auch nach Karlgrens Darstellung ungedeutete Reste. Im ganzen wird man jedoch zugeben können, dass die Karlgrensche Anschauungen sich besser mit den Tatsachen abfinden, als die Masperoschen und dass die Kor. Lehnwörter eher mit dem Kan-on als mit dem Go-on zusammengehen." Cf. also Mitsuda Shinzo 満田新造, 朝鮮字音と日本吳音との類似點に就て. The Tōyō Gakuhō 東洋學報 Reports of the Oriental Society, vol. 15, 1925. This study indicates also a large group of words where Sino-Korean agrees more with the Go-on reading than with the Kan-on.

³²Cf. n. 26 end. The criticisms expressed by Maspero do not completely invalidate the conclusions of Lo.

³³B. Csongor, Chinese in the Uighur Script of the T'ang Period, Acta Orientalia Academiae Scientiarum Hungaricae, II, 1, pp. 73-119, 1952. and Some More Chinese Glosses in Uighur Script. (Acta Orientalia Academiae Scientiarum Hungaricae, IV, 1-3, 1955., pp. 251-257. Cf. also J. R. Hamilton, Les Ouïghours à l'époque des cinq dynasties d'après les documents chinois, Paris, 1955, p. 145 ff. Appendice: Transcriptions chinoises du Turc au Xè siècle, p. 164 ff. Tableau des transcriptions des caractères et prononciations du VIIè et Xè siècle. For details on the Shan hsi and other dialects closely related to those of Shan hsi, cf. Nomura Masayoshi 野村正良, 山西諸方言に於ける明泥娘疑母の頭韻 Initials ming, niang, ni, yi in Shan-hsi Dialects. Gengō Kenkyū, nos. 19/20, 1951, p. 43-50 and 199; 張家口方言及包頭方言に於ける聲類. いわゆる西北諸方言との一比較. Initials in the Chang-chia-k'ou Dialect and Pao-t'ou Dialect. A Comparative Study with North-Western Dialects. The Journal of the Faculty of Literature, Nagoya University. 名古屋大學文學部研究論集 vol. 10, 4, 1955, pp. 1-62 and 143. The latter article contains other bibliography on the subject.

³⁴I made this point previously in Philologie et Linguistique dans les études sinologiques, MS 8, 1943, pp. 167-219. The criticism of J. J. L. Duyvendak "that Karlgren admits specifically that the Amoy and Swatow dialects show certain peculiarities that cannot be explained from the Ch'ieh-yun language" is not to the point. The fact is that among the regular mandarin dialects many archaizing elements are found. Among the irregularities of pronunciation mentioned in Karlgren's article, it is striking how many coincide with facts in non-mandarin dialects:

Shanghai (13 cases), Swatow (12), Cantonese (13), Hakka (15), Fuchow (6), Wenchow (2), Ningpo (1). Cf. also P. Demiéville, Archaïsmes de prononciation en Chinois vulgaire. TP, vol. 40, 1951, pp. 1-59; Compendium, p. 212, n. 2.

³⁵GS, Introduction, p. 3. The general remarks made on the reconstruction method of Karlgren's Ancient Chinese apply equally to the different systems of interpretations other than Karlgren's, from Maspero to Nagel, and Tung T'ung-ho to Lu Chih-wei and Li Yung 李榮 Ch'ieh-yün yin-hsi 切韻音系 (Phonetic system of Ch'ieh yün) (Yü-yen-hsüeh chuan-k'an, 4, 1952). The divergences between these systems are limited to detailed points of phonological groupings and phonetic values of reconstruction or to different stress on some of the sources used to interpret the Ch'Y (loan words, etc.)

³⁶GS, p. 31.

³⁷GS, p. 5: "It clearly follows . . . that the reconstruction of Archaic Chinese is greatly dependent for its correctness on a reliable knowledge of its Ancient Chinese 'projection,' one of its principal daughter languages, that of Ts'ie yun. . . . It is absolutely essential that we work with homogeneous materials, ancient phonetic glosses based on one and the same 6th century dialect."

³⁸There is a certain circularity in this reasoning: the phonological distinctions of ArC must coincide with the AnC system, otherwise the ArC reconstructions on the basis of AnC would never be possible.

³⁹As a starting point, we can accept such regularity of development of the language in general, always attentive for possible exceptions; already the facts known on the Han time dialects in FY refute such a regularity.

⁴⁰Tung T'ung-ho 董同龢 Shang-ku yin-yun piao-kao 上古音韻表稿 CYYY, Monogr. A, no. 21, 1944. In the introduction, Tung points out the scarcity of characters in certain rhyme classes of SCg, and attributes great importance to the Hsh and rhyme groups in AnC for the study of ArC. Also Tung T'ung-ho, Tentative Archaic Chinese Phonologic Tables, CYYY, 13, 1948.

NOTES TO CHAPTER II
Particular Study of the Rhymes
(Pages 11-22)

¹Shi King Researches, BMFEA, 4, 1932, pp.117-185. Word Families in Chinese, BMFEA, 5, 1934, pp.9-57; GS, pp.90-110; The Rimes of the Shi-King; The Rimes in the Sung Section of the Shi-King, Göteborgs Högskolas Årsskrift, 41, 1935, pp.1-8.

²Le Parallélisme dans les Vers du Cheu-King. Chap.2: "Assurément, les rimes vocaliques finales se trouvent particulièrement nombreuses dans le Cheu-king; mais cette acception trop rigide et trop artificielle de rime ne convient pas pour analyser le style du Cheu-king qui est avant tout spontané ... " Chang divides his material as follows: (a) Homophonie incomplète: homophonie consonantique: affliteration et rime consonantique: homophonie vocalique: homéotéleute et rime vocalique. (b) Homophonie complète: redoublement de mots – rime adéquate." P. 35: "L'homophonie incomplète, c'est la répétition des sons semblables, soit par leur consonantisme, soit par leur vocalisme: elle prend alors les noms ici d'assonance ou d'homophonie vocalique, là de consonance ou d'homophonie consonantique. L'homophonie consonantique consiste dans la répétition de mots ayant la même consonne initiale, soit a l'intérieur d'un vers, ou, d'une manière plus générale, d'une expression quelconque, soit dans une organisation plus étendue dans des vers correspondants. On a dans le premier cas l'allitération, dans le second l'allitération à distance ou la rime consonantique." Chang has many examples of his rhyme categories. Cf. also Li Ts'ung-yün 李業雲, The Rhymic Rules of Shih Ching 詩經韻例 (Journal of Philology and Literature, I, 1, p. 185, 1936.) Further study may reveal the value of his concept of rhyme in SCg, where a number of poems still resist all analysis of rhyme (pattern and phonetic values), some showing no rhymes (Odes 292-296), others very unsatisfactory ones (Odes 273, 275-277, 285, 287). If the theory can be proved that there was a system of consonantal rhymes, in initial, medial and final position, this distinction would serve as a touchstone of the relative antiquity of the poems of SCg. Even with the change to vocalic rhymes the old consonantal rhymes could have partly subsisted. F. Tōkei finds in several parts of the Shu ching and some odes of SCg (271, 285, 293, 294-296) evidence of a prosody based essentially on assonances and alliteration, and mostly on the opposition and regular alternation of words with voiceless and voiced initials. (Sur le rythme du Chou king and Notes prosodiques sur quelques chants de travail chinois. Acta Orientalia Ac. Hung. 6, 1, 1956, pp. 53-63; 7, 1, 1957, pp. 77-104.)

³J. Van Ginniken, La Reconstruction typologique des Langues Archaïques de l'Humanité, 1939, p.169, Cf. Reviewed by M. Cohen and G. Guillaume in BSLP, 40, 1941, pp.10-24. Van Ginniken came to his theory, partly through his own investigations on the origin and evolution of language, partly on the data given in Tchang Tcheng-ming, Le Parallélisme dans les Vers du Cheu-king. The facts collected in Chang's work show that he may be right when thinking that the rhyme system in SCg is secondary.

⁴Strictness in the SCg rhyme system was already pointed out by Li Fang-kui in: Ancient Chinese -ung, -uk, -uōng, -uok, etc. in Archaic Chinese, CYYY, III, 3, p. 275 ff. Cf. Karlgren, Glosses on the Book of Documents, BMFEA, 20, 1948, pp.41-42.

⁵Li Fang-kui, Archaic Chinese -iweng, iwək and -iwəg. CYYY, V, 3, n.49. Also Robert Shafer, JAOS, 1950, pp.139-141, review of Karlgren, The Chinese Language.

⁶Karlgren, The Poetical Parts in Lao-Ts'i, Göteborgs Högskolas Årsskrift, 38, 1932. Chang Ch'ang-kung 張長弓: The Rhymic Writings of Hsün-tzū 荀卿的韻文 LNHP, 3, 2, 1934, pp.145-167.

⁷The results on the rhyming passages of the works as Lao-tzū, Kuan-tzū, etc. are:

- (1) Although SCg keeps apart the vocalism in words ending in -ng, -k, -g according to 4 groups
 - (a) âng, iang, iwang, eng, weng, ieng, iweng
 - (b) əng, wəng, iāng, iwāng, ieng, iweng
 - (c) ang, ong, iong, uōng, iwōng
 - (d) ang, ieng, wəng, ung, iung
 in Lao-tzū and other works there is a mixing of a & b, a & c, a & d, b & c, c & d.
- (2) Although SCg rhymes words with the vocalic endings a : o, but not a : u, nor o : u, Lao-tzū and others rhyme them freely.
- (3) Although SCg never rhymes -k̄ with -t or -p, there are 4 such cases in Lao-tzū, 4 in Chuang-tzū, 1 in Kuan-tzū, 6 in Han-fei-tzū.

It must be observed that the exact value of some of those rhymes -iweng, iuk, etc. are still debatable and that the freedom mentioned under (3) is exceptional too. On text corruptions and faulty arrangements of some passages in the wrong chapters of Lao-tzū and the related problem of rhyming patterns, cf. J.J.L. Duyvendak, Tao Tō King, Le livre de la Voie et de la Vertu, Paris, 1953, pp.23, 37, 77, 105, 131, 143. As to the rhymes in Ch'u tzū, Karlgren, On the Script of the Chou Dynasty,

p.169, footnote, writes: "A very curious problem is the nature of the Ch'u-tsi, the odes of which were written in the last centuries of the Chou era. In spite of their being many centuries younger than the Shī odes and their having been composed to a large extent from Ch'u, they have just the same intricate rime system as the Shī king. It is hardly conceivable that K'ü Yūan and Sung Yū could have spoken a language sufficiently similar to that of the Shī to cause their rimes to conform entirely to the rime system of the Shī. The explanation is quite different: the Shī was already sufficiently authoritative and normative for the high poetry to force the authors to follow its rime categories even if they were not really efficient rimes in their own spoken dialects. The same phenomenon has repeated itself in later times, when the T'ang rimes were normative in later poetry, when they were no longer really rimes, phonetically speaking." This passage asserts that (a) the rhyme system of Ch'u tz'ü is the same as in SCg; (b) the reason is different as for the Lao-tz'ü rhymes, etc., which follow a freer system; the SCg was already the norm of high poetry. When examining the text of Ch'u tz'ü we find a great amount of hapax legomena, which are clearly dialect words, and show that the poetry of Ch'ü and Sung was strongly dialectal. A difference in rhyming values can be expected as well. Yet since the method of establishing the ArC phonetism can set up only one reconstruction, the text from other dialect areas or texts other than SCg are interpreted in the light of the same phonetic values. Recently Lu Chih-wei examined The Rhymes of the Ch'u-tz'ü, YCHP 33, 1947, to point out several dialectal differences. Such differences, as already discovered, suggest that more profound ones may exist under the apparent identity of rhymes.

⁸On the Script of the Chou dynasty, BMFEA, 8, 1936, p.165, 169.

⁹Examples of this parallelism between Hsh series and the SCg rhyme distinctions are found in Karlgren's On the Script of the Chou Dynasty, p.167. This holds in general, but many series, if completely listed according to SW, mix words with final -g and -d, -n and -m, etc. As will be shown later, Karlgren's Hsh series are his own, not those of SW or of Han scholars.

¹⁰Karlgren, Word Families in Chinese, BMFEA, V, 1934. As W. Simon showed (The Reconstruction of Archaic Chinese, BSOAS, IX, 2, 1938, p.274) the material and method used to determine whether final consonants in ArC were primary (present in Sinitic roots) or secondary (special to Chinese only) are still very insufficient. Karlgren does not tell for each case whether these final consonants are primary or secondary.

The greatest inconvenience is that in Word Families all words with final vowels are entirely left out in the list of cognates, and that these final consonants are taken as an important element to determine the cognates.

¹¹Cf. GS, p.31. Besides the divergence of the Hsh value âg from the SCg value -o', Karlgren admits other exceptions, which do not cover a whole group but are limited to individual words, such as ㄨ̄ nwəb, SCg, nwəd, etc., GS, p.29.

¹²Neither a final implosive -k nor a final glottal stop explain why such words could rhyme at the same time with -g and with open vowels. The only explanation seems to be -y. As a parallel case, that could be opposed to Karlgren's example from modern Chinese dialects, is the other process discussed by Forrest (The Chinese Language, p.167), "final -k and -p as well as -t were already weakening, and that by way of the fricative rather than through reduction to the glottal stop, as Karlgren holds." The argument of Forrest follows the theory of Maspero based on Buddhist transcriptions in Chinese (Le Dialecte de Tch'ang-ngan, pp. 29-34, 37, 41), further developed from indications found in other transcriptions published at later dates. However, it does not appear that the evolution of final -k, -p, -t did everywhere follow the same line of development, nor that these finals disappeared at the same tempo in all places. Sakai Ken ichi 坂井健一 in his 宋詞押韻字にみられる音韻上の一二の特色 Some Phonological Features found in the Rimes of Sung Tz'ü. (The Tōyō Gakuhō, Reports of the Oriental Society, vol. 38, 2, 1955, pp.209-237), showed that during the period 990-1320, there is increasing confusion in the Tz'ü rhymes, between -t, -p; -k, -t; -k, -p and -t, -k, -p. The final -k remained longest as distinct from -t and -p, which became identical. Here it could hardly be a case of weakening of -t or -p, but rather a shift to a different articulation in both. Ogawa Tamaki in 蘇東坡古詩用韻考 Special Features in the Rhymes of Su Tung-p'o's Shih and Tz'ü (Miscellanea Kiottensia, Kyoto, 1956, pp. 843-870, 27-28) concludes to a merging of the three finals into glottal stop.

¹³W. Simon, The Reconstruction of Archaic Chinese, p.274 ff. (BSOAS, IX, 2, 1938): "To my mind the connection with ju-sheng's ought not to have a predominant position in proving final consonants in Archaic Chinese. The ancient finals can be inferred in phonetic series partly from connections with ju-sheng's, partly from a simultaneous vocalization in i and u, partly from an alternation with nasals, further from the combination of these clues with each other, and with Shih Ching rhymes.

Finally—as I shall attempt below—they can be confirmed, if not discovered, by means of etymological relationships." The latter criterion is only suggestive, not proving.

¹⁴BMFEA vol. 1, p.182, vol. 5, p.19 ff. Karlgren (Compendium, p.284 ff.) uses the rhymes found in the poetical passages other than SCg, although strictly speaking this could be allowed only in the supposition that all these other books take the SCg as a model, and Karlgren elsewhere considered some of those poems as less strict than the SCg. On the other hand, for the last group (xxxiii-xxxv) -o, -a, etc. (p.359 ff.) in Compendium, none of the rhymes which we adduced here are mentioned. Some authors have strongly opposed the reconstruction of finals -g, -d, etc.; thus A. G. Haudricourt, Comment reconstruire le Chinois Archaïque (Word, X, 2-3, 1954, p.363); his reasons (the onomatopoeic name for cat, Vietnamese loan words) do not weigh up against the rhyme researches of Karlgren. Haudricourt builds most of his evidence on the Vietnamese and Siamese loan words, but does not consider that these loan words may have undergone a special evolution in those languages different from the Chinese.

¹⁵The finals -n and -d are easily excluded, since there are -n and -d words which are differently treated than the supposed -r words. The final -s is excluded because a word, e.g., gias could not serve as a rhyme or phonetic for gian or kian. Here Karlgren considers simply that only one phoneme could be reconstructed, and does not envisage an earlier stage as -ns which could develop as -s > -z > -i in some words and -nz > -n in others. Yet at the same time he considers -s as the origin of his -r. He has not shown enough reason to discard other possible reconstructions as Simon's -d or a -z.

¹⁶Logically, as words with final -u or -i, belonging to Hsh series with -k, are reconstructed -g, so for words as 皆, 爾, 尼, which have Hsh derivatives with -t, we should reconstruct -d.

¹⁷GS, p.90; The rimes in the Sung Section of the Shī King, Göteborgs Högskolas Årsskrift, 41, 1935, pp.1-8.

¹⁸Cf. Karlgren's rhyme lists in GS and The Book of Odes, Stockholm, 1950.

¹⁹Since the majority of words in -r rhyme with each other, it is impossible to determine from those cases the reconstruction of the finals. The Hsh connections of 皆, 爾, 弟, suggesting final -d, must be given preference.

²⁰Although the -n reading of 鐘 stands for a different meaning, the fact that the same graph was used, shows that a reading -n was possible

for the meaning "butt end of a weapon-shaft"; a fortiori, a reading -n for 西 'west' was possible, since it is used as Chch with -n.

²¹In such rhyme patterns aa bb, the difference of vocalism can oppose them as different rhymes, although in other poems a:b would be a good rhyme. Cf. p.12 ff.

²²Karlgren rightly maintains that the reconstruction for these words must be founded on features in ArC as a whole, not on some dialect features, but it does not mean that only one reconstruction can be proposed. The reconstruction can not explain how AnC had in some cases -i, in others zero; in GS, p.26, Karlgren explains the development of -r into -i by supposing an -r mouillé; this amounts to two different finals.

²³Tōdō Akiyasu 藤堂明保 On the Special Features of the Chou-Ch'in Dialect, 上古漢語の方言。一特に周秦方言の特色について Tōhōgaku Ronshū 東方學論集 Memoirs of the Institute of Eastern Culture, February 1954, no.1, p.85 ff.

²⁴Tōdō poses a more backward vowel -iəm; but -iŋəm, parallel to -iŋəŋ, is also possible.

²⁵Rai Tsutomu 頼惟勤, On the Guttural Finals in Archaic Chinese 上古中國語の喉音韻尾について Ochanomizu University Studies in Arts and Culture 大茶の水大學大文科學紀要 vol. 3, 1953, pp.51-64. Cf. also Mineya Toru, An Attempt to Interpret the Ts'ie-Yün, Gengō Kenkyū, No. 31, 1956, pp.12-13. Lu Chih-wei's rhyme system for SCg is exposed in The Rhymes of the Book of Songs, YCHP, monogr. 21, 1948. His theory about dialectal origin of the -m finals in a series of words 冬, 東 etc., is exposed in The Phonology of Ancient Chinese, pp.214-215, YHCP, monogr. 20, 1947.

²⁶Cf. n. 7, Ch.II.

²⁷E.g., 熊 (GS 674. * gium), part of a personal name (Tso Wen 18 y.) is transcribed in Chien-fu lun with 雄: -ng.

²⁸Karlgren, Glosses on the Book of Documents, BMFEA, 20, 1948, p.40.

²⁹Karlgren, On the Script of the Chou Dynasty, p.159: "The Shī King was composed in the centuries 800-600 B.C." and in the footnote: "It has generally been considered that a few of the odes of the Sung section are to be dated as early as in the very first reigns of the dynasty. I doubt it. They are made at a time when literary activities had already reached a fair stage of development. On the other hand, only two or three odes may be as late as 570 B.C. The great majority of the 305 odes known to us were certainly composed between 800 and 600 B.C." Ibid., p.170: "It is inconceivable that the language could have been so conservative as to pre-

sent, in 221 B.C., exactly the same phonological divisions, in group after group, as in 800-600 B.C. Unless we suppose that the language remained unchanged even in detail for half a millenium, which is impossible, we must conclude that the phonograms in the Shī are contemporaneous with its rime categories, i.e., are to be dated in the centuries 800-600 B.C., if not slightly older." Here Karlgren has inverted the position of what is uncertain (namely the time of the uniformization of the rhyme system of SCg) with that which is certain (the Hsh system in SW, or at least the final period of Chou and early Han, as preserved in the SW tradition).

³⁰On the Script of the Chou Dynasty, p.159: "An inscription such as that of the famous Kuo-ki Tsi-po p'an [競季子伯盤 No. 157 in Karlgren's list, GS, p. 113; ca. 950-770, begin period Chou II] is rimed in a perfect Shī fashion." Karlgren, Yin and Chou in Chinese Bronzes, pp. 13, 14, 45. Yin and Chou Researches, Stockholm 1936. This argument which would be a strong one, has not been further developed, as far as is known to me. If such texts are long enough and sufficiently numerous to provide examples of its rhyme system, then a rhyme system should be established for those inscriptions alone, and later compared to that of the SCg. Up to now, we may ask whether we have discovered the complete rhyme system of these texts, or only those elements that fit in the system we have established on the basis of the Hsh system and AnC. Cf. Kuo Mo-jo, Yin Chou ch'ing-t'ung ch'i-ming-wen yen-chiu 殷周青銅器銘文研究, Shanghai, 1931, I, p. 20; II, pp. 14-58; Kuo Mo-jo in his Liang Chou chin-wen-tzu ta-hsi k'ao-shih 兩周金文字大係考釋, Shanghai, 1935, notes a number of rhymed passages in the inscriptions:

Inscr. 163 者減鐘	208 子璋鐘
173 王孫遺者鐘	219 陳公子甌
174 邾王義遺者 鐘楚錡	227 曾伯甬簋
175 儂兒鐘	228 曾伯旣壺
196 邾侯殷	232 曾子仲宣鼎
197 簠大中申鼎	238 邾公掣鐘
206 許子鐘	239 邾公華鐘
	243 邾大宰簋

272 叔夷鐘	294 邾侯庫殷
273 庚壺	296 晉姜鼎
274 素命罇	298 晉公盞
275 齊瓘氏鐘	299 邾鐘
278 陳助殷	302 吉日劍
280 陳逆鼎	317 秦公殷
283 因咨金臬	318 秦公鐘

Cf. also Kuo Mo-jo, Chin-wen ts'ung-k'ao 金文彙考 (new ed.; 1956), ch. Chin-wen yün-tu 金文韻讀, pp. 127-149. Kuo Mo-jo 郭沫若, The dating of a Royal Tomb of the Ts'ai State, recently excavated at Shou hsien, Anhui 由壽縣器論到蔡墓的年代 K'ao-ku hsüeh-pao, 考古學報 The Chinese Journal of Archaeology, no. 11, Spring, 1956. Ch'en Meng-chia, Chinese bronzes in Foreign Collections, 1946, p. 13.

NOTES TO CHAPTER III
The Hsieh sheng System
(Pages 23-54)

¹Although this possibility of a primary character of a Hsh series being in reality a secondary character and a secondary character being a primary one, has to be kept in mind, there is nevertheless good reason to rely on the SW analysis, which was based on a long tradition. As a matter of fact, there seems to be a definite connection, phonetically, between a primary character in the Hsh series and the derivatives. Prompted by a review of his Analytic Dictionary of Chinese and Sino-Japanese (Paris 1923), by A. Waley (BSOS, 3, p. 364), which drew attention to the fact "that (at any rate, in all the more typical series) it is the phonetic itself (i.e., the simple, uncompounded form) which lacks the initial consonant [i-, j-] and therefore originally had an initial unaspirated sonant (b-, d-, g-)," Karlgren, in his article A Principle in the Phonetic Compounds of the Chinese Script (Asia Major [Old Series, Leipzig], vol. 2, 1925, pp. 302-308), extended this particular feature, with a good deal of exceptions, to all the Hsh series, and formulated the rule of the Hsh

series as follows: "The authors of the characters freely use a word with a weaker initial consonant as phonetic in a word with a stronger one, but seldom *vice versa*." (p. 303), and "There was a marked tendency not to use words with strong initials [k'-] with words with middle initials [k-, g'-], but only with strong ones." (p. 307), "neither words with middle consonants [g'-, k-] nor with strong initials [k'-] are phonetic in words with weak initials [g-; initial ng- is not taken into consideration by Karlgren]; the exceptions are comparatively very few." (p. 305). "Words with strong initials seldom are phonetic in words with middle initials" (p. 306). Unfortunately, Karlgren has not returned to this question in any of his later studies, though it would be interesting to check this rule again with his definite reconstruction system of GS and a large body of characters arranged according to the Hsh series in SW as found, generally, in the KYSH. His formula was based on a number of 12,000 characters (selected from Giles' dictionary), though we are not told how the characters had been classified as to their Hsh series. Karlgren also excluded the Hsh groups that pointed to an ArC cluster initial (出, 兪, 音) or showed some unusual irregularity. But it is clear from the SW analysis that such Hsh series are considerably more numerous than has been usually accepted. Karlgren's rule describes perhaps adequately a general tendency but does not explain it. We could even ask whether some similar rule could be found concerning the finals. The problem goes deeper than the mere question 'which character was used as phonetic for another,' for if there were some phonetic relation between the primary character and the derivatives in a Hsh series, it ought to reveal a certain pattern of word derivation or vestiges of morphology, at least at an early stage between the primary characters and their cognate derivatives, before the pattern was applied also to purely phonetic derivatives. Then arises a new problem concerning the simple graph that served as phonetic in the other characters of the Hsh series, since it was selected in SW or in the tradition which SW still possessed to some degree, for the word stem from which the derivation of other words was developed.

²GS, pp. 456-458: the alternations in final and initial consonants are "sufficient to show that the system of cognate words, variations of the same word stems, was so elaborate and rich that a considerable sound variation under the head of one fundamental character was inevitable." However, the important point is to find the variation formula and limits within the system. Cf. Janusz Chmielewski, *The Typological Evolution of the Chinese Language*, RO, XV, 1939-1949, p. 396 and n. 48. To my

remarks on Word Families in Chinese (BMFEA, 1934) made in MS, VIII, 1943: *Philologie et Linguistique dans les Études Sinologiques*, pp. 201-202, add that the list of cognates in Word Families does not include the words in open syllables; moreover, we know nothing on the possibility that words ending or beginning in different consonants than the groups K-N, K-G etc., could be related (a derivation like bring : brought is not considered.) We have no criterion to verify such derivations by relying on our present knowledge of ArC only. Cf. B. Karlgren, *Cognate Words in the Chinese Phonetic Series*, BMFEA, 28, 1956, pp. 1-18, and my remarks in *The Study of Chuan chu in Shuo wen*, Conclusion (CYYY, 1958).

³We must distinguish between morphological derivations, variants of the same words such as doublets and dialect words, or variations in graphic representation referring to the same word, even if according to our reconstructions in ArC those variations seem to have relevant phonetic differences. It may be that we have to do with different attempts to write exactly the same word, taking in consideration sandhi effects, etc.

⁴Some of those studies were brought together in Shen Chien-shih hsien-sheng yi-chu chih yi 沈兼士先生遺著之一, Tuan-yen-chai tsa-wen 段硯齋雜文 Peking, 1947, especially on the character 濡 in SM (1937); on 不, 坏, 莽, 莖, 梧, 椽, (1946); on the character 盧 (1947). Other monographs on separate characters are: An essay on the primitive meaning of the character 鬼 Kui, translated by Ying Ts'ien-li, (MS, II, 1936, 37, pp. 1-20) from KHCK, V, 3, 1935. On the characters 蓍, 殺, 祭 (FJHC, 8/2, 1939). On the expressions 袒裼, 但馬, 剗襪 (FJHC, 11/12, 1942). On the characters 茲, 弦, 幽 etc., in the article 石鼓文研究三事實疑 (FJHC, 13/1, 2, 1945). In Yu-wen shuo tsai hsün-ku-hsüeh shang chih yen-ko chi ch'i t'ui-ch'an, 石文說在訓詁學上之沿革及其推闡 Studies presented to Ts'ai Yuan-pei on his 65th birthday, II, 1935, p. 777 ff; Shen proposed some types of semantic derivations within the Hsh series:

- (1) Branching of original meaning. Ex. 斯 'to divide, to split.' (a) 廝 'sound of grief, ripping sound' (b) 澌 'drifting ice.'
- (2) Expanding of original meaning in several branches. Ex. 'skin' (a) 'cover, envelop': 彼, 鞞 etc. (b) 'to skin, separate': 披, 籛, 披 etc. (c) 'one-side, sideways': 跛, 頗, 跛, etc.
- (3) Development through branching of a loan word. Ex. 農 'agriculture,' but through loan for 乳-濃, 禮, 濃, 醲 'thick, fat,

dense', etc. Other ex. 庚, loan for 空: 'empty'—康 (穀之皮), 糠 (水虛), 歉 (飢虛), 康 (屋康寔), etc.

(4) Development through branching of original meaning and loan-word meaning. Ex. 非 (a) original meaning: 'criticize, different, sideways': 非, 誹, 斐, 斐 (b) loan for 飛 'fly, soar'—俳, 裴; loan for 肥 'fat'—排; loan for 菲 'red'—翡, 緋; loan for 罪 'criss-cross'—扉, 匪, 篚.

(5) Double or parallel development from the same sound. Ex. 仝 (a) 'thick and dense' (駢, 軫, 軫) (b) 'rise high' (軫, 軫, 軫) (Same in 甲, 音, 駢, 奄, 奔, 弓).

(6) Semantic branching into contrary meanings. Ex. 亢 (a) 'high': 吭, 炕 (b) 'deep': 坑, 阮 etc.

The development of script and formation of characters in a given series is not always parallel with the development and derivation of words; some of those complications are shown by Shen Chien-shih but for every case the application of the model schema is different.

⁵The practice of making characters on the principle of pure phonetic derivation can be compared with the way some modern characters are made in the modern practice of writing a dialect in characters. Many words, although they may have their correspondent character in dictionaries, are not known in the ordinary written language. New characters are made with a phonetic element, which comes as close as possible to the pronunciation of the dialect word; only a complete phonetic identity allows the readers to understand the word. The other alternative consists in using a character meant as a pictograph, for which every reader will read the word he knows or thinks to correspond in his own dialect according to the context.

⁶GS, p. 459. The direction of sound shift in the sphere of the "phonetic" is exemplified by series 168, fundamental character 崑 *twân*; gradual shifting: *twân* ~ *t'wân* ~ *t'i'wan* ~ *di'wan* ~ *tiwar* ~ *di'war*.

⁷Until now only characters with a pronunciation that falls within the limit of the same series of initial and final consonants (K-T, K-M, etc.) and with meanings that appear to be semantically related, in our opinion, have been recognized as cognates.

⁸Characters earlier than those on the Shang bones are found, e.g., on vases. Cf. C. Hentze & Ch. Kim, *Göttergestalten in der ältesten Chinesischen Schrift*, and especially Hentze in *Le symbolisme des oiseaux dans la Chine ancienne*, *Sinologica*, 5, 2, 1957, pp. 65-92: "On n'a pas soupçonné que des caractères d'écriture puissent se trouver camouflés par l'ambiance ornementale au beau milieu des figurations." (p. 68); "Au milieu de

l'embaumure des bois du cerf, on a encore une fois logé le caractère ancien pour soleil. Dans la partie supérieure et dans les pointes de l'embaumure un ornement a été gravé. Disons tout de suite que, ce qui semble être un ornement, n'est en réalité autre chose que l'ancienne forme du caractère *tch'ou* = sortir, naître, formé à partir de l'image réduite d'une plante sortant du sol, avec embranchements latéraux." (p. 71); "Il est donc permis d'admettre qu'il y a identité entre l'image [signe iconographique] et l'inscription [signe paléographique]." (p. 73). Also, most recently, T'ang Lan 唐蘭, *Lost Script of Ancient China as seen from Inscriptions on Oracle Bones and Bronzes*. 在甲骨金文中所見的一種已經遺失的中國古代文字 *K'ao-ku hsüeh-pao*, *考古學報 The Chinese Journal of Archaeology*, no. 16, Summer 1957, pp. 33-36. Whether the Chou contained originally some non-Chinese populations (Eberhard, *Chinas Geschichte*, p. 27) or not (Creel, *Birth of China*, p. 221) can be left out of consideration. Even if the Chou brought some Turkish elements into the Chinese language (Eberhard, *Eine Neue Arbeitshypothese über der frühchinesischen Kulturen*, pp. 14-15, 1936. *Sonderabdruck aus dem Tagungsbericht der Gesellschaft für Völkerkunde*. Cf. also Y. Průšek, *Les récentes théories d'Eberhard sur les origines de la civilisation Chinoise*. *AO*, 21, 1953, pp. 44, 53-55), the Chou language we know of was surely Chinese.

⁹Shen Chien-shih, *On Early Semantograms*, *MS*, vol. 12, 1947, pp. 224-235.

¹⁰Convincing examples in P. A. Boodberg's *Proleptical Remarks on the Evolution of Archaic Chinese*, *HJAS*, II, 1937, p. 352: "The reasonable explanation of the grotesque distortion of the original pictograph for 馬 horse is that through pictorial emphasis on the eye Chin. 𠂔 *miôg*, or mane, hair, Chin. 毛 *môg*, the early graphologists of China were endeavoring to indicate the pronunciation of an early pictograph." This theory is further expounded with more examples in *TP*, XXXV, 1940, p. 266 ff.: *Ideography or iconolatry?*

¹¹Cf. discussion of *chih shih*, p. 31 ff.

¹²Karlgren, *On the Script of the Chou dynasty*, *BMFEA*, 8, 1956. Contrary to Karlgren's opinion we can quote Wang Yü-ch'üan, *Early Chinese Coinage*, 1951, pp. 15-17: "The style of the inscriptions of the three periods were roughly the so-called Ta-chuan, the Chou-wen (slightly simplified Ta-chuan) and the Hsiao-chuan. Whether the Ta-chuan can be regarded as also the style used in the various feudal states during the first period and whether the other styles found in the various feudal

states can be regarded as also the style in the royal domain of Chou during the second and the third periods cannot be said with absolute certainty, especially when we realized that, though so simply stated above, the styles of script during the second and third periods of Chou present strong, local divergence. . . Coins and bronzes have different epigraphical styles which result from the difference in their purpose and in the techniques of inscribing them. On bronze, inscriptions were cast on the vessels, which were made in honor of the maker's forefathers or other relatives, to commemorate a victory in war or a royal or princely grant, to record an important event or a settlement of a dispute. The personages involved are always kings, princes and upper class nobles. They thus had a monumental character and their inscriptions were accordingly rendered in a conventional and elegant manner. . . . The coins were not personal treasures of kings, princes or nobles; they were made to be used as media of exchange in a society, the overwhelming majority of which was illiterate. Inscriptions on the coins are merely marks indicating the mint's name, sometimes the serial number of minting, and occasionally also the denomination. . . . The inscriptions on the coins were left to artisans at the mint, who did not always follow the conventional style and contracted the structure of the characters to the extreme. . . . The fact is that the coins were cast by local mints many of which undoubtedly belonged to princes and minor noble and even wealthy private individuals. Under these circumstances local characters and individual inclinations could not but exert their influence. T'ang Lan. . . holds the opinion that during the Chou period the style script in common use was much more simple and irregular than the official script and that it had influenced the official writings towards the end of the period." (Underlining mine.)

¹³B. Karlgren, A Catalogue of the Chinese Bronzes in the Alfred F. Pillsbury Collection, 1952, p. 6 ff. Also Kuo Mo-jo, Liang Chou chin-wen-tzū ta-hsi k'ao-shih 两周金文字大係考釋, 1935, pp. 5, 9, 252. But Ch'en Meng-chia, Chinese Bronzes in Foreign Collections, First Series, National Library of Peiping, 1945, pp. 3, 13-14, 54 ff. Concerning the bronze style, W. C. White, Bronze Culture of China (Toronto, 1956, p. 11) sides with Karlgren: "Some scholars have been interested in classification of style according to locality, a method which has its value, for instance the centering of the Shang style in the Anyang area and of Western and Eastern Chou in the Loyang area, and the identification of characteristic styles with certain other smaller localities. However, the more one looks into the historical backgrounds the more

one is convinced that generalizations regarding localities have probably gone too far. It is true that the power of the central state of Chou had waned to such an extent in Middle Chou that the country became a group of independent states, yet, with the exception of Ch'in, there is nothing much to lead to the belief that independent styles were originated or developed to any extent in the spheres of influence of those states. There was a nominal recognition of the headship of the Chou kingdom which carries with it a certain unity of state ceremonial. There were constant alignments for interstate conflict, intermarriage between the ruling families, ceremonial visits between them and attendance at court. Even when a state was exterminated it seemed to be a recognized matter of honor to foster the remnants of its people. There was a tendency to conserve rituals of earlier days, and certain states accepted and practised those rituals as when Confucius expressed his preference for the ritual of Yin. Certain literature also would be standard in the whole country. With more light on the historical and geographical data of those early periods we may have to concede the essential uniformity of ideas and styles and ceremonial and governmental usages, even though the states were more or less independent of Chou. The greatest differences would be found around the outer borders of the country touched by the barbarian districts, and particularly in the area by Ch'in." Nevertheless, though casting and possessing bronzes were largely limited to the royal and feudal courts, there are exceptions to this as well (White, op. cit. pp. 173, 174), and the possession and use of script, its development and style forms, should not a priori be considered as inseparably connected with the bronze styles.

¹⁴Cf. D. Bodde, China's First Unifier, Leiden, 1938, pp. 122-123, 147-162. This uniformization was not entirely and only the result of the political unification by Ch'in, but was finally enforced and achieved by it. Concerning the units of measurement, Sekino Takeshi 關野雄, A Study of Chinese Archaeology 中國考古學研究 (Tokyo, 1956, p. 374 ff., pp. 404-405, Summary p. 18) says: ". . . the fact that there existed common units of measurements in the Chan-kuo period reveals an international aspect of the culture of the period. Again the fact that Shih-huang-ti gave a public recognition to the measurements of the Chan-kuo period gives a clue to the understanding of the significance of the unifying policy of Ch'in." Same remark is made concerning the 'units of weight of coins of the pre-Ch'in period' (Summary, p. 20; Japanese Text, pp. 419 ff., p. 451): "The prevalence of fairly universal units of weight in the pre-Ch'in period seems to afford evidence of the interna-

tionality of the general culture of the period. . . . That Shih-huang-ti went so far as to abolish the units of weight then used in the territory under his domain and to adopt the units of weight of the cultured States by the Yellow River shows an important aspect of the policy of unification of the Ch'in dynasty." It can be presumed that the various elements affected by the uniformization were not all unified with the same ease and speed of the official measures taken by a government, and that among these elements writing and language were the slowest to follow the general trend of uniformity.

On the origin and geographical expansion of the Shang culture, cf. Li Chi The Beginnings of Chinese Civilization. Three Lectures Illustrated with Finds at Anyang. Seattle 1957, pp. 19-38; Cheng Te-k'un, The origin and Development of Shang Culture. Asia Major, 6, 1, 1957, pp. 80-98 (with map: Distribution of Shang Sites). On the relation of Shang script, Chou script and the SW script and analysis, Ch'en Meng-chia devotes a whole paragraph (Ch. 2, par. 4, pp. 73-84) in his Yin-hsū pu-tz'ü tsung-shu 殷虛卜辭綜述 (Peking 1956). He finds that the earliest script applies, besides the Hh principle, the Chch and Hsh principles, but he entirely disregards the origin and meaning of the Chih shih and Chuan chu principles; nor does he solve the question (the most important) whether the Hsh in the bone script show the same phonetic series as those of SW, or whether they are always showing the same procedure and application of the Hsh principle of SW.

¹⁵GS 743 has the character 望 with a reading *miwang and the derivatives 望 and 望. In SWKL 3666 a 望 is a ku wen graph of 望. These graphs are only found in inscriptions and in SW. 望 is identified with 忘. The other character 望 'moon facing the sun, full moon' and 望 'to face, regard, look to' are taken as the same word as the later 望 *miwang 'moon facing the sun, full moon (Shu), 'look from afar' (SCg). But SW on the contrary still separates 望, the original graph for 'full moon' from 望 'to face.' Thus, though the identification of 望, 望 = 望 seems very convincing, SW still analyzes 望 (SWKL 5717 b) in a very unexpected way: whereas GS 742 analyzes 望 with 亡 as phonetic, SW says 从亡望省聲, and does not take 亡 as phonetic. However, 亡 appears in the definition, which takes the form of a sound phrase: 出亡在外望其還也 "to go out and disappear outside; one hopes (looks from afar) for its returning." 亡 is meant to indicate the reading, but also an etymological connection with the word 'disappear, be gone.' It is clear that already in SW 望 and 望, 望 has already a homophonous or at least phonetically very similar reading.

Though the meaning of 望 and 望 can be shown to be identical with 望 the Yin and Chou inscriptions give no indication of an identical reading. SWKL 3666a analyzes 望: 从月从臣从壬. 壬朝廷也. (壬 'to pay homage at court!'); the definition points again to the same etymology: 月滿與日相望以朝君也 "The moon is full and faces the sun to pay homage to its lord." It is not excluded that this SW analysis of 望 still preserved an indication that it originally had not the same reading as 望, but another one, etymologically connected with 廷 *t'ien.

¹⁶SWKL 798a offers no indication on the reading of the character 遠. The commentators only tell us that its meaning is identical with 原. The fan ch'ieh is later and obviously made on the idea that a synonym may be a homonym (for lack of better). The structure of the character suggests a different reading comparable to 象. The SW definition: 高平之野人所登 reminds us of Ku-liang, Chao 1 y. 6: 中國曰大原, 夷狄曰大鹵, 號從中國名從主人 "In the Central States they say: ta yüan (*ngiwän). The Yi ti say: ta lu (*lo?). The 'hao' follows the [name of] the Central States, the 'ming' follows the [designation of the] possessors." Kung yang comments differently: 地物從中國, 邑人名從主人, 原者何. 上平曰原. "The land description follows the [designation of the] Central States, the inhabitants call it according to the [designation of the] possessors. What is 'yüan'? A high plateau is said 'yüan.'" The difference of name is based on a distinction of "territory" and "inhabitants": yet ta lu is not necessarily a non-Chinese word. SWKL 5291 clearly explains 鹵 as 西方鹹地 "Salt-ground of the west," dialect word of the west, opposed to the eastern dialect word: 原. SM pairs 鹵 with 鹵 *bl - gl-? 遠 could be a dialect word of the northwest, synonym to 鹵. Yet ta lu 大鹵 may have been a name which was partly misunderstood and reinterpreted: 'the big uncultivated' (lu-mang 鹵莽 in Chuang), or maybe 'the big [region] of the uncivilized ones' (lu-tun 鹵鈍), or 'the big [region] of the captive slaves' (lu-huo 鹵獲 in SC and HS). Cf. my article The Word for Salt in Shuo wen (Anniversary Volume in Honor of Professor L. Olschki) and Notes on the Study of Shih ming, Asia Major, Vol. 6, part 2, n. 34).

¹⁷In fact, the only early and reliable source is SW as the later systems are all corrections to the SW system, attempting to explain the SW connections that seemed unacceptable.

¹⁸For a good exposition on the lexicological works before SW, cf. Derk Bodde, China's first Unifier, 1938, p. 147 ff.: The Unification of Writing.

Bodde sums up HS ch. 30, and mentions: a) The Large Seal (ta chuan 大篆), composed by the Great Historian of King Hsüan of Chou 宣王 (827-782 B.C.). b) Li Ssü 李斯 (280?-208 B.C.) basing himself on the Ta chuan made the Ts'ang-chieh p'ien 倉頡篇. Chao Kao 趙高 made the Yüan li 爰歷. Hu-mu Ching 胡毋敬 made the Po hsüeh 博學. In the time of Wu ti 武帝 (140-87 B.C.) Ssü-ma Hsiang-ju 司馬相如 composed the Fan-chiang p'ien 凡將篇. In Yüan ti's time (48-33 B.C.) 元帝, Shih Yu 史游 composed the Chi-chiu p'ien 急就篇. In Ch'eng ti's time (32-7 B.C.) 成帝, Li Ch'ang 李長 made the Yüan-shang p'ien 元尚篇. Later Yang Hsiung 楊雄 made the Hsün-tsuan p'ien 訓纂篇. In the time of Hsüan ti 宣帝 (73-49 B.C.) Chang Ch'ang 張敞 made a special study of the Ts'ang-chieh p'ien, and his grandson Tu Lin 杜林 used these materials for his Hsün ku 訓詁. It is useless to speculate on the question whether SW took its grammatological principles and their applications from earlier works now lost. Such a possibility would not greatly change the value of SW, or the time level attributed to the reconstructions of the SW system, for probably all these earlier sources did not go back beyond the time of Li Ssü. What is important is that SW has consistently applied the principles to the whole thesaurus of graphs discussed.

¹⁹This would mean that when SW gives a ku wen graph, and the structure suggests a different reading than the hsiao chuan graph, we can suspect a dialect difference between the central and the eastern states. On ku wen: Wang Kuo-wei, Han-tai ku-wen (Bodde, op. cit., pp. 151-152). On chou wen: Ch'en Meng-chia, Chinese Bronzes in Foreign Collections, 1st series, 1946, p. 14, where it is shown that chou 籀 is not the name of a historian (but means in Hsü Shen's text 作 'to make'; similarly chuan 篆 in ta chuan, hsiao chuan originally meant 'to inscribe'.

²⁰Hopkins, Pictographic Reconnaissances, JRAS (1930), p. 387 ff., on the proportions of corresponding characters between Shang graphs and the variants found on bronzes and in SW.

²¹In the same way as H. Frei showed that the mistakes in colloquial French in grammar, spelling, etc., are a sign of the new tendencies in a language (La Grammaire des Fautes, 1929).

²²Chang Cheng-lang 張政烺, Liu-Shu Ku-Yi 六書古義, On the oldest meaning of 'liu shu,' CYYY vol. 10, 1, p. 1 ff., 1942, shows the origin and meaning of the term liu shu and stresses the fact that the SW categories of characters are entirely new, although some analyses of characters were based on earlier works. The sequence and ter-

minology of Pan Ku in HS, ch. 30, is: hsiang hsing, hsiang shih (象事) hsiang yi (象義), hsiang sheng, chuan chu, chia chieh. In SW the order is: hsiang hsing, chih shih, hsing sheng (形聲), hui yi (會意), chuan chu, chia chieh.

Cheng Hsüan's order is: hsiang hsing, hui yi, chuan chu, ch'u shih (處事), chia chieh, hsieh sheng (諧聲).

Cf. W. P. Yetts, The George Eumorfopoulos Collection Catalogue of the Chinese and Korean Bronzes, Sculpture, Jades; Jewellery and Miscellaneous Objects, 1924, p. 5 ff., on the meaning of liu shu and definitions in Shuo wen.

²³Term proposed by Tchang Tch'eng-ming, L'écriture chinoise et le geste humain, 1938: "morphogrammes selon le procédé de l'imitation figurative."

²⁴Tchang Tch'eng-ming, ibid.: "dactylogrammes selon le procédé de l'indication manuelle." (Notes 23 and 24 are quoted from J. Van Ginneken, La reconstruction typologique des langues archaïques de l'humanité, Amsterdam, 1939, pp. 99-104).

²⁵Takata Tadasuke 高田忠周, Kochūhen 古籀篇, Introductory Volumes 學古發凡 p. 6 b ff., has several examples of how chih shih have been substituted by more complicated and more precise graphs, e.g., Δ and 集, \backslash and 左, \curvearrowright and 右, \downarrow and 進, \downarrow and 退.

²⁶Karlgren, GS p. 2. ". . . I adduce only such pre-Ts'in forms as are the ancestors of our present characters, the latter being technical modifications only (or sometimes misunderstood corruptions) of the former." This way Karlgren left out many graphs, which deserved to be analyzed, in order to know whether they were made on some principle other than the regular Han graph. If they were different in graphic structure or in phonetic composition, they may be words different from the later Han vocabulary, although synonyms.

²⁷The character 為 has a hsiao chuan graph 𠄎, which is not quite explainable by the Shang graphs 𠄎 or the Bronze forms, etc. The Stone Drum form 𠄎 shows also an element which is not quite derivable from the original bone graph; this element is 𠄎. It is not permissible to say simply that the SW explanation is wrong; Hsü Shen knew the other analysis, for he quotes the theory of Wang Yü saying: 爪象形也, but insists on analyzing and defining it differently. The graphic analysis is 母猴象也. 下腹為母猴也: "Picture of a female ape; the belly is to be considered as [that of] a female ape." This line is probably corrupted by the influence of the ku wen analysis, which simply

says: 象兩母猴相對也. "It represents the figure of two female apes facing each other." The graphic explanation of GS saying: "The drawing shows an elephant and a hand. The inference of some scholars that the archaic Chinese had tamed the elephant, causing it to 'make,' 'work' is perhaps somewhat bold" is made on the assumption that 'to make, to do' is the first meaning. But the first meaning could as well be 'to act as,' derived from 'to feign, to form, to simulate,' represented by 'hand working in ivory,' i.e., 'to form, represent, fabricate.' Thus the bone graph is a pictograph. It may have an endomorphic phonetic element; this is probably the role of the element 卩 in the Stone Drum and many bronze graphs (Takata, vol. 61, p. 8 ff.). What this element may represent is suggested in the SW s.v. 皮 *b'ia: 'skin' (SWKL 1315): 剝取獸革者 'that which is skinned from the hides of animals,' and 从又為省聲 (hsiao chuan 象, ku wen 象, chou wen 象). A phonetic connection exists between 皮 *b'ia and 為 *gwia < /* b'ia ~ bgwia. Bronze forms of 皮 are 𠂔, 𠂕. It is curious that a complicated character like 為 should be shortened to 𠂔, 𠂕, 𠂖 etc. Probably 𠂔 is the same element as 卩 and 卩. This means that the connection of 皮 to 為 is simply to be reversed from Hsh derivative to primary character. Comparing the graphs of SW and the Stone Drums 象, 象, if we leave out the central element, we have 𠂔, 象, a clear though simplified form of the graph 'elephant' of the bone inscriptions. It means that in Chou time, the Shang graph was changed to represent a new word, or got a phonetic element to indicate a new reading. Probably the first opinion is closer to the truth. The character 皮 is consequently a pictograph 'hand + hide': 'to skin, to work at animal skins.' Yet the element 'skin' is not represented as 革, 'a skin stretched on a frame to dry,' but as 'a prepared skin,' used for pantomimes, consisting of the head, completely whole, so as to fit over the head, and the forelegs tied over the chest, the rest hanging loose behind the back: 𠂔. (Cf. Hentze, Die Sakralbronzen und ihre Bedeutung in den Frühchinesischen Kulturen, pp. 32-34, on the method of skinning animals; Tafelband II, figs. 1-5, on the way of putting it on for pantomimes; cf. also Tafelband I, fig. 21: a detail from Wu-liang tz'u showing two persons dressed in animal hides acting in a pantomime.) No wonder that this element was added to the Shang graph 'hand + elephant,' in order to suggest a word, the first meaning of which was probably 'to act as, represent, to feign to be, simulate.' Summing up, we have three different kinds of graphs (a) Shang: hand + elephant 'to work in ivory: to represent, feign, simulate.' (b) Chou forms, Stone Drum and Hsiao chuan

graphs: elephant + hand with the phonetic element 皮 'skin': 'feign to be.' This word was paronomastically defined in SW as 母猴 *mæg-g'u < /* mg'u. (c) ku wen graph (eastern words), slightly differing from 為 /*bgwia, i.e., /*b'gu ~ mg'u, a simple Hh used as Chch 象 'two apes facing each other.' SWKL 4275b defines *siang: 象長鼻牙南越大獸 'the big animal of Nan Yüeh, with a long trunk and teeth.' *diang-b'iaed < /*diangb'iaed is probably a paronomastic definition of the name of the elephant; *diang-ngã < /*dngã ~ dzngã is comparable to 豫 *dio < /*-g; SWKL 4277a: 豫象之大者 'a big kind of elephant.' /*diang-b'iaed is then a binom, where *diang is taken from *diangã < /*dngã, and /*b'iaed is comparable to 為.

²⁸Karlgren considers this character as a complete replacement on 'totally different principles' (GS, p. 2). SWKL (5532 a-b) defines 婚 xuān < *xmwen as: 婦家也 "wife's family," and explains 禮娶 婦以昏時, 婦人陰也 "According to the Rituals one takes a wife by marriage at the hour of darkness, (for) the wife is the element 'darkness.'" SW analyses it: 从女从昏, 昏亦聲. The element 昏 is 'also phonetic.' This means that first of all it is understood to suggest an 'etymologizing, semantic' connection. The chou wen graph 慶 has convincingly been identified with the bronze graphs reproduced by Karlgren (GS, p. 2) and interpreted by him as different in construction from 昏; this bronze graph 昏 is used as a loan for 聞 /*miwen. (Takata, 37/31 a-32b, 53, 45b-46b). SW confirms this loan since it gives 昏 as ku wen for 聞 (SWKL 5356a-b). It seems that the bronze graph 昏, was read similarly to the new graph 婚, and had the element 昏 as phonetic (shortened for 聞 /*miwen) added to 昏 'cup' and 女 'woman.' One graph, 昏, reflects the semantic connection with 'darkness, hour of darkness' (SW; Hun yi and Po-hu t'ung) (Tjan Tjoe-Som, p. 262; also Cheng K'ang-ch'eng, comm. to Li chi); another graph 昏 with the element 'cup' probably alluded to the ceremony of drinking together from the same cup, (Ho chin 昏: Li chi, Hun yi; Couvreur, II, p. 643.)

²⁹母 and 女 could be related, though it is not strictly proved. 女 (cf. p. 51) /*n'yo < n'og, is defined SWKL, 5517a, as 婦人也 and 婦 *b'iuog as 服 *b'iuok < /*b'ziuk. 母 is *mæg < /*m'æg. 女 may have originally been /*bn'og ~ bzn'og. The pair 母: 女 can be compared with another cognate word 孃 'mother' niei < /*bzn'ieb (cf. p. 50) and 孃 /*bzn'ieb, 'leaven' (i.e., 'the mother'), a dialect word of Chiang nan (SWKL 3992); 孃 too has Hsh derivatives in m-. The pair 口 k'u and 甘 kâm could be explained as a set of words, originally with -m or

with -ng ~ -g. (SM equates 口 with 空 *k'ung.) 刀 and 刃 can be taken as cognates, since 刀 has Hsh derivatives 忍, *ngiæg < /*dngiæg (SWKL 4750), 刃 *xog < /*dxog, and 刃 /*ńien < /*zńiend has Hsh derivatives: 刃 *śiang < ns- < /*sný, 認 *ńziæg < ń- < /*zńý-. Even 刃, explained by SWKL (1803) as 从刀从一 may be a further derivation (expressed by *chih shih*), *ts'iang < /*ts'lang (cf. p. 48).

³⁰A phonetic role of 口 in 右 *giŋg* is not so farfetched for it must not be of the same strict kind as the Hsh of SW, nor exactly on the same principle. The fact is that SW proposes an analysis different from the Hsh category: 从口从ナ (SWKL, 603) corrected by Tuan Yü-ts'ai into 从口ナ i.e., ナ suppressed phonetic. On the other hand, 口 is equated with 空 *k'ung* (SM 8/10); AnC -əu could also go back to -əg (as in 不 *piŋg → p'əg → p'ung) and a derivative range -ug, -iug, -ung is quite possible. As to 工 in 左 /*tsâ-g, its role is very obscure. Yet SWKL (2013a-2014b) analyzes 左 as: 从ナ工 (i.e., 工, 'suppressed phonetic'). KYSH lists derivatives of 工: 韻 *d'ung*, 缸 *lung* (already in SW) and 澄 *nang*. 工 could have served as phonetic for words with dental initials and velar finals (D-G formula). A problem concerning 工 which has not been explained is the fact that 工 (*kung < /*tk- ~ sk- ~ dk- ~ lk-) is said to mean the same as 巫 (SWKL 2016b, 2024a). 工 has *ku wen* graph 工 (*mog 毛) and is a pictograph of a 'carpenter's square,' same as 巨 defined (SWKL 2019a) 規巨 *kiweg-kiwo. (Discussed by E. H. Schafer, *Ritual exposure in Ancient China*, HJAS, vol. 14, 1951, p. 152ff.) But the connection 工: 巫 has not been explained. Whether the SW graph analysis is wrong or not, the fact remains (a) that SW connects the two words at least semantically, (b) that 工 has bone and bronze graphs 工 'carpenter's square' (Takata 8/7b. Cf. also H. G. Creel, *What is Taoism?* JAOS, 76, 1956, p. 145. Ch'en Meng-chia, *Yin-hsü pu-tz'ü tsung-shu 殷虛卜辭綜述*, Peking, 1956, p. 365.) SW defines 巫 by a sound phrase 以舞 (*mýwog) 降神. Like 為 (*bgwia: 'pantomime, imitate,' cf. n. 29) means 'to act,' so 巫 /*mýwo > *miwo means 'to shamanize, dance, conjure' and is connected with 工 *kung* (/*km- > kw- > ku-) 'work,' (/*kmeg ~ kmog) 'carpenter's square,' i.e., tool to work.

³¹Cf. Boodberg, HJAS, vol. 2, 1937, p. 341.

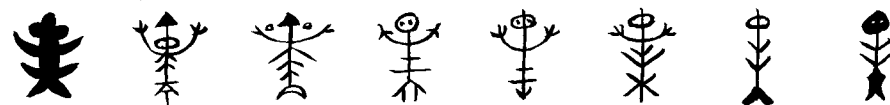
³²SWKL, 5907b, analyzes 希: 从糸希聲, yet GS, 1236 k, puts this character separately among the exceptional words, the ArC of which it was impossible to reconstruct "for lack of Shī rime or *hie sheng* connections." Now 希 itself, although appearing as a part of many graphs is not found in SW (SWKL 6866b, 6819b), it is the *ku wen* graph of 希 (Ta-

kata 17/36b) which has *dz'ük as 'suppressed phonetic,' 希. 希 (SWKL 3456b), 希 < *tjæg ~ /*tsjæg is defined by 紕 -t. The explanation is probably that already in SW time two different but related groups existed within 希: /*dxiəd, dxiənd and dxiæg, tjiæg < -gd.

³³An example is 復, cf. p. 35.

³⁴Some of the analyses in SW with the formula 从 x y or 从 x 从 y seem to be corrections of difficult analyses of graphs with radical and phonetic 从 x y 聲, as can be seen from the T'ang manuscripts of SW. Cf. Chou Tsu-mo 周祖謨, *The T'ang Manuscripts of Shuo wen* and the Ancient Pronunciations of Chinese Characters in it 唐本說文與說文舊音 CYYY, 20, 1948. On the character 吠, see Ch'en Meng-chia, *Myths and Witchcraft during the Shang Period 商代的神說與巫術* YCHP, 20, 1936, p. 554, where he takes 犬 in 吠 *b'iwad and 伏 as a variation of 友. *Chi yün* has 狔 and 狔 for 吠; Tzū lin 字林 writes 吠. The analysis of SW 吠: 从犬口 may very well be a later corruption of an original 从口犬 (= 友 *b'wat). The words 犬 and 友 may also be cognates 𠂔bk' - ~ k'm- and 𠂔bgw- > b'w.

³⁵Carl Hentze, *Frühchinesische Bronzen und Kultdarstellungen* (Antwerpen, 1937), ch. I: Die Zikade in Text und Schrift (pp. 13-22). 蟬 (GS, 147, z, ch'an / zian / dian) 'cicada' is derived from 單, which Karl-gren left unexplained. The Yin and Chou graphs present fundamentally the same aspect. Hentze chose four Yin graphs, left unidentified by Sun Hai-po, *Chia-ku-wen pien* (V, fu-lu, 2) as the original graph of 'cicada': 𠂔, 𠂔, 𠂔, 𠂔; furthermore, he lists ten bronze graphs which Takata (97/29) erroneously identified as graphs for the bat:



etc. But the Yin graphs 𠂔, 𠂔, and the Chou graphs 𠂔, 𠂔, 𠂔, 𠂔, etc., which have a clear similarity with the SW 單, are left out. Takata explains the graph of type 𠂔 as a combination of 𠂔 or 𠂔 'stars' with 𠂔 'a pole, a stick,' being originally a character with the meaning of 旂: flag, and written 𠂔. This is not very plausible, for it does not explain the inversion of 𠂔 into 𠂔, or forms as 𠂔, 𠂔, 𠂔, and most of all 𠂔 and 𠂔. Moreover the Yin graph 𠂔 and the Chou graph 𠂔 for 蟬, show again the element 𠂔 as an inseparable whole, whereas 𠂔 and 𠂔 stand for 虫 'insect.'

The simplest explanation may be that 𦉳 etc., is a strongly reduced picture of the cicada, where the top element was originally the head with eyes and the feelers or hooks: 𦉳, 𦉳, 𦉳, 𦉳, and the lower element 𦉳 was a reduced form of the body: 𦉳, 𦉳. This reduction was so far stretched that SW could isolate the element 𦉳 and explain it as a phonetic element, leaving the rest unexplained: 𦉳 𦉳.

³⁶These characters are 𦉳, 𦉳, 信, 瑞, 敗. Some of them are later inserted characters, therefore the explanation 會意 is later too. 𦉳 is defined 日長也 analyzed 从日永 i.e., 'suppressed phonetic' but 永 can not easily be taken as phonetic. But the character may, in its graphic form, very well be what the definition says 日長. 長 in seal and bronze forms is closely similar to 永 (𦉳) and could easily have been misunderstood for 永. (長: 𦉳考 𦉳 𦉳) (SWKL, 2945). 𦉳, 雲布也, is analyzed 从日雲, 會意. It is also a later included character. Commentators keenly suggested that it must stand for 黝: 'clouded, dark, black.' The graphic origin of 𦉳 is surely a combination of 'cloud' with 𦉳; but the interpretation of 𦉳 as 'sun' is a later misunderstanding for an element which is probably an extreme shortening of 黑 'black.' Some bronze graphs write 𦉳 𦉳 or 𦉳 (Takata, 14, 4a); the top element turned around would completely coincide with the graph for sun. An old reading for 黑 was P* tsiam (cf. n. 40 below). 黑 * xək < /* bxək, is in SW 从田从炎 ts'lung + diam : /P* tsiam, older reading and synonymous word of bxək 黑. This synonymous word is found under various other Hsh characters 黠, 𦉳, 點, 𦉳, 黠, 黠, 黠, 黠 (all having same general structure D-M, (-P), although the reading /* bxək is found in characters 黠, 黠. 黑 shortened into 𦉳 is then the phonetic element of 𦉳 * d'am. It is a fine example of late graphs still going back to early graphic and phonetic structures though not included in the early SW text. The reading P* tsiam for 黑 is possibly indicated in the definition of 熏: 火所熏之色也, another instance where a shorter and as exact a definition could have been given by synonyms, unless other information was intended by means of a sound phrase: "the color of what fire blackened by soot." #* siwo 所 + 熏 /* dxiwəm : siwəm. The reading /* dxiwəm (instead of /* dxiwən) is suggested in the SW s.v. 黑: 火煙上出也 "The soot of fire is going up and out"; the analysis of 熏: 从火从黑 could not be * t'iat ~ t'iang (𦉳) + /* bxək 黑, but P* tsiam (old reading): #* t'iam ~ tgiam. That 黑 should be read in the old reading is suggested by the SW itself, which explains

further 中黑熏黑也: "The [reading] 中黑 is [the same as] 熏黑 (diwen-bxək; sandhi: dxiwembxək) 'blackened by soot of fire.'"

Other characters of this group, are plainly cases of suppressed phonetic and a later added formula of Hui yi. Thus 信 siĕn, analyzed 从人从言, which Tuan Yü-ts'ai, following some editions, emendates into 从人言. 言 is * ngian; in SM 言 is equated with 宣 * siwan (/* zngian = /* sýwan), so that * siĕn was /* sýen. (Cf. Bodman, SM Index, no. 1050). In the same category falls the graph 瑞 which has been generally recognized as a true Hsh. The formula hui yi was obviously added later.

Finally, there is the interesting case 敗, with the SW text: 敗, 毀也. 从支貝. 敗 賊皆从貝. 會意. Commentators easily understood 貝 as a phonetic: * pâd (pwâd) / 敗 b'wăd, pwăd, and considered the formula hui yi as an addition too, but the preceding phrase: 敗 賊皆从貝 may still belong to the original text, indicating 貝 not as a phonetic in 敗, but as a radical (賊 is originally listed under 戈 in SW), and thereby taking 敗 and 賊 as chuan chu (cognates); 敗 is, as a matter of fact, defined 賊也. Cf. Notes on the Study of Shih ming (II, 2 and n. 23, 24), Asia Major, vol. 6, part 2.

³⁷Takada, Introductory volume, 學古發凡, 1 hs. p. 49 ff., has listed various kinds of hui yi characters: (a) combination of chih shih graphs, (b) combination of various Hh graphs: doubling or tripling of the same pictographic element, combination of pictographic elements of similar semantic content: "sun, moon, stars," etc., or "wood, grass, leaves," etc., and, finally, combination of entirely unconnected and disparate pictographic elements, the role of which remains unknown or uncertain. (c) combination of hui yi characters together. (d) hui yi characters where some elements can be explained as phonetics in SW. This shows that the hui yi analysis does not exclude the possibility of a Hsh explanation.

³⁸Such a reading in fan ch'ieh fashion (though not in the sense of the fan ch'ieh method of Ch'Y, but in the sense of a combined reading of the two elements) has first been proposed by Lin Yü-t'ang 林語堂, in his article Han-tzŭ chung chih p'in-yin-tzŭ 漢字中拼音字, On Phonetic Combinations in Chinese Characters (CYYY, 2, 4, 1932, pp. 387-392). His most striking example, well put in evidence, is 竊:

𦉳	<u>ch'iat</u>
𦉳	<u>jiap</u>
竊	<u>ch'iap</u>

Unfortunately 廿 is clearly explained in SW as a ku wen variant of 矢 *śiər < /*sýəd, which has nothing to do with 廿 (SWKL 955: 二十并, ńziəp < /*ńziəp). 离 *siat < /*sýat (= 俛 *k'iad < /*skiad ~ *k'iat < /*skiat) (cf. p. 58) and 廿 (= 矢) /*sýəd are both phonetic in 竊. Lin Yü-t'ang includes several examples which are really cases of two phonetics together, or phonetics added to an already existing phonetic element, and rightly point out the process of substitution and addition of phonetics according to different times and dialects in which the Hsh principle was applied. His most probable case of true combinations of two graphic elements as a specific phonetic device, is 𪛗. Yet, it is not strictly necessary, for SWKL (2064) clearly indicates 否 alone as phonetic. But on the comparison of names like 帛喜, 伯喜, and the reading 𪛗 p'wji < /*piəg, Lin takes the combination 否喜 as an indication for a reading 否 *piəg + 喜 *xiəg → /*pxiəg, suggesting a particularly strong fricative element. The importance, however, of such combined readings resides in the facts that they establish a passage from Hy to Hsh. These readings can be applied in two different ways. E.g., sideward combined reading in 頃 k'iweng: 从匕 xwa, 从頁 siog: xiwog → k'iweng. 彤 d'uong: 从丹 tan, 从彡 sam ~ mog: t-am, t-og → d'uong. 龙 mang: 从犬 k'iwən, 从彡 mog: k'mog, or 犬 short for 吠 b'iwər (?), 从彡 mog: b'mog.

Downward reading: 菁 məng: 从苜 muât, 从旬 xiwən (xwəng): məng, mxwəng. 皇 g'wāng: 从自 dz'i, 从王 giwəng: dz'giwəng (cf. p. 36). 僉 ts'iam: 从人 dz'iəp 从口 ziung, 从从 dz'iuŋg, tsiam: dz'iuŋg, dz'iuŋg, dz'iam → ts'iam. 夙 dz'iəm, 从山 san 从入 ńziəp: ś-ńziəp → dz'iəm. 兵 pəng, pəng, 从斤 kien, 从开 kiwəng: kiwəng → kəng. 候, chou wen form of 兵: bkəng and pəng. 粵 p'ieng 从彡 (Hsh derivates 𪛗 b'iu, b'iwo) 从由 diog: b'iog, b'iwo → p'ieng. 美 miwər 从羊 probably for 羊 mjie, 从大 d'ât, d'âd: miwât, miwâd → miwər. 央 iang: 从大 d'at 从口 kiwəng: dkiwəng ~ d'iwəng → d'iang > iang. 丈 tiang: 又持十, read downward 十 śiəp + giüg: siüg → tiəg ~ tiang. (Important for 丈 is that SW does not have an explanation in terms of Hh or Hsh). The explanation of downward or sideward reading fits with many interesting binoms or synonyms, thus: 桑 sang: 从叒 ńziak, 从木 muk: ńziuk < bnziuk ~ mńziuk. This is very probable if we remember that 桑 sāng is 夫桑 b'iu-sāng < bsāng, and has a synonym (Chuang) 若木. bsāng: mńziuk or bnziuk. (On the Fu-sang problem, cf. J. Kato, An Etymological Study of the Word 'Fu-Sang,' Shigaku Zasshi 史學雜誌, The Journal of Historical Science, vol. 60, 7, 1951, p. 40 ff., also Naojiro Sugimoto and Masaru Mitarai, Sun-Lore in Ancient

China. With reference to the Fu-Sang Legend, Minzokugaku Kenkyū 民俗學研究, The Japanese Journal of Ethnology, 15:3-4, 1950, p. 64 ff., where a great number of texts and graphic variants are quoted and discussed; many particular passages, however, seem to expose weak or far fetched theories.) This theory also explains the problem of 奇 (cf. p. 33): 从大 (d'ât) 从可 k'a: dk'a → g'ia < dg'ia, kia < dkia. At the time of SW, the word 奇 and its derivates still had the cluster dk-, dg'-, whereas 可 and its derivates had lost it; therefore 可 and 奇 could not be grouped by SW in the same Hsh series; but 奇 in its hui yi analysis still showed the original connection. This theory also explains some characters used in special ways. E.g., the meaning and use of 南 in 周南, 召南. The ArC reading is not simply *nəm, but rather /*dnəm, dnjəm. (Cf. p. 36 ff.). The bone graphs often do not have the element 羊 which SW explains as phonetic; only the remainder is left 尙, 尙 or another form 肉. The top element is written like a 'tree, wood': 𪛗, 𪛗. If we apply a downward reading of 木 muk + 月 (which is a graph for 凡 b'iwəm, picture of a sail), we obtain initial m-, b-: b-nəm, b-dnəm. Probably this was a variant of the word 風 plum ~ b'lām ~ plwām (cf. p. 46). Chou-nan and Chao-nan were probably old attempts to write Chou-feng, Chao-feng 風, indicating a dialectal or older pronunciation, bn-, b'l-, pl-.

³⁹The expression 會意 is found with the meaning 會心 (i.e., 'to agree in sentiment, identity of feeling,' in T'ao Ch'ien's biography and T'ao Ch'ien's poems. In a poem of Kumarajiva, a line says (PWYF, 2347/1): 借言以會意, 意盡無會意. "To rely on words in order to meet in thought (to agree in feelings) and if the thought is empty, there is no place to meet (no common ground to meet)." The Feng-su t'ung-yi, pref. (CESP, p. 3) has a text: 漢興儒者競復比誼會意為之章句. "When the Han dynasty rose up, the Confucian scholars vied with each other to recover [the texts]; they compared congruent [meanings], combined various opinions, and took them as chang chū explanations." From these texts it seems that hui yi means: 'opinions on which people have met (agreed): common opinion,' used in a technical sense in SW. Since the Hy characters are exceptional and difficult to explain in terms of Hsh or other accepted categories, probably a makeshift analysis (sometimes expressing a Hsh analysis no longer acceptable in the SW system) was proposed as a commonly admitted opinion, often based on popular etymology or a school tradition.

⁴⁰That the Hy formula (从口从口) was used to introduce popular etymologies, is seen from the analysis of 女昏 (cf. n. 28 above) and 女姻,

(*·iēn) (with Chou wen graph 媾 *·iwen, slight dialectal difference) is analyzed as a hui yi 姻壻家也。女之所因。从女从因。因亦聲。 'Yin is the family of the groom. He is whom the girl follows'; but at the same time 因 is a perfect phonetic.

⁴¹In SW different kinds of definitions are to be distinguished. (a) general definitions, e.g., 獸也 'an animal.' This kind of definition and all those that are not meant as synonyms—definitions by description or by paraphrase, e.g., 情 (SWKL 4650 b) 人之陰氣有欲者 'Man's dark (or umbral) vapours that contain the desires,' or 真 (SWKL, 4655 a) 'On the outside it applies to (other) men, at the inside it applies to oneself'—(外得於人內得於人) do not come into consideration for a chuan chu interpretation. The definitions must be meant as word equivalents. (b) Between the descriptive and paraphrastic definitions and the real word equivalences, stand the paronomastic definitions which are homonymic, e.g., 慙敬也. These too have nothing to do with the chuan chu principle. In SW ch. hsin 心, we count 276 words. Several are defined by words already phonetically close; e.g., 269 and 28: 慙惘也. But there are also groups which differ phonetically widely and still are kept together; e.g., 268, 256 // 253:254 // 255:257:258: 惘慙也. 恥辱也. 忝辱也. 忤慙也. Some groups are supported by FY: 31, 32, 33: 慧儼慙校. Some definitions suggest that in SW time a word was binomial: 26 and 27, 44 and 45. 恍慨也. 慨, 恍慨也. 恍愛也, 恍, 恍, 恍也. The sequence in which the characters are discussed in SW suggest groups of cognate words (chuan chu):

- 1) 恒 慙 慘 忌
- 2) 悽 惘 痛
- 3) 惘 惜

The same applies to shorter groups as:

157, 159: 恍貪也. 憐貪也.

123-124, 126: 慙贛也 贛愚也 憙愚也.

84-88: 慙慙慙慙也. 慙慕慙也.

⁴²On the problem of the word families, cf. n. 3 and 7, ch. iii. A special sort of cognate can be established by the chuan chu of SW. The distinction of the different kinds of definitions and their sequence in SW can lead us to detect which ones are meant to be chuan chu and which

ones not. However, the chuan chu may represent an opinion of SW, which may be based on popular etymologies as well as on true etymological connections. But SW must surely include much reliable material. Cf. my article "The Study of the Chuan chu in Shuo wen," Anniversary Volume in Honor of Professor Y. R. Chao, CYYY, 1958.

⁴³Takata Tadasuke 高田忠周 Kochūhen 古籍篇 vol. 1. hsia, pp. 42-43.

⁴⁴Cf. Hopkins' translation of Tai T'ung: The Six Scripts or the Principles of Chinese Writing, 1881 (1954, Cambridge), Prefatory note pp. 13-14, basing on examples from the Liu-Shu Ku 六書故 (可: 匡, 后: 司, 子: 玄), explains chuan chu as 'to pour out' by decanting, i.e., deflection, inversion of the character at 90 or 180 degrees.

⁴⁵On the paronomastic definitions and Tu jo definitions, cf. the discussion on chia chieh.

⁴⁶Sound phrase, paronomastic definition, catch rhyme and fan ch'ieh may have some common origin. Cf. Ogawa Tamaki 小川環樹 Hansetsu no kigen to shisei oyobi goin 反切の起源と四聲及び五音. The origin of Fan-ch'ieh spelling and the Four Tones and Five sounds of the Chinese language, Journal of the Linguistic Society of Japan. Tokyo, 1951, 19/20, pp. 35-42. This study sheds new light on the history of phonetic analysis by Chinese: they were not first influenced by Indian phonology in the second century A.D. as was thought until now. Much earlier, in the first century B.C., divination on personal names used already a kind of sound analysis. (Cf. Orbis 2, 1, pp. 169, 1953.) On the liu shu and school tradition, cf. Chang Cheng-lang 張政烺, The oldest meaning of the term Liu-shu. CYYY, vol. 10, 1, 1942, p. 14 ff.

⁴⁷Cf. Wang Yung-pao 汪榮寶, Shih Huang 釋皇, on the Character Huang, KHCK, 1, 1923, pp. 387-388. A simple and convincing explanation is proposed for the graph 皇 as a pictogram of a 'crown, head ornament on top of 王'; it shows that SW has followed a later, graphically erroneous interpretation, which, however, permitted to take the parts in a phonetic role. Cf. Ch'en Meng-chia, Myths and Witchcraft during the Shang period. 商代的神話與巫術, YCHP, 20, 1936, p. 531.

⁴⁸任 is a very often encountered paronomastic definition and Chch for 南 (SWKL, 2689 a ff.) so that both were considered as really homonymous *nəm < /*dnəm : *n̄nəm < /*d̄nəm or /*dn̄ḡiəm : /*d̄n̄əm. Yet the sound phrase in SW writes 枝任 which Tuan Yü-ts'ai explains as 枝格任載 'the vegetation, when one comes to the southern regions, there is [rich] branching and bearing of fruit' and suggests that

a traditional old school phrase is preserved which describes the sound in a binomial and consequently older stage.

⁴⁹Cf. Tp, 34, 1939, pp. 291-292, and 35, 1940, p. 277 on H. G. Creel and P. A. Boodberg's discussions on 王 as explained in SW by a quotation from Tung Chung-shu: 古之造文者三畫而連其中謂之王三者天地人也而參通之者王也。
'In ancient times, when they created the script, "to draw three strokes and connect them in the middle" is called "King." The three strokes are heaven, earth, and man, and the one who connects [the three] and penetrates them is "King." No matter what was the original graph and its interpretation, the SW explanation is based on the latter graphic development, and a text which implies a sound description. The philosophical texts on the king may however still carry the ancient ideas of the king magician and sacrificer who maintains contact and order between earth, man and heaven, in the same way as is said for the 巫 'shaman' 能事無形以舞降神者。 The combination 為王 does not stand merely for its actual sense in the phrase: 'one strings together the three [that] is considered to be king,' but also 'the king who acts (為: 'to do, act') the harmony between the three.' According to Ch'en Mengchia, Myths and Witchcraft during the Shang Period, YCHP, 20, 1936, p. 535, the word for king (wang) may be cognate with wu 巫, as the king was the first and highest shaman. Cf. n. 30, ch. iii, on wu and kung (work), wei (to do).

⁵⁰A similar reconstruction is suggested in SW by the analysis of 禺 从白从肉 (SWKL 4072 b) piwət + niôg: #* pwîôg - pgwiôg. The labial initial is also indicated by the definition 母猴, in the same way as for 為 (cf. n. 27, ch. iii) #/ mg'u, and by the chuan chu definitions in some of the derivatives of 禺; cf. The Study of the Chuan chu in Shuo wen, CYYY 1958, (III, 3, nos. 11, 19 and 5, no. 3).

⁵¹The meaning shuo 說 when opposed to chieh 解, demands a stricter interpretation than in other expressions used in Hsū Shen's preface: 諸生競說字解經 'The scholars vied with each other to explain the characters and the classics.' Also . . . 百餘人令說文字未央中 "more than one hundred scholars were ordered to discuss the wen and the tzü in the hall Wei yang." . . . 九千三百五十三文重一千一百六十三, 解說凡十三千四百四十一字. 'It (SW) has 9353 wen, repeated graphs 1163; it explains by tmesis 13441 tzü.' (As to the translation of the terms wen and tzü, cf. P. A. Boodberg, Cedules from a Berkeley workshop in Asiatic Philology. 035-550610. Elements of Chinese Grammatonomy.)

⁵²According to Kuo Mo-jo, 南 has besides the meaning 'south,' also that of 'musical instrument,' and among the bronze graphs, there are forms that may be graphic representations of a bell. Kuo thinks that the meaning 'south' is derived from the name of the nan bell which was always located on the southern side of the hall. The reverse could be as plausible: the bell was called nan because it was placed on the southern side. (Chia-ku wen-tzŭ yen chiu 甲骨文字研究, sh, 1929, chap. 13). The origin of the graph 南 may have been various pictographs, meaning 'south, musical instrument, bell, song,' etc., but these graphic elements may have converged, been confused and changed under each other's influence; SW isolated the parts which graphically and phonetically seemed most relevant and explanatory in the light of the uniformization script with which it was dealing. In the same way 單 has been explained by Kuo Mo-jo (Chin-wen yŭ-shih chih yŭ 金文餘釋之餘, 1932, pp. 46-52) on the strength of a number of bone and bronze graphs as a pictogram of a net used for catching birds in the nest (𠄎), sometimes showing a net on top of a stick with a bird and a nest, but sometimes with the bird or the nest alone. 𠄎 is from

𠄎, the form 𠄎 adds a round wheel, used to keep the net open.

Kuo does not explain the sound contact 𠄎: 單; 𠄎 is * xân < /* xând < dx-(?), but 單 belongs according to SW to a Hsh series with g- (𠄎) and d-. The explanation of Kuo is attractive and has much in its favor. It seems to contradict entirely the explanation of Hentze (n. 35, ch. iii), but again, various graphs may have converged, and finally may have fused into one group of graphs, from which SW chose an explanation which fitted best according to the graphic and phonetic factors of its time. Hentze in Tod, Auferstehung, Weltordnung, Das mythische Bild im ältesten China (Zürich, 1955), p. 21, writes about differentiations of graphs and meaning: "It es nun so, dass je nach der genaueren Form des Gefässes, oder durch einen Zusatz (wie z. B. bei teng, wo in späterer Zeit noch das Zeichen ju = Fleisch hinzu gefügt wurde) [𠄎, 𠄎, 𠄎, 𠄎] eine andere Bedeutung entsteht, oder aber, wie übrigens recht häufig bei chinesischen Zeichen, dass ein gleiches Schriftbild auch ganz verschieden ausgesprochen werden könnte und nur durch phonetische Umwertung eine verschiedene Bedeutung erhält? Ein klare und unzweideutige Differenzierung der Schreibweise wäre dann, gerade bei lung [弄, 𠄎, 𠄎] und hiàng [饗, 𠄎] erst in späterer

Zeit entstanden, während augenscheinlich, bei den alten Schriftzeichen, das Schriftbild sich ziemlich gleich bleibt, ob es nun mit dem Ideenkomplex 'mit dem Gegenstand spielen' oder 'den Gegenstand in Händen halten' zusammen hängen mag."

⁵³In some cases GS does not try to explain such enigmatic discrepancies in initials without rejecting a priori the possibility of such consonant combinations, leaving the question of the reconstructions unanswered; thus, e.g., 11a: 隳 t'wa → swia → xwia. In other cases GS supposes confusion of graphs, e.g., 需 s'iu and 孺 níwan. However, SWKL (5204 and 4620) clearly analyzes both as having phonetic 而 (GS 982 *níæg, with derivatives 隳, 隳, níæg, nu again explained through confusion of characters, as to the second reading.) GS either disregards the Hsh series with enigmatic discrepancies, or explains them through confusions; on the other hand it proposes Hsh derivatives not accepted by SW. It seems then that GS, where it deviates from SW, lacks objective evidence for its Hsh system.

⁵⁴In our review of the SW Hsh, we have based ourselves on the KYSH material, checked with SW, as KYSH does not always follow SW and includes all the characters of KY. If the Hsh of KYSH which are not found in SW are regular, they are unimportant; but if they are not, the question arises how later scholars could have made a Hsh character, knowing its pronunciation and that of the primary character chosen as phonetic element, unless they were simply expressing a tradition. If in a regular series P-K, they included a character with different final and initial, K-T, this character could not have been invented later; they knew it to be made earlier, though it is found only in later sources. Therefore, some late but exceptional Hsh characters can be used for the study of the reconstructions of ArC, unless it be shown that they were not meant as real Hsh. E.g., the character 隳 kung, yung, under 隳 d'iung; or also 喟 ywek, under 百 pek, with regular derivations p'-k, m-k. In the latter case, KY explains that 喟 stands for 喟, which shows a regular phonetic construction, which in 喟 is not so clear. Also 音韻 d'ung, a later character not found in SW, could not be made on Hsh principles at any time, unless a certain tradition remained alive to allow later scribes to propose such a combination. Moreover, 音韻 d'ung does not stand alone; there are also derivatives like 虹 lung, 角工 fsiwong, and in SWKL 4971: 空 n'ang.

⁵⁵This is a problem of its own which is not taken up here. We can further ask whether the presence of alliteration and consonantal rhymes would be more visible by comparing the reconstructed initials in the odes that seem to have no final vocalic rhyming.

⁵⁶This conclusion raises some questions concerning the tradition and the establishment of the SCg text. The problem of the SCg text, as it exists now, is not only that of its rewriting in a uniform rhyme system, but also that of possible Han time misinterpretations and interpolations. Cf. E. Reifler, Ever think of Your Ancestor, MS, XIV, 1949-1955, p. 540 ff. The possibility of interpolations, text corruptions, and rearrangements appears also, and here to a greater degree than for the SCg, in the study of the Tao-te ching by J. J-L. Duyvendak, Tao Tō King, Le livre de la Voie et de la Vertu, Paris, 1953.

⁵⁷Y. R. Chao, Distinctions within Ancient Chinese. HJAS, 5 (1940). Karlgren (Compendium pp. 274-275) has come back to the problem and finds new proofs for g'wang > ywang and giwang > jiwang in the Hsh derivations which show a frequent alternation k-:g', and in the regular morphological role of the alternation of voiceless unaspirated and aspirated voiced initials. This may prove Karlgren's reconstruction for ArC, but the correction of AnC ji- < (yi), suggested by SM (Bodman, A Linguistic Study of the Shih-Ming, 1954, p. 24) seems preferable, though the difference is slight.

⁵⁸Thus Maspero, Tung T'ung-Ho and Li Fang-Kuei (Bodman op. cit., p. 24). A. G. Haudricourt, Comment reconstruire le Chinois Archaïque (Word, 10.2.3, pp. 356-357).

⁵⁹Y. R. Chao on the glottal stop in ArC, cf. Lg, 17, pp. 62-63. In a long study "Karlgren's Glottal Stop Initial in Ancient Chinese" (with particular reference to the hPhags-pa Alphabet and to certain points of linguistic psychology), Ottawa, 1953, E. R. Hope tries to prove that even in AnC there was no glottal stop as a significant element in the reconstruction of the class Ying in distinction from the class Yü (景, 愈). According to him, there was only an opposition of tones between the two classes, but the initial was exactly the same. His arguments are based on various considerations: (1) the modern Chinese dialects, where no such phonological oppositions between smooth vocalic initial and glottal stop initial are observed (not even in the modern Wu dialects), (2) the evidence shown by the Tibetan language, (3) and the Sino-Mongolian hPhags-pa inscriptions of Yüan time. Though very elaborate, his arguments do not seem to prove his theory. Cf. Review of Hope's works in Oriens, vol. 8, 1, 1955, and Hope's Reply in Oriens, vol. 9, 2, 1956.

⁶⁰Cf. KYSH, nos. 697-700, 704-706, 708-711, 713-715, 718-720, 722, 724-727, 729-732, 734-735, 738, 740.

⁶¹Henri Maspero: Préfixes et dérivation en chinois archaïque. MSLP, vol. 23, 1939, pp. 317-327. The examples, where a morphological role

has been discovered are so rare that it is highly hypothetical. It does not help in the present condition of our knowledge. Thus, Bodman (*op. cit.*, p. 48) in order to explain the pairing of 289 樂 *glâk* > *lâk* 'pleasure': 樂 *nglök* > *ngäk* 'music' also read *nglög* > *ngau* 'joy, rejoice in,' uses Maspero's theory: "this is most easily explained as a case of prefixes *g-lâk*, *ng-lök*, *ng-lög*." But besides the obvious fact that these are cognates, we know nothing of the mechanism of the morphological elements, and it does not explain how *SM* could pair them as phonetically identical. (Cf. Notes on the Study of *Shih ming* (I, 3 and n. 7), *Asia Major*, vol. 6, part 2, 1958.) Other attempts have been made in this direction: R. A. Miller (*Lg* 27, 2, pp. 157-158) has collected words with *m* + *-l-*, opposed to others with *l-*, which seem to be opposed as pairs of positive and negative: bad eyesight // clear of sight, etc. But when examining the actual characters, it is not certain that *ml-* is a safe reconstruction. Thus 瞽 *mliog*: 瞭 **liog*; **mliên* 吝: **liên* 憐; 榴 **mlog*, 瘤 **mlog*: 流 **liög*. The reconstruction 瞽 *mliog* lacks all proof; 瞭 *liog* (cf. *Hsh* der. as 寮 *tau*) would be ArC /**dl-*. Similarly 憐 in *SW* has 𠂔 as suppressed phonetic < /**dl-*. Furthermore, *SM* equates 瘤 and 流 *liog* (phon. 充 *t'uət*, *d'uət*), ergo: not *mlog* but *dlog*.

⁶²Wulff's theory (*Chinesisch und Tai, Sprachvergleichende Untersuchungen - Det Kgl. Danske Videnskaberne Selskab, Historisk-filologiske Meddelelser*, 20 Copenhagen, 1934; and *Musik und Freude im Chinesischen, Ibid.* 21, 2, 1935) is usually taken as being exclusive of that of Maspero. But all morphological explanations need not be either exclusively by prefixes or by infixes. The ArC reconstructions do not seem to reach a period where a morphological device appears in a productive stage. Moreover, little is known concerning real words of the language. The question seems premature. On the question of a morphological role played by tones in ArC, cf. N. C. Bodman's Review of B. Karlgren, *The Chinese Language*, 1949, in *Lg*, 26, 1950, p. 339 ff., and Chou Fa-kao 周法高, Notes on Chinese Grammar, *中國語法札記*, *CYYY*, 24, 1953. The bibliography listed by Chou shows that the idea of tone morphology has occupied many. This opinion assumes the presence of tones in the ArC period (cf. Appendix on tone and stress). Chou thinks that some of the cases he lists seem to lead back to the ArC period, but that a great number of them are later applications of derivations by tone distinctions. The attempt of Yü Min, *Word Derivation in Archaic Chinese through the Annexing of the Suffix D*, *論古韻合怡屑沒曷五部之通轉*, *YCHP* 34, 1948, p. 29 ff., to find a systematic derivational pattern in some finals is not successful.

⁶³Karlgren has used only one formula of cluster reconstruction in the sequence of elements and two formulas in the applications: (a) all characters in the *Hsh* series are reconstructed with a cluster; (b) some of them are not. As to the sequence it is not impossible that different sequences in clusters having the same elements, finally fall together in AnC with the same kind of initials, *lm-* and *ml-* > *m* and *l*, etc. It will depend on the details in AnC which sequence is best for a given *Hsh* group. As to the full application of a cluster formula within a *Hsh* series, it is, of course, possible that a *Hsh* graph was made when earlier characters belonging to that group had already lost some elements of the cluster. We can imagine that *blwan*, after having become *lwan*, was used as *Hsh* for a new character, *lwan*. It is therefore important to rely on one document to obtain one level of time for all the characters belonging to the same *Hsh* group. This is possible only by following *SW*. It is therefore legitimate, contrary to Tung T'ung-Ho and Lu Chih wei's opinion (*Bodman, op. cit.*, pp. 44-45), and necessary to look for a cluster reconstruction in all the characters which *SW* puts in the same series.

⁶⁴Li Fang-kuei: *Archaic Chinese -iwəng, -iwək, and -iwəg. CYYY*, vol. 5, 1, p. 71, n. 1.

⁶⁵There are, however, AnC readings of separate characters which do not go back to ArC as such. Thus *k-* in 窳 *kau* may be a result of the sandhi of the initial with the preceding syllable. The reading *kau* appears only in the binom 困窳 (*Chou li*). Although the reading *p'âu* is in accordance with the other derivatives with *m-*, *kau* is found only in the *Ching-tien shih-wen*. The *Hsh* series has *mau* < /**lmog*, *liog* < /*(*m*) *bliog*, *miau* < /**mlog*, and *p'au* < /**pl'og*. But a binom of *SC* 南窳 was **nâm-p'log* and variant /**nəm'log*. This element *log* was used in another binom /**kiwən'log* > *kiwəng'log* ~ *kiwən-k'log*. *Nâm-p'âu* in *SC* (although, according to text antiquity, apparently later than the one of *Chou li*) is more archaic and original, for it is a place name and has a reading *p'au* which fits in the *Hsh* series, whereas *k'au* is entirely isolated and late (result of sandhi). 困窳 (*Chou li, Kuan*), 垣窳 (*Hsün*), 贊窳, 倉窳 (*Lü*) are probably only compounds. 窳 appears alone in *Tso chuan*, *Hsün-tzu* and *Kui-ku tzü*.

⁶⁶Pelliot, *TP*, 27, 1930, p. 376, does not believe that 一 *iēt* is really phonetic in 聿, as stated in *SW*; he gives no reason but the apparent difficulty of explaining this fact in our terms of reconstruction. Yet this is repeated for 𠂔, which is homonymous with 律. Similarly, the statement of *SW* concerning 盡 (phonetic 聿) has been doubted, beginning with Hsü Hsün (ob. 991) who corrected 聿 as a shortened and cor-

rupted form of 聿, a correction which has been followed by most scholars, such as Tuan Yü-ts'ai, Chu Chün-sheng, etc., and seems quite plausible in the light of the fact that 聿, *tsiën*, is explained in SW as 聿飾也从聿从彡俗語以書好為聿讀曰津。 However, this analysis is not more astounding than that of 筆 **piët*, which is now generally taken as a Hsh. It is readily acceptable, but the SW analysis still requires an explanation. The Hsh explanation may be true at a time based on a different reading; it is probable in the light of EY (6, 36) definition 不律: 筆, as well as the SW words, which are listed as perfect cognates and dialectal variations of the same word: 聿, 不律, 弗, 筆. The SW analysis: 筆从竹从聿, could hardly be a later corruption or correction, since the later Chinese scholars always thought of 筆 as a Hsh. The only explanation is that at SW time there was a reading prevalent, which was not the ancestral form of the AnC *piët*, but which had a weak labial initial element, that had already been dropped in SW time. Then the formula of SW 竹 + 聿, if read downward is 竹 **tiuk* (Hsh *kiuk*) < /**t'juk* + 聿 **liwət* < /**t(1)ýwət* from /**bt(1)ýwət*. This is in complete agreement with the SM definition 速 *dz'iuët*. The other reading, however, from which AnC *piët* derived, /**p'let*, became standard, whereas the SW reading was lost after SM time. We may explain the analysis in SW of 聿, in the same way, possibly by a sideward reading } *siam*, *sam* + 聿 *liwət* < /**slwət*, and by same loss of initial *b-*. The unusual reading of 聿 (regular AnC *tsiën*) is also confirmed by the fact that SW thinks it necessary to explain by means of a popular saying (俗語), a sound phrase in which probably 書好 (*siwo-xog* < /**swxog*) are the two important words. We obtain two forms, P**bsgôg* and a later one /**slgwət* - *slwət*. Note that 聿 has a Tj 津 the ku wen graph of which is 𠂔 /**dgwəd*. The AnC *tsiën*, in the light of the other Hsh graphs in that series went therefore back to /**b'slënd* > *tslënd* > *tsiën* comparable to P**bslgwənt* ~ *bsgôg*. The complete series of Hsh in SW is - *iët*, 𠂔 *kwek*, 筆 *piët*, 聿 *iuët*, 𠂔 *tsien*, 𠂔 *dz'ien*, 律 *liuət*, 持 *luât*, 𠂔 *luət*, 𠂔 *liwän* < /**b'lek* > *jek* > -*t*, *blkwak*, *p'let* > *pl-* > *p-*, *blgwət* > *blw-* > *iuët*, *b'slënd*, *b'zleñd*, *blywət*, *blgwənt*, *blywənt*. 𠂔 is connected by E. Reifler (Ever think of your Ancestor, A pious fraud of Early Confucianism and its Consequences for the formal and semantic Interpretation of the Wen Wang Ode, MS, xiv, 1949-1955, p. 349) with 𠂔 *d'əd* as its primary graph, i.e., 'the primary constituent indicative of the pronunciation and primary meaning.' Yet he offers no phonetic explanation of the contact 𠂔 with 𠂔. Moreover 𠂔 has bone graphs with 𠂔 and 𠂔, but

SW again has an unusual explanation which, though it does not exclude an etymological connection with 𠂔, supposes it to be unknown in SW. The SW explanation cannot be ignored, as it reflects the linguistic analysis at one given period.

⁶⁷Karlgren (Compendium, p. 279 ff.) argues that liuk 六 corresponding to Tibetan drug, "never had any labial initial." But in TP (vol. 28, 1931, p. 45), criticizing Simon's Tibetisch-Chinesische Wortgleichungen (Sonderabdruck MSOS, vol. 32, 1, 1929), he warns against such comparisons; it is quite possible for one language to develop or preserve elements not found in another language. Thus for "6" he quotes Kuki-Chin words as pa-ruk, pa-ruk (with p-). Similarly, a reasoning from the existing cognates is not definitive. "Both 𠂔 AnC *mjië* 'not' and 勿 AnC *miuët* 'do not' belong to a large family of negation words which all begin with labials p- and m-, and it is therefore certain that our *mjië* and *miuët* here never had any consonant group for initial" (Compendium, ibid.). Here it is supposed that the only sequence is m-, and all the details of morphology and derivation of cognates are known.

⁶⁸R. A. Miller (Lg, 27, 2, 1951) objects to the reconstruction Kroraimna: glu-glan, and thinks lgan equally possible. But why glu in one place and lgan in another? Furthermore, the reading of a cluster in the middle and in the beginning of a word should not be expected to be the same, so that glu-lan is quite possible. But there are Chinese characters with kl-, and it is not explained why not one of those was used for a sound kro-. All this shows that transliterations are not a sure criterion of reconstruction.

⁶⁹On the strength of a binom in Ode 37, Karlgren finds that AnC *t'ie* 𠂔 was ArC *t'l-* but 𠂔 AnC *ljie* was ArC *l-*, "since the syllables liu-li occur as the name of a bird in Ode 37. This is one of the many bisyllabic words having alliteration, and since for liu 流 there is not the slightest indication of any other initial than l-, the l- in *ljie* is likewise confirmed." However, whether liu-li is an alliterative binom is not proved. SW analyzes 流 with 𠂔 *t'uət* ~ *d'uət* phon. Furthermore, 流 離 is also written 留 離 (留 has derivatives *t'ieu* and 𠂔 *d'ieu*), which suggest dliog for 流. Prof. Boodberg, in order to ascertain "the normal sequence of binom initials examined over 600 binoms exhibiting alliterations corresponding to initial consonantal complexes the existence of which is indicated through other evidence." (HJAS vol. 2, 1937, pp. 357-358). This method does not seem to distinguish between the oldest forms of binoms and the later ones, or to consider that a sequence could be a dialect feature corresponding to another sequence of other

dialects, or of the standard word. Prof. Boodberg gives an example of such a situation for the word "tiger" (*op. cit.*, n. 58). He concludes however: "It appears clearly from the above that for the first ten classes [i.e., GL, BL, GS, BS, GD, BD, GN, BN, DN, BG] in the predominant majority of cases, the sequence of the initials reflects the order of consonants in the Anlaut consonantal complex which the binoms served to reconstruct." This seems to be a *petitio principii*, as it presupposes that the sequence GL-, GS-, etc., is the regular one in the ArC clusters. Furthermore, "in the last two classes the distribution is about 60 per cent to 70 per cent in favor of a reversed order of initials indicating apparently a real alliteration rather than a 'phonetic reconstruction'." This does not follow without presupposing a sequence of the consonantal clusters as regular. These remarks do not mean that *de facto* the order of the binomial initials is not coinciding with the sequence of the consonantal cluster, but that the binom offers no safe criterion, for the origin of the binom can be of so many different kinds. As to the binoms given by SW, there can be cases where the binom suggests a cluster contrary to the Hsh evidence. But the sequence is not definitely shown. Thus 牙 mjəu has derivatives mung, muong, mau, məu, muk and ńziəu, nəu, niəu. SW defines 牙 as 齒牙 ziôg-miôg (~ -mug) which indicates a cluster d- m- (cognate or variant: 勇牙 diəd-miôg). Yet the derivative 柔 ńziəu (SWKL 6393 a-b) could hardly be derived from zm, whereas mz- easily could become nz- > ńz-; another possibility is bzn-.

⁷⁰The Chch 歷 : 閣, although used by Karlgren to establish the reading klak and ?-liek is not certain. Cf. *infra*. p. 57. Inconclusive Chch and paronomastic definitions are multiple, e.g., SM 樓 * glu > ləu: 婁 * glu > ləu, or 槽 * lo > luo: 露 * glâg > luo and * lo > luo: * gliô > liwo 旅 where, without going into the ArC values, AnC already offers sufficient similarity. Cf. Notes on the Study of Shih Ming, AM, VI, 2, 1958 (chain 3, gr. 3).

⁷¹A free alternation tn- ~ nt- may seem difficult to accept; where nt- and tn- are both needed in a Hsh series, a metathesis of -n-, tn- > nt- may explain the forms as well.

⁷²The way by which x- results in the process of pronouncing a voiceless m is not exclusively by velarization, (as explained by Tung T'ung-ho). But no matter how, the xm- form can not easily explain the development xm- > x-, except in the AnC xw-; to explain all cases of ArC, mx- ~ bx- is needed as well.

⁷³S. M. Shirokogoroff in *Phonetic Notes on a Lolo dialect and Consonant L* (CYYY, vol. 1, A, p. 218), gives a schema of the realizations of L in some Lolo dialects and in Tibetan:

Character	Voice	Air	Character	Ahi	Ni	Tibetan
Occlusive	-	Strong	Diminuendo starting by explosion		tl ↑ dl	dl ?(rl)
	+		Crescendo culminating by explosion		ld (lž) ↑	ld (lč) ↑
Spirant	-	Moderate	Even	L(hl)	L(shl)	L(lh, hl)
Liquid	+	Slight	Diminuendo	^l l(人, t)	l?	l?
Spirant	-			x(h)		

⁷⁴In some cases GS, in fact, suggests a reconstruction gm-, e.g., 灰 xwəg → mwəg (gmwəg?) 版, but curiously enough, 灰 is not reconstructed as * xmwəg like GS 947q 每 mwəg: xmwəg. In SWKL, 4468, 灰 is explained 死火餘盡也. 'Remnants of extinct fire' 从火从又. 又手也. 火既盡可以執持. 又 is 手 'the hand'; 'when the fire is extinguished one can take it (in the hand)!' 火 * xwâr + 又 * giug (手 * siôg): 𠄎 xw(i)ug ~ xw(i)ôg, and 既滅 * kiəd-miät: # km-, suggest a sequence 𠄎 xməg > * xw- and 版 𠄎 gməg > * mw-.

⁷⁵Lg, 17, pp. 62-63.

⁷⁶The symbol -y- indicates a spirant with a tendency toward palatalization. Maybe it was rather phonetically unstable, and hardly distinct from -y-. (Cf. W. Simon, *Tibetan So and Chinese Ya* 'Tooth.' BSOAS, 18, 3, 1956.) Besides the medial vowels, as -i- from -l-, -u-, -w-, from -g-, -b-, -m-, there could be medial vowels -i- and -w- which were later developments from ArC through a process of diphthongization. (H. Maspero, *Le chinois. Les langues du monde*, Paris, 1952, p. 597; A. G. Haudricourt, *op. cit.*, Word 10, 2-3, p. 359.)

⁷⁷Dialectal Hsh here can be suspected, because among a great number of ts- and k-, there is only one m-; but it is hard to establish a certain proportion in the presentation of an initial, to be ruled out as exceptional or dialectal. As to miwəm, it is not found in SW, and could not have been applied even in later times as a Hsh. Was it a Hy or made on another principle? It appears in the early inscriptions (Takata, 28/24 a-b:

餞 synonym of 劍, 銓. In KY 餞 is defined 刃: *niēn < zūniēn. When including the m- among the elements in the consonantal cluster, we reconstruct: btsýlam, btsýlap, (< -mb, -mp), bdýlēm, blsýēm ~ bslyēm (?), bl'tsam, bznglam, bzglam, bsklam, bskam, bsklam, bslkam, bzlýam, bz·lam, zmlgwēm > zmlw- > miw-.

⁷⁸These reconstructions are based only on the Hsh facts, but other information suggests the presence of a labial in this group at an earlier stage. 毒 *ai < /*d·əg is defined (SWKL 5653) 人無行也 emendated according to other texts as 士無行者也 'What an officer does not do' and referring to the story of Lū Pu-wei and the mother of Ch'in Shih-huang (Franke I, 225-226) and is analyzed as 从士从母 dz'ieg + mæg: /*dz'mæg ~ dz·wæg. On the other hand 毒 (SWKL 231) is defined and analyzed 厚也, 害人之草也, 从艸毒聲 *d'uok < /*dywok; 毒 has a ku wen graph 藺 *b'iuik < /*bgiuk ~ /*bzgiuk, P* dgmok. The explanatory phrase s.v., 毒, quoted from Chia K'ui has: . . . 故世罵淫曰嫪毒 'Therefore, for generations (people) cursed adulterous (men) by saying: 嫪 (嫪) 毒.' /*bglōg ~ /*blýog + /*d·əg: P* b(1)d·əg (metathesis of the initial cluster of dz·mæg ~ dz·wæg). This element b- ~ m- also appears in the reconstruction based on the dialect words for 'poison' (cf. pp. 129, 146).

⁷⁹As for the initial glottal stop in ArC (cf. n. 59, supra) a question arises on the glottal stop in the initial clusters. We can simply integrate the glottal stop with the clusters as we have done in the examples above, but there is no proof for a particular reconstruction as · or as -k-, -y- or any other phoneme that could have developed into a glottal stop after the split. Bodman (op. cit., pp. 55 and 139) supposed that in many cases the glottal stop is "a development from a cluster," in particular "some velar cluster, or perhaps from ?k or k? (preglottalized or glottalized velars)."

⁸⁰In the series 泛, we can find various indications by which the reconstructions based on Hsh alone can be checked. Thus, 泛 /*b'iwamp 'sound of water,' and /*b'iwamb 'to float' (identical with 泛 /*b'iwamb, pliwamp 'a straw floating on the water') is defined in SWKL, 5024 浮 *b'iōg; 浮 in turn is defined (SWKL, 4964) as 汜 *p'iwam ~ b'iwām < /*pgiwāmb ~ bgiwāmb, and serves as a definition for 漂 *piog < /*pziog and 汎 *p'iwām < /*p'lwām. On the other hand 汎 is defined (SWKL 4966) by 濫 *glām, < /*d'lāmb ~ dlyāmb, which in turn is defined by 汎. This set of definitions means that 汎, 泛, 浮, and 濫 are chuan chu. Moreover, we have a binom 汎濫 /*p'iwāmd'lāmb ~ p'iwāmlýāmb, #* plwamb ~ pglāmb ~ plyāmb. From

the graphs 漂 /*pziog and 浮 /*b'iōg, we might also reconstruct a form /*pzlog ~ bzlog. The endings -mb ~ -mp or -g are probably connected with the vocalism -a- and -o-, respectively. Cf. The Study of the Chuan chu in Shuo wen (III, 3, no. 30), CYYY, 1957. The sequence of the initial cluster elements in 泛 can be bzg- as well as bgz- or pgz- ~ pzg. The same factors reappear in the connections of words and forms in 砭 *pīam < /*-b, also written 砭 *pīam < /*pīam, and defined in SWKL 2408 以石刺病 'to prick' [heal] sickness with a stone [pin]. It serves as a definition for 票: 砭刺也; *p'iog < /*pziog. 砭 is probably a cognate of 歲, 銓 *tiēm < /*tyēm. We may again posit a form /*pīamb ~ pziamb for 砭. For 姪, defined as 婦人兒 'feminine' (SWKL 5585), a triple reading is indicated *b'iwap, b'iwam, k'iwap, each with two reconstructions equally defensible: /*bgiwamp ~ bgiwamb ~ bkiwamp and /*gmīamp ~ gmīamb ~ kmīamp. 姪 can be compared here with 姪 p'iwong, which is not in SW, but appears already in FY 1/3, as a dialect word of Chao, Wei and Yen Tai, and with 豐 siōng and 松 dziung corresponding to 壘 *p'iong < /*pzyōng ~ pzōng) and 壘 iām < /*dýamb (SWKL 2096 indicates 壘 as phonetic element, which itself has phonetic 大 *d'ād < d'āb) may be from √bzgamb ~ bdgamb, though this is only suggested on the possible relation with 姪 and 姪. Another Hsh derivative of 泛 is 𪛗 analyzed in SWKL 2771 as 从貝从泛, (but some editions emendate it 从貝泛聲). Cheng Hsūn established an equation between 𪛗 *pīam < /*pīamb, and 廉 *glīam < /*dýam ~ lýam, which for both suggests forms like #* plýamb ~ pziýamb and /*blýam. Furthermore, 𪛗 is also written 𪛗 (SWKL 2706) and defined 以為𪛗損之𪛗; this binom 𪛗損 may be a simple compound, though it is not impossible that the sequence of the initial consonants of an older form is still revealed *pīam-swən < /*psgwən ~ bswən. (Cf. Notes on the Study of Shih Ming, AM, vi, 2, 1958, n. 61.) Not much light is brought from the other derivatives, though 屨 (SWKL 3785) is defined by the binom 屨屨: ts'iap (sap, tsap) - d'iap, obviously a reduplicative binom. However, the sandhi -pd- ~ -bd- may still be an indication of the original pronunciation of 屨 d'iap < /*bdgiēmp ~ bdgēmp; moreover 屨 itself is defined in KY 簿屨 #* btsap (?). Finally, there is the binom 駢鷓. The reading of these characters

駢	鷓	+	鷓
駢	鷓	+	鷓
駢	鷓	+	鷓
駢	鷓	+	鷓

show that in both elements we have various contracted forms of a word with different realizations of an initial cluster B-G, and we could imagine various reconstructions of the binomial and monosyllabic word forms. Yet the fact that the sequence of writing the graphs is always 駮鷓 and never 鷓駮 indicates that in SW under the written sequence is suggested also a sequence of sounds. Under the Hsh series 自, the more regular derivatives are with k-, the irregular and more rare ones are with p- and t-; we may suppose that the preceding graph 駮 was to express the element b- p-, and that the reconstruction of 駮 is $\sqrt{*bsk\text{əmp}} - b\text{z}\text{v}\text{əmp} - b\text{z}g\text{əmp}$. The medial element is the first to disappear and the binom 駮鷓 just stood for a dimidiation of a cluster B-G: $*b'i\text{əp}-k'i\text{əp} - b'i\text{ək}k'i\text{əp}$ and other forms of inversions and reduplications $\sqrt{*bki\text{əppi}\text{əp}}$, $g'i\text{əppi}\text{əp}$ and even $\sqrt{*p'i\text{əp}-k'i\text{əp}} - p'i\text{əppi}\text{əp}$. The full reconstruction of the separate graphs 駮 and 鷓 according to all the elements represented in their respective AnC readings is therefore nothing else but an extreme contracted form of a binomial word form. Originally this word could probably be written either 駮 or 鷓, and was read as the same word. Although the word admitted various differences in the course of the evolution according to time and dialect areas, 駮 and 鷓 became each associated with different contracted forms which resulted in the AnC readings b'iəp, kiəp, g'iāp and kiəp, piəp.

⁸¹These indications on Pre-ArC forms found in SW are scant and hypothetical; they belong by definition to a period preceding the SW times, and they cannot be detected except when the ArC form is a normal development and continuation of the Pre-ArC. These forms, however, are important in cases where they can be compared with dialect words and the reconstructed forms built on the comparison of the dialect words of Han time. Sometimes these Pre-ArC forms are necessary to understand the explanation proposed in SW.

NOTES TO CHAPTER IV

Chia chieh and Paronomastic Definitions

(Pages 55-70)

¹GS, Introduction, p. 3; BMFEA, 8, 1936, p. 162 ff.

²Karlgren has rejected some Hsh explanations of SW, and preferred to explain the unusual contacts of readings by supposing they are synonyms. Thus the graph 袂 (GS, 312 d) meaning 'sleeve' has two read-

ings kiwat, miad. It appears in the Li chi with two readings, (miad and kiwat), and is analyzed by SW as having 夬 as phonetic. There is no sign that there would be a word, written with the same graph which was a synonym without any etymological connection. 袂 was $\sqrt{*kmiat} > *kiwat$ and $\sqrt{*gmiad} > *miad$. Similarly, Karlgren considers 緹 piěng 'felly of a wheel' as a Chch, yet the pronunciation piěng is found in several derivatives of 庚 $*k\text{āng} < \sqrt{*bk\text{āng}}$, $*pi\text{ěng} < \sqrt{*p\text{y}\text{ěng}}$. The graph piěng is a completely regular Hsh used as Chch for another word.

³Chch are more irregular than the Hsh which form systematic groups. However, frequent cases of Chch may have been the beginning of an elaboration of Hsh of the kind 舍:捨, and may have resulted in the systematic grouping of the Hsh characters.

⁴SW defines 長 as 久遠 'long [time]; far, distant [space],' and analyzes it as Hsh 从兀从匕... 止聲. It seems far fetched that SW would take words with a meaning 'long, to grow,' frequent and regular in the texts, for a meaning 'far distant.' Hopkins, JRAS, 1930, p. 100, explains 長 as a pictograph of "a human figure, with lines of upper part symbolizing loose hair of head." Takata (33, 25 b) takes it as a combination of 兵 (upper part) + 老 (lower part): old → grow old → longaevus (?) → grow, long.

SW analyzes 令 as 从△卩 suppressed phonetic and defines it 發號 'to utter a cry [command]. 卩 tsiēt, tsiet, tsiek (Hsh derivatives: dz'iet, dz'iēt, siuēt: tsiak, dziək) is phonetic in 令, which itself has derivatives liān, lien, liāng, lieng, leng, g'ien, (tsiāng); these are two sets of ArC readings: $\sqrt{*tslet}$, tslek, slwet, dz'let, dzlek (-t ~ -k) and $\sqrt{*glien}$, glang, glieng, g'len, tsleng (-n ~ -ng), going back to 令 $\sqrt{*dzglieng}$, etc., and 卩 $\sqrt{*tsl'et}$, tsl'ek. Prof. Boodberg finds 卩 as phonetic in 色 siək and 辟 p'iek, which leads him to $*BTSiet - -k$ (HJAS, 2, p. 346, n. 41). SWKL (4030 b) however has 色: 从人从卩 (some texts read 从人卩 suppressed phonetic); 辟 SWKL (4035 b) is analyzed: 从人从辛... 从口... with text 節制其辜也 (sound phrase?) The SW analysis of 辟 does not exclude that in earlier periods this character really showed a phonetic connection with 卩. (Cf. p. 157). Such a connection would indicate a labial element in the initial of 卩 and 令. GS 823 notes that "in the inscriptions this graph [令 $*li\text{ěng}$] very often serves for 命 (GS 762 $*mi\text{āng} - mi\text{ěng}$). It might be the primary graph of 𠄎 below 'bell' [鈴, Chou II (ca. 950-770) 鈴], showing a kneeling man and a drawing of a bell; there are various early texts to show that the bell was used for signals of command." In Fu Ssü-nien's 傅斯年 posthumous Collected Works (Fu Meng-chen hsien-sheng chi 傅孟

真先生集, National University of T'ai-wan, 1952), vol. III, 中篇己, Hsing-ming ku-hsün pien-cheng 性命古訓辨證 (Philological Study of the expression Hsing-ming, 1938) (pp. 7-58, 68-78), a study is made on the written forms, occurrences and meanings of 令 and 命 in the Chinese inscriptions and earliest literature. According to this study, the character 令 'to command, an order,' is already found on the Shang bones in basically the same form as in the early Chou inscriptions, but, whereas 命 is not found on the Shang bones, it appears in some Chou inscriptions (which all date from the Middle Chou period, ca. 900-ca. 600), but with exclusion of 令. Only a few inscriptions have 命 together with 令. Therefore, the form 命 is a later derivation from 令, which came about in the middle of the Western Chou period. Fu Ssü-nien concludes that 命 is nothing else but 令 enlarged by the radical 口, first written 令 and later 命. He even thinks that in the early literary texts such as Shu ching and SCg, 命 in every instance was originally 令, and 令 stood for 靈 'good, auspicious.' This agrees with the analysis in SWKL 582 with a hui yi formula: 从口从令 i.e., 令 is not excluded as phonetic in 命, but the analysis stresses the fact that 命 is etymologically the same as 令. Probably 鈴 or 鈴, 鈴 is etymologically 'bell for command.' In our reconstruction 令 may have been $\sqrt{*BL-}$ ~ (B)dl-, and 命 $\sqrt{*ML-}$ > *mi-.

⁵However, these Chch words (of which we know only the reading) can be used as variants and/or cognates and applied in another process of reconstruction in the same way as the words supposedly belonging to the same family of words can be compared in order to reconstruct an older form.

⁶Cf. GS, 685 k-1. In Karlgren's opinion, the reading of 至 would equally be *tiäd at the time of SW; but the SW suggests a more archaic reading, maybe -b > -d. Ch'en Meng-chia in The Names of the Kings of Shang 商王名號考 YCHP, 27, 1940, p. 116-123, discusses the graphs 天 tsiäk ~ liet, 𠄎 *skiad, 𠄎 *s'iat, 𠄎 *tiäd, 𠄎 *bzngiab ~ *bns'iad (cf. p. 58 and n. 12, ch. iv) as graphic variants for the same name; the earliest form of 至 had probably -b, which developed later into -d. The changes and corrections which Ch'en Meng-chia has brought to his study of 1940 in his later article Shang wang miao-hao 商王廟號考 (Posthumous Names of the Kings of Shang) in K'ao-ku hsüeh-pao 考古學報, vol. 8, 1954, p. 1-48, do not touch upon the identification of the names 天, 𠄎 etc.

⁷The Hsh series 介 has no cluster initial like 劫, but an irregular derivate 𠄎 măi < *măd (not in SW, although not to be rejected a priori): $\sqrt{*bxad}$ ~ m'ad ~ gmad (?).

⁸N. C. Bodman: A Linguistic Study of the Shih-Ming. Initials and Consonant Clusters. HYIS, XI, 1954, p. 4. Other paronomastic definitions are found in SW, EY, PHTY, etc. Some of them are brought together in collections like Kuang Shih-ming 廣釋名 by Chang Chin-wu 張金吾 T. Shen-chan 慎旃 (1787-1829), and Han Wei yin 漢魏音 by Hung Liang-chi 洪亮吉 T. Chün-chih 君直 (1746-1809). These paronomastic definitions are not always sure, though my doubts expressed before in MS, 8, 1943, p. 177, were exaggerated.

⁹Bodman, ibid, p. 65.

¹⁰BMFEA, 5, 1934, pp. 16 and 57; 1944, gloss 498, p. 67. Cf. also Chu Chün-sheng 朱駿聲 T. Feng-ch'i 豐芑, 1788-1858, in SW T'ung-hsün ting-sheng 說文通訓定聲, s.v. 閣. Shih-san-ching chu-shu 十三經注疏 (Wen-yüan lou ed. 1896), ch. 11, 2, p. 6 b: 閣閣猶歷歷也. Bodman, op. cit., p. 66, n. 1, accepts 閣 as Chch: 歷 gliiek, 'the phonetic series of which gives no evidence of a cluster.' He takes 魔, SW definition of 彌 as a phonetic gloss. 魔 is a variant of 彌, phon. 南 kek ~ liek; Bodman's suggestion of a cluster in 魔 is probable, but not his sequence of the elements of the cluster.

¹¹Karlgren, BMFEA 14, 1942, Intr. p. 81. The case 敦: 督 as proposed by Ch'ing scholars can not be accepted as a reliable certain Chch unless they could adduce clear and certain cases of substitution of these graphs for the same word. Yet there is a frequent contact between -n and -g (k) words in many Hsh series, and also between Chuan chu words (Cf. The Chuan chu in Shuo wen, 4, 29 and Ch'en Meng-chia, K'ao-ku hsüeh-pao, The Chinese Journal of Archaeology, no. 12, Summer, 1956, p. 105.)

¹²Cf. n. 6, ch. iv. Karlgren, BMFEA, 18, 1946, p. 257, n. 2. SW equally gives 𠄎 as Tj of 𠄎. 𠄎 has derivatives: siät, ts'iet, yat, yuâi, yen. 𠄎 has Hsh: k'iei, k'iet, etc., ziäi, t'iai, ts'iat. An example taken from place names is treated by Tödö, A. Tohogaku ronshü, no. 1, 1954, p. 103: in Hsün-tzū, a Ch'in locality is called 臨慮 *liäm-liwo, explained by Yang Liang 楊涼, as 林慮 *liäm-liwo, but written in HS 隆慮 *liung-liwo. GS *bliäm: *gliäm: *gliông is not satisfactory. We reconstruct 臨 as $\sqrt{*bgläm}$, 林 as $\sqrt{*dl'äm}$ and 隆 as $\sqrt{*dl'ông}$. The identity of sound between 臨 and 林 is supported by the Tj in SW 𠄎: 林 (b- had already dropped, leaving *gläm ~ $\sqrt{*l'äm}$: $\sqrt{*dl'äm}$). That 林 still had the d- is seen from the Tj of 婪 -lam: 覃 dyäm, and that the l- could be acoustically close to dl- is known by the definition of 婪 *-läm by $\sqrt{*z'läm}$ (cf. p. 62). The form $\sqrt{*dl'ông}$ is a later development of the final -m.

¹³Karlgren, BMFEA, 17, 1945, p.140 ff. Fu Ch'ien (ob. 189) and Chao Ch'i (ob. 201) still represent an early and reliable tradition.

¹⁴SWKL 1695B ff. SW has no char. 獵 no 犹, but only 獵. 獵 is also written 獵 (RV, p.394, acc. to Wang Kuo-Wei's Kuan-t'ang chi-lin, ch'u-chi 13, 4b-5b).

¹⁵Cf. n. 36, ch. iii.

¹⁶This example is taken from Jao Tsung-yi 饒宗頤 Shuo Ju: 說孺, pp.112-112, Journal of Oriental Studies I, 1, 1954, University of Hong-Kong. Cf. Kuo Mo-jo, Liang Chou chin-wen-tzũ ta-hsi k'ao shih 兩周金文辭大系考釋 1935, 1, pp. 121 ff. and pp. 133 ff.; inscriptions ascribed by Kuo to Li Wang's time, 879-828.

¹⁷Free interchanging of graphs in inscriptions does not always indicate identical readings; thus, in inscriptions, 弱 is used interchangeably with 弗, 勿, 不, 毋, 亡 (according to Chang Tsung-ch'ien 張宗騫 YCHP, 28, 1940, p. 57 ff.). These words, all cognates, do not represent exactly the same word form, and do not tell which was the pronunciation of 弱 in those inscriptions. There are, however, other methods to establish a reading in inscriptions: if several graphs for words, in no way semantically connected, are repeatedly used for each other, it is probable that they were homophonous. A case may be found in the contacts mentioned in GS, 60, 79, 80, 103. Thus 御 *ngio is a variant of 馭 (Chou I), explained as 'horse + hand wielding some object.' Several variations of this graph are found (Takata, 64/19 ff.) among which some (馭) clearly show the element 个, which I take as identical with 午 *ngo 'pestle' in 御 *ngio. (Shang 御, Chou I 御, Chou II 御). In SW 午 constitutes a Hsh series with readings ngio, xio, etc., and 杵 ts'iwo < *ts'io. SW analyzes 御 (SWKL 829): 使馬也从手从卸, and explains: 舍車解馬. 从刀止午. 午 suppressed phonetic. As siã : ngo is a Hsh derivation, the analysis 从 0 从 0 for 御 probably indicates a reading i'jak + siã : #* ts'og, instead of /* zngio. GS 58 f-i has 御, variant of 吾; the role of 个 can hardly be anything but phonetic: *ngio < /* zngio. Moreover, GS, 79 m has 廡 : *ngio 'to fish,' Chch for 吾 (Chou III); it agrees with Takata (80/34), where 廡 is written 廡, and identical with 吾, 漁, 御. Finally, *xio 許 is Chch for 無 (*bxio, rather than GS 103 g-r: *xmio), a place name in SC, for which HS substituted 許. 許 is Tj of 無 in SW; probably the older reading /*bxio was obsolete, still followed in SC, already simplified in Hsü Shen's time to *xio (許) and so written in HS. The repeated interchanging of characters 御, 吾, 午, 魚 is a sign that they are Chch and allow a combination of their initials into

one cluster. Cf. Wei Chien-kung, Ku-yin-hsi yen-chiu 古音系研究, Peking, 1935.

¹⁸This appears clearly in Max Loehr's: Bronzexte der Chou-Zeit, Sinologische Arbeiten, Peking, 2, 1944, pp.30-91; MS, XI, 1946, pp.269-325, and H. Maspero, Contribution à l'étude de la société chinoise à la fin des et au début des Tcheou. BEFEO, 46, 1954.

¹⁹Besides commentaries, dictionaries, and word studies, there are collections of binoms as P'tien ya 駢雅 and more modern collections as Chu Ch'i-feng's 朱起鳳, Tz'ü t'ung 辭通, and Fu Ting-yi's 符定一, Lien-mien tzü-tien 聯綿字典, which, of course, do not exhaust all the material from the linguistic point of view.

²⁰This is similar to the interchange of ming (名 and 明) in Han texts. Since, in the modern reading, these two characters sound identical, they do not inform us about Han reading, but only show that they were identical as they are now.

²¹Cf. Commentary to Ch'tz, Li-sao, by Wang Yi 王逸 T. Su-Shih 叔師 (89-158 A.D.). The meanings in SW and the texts can be explained as derived from one basic meaning 'grasper, grasped thing: tongs, sword, handle.'

²²Lu Chih-wei, A phonographical Study of the Tu-jo notations in the SW, YCHP, 30, 1946, pp.13-279. In some cases Lu proposes drastic emendations of the graphs. Thus 卷: 耿, corrected into 解. (Cf. The Study of the Chuan chu in Shuo wen, CYYY, 1957, n.9). Not all the 878 Tj equations collected by Lu are equally interesting; many show complete identity between Tj and the defined character.

²³If SW has no additional indications as Tj for a character, we must apply a full reconstruction as required by all the Hsh of SW. If the Tj allows a transcription in AnC values as well as in Hsh values, then again the Hsh value is to be preferred.

²⁴N. C. Bodman, op. cit., p. 65.

²⁵Cf. Notes on the Shih ming. Marginalia to N. C. Bodman's Linguistic Study of the Shih Ming, Asia Major, vol. 6, part 2, 1958.

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At the end of these notes of the first part dealing with the problems of reconstruction of AnC and ArC, I take the opportunity to add some general remarks on two recent publications, which I could not mention before in the main body of this work. One publication, referring to the reconstructions of the AnC, is the article of Wang Lien-tseng (王聯曾): Un dictionnaire phonologique des T'ang. "Le Ts'ie yun corrigé et complété"

de Wang Jen-hiu. (TP, 45, 1-3, 1957, pp. 51-150). It consists of an exposition of the text history and a detailed description of the structure and contents of a complete manuscript of the Ch'Y by Wang Jen-hsü. From the fragmentary manuscripts of the Ch'Y discovered earlier, little information could be obtained and little use could be made (op. cit. p. 60), so that the author can sum up the sources on Ch'Y as follows: "Il ne nous reste que deux dictionnaires complets: le K'an mieou pou k'iué ts'ie yun [in the photographic edition of 1947, made in Peking—200 copies only—entitled T'ang hsieh pen Wang jen-hsü k'an miu pu ch'üeh Ch'ieh yün 唐寫本王仁昫刊謬補闕切韻] (manuscript complet) et le Kouang yun de Tch'en P'ong-nien. Ce dernier, utilisé jusqu'ici par tous les sinologues, et fort remanié tant en ce qui concerne l'ordre des rimes qu'en ce qui concerne les notations phonétiques en fan-ts'ie, est bien postérieur de 506 ans au Ts'ie yun de Lou Fa-yen, tandis que le premier, respectant intégralement le texte du Ts'ie yun, ne lui est postérieur que de 105 ans et n'a encore été utilisé presque par personne." (Op. cit. p. 80.)

Further in the article (chap. iv: Le Ts'ie yun et le Kouang yun. Op. cit. pp. 133-144) the author compares in detail the differences in number and order of rhymes and the differences of fan-ch'ieh (with some striking examples, pp. 142 ff.) in the Ch'Y and the KY. He concludes (p. 145): "La distinction entre le Kouang yun, connu et utilisé depuis près de mille ans, et le Ts'ie yun, disparu avant la fin de l'époque des T'ang (906), devient indispensable si nous voulions étudier scientifiquement la phonologie chinoise, notamment le système de la langue chinoise, relativement ancien (de l'époque de Lou Fa-yen) en nous appuyant sur les systèmes de rimes successivement, les uns après les autres, à partir du III^e siècle jusqu'aux VI^e de l'ère chrétienne, c'est-à-dire jusqu'à la veille de la rédaction du Ts'ie yun de Lou Fa-yen."

On the supposed identity of the fan ch'ieh in Ch'Y and KY, the author (footnote 2, p. 139) writes: "Malgré l'affirmation prématurée de M. Karlgren: 'La comparaison des fragments subsistants montre que les fan-ts'ie du Ts'ie yun étaient identiques à ceux du Kouang yun' (p. 30, Phonologie chinoise), affirmation reprise par Maspero (BEFEO, XII, p. 119), ces modifications ne sont, bien entendu, que partielles. Étant donné la lenteur de l'évolution phonétique, les notations de prononciation d'une langue vivante ne peuvent être totalement différentes d'un dictionnaire à l'autre, quand bien même un laps de temps de quatre ou cinq siècles se serait écoulé entre les dates de parution des deux dictionnaires. En l'espèce, ceci est vrai pour le Ts'ie yun et le Kouang yun."

Néanmoins, les fan-ts'ie du Kouang yun présentent quelques modifications typiques tant dans la partie initiale en ce qui concerne les dentilabiales et les palatales, que dans la partie finale qui est mise en évidence par le "t'ong yong" 同用, terme utilisé par le Kouang yun seul et non pas par le Ts'ie yun comme l'a cru H. Maspero. Mais ces fan-ts'ie, au moins pour la plupart, restent identiques à ceux du Ts'ie yun et peut-être même à ceux du Yun tsi du III^e siècle ou d'une époque encore plus reculée. Par ailleurs, on les retrouve même au XVIII^e siècle dans le K'ang hi tseu tien ou un des premiers mots de vocabulaire de la première cinquantaine de rimes du ton uni: 東 a pour fan-ts'ie '德紅' qui s'emploie encore aujourd'hui. Cela ne veut cependant pas dire que le K'ang hi tseu tien est identique au Ts'ie yun. He therefore concludes: "Dans ces conditions, le Kouang yun ne peut difficilement servir de base soit pour l'étude du dialecte de Tch'ang-an sous les T'ang (618-906), soit pour la détermination des valeurs phonétiques d'une langue antérieure au X^e siècle." (Op. cit. p. 144.)

On the difference in rhymes, he makes an important remark concerning the k'ai k'ou and ho-k'ou: "De plus, conformément à une théorie du XIV^e siècle (voir le Ts'ie yun tche nan de l'an 1336 et le Ts'ie yun tche tchang t'ou faussement daté de l'an 1067), M. Karlgren tient compte dans ses Études de la distinction du 'k'ai k'eou' 開口 et du 'ho k'eou' 合口, c'est-à-dire de la présence ou non, dans une rime, de la semi-voyelle -u-, ainsi que de celle de quatre classements (ou 'divisions' selon M. Karlgren), suivant l'existence ou non de la semi-voyelle -ü- ou du yod, se combinant avec le 'k'ai k'eou' et le 'ho k'eou', alors que la langue ancienne de l'an 600 pose des problèmes plus complexes . . . (Op. cit. p. 133, note 1.) It is hoped that the author will go into these problems of which he speaks at some later occasion. On the detailed reconstruction of an extremely rich system of vocalism in AnC, as set up by Karlgren, the author remarks: "Ignorant que Lou Fa-yen avait rassemblé toutes les rimes dialectales dont le Kouang yun avait hérité en les modifiant, M. Karlgren les a admises comme étant celles d'une langue homogène." He continues with stating emphatically that "Lou Fa-yen ne s'était pas trouvé devant une langue homogène, mais au contraire, [a] dû rassembler toutes les rimes établies, tant du Nord que du Sud de la Chine, compte tenu du sien. (Op. cit. p. 134, note 3.) In this connection, attention may be drawn to the article of Fukunaga Seya 福永靜哉: Basic Problems in the Reconstruction of the Ch'ang-an Pronunciation in the T'ang Dynasty 長安音再構成の基礎 (The Journal of Kyōtō Women's University, Part of Literature. 京都女子大學. 文學部

no. 9, Oct. 1954, pp. 1-32). After expounding Karlgren's and Maspero's theories on the Ch'Y language as a dialect of Ch'ang an of Sui and early T'ang times, and their conflicting theories on the relations between Sino-Korean, Go-on, Kan-on and the Ch'Y language, Fukunaga adduces examples from comparisons of Ch'Y readings with those Sino-Xenic readings, as well as quotations from Hui Lin's 慧琳 Yi-ch'ieh-ching yin-yi 一切經音義 to prove that the Ch'Y language in many instances, if not—as he is inclined to conclude—in its main characteristics, reflects a system of pronunciations based on the dialects of the southern regions (Wu 吳, Chiang-nan 江南, etc.)

On the KY, Wang Lien-tseng is still more definite: "Or, qu'il s'agisse de l'édition du XII^e siècle ou de celle de l'an 1337, le Kouang yun actuel ne représente aucun dialecte déterminé: ni le dialecte de Tch'ang-an, ni celui de Wou." (Op. cit. p. 133, note 1, end.) It seems then that Wang Lien-tseng really considers the Ch'Y as well as the KY as nothing but a compilation of all kinds of dialect readings, the difference between the two works being only one of a higher or lesser degree.

When speaking of Professor Karlgren's reconstruction of ArC, we have everywhere used his Grammata Serica. Recently a new edition has been published, entitled Grammata Serica Recensa (BMFEA, 29, 1957, pp. 1-332). The most important changes concern the different meanings of the words, according to the different pre-Han texts where they appear, with references to the fuller discussions in Karlgren's Glosses on the Odes (BMFEA, 14, 1942 - Kuo feng; 16, 1944 - Hsiao ya; 18, 1946 - Ta ya and Sung) and his Glosses on the Book of Documents (BMFEA, 20, 1948 and 21, 1949). Another innovation is a systematic indication of the tones of AnC for all monosyllables, according to their different meanings or loan usages. This additional information will greatly help the study of the tones in the ArC period. A careful comparison of the two editions shows that hardly anything has been changed as far as the values or forms of reconstructions in AnC and ArC are concerned. The interpretations and explanations of the graphic structure has in some cases been changed, some new words here and there have been added.

PART TWO

NOTES TO CHAPTER I

Preliminary Questions

(Pages 74-101)

¹The broad meaning of "dialect" is owing partly to a lack of adequate terminology which would formally correspond to each distinctive aspect (social, areal, historical) of a linguistic system of a community. Cf. A. Martinet, Dialect, Romance Philology, vol. 8, 1, p. 1 ff., 1954. Fujiwara Yoichi 藤原與一, A Dialect-Geographical Study of the Japanese Dialects (Folklore Studies, vol. 15, 1956, p. 1) aptly defines dialects as "local linguistic units mutually contrasting inside one larger language unity, and having themselves an internal system of their own."

²A. Martinet, review of Sever Pop, La dialectologie, in Word, vol. 8, 3, 1952, p. 261 ff. The Chinese dialect situation could be compared with a combination of Martinet's distinctions: (1) "A group of closely similar local forms of speech, separated on the map by neat bundles of isoglosses from neighboring groups of the same type, [but covering rather wide areas], all of these coexisting with local forms of a common standard language." It is also possible to speak here of 'over-all dialects' in the sense of broad regional dialects which developed in the areas from the local dialects varying from place to place and some urban colloquial standard. Cf. Jan Chloupek, The Problem of Over-all Dialects, (as reviewed by P. L. Garvin, Slavic Word, vol. 11, 4, 1955, p. 626). (2) Inter-dialectal comprehension is unlikely. But the written forms and literary language are factors of mutual intelligibility additional to the standard language, at least at a higher social level.

³On the social aspect, it is sometimes possible to suppose a different social significance. Yen is an area of expansion by immigration of Chinese; Tg-Ch'i H-T were areas of expansion by slow infiltration of the Chinese language (standard and literary) into the social levels of the lower non-Chinese peoples. Huai, and to some degree Wu, were areas of dialectal expansion of Ch'u which reached probably all levels directly, whereas the standard and literary influences reached a higher level.

⁴This study appeared first in the review Kung hsien 貢獻 1927, and was reprinted in Yü-yen-hsüeh lun-ts'ung 語言學論叢 pp. 16-44, 1934.

⁵Cf. Lo Ch'ang-pei's introduction to Chou Tsu-mo's Fang-yen chiao-chien, pp. ix-x.

⁶Ku Chieh-kang 顧頡剛 Liang Han chou chih k'ao 兩漢州制考, Academia Sinica, Studies presented to Ts'ai Yuan P'ei on his 65th Birthday, Part II, 1935, p. 855 ff.

⁷The delimitation of Han (Wu tu and Chung Han) as part of Liang against Yi with Shu and Chien Wei 犍為, is based on the Hua-yang kuo-chih, 華陽國志, SPPY, 1186, Fu lu pp. 1-5.

⁸Kn-hsi and Kn-tg are mentioned in formulas of different wording which may indicate a slightly different significance in the general picture of the dialect information. Thus, a different meaning in terms of distribution may underlie a formula: "In the east of the Pass, Chou Lo & Hanh . . ." or "From the Pass eastward, in Ch'en Wei Sung." Such details can be evaluated only in separate word studies, where such minor points may change the picture of the areal distribution. In the general delimitation of areas and their respective importance these details have been ignored.

⁹Cf. MH, V, p. 100, n. 1. The other five kingdoms are Chao, Han, Wei, Ch'u, Yen.

¹⁰Cf. MH, I, p. 162, n. i and ii, p. 347, n. 7, Chavannes localizes Yang Ch'eng at 35 li northeast of Teng feng 登封.

¹¹There are also influences from Tg-Ch'i H-T which may have reached Yen, Ch-hs, and Lsh by water (cf. p. 223).

¹²The same remark can be made concerning the distinctions Ch'-Chin chih chien (間) 'the region between . . .', -hui (會) 'meeting point'; ku tu 故都 'old capital,' etc., as in n. 8.

¹³There is also another Liang situated in a different area and belonging to another dialect group. In Liang Ch'u it is not clear which Liang is meant; it is probable that the same Liang is meant as in Liang Sung. Cf. Wang Yü-ch'üan 王毓銓, Wo Kuo ku-tai hua-pi ti ch'i-yüan huo fa-chan 我國古代貨幣的起源和發展 (Origin and Development of the Ancient Coinage of China), Peking, 1957, p. 37. In FY 11/4, Kuo mentions the name Liang kuo 梁國, a state which in 340 B.C. centered around Ta liang (modern K'ai feng in Honan), in his commentary on a dialect word, attributed to the area of Ch'u, namely 蚤. It suggests that Liang in the combination Liang Ch'u meant an area close to Ch'u, and that this area was the same as in Liang Sung, occasionally connected with Ch'u but essentially part of the dialect group Lu-Sung-Wei. Against this hypothesis, however, we must cite the SW text (SWKL 6158b) which seems to quote in part the text of FY 6/30 梁宋之間 . . . 蟻

場謂之垣, with a change of the name of the dialect area, saying: 益州部謂蟻場曰垣 "The (dialect of the) administrative division of Yi chou calls the hill of the earth worm (?) 垣." It seems to indicate that Liang Sung was the same as in Liang Yi, since SW substitutes Yi chou pu 益州部; however, it can also be explained that the SW information is an independent new fact of dialect vocabulary at a later period.

¹⁴Lin Yü-t'ang, op. cit., p. 22; D. Bodde, History of Chinese Philosophy 1952, vol. 1; Wang Yü-ch'üan, Early Chinese Coinage, 1951, p. 252, reproduced in this work as map no. 18.

¹⁵Ch'i Ssü-ho 齊思和, The Origins of the Feudal States Yen and Wu. 燕吳周封國之說 YCHP, 28, 1940, pp. 175-188, 192. Ch'en Meng-chia 陳夢家, Hsi Chou t'ung-ch'i tuan-tai 西周銅器斷代 (Dating of the Western Chou Bronzes), K'ao-ku hsüeh-pao 考古學報, 10, 1955. Inscription no. 24, pp. 99-104, pp. 122-132. Cf. also Bernhard Karlgren, Yin and Chou in Chinese Bronzes, in Yin and Chou Researches, Stockholm, 1936, p. 73. Cf. also T'ung Chu-Ch'en 佟柱臣. A Study of the Territory of North-eastern China during Han and pre-Han Periods as shown by Archaeological Evidence. K'ao-ku hsüeh shang Han-tai chi Han-tai yi-ch'ien ti tung-pei Chiang-yü 考古學上漢代及漢代以前的東疆域 K'ao-ku hsüeh-pao, no. 11, Spring 1956, pp. 29-42. As to Wu, cf. T'ang Lan 唐蘭 A Study of a Western Chou Bronze, recently unearthed at T'an-t'u, Kiangsu Province 宜戾矢段考釋 K'ao-ku hsüeh-pao, no. 12, Summer 1956.

¹⁶The meaning of 雜齊 tsa Ch'i is probably that the said dialect word is found to some degree in Ch'i, mixed together with the other dialectal or standard words.

¹⁷沂: correctly 沂. Cf. Chou Tsu-mo, Fang-yen chiao-chien p. 31. 沂者水名, 國語, 吳語. 韋昭注云沂水出泰山, 蓋南至下邳入泗. "Ch'i is the name of a river. Wei Chao's commentary to Kuo yü, Wu yü says: 'The river Ch'i originates in T'ai shan, then goes southward till Hsia P'ei and enters into the river Ssü.'" "

¹⁸In the later statistical computation (p. 179 ff.), Hsi Ch'u of FY 1/21 has been taken as the region west of Ch'u in sensu stricto against Kuo Po's commentary.

¹⁹Among the references to Ch'u alone are also counted the expressions 楚部, 楚語, 楚之郊, 楚之外郊. Cf. n. 8, 12.

²⁰1/31 opposes Ch'en-Ch'u to Ch'u; in this case Ch'u alone is the center of Ch'u (cf. map no. 7) against the northeast of Ch'u with Ch'en. In the same way 1/2 opposes Sung Ch'u against Ch'u.

²¹Cf. N. L. Swann, Food and Money in Ancient China, Princeton, 1950, p. 241, n. 421.

²²Cf. RV, pp. 335-336, which localizes them in Kuanghsi, Fuchien, Kuangtung, and more specifically in Kui lin. Cf. Franke I, p. 391; III, p. 168. The commentary SC Cheng-yi 史記正義 by Ssü-ma Cheng 司馬貞 puts the Ou Yüeh in South Yüeh. It quotes the Yü-ti chih 輿地志 saying 交阯固時為駱越秦時曰西甌 "Chiao-chih in Chou times was [the region of the] Lo Yüeh, in Ch'in time it was called Hsi Ou." (K'M 152.1). Also Chavannes, MH V, p. 78, n. 2; IV, p. 418, n. 1, and Sugimoto Naojiro (杉本直治郎), The Southern Extremities of the Ch'in and Han Dynasty, Shigaku Zasshi 史學雜誌, Journal of Historical Science, vol. 59, 1950, p. 2, put Hsi Ou in Tonkin "beyond Yü-lin chün (Kuangsi province) of Han." Probably the center of the Hsi Ou populations may have been politically beyond the Kuangsi province, but it seems preferable to accept the Hsi Ou of FY as a dialect in the region of Kui lin, where Hsi Ou inhabitants were probably still present. The text of FY 毒屋黃石野之間 is obviously a description of an uncultivated region which produced Yellow Stone and 毒屋 (= 毒冒: 'tortoise shell'?).

²³The term Chou nan appears in SC, ch. 130 (K'M 279/2) and is explained by the commentary as the region of Lo yang. Fu Ssü-nien 傅斯年, who made an interesting study on the relative antiquity of the different odes of SCg and their respective geographical origin (Fu Meng-chen Hsien-sheng chi 傅孟真先生集 [Collected Works of Fu Meng-chen], vol. 2, 中編上甲, pp. 92 ff. and 中編上乙, pp. 34 ff., 68, and 74-78, 1952) explains the meaning of the names of the divisions Chou nan and Shao nan not as airs from Yung chou Chi shan, but as terms indicating a geographical origin of songs from the regions stretching south of the Huang ho till the Han and Chiang rivers. This term, then, would cover quite a big area, overlapping with many other areas mentioned in FY. It seems that FY has used the terms Chou nan and Shao nan to indicate a region, originally the central part of the Nan kuo 南國 'Southern States' as explained by Fu Ssü-nien, but probably much more limited, so as to coincide with the localisation of SC. This is not necessarily in contradiction to our explanation of Nan 南 = Feng 風, since Fu brings the time of these odes to a later Chou period, when the meaning nan = feng would have been lost already and understood instead as pointing to the geographical area of origin of these odes. FY 1/20 mentions Chou nan and Shao nan together with Weih (周南召南

衛之語也); this strengthens the hypothesis of Chou nan as referring to the region of Lo yang, for then it naturally would form a contiguous area with Weih.

²⁴This was already recognized by Ogura Shimpei 小倉進平 in his Outline of the Korean Dialects (Memoirs of the Research Department of the Toyo Bunko. The Oriental Library, no. 12, 1948), p. 3: "As to investigations by the Chinese, Yang Hsiung of the Han Dynasty in his Yang-tzū Fang-yen records what he calls the dialect of the region along the Retsu River (冽水) in Korea; however, the words discussed are by no means genuine Korean, but a collection of the Chinese dialect words used in the region." Further proof of this explanation is given infra p. 167.

²⁵Cf. SC and HS, e.g., the Hsiung-nu chuan 匈奴傳 where several Hsiung-nu words are transcribed and explained. Furthermore, Liu Hsiang 劉向 reproduced the sounds and gave a translation in Chinese of a Yüeh song. Cf. Izui Hisanosuke, 泉井之助, A propos d'une chanson indéchiffrée dans le Chouo-yüan, 劉向說苑卷第一の越歌に於て Gengo Kenkyū, Journal of the Linguistic Society of Japan, no. 22/23, 1953, p. 42. This proves that the Han scholars were well aware of non-Chinese words; they had a clear knowledge of the non-Chinese nature of the language of the Yüeh populations; Yang Hsiung certainly must have meant the Chinese speaking inhabitants of Yüeh.

²⁶Cf. Karlgren, On the Authenticity and Nature of the Tso-Chuan, Göteborgs Högskolas Årsskrift, vol. 33, 1926, and The Authenticity of Ancient Chinese Texts, BMFEA, 1, 1929, p. 177 ff. Maspero's objections (JA, 1928, p. 159), that the grammatical features may be a difference of style, does not exclude Karlgren's theory. A style may have evolved from a special dialectal grammar. Chinese scholars, such as Chou Fa-kao 周法高, Notes on Ancient Chinese Grammar, CYYY, vol. 22, 1950, p. 171, interpret the distinction of 於 and 于 in Tso chuan in the sense that 于 represents an older phase of the language than 於.

²⁷A. Waley, The Analects of Confucius, 1938, p. 148, thinks that the Tso chuan text is written in a dialect situated more to the north in comparison to Lu, but he does not give any reasons for this opinion.

²⁸Cf. On the Authenticity and Nature of the Tso-chuan, ch. ii. Unfortunately Karlgren's examples of hapax legomena in Chuang-tzū as specific Ch'u words are not correct, since 舟 is not exclusively found in Chuang-tzū, and 蟹螯 is found under different variant graphs in other works (MS, 8, 1943, p. 199). But the principle enunciated is safe; in a study on 'The Dialectwords in Ch'u-tz'ü,' begun some years ago and as yet unpublished, I have made a complete list of the words that can be isolated as

hapax legomena in Ch'u-tz'ü and further compared with corresponding words in standard or other dialects. Recently J. Chmielewski has treated this problem in a rather lengthy repetitious article, where, however, he has not tried to give as many examples of Ch'u words as we would wish to see studied, but only a general introduction to the problem. (O niektórych Językowych i językoznawczych Aspektach najstarszych Warsaw 'Cz'u-tz'y' [On Some Dialectal and Linguistical Aspects of the Oldest Stratum of 'Ch'u-tz'ü.'] RO, 1956, pp. 37-79.

²⁹Cf. Aspects linguistiques de l'hydronymie Chinoise. Revue internationale d'onomastique, vol. 7, 2, 1955. Lin Yü-t'ang in his Yü-yen lun-tsun 語言論叢, 1934, has collected some interesting instances of dialect words, phonetic distinctions in names of places and persons, reflected in the particular choice of characters, according to the sources, and their supposed dialectal origins. (Tso chuan, Kuang yang chuan, Ku liang chuan, Chou li, etc.); cf. p. 88 ff., 101-136.

NOTES TO CHAPTER II
The Comparative Method
(Pages 102-194)

¹When the monosyllable and the binom correspond to each other as two variant forms of the same word, then we can speak of a reduced word stem, represented by the reconstruction of the monosyllabic form according to the full Hsh value in the SW system, and a lengthened or extended word stem, coexisting at the time the binom is found, attested in literature—i.e., at the latest in FY and SW and contemporary literary texts—and reconstructed according to a later, more simple pronunciation indicated by the binomial graphism. It will be shown later that not all binoms are a priori later formations by dimidiation of monosyllabic forms, nor that all binomial forms must have always a corresponding monosyllabic form.

²On the importance of the binoms, cf. Wei Chien-kung 魏建攻, Ku-yin-hsi yen-chiu 古音系研究, 1935 (p. 65 ff; p. 93 ff; p. 187 ff; p. 349 ff.) P. A. Boodberg, HJAS, 2, 1937, p. 353 ff. Sun Te-hsüan 孫德宣, Lien-mien-tz'ü ch'ien-shuo 聯縣字源說, FJHC, 9, 1942, pp. 159-186. P. Serruys, Philologie et linguistique dans les études sinologiques, MS, 8, 1943, ch. 2, pp. 181 ff.

³A systematic study of the binoms from the point of view of linguistic evolution is still to be made. Though we have dictionaries and lists of

variant writings of binoms, such as Wang Kuo-wei's 王國維, Lien-mien-tz'ü p'u 聯縣字譜 (Hai-ning Chung-k'o kung yi-shu, 2d series, p. 159 ff.) and later works of the same kind, it will be necessary to collect all binomial forms of any sort—dimidiation binoms, reduplicatives or simple compounds—according to a strict distinction of time and of their place of origin, and compare them with each other and their respective corresponding monosyllabic forms if possible. Karlgren's remark in Glosses on the Kuo Feng Odes (BMFEA, 14, 1942, p. 87) are true to a certain extent: ". . . the Chinese philological literature in question teems with such speculations: a was equal to b, for they 'had anciently the same sound' or they 'belonged to the same class of initials' or they 'had the same final,' briefly everything could be equal to anything else through reference to an ancient phonology of which only the outer framework (the rime groups and the groups of initials) was approximately known but the true values of which were entirely unknown," for they apply only to the statements of Chinese philologists of later times commenting on the language of a period which was unknown to them; however, the early commentators of Han time, when they state that some words had the same sound are entirely reliable, and so are the clear identifications of different variants of binomial forms and monosyllabic forms, where the reconstructions of Karlgren himself already provide often a close similarity and a definite pattern of correspondence of sounds.

⁴The two sequences in the initial *pɕ- and *bd'-, *pts- as against *tsp- or *tsp'- indicated by SW and other binoms, do not exclude each other. Though we list these wordforms as examples of dimidiation binoms, it does not mean that we consider *pɕ-, *bd'- as the original form and the only existing one, but only that the form 柿札 can be considered as a dimidiation of 柿; it does not exclude that variants of monosyllabic forms with an inverted sequence may have existed as well as the ones suggested by particular binomial formations.

⁵SWKL 483b ff. lists the graphs under the heading 犛部. 犛 is explicitly analyzed: 从犬从犛. 犛亦聲 and explained as 犬善逐兔艸中 "a dog skilled in chasing the hare (hiding) in the grass." This indicates that the formula repeated in the analysis of 莫: 日在艸中 'sun in the grass' and of 葬: 死在艸中 'the dead in the grass' must be understood as a graphic combination with a phonetic role attached to 犛 as in the case of 犛. Some editions, as a matter of fact, have the characters 犛亦聲 as part of the analysis of

莫 and 莽, and these emendations are followed as preferable by Tuan Yü-ts'ai. On the binoms, cf. TT 1556 and 2634; EY 15/26 (pp. 8-9).

⁶In the concordances to Mo-tzŭ, Lun Yü, Chuang-tzŭ, Meng-tzŭ, Ch'un-ch'iu Tso chuan and Shih ching, mien 勉 appears alone as a monosyllabic word only in the position of a verb, 'to exhort, to exert oneself' never as a predicate or adjectival descriptive word 'vigorous'; in Li chi 勉 appears alone and in combinations with other verbs (勉作, 勉強) but not as adjective.

⁷SM 24/1 says 車古者曰車聲如居言行所以居人也今曰車聲近舍. 車舍也行者所處若居舍也 "The cart: in the old times it is said 車, with a sound like 居 *kio; it means that it is something in which man sits while traveling. At present it is said 車, with a sound closely (similar) to 舍. 車 is 舍; it is the place where travelers are dwelling like a lodging to dwell in." 舍 is the paronomastic definition of 車: 舍 *sia < *sya ~ tsya = 車 *tia < *tyia as against an older reading 居 *kio < *tkio(g) = 車 *tkio(g). (Cf. Notes on the Study of Shih Ming, AM, 6, 2, 1958, p. 145). In The Book of Odes Karlgren everywhere reconstructed 車 *kio, that is in its older reading; yet in some odes the rhymes would indicate clearly the Han time reading as in Ode 24 華 *g'wã: 車 *tyia, Ode 252 車 *tyia: 多 *tã: 馬 *mã: 馬也 *d'ia: 多 tã: 歌 *kã (a b a b b b), and possibly also in Ode 47 舍 *sia: 車 *kio (or *tyia): 盱 *xiwo, and Ode 83 車 *kio (or *tyia): 華 *g'wã: 翔 *dziang: 居 *kio: 姜 *kiang: 都 *to (a a b c b c). This would indicate that later rhyming patterns may have been inserted in the SCg. On the reading of 輿 in 輿輪, cf. SM 24/43 輿 *zio = 舉 *kio and TT 479 where 輿輪 is found as a variant of 車輪: *tyia-liwã ~ *sya-liwã = *zio-liwã < *zyo-liwã.

⁸On fusions cf. G. A. Kennedy, Equation no. 5 (Chinese Fusion-words), JAOS, 67, 1947, pp. 56-59 and Hermann Köster's critique in MS, 12, 1947, pp. 247-251; P. L.-M. Serruys, Une nouvelle grammaire du chinois littéraire, HJAS, 16, 1953, pp. 195-196; P. A. Boodberg, A Triple Fusion in Ancient Chinese, Cedules from a Berkeley Workshop in Asiatic Philology, 003-540720; A. C. Graham, A Probable Fusion Word: 無 wuh = 勿 wu + 之 iy, BSOAS, 14, 1, pp. 139-148, 1952 and The Final Particle Fwu 夫, BSOAS, 1955, 7, 1, pp. 120-132. Ting Sheng-shu 丁聲樹: Lun Shih-ching

ti ho, ho, hu 論詩經的何曷胡 [On the Interrogative Pronouns ho², ho⁵ and hu² in Shih ching], CYYY, 10, 2, pp. 347-367, 1942.

⁹As a great number of the binoms with the characters 昆屯 (and other graphic derivatives) show a sequence opposite to T-K-, it is probable that these binoms were later formations or if they were not, at least written with the characters 昆 and 屯 only in later times, and that they represent an inversed sequence applied on a large scale when the cluster had disappeared in the majority of the Hsh derivatives of 屯. However, this supposition is farfetched. Nevertheless, it must be pointed out that 屯 is defined 難 in SW: 'difficult, hardship,' and that the Hsh series 董 (KYSH no. 151, p. 195 ff) shows initials with g-, k-, x- as well as t'-, n-, etc. If the SW definition 屯: 難 implies that the two words were cognates there would be an additional indication of an original cluster in the Hsh series 屯, though the evidence is weak.

¹⁰Cf. Karlgren, Word Families in Chinese, pp. 118-119; GS, pp. 456-457, Compendium, p. 275; Cognate Words in the Chinese Phonetic Series, pp. 1-18; Bodman, Review of Karlgren's The Chinese Language, Lg, 26, 1950, p. 342. Chmielewski, J. Le problème des 'parties du discours' dans la langue chinoise, pp. 78 ff. (Rozprawy Komisji Orientalistycznej, 4, 1952); Serruys, The Study of the Chuan chu in Shuo wen (Conclusion), CYYY 29, 1957.

¹¹The reconstruction 央 / d'iang is proposed on the basis of SWKL 2272, where 央 is defined 中央 *tiông-iang and analyzed as 从大在口内, which can be taken as a hui yi with downward reading 大 *d'ad (t'ad) + 一 *kiweng: # *tkiweng, dkiweng. Cf. The Study of Chuan chu in Shuo wen, iii, 5, no. 20.

¹²Tuan-yen chai tsa-wen 段硯齋雜文 1947, Lien-mien-tzŭ yin-pien lüeh-li 聯縣詞音變略例 (lecture delivered in 1941).

¹³Cf. The Names of the Lizard in the Old Chinese Dialects. Orbis I, 2, 1952, p. 489 ff.

¹⁴In this count all the words to which FY gives no corresponding dialect word have been disregarded.

¹⁵Here follow the expressions of group A: 謀思, 欲思, 常思, 大袴, 小袴, 戶鑰, 疾行, 相惡, 相勉, 相睽, 愛憐, 憐哀, 醫治, 推博, 輕薄, 置立, 伏雞, 爵子, 雞離, 車韃, 車紂, 車缸, 轉目, 瞋目.

¹⁶Other examples of this group B: 襜褕, 汗襦, 蔽膝, 紕衣, 籠車, 複襦, 幪頭, 覆結, 注斛, 炊箕, 竊視, 確機,

刈鉤, 圍基, 墮耳, 長老, 尊老, 婦妣, 婦考, 奴力, 摩呂, 賦斂, 暴僇, 野亮, 揮棄, 窘猝, 違遽, 怖遽, 殘署, 欺謾.

¹⁷Other examples of group C: 行簷, 戰慄, 蜂蟻, 馬螭, 謹喘, 姚媿, 呵叱, 委痿, 煩滿, 布穀, 鶉鴉, 鴛鴦, 戴勝, 蝙蝠, 桑飛, 驪黃, 守官, 拘萼, 央亡, 嚙屎, 慙踈, 毒滿, 蚊蚋, 蝓諸, 蠖螿, 蠓蛉, 蜻蛉, 蠓蟻, 蚰蜥, 龜鼈.

¹⁸Other definitions in SW are sometimes in the form of sentences and consequently of no use here: 1/50 憂 // 2318 和之行. Others are compound expressions that are easily analyzed into two words of which one is added to modify the general meaning of the first: 1/5 養 // 2191 供養; such definitions are very numerous.

¹⁹The mutually defining words in SW, when belonging to the same division, are what SW meant by chuan chu 轉注: etymologically related words or cognates. (Cf. The Study of the Chuan chu in Shuo wen. CYYY 29, 1957.)

²⁰These words are related but form no binoms; 舟, 船 and 火, 燬 are dialectal variants in FY, but in SW both pairs are treated as chuan chu.

²¹J. Chmielewski, The Typological Evolution of the Chinese Language, Rocznik Orientalistyczny, 1949, pp. 371-429, explains the number of binoms in Kuo's commentary as a result of the transition from the monosyllabic stage. Demiéville has rejected this explanation by pointing out that already the early classic literature has many binoms (BSLP, 45, 1949, pp. 219-281), but the general tendency is clear from FY and SW.

²²The following pages are a review of all the binomial formations in FY; the binoms are briefly discussed mainly through comparison of the different variants found in the dialects and standard or literary language. This is not an exhaustive discussion but only a preliminary survey in order to deduce some general conclusions about the material contained in FY from the point of view of binoms as opposed to monosyllabic words. The words of Chapter 4 of FY, however, have been left out completely, because the majority of the binoms here seem to be late constructions and popular word formations directly taken from the spoken language. I intend to present a detailed study on this chapter soon.

敬 is analyzed by SWKL 4056 b 从支苟; 苟 /* kug - * ku is suppressed phonetic and has no final -ng. 敬 𠄎 * kiəng'əd - /* kug'əd - kiəg'əd.

²³Cf. Bodman, A Linguistic Study of the Shih ming, 1954. p. 51, and The Study of the Chuan chu in Shuo wen, CYYY 29, 1957, p. 152 ff.

²⁴Cf. n. 50, Ch. iii, Part I. Wang Yün 王筠 (T. Kuan-shan 貫山, H. Chuan-yu 篆友, 1784-1854), in his SW chü-tu 說文句讀 (SWKL 5635) quotes Kui Fu 桂馥 (T. Wei-ku 未谷, Tung-hui 冬卉, 1736-1805) in order to explain the SW definition of 婁: 婁務, 禺也 as a reversed form of the name 務婁 in Tso chuan (Chao 1st year, 8), * miug-gliu < #* mgliug - * gliu-miug.

²⁵TT, 2427, tries to explain 央亡 as a graphic corruption of 交骨, but gives no proof for this explanation.

²⁶The reading of 箬簫 as a binom deviates from Chou Tsu-mo's. The reason is that neither 箬 nor 簫 appear separately in the FY text.

²⁷In Tso Ssü 左思 T. T'ai-chung 太仲 (? ca. 306 A.D.), Wu-tu fu 吳都賦 (WH, p. 104) the word 升 is explained as 'small, fine' in the expression 升越 (explained as 越之細者). 越 yüeh is here read as shuo (Li chi, ch. Li Yün 2, 11; Couvreur I, 506), and means 'rush, rush cloth.'

²⁸Some editions (e.g., Tai Chen 戴震) delete this information on N-Ch'u as spurious.

²⁹The reconstructions of the same character should not necessarily and always be considered identical when taken alone or as a part of a binom. Also some dialects can preserve more archaic readings though others may already have developed more recent forms. Thus the reconstruction of 與 (GS, 89 b-d * ziə > iwo) is taken here on two different levels of evolution: (a) in its older form * ziə - ziwo < /* zýwo - dzýwo, when taken alone; (b) in its younger form iwo, when taken in the binoms. The Hsh connections of 與 (KYSH no. 751, p. 872) show that the reconstruction in this series demands velar initials as well as dentals or sibilants. (舉 k-, 嶺 s-; SWKL 5442 definitely analyzes 舉 with phonetic element 與, and the definition of 與 in SWKL 1145 黨與 'to help, to assist' may very well indicate a variant cluster by means of the dimidiated binom.) A. C. Graham, in his article, The Relation between the Final Particles yu 與 and yee 也 (BSOAS, 19, 1, 1957) concludes (p. 123) that 與 * ziə cannot be but a fusion of 也 * dia + 乎 * g'o, though he finds the reconstructions of GS highly unsatisfactory for explaining the phonetic side of this fusion word 與. The reconstruction of Lu Chih-wei 與 * d- does not solve the problem, for the difficulties

do not lie in the initial dental or sibilant, as 與 has derivatives with dz- and z-, and 與 may have gone back to *dz-; the difficulty lies rather in the initial *g'- of 乎. Our proposed reconstruction /*dzýwo ~ /*dzýo would explain the fusion more satisfactorily.

³⁰FY 7/14 is a case of two different words mutually attracted because of phonetic similarities with semantic overlapping: 'to force, to use violence' and 'to lie, to violate the truth': /*tsýam-pia → *b'ia-b'iwo → 强暴 but /*tsýam → d'ân-sýiam 彈檢.

³¹Cf. Dubs III, p. 39, n. 8. 8, where 痿 is translated 'arthritis,' with a reading juí, according to Ju Shun. In K'M 316.3 the text of the HS commentary quotes Su Lin 蘇林 (fl. 196-227) saying that 痿 is read as 萎 *·iwâr, and then also Ju Shun's text that it is read as 踠 *·wâr. 踠 means 'to sprain.' But Yen Shih-ku 顏師古 (579-645) reads 痿 like 羸 ńzwi (人佳反). In the same commentary it is defined 痺病, and explained 弩病兩足不能相過 'Sickness of the crossbow [men]; the two feet cannot step forward.' 痺, a corrupt writing of 痺, is defined in SW 溼病 'Sickness from dampness' (rheumatism?) KYSH (no. 844, p. 995) gives the readings of 痿: ·wię and ńzwię. In the light of the other Hsh derivatives in that series such as 痿 t'uâi, 痿 nuâi, nuâ, 痿 swię, and of binoms like 痿痿 ·uâi-t'uâi 'rheumatic paralysis,' 痿莎 nuâ-suâ 'to rub,' we must reconstruct /*dn·wâd > (*·wâr), /*zn·iwâd > (*·iwâr), /*tgwâd > (*t'wâr), /*snýwâd > (*siwâr), etc., and the binoms are probably inverted dimidiations of ##tgwâd ~ dgwâd and of ##sngwâd. 痿 ńzwi, ńzwię, ·wię was then /*zngiwâd, zngiwâd, (dn·iwâd). Comparing this with the other words in FY and SW, *d'iang-g'wia, d'iang-k'wia are dimidiations of ##dngwia ~ dnkwia (> -iwâd?) and *nged-k'ięg may be a sort of dimidiation of ##tnkięg > nged-tkięg (止 has initials of the k- and t- series). The binom *d'iang-miug may even go back to an earlier form or variant ##dmjug (dm- instead of dng-, and -iug instead of -iwâd).

³²Following TT 2708, 時殖 is taken as a binom, against the opinion of Chou Tsu-mo. 置 is the original monosyllabic word. The FY text has 置立, which is a compound, but 立 has been isolated in the definition. (FY 7/31, 12/75).

³³Cf. E. Chavannes, Les Documents Chinois découverts par Aurel Stein dans les sables du Turkestan oriental. Oxford, 1913, p. xvi, and nos. 38, 71, 134, 253, 498, 682, 693, where the arrows 彗矢 'flèche d'arbalètes,' probably the same as 飛彗, are mentioned. H. Maspero, Les Documents Chinois de la troisième expédition de Sir Aurel Stein en Asie centrale, London, 1953, mentions only the common term 弓前. Lao Kan

勞幹, Chü-yen Han-chien k'ao-shih 居延漢簡考釋 1949, vol. 2, pp. 54 ff. on 鏃.

³⁴The reconstruction /*ndz'lięng is a parallel case with the one explained in more detail (p. 109) concerning the word 盜蓋. Chou Tsu-mo's text edition separates 安 from 靜 as two independent words, but since the FY text mentions only 安 as a dialectal corresponding word (Ch-Hs), it seems preferable to take 安靜 as a binom (TT 1548). Chu Chün-sheng (SWKL 3231) and Takata (op. cit. 71/24) think that 安 is simply a graphical mistake of copyists. But besides the FY text, 安 is also found in Chuang-tzũ and Ch'tz, two texts which contain a considerable number of hapax legomena, pointing to a Ch'u dialect influence. Since FY uses 安, it is probable that it was meant to stand for a special reading different from the ordinary graph 宋 *dz'liôk. KYSH no. 669, p. 790 ff. has the derivatives 長末 *niog < /*zniog and 怒 *niok < /*zniok; 宋 was /*dzn'liôk, which offers an interesting comparison with /*ndz'lięng. Yet in Chuang-tzũ and Ch'tz, 安 appears as part of a binom 安奠. The form 宋奠 is nevertheless a very common and widely found binom *dz'liôk-mâk < ##dz'mâk. Maybe, the latter form (~ /*dz'miôk?) represents the oldest form, which became common in its dimidiated form, but developed as /*dzn'liôk in the southern dialects.

³⁵These conditions have been discussed with examples from the Indo-European languages by E. Benveniste, Problèmes sémantiques de la reconstruction. Word, 10, 2-3, 1954, pp. 251-264.

³⁶Such mutual encroachment and influencing of words from different families is discussed by Yakov Malkiel, Etymology and Word Families, Word, 10, 2-3, 1954, pp. 265-274, and Etymology and Historical Grammar, Romance Philology, 8, 3, 1, 1955, pp. 192, 198 ff., and The Uniqueness and Complexity of Etymological Solutions, Lingua, 5, 3, 1956, p. 226 ff. (especially 10. Compromise Solutions, 11. Typical Blends, 13. Erratic Patterns of Etymological Debates). Moreover Chinese is one of those languages which seem to have vocabularies which become easy victims to the influences of folk-etymologies and semanticization, either because of the continuous influence of the script or because of other factors, as explained by U. Weinreich, Yiddish Blends with a Slavic Element, Slavic Word, vol. 11, 4, 1955, p. 609.

³⁷In SWKL 6629 b 辰 is explained by a paronomastic definition 震也, and a phrase 三月陽氣動萬物振民農時也物皆生 'The 3rd month is the time when the yang vapours move, thunder and lightning stir the people to husbandry; [then] all things grow.' 辰 has 厂 (*xan) phonetic. *dian < /*dýan. The word play involving 辰, 振,

農 is probably more than visual and graphic, but phonetic; 農 #znôŋg ~ dnôŋg: #dýen < dny- ~ ndy-. On a possible velar element in 農 cf. n. 56.

³⁸Janusz Chmielewski, *The Problem of Syntax and Morphology in Chinese* (*Rocznik Orientalistyczny*; Polska Nauk, Komitet Orientalistyczny, Tom xxi, Warszawa 1957, pp. 71-84): "In that epoch of the Chinese language monosyllabic units of speech represented in Chinese script by single characters were as a rule real words. This may be ascertained in spite of the fact that it is impossible directly to apply here the criterion of intelligibility I spoke of in the preceding, i.e., criterion (1) mentioned above [i.e., the speech unit in question must be directly intelligible to the hearer if spoken without any context], as we neither know for sure what the Archaic monosyllable sounded like, nor are we able to judge on personal experience whether they were intelligible to the hearer if spoken outside of any context; there are nonetheless, indirect proofs that they were. First, the very Chinese script itself shows that definite semantic values were associated with single monosyllables—which then must have been understood by those who invented and used characters as written symbols of the monosyllabic units. Second, there is the undeniable fact that Archaic monosyllables were as a rule much richer in their phonetic garb, much more differentiated in sound and much less homophonic than they are in Modern Chinese, and consequently could be intelligible to the ear of the hearer if pronounced in isolation. But the most positive proof is furnished by the criterion (2) [i.e., (the speech unit) must be capable of playing by itself the role of a definite syntactic element in a sentence, i.e., the role of subject, object, predicate, etc., according to the semantic value of the speech unit in question], for it is perfectly well known by anybody dealing with Archaic Chinese texts that the overwhelming majority of monosyllables are attested in those texts as speech units capable of performing by themselves, according to their semantic value, the functions of subject, object, predicate, etc., in sentences . . . Thus it is to be taken for granted that the bulk of Archaic Chinese monosyllables—except for the cases just mentioned [onomatopoeia, compound words and binoms dimidiated from original monosyllabic forms]—were real words in the language of the epoch, and vice versa: words were as a rule monosyllabic units of speech. From this it follows that in Archaic Chinese dissyllabic complexes, were as a rule, simple word groups composed of two monosyllabic words, i.e., the simple syntactic formation bound up into a whole by some sort of syntactic relation between monosyllables." (Pp. 74-75). The same arguments

are repeated by Chmielewski in his article *Remarques sur le problème des mots dissyllabiques en chinois archaïque* (*Mélanges publiés par l'Institut des hautes études chinoises*, Tome Ier, Paris 1957, pp. 423-445). There again he accepts the fact of the existence "de certaines catégories de mots dissyllabiques en chinois archaïque" but adds: "mais . . . il n'infirmes pas le principe du monosyllabisme des mots chinois pour la période archaïque." The distinction of Chmielewski concerning the notion of syllable and syllabication in Chinese (Ancient and Modern) compared to that in the Indo-European languages is certainly a definite step forward to understanding the syllable in the so-called monosyllabic structure of a language, but it becomes of use only, once this monosyllabism is a certitude in itself. Chmielewski admits that the factual knowledge of the Archaic reconstructions still leaves a great deal unanswered as to the particular way in which this principle of morphology and monosyllabism in the Archaic language is to be applied. Coming to the question which concerns us here, whether and to what extent the scribes in the pre-Han periods could have represented any word, bisyllabic or monosyllabic by means of one graph, Chmielewski mentions the affirmative opinion already expressed as early as Ku Yen-wu 顧炎武 (1613-1682), but rejects it because of the weakness of the specific examples given by Ku Yen-wu. In spite of this, it seems that the possibility of such cases still remains. Moreover the explanations which Chmielewski offers for some Archaic binoms as being simply compounds (adjective + noun, etc.) are equally weak, since they reflect word analyses based on later semanticizations and folk etymologies with little solid ground.

³⁹Excursion in Chinese Grammar, *BMFEA*, 1951, no. 23, pp. 107-133.

⁴⁰*Philology and Ancient China*, Oslo, 1926, p. 43. Excursion in Chinese Grammar, *BMFEA*, no. 23, 1951, p. 109: "It is important to observe that I meant by this that their language and the spoken language was one and the same; but obviously there was the same difference of style as in most other early literatures . . . ; it stands to reason that when a sentence was committed to writing it was not formulated exactly as a ruffian in the suburbs of Chou or a farmer in the fields of Lu would phrase it, but it was tidied up and probably made shorter and more polished. The important and fundamental point is that in my opinion expressed in 1926, the grammatical system (auxiliaries, word sequence constructions) and fundamental vocabulary were the same: the literary language was a normalized and moderately stylized reproduction of the colloquial in educated circles." (p. 110): "There can thus be no doubt that the pronouncements of Confucius, in the formulation they have in the *Lun-yü*, if read

aloud by the disciples some decades later with the pronunciations of the words then current, were perfectly intelligible to the listeners as far as the phonetic distinctions were concerned. The individual words were sufficiently differentiated phonetically to be kept apart; the recorded lectures of Confucius might very well represent his normal educated spoken language."

⁴¹Gino Bottiglioni, *Linguistic Geography: Achievements, Methods and Orientations*, p. 381. (*Word*, 10, 2-3, pp. 375-387).

⁴²The value of the statistical method in linguistics has been differently appraised. On the method: A. L. Kroeber and C. D. Chrétien: *Quantitative classification of Indo-European Languages* (*Lg*, 13, 1937, pp. 83-103); *id.*, *The Statistical Technique and Hittite* (*Lg*, 15, 1939, pp. 69-71), and further in *Introductory* and footnotes of C. D. Chrétien, *Word Distributions in South-eastern Papua*, *Lg* 32, pp. 88 ff. G. U. Yule, *The Statistical Study of Literary Vocabularies*, Cambridge, 1944, and J. Whatmough, *Statistics and Semantics* (*Sprachgeschichte und Wortbedeutung*, Festschrift Albert Debrunner, Bern 1954, pp. 441-496.) Yet, G. R. Pickford in *American Linguistic Geography*, (*Word*, vol. 12, 2, p. 219) mentions Yule's book as an example of out-of-date statistical methods, and warns against the use of this method without the help of a professional statistician. B. Col-linder, *La parenté linguistique et le calcul des probabilités*. (*Språkvetenskapliga Sällskapet i Uppsala Fördhandlingar*, 1946-1948, pp. 1-24), is criticized by Vittore Pisani: *Parenté Linguistique* (*Lingua*, 3, 1952, pp. 3-16). Jan Safarewicz: *Critique de la Méthode dite Quantitative de l'appréciation de la parenté des langues*. (*Bulletin de la société polonaise de linguistique*, 8, 1948, pp. 39-40), formulated two objections: 1. "Impossibilité de présenter sous la forme numérique toutes les différences qui existent entre deux langues. La méthode exige une constatation de la présence ou de l'absence d'un trait caractéristique dans chacune de ces langues. Or, il arrive souvent que les deux langues subissent des changements, mais dans des directions différentes; dans ce cas-là, il est impossible de qualifier ces différences comme la présence ou l'absence de traits communs. 2. La formule mathématique

$$Q_6 = \sin - \frac{\pi}{2} \frac{ad - bc}{\sqrt{(a-b)(2-c)(d-b)(d-c)}}$$

ne permet pas de distinguer entre les ressemblances provenant de la conservation de l'état ancien et celles qui proviennent de l'innovation commune: la formule conduit au même résultat dans le cas où a est grand et d est petit, etc. Comme seules les innovations communes prouvent la parenté proche de deux langues, la conclusion ainsi obtenue n'a,

au point de vue linguistique, qu'une valeur très faible. Toutes les autres formules proposées par M. Czekanowski présentent le même inconvénient." A. Martinet in *The Unity of Linguistics* (*Word*, 10, 2-3, 1954, p. 125) writes: "It is foolish to expect that linguists as a group will find time, energy, and inclination to acquaint themselves with the variety of extraneous disciplines from which some light could reach them. Flaunting mathematical formulae before a linguistic audience or in a linguistic publication is either grossly misinterpreting the needs and capacities of one's audience or readers, or else trying to bully them into accepting one's views by claiming for these the support of a science they tend to respect as the most exact of all sciences, but whose data they are not in a position to verify. We need more and more rigor in linguistics, but our own brand." The mathematical part in our statistical study of the FY material will be simple enough, being nothing but a numerical expression of most simple relations between dialects as they are described by means of a very undeveloped system of phonetic-graphic writing, on which a whole hypothetical structure of reconstructions is built. This nature of the results in the reconstructions of the Chinese language seems to be a reason not to try to squeeze every bit of information by means of more intricate formulae.

⁴³This study of the connections between the different dialect areas has been made already by Lin Yü-t'ang, *Yü-yen-hsüeh lun-ts'ung* 語言學論叢 (1934, p. 22 ff.) with a map. However, one map can hardly show the complexity of all the mutual influences and connections existing among the areas. Moreover, the relations among the dialects are not completely understood by studying only the identical graphs listed in FY for the various areas; the connections shown by words which present a similar phonetism among the various dialects can greatly alter the picture obtained by the cases of simple identity. Curiously enough, Ch'en Meng-chia has reversed the procedure by using Lin Yü-t'ang's statistical facts to determine the location of the state of Yen, which Lin Yü-t'ang had already assumed as certain. Besides the fact that Yen as understood in FY must not a priori be taken as identical with Yen of the Western Chou period, considering the wide span of time between FY and Western Chou, the statistics of Lin Yü-t'ang did consider only one sort of contact with other dialects, namely the identity cases, and left out the similarity cases. (Ch'en meng-chia in *K'ao-ku hsüeh-pao* 10, 1955, pp. 99-104).

⁴⁴Prof. Y. R. Chao pointed out to me that in the modern usage contrary cases can occur in the Chinese dialects, e.g., 甩 Mandarin *shuai*³ 'to fling,' Wu *huē* 'to fling,' Cantonese *lhat* 'off'; and on the other hand,

Mandarin 邊 'side,' Cantonese 便 'side,' or Mandarin 知道 'to know,' Cantonese 知到 'to know.' However, our remark on the use in FY of the same or different characters is still true on the whole; in a case like the usage of 用, it appears from the usage of FY in general that it would have duly noted the change of meaning as in lhat, and would have proposed other characters for huē and lhat that suggest better their sounds according to the reading in the standard language.

⁴⁵Cf. W. Eberhard, AA, 9, 1-3, p. 221. We can admit the general statement of Eberhard that in the course of time, and together with the mixture of various cultural elements, the Chinese language also took over many words of different linguistic stocks, but it is not certain whether those words remained or were rejected later. Moreover, we do not know whether the linguistic borrowings occurred in the same degree as for other elements of culture. Most of all, too little is known of the pronunciation of the early Chinese language and of the languages from which the words may have been taken. The language of Han, as reflected in SW and FY, must already be far developed and changed from the early period when the different cultures (Tibetan, Pa, Yao, Tai, Liao, Li, and Yüeh) merged and contributed to the typical Chinese culture. Thus, the Yüeh culture is typified by its special stress on ships and boats, and we naturally expect that the names, so numerous in South China (FY 9/25) for different types of boats and their parts, may go back to the language prevalent in the old Yüeh culture. But since the FY material is relatively late, even though the things may be non-Chinese in origin, there is hardly any evidence as to the vocabulary on ships and boats being non-Chinese.

⁴⁶Cf. p. 100 and n. 25, ch. i.

⁴⁷The main marks used to discover the loan words in languages other than Chinese are the phonetic features (unusual phonemes), obscure or unsatisfactory etymology, combined with the semantic content of the word pointing to extraneous origins. In Chinese the phonetic aspect is to a high degree disguised under the special script.

⁴⁸鷓 jiwək < * giwək is defined in KY by a binomial form 鷓或鷓 * b'jək-giwək ~ piuk-giwək < # * bgiwək ~ pxiwək. Though the KY is a late source in comparing the Han time vocabulary, it is not excluded that the KY word is not just a learned binomial formation but rather a living word from the dialects, reflecting still the original sequence. On the other hand, the KYa quotes the FY word 鷓或鷓, and Wang Nien-sun 王念孫 in his commentary takes it as an indication that the present text is corrupt and should be emended 鷓鷓, of which the KY

word is an inversion. The right sequence is suggested by the reconstruction of 鷓 * piuk < # p'juk ~ * b'jək < # byjək, a stem which has been reduplicated in 鷓鷓, 服鷓, and 鷓鷓. From the study of the character 或 alone, not very much can be gained except that the character 鷓, composed of two 或 opposed to each other and explained as a variant of 諄 (SWKL 1038) * b'wəd ~ b'wət 'confused,' may be etymologically related to 惑 'confused' and to binoms like 迷惑 * mjər-g'wək < # * mg'wək (Takata, op. cit., 53/2); then, even in the supposition that 鷓 stands alone in the FY text, we could still posit # bgiwək.

⁴⁹One explanation which may be proposed is that Lu-Sung, although participating in the literary and cultural activities, was, as a dialect area, more conservative, whereas Ch'u and Ch'i developed along parallel lines. Such a theory would agree on one hand with the fact that the political power of Ch'i expanded rather toward the north than the south, (cf. R. L. Walker, The Multi State System of China, Hamden, Connecticut, 1953, p. 30: map showing the expansion of the state of Ch'i during the Ch'un ch'iu period.), and on the other hand with the fact that the isolation and conservativeness of Lu-Sung-Wei seems to be rooted in its earliest cultural and historical tradition. (Cf. p. 234). Moreover, Ch'u and Ch'i still had a common frontier and were in contact through the region of Huai and H-T, which, though they are treated by FY as independent dialect areas, were nevertheless politically under dominion of Ch'u. The Ch'u influence in Huai is extremely strong, and though the Ch'u dialect did not affect much that of H-T (cf. p. 171), this did not prevent in the least the cultural and linguistical exchanges between Ch'u and Ch'i.

⁵⁰On 啣 * siəd (FY 2/25) and its connection to 息 * siək (st. word) cf. Boodberg, HJAS, 2, (1937), p. 341, n. 26. Its similarity to dialect forms such as 喙 * t'iwad ~ * xiwad < # dx- shows that it is a genuine Chinese word. Yet the SW text indicates that the scholars were conscious of non-Chinese origins of some dialect words, but applied this explanation to the wrong words.

⁵¹亭公 and 亭父 (丁公, 丁父 in KYa) are obviously other terms for the 亭長 of SC (Kao tsu annals), and 褚, according to the commentary of Kuo P'o, refers to the red clothes worn by this official, which Chavannes translates as 'Chef du ting' (MH, II, p. 326, n. 1). 罪 appears as part of the binom 罪獲 in Tso chuan, Hsi, 4 y. 釐 * ts'iôg is obviously to be considered as a variant of 釐 * dz'iu.

⁵²Though Ch'u had its capital in the Huai region (Shou-chou) only during the last eighteen years of its existence as a state, the influence of Ch'u

in Huai must have been active long before the event of the establishment of the new capital. O. Karlbeck, *Selected Objects from Ancient Shou-chou* (BMFEA, 27, 1955, p.45) notes that "a ruler would not have chosen for his capital anything but a city of considerable importance; it must have possessed a certain amount of culture . . ." and it may be added that this culture, the language included, was probably already profoundly influenced by Ch'u. However, there is a word suspect of being originally non-Chinese: it is the name of a special raft with a house on it; it is a dialect word of Ch-H only, and written 薦 * *tsiæn* 'grass mat,' * *dz'wæn* ~ * *dz'jæn*: 'grass, herb.' The object seems to be unknown elsewhere; the word can phonetically not be compared to any other known term for 'raft, float'; the graph is probably an attempt to choose a character that is somehow semantically expressive: '(floating) grass mat' → 'home on a raft.'

⁵³The standard term and defining word of this group of dialect words of FY 2/5 is 雙 'two, double.' This is a mistake for 曠, as the footnote of Chou Tsu-mo proves. The characters of the N-Ch'u words and their readings are surely exceptional, but so are Sung Weih Hanh Cheng 金樂, Yen tai Ch-hs Lsh 盱, 揚. This series seems to cover a wide range of meanings 'moist, glistening' but also 'bright, beautiful.'

⁵⁴R. A. D. Forrest, *The Chinese Language*, 1948, p.223.

⁵⁵According to A. Herrmann's Political Racial and Linguistic Map of China (*Atlas of China*, Harvard University Press, 1955, map 67) there are now many non-Chinese peoples and languages in the area corresponding to the Yüeh of Han time. *A fortiori*, at the time of FY, the non-Chinese population was more numerous and denser, and the FY material did not refer to them.

⁵⁶The words concerning us here are, e.g., 2/3 婿 * *t'wâ* ~ *d'wâ* < * *ty-*, *dy-* and 10/8 婢 * *ngan* < * *zng-*, 嬖 * *tsëk*, 鮮 * *sian* < * *sý-*. Cf. 姚 * *t'iog* (Ch'u-Ch'en, Chou), 姝 * *diu* (Chao, Wei), 姝 * *ngâ* < * *zngâ* (Ch'-Chin). 3/12 瀾 * *lât* < * *d'lânt* and 10/31 頤慙 * *d'wæn-mýwæn* (cf. standard 毒 * *d'ôk* < * *dmôk*, Ch-Hs P-Yen 癆 * *d'ôg*, Ch'i 夙憫 * *tiäd-t'iôg*). 3/46 田臺 * *d'ien-d'æg*, 覆 * *bzëk*, 辟 * *bziëk*; 臺 * *d'æg* goes back to * *bd'æg*. (Tso chuan 'servant, helper'); as shown before (p. 157), it is an old binom. 3/51 不斟 * *piüg-tiëm* < ** *p'týëmb*, 何斟 * *g'â-tiëm* < ** *gtýëmb*: standard 益, which Kuo explains as

斟酌益之. Probably the literary binom appearing in pre-Han literature (TT, p. 2519: HNtz, Lü-shih Ch'-ch') is the real corresponding word to that of N-Ch'u; 斟酌 * *tiëm-tiök* goes back to * *týëm-b'tiök* (勺 has derivatives *p-*, *k-*, *t-*), apparently a reduplicative binom with the finals differentiated as -*æg*: -*ök*; the final -*ng* became -*mb* through sandhi with -*b't-* of 酌. Then 斟 * *týëm-* also had a *b-* initial, which was readily lost when the character was the first element of a binom, but not in the middle of a word, if a suitable character could be found. In an archaizing dialect such as N-Ch'u, at the periphery of the Chinese speaking areas, the labial was dialectally preserved and FY could not write it but by a binomial device 不斟; to this word corresponded another dialectal variant with *g-* instead of *b-* ~ *p-*. 3/49: see *supra*, 撲生 - 撲漸. 10/46 筮 * *iung*, 饗 * *dnông* ~ *dñiung*: 盛 * *diëng*, 多 * *tâd*. The two N-Ch'u words were probably variants of the same words: 饗 * *d'iung* ~ *dñiung* ~ *dnông*. KYa and later dictionaries consider the two as parts of a binom 筮饗, related to 盛 * *diëng*. 筮 is a Hsh derivate of 筮 * *iung*, which in SWKL 5143b is written with variant 筮. Ch'en Meng-chia, *The Names of the Kings of Shang*, YCHP, 27, 1940, pp.136-137, equates 筮 with 疇 * *d'iôg*. Cf. also Ch'en Meng-chia, *Shang wang miao-hao k'ao 商王廟號考* (Posthumous Names of the Kings of Shang), K'ao-ku hsüeh-pao 考古學報, 8, 1954, p.32, and Yin-hsü pu-tz'ü *tsung-shu 殷虛卜辭綜述*, Peking, 1956, pp.429-430. For the phonetic implications, cf. *Notes on the Study of Shih ming* (Chain iv, end) and *The Chuan chu in Shuo wen* (CYYY, 23, 1957, III, 2, no.5, p.164).

⁵⁷Bodman, *A Linguistic Study of the Shih ming*, 1954, p.35, discusses the word pair 654 兄 * *xiwang* > *xiwang*: 荒 * *xmwâng* > *xwâng*, and suggests a reconstruction *xmiwang* for 兄; he compares it to 孟 * *mäng* > *meng* 'elder brother.' The full Hsh value of 荒, according to the Hsh connections indicated by SW, would be * *lxmwâng* > * *xmwâng* > * *xwâng*. The SM pronunciation of 兄 must have been * *xmiäng*. As to the reconstruction of 孟, the Hsh connections show no trace of any velar initial; however, this does not mean there was no such cluster, for if all the words in the series have the same cluster, e.g., * *gm*, they may all equally develop into * *m-*. A similar case may be found in FY 2/23,

which compares among other dialect words, 梗 *kǎng < /*bkǎng and 猛 *mǎng < /*gmǎng ~ m'ǎng.

⁵⁸See n. 34. In Ch'tz 窈 appears as part of a binom 窈窕 *dziôk-mâk. Another binom with the same meaning and having 寂 as a constituent, 寂寥 /*dz'iôk-dglôg, a dimidiation of /*dz'lôk ~ dz'lôg, shows that 寂窕 could be equally a dimidiation of /*dz'mâk, and that the graph 窈 was chosen to write this monosyllabic form, still used dialectally in the south. We find in this word a parallel case with the distinction of the reading of the same word in the southern and northern dialects, noted for the word 蟻 (FY 11/7-9, cf. supra p.108), though here the script variant was used as a specifying means to distinguish this dialect difference.

⁵⁹Although p'u-ch'i 蒲器 is not further explained s.v. 蒲 in SW, the text (in SWKL 5744b) makes this clear 所以盛種 'by which the seed is poured in (contained)'. The same definition is given for 餅, on the authority of Yang Hsiung, who differs from Tu Lin's 杜林 (T. Poshan 伯山, ob. 47 A.D.) opinion (竹管: bamboo basket) and that of Hsü Shen (輅). But in SWKL 3432 we find as definition of 輅: 蒲器, a compound word which explains the real situation. The three authors do not contradict each other but indicate three meanings which are derived from one and the same: 'container made of woven sticks or rushes.' Fixed together with a plow, it made a plow which did the sowing at the same time as the plowing. Taken alone it meant 'bamboo basket,' or 'basket which was attached to a plow for sowing.' P'u-ch'i means 'rush (basket) implement (plow)'. In FY 畚 is taken as a dialect word for 'plow,' though in SW the original meaning seems to be 'basket,' and therefrom 'plow with a basket attached.' However, 畚 ('plow') variant graph of 畚, has also the radical 畚, just like 畚, and the word 畚, 畚 as a dialect word, may be entirely unrelated to 'basket,' and may have only later been connected to 'basket' by SW.

⁶⁰The words in these passages are: 3/9 standard 蕪菁 Kn-tg, id., but Ch'-Ch'u 蕪, Lu Ch'i 蕪, Chao Wei 大芥, etc. 4/1 standard 禪衣, Ch-H 禪, Kn-tg and Kn-hs 禪衣, Chao Wei 袈裟, literary 深衣.

5/7 standard 案 Ch'-Ch'u Sung Wei 攜, Kn-tg and Kn-hs 案 5/8 standard 梧落, Ch'-Ch'u Sung Wei 梧落, 豆筍, Kn-tg and Kn-hs 梧落. 5/16 standard Kn-hs 甌, Ch'-Ch'u Sung Wei 甌

⁶¹FY 8/1, the Kn-tg Kn-hs word is 伯都 *pak-to. Kuo P'o explains it by a phrase, indicating its religious connotation: 俗曰事神虎說 'Commonly they say po-tu in the sense of serving the spirit tiger.' This religious meaning may indicate an older form of the word. It has preserved the labial, which is found only in the full Hsh reconstruction of 虎 /*blxog ~ bdxog, and in a paronymastic definition of PHTY (Tjan Tjoe-som, p.435) 虎之言捕討 'The tiger is paronymously said to catch and chastize.' 捕討 *p'âk-t'ôg ~ piug-t'ôg < /*pt'ôg. This definition also shows that the original meaning was lost and reinterpreted.

As to FY 8/5, the Kn-tg Kn-hs word is written in two ways, 𪗇 *d'iad < /*d'iad (SWKL 4248: 矢 phon.), and 豕 𪗇 < /*s'ýed ~ s'ýad (KYSH, no.655, p.772); these two graphs are among the oldest and the simplest of the group; this too indicates that they may represent the oldest layer in language.

⁶²The case of 鳴 is particularly interesting. In MS VIII, 1943, p.215 ff., a comparative study of the various binoms was made in order to follow the various underlying etymologies, semanticizations, and the popular beliefs and tales concerning this bird. But the form 鳴鳥 of Yi-chou shu was omitted. TT (p.1097) suggests that it was a mistake, just as the TPYL quotation from Li chi, 鳴鳥 was a mistake for 鷓鴣.

But that is not probable as 鳴 is always the second member of the binom. 鳴鳥 is a compound word, where 鳥 is simply added to lengthen the word. 鳴 *tan could be simply the second member of the binom, separated from the first, and united with 鳥 to make a new variant; but it is also possible that it was a reduced form of /*ktând ~ kntând (KYSH, no.216, p.274), of which the other forms *kân-tân, etc., were dimidiations. This would explain the reduplicated form in FY (Kn-tg: 鳴鳴) and the lengthened form of Yi-chou shu as well; it makes the emendation 鷓鴣 proposed by Tai Tung-yüan unnecessary.

⁶³In connection with this solution, it must be considered that this statistical appraisal lumps together the whole of the central and eastern dialects in a general and global way, without making any distinction between the areas at greatest distance from the area of the western dialects and those that are in immediate contact with the west. This way,

our hypothesis does not contradict or exclude the other statements made before, such as, e.g., on p. 181 concerning the particular relationship of Ch'u with the western dialects, or on p. 183 concerning the existence of a possible earlier uniform area which straddled the Kn-tg Kn-hs line, before Ch'in and its earliest expansion area, Kn-hs, came into prominence in Early Han.

NOTES TO CHAPTER III
The Geographical Method
(Pages 195-235)

¹J. A. Sheard, Dialect Studies, Transactions of the Philological Society, 1945, pp. 163-205; E. Pulgram, Family Tree, Wave Theory and Dialectology, Orbis, 2, 1, 1953, pp. 67-72; Neogrammarians and Soundlaws, Orbis, 4, 1, 1955, pp. 61-65; Yakov Malkiel, Etymology and Historical Grammar, Romance Philology, 8, 3, 1955, p. 196 ff.

²L. Bloomfield, Language, 1933, p. 321.

³L. Dominian, Linguistic Areas in Europe: Their Boundaries and Political Significance. Bulletin of the American Geographical Society. Vol. 47, 6, 1915, pp. 401-439.

⁴G. R. Pickford, American Linguistic Geography, Word, 12, 2, 1956, pp. 211 ff., but also R. I. McDavid and V. G. McDavid, Regional Linguistic Atlases in the United States, Orbis, 10, 1957. The remarks of G. R. Pickford on the neglect of many other social factors by stressing the mere geographical distribution may be much to the point also for other countries than the United States. Yet, on the other hand, the energies put in a Linguistic Atlas such as that of the United States and Canada are not quite completely wasted, for they often delineate definite linguistic areas, reflecting an earlier situation, now perhaps entirely past or on the way of disappearing, yet true for an earlier period.

⁵Among the many studies of this kind by Paul Aebischer, one of the clearest cases is presented in Les dénominations du 'cousin' en Italie dans les dialectes actuels et les chartes médiévales. Étude de stratigraphie linguistique. Annali della R. Scuola Normale Superiore de Pisa (Lettere, Storia e Filosofia), Ser. II, vol. 12, 1943, pp. 28-29.

⁶E.g., the short paragraphs by Menendez Pidal in Origenes del Español, 1950, p. 489: Algunos principios geografico-cronologicos.

⁷E.g., Carl Theodor Gossen, Die Picardie als Sprachlandschaft des Mittelalters, 1942; Petite Grammaire de l'ancien Picard, 1951, ch. 5, Quelques

aspects de géographie linguistique: De l'histoire des langues écrites régionales françaises, du moyen âge au XVI^e siècle. (Conférence, Louvain, 1957, 10 pp.) (résumé par Rodica Doina Pop). Rafael Lapesa, Historia de la lengua Española, 3d ed. Madrid, 1955, ch. 7, Primitivos Dialectos Peninsulares; La Expansion Castellana, pp. 121-135 (with map: Primitiva Reparticion de algunos Caracteres foneticos diferenciales). Diego Catalan, The Romanic Leonese Domain, Orbis, 4, 1, 1955 (p. 171 On medieval Leonese). Y. Malkiel, Review of El Fuero de Teruel edited by M. Gorosch, Lg., 31, 1955, p. 261 (6. Dialectal coloring of the manuscripts, 7. Dialect mixture, pp. 270-274). An example of careful sifting and comparison of different written sources to extract and geographically determine the origin of dialect words in English is Rolf Kaiser's Zur Geographie des Mittelenglischen Wortschatzes (with a map indicating two main important dialect frontiers) (Palaestra 205. Untersuchungen und Texte aus der Deutschen und Englischen Philologie, 1937, Leipzig).

⁸E.g., Ernst Schwarz, Goten, Nordgermanen, Angelsachsen. Studien zur Ausgliederung der Germanischen Sprachen, 1951, p. 120 ff.; Gotische Wortgeographie.

⁹E.g., A. Tovar, Ensayo sobre la estratigrafia de los dialectos griegos. I. Primitiva extension geografica del Jonio. Emerita, 13, 245-335, 1944. Reviewed by C. R. Sleeth, Word, 3, 1-2, p. 136 ff. 1947.

¹⁰S. Pop, La Dialectologie. Aperçu historique et méthodes d'enquêtes linguistiques. I. Dialectologie Romane. II. Dialectologie non Romane. Louvain, 1950. This work contains detailed information on the activities in linguistic geography all over the world, the different methods of investigation, and the various ways of interpreting the collected materials. J. Jud, Methodische Anleitung zur sachgemässen Interpretation von Karten der Romanischen Sprachatlanten. Vox Romanica, 13, 2, 1954, pp. 219-265. G. Gougenheim, Un problème de configuration des aires; les aires dépassantes. Orbis, 6, 1, 1957, pp. 177-184. Most of the work in linguistic geography consists in monographic studies on one or two particular features of phonetic, grammatical, and more often lexical nature in the dialects. A synthesis on a group of dialects based on a considerable number of maps, giving a picture of the over-all situation of a country is rarely done. It has been attempted for Japanese by Fujiwara Yoichi in a Dialect-Geographical Study of the Japanese Dialects (Folklore Studies), 15, 1956, pp. 1-134).

¹¹G. Bertoni and M. G. Bartoli, Breviario di Neolinguistica. Modena, 1928; M. Bartoli, Saggi di Linguistica Spaziale. Torino, 1945.

¹²G. Bonfante, On Reconstruction and Linguistic Method. Word, 1, 1, p. 83 ff.

¹³R. A. Hall, *Bartoli's Neolinguistica*, *Lg*, 22, 1946, p.276 ff. G. Bonfante, *The Neolinguistic Position*, *Lg*, 23, 1947, p.344 ff. G. Devoto, *Matteo Bartoli*, *Word*, 3, 3, 1947, pp.208-216. A. Heiermeier, *Review of M. Bartoli's Saggi di Linguistica Spaziale*, *Indogermanische Forschungen*, 61, 2-3, 1954, pp.279-283.

¹⁴K. Jaberg and J. Jud, *Der Sprachatlas als Forschungsinstrument. Kritische Grundlegung und Einführung in den Sprach- und Sachatlas Italiens und der Südschweiz*. 1928. pp.29 ff., 186-187. S. Pop, *La Dialectologie*, II. Conclusions, p.1133 ff.

¹⁵Thus Kloeke's investigation on the vowel in mouse: house in the Netherlands (Bloomfield, *Language*, p.328) reduced the many different variations of words into five main groups and, in Jaberg's study on the dialectal treatment of the words corresponding to Latin *sk-* in French, the results show two main groups, one with the prosthetic vowel and one without. (Bloomfield, *Language*, p.346.)

¹⁶It is in the field of Indo-European and Proto-Indo-European that the dialect-geographical method has been most vigorously debated: E. H. Sturtevant, *Hittite and areal Linguistics*, *Lg*, 23, 1944, p.376 ff.; G. Bonfante, *The Neolinguistic Position*, *Lg*, 23, p.344 ff.; L. R. Palmer, *The Latin Language*, 1954, p.25 ff.; V. Pisani, *La question de l'Indo-hittite et le concept de parenté linguistique*, *AO*, 17, p.251 ff.; T. Burrow, *The Sanskrit Language*, 1955, p.13 ff.; A. Carnoy, *Dialectologie proto-indo-européenne*, *Orbis*, 1, 2, 1952, p.425-427; J. W. Marchand, *Was there ever a Uniform Proto-Indo-European?* *Orbis*, 2, 2, 1955, pp.428-431.

¹⁷As pointed out already before on p.100, the line of separation between the various dialect areas on our map of the *FY* dialects is not exactly determined, nor is it clear that all the isoglosses formed by the various dialect words do form precisely the tight bundle which our limits of the areas on the map seems to indicate. Though the situation is not quite the same as that found in the dialect geography of Ancient Greece, as described by W. Porzig, *Sprachgeographische Untersuchungen zu den Altgriechischen Dialekten* (*Indogermanische Forschungen*, 61, 2-3, 1954, p.147), it is very similar.

¹⁸定甲 **d'iəng-kap* belongs to the same group of dialect variants as 鴉鴉 (or 鴉鴉), and the literary variant 鴉鳥, discussed in n.62, ch.ii. The first member of the binom can be found in 城旦 **diəng-tān*, and possibly in Kuo P'o's 低仰 **tjər-ŋgiang*, and in 獨春 **d'uk-siung*. 城旦 and 獨春 are new formations, since they obviously attempt

to clarify its semantic content (cf. *MS*, 8, 1943, p.216). Considering that 定甲 is not semanticized, it must have remained unanalyzed in its parts, and represented one of the oldest forms of the word; **d'iəng-kap* may have been from #**dnkap* ~ *dnkap*, for 甲 has a *Hsh* derivate 筭 *tāp* ~ *yap*. Though this character 筭 is not in *SW*, it is still significant, in view of binoms as 鞞鞞 (inverted sequence), definitions as 押 : 習也, cognates as 龕, 含 (*FY*, 6/10) and 匣 : **k'əm* < /**tkəmb*, **g'əm* < /**dg'əmb* 'to receive, contain,' **g'ap* < /**dg'ap*, 'box, container'; 拾 **g'iāp* < /**dgiāp* 'sword scabbard, box, cage' and 柙 **g'ap* < /**dg'ap*. The same interchanging of 甲 with 合 is found in other cognates like 歎 **xap* < /**dxap* and 駘 **xap* < /**dxap*, both defined as 鼻息. The element 甲 **kap* < /**dkap* was probably an original form of the name for this bird, with variations such as /**dkap* ~ *dkamp* ~ *dkamb* and #**dnkap* ~ *dnkap*, and dimidiated as 定甲. The element **d'iəng* has been separated and added to /**tan*, thus suggesting a new popular etymology 'city wall slave.' This additional element *tan* came from the west. This is true, not only on the condition of accepting Tai Chen's emendation of 鴉鴉 into 鴉鴉 (then surely a word from the western dialects), but also in the reading 鴉鴉, a reduplicative binom built on the *Yi-chou* *shu* word 鴉 (鳥), for this word may go back to early Chou times (Western Chou). Only 定 appears in an old unanalyzed binom, and the ending *-ng* can very well be taken as *sandhi* with the following *-k* of **kap* in **d'iəng-kap*. A more original *-n* may still be reflected in the Kuo P'o's form 低仰 **tjər-ŋgiang* < #**ŋgiang* : /**tŋg-* and /**dnk-* (of 定甲) which would then appear to be a metathesis of /**knt-* ~ *kt-* of 鴉, and the finals would show a variation of *-nd* ~ *mb* ~ *mp*. The geographical distribution can be summarized as follows:

	East	West
Kn-tg	城旦, 倒懸, 鴉鴉, (鴉鴉)	鴉鴉 Literary 鴉鳥
Chou Wei Sung Ch'u	獨春, 定甲	盍旦, 鴉鴉, etc.

It can be observed that the Kn-tg forms show influences from the western dialects in the new binomial formation 城旦, in the reduplicated form 鴉鴉, built on an old western literary word 鴉 (鳥), and in

the second element of the Chou Wei Sung Ch'u word 獨春 *d'uk-siung. Against these new formations, retraceable to the western forms, one archaic word is found in the dialects of Chou Wei Sung and Ch'u 定甲 /^h dnkamp ~ dnkamb, which is comparable to the oldest literary word /^h kntând 鳴. This is the only original eastern dialect word. Yet it is comparable to the Kn-hs word 鷄鳴 *kân-tân, which is a dimidiation of 鳴 /^h kntând, and has early literary variants preserved in *Li chi*, which is in reality quoted from a lost SCg text, 盍曰 *g'âp-tân < /^h dg'âp- and 曷曰 *g'ât-tân < /^h zg'ap- (cf. *supra* p.29), and still preserved in Cheng Hsüan's explanation 渴曰 *g'iat-tân < /^h zg'iap-. Though 盍曰 may already in Han times have been read with a sandhi *g'âtân ~ 可曰 *k'â-tân (TPYL), 侃曰 *k'ân-tân, we can observe the elements /^h dg'ap and /^h dg'iap, which are strikingly similar to 定甲 /^h dnkap.

¹⁹Cf. *Fang yen Studies*, I. Preliminary Problems to the Study of the Book *Fang yen*. This volume deals with the problem of authenticity and history of the *Fang yen* text; in Chapter 2, the importance and significance of the Appended Letters is discussed. The relevant passage in this letter says: "When the officials from all over the empire, coming to send in their reports, and the military officers from the Inner Commanderies, came to meet together, I, Yang Hsiung, constantly holding a soft brush of three inches and a piece of oiled plain white silk of four feet in hand, asked them about their unusual expressions. When I came back, I immediately committed it with a lead stylus on a tablet. Up till now, it is twenty-five years [that I have done so]."

²⁰Hans Bielenstein, *The Census of China*. *BMFEA*, 19, 1947, pp. 135-138. With the kind permission of the editors of the *Bulletin of the Museum of Far Eastern Antiquities*, and the author of the above said article, we have reproduced Plate 1 (general map of Modern China) and Plate 2 (Western Han 2 A.D.).

²¹Sekino, Takeshi 關野雄, *A Study of Semi-Circular Eaves Tiles* (*Pan wa tang*) 半瓦當の研究. Tokyo, 1952. English Résumé by Harada, Jiro 原田次郎. Also Takeshi Sekino, *A Study of Chinese Archaeology* 中國考古學研究, Tokyo, 1956, p. 23 (*A Syllabus of Semi-Circular Eaves-tiles*) and pp. 501-525.

²²Ch'en Meng-chia, *Hsi-Chou t'ung-ch'i tuan-tai* 西周銅器斷代 (*Dating of the Western Chou Bronzes*), *K'ao-ku hsüeh-pao*, 10, 1955, pp.

127-128, also considers the knife type coins to have originated in and spread from Yen, but here he takes Yen in a much broader sense than Sekino. The conclusion of the English Résumé of Sekino's study ends with the following statement: "In other words, the semi-circular eaves tiles were originated by Yen, and their use permeated the neighboring regions. If we are not committing a gross error by this assumption, a flood of light is thus thrown on the culture of Yen, on the greatness of her originality and the power of her influence. This is not only noteworthy as revealing a phase hitherto unknown to the world, but will present a new problem to students of ancient Chinese history. Furthermore, if we consider Yen and San Chin as the two great powers representing the cultures of the time, judging by our observation from the standpoint of the *tao* and *pu* spheres, we are confronted with this problem: Why were these two powers subjugated by the newly risen Ch'in? I have my own answer to this query ready, but it must wait for another occasion."

²³Ch'en Meng-chia 陳夢家, *Chinese Bronzes in Foreign Collections* 海外中國銅器圖錄. First Series, National Library of Pei-p'ing, 1946, pp. 4 and 7-8. B. Karlgren, *Yin and Chou in Chinese Bronzes*, p. 58. (*Yin and Chou Researches*, Stockholm 1936). On the importance of the influence from Ch'u in explaining the archaeological finds in Shou hsien, capital of Ch'u at its third final period, see also O. Karlbek, *Selected Objects from Ancient Shou chou*, *BMFEA*, 27, 1955, p. 45. The eastward and northeastward move of the center of Ch'u, politically and culturally, should be connected with the complete overriding of an earlier initial Ch'u influence towards the western regions, Shu and Pa, by the final and definite domination, the organization and exploitation of the whole of the western regions by Ch'in (cf. *Franke* I, pp. 186-187 and III, p. 117 and also Cheng Te-k'un, *Archaeological Studies in Szechwan*, Cambridge, 1957, pp. 9-17; Arthur Waley, *The Nine Songs, A Study of Shamanism in Ancient China*, London, 1955, p. 59, *The Expansion of Ch'u*), a fact which explains also the weak connections of the Ch'u dialect with the western areas, and the intimate contact, almost complete unification of the dialect features of the latter (as reflected in *FY*) with Ch'in and Ch'in-Chin.

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