THE STUDY OF THE *CHUAN CHU* IN *SHUO WEN*

PAUL L-M SERRUYS, C. I. C. M.

Saint Mary's College, California

Note. A short paper on this subject was read at the fifth annual meeting of the Western Branch of the American Oriental Society, on April 23, 1955, at the University of Washington, Seatle, Washington. The present study is a more extensive and complete development of the same ideas proposed on that occasion. I am happy to dedicate this study to Professor Chao Yuan Ren and to contribute it to the Anniversary Volume published in his honor.

INTRODUCTION

I. Survey of Theories and Interpretations.

  1. Generalia

  2. *Chuan chu*, a principle of graphic composition?

    1) *Yu-chuan tso-hui* theory.

    2) *Chuan chu*, a general graphic principle?

    3) Wang Yung-pao's theory.

    4) *Chuan chu*, a principle of classification?

  3. *Chuan chu*, a principle of phonetic derivation?

  4. *Chuan chu*, a semantic principle.

    1) General formulations.

    2) · Hsü Tu-jen's theory.

    3) *Hsün ku* theory.

    4) Chu Chün-sheng's theory.

II. The *Chuan chu* Example of *Shuo wen.*

  1. Definition and terminology.

  2. The example of *Shuo wen, k'ao lao.*

  3. Extensions of the strict acceptation of *Chuan chu* in *Shuo wen.*

III. The *Chuan chu* Pairs and Chains in *Shuo wen.*

  1. Preliminary remarks.

  2. Words with initials and finals of the same series (1-40).

  3. Words with different initials in GS (1-33).

  4. Words with different finals (1-67).

  5. *Chuan chu* pairs explained through binoms (1-35).

CONCLUSION

INTRODUCTION

Chuan chu 轉注[1] is one of the 'six principles' of writing (*Liu shu* 六書) according to which the *Shuo-wen chieh-tzŭ* 說文解字 explains the words and graphs of the Han time lexicology. Each principle is defined in *SW* and explained by two examples. The importance of this set of principles of writing is seen in the way the *Hsing sheng* 形聲 (or *Hsieh sheng* 諧聲) principle was used to explain some aspects in the development of the Chinese script and language, as well as to reconstruct the sound of the words represented by these graphs. Among the six principles, the *Hsh* principle is the one which has until now been studied most intensively and made to throw light on the problems of phonetics with occasional points on the problem of cognates or of derivational and morphological processes. To some extent, though not sufficiently, the principle of borrowings of characters (*chia chieh* 叚借) has been exploited in a similar way. The *hsiang hsing* (象形) principle deals directly with the pictographic structure of the graphs; comparison of the various bone and bronze forms with those found in *SW* and other later sources, provided a fairly good picture of the general development of the graphs. But many problems connected with this variety of graphic forms still remain unsolved. One is the role of the *chih shih* (指事) and their relations to the *hsiang hsing*. It is legitimate to ask which was the particular reason for these variations consisting in slight distortions or complete changes of details, in substitutions of one part of the pictograph by another, according to the inscriptions of different times and places, or to seek the underlying etymologies which are at the origin of some grahic misinterpretations of the *SW*. It is known that various graphs like 肋, 劦 etc. are but representations of fundamentally the same object, yet they have been designed for different words and meanings. Such an investigation would eventually lead to discoveries

---

(1) Abbreviations used in this article are the following. *Chuan chu: CC; Hsing sheng, Hsieh-sheng: Hsh; Shuo-wen chieh-tzŭ* 說文解子: *SW*, quoted according to the *Shuo-wen chieh-tzŭ ku-lin* 說文解字詁林 (abbreviated: SWKL) by Ting Fu-pao 丁福保, Shanghai 1928. B. Karlgren, *Grammata Serica, Script and Phonetics of Chinese and Sino-Japanese*, BMFEA vol. 12, 1940: *GS*. Shen Chien-shih 沈兼士, *Kuang-yün sheng-hsi* 廣韻聲系, Peking 1944: *KYSH. Shih ming* 釋名. *SM;* when referring to N. C. Bodman, *A Linguistic Study of the Shih Ming*, Harvard University Press, Cambridge, Mass. 1954, the page or the number of Bodman's list is indicated, e. g. (Bodman p. 40 or Bodman 153). *Fang yen* 方言, quoted according to *Fang-yen chiao-chien* 方言校箋, by Chou Tsu-mo 周祖謨, Université de Paris, Centres d'études sinologiques de Pékin, 1951. Fu Ting-yi 符定一, *Lien-mien tzu-tien* 聯緜字典 (Peking 1941): *LMTT*. Chu Ch'i-feng 朱起鳳, *Tz'ŭ-t'ung* 辭通, Peking 1934: *TT*. Chang Yü-shu 張玉書 *et al. P'ei-wen yün-fu* 佩文韻府, Wan-yu wen-k'u ed.: *PWYF*.

not only concerning the development and growth of the script, but, what is more important, concerning the language that was put to writing in this way. But in the present state of our knowledge of the Chinese language of the older periods, these problems may be premature and must be disregarded for the time being as *cura posterior.*

Though the principle *hui yi* (會意) has mostly been understood in the sense of 'combination of preexistent, often simplified or truncated pictographic elements into one character' or 'compound graphs', or 'suggestive compounds', it seems that its exact meaning, in contradistinction to *hsiang hsing* and *chih shih* has not been satisfactorily explained. The translations of the definition of *hui yi* in *SW*, proposed by the various authors[2], as well as, for instance, the explanation by W. P. Yetts[3] seem to indicate a well established, generally accepted and certain theory. Yet, as Hopkins has pointedly commented, it is a fact that though the classical *SW* example [武 "to stay 止 the weapons 戈"—peace and order b ing the most outstanding glory of military prowess; and 信 "人 a man's 言 words i. e. good faith, belief"] seems to be quite clear, more frequent are the cases where the commentators cannot tell us for certain what elements are combined and how these parts can aptly represent a given word. Hopkins thinks that translations like 'suggestive compounds' should not be taken as referring to "the reader who seizes the meaning of a character from its composition", but "that the maker of the character is intended, who by grasping the notions implied by a spoken term, in other words, by analysing its meaning, formed a compound in accordance with his understanding of the import of a term." It is interesting to note that Hopkins starting from the spoken word which is graphically represented by the script inventors, comes close to the idea that the choice of the elements in the *hui yi* should indicate etymological connections of these parts with the new word itself. This is a most promising approach to the study of the *hui yi*, which again would bring the graph and the graphical structure back to the word, its sound and its meaning.

The most wide variety of explanations has been proposed concerning the meaning of the *CC* principle. In the *Introductory Volumes* of SWKL[4], notes and studies of various length of more than 30 authors are reproduced, with

(2) L. C. Hopkins, *The Six Scripts or the Principles of Chinese Writing by Tai T'ung*, 1881 & Cambridge University Press, 1954, p. vii-viii.

(3) W. P. Yetts, *The George Eumorfopoulos Collection*, Volume I, London, 1924, p. 6.

(4) *Shuo-wen chieh-tzŭ ku-lin, Ch'ien pien* 前編, abbreviated *SWKL, Intr.*

surveys and discussions of different opinions of Chinese scholars from the earliest times till now. The reason of this variety of opinions is, according to W. P. Yetts "the cryptic definition given in the *Shuo wen* preface......
Many writers have attempted differently to expound Hsü Shen's definition, the ambiguity of which may not be his, but may be due to some instance of the textual corruption known to pervade the dictionary in its extant form. On the other hand, Hsü Shen may himself have misunderstood the traditional term *Chuan-chu*, the latter word of which offers the chief conundrum." None of all the Chinese writers on *SW* seem to express any feeling that the *SW* definition of *CC* is cryptic or ambiguous. With few exceptions, they all start their discussion from the assumption that the *SW* text, as it stands now, is correct. Furthermore, no plausible corrections were proposed that brought new factors into the notion of *CC* or clearer enunciations of this notion[5]. It is not acceptable that Hsü Shen was unsure or confused about the true acceptation of the term *CC* in *SW*. If his acceptation were not the traditional one, supposing that the term as such existed before him, it is reasonable that only the acceptation which he expressed in his definition, could logically fit in the context of the other five principles and their definitions, and in the analysis of graphs in his dictionary. It is necessary therefore to understand each word of the definition, the meaning of the terms, as well as of the examples added to it, in the light of the definitions and the applications of the other principles. Rather than claiming corruption of the *SW* text, ambiguity of the terminology, or uncertainty of the notion in Hsü Shen's mind, it is probable that the differences in opinion are due to the fact that the *SW* quotes only two examples to illustrate his idea, and most of all, that nowhere in the text of his dictionary the term *CC* is explicitly mentioned to explain a word. Various possible reasons could explain this fact. It may be that the *CC* principle as such never plays any role in the graphic structure

---

(5) John Chalmers, The Six Modes of Development of the Chinese Written Language 六書, *The China Review*, vol. 16, 1. 1887–88, p. 10 sq. Chalmers makes a 'critique of the definition of Chuan chu' and takes the formulation of Chia Kung-yen (cfr. infra, p. 137) as a correction of the *SW*, and proposes a correction (p. 30): 連類一音, 文意相受 instead of 建類一首, 同意相受; he translates this corrected definition: "Like meanings uniting in one sound, the character and the meanings receive each other." Though elsewhere Chalmers approaches the correct understanding of the true significance of *CC*, (p. 12. "By extending its [a character's] use, however, to any one of them [i. e. all the cognate meanings of the root] in addition to its own pictorial significance, a definite advance is made in the evolution of the written language."), he finally seems to follow the opinion of Chu Chün-sheng (cf. infra p. 147), which is incorrect; his text emendation is not supported by any textual evidence.

of a character, or that it never applies to one character, but rather to different characters at once. The CC notion of Hsü Shen, far from being an ancient, traditional, by his time already misunderstood, vague and inadequate notion, may on the contrary have been one that was generally known, accepted and therefore also easily recognized. If the actual disposition and procedure of analysis of words and graphs did not lead naturally to an explicit mentioning of the CC principle, whenever it was applied, the very nature of the writing or the language may have allowed every reader to understand the role of the CC principle and apply it himself every time, and this on the basis of the present procedure of SW itself.

I. SURVEY OF THEORIES AND INTERPRETATIONS

1. Generalia.

A very important distinction which lies at the root of many mutually opposed interpretations of the CC principle, is that which divides the six principles in two essentially and formally different groups. The first group containing the principles 1-4 (*viz. hsiang hsing, chih shih, hsing sheng, hui yi*) regards the graphic structure and analysis of the characters. They explain the characters either in terms of pictographic representations of objects, combinations of preexisting pictographic elements, or combinations of graphic elements with graphically unrelated ones, chosen only for the sound. These four categories exclude each other, in the sense that every Chinese graph must belong to either one and only one of them, with exclusion of the others. A character may be differently analyzed according to the opinions of different authors, or according to the different variants of writing (*chuan tzu* 篆字, *chou wen* 籀文, *ku wen* 古文, bronze or bone graphs), since they may be of different origin in time and space; yet on each level and in each theory, a character can belong only to one of the four classes. This theory considers the first four principles as a device for a synchronic graphic analysis. It does not ignore the fact that there are border cases, where with different advantages or degrees of probability, one could choose to call a given graph a *hui yi* or a *Hsh*, etc.; neither does it ignore that some characters did develop graphically so as to move from one class to another, according to different periods or forms of script. It holds that formally it can only belong to one of these four classes or principles of writing.

Opposed to these first four categories or principles are the ones called *chia chieh* and CC. They do not refer to the graphic analysis or interpretation

but to other aspects, as e. g. the usage and the applications of the graphs in given circumstances. Thus, in the field of the *chia chieh*, any *Hsh*, *chih shih*, *hsiang hsing* or *hui yi* can be used for another word that has the same sound, no matter what is the meaning of the borrowed graph and word or what is the meaning of the word for which it is secondarily used as a phonetic substitution. The *CC* too must refer to a new aspect either of the word or the graph, which can coexist with any of the first four principles. This idea has been strongly defended by Hu Wen-yü 胡韞玉 (T. P'u-an 樸安) in his *Liu-shu t'ung-lun* 六書通論 (SWKL, Intr. p. 143 sq.). It was a distinction followed by great scholars such as Tai Chen 戴震 (T. Shen-hsiu 慎修, H. Tung-yüan 東原, Kao-ch'i 杲谿, 1724–1777) who wrote: (SWKL, Intr. p. 111) 指事象形形聲會意四者爲字之體；轉注叚借二者爲字之用 "The *chih shih*, *hsiang hsing*, *hsing sheng* and *hui yi*, these four, are the structure of the characters, the *chuan chu* and *chia chieh*, these two, are about the use of the characters". This is a clear and easily demonstrated fact for the *chia chieh*, but the particular new aspect which is the formal characteristic of the *CC*, is exactly the point so much disputed among the Chinese scholars. Obviously, though equally applicable to the characters of all former four categories in the same way as the *chia chieh*, it cannot be identical with the formal characteristic of the *chia chieh*.

The distinction between the graphic principles 1–4 from 5–6 (*chia chieh* and *CC*) was already made by the Ming time scholar, Yang Shen 楊慎 (T. Yung-hsiu 用修, H. Sheng-yen 升奄；1488–1559) 六書象形居其一，象事居其二，象意居其三，象聲居其四．假借借此四者也．轉注注此四者也⋯⋯四象以爲經，假借轉注以爲緯，四象之書有限假借轉注無窮也．假借者借義不借音，轉注者轉音而注義． "Among the six principles of writing, *hsiang hsing* occupies the first place, *hsiang shih* [term used in *Han shu Yi-wen chih* 漢書藝文志 for *chih shih*] comes second, *hsiang yi* [i. e. *hui yi*] comes third and *hsiang sheng* [i. e. *Hsh*] comes fourth. The *chia chieh* is a principle by which one borrows all these former four, and the *CC* is a principle by which one runs connections between those four. The four *hsiang* principles are considered the warp, the *chia chieh* and the *CC* as the woof. What is called *chia chieh* is a principle by which one borrows the meaning [of another word] but not the sound [which is already in the original word for which the borrowed graph stands]; what is called *CC* is a principle by which a word develops a new sound and derives a [new word with similar] meaning." Detailed exposition of this theory must

come later, but may it suffice here to point out the essential distinction between the script principles 1–4 and 5–6.

That this distinction is correct appears from the fact that the authors who disagree on this point have a great difficulty in assigning a clear role to the *CC*; they necessarily fall into all sorts of confusions between *CC* and *Hsh*, *hui yi*, *hsiang hsing* or *chih shih*. By maintaining that *CC* represent a principle of graphic structure or composition, they must logically explain its formal role in terms of a pictographic or phonetic role in the graph. As it is not difficult to find either *hsiang hsing* or *chih shih*, *hui yi* or *Hsh* characters in which the *CC* principle finds application, a confusion is easily caused by identifying the formal *CC* role as something that is already performed by one of the former four principles.

2. *Chuan chu, a principle of graphic composition?*

It is not our intention to discuss all the theories which start from the idea that *CC* is a principle of graphic composition in the same as the other principles of writing 1–4.

1) One theory ascribes to the *CC* a new principle of graphical derivation; it is called the theory of *Yu-chuan tso-hui* (右轉左回) or by similar names, and was proposed already by the earliest commentators, such as Tai T'ung 戴侗 T. Chung-ta 仲達 (Sung, fl. 13th cent.) and before, by Sun Mien 孫愐 (T'ang, fl. 8th cent.) and probably Chia Kung-yen 賈公彥 (T'ang, fl. 7th cent.). In Hopkins' translation of Tai T'ung's text it says (*Op. cit.* p. 18) "What are deflected characters [i. e. *CC*]? They are those made by taking an existing figure and turning it round on its axis. For example, 山 *shan* 'mountain', when turned round on its side becomes 阜 *fou*, 'a mound', 人 *jen* 'a man', inverted becomes 匕 *hua* 'to change', 欠 *ch'ien* 'deficient', inverted becomes 旡 'breath unexhaled', 子 *tzu* 'child' inverted becomes 去 *t'u* 'birth of a child'". While there are no doubt characters which are inverted or deflected forms of other graphs, and while it is possible that such characters happen to be *CC* (e. g. 丿 and 乀, 子 and 去, etc.), it does not mean that such deflections or inversions are the formal characteristic of a *CC*. Deflection and inversion are treated in *SW*, but they fall in the category of *hsiang hsing* or *chih shih*. If they were a new formal principle of graph formation, with special name *CC*, it is surprising that the *SW* definition did not just say so, using such an expression like *Yu-chuan tso-hui*. Moreover the *SW* example 考老 is not easily explained by deflection or inversion; these characters are, as a matter

of fact, analyzed as *Hsh* and *hui yi;* it is not probable that in this classical example, the deflexion or inversion process did apply even to the two bottom elements of 考 and 老 (as some authors think)[6], for they are not the same graphic element (inverted or deflected); these graphic elements have been satisfactorily and completely explained otherwise. (Cf. infra p. 152ff.)

2) *Chuan chu*, a general graphic principle? Yetts (*op. cit.* p. 7) says in his explanation of *CC* that "the sharing of one immutable element by all the characters of a certain group manifests their general kinship in meaning as well as in form, the different shade of meaning amongst members of the group, signified by respective changes in position of another (variable) element in relation to the common (immutable element)". This explanation practically coincides with that of some Chinese scholars who take the *CC* as a principle of classification only, by virtue of which all graphs with the element 老 (shortened 耂) are grouped together in *SW*. It is not clear at all how many different shades of meaning could aptly be expressed by changes of position, additions, inversions or deflections, and how they graphically represent such a differentiation. The variations obtained are very limited. Most of all, the example 考老 illustrates this theory very poorly. The theory is of little significance and value unless it be extended in the sense of K'ung Kuang-chü 孔廣居 (T. Ch'ien-ch'iu 千秋 H. Yao-shan 瑤山). K'ung's theory (SWKL, Intr. p. 109 sq,) considers the *CC* not as a principle of character structure on the same level as the *hsiang hsing, hui yi*, etc. nor as another formally distinct principle opposed to the principles 1–4, but as a very general underlying principle of writing applying to *all* characters. This *CC* principle is active in the pictographic signs as it produces different graphs like 上 and 下 ; it is active in the same way to form different *hui yi* characters, etc. This theory, however, is farfetched, and is not proved in detail or by any examples; its provides nothing new for the understanding of the particular structure of the graphs. Moreover, all authors see a definite logical order in the sequence of the *liu shu.* 1) pictograms 2) compound characters partly with sound elements (*Hsh*) or completely pictographic elements (*hui yi*), 3) borrowings, 4) *CC*. If the *CC* were a general graphic principle underlying all graphs, it should logically precede the others.

3) A rather original explanation, based on the graphic aspect of the characters, is that proposed by Wang Yung-pao 汪榮寶 T. Kun-fu 袞甫 (SWKL,

---

(6) W. P. Yetts follows this theory when he speaks of "the deflection or inversion of the lower element about a pivotal axis."

Intr. p. 208 sq.). On the basis of the example 考老 , Wang sees in the CC a principle of graphic composition the role of which consists in changing a given character by substituting one element by another, or through curtailing or simplifying of a character, then by adding another graphic element (轉注者以改字爲造字者也). Thus in 老,匕 is dropped, 丂 is added to form a synonym 考. Similarly, in 畫 'limits of a field, limited field', 田 is dropped and 日 is added to make 晝 'daylight—a meaning somehow connected with 畫, as the daylight is 'limited' by the night (SWKL, 1277). Wang gives several other examples 羍→㹩→�ürgencommandés, 鰲 . 𦣻→眉→省 . 轟 simplified to 冉→再, 畲 . 筋→a) 劳→ 筎 ; b)→𦟎→筋 . 高→髙→𪪺 , →亭→毫 etc.

It can be seen immediately that this theory takes the CC as a special group of *hui yi* or *Hsh*, where either one of the constituent parts is simplified. Yet in *SW* there are many such characters among the *Hsh*, where either the signifying or the phonetic element appear in shortened form, but *SW* nevertheless calls them *Hsh*. The same is true for the *hui yi* characters, analyzed in *SW* by the formula 从....从...., which often reproduce either one of the graphic parts in shortened form. Wang Yung-pao's answer to this objection that these characters in reality are not true *Hsh* or true *hui yi*, contradicts the *SW* text. Furthermore, the semantic connection which Wang tries to discover between the characters involved in this process of graphic derivation is often far fetched, improbable and gratuitous. To avoid this difficulty by defining the CC as a special type of *Hsh* or *hui yi*, to be set apart from the ordinary ones, is to go counter to the analysis of *SW*.

Other authors have the same theory as Wang's without any new arguments; thus Hu P'eng 胡朋 T. Wu-tang 無黨 (SWKL, Intr. p. 203 b). Jao Chiung 饒炯 too mainly confuses the notion of CC with *Hsh* (SWKL, Intr. p. 135 b); he lists some forms which he explains as changes due to additions of elements to an already existing character after some parts have been removed (開→門 →闔) or cases of doubled graphs (宜→誼), and tautological additions of signifying parts (畫→劃). Often these authors adduce examples that may be true CC (轟 & 再, 開 & 闔), but they failed to point out the true nature of the principle of CC.

4) *Chuan chu*, a principle of classification? Another opinion is proposed by Yeh Chün 葉潯 T. Che-ch'en 哲臣 (SWKL, Intr. p. 204 sq); to this author, CC seems nothing more than a special principle concerning the sequence in which graphs are listed in the dictionary. Starting from the idea that CC

characters imply some semantic connection, he considers as CC those characters which are discussed in SW under a particular division, which in view of their graphic structure is exceptional. E. g. 茻 and 糾 have a meaning which is basically the same as 丩, and are therefore not listed under 艸 or 糸, but under 丩; 鉤, 筍 and 拘 are semantically mere variants or derivations of 句, and therefore do not belong to the SW divisions 金, 竹, 手 but to 句. This observation itself is correct and may have led him to deeper insight in the significance of the CC, yet, he failed because he paid attention only to *one* aspect of some CC cases.

3. *Chuan chu, a principle of phonetic derivation?*

Some authors find the explanation of the CC, taken as just another principle of graphic structure, parallel to the four first principles, in the phonetic side of the word. Often they confuse the CC with the *Hsh* cases, and bring them under a new group, the CC; or they present CC as a special category of characters developed through derivation of sound. One defender of this theory, Jao Chiung 饒炯 writes 轉注本用字之後之造字一. 因篆體形晦義不甚顯而从本篆加形加聲以明之 "CC really is a case of characters made from other characters already used; because the graphic structure of the seal script was obscure and its meaning not very clear, another signifying or phonetic element was added to make it clear." It has already been pointed out that the addition of another signifying or phonetic element could not keep such a character distinct either from a *hui yi* or a *Hsh* respectively. Jao Chiung's examples are mostly *Hsh* graphs, which are semantic derivates of the orginal graphs: 口→圍, 民→氓 etc. He observes that the CC are different from the *Hsh* because they contain the same fundamental meaning (必包本義). This is not true, for the example of SW, 考 is analyzed by SW as a *Hsh* but it does not show any semantic connection with 丂, and as 考 is *Hsh* and CC at the same time, the formal difference between CC and *Hsh* must be found somewhere else.

Already in Sung time this confusion was present in the theory of Cheng Ch'iao 鄭樵 T. Yü-chung 漁仲 (1104–1162) who wrote 諧聲轉注一也; 役他爲諧聲, 役己爲轉注 "*Hsh* and CC are one thing; if it serves another, it is a *Hsh;* if it serves itself, it is a CC." This cryptic formula is understood by Hu Wen-yü as follows (SWKL, Intr. p. 156) "If it uses another character to indicate the sound [e. g. 也] but keeps its own meaning [i. e. 他] it is a *Hsh*. If it is identical in meaning with the character [i. e. 老] but takes another phonetic

element [i. e. 丂 in 考], it is a *CC*." Here too we have merely two graphic analyses of characters which do not show why one *Hsh* character belongs at the same time to another class distinct from *Hsh*.

Chang Yu 張有 T. Ch'ien-chung 謙中 (Sung) has difficulty distinguishing *CC* from *chia chieh*, when he writes (SWKL, Intr. p. 155 b) 轉注者展轉其聲注釋他字之用也. 如其無少長之類...叚借者, 因其聲借其義. 轉注者, 轉其聲注其義. "A *CC* is a [word] developed or developing into [another] sound and interpreted for the use of another character [word], like the characters 其, 無, 少, 長....; a *chia chieh* is a character which along with the sound, borrows it for another meaning. The *CC* develops a [new] sound, and interprets its meaning." The examples show that Chang Yu thought of *CC* as a variant reading or tone difference of one character for a different meaning (長 '*chang, ch'ang*: grow, old', etc.) This, however, cannot be applied to the classical *SW* example 考老.

In Ming time, Chao Ku-tse 趙古則 (SWKL, Intr. p. 156) repeats the same text of Chang Yu and applies it exclusively to various tones and readings, e. g. 惡 'to hate, bad', etc. His examples fail to agree with *k'ao-lao* of *SW*, and though the *SW* example, as will be shown, is one of etymological relationship between cognates, and therefore has a certain sound similarity, this alone does not account for the *CC* of *SW*. Also Yang Shen 楊慎 (SWKL, Intr. p. 195) mentions various characters which he explains as *CC* because they possess more than one reading or different tones. This theory was followed by Ku Yen-wu 顧炎武 T. Ning-jen 寧人 , H. T'ing-lin 亭林 , Chiang-shan-yung 蔣山傭 (1613–1682) (SWKL, Intr. p. 196).

4. Chuan chu, a semantic principle.

From the discussion of the above mentioned theories, it appears that *CC* does not play any part in the graphic structure of the graphs, but that the formal significance of the *CC* must be some aspect connected with the meaning of the words represented. Here again there are different theories and opinions.

1) General formulations.

There are many authors who have given general formulas stressing the semantic aspect in the *CC* as its formal significant factor, yet, for some reason or other, did not develop this idea into a complete theory which would explain all the implications. Mao Huang 毛晃 (Sung) says (SWKL, Intr. p. 128) 轉注謂一字數義展轉注釋而後可通也 "The *CC* is said to be a case, where several meanings of one character evolve and develop, are derived and explained

[from it] and can then be used for each other". This is correct, if these several meanings are represented by different characters. The same formula is given by Chang wei 張位 (Ming). Hsü Shao-cheng 徐紹楨 T. Ku-ch'ing 固卿 writes (SWKL, Intr. p. 140 sq) 又於形事意聲之外別制轉注假借以通其變. 轉注者, 因其意而輾轉訓釋此字. 求之此字最始之義, 則無不相因而生, 所謂建類一首同意相受 也. 假借者, 因其聲而假借以爲他字. 求之此字本有之義, 不必相因而生, 所謂本無其 字依聲託事也......制字則轉注假借無非其事意聲之文......古人制字之初, 既一義 轉爲數義, 一字假借爲數字, 則字雖少而自可應用不窮. 其後孳乳寢多, 又取所轉之義 所假之事, 別制一字以當之, 因而轉注之中復有轉注. "Furthermore, besides the *hsiang hsing, chih shih, Hsh* and *hui yi*, there are specially established *CC* and *chia chien* in order to unite them in their different changes. A *CC*, following the meaning and developing it, interprets and defines it as this [other] character. If one investigates, this [new] character in its earliest meaning, it has nothing which is not mutually connected [with the first] and from which it originated. That is what is called 'To establish their meanings under one head, and mutually connect their meanings.' A *chia chieh* is a case where one following its sound borrows it for another character. If one investigates, this character's original meaning must not in any way be related to and originate from the first. That is what is said 'Originally there is no such character, and relying on the sound, one entrusts it [the word to its sound]'......In the structure of the characters there is no *CC* or *chia chieh* which is not already a *chih shih, hui yi* or *Hsh*. "......" The ancients at the origin of the character making, as soon as from one meaning they developed several meanings, and borrowed one character for several characters [i. e. other words], though [the available] characters were few, they still could naturally apply them without end, and from then on they developed and increased in number."

Kan Yü 甘雨 T. Tzŭ-k'ai 子開 (Ming) has even a shorter formula which can be explained according to the correct meaning of the *CC* 假借非本字, 轉注非本意 (SWKL, Intr. p. 1566) "*Chia chieh* are not the original characters [i. e. they are characters taken for their sound to stand for another word of identical sound]; *CC* are not the original sound [i. e. they are cognate words derived from another, with similar sound, and written by another character]."

Chin Yüeh 金鉞 writes (SWKL, Intr. p. 185) 異字同義曰轉注, 異義同字曰 假借; 有轉注而數字可一義也. 有假借而一字可數義也………故轉注者於六書中觀其 會通也 "......Different characters with identical [or similar] meaning are

said *CC*......Different meanings [i. e. words] represented by the same charac-
ter are called *chia chieh*. If one has a *CC*, several characters can have one
meaning; if one has a *chia chieh* one character can stand for several
meanings [i, e. words]......Therefore, the *CC* principle within the six princi-
ples of writing [has a role] which regards their reuniting [in one word stem]."
Though the author uses a vague way of expressing his ideas, his formulation
would not make sense in another translation.

    Wang Ying-tien 王應電 T. Chao-ming 昭明 (Ming) writes 轉注者, 聲出於天,
或有餘, 或不足焉. 聲之有餘也, 一義而合為一聲; 不能聲為之制字也. 故以一字而轉為
數聲轉注之, 謂之轉注 "A *CC* is [as follows]: the sound [of a word] originates from
nature, sometimes, it is amply sufficient, sometimes it has not enough. When
the sound is amply sufficient [to express all shades], then there is one
meaning and it is united with one sound [one word, one character]. If it
cannot be so, then the sound [of the word] makes a [new] character for [the
cognate meanings]. To develop and to derive it [i. e. the meaning and the
new words] that is called *CC*." Some authors understand Wang Ying-tien's
formulation as an exposition of the theory that the *CC* principle is limited
to cases where a word has different tones for different meanings, but it can
also be understood as a process by which newly derived words are represented
by another character.

    Many of these general formulations are short and vague, and though
they can be understood in the correct way, they often lead these same
authors or their followers to serious errors, because they had not sufficiently
developed the significance and role of every element present in the *SW*
definition.

    2) Hsü Tu-jen 許篤仁 (SWKL, Intr. p. 209 sq.) sums up his theory saying
同一意義之文字恆有變動轉移曰轉 "When characters which have a similar and
related meaning, and mutually have changes and developments [in sound], this
is said *CC*." But by his examples Hsü indicates that he considers as *CC*
such characters which show some common ground in the semantic content,
but can not be expected to have any phonetic relationsip. Thus he takes
the characters 皇, 帝, 王, 君 or 哂, 喜, 欣, 歡, 悅 as *CC*. Though he
knew that *CC* must be semantically related, his theory remains too vague
and fails to take into account the other factors necessary for a *CC* in *SW*.

    3) *Hsün-ku* (訓詁) theory. This theory has been followed and defended
by the most outstanding Ch'ing scholars like Tai Chen 戴震, Tuan Yü-ts'ai

段玉裁，Wang Nien-sun 王念孫，Ch'ien Ta-hsin 錢大昕，Kui Fu 桂馥，Wang Yün 王筠 and others. The name of the theory is taken from the summary formula of Tuan Yü-ts'ai 轉注即訓詁．字反覆相訓爲轉注．數字合爲一訓亦轉注 "CC that is the same as *hsün-ku*. Characters which repeatedly and mutually define each other make a CC. When several characters unite into one definition, that too is a CC." This theory is based on the study of the SW example *k'ao lao* and the philological studies on phonetic groups and rhyme classes of characters which these scholars applied in various philological problems in their commentaries on the classical texts. The *hsün ku* theory has been widely followed, but not always with the same extension, sometimes with serious limitations and modifications. However, it was foreshadowed before already by others who explained the terms involved in the SW definition. Thus for instance, the Sung commentator Hsü Ch'ieh 徐鍇 T. Ch'u-chin 楚金 (920-974) writes (SWKL, Intr. p. 121) 轉注者，建類一首，同意相受；謂老之別名有耆，有蠢，有耈，有耄，又孝子養老是也．此等字皆以老爲首，而取類於老；則從老轉注之．言若水之出源分岐別派爲江漢，各受其名而同於一水也． "The definition of CC [saying] 'Establishing a category [of similar graphs] under one head, by their identical meaning they are mutually related', means that, among the synonyms of *lao* 老 there is 耆, 蠢, 耈, 耄 etc; further such is also 孝 [defined as] 'the son feeds his old [parents]'. All these characters take 老 as their head [of the division in SW] and take their semantic grouping from 老 and consequently are [made up] from 老. CC is said to be like the source of the water which divides and splits up into separate branches to form rivers like Chiang or Han; each receives its own name, but originally they are alike in the one water [they have]."

This explanation of Shu is in nothing different from that of Chiang Shêng 江聲 T. Shu-yün 叔雲, H. Liang-t'ing 艮庭 (1721–1799), whose theory is summed up as follows (SWKL, Intr. p. 204 b) 轉注如挹彼注茲之注．老字以爲部首．所謂建類一首，考與老同意．故受老字而從老省．考字之外如耆蠢壽耈之類，凡與老同意者，皆從老省而屬老．是取一字之意以槼數字．所謂同意相受．叔重但言考者，舉一以例其餘爾．由此推之，則說文解字一書凡五百四十部，其始一終亥五百四十部之首，所謂一首也． "CC [as a term] is like the pouring out [i. e. deriving a word]: to draw water from that and pour it into this. One sets up the character 老 as the head of the division. This is called 'setting up characters of similar meaning under one head'. *K'ao* has the same meaning as *lao* and therefore is connected with *lao* and among the characters derived from a shortened form of *lao*,

besides *k'ao,* there are characters like 耆, 耋, 壽, 耇. All characters that have the same meaning as *lao,* are derived from a shortened form of *lao* and depend from it. This is to take the meaning of one character to unite and generalize the meanings of several characters. This is what is called 'their identical meanings are mutually related'. That Shu-chung (Hsü Shen) only speaks of 考 is that he sets up only one character to illustrate all the remaining cases; extending this [from this example], then each of the 540 divisions, from 一 till 亥 in the whole *Shuo-wen chieh-tzŭ* is what is called one division [like 老]."

Chiang Sheng sets no limits in the application of the *CC* principle, so that all characters listed in *SW* with the same or similar definition in the division are *CC,* even when they do not all fulfill the condition of the *mutual* definition. The latter criticism was clearly made by Yeh Teh-hui 葉德輝 T. Huan-pin 煥彬 H. Chih-shan 直山 (1884-1927)[7].

The explanation proposed by Tai Chen 戴震 T. Shen-hsiu 愼修 H. Tung-yüan 東原, Kao-ch'i 杲谿 (1724–1777) starts from the example in the *SW* definition, which he compares with the definitions in *Erh ya,* chapters *Shih hsün* and *shih ku* (SWKL, Intr. p. 123 b) 轉注相爲注, 猶互相訓. 老注考. 考注老. 爾雅釋詁有多至四十字爲一義者即轉注之法. 故一字具數字之用曰叚借. 數字共一字用曰轉注. "The *CC* characters act mutually as explanations and are like mutual definitions. *Lao* is explained as *k'ao, k'ao* is explained as *lao. Erh ya* (Chap. *Shih ku,* no. 3) lists as many as 40 characters with one meaning; this is the method of *CC.* Therefore the use of one character prepared for several charactes [i. e. words] is called *chia chieh;* the use of several characters united in one character [i. e. one meaning, in one division of *SW*] is called *CC.* "......(SWKL, Intr. p. 113 b) 轉注者, 其義可以轉相注釋, 如爾雅釋詁釋訓等初哉首基之類皆始也, 而始亦可訓初. 許云轉注考老是也. 老部老字注云考也. 考字亦注云老也. 則知始也者建類一首也, 初哉等皆同意相受也. "*CC:* their

---

(7) In the biographical note on Chiang Sheng by Hiromu Momose (A. W. Hummel, *Eminent Chinese of the Ch'ing Period,* 1644–1912, Washington, vol. I, p. 140) credit is given to Chiang Sheng for his important contributions in the solution of the problem of the *CC,* and for having passed his notes to Tuan Yü-ts'ai. However, Tai Chen has proposed this theory as early as Chiang. It seems that only Wang Yün has stated all the various conditions and limitations of the *CC* definition in *SW* in the clearest possible way. Hiromu Momose bases his statements on Li Ching-kao 黎經誥, *Hsü-hsüeh k'ao* 許學考 (1927), 15/33a, 40a, 17/8 b; Hashimoto Naribuni 橋本成文, 清朝尚書學 in *Kambun Kōza* 漢文講座, vol. v, 1933 and Takata Hirotada 高田周忠, 轉注考證 in *Kangaku* 漢學, vol. I, nos 1–7. I have not been able to consult the latter two works; curiously enough, Takata does not quote Chiang Sheng in the *Introductory Volumes* to his *Kochūhen* (Tokyo 1919), but follows the theory of Huang Yi-chou 黃以周 (cf. infra, p. 160).

meanings: can be turned and explain each other like in *Erh ya,* chapters *Shih ku* and *Shih hsün,* where [*Erh ya,* I, 1, no. 1] *ch'u, tsai, shou, chi* and other words of this semantic group all mean *shih,* and *shih* too can be explained as *ch'u.* Hsü says *CC* are [cases like] *lao* and *k'ao.* The character *lao* in division *lao* is explained *k'ao,* and the character *k'ao* is also explained *lao;* then we know that the definition 始 [in *Erh ya*] plays the role [expressed in the formula] 'to set up the words under one head', and *ch'u, tsai* etc. are all mutually related by their identical meaning."

Tuan Yü-ts'ai 段玉裁 T. Jo-ying 若膺 H. Mou-t'ang 懋堂 (1735-1815) has not changed this theory in its essentials. He says (SWKL, Intr. p. 128) 建類一首, 謂分立其誼之類而一其首, 如爾雅釋詁第一條始是也. 同意相受, 謂無慮諸字, 意恉略同, 誼可互受相灌注而歸于一首. 始初哉首基肇祖元始俶落權輿其于誼或近或遠, 皆可互相訓釋而同謂之始是也. 猶考老者, 其顯明親切者也. 轉注中可包叚借, 必二之者, 分別其用也. 既叚借而後與叚誼之字相轉注. 未叚借則與本誼之字相轉注也. "'*Chien lei yi shou*' [definition in *SW*] means to divide and set up the categories of meanings and unite them under one head, like in *Erh ya,* chapters *Shih ku,* first entry, defined *shih.* '*T'ung yi hsiang shou*' [of the *SW* definition] means that no matter the meaning of all the characters, they have a general common idea, and can be mutually connected and, poured out, they return back under one head, like *ch'u, tsai. shou, chi, chao, tsu, yüan, shih, shu, lo, ch'üan yü.* These characters, whether in their particular meaning near or distant, can all mutually define each other and can equally be said to mean *shih.* It is like *k'ao* and *lao,* which make a most clear and closely fitting example. Among the *CC* one can also include the *chia chieh,* but it is necessary to separate the use of both principles. After a *chia chieh* is made, then later the character of the borrowed meaning is mutually reversed and explained [by the first word]. When it was not made as *chia chieh,* then it is reversed and explained as *CC* with the character of the original meaning."

Wang Yün 王筠 T. Kuan-shan 貫山 H. Lu-yu 篆友 (1784–1854) says (SWKL, Intr. p. 128, b) 建類者建立也. 類猶人之族類也, 如老部中字皆老之類. 故立老字爲首. 是曰一首. 老中字皆以老爲誼而非相受若老者考也……是知以老注考, 以考注老, 其意相成, 故轉相爲注, 遂爲轉注之律令矣 "In the expression '*chien lei*' *chien* is *li* 立 'to establish', and *lei* is like *lei* of 'human races'. Like in the division *lao* all characters are of the [semantic] class of *lao,* therefore one sets up the character *lao* as the head: this is called 'one head'. The characters in the division *lao,* all make up their meaning from *lao,* but do not all fulfill the

condition of mutual connection like [in the formula] '*lao* is *k'ao*',......Then, knowing that *lao* is explained by *k'ao* and *k'ao* by *lao*, the meaning is mutually fixed and completed; therefore reversing the characters back to each other and [making them] mutually serve as definition, this consequently is the rule of the *CC*."

Several criticisms were expressed against this *hsün ku* theory. a) One is that the *hsün ku* practice found in *Erh ya* is falsely identified with the meaning of *CC*. Though the defenders of the *hsün ku* theory did not have misconceptions about the true meaning of the term *CC*, and knew that practically it was meant for words which were used to define each other in *SW* within the frame of one and the same division of *SW*, they were led through this comparison with the *Erh ya* definitions to extend the application of the *CC* beyond the limits of the *SW* definitions. The *SW* dictionary never connects such a number of similarly defined words like *Erh ya*, unless one goes as far as to consider as *CC* all words of the same division that happen to be defined in the same way; strictly speaking the *CC* in *SW* refer only and exclusively to word *pairs* that mutually define each other. This is clearly brought out by Wang Yün.

b) It has been shown that among the words listed in the *Erh ya*, many do not originally have the intended meaning; they often have this meaning only through *chia chieh* usage, or through semantic extension and connotations, which exceed the basic meaning of the word.

These criticims were made by many authors who rejected the *hsün ku* theory entirely, in spite of its positive points and in spite of the fact that the comparison of *CC* with the *hsün ku* process is misleading because of the name only. Moreover, these critics were not able to substitute a better theory; on the contrary, because of some exaggerated application of the theory, they rejected also the important factor that the *CC* are indicated by characters which are used as mutual definitions of each other as they appear in *SW* only and not in *Erh ya* or any other source. The critics of this theory fell into the other extreme. A case is the theory of Chu Chün-sheng.

4) Theory of Chu Chün-sheng. According to Chu Chün-sheng 朱駿 聲 T. Feng-ch'i 豐芑, H. Yün-ch'ien 允倩 H. Shih-yin 石隱 (1788–1858) the condition of the *SW* definition, expressed by the words '*t'ung yi hsiang shou*', is only fulfilled in the divisions of *SW* like 老, 履, 疒, 廌, but not in divisions like 木, which includes words for plants and wooden objects of

such wide variety that they cannot be related in any way, or in divisions like 水 , which lists names of places and things concerning water, or 日 which has words for sun and stars but also concerning time, etc. Though all these characters are under the same heading of divisions, there is no common meaning in them. It is clear that Chu Chün-sheng attacks here a *hsün ku* theory of widest application and extension where almost all words under the same division would have to be forced under one basic meaning, disregarding entirely the limitation imposed by the *SW* definition itself that the *CC* are really word pairs that mutually define each other.

Originally, according to Chu Chün-sheng, a *Hsh* or a *CC* are really not different (SWKL, Intr. p. 197) 轉注者, 體不改造, 引意相受, 令長是也. 叚借者, 本無其意, 依聲託字, 朋來是也. "*CC* is like 令 and 長 where without change in the graphic form of the character, [one word] stretches its meaning towards another meaning and relates them together. *Chia chieh* is like 朋 and 來 , which do not originally have this [intended] meaning [viz. 'friend, to come'], but relying on the sound they entrust [the word to these characters]." Chu further explains his ideas (SWKL, Intr. p. 129) 凡一意之貫注, 因其可通而通之爲轉注; 一聲之近似, 非其所有而有之爲叚借. 就本字本訓而因以展轉引申爲訓者曰轉注. 無展轉引申而別有本字本訓可指名曰叚借 "Whenever connections and derivations in meaning are interchanged and identified with each other, because they can be used for each other, it is a *CC* case. Whenever in a close similarity of sound there is no such character [for the intended meaning] but one takes this same character, it is a *chia chieh*. Cases where, holding to the original character and the original definition, one follows the extension [of meaning] through development of content and uses [a character] for another meaning are called *CC*. When there is not extension [of meaning through semantic development], but one specially takes an original character with its own meaning that can stan dfor the [intended] word, then it is called a *chia chieh*."

Chu therefore concludes 轉注無他字而即在本字, 故轉注居叚借之前. 叚借有本字而偶用別字, 故叚借附六書之末. "In the *CC* there is no other [second] character but it is residing in the original [one] character itself; therefore *CC* is placed before the *chia chieh* [in the sequence of the six principles]. The *chia chieh* [means] there is an original character but accidentally one uses [it for] another character. Therefore, *chia chieh* is listed as the last of the six principles."

Chu does not only consider the definition of *CC* in *SW* as definitely wrong, but he prefers another sequence. He has no proof to reject the *SW*

definition and to substitute his own. Though there are semantic shifts and changes in the meaning of words without therefore having new characters invented for every new shade of meaning, yet such cases are not the *CC* meant in *SW*. While in the examples of the other principles of writing, *SW* always cites wo examples (日 and 月, 上 and 下, 武 and 信, 江 and 河) of which each separately illustrates the meaning of the principle, there is only one example for the *CC*; the two characters 考 and 老 are meant as a word pair. Chu had also to change the definition of *chia chieh* in *SW* which he linited to some particular cases. In SWKL, (Intr. p. 122 b) he lists examples of the various kinds of *hsiang hsing, chih shih, hui ki* and *hsing sheng;* it is striking that he could only list a small number of examples that supported his theory of the *CC*. He has not been followed by any other scholars; Tseng kuo-fan 曾國蕃 (SWKL, Intr. p. 216) and Huang Shih-san 黄世三 (SWKL, Intr. p. 198) both wrote a short note to refute his theory.

II. THE CHUAN CHU EXAMPLE OF SHUO WEN

1. Definition and terminology.

From the previous review of theories, it appears that all Chinese scholars started from the *SW* definition as it stands; only Chu Chün-sheng boldly construed a different one. The variety of opinions must partly be explained by the fact that often in their interpretation these scholars failed to consider all the elements entering in the definition, or stressed any particular aspect at the expense of others, or finally misunderstood the true nature of the example *k'ao lao* of *SW*.

It is necessary now to gather all the positive and correct aspects brought out by the earlier studies, and to check them again with the definition. The *SW* text says 轉注者, 建類一首, 同意相受, 考老是也. "What is called *CC* [i. e. development and derivation] is like [for] the characters *k'ao* and *lao:* one sets up [various graphs of similar semantic] categories under one head, which by their identical etymology are mutually related." This definition is composed of a set of terms which are often taken as '*supposés connus*' by many authors. Some of those terms are touched upon only accidentally or incompletely. One scholar, Hsü Tu-jen 許篤仁 (SWKL, Intr. p. 209) has paid special attention to the meaning of each one of the terms in this definition.

A. The name *chuan chu* itself demands an explanation. This term does not seem to be known in any other context but in descriptions of water

courses.   Thus *Shui-ching chu* 江水翼縣轉注. 故有東渡西渡焉 "The water of the [P'u-yang 浦陽] Chiang goes wing-like around [Yen 剡] hsien, turns around and flows away.   Therefore, there is an eastern and a western ferry crossing." In the *Lien-hua lou ming* 蓮花漏銘 'Inscription of the lotus water clock' by Hsia Sung 夏竦 (Sung 984-1050) we read 玉虬吐水, 分灌兩壺; 金龍轉注, 下激衡渠. "The jade dragon spouts out water which divides and pours into two vases; the golden dragon makes it turn and flow away, it goes down in a torrent into a cross wise running drain."

In the definition of *SW* the same expression descriptive of diverted, turned off streams of water, is used figuratively and in analogy for some graphic, phonetic or semantic process of word or graph derivation.   However, that this term does not mean a process of graphic change by 'inverting or deflecting' of graphs has been shown already; it can be added here, that though such changes are observed and appear to be one of the processes for the formation of new graphs, often mentioned in *SW*, they are not described by the term' 轉 'to turn around, roll over on the side' but by the term *tao* 倒 'to turn upside down' or by the term *fan* 反 'to turn to the other side, turn away'.   Some authors in the text quoted above explain *CC* by the expression 輾轉 (Hsü Shao-cheng, p. 142) or also 展轉 (Mao Huang, p. 141) 'to unroll and revolve, to unfold, to roll out, extend'.   These explantions do not necessarily imply the inverting of deflecting of graphs, but may express as well the developing and extending of meanings.

CC then expresses a relation of a pair or sometimes a chain of words represented by distinct graphs, not a relation between the graphs or a process of graphic structure itself.   This relation of the words of the *CC* pair or chain is phonetic and semantic at the same time or in one word etymological. Some authors in their criticism of the *hsün ku* theory objected that it did not take the term *CC* in its true sense, but as simply meaning 註釋 'comment and explain'.   But as a matter of fact, the text of Tuan Yü-ts'ai quoted above shows by its expression 灌注 'to pour out' that they understood the term *CC* correctly.   At the same time they knew that this etymological relation was marked in *SW* by a practical device consisting in the mutual definition of at least two graphs listed in the same division.   The comparison with the *hsün ku* points simply to that fact, and means that in the same way as many *hsün ku* identifications in *Erh ya* or elsewhere refer to cognate words, so the *CC always* indicates cognates in *SW*.

B. '*Chien lei yi shou*' has been well explained for instance by Wang Yün's text quoted above. The condition expressed here requires that the members of the *CC* pair must have a semantic relationship which is more than merely syonymous. It is a relationship shown already partly in both of the *CC* characters by the their graphic structure, since they must belong graphically to the same division of *SW*. They have some graphic element which expresses a common ground in the semantic content. But besides the mutual definition and the close phonetic similarity of the words, the semantic relationship must be so close as to permit a common graphic structure of the characters. Though, as will be pointed out later, this graphic element, by which the *CC* characters fall into the same *SW* division, is a condition that could easily be fulfilled or remediated if not already fulfilled in the commonly accepted graphs, nevertheless it is a condition, considered essential, as it is clearly expressed in the SW definition of the *CC*; it is probably intended to point out that among the various cognates, the *CC* represent specially close cognates, precisely because besides the phonetic and semantic connection, even the graphic representation or conception of the words, showed a close relationship within the *CC* pair.

C. '*T'ung yi hsiang shou*'. In his explanation of this part of the definition Hsü Tu-jen (SWKL, Intr. p. 210 a) defines 受 by 繼 and 繼續 'to continue, connect'. In its ordinary and most frequent usage 受 means 'to receive'. Hsü takes his example from the *Yi ching, Hsü kua* (序卦) where it is repeatedly used (cfr. Harvard Yenching's *Concordance to Yi Ching*, p. 77–8) to express the mutual connection and sequence between the various hexagrams. Probably the meaning 'to receive' has been extended to mean 'to receive' in the sense of 'to take over, to continue', and in the *CC* definition in *SW* it indicates that the meaning of one of the two members of the *CC* pair is a natural 'continuation or extension', a semantic 'development' of the other. *T'ung yi* however cannot be understood simply as 'same meaning' i.e. mere synonyms as was maintaimed for some cases by Hsü Tu-jen himself (cfr. supra p. 143) but rather 'the same etymon'. The example *k'ao lao* indicates more than mere synonymity, but also a close phonetic similarity which can be reduced to a common word stem, as will be shown in the following pages. Yet the definition would not have expressed this essential factor of the *CC* notion clearly apparent through the study of the example *k'ao lao*, unless the term *t'ung yi* is really meant for 'same etymon'.

The term '*T'ung yi*' leaves one peculiar difficulty to solve. This same term is used in *SW* in some of the explanatory texts of the graphs, and here clearly refers to some graphic aspect of the graphs. Thus it is said that 巫 與工同意: "巫 is '*t'ung yi*' with 工", and many other examples can be cited; e.g. 瞽 and 美, 爾 and 爽, 皿 and 豆, 朵 and 采, 芈 and 牟, 官 and 師, 午 and 矢, etc. What is meant here is that the original graph of these pairs, e.g. 爾 and 爽, have something in common, probably not only graphically but also semantically, as in 芈 and 牟, where the top element is meant to represent the 'air' and consequently to represent the 'sound' made by the animals (羊 and 牛). The stress here is on the common graphic element with a general indication to some similar semantic role in the graphic structure, but it does not point to a common etymon, as it is implied in the definition of *CC*. The term '*t'ung yi*' is consequently applied to a different level (graphic structure as against semantic connection based on phonetic similarity) and refers to two essentially different notions.

In conclusion, the term *CC* is a figurative use of an expression meaning 'to turn off and flow away, to turn off and pour out' for the process of 'development [of meanings] and derivations [of words], that are supposed to be etymologically related, and represented by graphs that have some graphical element in common so as to be listed within the limits of the same division of *SW* and explained by a mutual definition.

2. The example of Shuo wen, k'ao lao 考老.

The text in SWKL 3758 says 老, 考也; 七十曰老. 從人毛匕, 言須髮變白也. 凡老之屬皆从老 "*Lao is k'ao;* at the age of 70, one is said *lao* (old). From 人 man, 毛 hair and 匕. It means that beard and hair turn white. All words ranged under 老 are [graphically] derived from 老." The Small Seal graph shows that the top element is the same as that of 毛; the other elements below 毛 are explained as 人 and 匕. Tuan Yü-ts'ai notes that the analysis was originally 从毛匕 (read as 化 'to change') and that the graph for long hair (長毛) does not contain the element 人. As a matter of fact the early graphs for 長 show a man standing with flowing hair (ᚠ) similar to 老 without the element 匕; the two legs were later taken as 人. The original *SW* text may have been changed, and it probably said 从 (人) 匕毛 …. "From [人 man] 匕 changes his hair. It means to say that beard and hair of the head turn white. The earliest bone and bronze graphs (Takata, *Kochūhen* 古籀篇, 33/6. Sun Hai-po 孫海波 *Chia-ku wen-pien* 甲骨文編, Chu Fang-P'u

朱芳圃 *Chia-ku hsüeh* 甲骨學 8/5 b) are pictographs of a man with flowing hair (尤) leaning on a stick. The flowing hair is meant as an 'endomorphic phonetic', and down to *SW* time, the element 毛 may have kept this role as phonetic; the *SW* text 七毛 could also be taken as a case of 毛 'suppressed phonetic'. 毛 can be reconstructed[8] $* mog </* gmog \sim m'og \sim `mog$ (KYSH

---

(8) The reconstructions proposed in this article for various readings of characters and the pronunciations of words are indicated by the following signs. No sign precedes the Ancient Chinese reconstructions in which the values given by Kargren's *GS* and Shen Chien-shih's *KYSH* are followed. Asterisc $*$ precedes the Archaic Chinese values when following the *GS* reconstructions; / $*$ indicates any reconstruction, different from those of *GS*, and based directly on the *Hsh* connections of the phonetic series, established according to the *SW* graph analysis, *SW tu-jo* (讀若) notations, the *SM* equations and other paronomastic definitions of Han time sources. Often in the reconstructions marked by / $*$, phonetic elements are put in brackets e. g. / $*$ $(b)lôg$, to show that, though a full *Hsh* value requires b-, it is nevertheless possible that in given situations, for certain variations of the words, more simplified and further developed forms are equally possible. The full *Hsh* value is also marked sometimes $\sqrt{*}$. For the reconstructions based on the *SM* equations and definitions, reference is often made to a more detailed study on *SM*, published in *Asia Major, A British Journal of Far Eastern Studies, New Series*, vol. VI, part 2. *Notes on the Study of Shih Ming. Marginalia to N. C. Bodman's A Linguistic Study of the Shih Ming* (Abbreviated here *Notes SM*), where the words of the *SM* equations are studied from the point of view of chains of direct sound equations and contacts of *Hsh* series, to which each of these characters belong. The sign $\#*$ marks the reconstructions made on the strength of binoms and binomial sound descriptions; / $*$ / stands for all reconstructions which are not based on *Hsh* connections or *SM* and *Tu-jo* notations, but merely on dialect correspondences and supposed etymological relations between words.

  The reconstruction methods resulting in the forms marked / $*$, $\sqrt{*}$, $\#*$, / $*$ /, are explained in detail in my forthcoming work, *The Chinese Dialects of Han Time according to Fang yen*. University of California Press, Berkeley. In *Notes SM*, I returned to some key points of this theory. An important departure from the accepted theory is that the period called Archaic Chinese does not refer to the language of the Chou period. Though it is true that the finals and the vocalism of the Archaic chinese reconstructed forms are based on the rhymes of the *Shih ching* Odes, there is no proof that the final uniformization of the Odes into one rhyme system and the definite editing of the accepted *Shih ching* text goes back to the period of the Chou. In terms of reconstructions, the *Shih ching* informs us only on the finals, not on the initials. Here everything is furnished by the *SW* graph analysis and other phonetic descriptions used in *SW*. The graph analysis in *SW*, logically applied and followed, can be checked and completed by the *tu-jo*, the sound phrases, the analyses of variant graphs, as well as by dialect words, and the correspondences between binoms and monosyllabic forms. This results in a picture of a linguistic period, called here Archaic Chinese, which in terms of absolute time, is much later than Karlgren's Archaic Chinese, and which in terms of reconstructed forms shows a far more archaic structure than those in *GS*. The consequent elaboration of the initials and finals, according to the *Hsh* connections indicated by the graph analyses in *SW*, results in various Archaic readings with often rich consonantal clusters, The sequence of the constituent elements entering in the cluster should not be *a priori* considered the same in every word of the same *Hsh*. Nor can one expect that every word at a given period should have developed with the same tempo, so as to obtain mechanically the same phonetic pattern as the other words. Often in the comparison of words, correspondences of cognates and dialect forms, homonymic equations of characters, it appears that some words either had a more archaic form or a more developed and simplified reading, according to meaning, or special usage. The reconstructions represent a different degree of certitude which decreases with the signs / $*$, $\#*$, $\sqrt{*}$, / $*$ /.

  As a whole the *SW* graph analysis represents a contemporary synchronic analysis of words and graphs. They reflect a reading which is that of the standard language of the time of Hsü Shen (1st cent. A. D.); the graphs are the uniform accepted script of Han time, the final stage of a uniformization started by Li Ssŭ (221 B. C.). The dialect words, known through the FY vocabulary and other sources of Han time contain archaizing but also new word formations, popular etymologies but also learned semanticizations. The more archaizing forms probably lead us back to the early Han and late Chou language; the reconstructions deduced solely from the comparison of these dialect correspondences can be taken as pre-*SW* in general, often late Chou, yet the period can not be fixed exactly. In most cases the *SW* graph analyses and sound descriptions must be explained by reconstructions that show a more archaic structure than those of *GS*, yet must be ascribed to a time much later than the said Chou period. The *SM* system points to a period of Late Han; the *GS* forms occupy an intermediary pesition between the *SW* and the *SM* forms.

no. 349, p. 421; *Notes SM*, chain xi); as a phonetic in 老 it was probably /*ˑtmog, and 老 was /**b·lôg*, Some bone and bronze graphs have the top element 'hair' substituted by a man's head with a *hat* (冃); this change too may be meant to indicate the reading, since 曰, 冒 and 帽 was *môg<//*gmôg~*ˑmôg*~*m·ôg*, and 冒 is related to 兜鍪 **tu-mi̯ôg*<‡**tmi̯ôg*. The phonetic role of 曰 and 毛 in 老 implies an alternation in the sequence of the initial cluster ·*tm-*~*b·l-*. Yet in *SM* 老 is equated with 朽 **xi̯ôg*<//*xlôg (Bodman 472, and p. 51) which suggests for 老 /*glôg<*bglôg~*b·lôg* (The *SM* readings represent a later period than *SW*). Ts'ai Yung 蔡邕 T. Po-chieh 伯喈 (133–192) equates 老 with 久 **ki̯ŭg*<//**dki̯ŭg*, 壽 **di̯ôg*<//**dˆi̯ôg* (*Notes SM*, chain iv), and with 舊 **g'i̯ôg*<//**g'lôg*.

The other word of the *CC* pair is 考 **k'ôg*. Not only the *CC* pairing itself, but the fact that the example is put in the sequence 考老 (and not 老考) seems to indicate that its sound was **k'ôg-lôg*<‡**k'lôg*~*kl'ôg*>*k'ôg*. However, 考 does not immediately follow 老, as one should expect, since this is done with the majority of the other *CC* pairs; it is separated from 老 by a series of words that also mean 'old', and may be cognates but not *CC* words in *sensu stricto*. The reason for this sequence is probably that 考 is also closely related with the next word under discussion in *SW*, 孝 *xŏg defined 善事父母者 "What is (known as) to serve his parents" i.e. filial piety; it is analysed as a *hui yi* 从老省从子. 子承老也 "From shortened 老 and 子; 子 [means] 'the son receives the older [parent]'." To this, the text of the *SW hsi-chuan* 說文繫傳 by Hsü Ch'ieh 徐鍇 adds 老省亦聲 "老 is also phonetic". Though rejected by Tuan Yü-ts'ai as a later addition, this probably is a true analysis, for the combined parts in a *hui yi* often indicate an etymological relationship, and the explanation concerning 子 in 孝 shows that 子 is taken as the semantic part in the character; hence *xŏg<//*lxŏg. Chu Chün-sheng lists a good number of paronomastic definitions of this character, from which it will be enough to quote *Li chi* (*Chi t'ung*, *Couvreur* II, 319) and *Hsiao ching* (*Shou shen ch'i*) 孝 *xŏg—畜 **xi̯ôk*~-*g*<//**dx-*, **t̂'i̯ôg*~-*k*<//**tr̂-*; 孝 was therefore /*dxŏg. *Kuan-tzŭ* (*Hsing shih*) has 孝—高, and *SM* 27/24 has 孝—成 and 槁, which is explained by the phrase 槁於義爲成，凡五材膠漆陶治皮革乾槁乃成也. "槁 **k'og*<//*tkog 'dried' as to its meaning is [the same as] 成 **di̯ěng*<//**dˆi̯ěng* (cfr. infra, p. 155) 'completed, perfected'. All things made of the five materials, glue and varnish, earthenware and cast metal, skin and hides, when they are dry (乾槁 /*dkân-tkog~*dkândkog*) then they are 成 'finished'."

The other characters 耆, 耋, 耇, 鼇, 耉, 耇, 壽, though strictly speaking not *CC* words, still show some relationship to the words *k'ao* and *lao*. 耋: 年八十曰耋，从老省从至 "When one is 80 years of age he is called 耋; from 老 shortened and 至." Some editions take 至 as phonetic, which is completely in agreement with the reading * *d'iet*. The bone graph of 耋 (Takata, *Kochūhen* 33/6 b) shows the same graphic representations as 老, except that instead of the stick to lean on, there is the character 至 or 矢 (斍), which is very probably meant as a phonetic indication. In *SM* 耋 is equated with 鐵 /* *d'iet* </* *driet*, * *t'iet* >/* *triet*,∽-*k* (*Notes SM*, chain 1). This word is certainly cognate with 老, and comparable to its special reading /* *dr̆ĕng* indicated in SM.—耆 defined 老, was * *g'i̯ɛr* </* *dg'i̯ɛd*, * *t̂i̯ɜr* </* *t̂ɜd*, * *di̯ɜr* </* *dr̆ɜd*; all these forms may go back to an initials *bdg-* *bdr-*, *btr-*. (KYSH no 386, p. 467 sq.).—耇 is defined 老人行，才相逮. 从老省，从易省. "When an old man walks [his feet] hardly move (can reach each other). From 老 shortened and 易 shortened; [易] is the pictograph of the walk (of the lizard 蝪, according to some commentators). It is read like 樹 * *di̯u* </* *dr̆ug*∽* *di̯ĕk* </* *dr̆ĕk* (易).—耇 is defined 老人面凍棃若垢 "An old man, whose face is frozen and black, as if [covered with] dust." This definition is found with minor changes in *Erh ya* and *SM*, and indicates a paronomastic definition of 耇 by means of 垢 * *ku* </* *dkug* (*Notes SM*, chain iv). It is possible that this character 耇 is nothing but a new substitute for the bone and bronze graphs which instead of the long hair of the graph 老, have the element 古 'old' * *ko* </* *dkog* (怘) (Takata, *Kochūhen* 33/6).—鼇 means 年九十曰鼇. 从老从蒿省 "When someone is 90 years of age, he is said 鼇 * *môg*; from 老 and 蒿 shortened". Some editions (based on a quotation from *Yi-wen lei-chü* 藝文類聚) write 蒿省聲. Since 蒿 is * *xog*, this is very plausible, and 鼇 is then the same word as 耄 * *mog* </* *gmog*∽*mgog*∽*m·og*∽*'mog* (*Notes SM*, chain xi).—Finally, there is 壽 already mentioned above, and 耇, 老人面如點也 "An old man whose face seems covered with spots." * *tiem* </* *t̂i̯emb* < *tn̂·*—(KYSH no 606, p. 716); it is obvious that 點 in the definition suggests this reading. The *SW* adds 讀若耿介之耿; various explanations have been proposed, among which that of Hsü Hao 徐灝 still seems preferable: 耿 is read like 簡, * *kĕng*∽* *kăn*[9]; /* *df̯i̯ɜm*∽/*/ *df̯i̯ĕn* can be compared to 耋 /* *driet* and 戌 /* *dr̆ĕng*.

(9) Hsü Hao 徐灝 T. Tzu-yüan 子遠, H. Ling-chou shan-jen 靈洲山人 in his *Shuo-wen chieh-tzǔ Tuan-chu chien* 說文解字段注箋 (SWKL 3763) cites the *San-kuo chih* 三國志, *Shu chih* 蜀志 chap. 38, Biography of *Chien Yung* 簡雍傳 (*K'ai ming* edition p. 1018/2) whose family name was really Keng 耿, and pronounced *chien* 簡 by the people of Yu chou 幽州, according to P'ei Sung-chih 裴松之 T. Shih-chi 世期 (372-451). Lu Chih-wei 陸志韋, A Phonographical Study of the *Tu-jo* Notations in the Shuo wen, *Yen-ching hsüeh-pao*, vol. 30, 1946, p. 13-279 corrects the *SW* text, by emendating 綷 for 耿, but while there is a binom 耿介, I could not find any example or meaning of 綷介. Another author, Miao K'ui 苗夔 (in *SW sheng-ting* 說文聲訂) corrects the *SW* text into 耿弅之弅.

In *FY* 1/18, 6/55 and 10/40, we find a good number of dialect words of Han time for 'old'. They can be divided into three groups. a) 眉 *mįəd* </ /* mřəd, 棃 * lįəd </ /* dlřəd (*Notes SM*, chain vi, note 53). The *ku wen* graph in *SW* and other bone and bronze graphs write 勿 instead of 刀; 勿 * mįwət may indicate a reading /* mlįəd~b'lįəd, a reading also suggested by the *chia chieh* 蓺 /* mlįəd~b'lįəd (*Hsün-tzǔ*) (KYSH no 455, p. 544) and by the binoms 眉棃 * mįər-lįəd (in *FY* 11/51 麋棃) <#* mlįəd; 艾 * ngâd </ /* mgâd[10], 蠆 * driet and 耆 /* dg'įɛd, etc;< bdg'-. b) 父 * b'įwo </ /* b'lwog, a reconstruction justified by the binom 父老 * b'įwo-lôg <#* b'wlôg, 老 * lôg </ /* b'lôg; c) 老 * lôg </ /* glôg (b- lost), 考 /* kl'ôg, 舊 * g'įug </ /* g'lug, * g'įôg </ /* g'lôg, 俊 * sįôg </ * gslôg, * sug </ * glsug (*Notes SM*, note 42), 耆鮐 * ku-t'əg <#* kt'əg, 憾鰓 * kɛg-sɛg </ * k'sɛg~ks'ɛg, 耆革 * ku-kɛk~ku-kįək, reduplicative binom /* kuk~kįək </ /* kləк?, 乾都 * kan-to </ * kntog, * g'įan-to </ * g'ntog, 公 * kung </ * zkung and 翁 * ·ung </ * z·ung (these two last words are probably variants of #* kt'əg and k'sɛg~ks'ɛg).

Karlgren (*Glosses on the Kuo Feng Odes*, gl. 374) considers 眉 of *FY* as a truncated form of the old binom 眉壽 * mįwər-dįôg, which he explains not as a dimidiation binom but as a simple compound analyzable as 'vigorous old age'. This semanticization does not exclude that the word is in reality a dimidiation of the stem #* mdřôg, easily comparable to /* / b'lôg~(b)glôg and #* mlįəd. In the same way, other binoms may show clear semanticizations, but they are learned and far fetched; thus 乾都 and 乾槁 suggest 'dried out, withered', 耆鮐 suggests 'old, dusty (垢) and scaly' (鮐). When we find 凍 combined with 棃 'frozen (hard) and black skin', it is a semanticization which was thought out later in order to explain an already existing binom * tung-lįəd <#* tnglįəd (*SM* 10/18 and *SW*), a form comparable to /* dlřəd (of which b- had dropped). Other words in *SM* are also variations and combinations of the same word stem with an attempt to explain the meaning of sounds; e.g. 胡耈 * g'o-ku </ /* dg'og and /* dkug 'dewlapped oldster', 黃耈 * g'wâng-ku yellow and old' (reduplicative form like 耆革 'old hide'), 鮐背 * t'əg-pweg (~b'wəg), probably an inversion of a form like #* bdřôg~mdřôg, and then semanticized as 'scaly back', 齯齒 * ngieg-t'įeg 'child's teeth', a variation of * g'ntog (乾都) or #* kt'əg (老鮐).

To conclude this chapter we can say that there is wide variety of dialect words and word formations for 耈 'old', due to learned semanticizations or

---

(10) 乂, phonetic in 艾, is analysed in SWKL 5658 as 从ノ从乁 (cf. infra III, 2, no 21); ノ * p'iet, 乁 * p'įwət; either one of the graphic constituents points to a labial initial.

popular etymologies. They all go back to the same basic word stems, which could be reduced to one formula with variations in the initials and finals. Among them the *CC* pair 考 /* *kl'ôg* and 老 /* *glôg* (from *b'lôg~bglôg~ b'lôg*) are the most close cognates and can truly serve as a classic example of *CC*, in the sense of words written with the same fundamental graphical element, phonetically similar, and semantically related or identical.

3. *Extensions of the strict acceptation of Chuan chu in Shuo wen.*

Several Chinese scholars have drawn up lists of *CC* pairs from *SW*, basing themselves on the definition and the classic example *k'ao lao*. All these authors first list the cases which fulfill the narrowest and strictest conditions of *CC* definition, like 芳菲也 and 菲芳也 etc.[11]

From there Hu Wen-yü extends the *CC* pairs to groups of three or four characters, such as 論, 議也; 議, 語也; 語, 論也; the three definitions form a complete circle, and they make a perfect *CC* chain of words. Hu further proposes *CC* connections between dialectal words and others. Thus 淩, 茇 也; 茇, 淩也 is a *CC* pair in which 茇 is a dialect word of Ch'u, connected with the dialect word of Ch'in 薜苢. He also mentions the various dialect words that are found in sources other than *SW*, and that can be compared with the *CC* pairs of *SW*. Very often it is clear that such words are cognates with the *CC* words, but their etymological relationship is merely based on the semantic and phonetic connections and not on the specific criterion of the *CC* principle. Hu makes a further step by including all the words which have the same definition in *SW*. Proceeding from the *CC* pair 怨: 恚, he finds that 怒 is defined 恚, and that 慈, 慢, 恨, 懟 are defined by 怨, and concludes that *all* form one *CC* chain. He does the same for many other groups. Though these characters are found in the same *SW* definition they do not define each other mutually. One may not forget that *SW* often defines several synonyms by means of one of the more common standard words like 怨 and 恚, without indicating any connections of true cognates.

Chang Tu concurs with Hu Wen-yü in listing the dialect words with the other words given as *CC*. His examples may prove to be more probable and acceptable from the point of view of phonetic similarity. He cites e.g. 芌, 苢 (Ch'i); 筥, 稍 (Ch'in); 柤, 檐 (Ch.i), etc. He further points out that

---

(11) Such lists are made e. g. by Hu Wen-yü (SWKL, Intr. 154 sq.), Yeh Te-hui (Ibidem 177), Hsü Han 許瀚 T. Yin-lin 印林 (Ibid. 199), Hu K'un (ibid. 201 sq.), Yeh Chün 葉潘 (ibid. p. 204), Huang Yi-chou (ibid. 205), Liu Shih-p'ei 劉師培 (ibid. 207) and Hsü Tu-jen (ibid. 209).

the definition may sometimes differ by some additional words, mostly when the definition is put in the form of a phrase. E.g. 梡: 楄木薪也. 楄: 梡木未析也.

Yeh Te-hui devotes several pages to the different kinds of *CC* pairs. The first extension of the strict *CC* class is that which he terms with the words of Tuan Yü-ts'ai 隔部轉注 '*CC* of partitioned (distant) division'. Among the 18 examples which he cites, one can find some valid extensions, e.g. 膺, 肎也 and 匈, 膺也. Though 匈 is not in the same division as 膺, it is a valid extension because of the identity of 匈 with 肎. In the same way 儇 and 慧 can be reduced to a regular *CC* pair, by considering 儇 as identical with 懁, and 慧 identical with 譓, or 嫢 with 譓. The same can be said for 餕, 祭酹也 and 酳, 餕祭也 since 餕 is entirely identical with 酳 which is defined 祭也. 酳連祭也. However, Yeh does not suggest any of these reasons for his extensions. Yeh's fourth group is really not different from the prior one; it contains cases where a regular *CC* pair can be discovered if one takes a shortened or augmented script variant of one of the members of the pair, or by extracting the relevant word in a sentence definition (卜, 尗兆; 贄, 質). This group is also the same as that set up by Chang Tu above. In the second group Yeh lists the words which do belong to the same division in *SW*, but which in his opinion do not belong to the same semantic group (有一首而不建類); while giving examples which are perfect cases of *CC*, such as 蓨—苗, he does not explain why he doubts the correctness of the *SW* definitions. In his third group, he brings together a special category of words which was discussed in this article, those where the *t'ung yi* formula is applied in the graphic analysis of the characters, such as 巫 and 工, etc. In spite of the identity of the term with that in the *SW* definition of *CC*, these cases cannot be taken as true *CC* pairs. Yeh also sets up *CC* words on the strength of dialect words, but he rightly limits himself to those dialect words that are mentioned in *SW* only. His last group is concerned again with *CC*, which can be set up by taking a third member or a *chia chieh* as a bridge between the two *CC* words. Thus 分 and 別; 剝 and 割 (割; 剝也; 剝, 裂也. 枲: 刻本也); 逾: 遜進也; 遜, 踰也. 踰; 越也. 蹇 and 跛 (祕, 蹇也); 但 (衵) and 裼. Some of these cases seem particularly interesting, for some *CC* words do not belong to the same division only because they have been set up as independent divisions, with their own graphic derivates; they really are subdivisions of another division, usually preceding, each group

having its own derivates. Thus 逮 and 乃, 炙 and 炮. However, one needs to use great caution not to stretch this principle of extending the CC beyond the limits of a solid probability. All groups must finally be proved by means of the phonetic similarity of these words in their Han time pronunciation; this similarity must be sufficiently plausible and follow a certain regularity in phonetic derivation and correspondences, which occur also in the strict CC pairs.

Hsü Han often makes the same mistake as Hu Wen-yü by listing together the words of the same division which do not complete the circle of mutual definitions; thus he proposes as CC words 赴, 越 together with 走—趣. But his list contains also some cases of binoms where a character is defined by a binom of which one member is in turn the same as the first character. E.g. 趚, 趚趙, 怒走也. 趙, 趚趙也 but also 趩, 趚也. 趚, 趩趚也.

The fact that in *SW* definitions, one member is defined by the binom, the other on the contrary by the other member alone, can be explained as follows. When no binom appears in the definition, it is because the reading of the defined word and the following defining member construe *ipso facto* the binom in case. This raises the problem of the relation between CC and binomial constructions. Among the binoms, one must make an essential distinction between reduplicative binoms and dimidiative binoms. If the binoms which we consider in the light of the possible CC belong to the reduplicative binoms, it is an easy problem. Both members will show an elementary similarity in the same way as the ordinary CC. The dimidiated binoms, being the result of a split up of initial clusters, can equally result in CC pairs, but unless the CC pair is explicable in terms of ascertained reconstruction forms, there must be another explanation. On this the Chinese authors have not offered any specific theory.

Hsü Han also mentions as true CC some characters which show a graphic derivation by means of doubling, tripling or quadrupling the same graph, e.g. 口, 吅, 品, 㗊 or 屮, 艸, 茻. These cases, though *a priori* not to be rejected as possible cognates, cannot be considered in the light of the *SW* definition as true CC. Hsü finally considers that some graphs though entirely different are semantically so clearly related that they may be taken as identical words, e.g. 燕 and 乙, or at least in some way or other related like 隹 and 鳥. Cases of the latter sort must be set aside till more regular extensions of the CC classes have been solved.

Hu K'un 胡琨 lists twelve groups. Among them he mentions some which are in fact nothing but paronomastic definitions (天—顛; 南—任 etc.) or words which have the same definition but do not belong to the same *SW* division. Sometimes, in order to justify his *CC* pairs, he quotes definitions that are not in *SW* but in *Erh ya* or other sources. He lists as *CC* characters which are only cognates belonging to the same phonetic series, i.e. *Hsh* derivates. The same mistake is made by Yeh Chün who considers derivations such as 厽—垒—絫; 句—鉤—笱—拘 as *CC*, because they are listed in *SW* under the same division, yet they are nothing but *Hsh* derivates. Among them he also mentions 叒—桑, a very interesting example of two cognates 叒, 日初出東方 湯谷 'valley of the sun rise' and 桑 'the tree in the valley of the sun rise' with its corresponding binoms 榑桑 and 叒木. Though interesting cognates, they are not applications of the *CC* principle as described in the *SW* definition.

Huang Yi-chou 黄以周 excerpts mostly examples which show only graphic elements of comparison, such as the pairs of words with a *t'ung yi* formula of the kind of 巫 and 工, or *chih shih* groups like 上 and 下, or just inversions and deflections as 弓 and 巳. Most of these cases can not be proved at all, except for some rare groups like 彳 and 亍, a word pair now written by the *CC* pair 踟躕. Huang Yi-chou is followed in his theories by Takata Tadasuke (Hirotada?) 高田周忠, in *Kochūhen* 古籀篇, *Introductory volume* 學古發凡, 1 *hsia* 44.

III. THE CHUAN CHU PAIRS AND CHUAN CHU CHAINS IN SHUO WEN

1. *Preliminary Remarks*

This chapter is a review of all the cases of *CC* pairs and chains of words in the strict sense of the *SW* definition as they appear in *SW*, with some of the most obvious cases of extensions of the *CC* application beyond its narrower acceptation. If the notion of *CC*, as we have established it in the study before, is correct, then the *CC* pairs and chains of words acquire a new significance for the study of the Chinese language of Han time, as it is reflected in the *SW* text. Independently from what the present reconstructions of the Archaic Chinese language may offer in terms of formulas of phonetic correspondences between possible cognate words, or of formulas of phonetic variations observable between the words, the *CC* pairs of *SW*, by the very fact of their mutual definition within one and the same division of *SW*, provide us with close

etymologically related words. A systematic study of the *CC* pairs and chains in *SW* will therefore lead us to a better understanding and knowledge concerning the degrees of similarity and dissimilarity existing between the cognates; they will show us the most recurrent formulas and range of variations; they will also point to new clues and possible forms of reconstruction of the language of Han time.

1) The *CC* pairs and chains of characters in *SW* are found only in a rather limited number of words throughout the dictionary. The majority of the cognates are not indicated by the *CC* of *SW*; the *CC* occupy a special position in the groups of cognate words. As can be seen from the study of the words for 'old', there are only two true *CC* words in the strict sense of the definition, yet the other words in the same *SW* division, that are defined as 'old' can easily be recognized as cognates and variations of the same word stem; but while for the *CC* words the etymological relationship can be assumed on the mere external mark that they fulfill the conditions of the *CC* definition in *SW*, the other cognates can only be accepted on the assumption that there is a real phonetic, semantic and etymological relationship. The range of variations in the phonetic forms of our reconstructions is not known but by discovering first *undeniable cognates*, which can be established *independently* from any reconstruction theory; such cognates are the *CC* words in *SW*. The *CC* words are not the only cognate words in *SW*, but all the other cognates can be proved only through comparison of their reconstructed forms and their semantic connections as they can be known through literary usage and dictionary definitions. The *CC* words are probably the most closely related groups within possible wider families of cognates[12].

---

(12) The *CC* of *SW* do not support any wider groups than two or four characters or words; all wider groups of cognates need other specific evidence. Some groups have been proposed which include all words contained in one and the same division of *SW*. Thus according to P. A. Boodberg, *HJAS* vol. II, 1937, p. 369, "All the words classified under γ are thus derived from one 'etymon' or root, and 冰 *piəng is indeed the 'radical' of the entire group, the majority of graphs being explained as the product of the enlargement of the primitive graph by phonetic determinatives. Again, the phonetic analysis of the characters listed in the *Shuo wen* under 示 would indicate that all the graphs reflect but various forms of only two etymons: ***G^w leR* (with corresponding initial dental variations) and ***G^w LuG*. Under the first we would classify: 示, 祇, 祠, 神, 禧, 禮, 齋, 禳, 祕, 禋, 祝, 祺, 禔, 禫, 祈, 祀, 禘, 祡, 祉 (cf. also 天 and 帝). Under the second: 祿, 福, 褔, 禱, 祚, 祖, 祜, 祝, 宗, 禦. Both primitive roots served essentially to convey the meaning 'sacred', 'sacrifice', 'blessing', the first seemingly associated with the semanteme 'sacrificial stand'~'altar', the second more with that rendering 'sacrificial vessel'." The detailed proof of this statement would make the subject of a study of considerable length and great interest.

2) It is possible that *SW*, being based on the linguistic feeling of the speakers and the scholars of that time, connects words in a *CC* pair which in reality are not etymologically related. Yet such cases are the exception. It will be seen that some words are listed under the *CC* class because they had become so closely associated mostly through the usage in binomial composition that they were thought off as real cognates. They are rather rare among the big majority of true cognate words; this is quite natural and understandable, for, though probably the *CC* pairs and chains are reflecting the linguistic feeling to the speakers, they do not include *all* the possible members of an etymological family of words, but only the most obvious and closely related ones.

3) Our knowledge of the pronunciation and our methods of reconstruction of the Han time language, and of the language of the Archaic period in general is still defective, insufficient and uncertain in many details. It is still a patchwork, consisting of 'reconstructions' of different value and degree of certainty[13]. It should not surprise us to find words that in *SW* are treated as *CC*, although the reconstructions, which our present methods and knowledge of the Archaic Chinese enable us to posit, fail to show the particular etymological relationship between those words.

On the other hand, some of the *CC* words are, according to the accepted reconstructions of *GS*, entirely identical. These *CC* pairs poseequally a problem, for they should be reconstructed in a way which showssome variations of the same etymon. The same sort of phonetic variations together with the semantic shades are to be expected between the various *CC* pairs as those found between cognates belonging to the same phonetic series. E. g. 劦, 同力也 'united strength', $\gamma i\partial p < / * g'iap < / * g'li\ddotșap \sim g'lap$; 協, 同之和 'concordia', $x_ivp < / * xl\ddot{a}p$; 勰, 同思之和 'harmony of thought', $\gamma i\partial p < / * g'lap$, and 協, 衆之同和 'union of all', $* g'iap < / * g'lap$, also written 叶, 旪 (十 $*d_i\partial p$, phon.) $< / * / d\hat{i}lap$ (?). As to the cases like 朿 and 莿 $* ts'_i\check{e}g$ (SWKL 317) 'thorn', 甴 and 蓄 $* p_iuk$ (the second also $* p_i\check{u}g$) 'plant with edible fruit or root' (SWKL 301), 撢 and 探 $* t'\partial m$' to hold, to put the hand into and test' (SWKL 5465), it is tempting to explain e. g. 莿 as a mere variant graph of 朿 with tautological semantic element 刀, representing in fact the same word and the same sound. But in *SW* such graphs are discussed as variants under one graph, either as *ku wen*, (古文), *chou wen* (籀文), or simply *huo t'i* 'variant graph' (或體); the fact that

_____

(13) This sentence is verbally quoted from J. Gonda, originally intended for the 'so-called' reconstructed Indo-European (*Lingua*, VI, 3, 1957, p. 296); *Quanto magis* . . . . .

they form a separate entry in the *SW* indicates that they were considered as different words with a different though similar reading.

The reconstructions proposed in this study, though based on those of *GS*, will in many instance show important differences. Since there are important details still unknown about the real phonetic system and reconstructions of the *SW* language, it is quite possible that the apparent identical reading of word pairs like 朿 and 莿 is not the real reading as the author of *SW* knew it, but something more archaic and more complicated. Thus, the reconstruction 撢 * *t'əm* can be completed and pushed further to a form /* *tɤəmb* (KYSH no 851, p. 1008). 撢 is defined as 探 (SWKL 5464) but in turn 探 is not defined 撢 but 遠取也 'to take, to hold from distance'; though they are not *CC* pair in the strict sense, there is no doubt that the two words are cognates; yet, the *Hsh* connection of the character 探 gives no indications for an initial cluster. 菖 and 薔 are strict *CC* pairs, and it is possible that the additional reading of 薔 * *pi̯uk*</* *pɤuk, viz.* * *pi̯ŭg*</* *pɤŭg* explains the separate entry as of two distinct forms. (KYSH no 410, p. 503). 朿 and 莿 too define each other, but they do not follow each other as *CC* pairs in *SW* usually do. This may be due to later editing or copying, but it may also indicate that 朿 is used in a wider, more general sense than 莿 which is listed together with 薺, 蒺藜也 and 葥, 鼎葥也 (two specific names for 'thorn'). *FY* 3/11 writes 刺 for the verbal meaning 'to prick' and 朿 for the nominal meaning 'thorn', but we find nowhere that this distinction is consistently observed in the texts. It is not impossible that *SW* too may have suggested such a distinction which was not generally observed in the ordinary usage. The exact reconstruction of 朿 and 莿 in the *SW* language may be more complicated and entirely different from the accepted form * *ts'i̯ĕg*, and may then account also for the separate entry of the two words as distinct cognates[14]

4) The first cases of *CC* pairs to be treated in this list are those which show the same range of phonetic changes as established among the cognates for the Archaic Chinese period in Karlgren's *Word Families in Chinese* (BMFEA no 5, 1934), i. e. groups of words the initials and finals of which belong

---

(14) According to some editions of *SW*, the graph 朿 is considered phonetic in 棗 (SWKL 3045: 棗 * *tsôg* 羊棗也. 从重朿. *SW hsi-chuan* adds 朿聲). 棘 * *ki̯ək*, defined 小棗叢生者, and analysed 从並棘, is probably cognate with 棗; 棘 has a *Hsh* derivate 僰 * *b'ək* (SWKL 3623; KYSH no 109, p. 155). Chu Chün-sheng quotes *Li chi, Wang chih* (*Couvreur* I, p. 302) where 棘 is used for 僰 and read as 偪 /* *pi̯ək, pźək~b'źɔk* (*Notes SM*, chain x).

to the same series of articulation, while the vocalism is shifting more freely, though a certain relationship can be observed between the vocalism and the nature of the final consonants. The method of Karlgren's *Word Families* observes an extreme measure of caution which excludes all possible contacts between words with initials and finals of a different series of articulation. Yet, such a restriction is by no means certain, and it is important to try to find out whether or not such contacts existed, by studying the cognates on the basis of the *CC* pairs in *SW*. Furthermore, the *Word Families* also left out all words which in *GS* are reconstructed with a pure vocalic final; this is another unfortunate limitation in the usage of the word material in the study of the cognates. Moreover, our reconstructions, which logically apply the analysis of *SW* for each character of the *CC* pairs, will also allow us to bring further light on the existing alternations between various initial and final clusters.

2. *Words with initials and finals of the same series*

1. 韔 $* t\hat{\iota}ang</* bt\hat{r}ang$, $* d'\hat{\iota}ang</* bd\hat{r}\hat{\iota}ang$ 'bowcase' (KYSH no. 441, p. 529 sq.), 韣 $* \hat{d}\hat{\iota}uk</* \hat{d}\hat{r}uk</* bd\hat{r}uk$, $* \hat{t}\hat{\iota}uk</* bt\hat{r}uk$, $* d'uk</* bd\hat{\iota}uk$ (*Notes SM*, note 62). (SWKL 2343).

2. 銷 $* s\hat{\iota}\hat{o}g</* bs\hat{\iota}\hat{o}g$ (KYSH no 554, p. 654) and 鑠 $* sl\hat{\iota}ok</* bsl\hat{r}ok$ 'to melt, to fuse' (SWKL 6252). In *Word Families*, gr. T–NG 263–294, there is a wide variety of supposed cognates which cover too big a semantic field. 'to roast, burn, melt' etc. Several of these words, like 炙, 灼, 燒 etc. belong to narrower subgroups in *SW*.

3. 苖 $* t'\hat{\iota}uk$, $* d'\hat{\iota}\hat{o}k$, $* \hat{t}'\hat{\iota}uk$ and 蓨 $* t'\hat{\iota}\hat{o}k$ 'rumex' (SWKL 302).

4. 瘉 $* d\hat{\iota}u</* d\hat{\iota}ug$ and 瘳 $* t'l\hat{\iota}og</* (b)t\hat{r}log$, $* l\hat{\iota}\hat{o}g</* d'l\hat{\iota}\hat{o}g<$ $(b)dl\hat{r}\hat{o}g\sim (b)d'l\hat{\iota}\hat{o}g$ (KYSH no 882, p. 1040) 'to cure, heal'. Other cognates to this *CC* pair; e.g. 療 $* l\hat{\iota}og$, also written 療 $* l\hat{\iota}og</* (b)zl\hat{r}\hat{o}g\sim (b)z'l\hat{\iota}og$ (療 is read as 勞 $* log</* dlog$) and 藥 $/* (b)zlok$ (SWKL 3351-4).

5. 譸 $* t\hat{\iota}\hat{o}g$ and 訓 $* d\hat{\iota}\hat{o}g\sim* \hat{t}\hat{\iota}\hat{o}g$ (KYSH no 601, p. 712), also 侜 $* \hat{t}\hat{\iota}\hat{o}g$ $</* (b)t\hat{r}\hat{o}g$ 'to boast, bluff, brag' (SWKL 1035; binom 譸長 in *SW*, 侜長 in *Shih ching*).

6. 鐙 $* t\partial ng$ and 錠 $* tieng$ 'ritual vessel, footless vessel'.

7. 鐃 $* nog</* znog\sim z'nog$ 'bell without clapper' (KYSH no 169, p. 218) and 鉦 $* \hat{t}\hat{\iota}\check{e}ng$ (KYSH no 599, p. 709) (SWKL 6306).

8. 弱 * ĥi̯ok</*/ zĥi̯ok (cluster indicated by binoms like 捉搦, 劣弱, 長嫋 etc.) and 橈. The text in SWKL 3980 shows that in spite of difference of division (橈 under 木, SWKL 2471) they are regular *CC*. 橈 is * nŏg</* d'nŏg~* ĥi̯og </* zĥi̯og 'oar'. This *CC* pair can be compared with other cognates 櫓, 櫂, 棹, 楫, 槳 (*FY* 9/25).

9. 榟, 梓 * tsi̯əg and 楸 * ts'i̯ôg 'catalpa' (SWKL 2397–8).

10. 囊 * nâng</* znâng~dnâng 'sack, bag' (KYSH no 261, p. 319) and 橐 * t'âk</* tl'âk~tn'âk (KYSH no 695, p. 821).

11. 屩 * ki̯ak</* tki̯ak (¦) (KYSH no 31, p. 49) 'straw sandal' and 屐 * g'i̯ǎk</* dg'i̯ǎk 'shoe, wooden shoe' (SWKL 4577). Other cognates are 屨 ki̯u</* kli̯u~/* lki̯ug<zlki̯ug, 履 * li̯ek</* lŕi̯ek (KYSH no 921, p. 1076) and the binoms 達屨 * d'ât-lki̯ug~* t'ât-lki̯ug<#* tlki̯ug~tklug; #* dlki̯ug ~dklug; 疏屨 * ṣi̯o-lki̯ug<#* ṣlki̯ug~sklug; *Word Families*, gr. T-NG 505– 527, includes a great number of words from a semantic field which seems quite too broad:' to walk, to kick, foot, shoe, slipper'.

12. 丮 * ki̯ǎk, defined in SWKL 1213 持也. 象手有所丮據. 讀若戟 "to hold; represents the hand having something which it grasps" 丮據 * ki̯ǎk-ki̯wǎg, 'read as 戟 * ki̯ǎk', and 𠬠 defined in SWKL 1220 拖持 'to drag and hold', the same as 丮 reversed; * ki̯wok, ki̯uk.

13. 竅 * k'i̯og</* tkiog (KYSH no 782, p. 921) 'hole, opening' and 空 * k'ung</* tkung (KYSH no 4, p. 5 sq.) 'hole' (SWKL 3284).

14. 懼 * g'i̯wo</* -g (KYSH no 13, p. 22) and 恐 * k'i̯ung</* tki̯ung (KYSH no 4, p. 5) 'to fear' (SWKL 4694, 4776). Binom' 恐懼.

15. 稻 * d'ôg 'rice, paddy' and 秫 * t'o</* t'og 'glutinous rice' (KYSH no 659, p. 777; *Notes SM*, note 9) (SWKL 3091).

16. 走 * tsu</* -g and 趣 * ts'i̯u</* ts'i̯ug (KYSH no 636, p. 753) 'run, hurry' (SWKL 666).

17. 柱 * d'i̯u</* dŕi̯ug 'pillar' and 楹 * di̯eng</* dŕeng (SWKL 2495) (KYSH no 270, p. 332; *Notes SM*, note 49).

18. 刑 * g'ieng and 剄 * kieng</* dkieng (KYSH no 228, p. 286) (SWKL 1856). *SW* distinguishes 刑, 剄 from another word 荆, 罰辠也 'to punish', while *GS* 808 considers 刑 as a corruption of 荆 with shortened 耕 as phonetic, which is considered a 'combined graph'. But SWKL 1870 analyses 耕: 从耒井 聲 and explains it with a text 古者井田 "In ancient times, there was [the system] of land and wells". Tuan Yü-ts'ai considers 耕 as a *hui yi*, but Chu Chün-

sheng takes the text 井聲 as original. Tuan's opinion is probably based on the explanatory text, which indicates nothing else than that 井 has a semantic as well as a phonetic role. The character 荆 is explained by the *Yi ching* text 井法也 'punishment in the pit' (imprisonment in a pit?) and is analysed 从井从刀, 井亦聲. But 刑 according to SWKL, belongs to a complicated *Hsh* series 幵 (KYSH no 27, p. 430), which however has enough derivates with dental initial (e. g. 訮 * *t'ian*, * *xian*, * *ngǎn*) to justify a reconstruction /* *dg'ieng* 'punishment'.

19. 更 * *kǎng*</* *bkǎng* (KYSH no 393, p. 483) and 改 * *kəg*</* *bkəg* (SWKL 1337 analyses 改 as 己聲; KYSH no 55, p. 88; /* -*g*∼-*d*). This *CC* pair is probably connected with another pair of cognates 樂 * *pįwan*</* *plwan* ∼*plgwan* (KYSH no 877, p. 1034) and 便 * *b'ian*</* *bȓįan* 'ease, comfortable'; this meaning of 便 is clearly derived from 'to change' as suggested by the explanatory text in SWKL 3560 人有不便更之 "When men have it (i. e. ease) they do not change it." 更 and 便 belong to the same *Hsh* series. (On alternations -*n*∼-*g*∼-*ng*, cf. infra).

20. 驚 * *kįĕng*</* *zkįĕng*<√* *bzkįĕng* (KYSH no 87, p. 131, and no 47, p. 71; SWKL 4056 敬: 从攴苟 'suppressed phonetic), and 駭 * *g'ɛg*</* *dg'ɛg* 'afraid, frightened' (*Notes SM*, chain iii). *Word Families*, gr. K-NG 73-90 includes the *CC* pair 恐: 懼 (cf. no 14) which should be taken as a group independent from the *CC* pair 驚: 駭.

21. ノ* *p'iet*, defined in SWKL 5657 左戾也 'to twist, bend on the left side', and ﹨* *p'įwət*, defined in SWKL 5660 右戾也 'to pull, twist to the right side'. May be 戾 is another cognate in this group * *liəd*</* *lȓįəd*<*b*-?

22. 芴 * *mįwət*</* *mȓwət* (KYSH no 458, p. 546) 'edible plant' and 菲 **p'įwər*</* *pźįwəd*, * *b'įwər*</* *bźįwəd* (KYSH no 374, p. 451) (SWKL 454). Lu Chi 陸璣 (T. Shih-heng 士衡, 261-303) *Mao-shih ts'ao-mu niao-shou ch'ung-yü shu* 毛詩草木鳥獸蟲魚疏, 1/23, lists 芴 as a dialect word from Yu chou 幽州, and compares it to the dialect word of Ho nei 河內, 宿 * *sįôk*</* *bsįôk* (KYSH no 528, p. 670; SWKL 3245, 3021) and to the *Erh ya* word 薎 * *sįək*</* *bsįək* (KYSH no 528, p. 630). We obtain here two pairs of words, one with final -*d*, -*t*, another with -*k*.

23. 儇 * *xįwan*</* *zxįwan* (∼譞) and 慧 * *g'įed*</* *zg'įwwed* 'clever, smart' (KYSH no 291, p. 358; *GS* 527 d-e 慧: 譓).

24. 鴠 * *ȓįər*</* *ȓįəd*, * *ȓįəg* 'bird of prey' (KYSH no 199, p. 254) and 鵱 * *dwia*</* *diwag*∼*diwad* (KYSH no 684, p. 806) (SWKL 1523). Compare

SWKL 1775 腄, 瘢胝也 * *d'wia*</* *d'iwag~d'iwad*, * *twia*</* *tiwag~tiwad*, * *dẓ̂ôg* and 胝, 腄也 'callus' * *t̂ẓər*</* *tẓəg~tẓəd*.

25. 倚 * *ˑia*</* *d·iad* 'to lean upon, rely on' and 衣 * *ˑiər*</* *d·ẓəd* (*Notes SM*, chain vi, note 45) (SWKL 3536).

26. 楣 * *g'wən* (SWKL 2627 梡木未析也 'firelog') and 梡 * *g'wân*</* *-nd*, * *k'wân*</* *-nd* (楣木薪 'firewood').

27. 怨 * *ˑiwăn*</* *-nd* (KYSH no 724, p. 845) 'resent, resentment', and 恚 * *ˑiwĕg~*/* *-d*? (KYSH no 14, p. 23) defined in SWKL 4746–7 as 恨 * *g'ən* </* *dg'ən* (KYSH no 83, p. 128) 'to hate' which in turn is defined 恚. Binoms 怨恚 and 恚恨.

28. 趁 * *t̂'ẓən*</* *tnt̂'ẓənd*, * *d̂'ẓən*</* *dnt̂'ẓənd*, * *nẓan*</* *d·nẓand* (KYSH no 606, p. 720) 'to pursue, chase, follow' and 趲 * *d'ẓan*</* *dr'ẓand*, * *t̂ẓan* </* *t̂r'and* (KYSH no 216, p. 277) (SWKL 672).

29. 分 * *b'ẓiwən*</* *br'ẓiwən* 'share' (noun), * *piwən*</* *pr'wən* (verb) 'to divide, share' and 別 * *pẓat*</* *pr'at* (SWKL 1725 別, 分解; but also SWKL 5161 仌 * *pẓat*, variant of 八 * *pwat*</* *pgwat*—KYSH no 326, p. 391—which are both defined 分, and 別).

30. 贅 * *t̂ẓwad* (SWKL 2763 defined 以物質錢) and 質 * *tẓəd* defined 以物相贅 'to estimate in money, to pawn for money'.

31. 村 * *ts'wən*</* *-nd* 'to cut, chop' and 切 * *ts'iet*</* *-nt* (KYSH no 620, p. 609) (SWKL 1834).

32. 餕, also written 酸 * *tẓiwad*</* *t̂r'wad*, * *tẓat*</* *t̂r'at* (KYSH no 277, p. 338) 'libation' and 醑 * *lwəd*</* (b)*dlgwəd* (KYSH no 736, p. 857. (SWKL 2218, 6691).

33. 鐃 * *d'wəd*</* *dr'wəd* and 薤 * *tsẓər*</* *tsẓəd* and 韰 * *tsẓər*</* *tsr'əd~tsr'əg* 'shallots, pickled food' (KYSH no 620, p. 737 and no 939, p. 1096; cf. *Notes SM*, chain vi) (SWKL 3199–3200). A cognate is 韰 * *g'ad*</* *dg'ad* ~* *kəd*</* *dkəd* (KYSH no 81, p. 125).

34. 豕 /* *sr'ad* (KYSH no 655, p. 772), also read like 豨 /* *dxẓəd* (KYSH no 808, p. 958) and 彘 * *d'ẓad*</* *dr'ẓad* 'swine, pig' (SWKL 4227, 4248); a distant *CC* pair, probably valid because 豕 is followed by 希 and 彑, extensions of the same division. Another probable cognate is 㒸, read like 瑕 * *g'å*</* *dg'åg~-ad*.

35. 掘 * *g'ẓwət*</* *dg'ẓwət*, * *g'ẓwăt*</* *dg'ẓwăt* 'to dig out' (KSYH no 631, p. 744 sq. cf. *Notes SM*, chain vi) and 搰 * *g'wət*</* *dg'wət*, * *k'wət*</* *tkwət* (KYSH no 98, p. 145; no 67, p. 104. 冎 is probably also phonetic since

SWKL 1726 analyses 骨 as 从冎有肉; 肉 is semantic) (SWKL 5480).

36. 磑 $* ngwər</* mgwəd \sim bngwəd$ (KYSH no 434, p. 521) and 礦 $* mwâ</* mgwâd$ (KYSH no 350, p. 422; FY 5/22) 'stone mill' (SWKL 4205).

37. 媲 $* p'iər</* p'iəd<pẑiəd$ (KYSH no 387, p. 471) and 妃 $* p'iwər</* p'iwəd, * p'wər</* p'rwəd$ 'consort, wife, mate'. SWKL 5536 defines 媲 as 妃, but 妃 as 匹. 匹 (SWKL 5727) defined 四丈也 'four chang (measure)', $* p'iĕt</* pẑiĕt\sim pẑfĕt$ (KYSH no 326, p. 392), was probably used already in *SW* time as a more common form of 媲 as can be seen from the binoms like 匹婦, etc. Another cognate is 配 (SWKL 6666 妃省聲) $* p'wəd</* p'rwəd$.

38. 鍱 $* ts'iap</* tsriap, * dz'iəp</* dzriəp$, also written 鍱 (KYSH no 491, p. 580) and 鍱 $* diap</* dïap$, dialect word of Ch'i (KYSH no 667, p. 784) 'metal sheet, metal leaf' (SWKL 6274).

39. 捻 $* tiap</* tniamp$ (KYSH no 281, p. 342) 'to take between the fingers, to pick up' and 拈 $* niam</* dniamb$ (KYSH no 604, p. 717) (SWKL 540).

40. 入 $* ńiəp</* zńiəp$ (KYSH no 947, p. 1103) 'to enter' and 內 $* nəp</* znəp, \sim dnəp, * nwəb</* znwəb\sim dnwəb$ (KYSH no 266, p. 323). Though these two words are related as *CC* and have a common graphic element, they are not explained as characters of the same phonetic series. SWKL 2236 explains 內, 入也. 从冂自外而入也 "From 冂, to enter 入 from outside", a phrase which indicates the etymological connection of 入 and 內.

In these previous *CC* pairs the reconstructions suggested by the graphic analysis of *SW* often bring out a closer phonetic similarity than is observed in the usually accepted forms found in *GS*. In the following *CC* pairs some cases will be considered with often strongly differing initials or finals, but which can be bridged by reconstructing according to the *SW* graph analysis.

3. *Words with different initials in GS*.

1. 楮 $* t'io</* trlog$ (KYSH no 894, p. 1052) 'paper mulberry tree' and 榖 $* kuk</* nkuk\sim dnkuk$ (KYSH no 142, p. 187) (SWKL 2429).

2. 桐 $* d'ung</* drung$ (?) and 榮 $* giwĕng</* dgiwĕng$ (KYSH no 847, p. 1,000) 'sort of eloeococca' (SWKL 2436).

3. 聽 $* t'ieng</* trieng$ 'to hear, sharp of hearing' and 聆 $* lieng</* dlrieng\sim d'lieng$ (KYSH no 880, p. 1039) (SWKL 5353).

4. 嫪 $* glôg</* (b)d'lôg\sim dglôg$ (KYSH no 880, p. 1041) 'to be attached to, in love with' and 姻 $* g'o</* dg'og$ (KYSH no 57, 96) (SWKL 5618).

5. SWKL 4482 灼. 灸也 and 灸: 灼也. 灸 is *kᵢ̯ŭg</* dkᵢ̯ŭg (*Notes SM*, chain iv); 灼 is *t̂ᵢok</* (b) t̂rok 'to burn' (KYSH no 615. p. 730).

6. 栩 *xᵢwo</* dxᵢwog 'oak' (SWKL 1488; Chu Chün-sheng quotes the *Po Hu t'ung yi* 白虎通義 equation 羽:于:紆:舒 *śᵢo</* śrog; *Notes SM*, chain iii) and 柔 *d'ᵢo</* dr̂ᵢog. Other cognates. 櫟 *glᵢok</* (b)zlrok and 柞 *tsâk</* ts'âk, *dz'âk</* dzrâk (SWKL 2405).

7. 溝 *ku</* tkug 'canal' (KYSH no 48, p. 75; the original graph of 溝 probably was �III or �III /* drôg; cf. SWKL 6187; *Notes SM*, chain iv; furthermore, SWKL 1666-7 analyses 冓 *tsəg as 从一講省 'shortened and suppressed phonetic) and 瀆 *d'uk</* (b) druk (KYSH no 918, p. 1073). *Word Families*, gr. K-NG 206-227, includes words covering too wide a field of meanings: 'empty, hollow, canal, chest, grave, mine, etc.' (SWKL 5007).

8. 頭 *d'u</* drug 'head', defined in SWKL 3910 首, a *ku wen* form of 百 (SWKL 3950) *śᵢ̯ôg, which in turn is defined 頭. 首 *śᵢ̯ôg</* śrôg. This *CC* pair is also related with 頁 *g'iet~g'iek</* dg'-, zg'-.

9. 持 *d'ᵢəg 'to grasp, to hold' and 握 *·uk 'to grasp a handful' (SWKL 5388) and 搤 *·ĕk</* d·ĕk (KYSH no 842, p. 865) and 捉 *tsŭk 'to grasp'. This is probably a case of two related *CC* pairs. 搤 /* d·ĕk, 持 /* dr̂ᵢəg; 握 /* z·ŭk, 捉 /*/ tsŭk~ts·ŭk, 持 /*dr̂ᵢəg. The reconstruction of 屋 is supported by theanalysis of 屋 in SWKL 3789 从尸.... 从至. 至所止室屋 "From 尸...and from至; the room, where one arrives and rests." 室屋 *śᵢ̯ət-·uk<‖* ś·uk. (Cf. also SWKL 1578 屚, 从羴在尸 下尸屋也). The binom 搤持 of *SW* can easily be taken as a reduplicative, which suggests aform /* dr̂- for 持 as well.

10. 蔆 *lᵢ̯əng</* dlr̂əng 'water chestnut' (KYSH no 887, p. 1046), and 芰 *g'ᵢ̯ĕg</* dg'ᵢ̯ĕg~zg'ᵢ̯ĕg (KYSH no 590, p. 695). SWKL 329 lists 芰: as a variant of 茤 /*/ t̂riad~-g? (KYSH no 204, p. 262).

11. 陬 *tsu</* tsug, *tsᵢ̯u</* tsᵢ̯ug</*/ btsug~btsᵢ̯ug (KYSH no 502, p. 600; initial b- is suggested by the definition of 取 in SWKL 1253 捕取 *b'wo-ts'ᵢ̯u <‖* bts'ᵢ̯ug, paralleled by that of 捕: 取也 (SWKL 5497); 隅 *ngᵢ̯u </* mgiug 'angle, corner' (SWKL 4072 defines 禺 with a paronomastic definition 母猴 *məg-g'u <‖* mg'ug). This reconstruction is supported by the bynomial form 陬隅, repeated in other words 崛嵎, etc.

12. 憊 *b'εg </* brεg (KYSH no 422, p. 512) 'exhausted', also written 㦬 *b'wεg </* brwεg, and 憩 *k'ieg</* tkleg (KYSH no 145, p. 188) (SWKL 4479). SWKL 1392 analyses 㒷, 具也 'complete' as 从用苟省, where 苟 is

suppressed phonetic. Tuan Yü-ts'ai even emendates 从用苟省,苟亦聲 * *kĭək</** *bkĭək*) * *ku</** *bkug*. As to 縠, SWKL 1292 analyses the phonetic 毃 as 从 殳从害 /* *bdĭug* -/* *tkĭek<#** *bdkiek* (KYSH no 685, p. 807). The reconstruction is also supported by binoms like 縛繫 etc.

13. 額 * *nglăk~*/* *lngăk<√* lmĭăk~blngăk* (KYSH no 102, p. 149; *Notes SM*, chain iii), and 顙 * *sâng</** *bsâng~msâng* (SWKL 3915). *SM* 8/30 equates 額 with 顎 (a dialect word from Yu chou 幽州) * *ngâk</** *zngâk<* √* *zmgâk~bzngâk* (KYSH no 194, p. 239). Probably the values for the *CC* words of the *SW* are /* *bs`âng* -/* *blngâk* -/* *bzngâk* 'forehead'. In *Word Families*, gr. K-NG 91–114, 額 is found among a great number of words covering too wide a variety ranging from 'mountain top, dangerous' to 'rise, forehead' etc. Similarly, T-NG 64–84 contains 顙 among other words representing an equally large field of meanings. *FY* 10/34 mentions two other dialect words 顠 * *t̂ĭan* and 顏 * *ngan</** *zngand* (KYSH no 818, p. 975). The words with the final *-ng* or *-k* belong to the northern areas (Ju Ying, Huai-Ssŭ, Tung Ch'i and Yu chou) while those with the ending *-n, -nd* belong to the southern areas (Chung Hsia, Chiang Hsiang). It is possible that the two groups of words are etymologically related, and that 顠 goes back to /*/ *b̂ĭan~bt̂ran* and 顏 to /*/ *bzngand~zmgand*. In the word lists with different finals, a regular alternation between dental and velar finals is very frequent.

14. 簎 * *sŏg</** *bsŏg* 'bamboo vessel' and 筥 /* *klĭog~lkĭog* 'round basket, food basket' (SWKL 1934-6). *FY* 13/143 writes 簎 /* *bsŏg*, dialect word from Nan Ch'u, and 簃 /* *dlŕog*, standard word and also dialect word from Chao and Wei. Compare also the *CC* pair of SWKL 253 芌 * *gĭwo</** (*b)zgĭwog* (KYSH no 788, p. 939) 'colocasia' and the dialect word of Ch'i 莒 * *klĭo</** (*b)lkĭog~(b)klog* (?). There seems to be no basis for a labial initial in the series of 莒 and 筥 (KYSH no 893, 894 p. 1051 sq). These two *CC* pairs must be studied together with another group of *CC* words 呂, 膂, 背 and 脊. SWKL 3269 defines 呂 and its *chuan wen* form 膂 with 背骨 'backbone, spine'. But SWKL 1754 and 5516 defines 背 with 脊 and this with 背呂 * *pwəg-glĭo(g)<#** *pglĭog*. 脊 is an enlargment of 夼 (背呂也) which however is read like 乖 * *kwɛg*; this suggests an earlier form 夼 /* *bkwɛg~kmɛg*, and also 背 /*/ *pgwəg~bŕwəg*. This is confirmed by the fact that 北 'north, back side' is also defined 乖 * *kwɛg*, hence 北 * *pək</** *p`ək*. By virtue of the *CC* pairing even 脊 was * *tsĭĕk</**/ *btsĭĕk*; all this points also to a reading 膂

(*chuan wen* of 吕) *blŕog∼bdlŕog* and 呂 *klx̣og</*bklog∼blkx̣og*, 籨 /*dlŕog* </*/ blŕog∼bdŕog*.

15. 卜 *puk</*p·uk<ptuk* (*Notes SM*, chain x, note 36) and 兆, 𣎑 *d·x̣og*. 卜 is defined in SWKL 1379 灼剝龜也 'to burn and crack the tortoise shell' and 兆, 𣎑 (SWKL 1385) is 灼龜拆也 'the cracks of the burnt tortoise shell'; 灼 is *t̂x̣ok</*btŕok* and since 卜 and 兆, are both defined by 灼. 兆, 𣎑 was *d·x̣og</*bdŕx̣og*. Other cognates probably are 𡖊 /*dŕog<b-* ?, and 卧 *xwəg</*bxwəg∼xməg* (KYSH no 203, p. 435).

16. 鮥 *glâk∼/*lrâk*, *nglâk∼/*lngâk* 'sturgeon' and 鮪 *gx̣wəg</* zgx̣wəg∼dgx̣wəg* (SWKL 5216).

17. 恉 *t̂x̣ər</*(b)tŕəd* (KYSH no 386, p. 467), 意 *·x̣əg* 'to think, thought, intention, will', 志 *t̂x̣əg</*tŕəg* (KYSH no 594, p. 701 sq.) 'aim, goal, purpose, spirit, mind'. SWKL 4652-4 defines 志: 意也, 意: 志也. 恉: 意也. This *CC* group indicates that 意 probably must be reconstructed /*/ d·x̣əg*. It is explained in *SW* with the phrase 察言而知意 "To investigate the words and to know their meaning." 知意 may be isolated as sound descriptive *t̂x̣êg-·x̣əg<‡*t·x̣əg*. 志 does not appear in the original *SW* text, but it is a *ku wen* form of 識, which in SWKL 981 is defined 常 (emendated by Tuan Yü-ts'ai into 意) 一曰知也. Yet other commentators maintain 常 as a definition for 幟, another word, not found in *SW*, but read identically with· 識 *śx̣ək* ∼*t̂x̣əg* 'to know, remember, commemorate'.

18. 章 *t̂x̣ang* and 竟 *kx̣ang*. SWKL 1108 writes 章: 樂竟爲一章. 从音从十. 十數之終也 "When the music is finished, it forms one *chiang* 'piece of music'. From 音 and 十. 十 is the end of the numbers." 竟: 樂曲盡爲竟. 从音从儿 "When music and song are finished, it is *ching* 'the end'; from 音 and 儿." No matter how the graphs are to be analysed and explained, it is clear that both have a definition which makes them a *CC* pair, for which a reconstruction is required, probably *t̂x̣ang</*tŕang* and *kx̣ang* </*dkx̣ang*. *SM* 27/3 has 大夫曰卒. 言卒竟也 "A prefect [who dies] is said 卒. It is said 卒竟" *tsx̣wət-kx̣ang<‡*tskx̣ang∼dk-*. The graphs remain unexplained in *GS* 723, 752. *SW* however explains them as combinations of 音 with 十 or 儿, and since they are under the division 音, this element may have some etymological relation with 章 and 竟 (Cf. P.A. Boodberg, *HJAS* II, p. 344, note 37). The elements 十 and 儿 of the *SW*

analysis may be original or not,[15] yet it is important to know that in the opinion of the *SW* they may have played a phonetic role; 十 $* d\hat{z}\partial p$ and 儿 $*\hbar_{\dot{z}}\check{e}n$ would suggest readings with -*p* or -*n*~*ng*, which agrees with the readings found in connection with 音. The connection of 章 with 竟 appears from the meaning of 章 in *Li Chi* (*Couvreur* II, p. 68) 'music [of Yao]' /* $t\hat{r}ang$~/*/ $t\hat{r}am$ (~ * -*p*)—音 /* $\cdot i\partial m$ </* $z\cdot i\partial m$. The latter reconstruction can be deduced from the *CC* pairing of 音 with 聲, and from its *Hsh* connections. SWKL (1104 and 5355) discusses 音 and 聲 under separate divisions, but the text under 音 clearly indicates the *CC* connection: 生於心有節於外謂之音．宮商角徵羽聲也．絲竹金石匏土革木音也 "What is born in the heart and has a measure when [expressed] outside, that is called 音．[The music notes] *kung, shang, chüeh, chih, yü* are the 聲．The silk, bamboo, metal, stone, calebash, earthenware, skins and wood [are the material for the instruments] of music." 从言含一 "From 言 containing 一". 聲 was $* \hat{s_{\dot{z}}}\check{e}ng$ </* $\hat{s}\hat{r}\check{e}ng$ (KYSH no 120, p. 173), and has a cognate in 響 $* x_{\dot{z}}ang$ </* $zx_{\dot{z}}ang$ < (*b*)*zxlang* (KYSH no 111, p. 156). 聲 is member of a *CC* pair with 音, which *GS* explains as 'mouth blowing flute' (舌); but 言 is also explained as 'drawing of a kind of flute' (舌), without telling in what the graphic difference really consists. Kuo Mo-jo 郭沫若 (*Chia-ku-wen yen-chiu* 甲骨文研究, chap. 5, 釋和言, p. 3-4) thinks that both 言 and 音 represent a flute (丫丫) in the mouth, written ⊔ or ⊟, and were originally the same graph. This points to a connection between 言 $* ng_{\dot{z}}\check{a}n$ </* $zng_{\dot{z}}\check{a}n$, $* ng_{\dot{z}}\partial n$ </* $zng_{\dot{z}}\partial n$, 音 $* \cdot_{\dot{z}}\partial m$ </* $z\cdot_{\dot{z}}\partial m$, and 聲 $* \hat{s_{\dot{z}}}\check{e}ng$ </* $\hat{s}\hat{r}\check{e}ng$. The reconstruction of 音 is indirectly confirmed by a *Hsh* derivate 膺, which independently from any *Hsh* connection can be reconstruted $* _{\dot{z}}\partial ng$ </* $z\cdot_{\dot{z}}\partial ng$. For this character is equated in *SM* with 嬰 $* _{\dot{z}}\check{e}ng$ > $_{\dot{z}}\check{a}ng$ (Bodman no 675). The initial cluster of 嬰 is required by a *SM* equation 纓: 頸 $* k_{\dot{z}}\check{e}ng$ </* $tk_{\dot{z}}\check{e}ng$ (Bodman no 677; *Notes on SM*, chapt. ii), which demands a form 膺 /* $z\cdot_{\dot{z}}\check{e}ng$. 膺 makes a *CC* pair with 匈 also written 智 $* x_{\dot{z}}iung$ </* $zx_{\dot{z}}iung$ (KYSH no 801, p. 957) 'breast, chest' (SWKL 5721, 4046, 6797, 1753). Moreover 膺 is a *Hsh* derivate of 雁, which itself has as phonetic element, either 疒 or 人．SWKL 1530 proposes two analyses of 雁: a) 疒省聲 and b) 从人．人亦聲．The latter analysis, equally accepted by *SW*, is hardly explicable as a later addition;

---

(15) Takata (*Kochūhen* 53/34 sq.) explains the character 章 as a shortening of 竟 (音 with 十), the lower element 十 being originally 聿, a graphic variant for 聿, which represents a net on a stick, and is applied to a word 'end, to end'.

人 ＊ *ńi̯ĕn* is equated in *SM* 1084–5 with 忍 (a *Hsh* series with -*n*, -*t*, -*ng*), 人 ＊ *ńi̯ĕn*＜/＊ *źńi̯ĕnd*—忍 /＊ *źńi̯eng*; this reading -*ng* agrees again with the final of 膺; the initial of 人 again suggests an initial cluster for 膺 /＊ *z·i̯eng* (P.A. Boodberg, *HJAS* II, p. 338). All these contacts indicate that 音 /＊ *z·i̯əm* is a safe reconstruction.

19. 逢 ＊ *b̑i̯ung*～＊ *b'ung* and 遇 ＊ *ngi̯u*＜/＊ *mgi̯ug* 'to meet' (SWKL 753).

20. 嫗 ＊ *·i̯u*＜/＊ *b̑·i̯ug* (KYSH no 116, p. 171) 'to warm with the body, to hatch' and 母 ＊ *məg*＜/＊ *mwəg*～*mgwəg* 'mother'. SWKL 5542 defines 母 paronomastically by 牧 ＊ *mi̯ôk*＜/＊ *mî·ôk* (cf. *Notes on SM*, chain xi; SWKL 1373 analyses 牧: 从攴从牛 ＊ *puk-ngi̯ŭg*＜#＊ *pngi̯ŭg*; it is probably a cognate with 牛 ＊ *ngi̯ŭg*＜/＊/ *mgi̯ŭg*.—(Cf. French: vâche, vâcher).

21. 嬰 ＊ *·i̯ĕng*＜/＊ *b'·i̯ĕng*＜*bẑ·*- (KYSH no 717, p. 838), defined in SWKL 5606 頸飾也, 繞也 'ornament of the neck (necklace), to surround', but it appears as *chia chieh* for 'infant, orphan' in *Li Chi* (*Couvreur*, II, 179) and is used in this sense in SWKL 5577 defining 嫇 as 嬰嫇, a reduplicative binom; 嫇 ＊ *mi̯eng*～*mĕng*＜/＊ *mî·i̯en*～·*mĕng*～*m·ĕng*.

22. 卑 ＊ *pieg*～＊ *pied* (KYSH no 372, p. 447) and 尵 ＊ *ngieg*～＊ *ngied*＜/＊ *mg*-? 'sound of beating' (SWKL 1372).

23. 輻 ＊ *pi̯ŭk*＜/＊ *pî·ŭk*～*pẑ·ŭk* 'spokes of a wheel' (*Notes SM*, chain x) and 轆 ＊ *log*＜/＊ *dlog* (KYSH no 914, p. 1068) (SWKL 6432). The *CC* pairing suggests 轆 /＊/ *bdlog* (confirmed by interchangeable graphs in binoms as 轆釜—樑釜, TT 1296).

24. 妬 and 媚. SWKL 5613 defines 妬 with the sentence 婦妬夫也 "The wife is jealous of the husband" and 媚 with 夫妬婦也 "The husband is jealous of the wife." Tuan Yü-ts'ai corrects 妬 into 妒 ＊ *tâg*＜/＊ *t·âg*. 媚 is ＊ *môk*＜/＊ *m·ôk*～·*môk*＞*tmôk* (KYSH no 361, p. 437; *Notes SM*, chain xi). The *CC* pair is probably due to the dimidiation binom resulting from /＊ *tmôk*＞＊ *tâgmôk*. The binom 妬媚 is early attested (*Lieh-tzŭ*, LMTT 3, ch'ou 39). This explanation of 媚＞妬媚 is confirmed by the cognate 映 ＊ *kiwat*＜/＊ *kmiat*～·*tmiat* (*Notes SM*, chain ii). SWKL 1448 defines 映, 涓目 (涓 stands for 焆, meaning 目閒出火 'fire coming from the eye' or 含怒之視 'a look full of anger'); this word is equally dimidiated and written 妬媚 ＊ *tâg-mi̯əd*. The alternation of finals -*t*, -*d* with -*g* is a regular variation between many cognates. It appears also in the binom 嫵媚 in *SM* 8/26 眉媚也 "Beautiful" 有嫵媚也 ＊ *mi̯wo*～/＊ *mî·wog-mî·əd*. Takata (*Kochūhen* 47/25 has a *chia chieh* 矏 ＊ *xi̯ən*＜/＊ *bxi̯ənd*, ＊ *mwən*＜/＊ *mgwən* (KYSH no 376, p. 456).

25. 皃 also written 貌 *mög</*d˙mög~z˙mög>˙mög (KYSH no 615, p. 733; *Notes SM*, chain xi, note 68) and 頌 *dẓung</*dŕung, *dzẓung </*dźŕung (KYSH no 3, p. 2–4). SWKL 3832 defines 頌 as 皃 'appearance, manner, form' and 皃 as 頌, 義 'to announce, make known [externally]'. Though 皃 and 頌 do not belong to the same SW division, Tuan Yü-ts'ai suggests they are a *CC* pair; probably 皃 and 頁 can be taken as subdivisions of one group, since 皃 is analysed 从白．象人面形 and 頁: 从百 (head) 从儿. The reconstruction of 頌 is a serious difficulty; may be the form /*dŕung~ dźŕung can be brought back to /*/ dŕwəng~dźŕwəng from dŕm- or dźŕm(?). *Word Families*, gr. P-NG 162–5, contains the words 模，摹 *mâg, 貌 *mög, 描 *miog. In KYSH no 357, p. 432 all these words with 莫 indicate /*zm-~mz-. The character 描 is late, but another of this *Hsh* series 緢 is *chia chieh* for 貌 *mög</*d˙mög (*Glosses on the Book of Documents*, gl. 2060; BMFFA no 20, 1948). Similarly *Word Familis*, gr. T-Ng 381–5, contains 佾 and 肖 'like, resembling' which go back to /*bs-, bz- (KYSH no 554, p. 654).

26. 刊 *kân</*tkând (KYSH no 22, p. 35 sq.) 'to cut' and 劊 *tẓwat </*tŕwat, *twât</*tgwât (KYSH no 277, p. 338).

27. SWKL 218 defines and describes the character 丨 *kwən</*dkwənd in two ways with readings that imply two meanings related like *CC* words a) 引而上行．讀若囟 *sẓĕn</*sŕĕnd 'to draw upward', b) 引而下行．讀若退 *twəd</*tŕwənd 'to draw downward'.

28. 腓 *bẓwər</*bźẓwəd (KYSH no 374, p. 450) and 腨 *ḓẓwan</* dŕwan (KYSH no 202, p. 258). SWKL 1765 defines both by a binom 腓, 脛 腨也 and 腨, 腓腸也 'calf of the leg'. The *CC* pair is probably the result of a separation of the members of a binom 腓腨 /*bẓwədŕwan<♯*bdŕwan~ bźŕwənd (?).

29. 鉆 *g'ẓam</*dgẓamb, *t'iap</*tŕiamp (KYSH no 604, p. 715) and 鈕 *niap</*dnẓamp, *tẓap</*tnẓamp 'thongs, pincers' (SWKL 6292). 29 bis. 嫋 *niog</*zniog 'slender' (KYSH no 945, p. 1102) and 姌 *nẓam~ niam</*dnẓam, dniam. (SWKL 5576).

30. 濫 *glâm</*lŕâmb~d'lâmb (KYSH no 132, p. 180 sq.) 'to float, flow, overflow' and 氾 *p'ẓwăm</*p'lwăm (KYSH on 850, p. 1004). This must be compared with other definitions in *SW*: 泛 /*b'ẓwămp, defined 浮 *b'ẓôg, which is again defined 氾．漂 *pẓog</*pźẓog (KYSH no 407, p. 498) is 浮 (SWKL 4964). The real chain of *CC* words opposes two pairs of

forms 汜 /*p'lwâm* and 泛 /**b'ɨwǎmⱷ~b'ɨwamb* against 浮 *bɨôg</*bzlôg and 漂 **p'ɨog*</*pɨlog. This alternation *-m: -g* is frequent in the *CC* pairs. The mutual definition of 濫 and 汜 is not strictly speaking due to a *CC* but rather to a binomial form 汜濫 (LMTT 6, ssu 6) /*p'ɨwǎm-dlâmb~ p'ɨwǎm-lⱤâmb*<‡**pglwǎmb~plⱤamb*.

31. 苫 *sɨam</*sⱤamb (KYSH no 604, p. 717) 'to thatch' and 蓋 *gâp</**dg'âp~zg'âp*, *kâb</*zkâb 'to cover' (SWKL 423) (cf. *Notes SM*, note 71).

32. 迨 **g'əp*</*dgǝp (KYSH no 112, p. 157) 'to reach, attain, go to' and 遝 **d'əp*</**dⱤəp~dgǝp* (KYSH no 775, p. 911) 'to reach to' (SWKL 747).

33. 笘 **g'ɨam*</? 'gag' and 籋 *nɨap</**(b)znɨap*, *nɨap</**(b)znɨap* 'gag' (KYSH no 947, p. 1104). The *CC* pair suggests a reading 笘 /**dg'ɨamb*. In *SM* as well as in SW (SWKL 2026) 甘 is explained 从口含一 showing that 甘 is equated with 含 **g'əm*</**dg'əm*.

4. *Words with different finals.*

Such alternations have already been mentioned in the discussion of some of the previous cases (nos 13. 18. 24. 30).

1. 鱣 *tɨan</*tnⱤand (KYSH no 216, p. 276) 'name of fish' and 鯉 *lɨəg</*dlⱤəg (KYSH no 892, p. 1050) (SWKL 5219).

2. 証 *tɨěng 'straight, correct; to correct, regulate' (KYSH no 599, p. 710, lists some *Hsh* derivates ending in *-n*, *-m*), and 諫 **klan~*/*lkan 'to remonstrate, admonish' (KYSH no 61, p. 98) (SWKL 995–6).

3. 讙 *xwân</*dxwân, *xɨwǎn</*dxɨwǎn 'to shout' (KYSH no 585, p. 685), 誼 *xɨwǎn</*zxɨwǎn (KYSH no 545, p. 646) and 譁 *xwa</*dxwâg (SWKL 1060).

4. 鯶 **gl'wǎr~*/**lg'wǎd*, 鱧 *lɨⱤr</**d'lɨed~dlⱤəd* and 鱹 **g'wěk*</**lg'wěk* (KYSH no 741, p. 864) 'name of fish, tench? mullet'? (SWKL 5327).

5. 祀, 禩 *dzɨəg</*dzⱤəg (SWKL 46–7 祭無已 'to sacrifice without end (?) and 祭 *tsɨad 'sacrifice'. The *CC* pair suggests /*/ *tsⱤad*.

6. 鮦 **d'ung*</**ld'ung*, /**d'log*, also read like 襱 *lɨung</**d'lɨung* ~*dlⱤung* (KYSH no 236, p. 297–9) and 鱺 *liei*</*dlⱤɨed 'perch' (KYSH no 231, p. 292) (SWKL 5221–2).

7. 子 *tsɨəg</*/ *tsⱤəg*? The text of SWKL 6596 十一月陽气動, 萬物滋 "In the 11th month the *yang* vapours are in motion, the ten thousand beings

are made to grow" certainly intends the word 滋 *tsi̯əg* as a phonetic in-
dication of 子 which is related to 字 *dz'əg* and to 孳 *dz'i̯əg* 'to breed'.
SWKL 2376 puts 李 in the *Hsh* series 子, *li̯əg</*zli̯əg, 子 *tsi̯əg</*
tsləg. But SWKL 381 analyses 茲从艸絲省 (emendated by Tuan Yü-ts'ai
into 絲聲); 絲 is *si̯əg*, which could be related with 系 /*g'i̯ed</*zg'i̯ed∼
-*g* (*Notes SM*, chain vii). Though there seem to be no clear positive evidence
for a reading 子 /*tsí-, the other *CC* word strongly suggests such an initial
cluster. The other *CC* member, 云 (SWKL 6616) *t'wət*, is the graph 子
reversed, a pictograph for the 'baby at birth', defined 不順忽出也 "The unfilial
(disobeying) one suddenly comes out"; in this phrase the word 出 *ti̯wət*
</*tɕi̯wət* (*Notes SM*, chain vi), and the *Yi ching* phrase, also quoted in
SW, …不孝子突出… "the unfilial son suddenly comes out" (突 *t'wət</*
tɾwət) indicate the cluster initial of 云.

8. 幝, 褌 *kwən</*dkwən (?) 'leggings, trousers', and 緫, 柾 *t̂i̯ung
</*tɕung (SWKL 3413). According to Chu Chün-sheng 褌 has a variant
writing 裈 *g'i̯wən</* (KYSH no 18, p. 29). *dg'i̯wən*. However, cf. *FY* 4/7
which takes 裈 is as a word different from 幝.

9. 樴 *gi̯wək</*zgi̯wək∼dgiwək (KYSH no 870, p. 1019) 'bushy tree',
and 桜 *n̂i̯wəd</*znɾ̂wəd (KYSH no 227, p. 285) SWKL 2403 defines 桜 as
白桜樴 and 樴 as 白桜. In *SW* time the word is known already in its
binomial form as well: /*ni̯wədgi̯wək*, though the two *CC* words are both a
variant of the stem with a variation in the final, -*d*∼-*k*.

10. 椐 *k'i̯o</*tki̯og, *ki̯o</*dki̯og (KYSH no 57, p. 93) 'kind of tree'
and 櫃 *k'i̯wɛd</*tki̯wɛd, *g'i̯wɛd</*dg'i̯wɛd (KYSH no 203, p. 157).

11. 踞 *ki̯o</*dki̯og 'to squat' and 蹲 *dz'wən, *tswen</*-nd (SWKL
3779). Other cognates of interest in this connection are: 尻 *k'ôg</*nk'ôg·
(KYSH no. 70, p. 107; *Notes SM*, note 18) 'end of spine', 尻 *ki̯o</*dki̯og,
which in SWKL 6363 is analysed 从尸得几而止 "From 'body' obtaining a stool
and resting"; 得几 *tək-ki̯ɛd ⧺ tki̯ɛd; also 処, 處 *t̂i̯o</*tɕi̯og, equally
defined by SWKL 6364 止也. 得几而止. 从几从夂 "To rest; to obtain a stool
and rest. From 夂 and 几 *swi-ki̯ɛd<⧺*swki̯ɛd, 'to squat, establish oneself,
inhabitate', and 膪 *d'wən</*dnɾ̂wən (KYSH no 593, p. 700).

12. 欷 *xi̯ər</*dxi̯ən∼dxi̯əd 'to sob, to moan' and 歔 *xi̯o</*dxi̯og
</*dxlog (SWKL 3882).

13. 噓 *xi̯o</*dxi̯og<dxlog 'to blow, exhale' and 吹 *t'wia</*
tɕiwad∼tɕwiad (KYSK no 626, p. 742; cf. *Notes SM*, chain vi) (SWKL 574).

14. 蕪 * $m_ịwo$ </* $mî̯wog$~/* $m\hat{z}î̯$-, $m\hat{z}$- 'overgrown with weeds' (*Notes SM*, note 64) and 蔱 * ˙$_ịwăd$ </* z˙$_ịwăd$~z˙$miăd$ (KYSH no 572, p. 672; *Notes SM*, chapt. ii end). The CC pair is also combined in a binom 蕪蔱 with a variant 荒蔱 * $xmâng$- ˙$_ịwăd$ 'weed covered'.

15. 僵 * $k_ịang$ </*/ $bk_ịang$, * $g'_ịang$ </* $bg'_ịang$ 'prostrate, fall, overthrow' and 僨 * $p_ịwən$ </* $pî̯wənd$ 'overthrow, fall'. The reconstruction /*/ bk-, bg- is not only suggested by the CC pairing but also by the various connections of the word 畺, 疆 'boundary'. This character is a graphic enlargment of 畕 'two adjacent fields' (SWKL 6207) 比田也 $p_ịər$ ($b'_ịər$) -$d'ien$ <‡* $bd'ien$~$pd'ien$, /*/ $bk_ịang$. SWKL 6207 defines 畺, 疆 by 界 * $kăd$ </* $bkăd$ (KYSH no 78, p. 119). The same definition is given to 畔 * $b'wân$ </* $bgwân$ 'bank between fields' and to 畫 $rwɛk$ <* $g'wĕk$ </* $g'm̌ĕk$~$bg'wĕk$, * $g'wĕg$ </* $g'm̌ĕg$~$bg'wĕg$ 'to trace the limits, to border off'. SWKL 1275 says 畫象田四界．畫所以畫之 "Depicts the field and the four borders; [the brush] 畫 is that by means of which it is delimited [on plans]." It is probable that 画 is nothing but a variant of 畺 or 疆; the top element may have had a phonetic role, for 聿 was read /* $b'lwət$ and dialectally 不律 * $p_ịug$-$blî̯wət$ <‡* $pwlî̯ət$, and combined with 画 (* $k_ịang$) it may have suggested a downward reading ‡* $bk_ịang$~$pk_ịang$. 陌 * $măk$ 'path between fields' is not listed as such in SW but it is found in several definitions of other words, either alone or in the binom 阡陌, also written 仟伯 (*Kuan-tzŭ*, *Han shu*); (SWKL 6863) * $ts'ien$-$măk$~$ts'ien$-$păk$. The distinction between 阡 and 陌 as respectively 'west-east going field paths' and 'north-south going field paths' is based on late sources (*Feng-su t'ung-yi* 風俗通義) and the word is possibly adimidiation of ‡* $ts'măk$~$ts'păk$ and 陌 alone may go back to /*/ $dz'măk$. KYSH (no 327, p. 395) lists a derivate 陌, which is a late character, with a variant 嘖 * $g'wĕk$ </* $g'm̌ĕk$~* $măk$ </* $z'măk$ < ˙$măk$. Such late characters still may preserve traces of the earlier word forms. The cognates 畺 /*/ $bk_ịang$ and 界 /* $bkăd$ show the same sort of alternations as the CC pair 僵 and 界.

16. 齋 * $ts_ịər$~/* $ts_ịəd$, also written 粢, 餈, 盗 the last one (acc. KYSH no 939, p. 1095) with contacts -t, -k; 稷 * $ts_ịək$ 'millet' (SWKL 3082).

17. 罵 * $mă$ </* $dmåg$~$dmand$ (KYSH no 356, p. 431) 'to revile, insult' and 詈 * $liek$ </* $lî̯ek$; the reconstruction of 詈 is based on SM 詈: 歷, which is further explained by the sound phrase 以惡言相彌歷也 "With bad words to incriminate each other" * $m_ịad$-$lî̯ek$ <‡* $mdlî̯ek$; 亦言離, 以此挂離

之也 "Also read *lia</*d'liad; by these (incriminations) one catches (挂: 鉤取也) and ensnares him". *kwĕg-d'liad<‖*kwliad∼ᵐdliad.

18. 桎 *t̑i̯ĕt</*t̑ȓĕt∼-k (KYSH no 608, p. 723) and 械 *g'ɛg</*dg'ɛg (SWKL 2636).

19. 強, 彊 *g'i̯ang and 蚚 *g'i̯əd, g'wəd (KYSH no 20, p. 33) 'corn-weevil'. (SWKL 5960).

20. 嗌 *ˑi̯ĕk</*d·i̯ĕk∼-nt (KYSH no 742, p. 864) 'throat', and 因 *ˑi̯ĕn </*ˑi̯ĕnd (KYSH no 704, p. 828); SWKL 2731 analyses 因 as 从口大 'suppressed phonetic' /*d·i̯ĕnd, a reconstruction which applies also to 咽 'to swallow (SWKL 556 sq). Another cognate is 吞 *t'ən</*tʀən, *t'ien</* tʀien[16].

21. 語 *ngi̯o</*ᶻngi̯og 'to speak' (KYSH no 176, p. 223), 論 *li̯wən </*(b)lî·wən, *lwən</*(b)lgwən (KYSH no 876, p. 1052) 'to converse, to talk', 議 *ngia</*ᶻngia</-d 'to discuss' (SWKL 961-79).

22. 遠 *gi̯wăn</*ᶻgi̯wănd∼-ng (KYSH no 291, p. 357) 'far, distant' and 遼 *liog</*dlî·i̯og∼d'liog (KYSH no 913, p. 1066) 'distant'. Other cognates: 遉 *t'ŏk∼t'i̯ak, 逖, 逷 *t'iek</*tî-, 迴 *g'i̯weng</*dg'-?

23. 洝 *ˑân</*ˑând, 㳛 *ńi̯ɛg</*ᶻhî·əg 'warm water' (SWKL 5065). 㳛 has a variant 㳠 *nwân</*ngwând. The CC pairing suggests a reading 洝 /*/ z·ând∼d·ând∼n·ând; a hypothetical reconstruction, but confirmed by the dialect correspondences in FY 5/7, 37 俎几 *tṣi̯o-ki̯ɛd<‖*tski̯ɛd, 槬 *dia</*diad, 宜 *ngia</*dngiad, 案 *ˑân</*/ d·ând, and on the other hand 俎 *tṣi̯o</*-g, 枒 *si̯ag, 柸 *si̯ĕg, 桯 *di̯ĕng</*dî·ĕng.

24. 衍 *gi̯an</*ᶻgi̯an (KYSH no 769, p. 899) defined in SWKL 4941 水朝宗于海也 "The water courses (go) to pay court to the sea." 淖 *d'i̯og </*(b)dî·i̯og, *ti̯og</*(b)tî·og, defined by the same sentence from *Shu ching*. 衍 also means 'to flow, overflow', 潮 'tide, to rise (like the tide)'.

25. 犴 *kăn</*dkănd∼-ng (KYSH no 27, p. 43-4) and 獢 *ngi̯og</* dngi̯og∼ᶻngi̯og (KYSH no 169, p. 217) 'wild dog, strong dog' (SWKL 4413).

26. 裼 *siek</*sî·iek, *t'ieg</*tʀieg 'bare, naked' (KYSH no 216, p. 274), 袒, 但 *d'ân</*dʀând (KYSH no 216, p. 274) (SWKL 3740, 3737).

27. 舟 *t̑i̯ôg</*(b)tî·ôg 'boat' (KYSH no 602, p. 712) and 船 *d̑'i̯wan </*d'lwand (KYSH no 770, p. 900) (SWKL 3804).

---

(16) Karlgren has compared 嚥 'to swallow' with 燕 'spallow' (*Philology and Ancient China*, Oslo, 1926). This is not repeated however in *Word Families*, gr. K-N 287-8 咽, 噎.

28. 輈 *ti̯og</*.(b)tʰi̯og and 轅 *gi̯wăn</* zgi̯wănd∼-ng (KYSH no 291, p. 357) 'shafts or pole of carriage' (SWKL 6435).

29. 鷻 *d'wân∼d̂i̯wən and 雕 *d'i̯ôg 'eagle' (SWKL 1529, 1632 雕，鵰，鷻). This variation explains why 敦 is loan word for 彫，幬 (GS 464 p-q); there is nothing unusual or obscure about it.

30. 錭 *ti̯ôg 'dull' and 鈍 *d'wən 'dull' (SWKL 6353).

31. SWKL 6483 defines 陗: 陵也, and 陵: 陗高也 'high, dangerous', *ts'i̯og</*.(b)ts'i̯og; 陵 *si̯wən</* sʰwənd (KYSH no 765, p. 897).

32. 喜 with *ku wen* variant 歖 (SWKL 2062 樂也); 歖 and 歅 are defined in SWKL 3880 卒喜, which Tuan Yü-ts'ai explains as 猝 'precipitated, sudden', but more probably it is a binomial variant of 喜 *xi̯əg</* dxi̯əg (KYSH no 814, p. 971), *ts'wət-xi̯əg<♯* tsxi̯əg. SWKL 3869 歡 *xwân</* dxwân (喜樂) 'rejoice, joy'. Cognates can be found in 樂 *g'lâk</* lʰâk∼zlʰâk and the binom 喜樂 *dxi̯əg-lâk<♯* dxlâk.

33. 緩 *g'wân</* dg'wân (KYSH no 790, p. 946) 'slack, indulgent' and 綽 *t̂'i̯ok</* tʰ'i̯ok∼tnʰi̯ok (KYSH no 276, p. 336) 'indulgent, gentle' (SWKL 5931).

34. 綫 with *ku wen* variant 線 *si̯an</* sʰan 'thread' GS (237, 258). 原 and 泉 have both the same graphic element and they were probably in the same *Hsh* series (原 *ngi̯wăn</* zngi̯wăn, 泉 *dz'i̯wan</* dzʰi̯wan).— 縷 *gli̯u</* zlʰug (KYSH no 872, p. 1025).

35. 甂 *pi̯an</* pʰan (KYSH no 336, p. 401, with derivate 頒 ji̯u</* bgi̯ug and *xi̯wan</* bxi̯wan). SWKL 5755 defines 甂: 似小瓿大口...... "It resembles the *p'ou* with a big mouth..." 瓿 *pi̯ug</* pʰug, *b'əg</* bzəg, defined 甂. *FY* 5/10, 14 lists binoms 瓿甊 *pi̯ug-ngi̯u*, reduplicative binom /* bʰug, /* mgi̯ug, and 瓿甄 *pi̯ug-glug*, dimidiated binom <♯* pglug ∼* b'əg-glug<♯* bglug.

36. 甗 *ngi̯an</*.(b)zngiand (KYSH no 803, p. 961), 甑 *tsi̯əng∼-n (KYSH no 414, p. 585) (SWKL 5750).

37. SWKL 1895–8 觶，觛，觝 *t̂i̯ar</* tʰad∼/* tʰʰand∼tʰʰang (KYSH no 585, p. 685), 觛 *tân</* t'ând 'cup, ritual vessel' and 觴 *śi̯ang 'goblet'.

38. 薪 *si̯ĕn</*∼-ng, -m (KYSH no 541, p. 643) 'fuel, firewood' and 薪 *n̂i̯og</* zn̂ʰog (SWKL 443).

39. 頂 *tieng 'top of head', 顛 *tien (SWKL 3915).

40. 熱 *n̂i̯at</* zn̂i̯at∼zn̂ʰat (?), and 爇 *n̂i̯wat</* ẑn̂ʰat∼zn̂ʰwat (?), 燒 *śn̂i̯og</* śn̂ʰog 'to burn' (SWKL 4455).

41. 逾 $*d\underset{\dot{}}{i}u</*d\acute{r}ug$ (KYSH no 288, p. 349), defined SWKL 746 迻進也 'transgress', 踰 $/*d\acute{r}ug$, defined SWKL 872 越; 越 $*g\underset{\dot{}}{i}w\breve{a}t</*dg\underset{\dot{}}{i}w\breve{a}t$ defined (SWKL 793) 踰, and 越 $*g'w\hat{a}t</*dg'w\hat{a}t$, $*g\underset{\dot{}}{i}w\breve{a}t</*dg\underset{\dot{}}{i}w\breve{a}t$ (KYSH no 97, p. 145).

42. 袖 $*dz\underset{\dot{}}{i}\hat{o}g$ and 袂 $*kiwat</*kmiat$, $*m\underset{\dot{}}{i}ad</*m\acute{r}ad\sim gm\underset{\dot{}}{i}ad$ 'sleeve' (SWKL 3704-5). In SWKL 5741 由 $*d\underset{\dot{}}{i}\hat{o}g$ is a dialect word of Tung Ch'u for 缶 $*p\underset{\dot{}}{i}\hat{o}g</*/p\acute{z}\hat{o}g$, etymologically related to 匋 $*d'\hat{o}g</*bd'\hat{o}g$, $*d\underset{\dot{}}{i}og</*bd\underset{\dot{}}{i}og$ (KYSH no 314, p. 384); from this connection and the CC pairing, it is possible to posit 袖 $/*/bdz\underset{\dot{}}{i}\hat{o}g$, opposed to 袂 $/*kmiat\sim gm\underset{\dot{}}{i}ad$. 袖 has two variant graphs 褎 and 褒 (GS 1079), and it is clear that 釆 may play a phonetic role similar to 由 in 袖 and 褎. The phonetic 釆 (SWKL 3704) is a variant graph of 穗 $*dz\underset{\dot{}}{i}wəd</*dz\acute{r}wəd$ (KYSH no 864, p. 1015). 釆 itself is analysed 从爪禾 'suppressed phonetic' $*g'w\hat{a}</*zg'w\hat{a}d$ (cf. *Notes SM*, notes 46, 63; the same reading is also suggested in a downward reading of 爪禾 $*ts\hat{o}g\text{-}g'w\hat{a}d<\sharp*tsgw\hat{a}d$). Under the reading $/*/dz'w\hat{a}d$ 袖 is connected as a cognate to 褒 $*g'wɛr</*dg'wɛd$ (KYSH no 50, p. 90); another cognate is 袪 $*k'\underset{\dot{}}{i}ab</*pk\underset{\dot{}}{i}ab\sim tk\underset{\dot{}}{i}ab$. (On the alternations of final -d, and -b, cf. infra).

43. 濯 $*d'\delta k$, $*d'\delta g</*d\gamma\text{-}$ (KYSH no 254, p. 313) 'to wash' and 澣 $*g'w\hat{a}n</*dg'w\hat{a}nd$ (KYSH no 173, p. 843). (SWKL 5093). In *Word Families*, gr. K-N 238-46 and T-NG 235-49, both the words of this CC pair are listed in a different group of cognates, each of which covers widely differing sorts of semantic fields such as 'wash, pour out, clean, cleanse, rinse, etc. To these two groups comes also T-N 304-307. By following *SW* a somewhat different grouping can be proposed.[17] (SWKL 5068).

44. 汛 $*s\underset{\dot{}}{i}ĕn</*s\underset{\dot{}}{i}ĕnd\sim\text{-}mb$, $*s\breve{a}d$ (KYSH no 564, p. 667) 'to sprinkle', and 灑 $*sl\underset{\dot{}}{i}ĕg</*slĕg$, $*slĕg\sim/*lsĕg$. Because of the CC pairing the forms of 汛 may be reconstructed as $/*/ls\breve{a}d$, $slĕnd$ $(\sim mb?)$ opposed to $/*sleg$, $lsĕg$ (SWKL 5097).

The CC pairs which follow hereafter oppose words with final dentals -n, -d, -t or velars -g, -ng, -k against cognates with final labials -m, -b, -p.

---

(17) A first group, according to SWKL 5084 sq. contains 滌 $*d'\underset{\dot{}}{i}\hat{o}k$, 澡 $*tsog$, 浴 $*g\underset{\dot{}}{i}uk</*zg\underset{\dot{}}{i}uk$, $d\acute{r}uk\sim dg\underset{\dot{}}{i}uk$ (KYSH no 90, p. 132; *Notes SM*, chap. 1), and 洒, 洗 $*s\underset{\dot{}}{i}ən$, $*s\underset{\dot{}}{i}ər$. Another group is 涷, 漱 $*suk$, 澆 $*kiog</*dkiog$, $nk\underset{\dot{}}{i}og$, 沃 $*{}^{\cdot}ok</*z{}^{\cdot}ok\sim d{}^{\cdot}ok$) (*Notes SM*, chain viii), 渝 $*ts\underset{\dot{}}{i}an$, 灌 $*kwân</*dkwân$, 盥 $*kwân$. A third group is 淅 $*siek$, 汰 $*d'âd</*d\gamma\hat{a}d$ (KYSH no 252, p. 308), 瀟 $*s\underset{\dot{}}{i}\hat{o}g$, 潰 $*dz'\underset{\dot{}}{i}ĕg$ and 漚 $*{}^{\cdot}u</*(b)z{}^{\cdot}ug$. 淅 and 汰 form a CC pair in *SW*.

45. 鰌 * dz'i̯ôg, * ts'i̯ôg 'mudfish' and 鰼 * zi̯əp </* dzləp (KYSH no 528, p. 632) (SWKL 5230).

46. 績 * tsiek 'twist, spin' and 緝 * ts'i̯əp~tsi̯əp 'hem, connect' (SWKL 5907). Probable cognate: 紋 * ts'i̯ər </* ts'i̯əd < tns'i̯əd 'twist hemp'.

47. 籥 * diok, and the dialect word from Ying ch'uan 笘 * tiap </* tniamp (KYSH no 604, p. 715), and 策 * t'iap </* tɾiap < tɾl- (KYSH no 667, p. 785) 'writing tablet for student'. According to *Ts'uan wen* 纂文 by Ho Ch'eng-t'ien 何承天 (370–447), 籥 is a dialect word of Kuan hsi 關西 in Chin time.

48. 覆 * b'i̯ôg </* bźɾôg, * p'ək </* pzək, * p'i̯ôg </* pɾi̯ôg, * p'i̯ôk </* pɾi̯ôk 'to cover' and 覂 * pi̯um </* pɾumb (SWKL 3398). Compare another *CC* pair, SWKL 2144,3400 覆 and 蓋 * g'âp </* bg'âp, * kâb </* bkâb (*Notes SM*, note 71).

49. 諛 * di̯u </* dɾug (KYSH no 754, p. 877) 'to flatter' and 諂 * t'i̯ɛm </* tɾlɛm (KYSH no 132, p. 179) (SWKL 1026).

50. 阻 * tṣi̯o </* tnŝɾog 'precipitous, dangerous' (KYSH no 462, p. 553) and 險 * xli̯am~/* xlam < dzxlamb, * xli̯ăm~/* xlăm < dzxlămb 'precipitous' (SWKL 6481).

51. 齺 * ngi̯ăm </* dnglăm (KYSH no 51, p. 85) 'uneven teeth'. SWKL 848 defines 齺:齹, emendated by Tuan Yü-ts'ai into 齹; 齹 is defined 齒參差 , and 齺 is 齒差跌兒 'uneven teeth, ready to fall out'; * dz'â </* dzɾâg~ dzɾâd, * dz'ia </* dzɾi̯ag~dzɾi̯ad (KYSH no 472, p. 565). Probably 參 is another variant of the word 齺, * si̯əm, ts'i̯əm </* sɾəmb, tsɾi̯əmb (KYSH no 606, p. 721; *Notes SM*, chain v).

52. This *CC* contains more than two words: SWKL 1289 defines 殳 d̂i̯u </* dɾug < bdɾ- with a sentence 以杸殊人也 'to kill a man by means of of a pike, i. e. to pike'. SWKL 1292 defines 杸 /* dɾug as 軍中士所持殳也 'It is the pike which the officer in the war chariot holds in the hand', furthermore, here may be added (GS 323) 祋 * twâd </* tgwâd 'kind of spear' (殳也) and 芟 * sam </* s'am 'to cut grass, to cut' (SWKL 2385 describes the sound 芟 as identical with 糂 /* sɾog/* s'am (KYSH no 179, p. 226; cf. *Notes on SM*, note 46).

53. 檻 * g'lam </* dlɾam, * g'lâm </* dlɾâm 'cage' (KYSH no 131 p. 180) and 櫳 * li̯ung </* dlɾung (KYSH no 197, p. 250) (SWKL 2630).

54. 馮 * b'i̯əng </* b'i̯wəm?, defined in SWKL 4324 馬行疾也 and 驫 * b'wăm </* b'lwăm (KYSH no 417, p. 510) defined 馬疾步也 . In the same

division can be found a number of other words with similar definitions and probably cognate to the *CC* pair: 馻 * *n̨i̯əp* </* *zni̯amp* 馬步疾也, 騉 * *kât* </* *dkâp～zkâp* 馬疾走也, 驔 * *ts'i̯əm～*ts'i̯əm* 馬行疾也, 駸 * *dz'i̯og* 馬行疾步也.

55. 信 * *si̯ĕn*</* *sr̂ĕn* (*Notes on SM*, chain vii), 誠 * *di̯ĕng*</* *dr̂ĕng* (KYSH no 205, p. 267) 'sincere, truthful, reliable'. SWKL 987 gives also 訦 * *ȃi̯əm*</* *dr̂əmb* (KYSH no 263, p. 889) as a dialect word corresponding to 誠 (cf. *FY* 1/20); then it is clear that this *CC* chain also includes 諶: 誠也, * *ȃi̯əm*</* *dr̂əmb*.

56. 及 * *g'i̯əp*</* *zg'i̯əp* (KYSH no 162, p. 207) 'to reach, arrive', 逮 * *d'əd* </* (*b*)*ded*, * *d'i̯ed* </* (*b*)*dr̨ied*<*bdr̨l*-? (KYSH no 775, p. 910 sq), defined 及, and 唐逮 * *d'âng-d'ed*, a binom which shows an alternation *-ng～* *-d*, besides *-d～-p*. Here may be suggested as cognates: (*FY* 7/13) 蝎 * *g'ât* </* *dg'ât*<-*p*, and 噬 * *ȃi̯ad* </* *dr̂ad*.

57. SWKL 2506–7 is a *CC* chain containing 梠: 楣; 楣 (Ch'in dialect): 檐聯; 檐 (Ch'i), 梠也; 槐: 梠 (Ch'u), all meaning 'eaves'. 楣 * *mi̯ər*</* *mr̂əd* forms one group with 檐聯 * *mi̯an-li̯an* <#* *mli̯an*, 槐 * *b'i̯et* </* *bẑr̂ent*, * *b'i̯ed* </* *bẑr̂end*, opposed to 檐 * *di̯am* </* *dr̂am* (KYSH no 603, p. 714, *Notes SM*, note 44) and 梠 * *glio* ～/* *dlr̂og* (KYSH no 893, p. 1051).

58. 誕 * *d'ân* </* *dr̂ând* (KYSH no 778, p. 914) (SWKL 1053 gives a variant 這 * *ngi̯ǎn* </* *zngi̯ǎn?*) 'to boast' and 譀 * *g'âm* </* *dg'âm* (KYSH no 57, 9. 95).

59. 跲 * *kɛp* </* *dkəp*, * *g'i̯ap* </* *dg'i̯ap*, * *ki̯âp* </* *dki̯âp* (KYSH no 112, p. 157) 'to stumble' and 躓 * *ti̯əd* </* *tr̂əd* < -*b*? (*Huai-nan tzŭ*, Kao Yu's commentary indicates a Ch'u pronunciation of 躓, identical with 蟪 * *d'wəd*</* *dgwed*). (SWKL 889).

60. 泣 * *k'li̯əp～*/* *tkləp* 'to weep without sound' and 涕 * *t'i̯ər* </* *tr̂ləd* (KYSH no 778, p. 914; SWKL 2349 analyses the *ku wen* variant 𣷷 with ʃ as phonetic. Cf. *Notes SM*, chap. ii) (SWKL 5102).

61. 諧 * *g'ɛr* </* *bzg'ɛd* (KYSH no 15, p. 28. SWKL 1475 lists 皆 under 自 * *bẑr̂i̯əd*, and analyzes it 从比 (/* *dẑr̂əd*) 从白 (*bẑr̂əd*), and 詥 * *g'ep*</* *dg'əp* (KYSH no 112, p. 157) 'harmony, harmonious' (SWKL 1003). Compare here another *CC* pair 皆, defined 俱 * *ki̯u* </* *ki̯ug* 'all, complete', while 偕 /*/ *bzkɛd* (SWKL 3532) is defined 具, analyzed 从 廾从貝省, and which can be read downward * *pâd-ki̯ung* <#* *pki̯ung～bki̯ung(?).*

62. 歠 * *ťi̯wat* < / * *tři̯wat* 'to taste, eat' (KYSH no 277, p. 339), with a variant graph 吷 * *xi̯wat* < / * *xmi̯at* ~ *·mi̯at* ~ *t·mi̯at* > *t·i̯wat* (KYSH no 80, p. 124; *Notes SM*, chain ii), and 歙 with *ku wen* variants 㱃 and 余 * *·i̯əm* < / * *d·i̯əmb* (KYSH no 49, p. 81) (SWKL 3900, 3899).

63. 櫼 * *săm*, * *tsi̯am* 'wedge, peg' and 楔 * *kat* < / * *zkat*, * *si̯ĕt* < / * *sřĕt*, *siat* < / * *sři̯at* ~ *s·iat*. In Hsuan Ying's 玄應 (T'ang time) *Yi-ch'ieh ching yin-yi* 一切經音義, 楔 is mentioned as the standard word with dialect correspondences from Chiang nan 櫼, and from the Central areas (中國) 扂 * *tşăp* < / * *tsˇăp*, * *şăp* < / * *sˇăp*, * *tşˇi̯ep* < / * *tsři̯əp* (SWKL 2518).

64. 拾 * *dzi̯əp* < / * *dzřəp* (KYSH no 112, p. 157) and 掇 * *twât* < / * *tgwât* < -*nt*, * *ti̯wat* < / * *třwat* < -*nt* 'to pick up, gather' (SWKL 5459).

65. 鍥 * *k'iat* < / * *skiat* ~ *tkiat* 'to cut, cut through, cutting instrument' (KYSH no 79, p. 120) and 鎌 * *gli̯am* ~ / * *dlřam* 'sickle' (KYSH no 51, p. 84; *Notes SM*, chain i) (SWKL 6290). *Word Families*, gr. K-N 300–321, includes a great number of words from various semantic fields: 'notch, kill, punish, wound, cut, etc' Among them 鉙 and 劇 should be reconstructed in a more complicated form (cf. supra no. 41, 14). Under gr. T–N 15–37 we find equally numerous words meaning 'cut, short, piece, etc.' and various particular ways of 'cutting hair, grass, clothes, wings, grain'. *FY* 5/30 compares seven different nouns for 'sickle': 鉤 / * *zkug* 鉊 / * *třog*, 鍋 / * *lkwâg* ~ *lkwâd*, 刈 / * *zngi̯ad*, 鍥 / * *skiat*, and 鎌 / * *dlřam*.

66. 匣 * *g'ap* < / * *dg'ap* (KYSH no 114, p. 164) 'case, box' and 匱 * *g'i̯wεd* < / * *dg'i̯wεd* (KYSH no 157, p. 203) (SWKL 5736). Other cognates with this *CC* pair: 龕 * *k'əm* < / * *tkəmb*, 箧 * *k'i̯ap* < / * *ski̯amp*, (KYSH no 113, p. 162); 籯 * *di̯ĕng* < / * *dřĕng*, a *CC* word with 等 * *li̯ĕng* < / * *zlři̯ĕng* (KYSH no 880, p. 1038) (SWKL 1944, 1966) and 筥 * *si̯əg*, 匵 * *dřŭk*.

67. 吟, 詥 * *ngi̯əm* < / * *zngi̯əm* 'drawn out and sad song' (*Notes SM*, chain v), 呻 * *śi̯ĕn* < / * *sřĕn* (*Notes SM*, chain vii) 'to chant, drone'. Furthermore, 唫 / * *třiem* ~ -*n* 'to chant, recite' and 吚 * *zxi̯əd* (KYSH no 651, p. 769). (SWKL 929).

5. *Chuan chu pairs explained through binoms.*

The *CC* pairs and chains in *SW* include some exceptional cases, where either the initials or the finals present special difficulties prohibiting any reconstruction which could show enough phonetic similarity required for a true *CC*. The explanation of these *CC* pairs is to be found in the fact that many binomial members have become so closely associated with each other so as

to be considered as *CC* pairs. It has been shown already that several *CC* pairs often formed at the same time reduplicative or dimidiative binoms. Besides these cases, there are other binoms which are simply made up through the combination of two synonyms, that can not be reduced to the same original word stem; it may have been a bisyllabic word, which was written by convenient graphs that could be isolated and separately used for the same meaning. Finally, there are cases where the binomial form is a dimidiation of only one of the *CC* words, while the other *CC* member is only chosen to write phonetically the first or second syllable of the dimidiated binom, without itself being reducible to the original word.

1. 趲 * *g'ɪwan* < /* *dg'ɪwan~-ng* (KYSH no 585, p. 686) 'to walk with a bent back', and 趢 * *luk* < /* *b'luk*, * *lɪuk* < /* *blɾuk* (KYSH no 917, p. 1069). Binom, already in *SW* 趲趢 * *dg'ɪwan-b'luk* (-*blɾuk*) ~ *dg'ɪwamblɾuk*.~ *dg'ɪwangblɾuk* (SWKL 691).

2. 跛 also written 佊 (SWKK 4584) * *pwâ* < /* *pgwâ* 'to limp, to be lame', and 蹇 * *kɪăn* (KYSH no 786, p. 931) (SWKL 894). Binom in *Chuang-tzŭ* (LMTT 9 yu 242) 跛蹇 * *pgwâ-kɪăn* 'to limp on one side'.

3. 愚 * *ngɪu* < /* *mgɪug* 'stupid, ignorant', 戇 * *tŭng* < /* *l·tŭng*, * *xung* < /* *dlxung* (KYSH no 831, p. 987) (SWKL 4724). Yen Shih-ku 顏師古 (581– 645), commenting on *Han shu* (TT 298) indicates an old pronunciation 下紺反 * *g'əm* < /* *dg'əm*. Various different writings of the same binom are known 慃愚 * *t'ong-ngɪu* < *t'ongɪug* (*Li chi*), * *śɪung-ngɪu* < *śɪungɪug*, 憃愚 * *t'ɪung-ngu* < *t'ɪungɪug* (*Ta Tai Li chi*), * *d'ŭng-ngɪu* < *d'ŭngɪug*, 戇愚 /* *dg'əm-mgɪug* < *dg'əmgɪug* (*Mo-tzŭ*); the latter form is probably the oldest.

4. 盾 * *ɑ̂'ɪwən* < /* *ɑ̂'ɪwənd*, * *d'wən* < /* *d'wənd* (KYSH no 247, p. 306), 瞂 * *b'ɪwăt* < /* *brɪwăt* (KYSH no 342, p. 412). SWKL 1469 explains 盾 with a sentence 所以扞身蔽目 "That by which one protects the body and covers the eyes." The latter part of this sentence is more than unusual as a description of a shield and is hardly intelligible unless it be meant as sound phrase; * *pɪad-mɪôk* < ⧣* *pdmɪôk* indicates a reading of 盾 /*/ *bd'ɪwôk*, a variant of /* *bd'ɪwənd*. A probable explanation is that there was a binom 瞂盾 at the origin of this *CC* pair, and that a difference of stress developed this binom * *b'ɪwăt-d'wən* to /*/ *b'ɪwâtn* > *b'ɪwât*, or /*/ *bd'wənd* >* *d'wən*.

5. This is a case similar to the previous one. SWKL 2438 楡: 木. 白 枌 and 枌: 楡; 枌 * *b'ɪwən* < /* *brɪwən* 'elm', 楡 * *dɪu* < /* *dɪug* < *b-* (cf; 兪~舟). Binom /* *brɪwəndɪug* > *brɪwənd*~*b'dɪug*.

6. 忿 *p'iwən* </ *pɤiwən* 'anger, angry', and 悁 * ·iwan </ *z·iwand KYSH no 787, p. 935). Binom in *Kuo ts'ê, Ho-kuan-tzŭ* 忿悁 /* pɤiwən·iwand (LMTT, 4, mao, 221).

7. 噴 * p'wən </* pɤwən 'to spurt', and 吒 * tag 'to snort, sneeze'. Binom 噴吒 * pɤwən tag (LMTT 2, ch'ou, 163); compare 噴嚔 /* pɤwən-tied (*Erh ya*).

8. 諆 * kiəg </* zkiəg, * k'iəg </* skiəg, 欺 * k'iəg </* skiəg and 詐 * tsăg 'to deceive, cheat' (SWKK 1064). *SW* offers the binom * tsăgk'iəg <‡* tskiəg, a variant of /* skiəg∽zkiəg (諆, 欺); 詐 is used to represent the first syllable of the dimidiation binom derived from the split of the initial cluster of 欺.

9. 締 * d'ieg 'to knit together' and 結 * kiet </* dkiet (*Notes SW*, chain iii) (SWKL 5820). Binom 締結 * d'ieg-kiet <‡* dkiet (LMTT 7 wei 123).

10. 沒 * mwət 'to disappear under the water, sink, dive' and 沈 * d·iəm </* dɤiəm 'to sink, be submerged'. 沈 though defined in SWKL 5028 陸上滈 水也 "Water flowing over the hill" is probably cognate with 湛 defined 沒 (SWKL 5041). 湛 * təm </* t·əm, * d·ăm </* dɤ ăm, * tsiɛm </* tsɤɛm. Binoms 沈沒, 湛沒 (TT 2378; *Lü shih ch'-ch'*) /* dɤiəm-wət∽dɤăm-mwət; possibly 沒 goes back to /*/ d·mwət∽dgmwət (KYSH no 234, p. 293).

11. 扉 * piwər </* pʑiwəd (KYSH no 374, p. 45) 0, and 扇 * sian 'leaf of door' (SWKL 5300). SWKL analyses 扇: 从戶从狯省; 扇 is therefore related to 戶 * g'o </* zg'og. FY 5/21 oppses 扇 as a corresponding word to 萐 * siap, 箑 * tsiap, şap </* sɤamp, tsɤamp, sɤamp. SM mentions 窆 * sap as a Ch'i word for 扇. On the strength of the dialect correspondences a a probable reconstruction may be posited for 扇 /*/ sɤamb. 扇 is part of the binoms 扇窆 (Wei Chao's comm. to *Kuo Yü*, PWYF 4237/3) and 扇扉 (*Shui- ching chu*, PWYF 194/2), and the reconstruction -mb seems quite acceptable in the light of a *sandhi* in 扇扉 /* sɤan-pʑiwəd < sɤam(b)pʑiwəd. FY 2/31 lists some words for 'screen', which are probably cognates 翿 * d'ôg also written 翳 </* dɤôg (SWKL 1505), 翳 * ·iei </* d·ied and 幢 * d'ŭng </* ld'ŭng∽dl'ŭng. Possibly 扇翳 /* sɤamb-d·ied is just another variant of 扇扉.

12. 敷 * p'wo </* p'iwog (KYSH no 388, p. 477) 'to arrange, set forth' and 也 * sia </* bʑiad (KYSH no 771, p. 903) (SWKL 1330). SWKL 5664 defines 也 as 女陰也 '*pudenda muliebria*', and analyzes it 从乁, 乁亦聲. 乁 is read iẹ, but also p'iuət (KYSH p. 506), which suggests a reading /* bʑiad. This reconstruction agrees with the binomial form 敷也 (LMTT 5 mao 414)

* *p'iwog-śia* < / * *pśiad~bśiad*. Beside this binom there are others of the same structure 杯匜，髳髦，鶩馳 (LMTT 10 hai 24) confirming an initial *b*- in 也.[18]

13. 梅 * *mwəg* < / * *mgwəg*, with a variant graph 楳 * *mwəg*, and 柟 * *nəm* < / * *dnəm* (KYSH no 933, p. 1090) with a later variant 楠 * *nəm* < / * *lnəm~dnəm* (KYSH no 137, p. 1094). The commentators to *SW* point out that 梅 has been used for two different trees, the ordinary plum tree, and another one, of unknown species which had an edible fruit, the name of which was however still used as a synonym of 柟 (probably with no edible fruit), sometimes called 梗柟 * *b'iandnəm*, 赤梗 * *t̂'iăk-b'ian* (dialect word from Yi chou, according to Sun Yen 孫炎, 3d cent.). As to the *CC* pair 梅: 柟, it is probably referring to the same tree as the 梗柟, and on the sequence * *b'ian-dnəm*, it is was a binom, probably 梅柟 * *mwəgdnəm* < ‡ * *mgnəm~bdnəm*, rather than 柟梅 / * *dnəm-mwəg* < ‡ * *dmgwəg*, which however is comparable to 赤梗 * *t̂'iăk-b'ian* < ‡ * *db'ian*, with alternation of the finals -*g*~-*n*.

14. 儋 * *tâm* < / * *t'âmb~'tâmb* (KYSH no 603, p. 714) 'to carry on the shoulder', 値 * *t'ân* < / * *tɤând* (KYSH no 216, p. 276) (SWKL 3541), and 何 * *g'â* < / * *dg'â* < -*n*, -*nd* (SWKL 1473). *SW* has the binom 儋何 * *t'ân-g'â*, but in literature (TT 1473), one can find 儋何 / * *t'âm-g'â*, a variant of 値何 * *t'ân-g'â*, as well as 何儋 * *dg'â-t'âmb* (TT 2190). The double binomial sequence indicates the *SW* listed here a true *CC* pair, of which each member is etymologically related and offers a difference in the final / * *dg'â* / * *tɤând*, *dg'ân* versus *t'âmb* /*.

15. 瘞 * *·iad* < / * *d'lab* > -*d* (KYSH no 113. y. 163) 'to bury', defined in SWKL 445 幽薶也; Sun Yen 孫炎 sets up a paronomastic definition 瘞: 翳 / * *d'iəd*; the latter character is equated in *SM* with 殪 / * *d'iet*. *Erh ya* (*Shih ku* I, B, 36) defines 瘞: 微; Chu Chün-sheng rightly takes this as a paronomastic

---

(18) There is a number of words where a development *bɤ-*, *bz-*, *bs* > *gz-*, *gs-* can be observed. Thus *FY* 5/28 杷 * *b'ă~b'wai* < -*d*(?) is opposed to 渠拏 * *g'io-nă* < ‡ * *gd'năg* and 渠疏 * *g'io-sio* < ‡ * *gśiog*. 杷 probably goes back to / * *b'âg~bɤăg~bgwad*. *FY* 11/17 蟑蛦 * *b'iôg-liôg* < ‡ * *b'lôg~bdliôg*, also written 蟑蛦 (*Shih ching*, *Erh ya*) * *b'iôg-diôg* < ‡ * *bdiôg*, is opposed to the dialect word 祼蟄 * *g'io-liăk* < / * *g'iog-liăk* < ‡ * *g'lôg~g'liăk~gd(l)ĭăk*. SWKL 6578 explains 巴 as a pictogram of a snake (蟲: 食象蛇) * *b'ă* < / * *b'ag~-d*. 虵 * *d'ia* < / * *bd'iad* is a variant of 蛇 * *t'â~d'ia*, * *dia*, and defined 虫 * *xiwəd*, in its turn defined 蝮 * *p'iuk* < / * *pɤiuk* (SWKL 5930). 虫 and 蝮 are probably *CC*, / * / *bxiwəd*, / * *pɤiuk*. *Shan hai ching* 山海經 has the binom 巴蛇 * *b'ăg-d'iad* < ‡ * *b'diad*. Furthermore, the snake 巴 is described (*SWKL* 6578) in a curious way 博三寸首大如擘指 "It is three inches thick (* *pâk*) and the head is as big as a thumb" (* *pĕk-tiər* < ‡ * *ptiəd*.)

definition * *bd˙lab*~/* *mî˙wəd*. *Erh ya* elsewhere (*Shih hsün*, II, 105) defines again 瘱 by 幽 * ˙ʮ̑ôg </* *dzˑʮ̑ôg* (*Notes SM*, chain viii; SWKL 1671). The distant divisions of 瘱 and 蘿 in *SW* can be solved through the variant graph 埋, which falls within the same division as 瘱. 蘿 * *mlɛg*~/* *lm˙ɛg*~*l˙mɛg* (KYSH no 892, p. 1051) is equated in *SM* with 痗 * *xmwəg* ~/* *gmɛg* (*Notes SM*, chain xi). Numerous binoms (TT 407) attest the sequence 瘱蘿 /* ˙ʮ̑ad-*l˙mɛg* >* ˙ʮ̑ad-*mɛg*, of which both elements /* *bd˙lab*, /* *lm˙ɛg* can be justly considered as *CC* pairs. Besides the alternations between 瘱 and 蘿 (-*b*, -*g*) there is also 幽 /* *bzˑʮ̑ôg*.

16. SWKL 2568 棚 * *b˙ăng*, * *bĕng* and 棧 * *dz˙ăn*, * *dzˑʮ̑wan*, * *dz˙an* </* -*nd* (KYSH no 518, p. 621) 'shed made of intertwined branches'. Among binoms, 棚棧 is late (PWYF 3027/1), but 板棧 * *pwan-dz˙ăn* 'laths, slats' (*Hou Han shu*, K'M 766/4) may be a variant of the same word, with *sandhi* change.

17. 袷 * *g˙ăd* </* *bg˙ăd*~*mg*-? (KYSH no 78, p. 119), and 祏 * *t˙âk* </* *tɤâk* (*Notes SM*, note 44, chain ii) 'to widen a garment; slitted garment, slitted skirt or pants', There are no binoms in early literature, but in *Kuang ya*, *Yü pien* and modern literature, we find 裵祏 *g˙ʮ̑uən-t˙âk*, 帬衩 *g˙ʮ̑uən-ts˙ai*, 開祏 * *k˙ɛd-t˙âk*, all forms which suggest a binom with the sequence 袷祏 *g˙ăd-t˙âk* (SWKL 3708).

18. 蜀 defined in SWKL 6031, 5960 as 葵中蠶也 'the silkworm of the mallow', also written 蠋 * *d˙uk* </* *bd˙uk* (*Huai-nan-tzŭ, kuan-tzŭ*) [Ching-tien shih-wen 經典釋文 (*Ch'eng-chi shu-ts'ung* ed. p. 284) defines it 桑蟲也] and 蠶 defined 任絲 '[the worm] that produces (妊) silk thread' * *dz˙əm* </* *dzɤəm*. The binom 蠶蠋 /* *dzɤəm-bd˙uk* appears in *Kuan-tzŭ*.

19. 謗 * *pwâng*, 誹 * *p˙ʮ̑wər* </* *pźʮ̑wəd* 'to criticize, slander', 誀, 毀 and 譭 * *xʮ̑wăr* </* *bxʮ̑wăd* (*Notes SM*, note 23); alternation between final -*ng*, -*d*. The binoms 毀謗 /* *bxʮ̑wăd-pgwâng* (TT 2104), 誹謗 /* *pźʮ̑wəd-pgwâng* (TT 2104) are as early and well attested as 謗毀 * *pwâng-xʮ̑wăd* (LMTT 9, yu, 111). The differences in the initials *pw*-, *pź*-, *bx*- are probably not a reason to reject this *CC* pair of *SW* as representing true cognates.

20. 枷 * *ka* </* ? and 柫 * *pʮ̑wət* 'flail' (SWKL 254–5). The definition of 柫 is 連枷 * *lʮ̑an-ka* </* *dlʮ̑an-ka* ~ *dlʮ̑aŋka* (KYSH no 878, p. 1036). This binom is a variant of the binom in *SM* 21/14 羅枷 * *lâ ka* </* *dlâ-ka* (cf. FY 7/23 羅~離 /* *d˙lia*-), and proves that the two words 枷 and 柫 are meant as real *CC* in *SW*. Both forms /* *dlʮ̑an-ka* and /* *dlâ-ka*~*d˙lia-ka* must be explained as binoms resulting from a sort of enclitic ending, as in the word

驪駕 *lᵢ̆ĕg-ka</*zlᵢ̆ĕg-ka as against 楷 *sᵢ̆ĕng</*slĕngk 'wooden sticks crossed to support the rice wattle'. Other binoms point to the same sequence of initials in the reconstruction: 譖加 *tseng-ka 'to impress upon, cheat', also written 增加 and 乘架 *ð'ᵢəng-ka (*Huai-nan-tzŭ*; explained by Kao Yu as 材木相乘架 'the wooden material is set up and fitted together'). 乘架 is probably cognate with 楷 and 驪駕. In all these binoms the final -*a* is probably enclitic, and the earlier form was /*slĕngk, /*tsengk, /*ð'ᵢəngk. The word for 'flail' 連加 #*dlᵢangk, 羅加 #*dlâk~dlᵢak, can be compared to 柍 *˙ᵢang</*dᵢang (SWKL 2235 analyses 央 as 从大冂之內 *d'âd-kᵢweng</#*dkᵢweng, and defines it 中央 *tᵢông-˙ᵢang<#*t'ᵢang~/*/d'ᵢang) and to 度 *d'âg, d'âk. On the other hand, this word stem 柳, 架 *ka also appears as /*dka 'building structure', related to 柂架 *dia-ka 'clothes stand' (*Li chi*, Couvreur I, 26) and to 簨 *kug</*dkug (Takata, *Kochūhen* 8/31). FY 5/29 lists several dialect words for 'flail' 㲎 /*tsˆlam (KYSH no 500, p. 595, *Notes SM*, chain v), 櫏殳 /*snᵢap-dˆug</*snlamp- and /*bdˆug (KYSH no 308, p. 376), 度 *d'âg~d'âk, 柍 /*d'ᵢang, words which all belong to the same stem, and 梻 *pᵢwət, 桲 *b'wət, 棓 *p'əg</*pzəg (KYSH no 308, p. 464). *SM* 21/14 explains the equation 柳: 加 with the phrase 加杖於柄頭以摙穗而出其穀也或曰羅柳互杖而用之, 或曰丫. 丫以杖轉於頭. "柳 is 加 'to add'; adding the stick to the end of the handle, in order to beat (摙 *kwâ</*ˡkwâg~dkwâg) the ears of the grain and to make the grain come out. It is sometimes called 羅加; they hook together the sticks and use them so; sometimes it is caled 丫 *˙ia 'to fork, the forked (stick)'; 丫 is to make the stick turn on the end [of the handle]." 丫 is a different word based on the stem 'forked object, fork'. The *SM* expression 加杖 *ka-ð'ᵢang 'added stick' is a semanticization of an inverted dimidiation binom, derived from 柍 /*d'ᵢang. There remains 棓 *p'əg</*pzəg, which is probably related to 殳 in 櫏殳, /*bdˆug 'beater'; 梻 *pᵢwət and 桲 *b'wət could be cognates of 棓 with alternation in the final -*t*. There is no text example of any binom made from 梻 or 桲 and 柳; yet it seems that the only explanation of the CC pair was a binom 梻柳 *pᵢwət-ka, 桲柳 *b'wət-ka (rather than the reverse sequence). There are however binoms which could be considered variations of a supposed 梻柳, such as 扑擊 *p'uk-kᵢək (TT 2640), with a *sandhi* which could have wiped out the initial cluster of 擊 /*dkᵢək (cf. supra 3. no. 12) or 摳撾 *˙u-kwâ</*bzˆug-dkwâg (TT 2639). (Other binoms, such as 跏跌, show the reverse sequence to be possibte as well). The same diffuclty occurs with the CC pair 柄 *pᵢăng</*pˆăng (KYSH no 393, p. 482) 'handle' and 柯 *kâ</*dkând~

lkând (KYSH no 808, p. 697; GS 1, *-n* in a loan word *kân*); binom 柄柯 * *p̯ăng-kâ?*

21. 脅 * *x̯ăp*</* *xlămp*, * *x̯ăm*</* *xlămb* (KYSH no 380, p. 459) and 膀 * *bwâng* 'ribs, sides'. (SWKL 1755). Among possible binoms we find only 傍脅 * *b'wâng-x̯ăm* (-*x̯ăp*) (*Shih chi*, chap. 112) 'to be around, at the sides', and 迫脅 * *păk-x̯ăp* 'to press close, use pressure against' (TT 2794), which are expressions with verbal meaning derived from the basid meaning of 膀脅 'the ribs, the sides'.

22. 排 * *b'ɛr*</* *bzɛd* (KYSH no 374, p. 450) 'to push' and 擠 * *tsi̯ər*~ /* *tsi̯əd*, 推 * *t'wər*</* *tɤwəd*, * *t̂'i̯wər*</* *tʃi̯wəd*. (SWKL 5385). Binom 排擠 * *b'ɛd-tsi̯əd*, 排推 * *b'ɛd-tʃi̯wəd* (LMTT 4, mao, 299).

23. 滿 * *mwân* 'full' defined in SWKL 4983 by a reduplicative binom 盈溢 /* *dʰĕng-d'i̯ĕt* (cf. supra 3. no. 9), and 溢 * *·i̯ĕt*</* *d'i̯ĕt*(?) (SWKL 5083); binom 滿溢 * *mwân d'i̯ĕt* (TT 2345).

24. 隱 * *·i̯ən* 'bevel' and 栝 * *kwât* 'carpenter's square' (SWKL 2582). The commentaries of *Hsün-tzǔ*, *Huai-nan-tzǔ*, *Yen-t'ieh lun*, *Ta Tai Li chi*, *Kui-ku-tzǔ* take both syllables as inseparably combined to form one binom 隱栝 * *·i̯əngkwât* 'correcting frame'. In *Shu ching* (Karlgren, *Glosses on the Book of Documents*, gl. 1483) 隱 is found alone; everywhere else however, the *Han-fei-tzǔ* text included[19], we find a binom. Although it is not impossible that 隱 could appear alone in that sense, this occurrence seems suspicious, and it would indicate rather that the reading of the 'Stone Classics' which has 乘 for 繩 'to correct by means of the plumb line' is a preferable reading in *Shu ching*.

25. 炮 * *b'ôg*</* *bzôg*, * *p'ôg*</* *pzôg* 'to bake, to roast' (KYSH no 314, p. 383), and 炙 * *t̂i̯ăk*</* *tʃăk*, *t̂i̯ăg*</* *tʃăg* (KYSH no 613, p. 730) 'to roast, to broil'. There is no indication of a labial initial in 炙. The explanation of this CC pairing (SWKL 4475, 4547) is found in the SW definition of 炮 by a binomial expression 毛炙 * *mog-t̂i̯ăk* (~-*t̂i̯ăg*)<‡* *mtʃi̯ăk*, *mtɤăg* (LMTT 5, ch'en, 318 quotes *Chou li* 毛炮 * *mog-b'ôg* 'to burn the pig with the hair'). The real CC pairing is between 炮 /* *bzôg~pzôg~bd'ôg* and the binomial form 毛炙 * *mog-t̂i̯ăg*<‡* *mtɤăg*.

26. 極 * *g'i̯ək* 'ridge of roof' and 棟 * *tung* 'ridge pole' (SWKL 2494). The phonetic of 極 is 亟, analysed in SWKL as 从人从口从又从二. But Wang Hsü 王煦 T. Fen-yüan 汾原, H. K'ung-t'ung 空桐 (Ch'ing) in *SW wu-yi* 說文五

---

(19) Cf. Ch'en Ch'i-t'ien 陳啓天, *Han-fei-tzǔ chiao-shih* 韓非子校釋, Chung hua ed. 1940, p. 18-20.

翼 corrects this into 从二皈 (聲), which is confirmed by the early graphs (*GS* 910, Kuo Mo-jo 郭沫若, *Liang-chou chin-wen-tzǔ k'ao-shih ta-hsi* 兩周金文字考釋大系 1935, inscr. 15, 班毁). The reconstruction of 極 must follow the same pattern as 憊 above, /* *bg'i̯ək*. Yet 棟 has no labial initial (KYSH no 197, p. 45) and the solution is to be found in the definition of 桴 (SWKL 2492) 棟也; this is corrected by Tuan Yü-ts'ai into 眉棟 (following *Erh ya, Shih kung*, 5/11,4) * *mi̯ər-tung*</#* *mtung*. From this binom 棟 was isolated and defined 極 and *vice versa*. This way the cognates to which the *CC* of *SW* refers are 桴 * *b'i̯ôg*</* *bźi̯ôg*, * *p'i̯ug*</* *pźi̯ug*, 極 /* *bg'i̯ək*, and 眉棟 #* *mtung*.

27. 噬 * *d̂i̯ad* 'to bite' and 啗 * *d'âm*</* *dʳâmb* (KYSH no 132, p, 178) (SWKL 566). However, 啗 is not defined 噬 but 食, which is in its turn defined (SWKL 2177) as 亼米 'to collect, gather rice grains'; this is a rather unusual definition, unless it was also meant as a description of the sound /* *dz'i̯əp-mi̯əd* (KYSH no 353, p. 428)</#* *dz'mi̯əd*. 噬 is a phonetic derivate of 筮, defined in SWKL 1925 by a sentence 易卦用蓍也 "The *Yi* [*ching*] divination uses the milfoil"; * 蓍 *śi̯ər*</* *sʳəd* (KYSH 386, p. 467), and suggests a reading 噬 /* *dʳad*. It is legitimate to set up as cognates: 食 /* *dʳi̯ək, dzʳəg*, 噬 /* *dʳad*, 啗 /* *dʳâmb*. The binoms 噬啗 * *d̂i̯adʳâmb* (PWYF 4173/1) and 噬食 * *d̂i̯ad-d'i̯ək* (PWYF 4060/2; *Hou Han shu*) explain this *CC*.

28. 餓 * *ngâ*</* *zngâd* (SM 義: 宜: 宜 has phon. 多; SWKL 3243, SWKL 5702 defines 我: 自謂 #* *dzgi̯wəd*), and 飢 * *ki̯ɛr* 'hungry, to starve' (SWKL 2214). Other cognates are: 僅 * *g'i̯ɛn*</* *dg'i̯ɛn* (KYSH no 151, p. 195), 饑 ⁂ *ki̯ər*, and 餧 *i̯wăr* </* *zn'i̯wad* (KYSH no 844, p. 995). The binom 飢餓 * *ki̯ɛd-zngâd* is early and frequent.

29. 臾 * *di̯u*</* *dʳug*, defined in SWKL 6048 束縛捽㧈爲臾 (phrase completed by Tuan Yü-ts'ai who writes 臾曳) 'to bundle together and to pull and drag is 臾曳'. 捽㧈 * *dz'wət-zi̯ad* (∼-*zi̯at*) is a reduplicative binom of the same nature as 挩曳 * *t'â-zi̯ad*. 㧈 is a variant of 拽, which is an enlargement of 曳 * *zi̯ad*</* *zʳad*, * *zi̯at*</* *zʳat* (KYSH no 667, p. 783; *Notes SM*, chain ii). 曳, 拽 is equally * *zi̯ad*</* *zʳad* (KYSH no 778, p. 914). The binom 臾曳 * *dʳug-zʳad* (∼-*t*) is a another reduplicative binom, where the *CC* pair shows an alternation -*g*: -*d*.

In the *SW* analysis of 臾, 从申从乀 an etymological relation is implied between 臾 and 申 * *si̯ɛn*</* *sʳɛn* (*Notes SM*, chain vii). 申 is explained in SWKL 6644 by the phrase 七月陰气成體自申束 "In the 7th month the female vapours are formed, the bodies stretch and contract themselves". 申 /* *sʳɛn* and 束 * *śi̯uk*. The same alternation is repeated in the explanation of 疎 (SWKL 4630)

自申束也 'to stretch and contract itself' (/* *srěn-śįuk*). This leads to another interesting *CC* pair 申 and 束.

30. SWKL 2710 束 * *śįuk* 縛也; SWKL 5821 縛 * *b'wâg, b'įwak, b'įak.* In spite of the fact that these two characters do not appear in the same division of *SW*, they are regular *CC* pairs. The meaning of these characters is not only 'to tie, bind, bundle' but also 'strap, cord to tie up, strings'. *Li chi* (*Couvreur* I, p. 184–5) has the expression 棺束 'coffin straps', to which according to Cheng Hsüan corresponds a Ch'i dialect word 緘. Probably, already in Han time, there was a character 練, though it is now known only from *Yü p'ien* (紡纑絲 'to spin a coarse thread') and from *Kuang yün* (練葛 'fiber plant') for the nominal sense corresponding to 束 'to tie'. A cognate to 縛 is 繃 * *pɛng,* defined and explained in *SW* by a quotation from *Mo-tzŭ* 葛以繃之 "With straps of coarse fiber cloth they tied his body" (*Mo-tzŭ* text has 緘, the Ch'i word for 束 'strap for coffin'∼'to strap'). Yet, the reconstruction 束 * *śįuk,* 捕 * *b'wâg,* 繃 * *pɛng* do not show the phonetic similarity required for a *CC* pair. *SW* (s. v. 具, cf. supra) has the binom 束縛 * *śįuk-b'wâg,* but *SM* 5/50 has the binom 偪束 * *pįək-śįuk<‡* *pśįuk* 'leg strap', explaining the word 幅 * *pįək</* *pźək∼pŕək.* 縛束 * *b'įwak-śįuk<‡* *bśįuk* exists also (*Hou Han shu,* Chap. *46*). The *CC* pair and the binoms combined in both sequences indicate the existence of a variant of the stem 縛 /* *bŕ-∼bź-* but also 束 * *śįuk</*/ bś-* or *mś-.* The relation between 縛 and 繃 is paralleled by the case 倗 *b'əng,* * *p'əng* 'assistant, adherent' and 輔 * *b'įwo</* -g,* (SWKL 3515), a perfect *CC* pair since 輔 and 俌 * *p'įwog∼pįwog* are the same (SWKL 3535). The reconstructions in the series 朋 (KYSH no 334, p. 408) may well have a dental or velar element in the initial: 繃 /*/ p̓ɛng,* 倗 * *b'əng∼p'əng</*/ bŕ-, pŕ-, pz-, bz.* Some binoms like 髯䯂, 倗悷, 朋黨, 弸彊 suggest such an initial cluster (cf. supra no 16)[20].

31. 棱 * *ləng</*/ d'əng* (KYSH no 887, p. 1046) and 柧 * *kwâ* 'sharp angle, corner' (SWKL 2619 quotes the binom 棱柧).

32. 諷 * *pįum</*/ plum∼plwəm* (KYSH no 417, p. 510), 誦 * *dzįung,* also written 訟, 詢, </* *dźŕung* 'to recite, chant'. Binom in *Chou li, Ta Tai Li chi, Lü shih ch'-ch'*: 諷誦.

33. 目 * *mįôk</*/ mŕôk* (*Notes SM,* chain xi), and 眼 * *ngɛn</*/ dngɛn* (KYSH no 83, p. 127). These two *CC* words seem to be phonetically irreducible

(20) 朋 is related to 風, 鳳 and 飛廉 **p'iwər-glįam<‡* *pglįam∼plŕam.* cf. SWKL 1585, 6955. Ssŭ Wei-chih 斯維至, The Character 風. An Etymological and Mythological Study. *Bulletin of Chinese Studies,* VIII, 1948. Kuo Mo-jo 郭沫若, *Chin-wen ts'ung-k'ao* 金文叢考, 1952, p. 154.

to one word stem, yet the binom 眼目 (PWYF 3407/3) is a late one. 眼 * *ngən* is used as a loan word for 'to protrude as a knob'; it probably is only a semantic shift 'eye', 'protruding like the eye'. The etymology 'protruding eye'—'watching, inspecting, glaring' suggests that 眼目 could have existed much earlier, together with other variant binoms, used in a verbal rather than nominal sense, like 瞋目 * *t'iĕn-miôk*</* *t'iĕn-mîôk* 'glare' (TT 2204), and 睼望 * *xiər-miwang*</* *dxiəd-miwang* 'inspect, supervise' (LMTT 7 wu 186, *Lü Shih ch'-ch'*).

34. SWKL 1197–9 pairs two characters as *CC* 鬻 and 鬻. The first is written with various graphs that give some indications as to the reconstructions; 餰 * *t̂ian*</* *t̂ran* (KYSH no 769, p. 899), 飦 * *kiăn*</* *tkiănd*, 鬻 * *kiăn*</* *zkiăn* (KYSH no 125, p. 175), 鍵 * *kiăn*</* *tkiăn* 'rice gruel'. The other character 鬻 * *t̂iôk* may go back to /* *(b)t̂fôk*, since this reading of 鬻 is based on the *chia-chieh* usage for 賣 'to sell' in *Chou li*, *Li chi* and *Tso chuan* (* *diôk*</* *bdîôk*). The *CC* pairing can be explained through the binom 飦鬻 /* *tkiăn-t̂fôk*, (*Meng-tzŭ*, *Ku-liang chuan*), 饘鬻 /* *t̂fân-t̂fôk* (*Li chi*); the regular alternation in the final -*n*~-*k* shows that the *CC* members are true cognates.

35. SWKL 1842–3 pairs as *CC* the characters 剝 and 割. The SW text under 剝 says: 裂也. 从刀从彔. 彔刻害也. 彔亦聲 "剝 means 裂 (SWKL 3736 裂: 繒餘也 'left over piece of silk, silk rag'. May be 裂 stands for 列 'split, divide, burst'); from 刀 and 彔. 彔刻 (* *luk-k'ək*</* *b'luk-k'ək* <#* *blk'ək*) means 割 'to cut'; 彔 is also phonetic". 割 * *kât*</* *zkât* (KYSH no 79, p. 121) is simply defined 剝 * *pŭk*</* *l·pŭk* (KYSH no 917, p. 1071). The binom and the definition in *SW* indicate a connection of 剝 with 割 and 刻 * *k'ək* (KYSH no 854, p. 1012), which reappears in the definition of 彔 (SWKL 3066) 刻木彔彔也 'to cut a tree * *luk-luk*',</* *b'luk-(b')luk*. 刻 itself is defined in SWKL 1836 鏤 'to inscribe, carve' /* *bglug* (KYSH no 872, p. 1024). The *CC* pairing of 剝 and 割 however can only explained through a binom 剝割 * *pŭk-kât*</* *l·pŭk-(z)kât* (*Hou Han shu*, PWYF 3718/1), comparable to 剝裂 * *pŭk-liat*</* *l·pŭk-(d)l̂fat*, and with alternation in the final of the second member of the binom: 彔刻 /* *b'luk-k'ək*, 彔彔 /* *b'luk-(b')luk*, 剝落 /* *l·pŭk-lɣâk* (*Han shu*) and 暴樂 /* *b'ôg* (~*b'uk*)-*lɣâk* (*Chou li*) 'broken up, split up' (*TT* 2703).

IV. CONCLUSION

In this study a complete survey is given of all the *CC* pairs and chains that fulfill the strict requirements of the *SW* definition of a *CC*. Besides this,

a number of cases was discussed where the CC pairs are listed in different and distant divisions of SW and others that need to be explained in the light of the binomial forms connected with the characters of the CC words. Among the latter ones, some of the binoms used to explain the CC, are dimidiations of only one of the members of the CC pair, while the other character merely served to write the sound of a syllable in the binom, without any true etymological relation, deducible from the phonetic structure of the reconstructed forms. Other binoms however could easily be explained as reduplicatives, i.e. made up of two elements, each of which independently proves to be a true CC pair and a variant of the same word stem.

The study of the CC pairs in SW sheds an entirely new light on the problem of the cognates in the Chinese language of Han time. The criterion mostly used for the selection and comparison of cognate words was extremely subject to the danger of subjective interpretation, as it was solely based on the possible semantic connections and the phonetic similarities that could be observed, according to our present methods and results of reconstructions. The first assumption—semantic connection or unity—is a very subjective criterion. It can not be established *a priori* in what way a language will direct and realize its various possibilities of word derivation, nor can it be established that any language will show the same semantic connections between words that are observed in another language.

Even when one limits oneself to the words of one and the same phonetic series in Chinese, this danger of subjectivity remains. The reconstruction of the Archaic Chinese language is not yet sufficiently well established in all details, to be taken as a certain and fully reliable criterion of comparison and determination of cognate words. Though there is no doubt that 分 * $pįwən$ 'to divide' and * $b'įwən$ 'part, share' are cognates, it appears from SW that this is not the whole picture, for there is also 八 and 別. (cf. supra 2. no 29). It could further be asked whether e.g. cases like 濯 * $d'ŏk$ 'to wash' and * $d'ŏg$ 'to wash clothes' are more than just slight variations of one and the same word (they are readings of one and the same character with fundamentally the same meaning), while the CC pairs of SW connect more profound alternations of derivates and cognate words, e.g. 濯 * $d'ŏk$ and 澣 * $d'wân$ (cf. supra 4. no 43). When the two words are not two different readings of the same character, but are represented by two characters belonging to the same phonetic series,

having different radicals, it is already more difficult to obtain certainty that in a given case the *Hsh* derivates are real cognates. Some cases may seem clear and obvious, but it is always because the semantic shift seems natural to our linguistic feeling, and some cases may be doubted; e. g. 抽 * $t'\chi\hat{o}g$ 'to take out, pull out'—胄 * $d'\chi\hat{o}g$ 'the outcome—descendants'—由 * $d\chi\hat{o}g$ 'to come out from' seems a very natural derivation of words, and we can immediately share this feeling by examples from other languages, but one can not be certain, and examples like 眉 * $m\chi\partial r$ 'margin of the eye' eyebrow'—湄 'margin of a stream' may seem good enough to some, but unnatural to others.

Furthermore if one remains strictly within the same phonetic series, it is impossible to establish any other sort of cognates but those that show the same range of variation in phonetism as found in the phonetic series. It appears then that the principle of the phonetic series in Chinese becomes of the highest importance. In Karlgren's article *Cognate Words in the Chinese Phonetic Series* (BMFEA no 28, 1956) the phonetic series from which the cognates have been selected are the same as those in *GS*. Yet, no objective criterion has been proposed by which the *Hsh* series can be made up, separated or combined, except the *SW* analysis, which in principle must be accepted throughout or rejected. If one follows the *SW* analysis to establish the *Hsh* series, and then compares the range of sound variations in the phonetic series, with the variations seen between the various *CC* pairs of *SW*, one can conclude that there is no variation between the reconstructed forms of *CC* words which is not found as well among the derivates of the *Hsh* series of *SW*. However the *CC* variations show a wider range, in the sense that some variations of the *CC* words, which occur repeatedly, are found in the *Hsh* series as *exceptional* and *rare*. This reflects an aspect in the language which is normal and regular. The *CC* are groups of two or more words, which were felt as cognates, derivates of the same stem, by the speakers and scholars of Han time. Such words were not only of the type 'bind—bond', 'lose—lost', where the phonetic similarity remains close and easily recognizable, but also of the type where the variations go beyond the limit of finals and initials of the same series of articulation, such as 'work—wrought—wright', 'bring—brought', or even where monosyllabic forms are related with bisyllabic ones 'wagon—wain', etc. Such cognate forms, still clearly recognized by the speakers, may nevertheless have become obsolete, and reach back to more archaic forms, no longer productive in the language,

and to phonetic structures no longer considered similar enough to be analyzed as belonging to the same *Hsh* series, but for some exceptional cases.

Finally, when the application of semantic connection and phonetic similarity is not limited to the words of the same phonetic series, but is extended to all words that may be possible cognates, as was done by Karlgren in *Word Families in Chinese*, the degree to which subjective impressions may influence the study of the cognates becomes still greater. The phonetic similarity may change in any important detail whenever a different kind of *Hsh* series or graph analysis is followed; and an entirely new grouping of cognates can be proposed whenever another phonetic reconstruction is derived from the *Hsh* series to which a given character is supposed to belong. Furthermore, even in the supposition that such a group of words can be taken as real cognates, and not mere accidentally resembling sounds of words with some kind of semantic connection, the number of possible cognates rises so high, that it should be possible to distinguish subgroups of words which are closer to each other within the general group. Without any ancient source that would guide us in such a study, there are great risks of subjective feeling vitiating the whole process in the grouping of cognates.

The *CC* words of *SW* offer cases where the subjective element from our part is excluded. They represent the feeling and understanding of the speakers and scholars of Han time concerning the etymological relations between some words of a linguistic period of great importance in the history of the Chinese language. Their feeling and understanding may occasionally be mistaken too, but, in all respects, their contemporary analysis of the language is preferable to our guesses. Since the range of alternations and variations between the sounds of the *CC* words still remains in full agreement with the phonetic analysis of the graphs in *SW* and with the dialect differences shown in *FY* and other sources of the same period, there is a solid certitude that the majority of the cognates thus obtained through the *CC* pairs of *SW* are entirely reliable and valid. In the study of theco gnates and derivations morein the Chinese language, the *CC* form the first objective foundation from where more elaborate studies can be started.