## On Divisions III and IV of the Yün ching\*

## By Tôru Mineya

1. It is well known that the four sections alloted to the four tones in the tables of the Yün ching 韻鏡 are each subdivided into four divisions called from top to bottom Divs. I–IV, the 206 rimes being arranged according to this classificatory scheme. With the differences in tone and division arranged vertically, the horizontal lines of the tables are divided into twenty-three columns by combining the seven phonological categories: ch'un 唇, shê 舌, ya 牙, ch'ih 齒, hou 喉, pan-shê 半舌, and pan-ch'ih 半齒[1] with the four subcategories: ch'ing 淸, tz'ū-ch'ing 次淸, cho 濁 and ch'ing-cho 淸濁. Therefore, the position of a given Chinese character in the Yün ching can be specified by indicating which one of its forty-three tables it belongs to and in which column and row it is situated. Such a way of indicating the positions of characters in the tables enables us to show which features are shared, and which are not, by the readings of any two characters.

In actual practice, however, the character 奇, for instance, is not mentioned as being in "the 4th table or chuan 轉 (k'ai-k'ou 開口), p'ing-sheng 平聲, Rime chih 支, Division III, ya-yin 牙音, cho 濁," but said to be "(p'ing-sheng) Rime 支, k'ai-k'ou, Initial chün 群, Div. III." In the same way, 祗 is called "Rime 支, k'ai-k'ou, Initial 群, Div. IV"; for the names of the Thirty-six Initials 三十六字母, e.g. 見,溪,群,疑, etc., are in commoner use than the terms defined by such phonological categories and subcategories as ya-yin ch'ing, ya-yin tz'ŭ-ch'ing, etc. Again, because it is understood already that Rime 支 for instance is located in the 4th table, if it is k'ai-k'ou, and in the 5th, if it is ho-k'ou 合口, it is no longer necessary to give the number of the tables where it appears. In either case, it is not a means of indicating the sound of characters but simply a method of indicating their positions in the classificatory scheme of the Yün ching. For this reason, however, it is all the more convenient, and is widely employed since phonetic similarities or differences between one character and

<sup>\*</sup> This article entitled "Inkyô no III-, IV-tô ni tsuite 韻鏡の三四等について" (written in Japanese) originally appeared in *Gengo Kenkyû*, the Journal of the Linguistic Society of Japan Nos. 22/23 (1953), pp. 56-74. It is a part of research conducted under a grant from the Ministry of Education. The numbers of the footnotes which are enclosed in square brackets indicate the supplementary notes added to the English version.

<sup>[1]</sup> pan-shê-yin and pan-ch'ih-yin are the terms commonly used in Chinese phonology, but the terms used in the Yün ching are shê-ch'ih-yin 舌齒音 and ch'ih-shê-yin 齒舌音 respectively.

another can be treated without having to take a position on those reconstructed readings which are the object of controversy. (2)

Such a method of designation is justified as long as we are concerned with the positions of the characters in the scheme of the Yün ching; but it is not proper to apply this scheme as it is to the phonemic system of Ancient Chinese that is revealed by the fan-ch'ieh 反切 in the Ch'ieh yün 切韻, (which will be referred to as 'the phonemic system of the Ch'ieh yün' in the rest of this article), for there are certain discrepancies between them, as has often been pointed out. (3) In other words, the latter should be expounded through the investigation of the fan-ch'ieh spellings given in the Ch'ieh yün to indicate the readings of the characters, and it is only by this means that its proper classification can be achieved. Now if it is maintained that "the fact that the fortythree tables of the Yün ching contain all the 206 rimes of the Chieh yün (4) should be considered as indicating that the Yün ching does not represent the actual sounds faithfully, but that it is an interpretation of the Ch'ieh yün, (5)" then it cannot be said that the aforementioned means for relating characters to their positions in the Yün ching reveals their sounds in a particular dialect at a particular time. In the present article the writer will first of all consider the phonemic system of the Ch'ieh  $y\ddot{u}n^{(6)}$  reconstructed on the basis of an analysis of its fan-ch'ieh spellings and independently of such rime tables as the Yün ching, etc. He will then try to explain the reason why the Yün ching gave such an interpretation to the Ch'ieh yün that brought in the discrepancies

<sup>(2)</sup> For instance, the difference between 奇 and 祗 can be treated by indicating that they differ only in Division, the former appearing in Div. III and the latter in Div. IV, without elucidating what feature or features distinguished these Divisions in the Yün ching.

<sup>(3)</sup> Rokurô Kôno 河野六郎: Chôsen-kanjion no ichi-tokushitsu 朝鮮漢字音の一特質 (A Characteristic of Sino-Korean), Gengo Kenkyů 3 (1939), 27–53 (abbrev. 'Sino-Korean'); Akiyasu Tôdô 藤堂明保: Chûko Kango no on'inron-teki tairitsu 中古漢語の音韻論的對立 (Phonological opposition in Ancient Chinese), Nihon Chûgoku-gakkai Kaihô I (1949), 55–96 (abbrev. 'Ancient Chinese'), and others. Cf. Postscript.

<sup>(4)</sup> Since it is certain that the original Ch'ieh yün contained less than 206 rimes Ch'ieh yün should be interpreted here as refering to the rime books based on the Ch'ieh yün, and not to the original Ch'ieh yün compiled by Lu Fa yen 陸法言.

<sup>(5)</sup> Kôno 'Sino-Korean', p. 50.

<sup>(6)</sup> In view of the remarks in the preface to the Ch'ieh yün, the opinion that the Ch'ieh yün does not depict the phonemic system of a particular dialect at a particular time is predominant. Even so, it is not beyond all doubt that the Ch'ieh yün represents a kind of least common multiple of the phonemic systems of various dialects. As a result of his study of the fan-ch'ieh of Hsüan-ying's I ch'ieh ching yin i, Chou Fa kao 周法高 has found that its scheme has many points of agreement with that of the fan-ch'ieh of the Ch'ieh yün, and has come to believe that Ch'ieh yün's system was something akin to the phonemic system of an actual dialect. (See Chou's article '玄應一切經音義反切考' in the Bulletin of the Institute of History and Philology, Academia Sinica, 20 [1948], 203-33.) Hence there is still room for further investigation of this problem.

between their systems, placing special emphasis on the problem of Divs. III and IV of the tables.

- 2. Because there is some confusion of terms due to improper use of the Sung phonological terminology in illustrating the phonemic system of the Ch'ieh  $y\ddot{u}n$ , as well as because the interpretation of the system itself presents problems, we have to start our inquiry with a consideration of the Ch'ieh  $y\ddot{u}n's$  phonemic systems.
- 2.1. Since Ch'ên Li's 陳澧 ch'ieh yün k'ao 切韻考 appeared, the so-called hsilien 系聯 or cross-reference method has been traditionally employed in analytical researches on the fan-ch'ieh spellings. Lu Chih wei's 陸志韋 'Chêng Kuang yün wu-shih-i sheng-lei'(7) may be regarded as the most remarkable contribution along this line to the classification of the upper characters of fanch'ieh in the Kuang yün 廣韻. Ch'en Li attempted to revise the fifty-one sheng-lei 聲類 or initial categories yielded by the chêng-li 正例 (the primary cross-reference method applied to only cheng-ch'ieh 正切) by reference to the pien-li 變例 (the anomalous cross-reference method for which yu-ch'ieh 又切 also count), with the result of obtaining forty initial categories on account of his inconsistent procedure. In regard to this Lu says, "the Ch'ieh yün k'ao compiled by Ch'ên Li aims at his own prospect. As the fifty-one initial categories did not conform to his postulated theory, he used the cross-references of the yu-ch'ieh until they fit in well with it." As for Karlgren's forty-seven initial categories, he also rejects them, saying: "Karlgren has divided them into forty-seven categories (which are now widely accepted in our country), but it seems to me that he begins and ends with the traditional Initials 字母 and Divisions 等呼." Then he made a statistical study of the distribution of the initial categories in relation to the yün-lei 韻類 or final categories on the basis of Ch'ên Li's fifty-one categories, and set up the same number of categories, which, however, differ in content from Ch'ên Li's, and found the following classes among them: (8)

## Group A

<sup>(7) &#</sup>x27;證廣韻五十一譯類 (51 Groups of Initials in the Kuang yün, a Formal Proof.)'; Yenching Journal of Chinese Studies, 25 (1939), 1-58.

<sup>(8)</sup> The table in his article was only tentatively proposed for the purposes of explanation. The one given here is made as a summarization in accordance with his argumentation by the present writer.

<sup>(9)</sup> These characters represent initial categories. Those enclosed by parentheses are their counterparts, though not always proper, in the phonological terms of Sung time.

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Class C
            方, 芳, 符, 武, 于
            (非
              敷 奉
                     微喻III)(10)
            居, 去, 渠, 魚, 許, 於
   Class D
           (見加 溪加 群 疑加 暁 影加)
Group B
   Class E
               他,徒,奴,盧,作,倉,昨,蘇(11)
                  定
                     泥
                        來』精』清』從』心」
   Class F
               普,蒲,
                     莫
                     明)
            (鷙
               濟
                  並
   Class G
            古, 苦, 五, 呼, 胡, 鳥
            (見」溪」疑」 暁」匣」影」
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It is no wonder that this grouping, which is the result of Lu's statistical calculation, should be closely similar to the relationships observed among the so-called Thirty-six Initials 三十六字母, and to the distinctions of the so-called seven phonological categories 七音, in the phonology of the Sung time. It is also an interesting fact that the initial category 于, corresponding to Initial 喻 of Div. III, is separated from the category 以 (喻w) of class A and placed in class C. This may be connected with the fact that the category  $\mp$  is accompanied by a medial -u- in the majority of cases and also with the fact that the initial categories 方, 芳, 符 and 武 are neutral with respect to the occurrence of medial -u-. These statistics are based on the 300 final categories obtained by revising the 319 categories of the Ch'ieh yün k'ao, but the revision was not carried through strictly according to the fan-ch'ieh spellings and instead the principle of symmetrical distribution in the four tones (四聲相承) was often relied upon. It must be noted that Lu himself mentions that "the 300 final categories are to be considered as a starting point of our study, but not as a result of our examination." Yet there remain many problems to be solved as regards the grouping of finals, and a different grouping would give different values with regard to the distribution of the upper characters; however, it is not certain whether it would entail a change in the general trend. Accordingly, we may say that at the present stage of research, it seems useful to make use of these results because it is thus possible to avoid the confusion that the use of the phonological terms of Sung time would involve.

For the study of the phonemic system of the Ch'ieh yün, then, we have no other choice but to make use of the statistics regarding the distribution of the fan-ch'ieh spellings in the Kuang yün along with a close examination of the fan-ch'ieh in the extant fragments of the Ch'ieh yün. [12] It is true that the former contains more rimes than, and different fan-ch'ieh spellings from, the

<sup>(10)</sup> In a footnote Lu mentions that 幫非, 滂敷, 並奉, 明微, should actually be given here instead of 非, 敷, 奉, 微.

<sup>(11)</sup> Initial categories 多 and 盧 comprise the respective ones of 都 and 郎.

<sup>[12]</sup> At present, we can use the T'ang manuscript of Wang Jên-hsü's 王仁昫 k'an-miu pu-ch'üeh Ch'ieh yün 刊謬補缺切韻 in its entirety.

latter; nevertheless, it is generally obvious from Ling Ta t'ing's 凌大挺 argumentation in his article: 'T'ang-hsieh-pên yün-shu-ti sheng-lei' (13) that the fan-ch'ieh spellings of the Kuang yün are useful for the studies on those of the Ch'ieh yün without committing any serious mistakes. Within the range of our discussion which follows, at any rate, the above classification of the fifty-one initial categories based on the fan-ch'ieh of the Kuang yün is useful, only the distinctions, as Lu admits, between the class A initial categories of Group A: 子, 七, 疾 and 息 and their class E counterparts in Group B: 作, 倉, 眸 and 蘇 are in this order less clearly made and in reality quite confused. Therefore, these distinctions will not be called into question in this article.

- **2.**2. Final categories can, in turn, be classified into the following Groups with reference to the above classification of the initial categories: (14)
- Group I The final categories which appear chiefly with the upper characters of Group B, e.g. 東紅, 冬, 齊, etc.
- Group II Those which appear chiefly with the upper characters of Group B and the class  $B_1$  of Group A, e.g. 江, 佳, 山, etc.
- Group III Those which appear chiefly with the upper characters of Group A, e.g. 東融, 鍾, 支, etc.

When collated with the  $Y\ddot{u}n$  ching's scheme, the final categories of Group I are arranged in Div. I or IV and those of Group II are in Div. II, none of them pertaining to two different Divisions. On the other hand, Group III consists of the final categories arranged only in Div. III and of those in both Divs. III and IV (with some occurring also in Div. II). Karlgren has named the latter categories of Group III type  $\alpha$  and the former type  $\beta$  while those of Group I arranged in Div. IV type  $\gamma$ . These types correspond respectively to Arisaka's '( $\alpha$ ) rimes belonging to both Divs. III and IV 三四等兩屬韻, ( $\beta$ ) rimes belonging exclusively to Div. IV 四等專屬韻'. (15) The point of difference between types  $\alpha$  and  $\beta$  with reference to the above grouping of the fan-ch'ieh spellings is that, whereas the upper characters for type  $\beta$  are chosen only from the classes C and D of

<sup>(13) &#</sup>x27;唐寫本韻書的豒類 (The Initial-consonant Groups of the T'ang Dynasty Rhyme Books)', Yenching Journal of Chinese Studies 26 (1939), 129–142.

<sup>(14)</sup> Group II shows a strong tendency to take the Group A initial category 評 in place of the Group B initial category 評 as the upper character of fan-ch'ieh. Besides many exceptional instances are found in the individual fan-ch'ieh spellings of the extant fragments of the T'ang manuscripts of the Ch'ieh yün as well as in those of the Kuang yün. These will not be taken into consideration here unless they are particularly relevant to the problems considered below.

<sup>(15)</sup> Hideyo Arisaka 有坂秀世 'Karlgren-shi no yôon-setsu o hyôsu カールグレン氏の拗音説 を評す (A Critical Study on Karlgren's Medial i Theory)' in his Kokugo On'inshi no Kenkyû (Studies on the Phonological History of Japanese), Tokyo, 1944, revised and enlarged ed. 1957; this article first appeared in the Reports of the Association of Phonetics of Japan. 1937–39. (Abbrev. 'Medial i Theory') [15′] Its English version, translated and annotated by R. Kôno, was published in Mem. Toyo Bunko. 21 (1962).

Group A, those for type  $\alpha$  are from the other classes of Group A as well. Tôdô has classified the 'rimes with medial -i- in the *Ch'ieh yün* (*Kuang yün*)' (corresponding to Group III above) into the following four groups: (16)

- A. The rimes containing the ch'un, ya, hou, shê and ch'ih initials with front or central medial-i- (the so-called 'combined Divs. III and IV rimes').
- B. The rimes containing only the *ch'un*, *ya* and *hou initials* with central medial-i- (the so-called 'pure Div. III rimes').
- C. The rimes containing the *ch'un*, *ya* and *hou* initials with central medial-iand the *shê* and *ch'ih* initials with a front or central medial-i- (the so-called *'chü hsia* 偈狹 rimes' of the Sung scholars).
- D. The rimes containing only the *ch'un*, *ya* and *hou* initials with front medial-i- and *shê* and *ch'ih* initials with front medial-i- (the so-called 'Div. IV rimes with medial-i-').

Compared with Karlgren's classification, Tôdô's B corresponds to type  $\beta$ ; his A, C and D are all comprised in type  $\alpha$ . With reference to the above mentioned grouping of the upper characters of fan-ch'ieh, it is seen that class  $B_1$  does not appear in the D rimes, and that the difference between rimes A and C depends on whether or not the so-called ch'ung-niu  $\mathbb{E}\mathbb{H}$ , i.e. fan-ch'ieh doublets, are found in them.

2.3. The ch'ung-niu is a term used by Chinese scholars in referring to the fact that "there are several pairs of fan-ch'ieh which appear to indicate identical sounds, for the upper character of each pair indicates the same category of initial and the lower character belongs to the same rime."(17) This phenomenon has long been elucidated by Arisaka, and it is well known that it has become a crucial problem in the study of the Ancient Chinese phonology recently in China as well. (18) It might seem thus unnecessary to give its detailed account here, but in view of the fact that so far at least two theories have been postulated as to its phonemic interpretation, it still requires our consideration. The one advanced by Arisaka, Kôno, Lu Chih wei, and others assumes a difference in medials while the other by Tung T'ung ho 董同龢 Chou Fa kao 周法高, and others assumes a difference in degrees of opening among the principal vowels. Reviewing these, Tôdô has raised an objection to the 'opportunism' which has led to their rejection of the 'different medials' theory for the reason that 'it would add the complexity of the problem,' and, on the other hand, agrees with Tung T'ung ho in admitting that "the difference in principal vowels should also be taken into consideration" in relation to Archaic Chinese. He further states: "In conclusion, I think the difference

<sup>(16)</sup> Tôdô 'Ancient Chinese,' p. 73.

<sup>(17)</sup> Arisaka 'Medial i Theory', p. 323 [p. 53]; (these are distinguished by their placement in Divisions III and IV in the  $Y\ddot{u}n$  ching.)

<sup>(18)</sup> Tsutomu Rai 賴惟勤 gives a brief and to-the-point illustration of this matter in Chûgokugogaku 27 (1949).

between the Divs. III and IV of the 'combined Divs. III and IV rimes' consists in both their medials and principal vowels; consequently, it cannot be readily concluded that their medials constitute the only point of difference between them, as the Arisaka-Kôno theory does." (19) Neither of those theories, however, seems to assert that only one element constitutes the point of difference, and that everything else is the same. Strictly speaking, this is phonetically impossible, and it is a matter of phonemic interpretation which element should be considered as being responsible for the distinction. Although Tôdô's argument may be right from the phonetic point of view, it is not necessary to postulate distinctions in both the medials and the principal vowels from a phonemic point of view. (20)

**2.**3.1. The *ch'ung-niu* phenomenon is observed in the characters with *ya*, *hou* and *ch'un* initials, that is to say, in classes C and D of Group A in the classification of the upper characters of *fan-ch'ieh*,<sup>(21)</sup> and as such it does not matter whether we follow the 'different medials' or the 'different principal vowels' theory. If, however, we are to distinguish the two types of finals<sup>(22)</sup> in the *ch'ung-niu* pairs, (which are called types A and B by Kôno), there arises a question as to which of the types in the same final category we should assign the characters described by the upper characters of the classes other than C and D.

Arisaka,  $(^{23})$  basing himself chiefly on Sino-Korean and Chinese transliterations of Sanskrit, has supposed it possible that they belong to type B in the case of the ch'ih initials of Div. II [class  $B_1$ ], and to type A in the case of those of Divs. III and IV [class A]. As for the  $sh\hat{e}$  and  $pan-sh\hat{e}$  initials [class  $B_2$ ], for the reason that Sino-Korean renderings generally show medial i, and through his interpretation of the "Kuang-t'ung Mên-fa 廣通門法", one of the methods of explaining the fan-ch'ieh spellings, he concludes that: "If so, the medial element of Div. III of the  $sh\hat{e}$ -yin 舌音 and the  $pan-sh\hat{e}$ -yin 半舌音 was a palatal i just like that of Div. III of the ch'ih-yin 齒音 and pan-ch'ih-yin 半齒音 and of Div. IV of the ch'un-yin 唇音, ya-in 牙音 and hou-in 喉音." Even if he did consider the possibility of allotting the characters with  $sh\hat{e}$  initials [class  $B_2$ ] to type A, he himself refrains from drawing this conclusion, for, he says, "Generally speaking, the nature of the medial element of the  $sh\hat{e}$ -shang-yin 舌上音,  $sh\hat{e}$ -t'ou-yin 舌頭音, and pan-sh $\hat{e}$ -yin 半舌音 in the Chinese

<sup>(19)</sup> Tôdô 'Ancient Chinese,' p. 78. Italics are Tôdô's.

<sup>(20)</sup> Incidentally, Wang Ching-ju 王靜如 considers that the distinction was either in medials alone or in initial consonants alone or in both, according to differences of the initials. We shall discuss this theory later on (Section 2.3.5.).

<sup>(21)</sup> Except that the characters with the initial category 于 of class C do not have ch'ung-niu pairs. Moreover, false ch'ung-niu pairs are found among those with the initials of the other classes (than C and D) on account of later interpolated characters. These are not considered here.

<sup>(22)</sup> Finals consist of Medial (yūn t'ou 韻頭) + (Principal) Vowel (yūn fu 韻腹) + Final Consonant (yūn wei 韻尾) .

<sup>(23)</sup> Arisaka 'Medial *i* Theory', pp. 324–343.

original has still to be investigated."

In his investigation of the fan-ch'ieh spelling,  $K\hat{o}no^{(24)}$  has proved that the  $ch\hat{e}ng$ -ch'ih 正齒 initials of Div. III, and the ch'ih-t'ou 齒頭 initials and the Initial  $\exists$  [class A] bear a close relationship to the ya and hou initials with type A finals [type A of class D], while the  $ch\hat{e}ng$ -ch'ih initials of Div. II [class  $B_1$ ] are closer to the ya and hou with type B [type B of class D]. As for the  $sh\hat{e}$  initials [namely class  $B_2$ ], he remarks that: "On several occasions the author has already mentioned that the above-given four types [A and B, and their ho k'ou counterparts C and D] are often confused (with respect to the usage of fan-ch'ieh spellings) in the  $Y\ddot{u}$  p'ien 玉篇 and the Ch'ieh  $y\ddot{u}n$ , and it seems that this is caused in many cases by use of the characters with  $sh\hat{e}$  initials. This arouses our suspicion that the glide after the  $sh\hat{e}$  initials might have been perceived at that time as something intermediate between the glide of the finals of types A/C and that of the finals of types B/D. Even so, because there still remain many questions concerning the ancient values of the  $sh\hat{e}$  initials, we cannot hastily form our conclusion." (25)

2.3.2. Contrary to them, who have left unsettled the question of whether the characters of class  $B_2$  (with  $sh\hat{e}$  initials) should be regarded as belonging to type A or to type B, both Tung T'ung ho and Tôdô have concluded that they ought to be placed in type A. Taking the  $sh\hat{e}$  and ch'ih initials [classes A and B] as forming one group, Tung<sup>(26)</sup> considers that the more frequently they have characters with the initials of this group as the lower character of fanch'ieh, the closer are they to this type and that the less they do so, the remoter they are from this type. Conversely, if we examine the lower characters of fan-ch'ieh for characters with these initials, we find that they are more frequently characters with the ch'un, ya and hou initials of Div. IV rather than those with the same initials of Div. III. Further the characters in Rime  $\hbar$  with the ch'un, ya and hou initials are arranged in Div. IV of the time tables; but this is impossible unless the finals after the ch'un, ya and hou initials of Div. IV are of the same type as those after  $sh\hat{e}$  and ch'ih. From these observations he reached the following conclusion:

Class 1—comprising the shê and ch'ih initials and ch'un, ya and hou which the rime tables place in Div. IV;

<sup>(24)</sup> Kôno 'Sino-Korean', pp. 42-43.

<sup>(25)</sup> ibid., pp. 47.

<sup>(26) &#</sup>x27;廣韻重紐試釋 (A Preliminary Study of the fan-ch'ieh doublets in Kuang yün)', Bulletin of the Institute of History and Philology, Academia Sinica 13 (1948), 1–20. pp. 9–10.

Class 2—comprising the *ch'un*, ya and *hou* initials which the rime tables place in Div. III."

Classes 1 and 2 here correspond to the above types A and B respectively. Incidentally, Class  $B_1$  (the *chêng-ch'ih* initials of Div. II) is not given particular attention in this classification.

Tôdô also claims that: "Having the same series of lower characters of the fan-ch'ieh, the characters with the hou, ya and ch'un initials of Div. III and those with ch'ih-shang 齒上 [=the chêng-ch'ih of Div. II=class B<sub>1</sub>] should all be placed in the rows of Div. III, whereas those with the hou, ya and ch'un initials of Div. IV and with chêng-ch'ih, ch'ih-t'ou, shê-shang, pan-ch'ih and pan-shê, and Initial 喻, [namely classes A and B<sub>2</sub>], in which the lower characters are of another series, should be arranged in the rows of Div. IV." Hence neither Kôno's arguments nor Arisaka's concerning the shê initials cited above is touched upon here, and it appears that what underlies his idea is the contrast between the hou, ya and ch'un initials and the shê and ch'ih initials. As shown by Kôno's arguments, this can be said of Rime 支 k'ai-k'ou which offers one of the most favourable instances, but not of all the rimes which involve the ch'ung-niu. Both Rimes 眞 and 質 quoted by Tung in the said article (p. 9) are similarly given as 'most favourable instances,' and the confused state of usage of the characters of class B2 is evident if we refer to the tables on pp. 68 f. of Chou Fa-kao's 'Kuang yün ch'ung-niu-ti yen-chiu" (27) in the same number of the Bulletin as Tung's article.

**2.**3.3. In cooperation with Kôno the writer previously investigated the *fanch'ieh* of the *Kuang yün*, paying special attention to the problem of medials. (28) Viewed from the present state of our study, the paper contains many unsatisfactory points, but we consider the figures obtained therein to be still worth quoting.

The figures enclosed in square brackets in this table show our counts with the exclusion of the following four pairs:

- (13) 貴 (spelled 彼義) : 臂 (spelled 卑義) (Rime 寘)
- (15) 髲 (spelled 平義) : 避 (spelled 毗義) (Rime 寘)

<sup>(27) &#</sup>x27;廣韻重紐的研究 (Studies on the fan-ch'ieh doublets in Kuang Yün)', ibid., 49-117.

<sup>(28)</sup> An article under joint authorship with Prof. Kôno, entitled 'The Four Types of Medials in  $Ch'ieh\ y\ddot{u}n'$ , a result of this investigation, was to appear in the bulletin of a certain society, which unfortunately was never published.

<sup>(29)</sup> Arisaka 'Medial i Theory', pp. 323–327. The distinction between types A and B is based on Divs. IV and III of the Yün ching, which are not referred to as such by Arisaka.

Kuei-tzŭ Lower	ya and hou kʻai-kʻou		ya and hou ho-k'ou		ch'un	
character of the fan-ch'ieh	A	В	A (C)	B (D)	A	В
$ya$ and $hou$ [class D] ${A \atop B}$	4 [3]	20	7	14	1 2 [0]	11 [9]
ch'un [class C (except {A B		2	2		7 [6]	1 [0] 13
shê-shang [class B <sub>2</sub> ]		2		2		1
ch'ih-t'ou chêng-ch'ih category D pan-ch'ih	6 5 9 1	1 [0]	2 1 4		3 7 2 1	
pan-shê [category 力]	1	1	1	1	3	

- (41) 密 (spelled 美畢) : 蜜 (spelled 彌畢) (Rime 質)

Example (38) is left out because  $\underline{\underline{\mathfrak{m}}}$  is not found in the K'an-miu pu-ch'üeh Ch'ieh yün 刊謬補缺切韻 of Wang Jên-hsü 王仁昫; (in addition, the lower character  $\overline{\mathfrak{m}}$  itself is spelled 於双; hence these fan-ch'ieh doublets are not in contrast.) (30) On the other hand, since the doublets in each of the remaining pairs have a lower character in common, and the difference between their values are indicated by the upper characters, these pairs were not counted in our study.

The figures with the exclusion of the four pairs show that the characters from classes A and  $B_2$  (except category  $\mathcal{D}$ ) appear as the lower characters for the *kuei-tzǔ* of types A and B respectively; on the other hand, those of category  $\mathcal{D}$  are found in both types A and B of the *kuei-tzǔ*. The class  $B_1$  characters do not appear in this table.

Secondly, the sorting of the lower characters for the kuei-tzŭ that consist

Lower charthe for	racter of   n-ch'ieh		$cl.B_1$	$\mathrm{cl.B}_2$				
kuei-tzŭ		cl.A		other than 力	category 力	cl.C	cl. D	(total)
class A		453	0	21	125	12	64	675
class B <sub>1</sub>		11	20	9	34	9	44	127
class $B_2$ other than category $f$	than 力	72	0	16	91	5	28	212
	ory力	34	1	14		2	18	69
(total)		570	21	60	250	28	154	1083

<sup>(30)</sup> It may seem inconsistent to omit only this example in spite of there being other later interpolated characters as well as some more pairs of fan-ch'ieh spellings with which we may speak of the ch'ung-niu contrast, but our purpose here is only to point out the general tendency.

of the classes A,  $B_1$  and  $B_2$  gives the result which is shown in the second table on p. 74.

Here the fan-ch'ieh spelling 旨支 for the character 脂 of Rime 脂 is modified to 旨夷, and the two instances of fan-ch'ieh, where the lower characters are of class E, are omitted. (31) Further, the division of the lower characters of classes C and D into types A and B is not considered here. Many other points which require further scrutiny have been left out of consideration; consequently, it may be unwise to gather from these results what the fan-ch'ieh system of the Ch'ieh yün really represents. Nevertheless, general tendencies observed in the use of the fan-ch'ieh of the Kuang yün evidently indicate that there is a possibility that class B<sub>1</sub>, although it does not appear in the preceding table, belongs to type B and that the category  $\mathcal{I}$  of class  $B_2$  have a status intermediate between types A and B. As for the other initial categories of class B<sub>2</sub>, it is also possible to consider that the characters thereof, as well as those of category 力, might have been neutral, since they strongly exhibit characteristics of type A in this table, although in the preceding one it seems as if they belong to type B. In sum, supposing tentatively that, while class B<sub>1</sub> is of type B, class  $B_2$ , including the category  $\mathcal{D}$ , is neutral, the distribution of these classes as to the types A and B based on the fan-ch'ieh of the Kuang yün—it is assumed that the same holds good for the Ch'ieh yün—can be shown as follows:

Type 
$$A ext{.....} A ext{C} ext{D}$$

Type  $B ext{.....} B_1 ext{C} ext{D}$ 

**2.**3.4. It is easy to say that the final categories of Group III fall under types A and B, that the initial categories of class A appears with type A, class  $B_1$  with type B, classes C and D with both types A/B and that class  $B_2$  is neutral in this respect. In order, however, to represent their phonetic values concretely we have to decide whether the characters that have a class  $B_2$  initial should be transcribed with medial -i- (type A), or with medial -i- (type B), with close vowel (type A) or with open vowel (type B), if we follow the 'different principal vowels' theory. In the final analysis, either we must assume a third medial (or principal vowel) for them, or assign them the type A medial (or principal vowel) by interpreting them as being phonemically of type A. Nevertheless, the former solution would make the resulting system unnecessarily complex, and the latter, on the other hand, would fail to find any positive support in the phonemic system of the Ch'ieh  $y\ddot{u}n$ .

Such difficulties may be solved once and for all if the distinction in classes

<sup>(31)</sup> For convenience of reference, the classification in the original table that was made using Sung phonological terms like chêng-ch'ih, ch'ih-t'ou, pan-ch'ih and pan-shê is modified as in this table. The figures here include some obvious instances of later interpolated characters, and hence they show only the general tendency.

C and D between types A and B is attributed to their initial consonant phonemes (initial categories). (32) Kôno has already said, on page 47 of the article often quoted above 'A Characteristic of Sino-Korean', that: "It is now obvious from what has been shown above that the four types [A, B, C and D] of the characters with ya and hou initials [class D] are based on differences in the nature of their medials, and these, in turn, might be attributable to the different places of articulation of the ya and hou initials. It is by no means unreasonable to suppose that the characters of types A/C and of types B/D with initials 見, 溪, 羣, 疑 and 暁 [class D categories 居, 去, 渠, 魚 and 許] were respectively platal and velar plosives, nasals and frictives. That Initial 喻 [category 以] occurs only in the characters of types A/C could be taken as indicating that it had the value [j], and the fact that Initial 羽 [category 于] is limited to types B/D would speak eloquently of its evolution from the Archaic Group B initial  $\mathbb{E}[\gamma]$ , [corresponding to category 胡]". He adds further: "But, to my regret, I cannot explain on what phonetic grounds the two types of characters with Initial 影 [category 於] were based." Accordingly, it would be easy to postulate that the two types of characters differentiated by both their medials and principal vowels, as argued by Tôdô, were also phonetically different in their initial consonants.

In other words, it is possible to attribute the differences in medials and principal vowels to the differences in the initial consonant phonemes, interpreting the type B initials of class C (方, 芳, 符 and 武) as /pi-, pʻi-, bi-, mi-/ aud the type A initials of the same class as /pji-, pʻji-, bji-, mji-/, and the type B initials of class D (居, 去, 渠, 魚, 許 and 於) as /ki-, kʻi-, gi-, ni-, xi-, 'i-/ and the type A initials of the same class as /kji-, kʻji-, gji-, nji-, xji-, 'ji-/. For example: [38] 奇/gie¹/:祗/gjie¹/, 眷/kiuan³/:絹/kjiuan³/, 妖/'iau¹/: 要/'jiau¹/, 筆/piet/:此/pjiet/, etc.; class A characters such as 支 and 精 are rendered as /tśie¹/ and /tsian¹/; class B₁ characters such as 初 as /tṣʿia¹/; and class B₂ characters such as 中 as /tiʌun¹¹³/. The characters with initial category 於 can be differentiated by /'-/ and /'j-/, to which are attributed both the difference between [-i-] and [-i-] (as well as slight differences among the vowels following them) and that between their onglides. This interpretation will enable us to discard the distinction between the types A and B of the finals of Group III. (34)

Further, the following relationships exist between the fan-ch'ieh spellings and the phonemic system postulated here. The distinction between category

<sup>(32)</sup> The possibility of such a phonemic interpretation was suggested to the writer by Professor Shirô Hattori.

<sup>[33]</sup> The phonemic notation for Ancient Chinese presented here is revised in accordance with the writer's new interpretation. cf. T. Mineya: Etsunan-kanjion no kenkyů 越南漢字 音の研究 (Studies on Sino-Vietnamese), The Toyo Bunko Ronsô Series A. Vol. LIII (1972).

<sup>(34)</sup> According to this interpretation, the four finals under Rime  $\pm$  are reduced to the two that are distinguished by the presence or the absence of medial /-u-/.

古: category 居 etc. in the upper characters of fan-ch'ieh is utilized for representing that between Groups I/II: Group III—which corresponds to the absence vs. presence of medial /-i-/—but are not used to bring out oppositions between  $k: kj, ^{(35)}$  etc., which are in principle represented by the lower characters of fan-ch'ieh (although sometimes represented by upper character). (Cf. 2, 3. 3) Again, when such oppositions (ch'ung-niu) are absent, the usage of the lower characters is not strictly observed in this respect, but the close relationship recognizable between the characters of class A and those of the kj-type in classes C and D, as well as between those of class  $B_1$  and those of the k-type in classes C and D, with regard to their distribution in the fan-ch'ieh spellings, may be said to reflect their phonetic characteristics.

2.3.5. According to Wang Ching-ju's 王靜如 theory about the *ch'ung-niu* problem in his article 'Lun k'ai ho', '36) which the writer has refrained from discussing so far, the *fan-ch'ieh* doublets with *ch'un* initials, namely class C excluding category 于, can be distinguished as pi- [type A]: pɪw- [type B], (37) and those with *hou* and *ya* initials namely class D as ki- [type A] (kiw- [type C]): qɪ- [type B] (qɪw- [type D]) for category 居 [to which 去, 渠 and 魚 conform?], as  $\chi$ i- [type A] ( $\chi$ iw- [type C]):  $\chi$ I- [type B] ( $\chi$ Iw- [type D]) for Initial 脍 [許], as i- [type A] (iw- [type C]): 1- [type B] (Iw- [type D]) for Initial 影 [於], and as ji- and jiw- [以]: вɪ- and вɪw- [于], for Initial 喻.

Though the initial categories  $\mbox{$\sc U$}$  and  $\mbox{$\sc T$}$  fall under Initial  $\mbox{$\sc M$}$  in the Thirtysix Initials, it has been agreed by scholars already that category  $\mbox{$\sc T$}$  can be regarded as the yodized counterpart of category  $\mbox{$\sc H$}$   $\gamma$ - (corresponding to Initial  $\mbox{$\sc M$}$ ). As for the so-called ch'un initials, which correspond to class  $\mbox{$\sc C$}$ , it may be said that they might have had the weaker ho-k'ou nature in type  $\mbox{$\sc A$}$ . However, since the distinction between k'ai-k'ou and ho-k'ou is generally confused with regard to their distribution as fan-ch'ieh spellings, it is not necessary to add  $\mbox{-}w$ - in order to differenciate type  $\mbox{$\sc A$}$  from type  $\mbox{$\sc B$}$ . Besides, it is quite unreasonable that while allowing for distinctions of initial consonants in the characters of the initial categories like  $\mbox{$\sc B$}$ , no such distinction is allowed in those of the initial category  $\mbox{$\sc P$}$ , where there also exists, as a matter of course, a difference of articulation between  $\chi$ 's in  $\chi$ i- and  $\chi$ i-. After all, our interpretation dis-

<sup>(35)</sup> If this is taken into consideration, the initial of the Group II characters that frequently uses the character of category 

in place of those of category 

as the upper characters of fan-ch'ieh can be regarded, for this reason, as /xj-/. Moreover, we can think of the possibility that the ya and hou initials of the Group II characters might have been /kj-, k'j-, nj,.../ in spite of their employment of class G characters for their initial spellers. (It must be noted, however, that they are not followed by medial /-i-/.)

<sup>(36) &#</sup>x27;論開合 (K'ai-k'ou and Ho-k'ou)', Yenching Journal of Chinese Studies 29 (1941), 143-192.

<sup>(37)</sup> The character 陂 under Rime 支 as pwie and 悲 under Rime 脂 as pwi. When transcribing other characters of these Rimes, the order of w and i (or i) is reversed.

cussed in the preceding section according to which the difference in medials is included in the initial consonant phonemes does hold good; hence we cannot approve of Wang's theory which claims that distinctions are made either between the medials -i- and -I- or between both initial consonants (e.g. k- and q-) and the medials (-i- and -I-). Moreover, Wang does not show in his article how the distinction between types A and B can be transcribed in the case of classes A and B (with the *shê* and *ch'ih* initials).

2.3.6. Needles to say, what the writer has mentioned so far also applies to the phonemic system of the Ch'ieh  $y\ddot{u}n$ , which can be reconstructed from the fan-ch'ieh of the Kuang  $y\ddot{u}n$  and from the extant fragments of the T'ang manuscripts of the Ch'ieh  $y\ddot{u}n$ , (and to which the one known from the fan-ch'ieh of the I ch'ieh ching yin i —切經音義 by Hsüan-ying 玄應, appears to have been closely related); however, when it is a question of the system revealed by the fan-ch'ieh of Hui-lin's 慧琳 I ch'ieh ching yin i [abbrev. as Yin i], for example, matters are quite different.

In Hui-lin's Yin i the two final categories in Rime 仙 of the Ch'ieh yün, for instance, have split into four. The first one and Rime 元 (k'ai-k'ou) have merged into final 言 (k'ai-k'ou) in the No. 7 final category 襲, (38) the second and Rime 元 (ho-k'ou) into final 權 (ho k'ou) in the same final category, the third and Rime 先 (k'ai-k'ou) into final 然 (k'ai-k'ou) in the No. 8 final category 肩, and the fourth and Rime 先 (ho-k'ou) into final 緣 (ho k'ou) in the same final category. In the phonemic system of the Ch'ieh yün, Rime (III (Karlgren's type  $\alpha$ ) is supposed to have been /-ian, -iuan/, Rime  $\vec{\pi}$  /-ian, -iuan/ (type  $\beta$  which has only the k- or p-type initials in classes C and D and a neutral principal vowel), and Rime 先 /-en, -uen/ (type  $\gamma$ ) belongs to Group I (cf. 2.2.). Consequently, the splitting of Rime 仙 in Hui-lin's Yin i is as follows: class A and the kj-type of class D of Rime 仙 (k'ai-kou) have joined with Rime 先 (k'ai-k'ou), while the k-type of classes B and D has joined with Rime 元 (k'ai-kou), and in conformity with which the ho-k'ou counterparts of Rime 仙 have joined with the ho-k'ou finals of Rime 先 or Rime 元; since the initials of class C (ch'un initials) are considered, according to Huang, to have formed a third category in addition to the k'ai-k'ou and the ho-k'ou, the pj- and p-type initials in them have come to fall under the third category of No. 8 final category 肩 and of No. 7 final category 韈, respectively.

The characters under Rime 先 /-en, -uen/ (without medial -i-) in the system of the *Ch'ieh yün* are supposed to have changed to /-ien, -iuen/ here. From this we must necessarily conclude that the splitting of Rime 仙 and its merger with Rimes 元 and 先 indicate that the difference between principal

<sup>(38)</sup> For this and what follows, see Huang Ts'ui-po 黄淬伯: Hui-lin i-ch'ieh-ching yin-i fan-ch'ieh k'ao 慧琳—切經音義反切攷 (A Study of the Fan-Ch'ieh of Hui-lin's I-ch'ieh-ching yin-i), 1937.

vowels in class A and the pj- and kj-types of classes C and D on the one hand, and the ones in class B and the p- and k-types of classes C and D on the other hand, had evolved to such an extent that it came to be phonemically significant under the influence of the preceding consonants and medials. To be sure, there is still room for further investigation concerning the question of whether or not it is necessary to distinguish phonemically the initial consonants of the kj-(pj)-type from those of the k-(p)-type in the phonemic system of Hui-lin's Yin i; but it should be remembered that Hui-lin went as far as to use a different series of characters even for the upper characters in order to describe the above mentioned distinctions and that those aspects of the fan-ch'ieh of the Ch'ieh yün are still preserved by Hui-lin's which show that class A and the kj-(pj-)type of classes C and D are closely related, and class B<sub>1</sub> and the k-(p-) type of classes C and D form another related group, with class B<sub>2</sub> having an intermediate status.

3. So far we have considered the Group III final categories in the Ch'ieh yün (with the main emphasis on the problem of the ch'ung-niu), and reviewed the essential points concerning the similarities and differences between its system and the one revealed by the fan-ch'ieh of Hui-lin's Yin i. Now, we have arrived at a stage to collate the phonemic system of the Ch'ieh yün with the schema of the Yün ching. If we illustrate faithfully the phonemic system of the Ch'ieh yün in accordance with the interpretation given in Section 2.3.4. above, we have to present it in such a way that A, B, the p-type of C (=F), the pj-type of C, the k-type of D (=G), the kj-type of D, and E, are arranged horizontally and the p'ing, shang, ch'ii and ju tones are arranged vertically and furthermore subdivided into three sections I, II and III; thus this arrangement is quite different from the one found in the extant texts of the Yün ching. Further, many scholars incline to attribute the ch'ung-niu distinction in the Ch'ieh yün to either central and front medial -i- or to different degrees of opening of principal vowels (cf. Sections 2.3.1-3. above), and from their point of view the third Group must be divided into two divisions (Divs. III and IV) as follows:

Div. III (type B) 
$$B_1$$
 C D Div. IV (type A) A  $B_2(?)$ C D

In the Yün ching classes C and D of type B and those of type A are mainly placed in its Divs. III and IV, respectively, but class  $B_1$  is placed in Div. II; besides, the initial categories 之, 昌, 式, 時, 而 and 以 of class A and those of class  $B_2$  are placed in Div. III, and the initial categories 子, 七, 疾, 息 and 徐 of class A in Div. IV. [89] It is on account of this fact

that the proposal that "the arrangement of the finals with medial -i- in uhe  $Y\ddot{u}n$  ching must be modified", (40) as well as the theory that "it does not represent actual sounds, but is an interpretation of the Ch 'ieh  $y\ddot{u}n$ ", (41) has been put forward.

Then, what is meant by the proposal: "the arrangement must be modified"? On this proposal Tôdô says: "The medials of Ancient Chinese consist of a relatively deeply retracted central medial -i- and a front medial -i-, and as for the ch'un, ya and hou initials, those with the former medial are clearly distinguished from those with the latter by their arrangement in Divs. III and IV in the mediaeval rime tables. On the other hand, as for the shê and ch'ih initials, their arrangement is considerably distorted. If argued on the ground that the differences among the hsi-yün 細韻 [i.e. final categories] are, properly speaking, those among finals, they naturally must be classified according to the lower characters of their fan-ch'ieh.... The medials of the shê and ch'ih initials, too, should in principle be arranged according to the lower characters of their fan-ch'ieh. In spite of this, Sung scholars were so carried away by their desire to make their rime tables look orderly that they entered the shê-shang and chêng-ch'ih initials in Div. III, the ch'ih-t'ou in Div. IV and the ch'ihshang in Div. II under restraint of distinctions in initial consonants. In this manner they mixed the classification by Divisions, which ought to be made on the basis of the values of finals, with the classification according to initials, which has resulted in serious contradictions and confusion." Therefore, his proposal that "the arrangement must be modified" probably means that the rime tables which are to represent faithfully the phonemic system of the Ch'ieh yün should be different from those in such works as the Yün ching and the Ch'i yin lüeh 七音略. On this point he is certainly right; nevertheless, it is still open to question whether the failure of the Sung rime tables to become ideal ones is due to the fact that "they mixed the classification by Divisions, which ought to be made on the basis of the values of finals, with the classification according to initials." On the other hand, he says; "Even among the mediaeval rime tables Yün ching, Ch'i yin lüeh and Ch'ih chang t'u 指掌圖 there are differences in their grouping of Divs. III and IV....It is supposed that the original difference between Divs. III and IV might have been gradually disappearing when these works were completed and that not a small part of them must have relied upon mere tradition." In connection with his interpretation of the opposition between nei-chuan 内轉 and wai-chuan 外轉 as 'deep vs. shallow', he further says: "In the period of transition from T'ang to Sung, (1) the ya initials k, k' of Div. II rimes had shifted to c2, c2 through the fronting of their points of articulation and were then in a transitional stage of palatalization for their eventual evolution to  $t\acute{s}$ , ts'...(2) the  $ch\acute{e}ng$ -

<sup>(40)</sup> Tôdô 'Ancient Chinese', pp. 74.

<sup>(41)</sup> Kôno 'Sino-Korean', loc. cit.

ch'ih initials of Div. III were gradually changing to ch'ih-shang (supradentals) in the Northern dialects in that period, and the dentilabialization of the ch'un initials with the central medial-i- was then developing. . . ." The present writer has given rather long quotations here, for this is an important point. Is there any reason for not associating the chronological sound changes here recognized with the problem of the discrepancies between the rime tables and the Ch'ieh yün's system? In particular, it must be mentioned that the second remark, that the chêng-ch'ih initials were changing at that time will afford an important clue for solving the problem of Divs. III and IV, though Tôdô makes no reference either to the sources or to the grounds on which he bases his remarks.

3.2. We noted above (2.3.6.) that the contrast between the k-type and the kj-type initials in the characters of classes C and D is already encountered as the distinction between their principal vowels in Hui-lin's Yin i. If the commonly accepted theory that regards the Divisions in the Yün ching as showing differences in degrees of opening of vowels is right, (42) these characters which form ch'ung-niu pairs, might be able to be arranged in Divs. III or IV on the basis of their sounds of the time, and it would be unnecessary to claim that "not a small part of them must have relied upon mere tradition." Each of the exceptions in the arrangement of the Yün ching must be scrutinized individually.

Besides, what has been referred to as exposing 'serious contradictions and confusion' means that, though the phonemic system of the Ch 'ieh yün naturally demands the placement of class A in Div. IV, the characters of categories 之,昌,食,式,時 and 而 (照 $_{III}$ ,  $\mathcal{F}_{III}$ ,  $\mathcal{K}_{III}$ ,  $\mathcal{K}_{III}$ ,  $\mathcal{K}_{III}$ ,  $\mathcal{K}_{III}$ ,  $\mathcal{K}_{III}$ ,  $\mathcal{K}_{III}$ , and that those of class  $\mathcal{K}_{I}$  [ $\mathcal{K}_{II}$ ],  $\mathcal{K}_{II}$ ], which should naturally be placed in Div. III, are assigned to Div. II. The consonants of categories 之,昌,食,式 and 時 (with some exceptions) were those that would later change to supradentals and join class  $\mathcal{K}_{II}$  categories 倒,初, $\mathcal{K}_{II}$  and 所,and class  $\mathcal{K}_{II}$  categories 倒,初, $\mathcal{K}_{II}$  and 所,and class  $\mathcal{K}_{II}$  categories  $\mathcal{K}_{II}$ ,  $\mathcal{K}_{III}$  and  $\mathcal{K}_{III}$  in the theory that the initials of class  $\mathcal{K}_{II}$  were supradentals at the time of the  $\mathcal{K}_{II}$  chief  $\mathcal{K}_{II}$ , which had derived from Archaic ts, ts', dz and s, is right, the shift may be referred to as the first supradentalization in the history of

<sup>(42)</sup> It must be noted that Rime 仙 cited above as an instance to illustrate the phonemic system of Hui-lin's Yin i also occurs in the four tables of the Yün ching: (wai-chuan 外轉) Nos. 21 (k'ai), 22 (ho), 23 (k'ai) and 24 (ho); it is placed in Div. IV as against Rime 元 in Div. III in the first two tables, and in Div. III as against Rime 先 in Div. IV in the rest. Pararell arrangements such as III 雩: IV 蕭 (k'ai) in the Table 25 (wai) and III 〇: IV 雩 (ho?) in Table 26 (wai); III/IV 淸 (k'ai) in Table 33 (wai), III/IV 淸 (ho) in Table 34 (wai) and III 淸: IV 靑 (k'ai) in Table 35 (wai); and III 鹽: IV 添 (k'ai) in Table 39 (wai) and III 嚴: IV 鹽 (ho?) in Table 40 (wai) also present similar problems.

the Chinese language, and that of the initials of categories 之, 昌, 食, 式 and 時 as the second one that took place later. Might we not be allowed to consider, then, that though this second shift was completed much later, it was in progress already at the time of the Yün ching and that dorsals such as tś, ś, etc. had become the apicals tʃ, ʃ, etc.? Considered in this light, the syllables with these initials can have their vowels arranged in Div. III, not in Div. IV. Again, the initials of class  $B_1$  側, 初,  $\pm$  and 所, losing their medial-i-because of their supradental articulation (or having changed it to -u- by labialization), could qualify for being entered into Div. II. The initial category 而 (Initial  $\Box$ ) that would also evolve later to the supradental z was placed in Div. III parallel to that of the initial categories such as  $\dot{z}$ , etc. On the other hand, the initial category 以 (Initial  $\dot{m}_{\text{IV}}$ ) can be considered to have remained palatal, hence its placement in the Div. IV. (43)

Following this line of reasoning, we must necessarily conclude that the schema of the Yün ching does not represent the phonological system of the time of its compilation, but is just an interpretation of the revised editions of the Ch'ieh yün, and that it is the 'serious contradictions and confusion' in the Yün ching as compared with the phonological system of the Ch'ieh yün which as such have such important meaning as material for the study of the phonological history of Chinese. It seems to us that only from such a point of view we will be able to solve the other problems of the Yün ching.

3.3 Incidentally, the merger of initial categories 側之, 初昌, 士食 and 所式 into the respective Initials 照, 穿, 床 and 審 in the so-called Thirty-six Initials is easily understandable if they are interpreted as tṣ- tʃ, tṣ'-tʃ', dz-dʒ and ṣ-ʃ rather than as retroflexes (like tṣ) and palatals (like tś), (and this is all the more so because there also exist dental affricates such as ts and fricatives,) and supposing that the differences in the medials and principal vowels immediately following those consonants were already phonemically distinctive, it might be possible to interprete those pairs of initials as each forming a single phoneme, thus /tf, tf', dg, f/.

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(43) Again, take Rime 仙 for example.
    Table 21 (k'ai)
                         III 元: kiæn (<kian), etc.
                         IV 仙: gjien (<gjian), pjien (<pjian), tsien (<tsian), etc.
    Table 22 (ho)
                         III 元: niuæn (<niuan), fi(u)æn (<pian), etc.
                         IV 仙: 'jiuen (<'jiuan), tsiuen (<tsiuan), etc.
    Table 23 (k'ai)
                         III 仙: giæn (<gian), ţiæn (<ţian), tſiæn (<tśian), ziæn
                         (\langle z'ian \rangle), etc.
                         IV 先: k'jien (<k'en), pjien (<pen), tien (<ten), tsien
                          (< tsen), etc.
    Table 24 (ho)
                         III 们: kiuæn (<kiuan), 'iuæn (<'iuan), tʃiuæn (<tśiuan),
                         žiuæn (< ńiuan), etc.
                         IV 先: kjiuen (<kuen), etc.
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Again, according to such a view, the table below that is given as '11, A T'ang manuscript of the Thirty Initials 唐寫本 三十字母 一種' in the Wei's 魏 preface in the Shih yün hui p'ien 十韻彙編 can be regarded as a fairly orderly arrangement:

d 透 定 泥 禪 Ħ t∫ʻ 3 邪 照 心 t∫ 從 精 淸 ts ts' dz j 見 磎 羣 疑 k k' 暁 匣 影  $\mathbf{x}$ 徹 澄 知 ţ ţʻ d 芳 p' b m

4. What has been expounded so far, seems to have on the whole sufficiently illustrated the following points: the Yün ching is 'an interpretation of the Ch'ieh yün,' and it may be proper to consider that the reason for its failure to give a faithful representation of the latter's system is not because "serious contradictions and confusion" brought about by the excessive desire on the part of its compilor(s) "to make the rime tables look ordely," but because they interpreted the Ch'ieh yün's system under the strong influence of another phonological system at the time of its compilation in spite of their efforts to keep intact the rimes and the hisao-yün 小韻 or representatives of homophonous characters (which correspond to the kuei-tzŭ of the rime tables) in the revised editions of the Ch'ieh yün. Although the date of compilation of the Yün ching has not been fixed as yet, such phonological changes that can be seen to have taken place between the phonological systems of the Ch'ieh yün and the Yün ching would prove to be useful in the fixing of the date. It is thought, however, that the date of compilation of the original text approximating to the extant one of the Yün ching cannot go as far back as around that for the Ch'ieh yün. (44) Matters, of course, would be quite different if the extant one diverged greatly from the original, though.

In the present article the writer has taken every possible care to avoid the use of the Sung phonological terminology when speaking of the phonemic system of the Ch'ieh yün. If the Yün ching has such a nature as mentioned above, it is obviously wrong to apply the classification of Sung phonology according to its Initials and Divisions in the phonemic stuides of Ancient Chinese. Only as far as we are concerned with rime tables like the Yün ching, etc., these terminology is profitably applicable. Needless to say, this article

<sup>(44)</sup> Though its 206 rimes and collation with rime books as to the distribution of its kuei-tzŭ give us an impression that the date of the compilation might have been much later, these cannot afford strong grounds for the fixing of its date since they are the points most liable for revision. On the other hand, the order of arrangement of the rimes may supply a reasonable ground for it.

has treated of the classification of the fan-ch'ieh spellings, only to the extent that the problems here concerned require it. It is to be much regretted that when considering the phonological system at the time of compilation of the Yün ching, the writer could only discuss possibilities in most cases, but failed to adduce any positive evidence in support of them.

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Postscript: In the footnote (3) the writer has mentioned only Kôno and Tôdô, but before them Arisaka had already pointed out the discrepancies between the Ch'ieh yün and the Yün ching. For instance, on pp. 346–347 of his 'Medial i Theory' he states that notwithstanding the higher probability that  $\gamma$  type rimes had no medial i at the time of the Ch'ieh yün, 'the fact that Div. IV is made up of part of  $\alpha$  type rimes and of these  $\gamma$  type rimes reflects their phonological status after their shift to rimes with medial i.' Incidentally, as he considered that the cerebralization of Initial  $\Box$  and the chêng-ch'ih and hsi-chêng-ch'ih  $\Box$  of Div. III took place during the period of Sung ('On Sino-Korean', op.cit., pp. 308–389), he seems to have ignored the shift in his interpretation of the Yün ching, which is said to be a work compiled at the end of the T'ang period or around the time of the Five Dynasties (Arisaka 'Medial i Theory', pp. 347).'

Furthermore, it is found that the inexplicability of the Yün ching by the phonology of Ancient Chinese, known from the Ch'ieh yün, was argued by Shinzô Mitsuda long ago, in 1917-18; thus, there are a series of his articles: 'Inkyô no shokyo to sono honshitsu (The Sources of the Yün ching and its fundamental nature)', Tôa Kenkyu 7.1-2, 'Inkyô chosaku no nendai ni tsuite (The date of compilation of the Yün ching)', Kokugakuin Zasshi 23.10, 'Chûkoon nite setsumei-shigataki Inkyô no shoten (Some Aspects of the Yün ching that are inexplicable by Ancient Chinese)', Geibun 10.5, 'Inkyô, Shûin nado wa tada Chûko-bun'in no keishiki o tôshû-seru mono ni shite sono hatsuon wa Kinsei-on nari (Yün ching, Chi yün, etc. follow the classification of the rimes of Ancient Chinese and the sounds represented there were that of Modern Chinese,' Geibun 14.7, and others. According to his opinion, it is confirmed from the preface in the Yün ching that it was compiled before the founding of the Sung Dynasty. From the fact that neither is it listed in the catalogue of the books brought back to Japan by Ennin 圓仁 (Jikaku Daishi 慈覺大師) about sixty years before the fall of the T'ang Dynasty, nor is it referred to in the Shittan-zô 悉曇藏 by Annen 安然, he concludes that the compilation of the Yün ching was made at the very end of the T'ang or during the Five Dynasties. On the other hand, he considers that the rimes of tz'ŭ 詞 (or shih-yü 詩餘) date from late T'ang and assumes from similarities between the groupings of rimes in  $tz'\check{u}$  and  $ch'\check{u}$   $\boxplus$  (in the Chung yüan yin yün 中原音韻) that 'the tz'ŭ rimes, namely late T'ang sounds were Modern Chinese' ('Shi-in sunawachi Ban-Tô-on wa Kinsei-on nari', Geibun 10.2). With this assumption he attempted to solve all the problems of the Yün ching in the light of the phonology of Modern Chinese. The writer agrees with his opinion that the Yün ching does not reflect the phonology of Ancient Chinese as it was, but holds a totally different view as to his 'interpretation of four Divisions of the Yün ching' by the sounds of Modern Chinese ('Inkyô 4-tô no kaishaku', Geibun 11.5.).