HOW TO FORM A HEXAGRAM AND CONSULT THE I CHING*

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The procedure for forming a hexagram and consulting the *I Ching* available in the West is that of Chu Hsi of the Sung (1130-1200). His version was originally the method of the coin oracle (i.e., by tossing three coins), but to justify it he forced it upon the text of the "Hsi Tz'u Chuan" of the *I Ching*.

Instances of the divinatory use of the I ching recorded in the Tso Chuan and Kuo $Y\ddot{u}$ amount to more than 25 cases. Chu Hsi's version cannot explain these cases.

Following strictly the text of the "Hsi Tz'u Chuan," the author has recovered the original divinatory procedures for forming a hexagram and consulting the *I Ching*, and they are verified by the recorded cases. The recovered procedures are simpler and more logical and consistent than those of Chu Hsi's version.

The divinatory procedures for forming a hexagram and consulting the *I Ching* were prescribed by Chu Hsi (1130-1200) in *Shih I*, a part of his *I Hsüch Ch'i Meng*. Since Chu Hsi's commentaries on the Chinese Classics became the standard texts, Chinese scholars have followed his prescription obediently.

The English translation of *I Ching* by James Legge was based upon Chu Hsi's *I Hsüch Ch'i Meng* and *Chou I Pen I*¹.° The German translation by Richard Wilhelm was based upon the *Chou I Che Chung*,^d a collection of the Sung commentaries on the *I Ching* by Ch'ing scholars.² Therefore, only the Sung version of the divinatory procedures is available in the West. Scholars like C. G. Jung,³ Hellmut Wilhelm⁴ and Wayne Mc-Evilly⁵ followed his version to form hexagrams and to consult the *I Ching*.

It was Jung who first introduced the concept of "synchronicity" in opposition to "causality" as the key to understanding the Chinese psychological phemomenology as revealed in the *I Ching*. McEvilly further suggested that "Not only is it [the *I Ching*] remarkable because of its antiquity, however, but also because of its persistent appeal to the deeper levels of the psyche, its impressive vitality, and its implications for the future expansion of our ideas concerning the nature of human experience." In recent years more articles and books have been written dealing with different aspects of this most treasured Chinese Classic. However, as in the cases of many other Classics there are still many unanswered problems about its text, its history, and its usefulness.

This paper is intended to deal with two basic and yet related problems: how a hexagram is acquired and how the *I Ching* is consulted. These problems have been discussed among Chinese scholars ever since the T'ang period (618–905). During the nineteen twenties at the monthly meetings of the I Hsüeh Yen Chiu Hui in Nanking several of my friends shed some new light on them. Many original ideas in this article should be attributed to Kao Heng,^e who contributed a great deal to our discussions.⁷

The I Ching was originally entitled Chou I, which in-

^{*}The editors wish to express reservations concerning certain traditional views accepted by Professor Chen in respect to the *I Ching* (e.g., its authorship by the legendary Fu Hsi or by early historical figures). However, these views do not affect the core of the article itself, which offers a valuable interpretation concerning the use of this ancient text.

¹ See James Legge's *The Yi King*, Preface, p. xv, in *The Sacred Books of The East* (Oxford at The Clarendon Press, 1899).

² See The I Ching or Book of Changes, The Richard Wilhelm translation rendered into English by Cary F. Baynes (New York: Pantheon Books, 1950), Introduction, p. xlii.

³ Ibid., Foreword by C. G. Jung, pp. i-xx.

⁴Cf. Helmut Wilhelm, Change: Eight Lectures on The I Ching, translated from German by Cary F. Baynes (New York: Bollingen Series, 1950).

⁵Cf. Wayne McEvilly, "Synchronicity and The I

Ching," Philosophy East and West, XVIII (1968), 137-148.

⁶ Ibid., p. 148.

⁷The I Hsüeh Yen Chiu Hui (Association for *I Ching* Studies) was founded by a few scholars in Nanking. The author of this article was one of its members. Under its sponsorship *I Hsüeh T'ao Lun Chi*, ^{au} a collection of the member's articles, was published by The Commercial Press, Shanghai, 1937.

dicates that its present text was used or edited during the Chou dynasty (1122-255 B.C.). In Conspectus A and B (hsi tz'u chuan^f) it is repeatedly mentioned that the Chou I was created during the transitional period of the Yin and Chou (about the 12th century B.C.) and that the author or authors were perhaps in grave danger. In the Tso Chuan it is said "A shih [an official in charge of recording history, among other duties of the Chou court had an audience with the Earl of Ch'en, bringing with him the Chou I. The Earl of Ch'en requested him to divine with the yarrow stalks and, as a result, he obtained the hexagram Kuan (20) which was transformed into the hexagram Pi (8)" (Chuang 22, 685 B.C.). Checking the Tso Chuan, we found that no case of using the Chou I was recorded before that year. It seemed that the Chou I was originally monopolized by the Chou court and unavailable for the feudal states until the shih escaped the Ch'üan Jung's invasion and sought employment in a feudal state.

According to the Tso Chuan, Kuo Yü and Li Chi, throughout the period of the Spring and Autumn Annals (722-481 B.C.) scapulimancy, the traditional method of divination, was generally in use. After the year 685 B.C. both scapulimancy and the Chou I were consulted. Time and again it was mentioned in the Tso Chuan and Li Chi that scapulimancy was preferred to the Chou I.8 There are nineteen cases of consulting the Chou I recorded in the Tso Chuan and four cases in the Kuo Yü. These provide us with source materials for investigating the divinatory procedures of that time. Study of each of these cases suggests that a hexagram, after being formed, was transformed into another hexagram, or that the diviner failed to acquire its "related hexagram" (chih kuah) because of the unavailability for change of the monogram (line) normally subject to change. Such evidences can provide us clues as to how the diviner operated the 50 yarrow stalks and how he determined which monogram or monograms underwent change. Following the clues, we can reconstruct the hexagram and find the constituent values of its six monograms (either 6 or 7 or 8 or 9) in order to see why the diviner failed to acquire the "related hexagram" in his particular case. Furthermore, by so doing we should be able to find the rules, if any, which guided the diviner in using a particular monogrammatic (yao tz'ui), or hexagrammatic (kua tz'u') or symbolic (hsiang chuan^k) or compendium (t'uan chuan¹) for consultation.

As indicated in the Introduction by R. Wilhelm to

his English translation (from German) "Chu Hsi attempted to rehabilitate it [the I Ching] as a book of oracles: in addition to a short and precise commentary on the I Ching, he published an introduction to his investigations concerning the art of divination." As a matter of fact he could not rehabilitate the I Ching as a book of oracles since he failed to explain the twentythree divinatory cases recorded in the Tso Chuan and Kuo Yü. Uncertain about the divinatory procedures practiced by ancient diviners, he accepted the later version of the Taoists. In order to justify this later version he transposed and misinterpreted the text of Chapter IX of Conspectus A.¹⁰ This should not be interpreted. however, as a reflexion on his integrity; perhaps rather it was necessitated by the cosmological speculations of the Sung scholars.

We must realize that divination was a practical art and that its divinatory procedures and annotations underwent changes whenever a new augury was demanded. Prior to the Chou I scapulimancy was popular during the Yin (1766–1122 B.C.), and contemporaneous with Chou I there were the Lien Shan^m and Kuei Ts'angⁿ. And according to Huan T'an's Hsin Lun^p as quoted in T'ai P'ing Yü Lanq, 608, the Lien Shan consisted of eighty thousand words and the Kuei Ts'ang consisted of four thousand three hundred words. After the Chou I, the Chiao Shih I Lin^r by Chiao K'an^s (fl. 33 B.C.) was popular during the Han; the Ts'an T'ung Ch'i^t by Wei Po-yang^u of Later Han introduced some new ideas and diagrams which exercised a deep in-

⁸ In the *Tso Chuan* (Hsi, 4) it is said, "Shihav (Chou I oracles) are inferior while scapulimancy is superior." See also Li Chi, piao chi, av 27, 29.

⁹ The I Ching, Introduction, p. xli.

¹⁰ According to the T'ang stone-script version of the Chou I and its quotation in Pan Ku's Han Shu, lū li chih, ax the sequence of this chapter should be in the order which appears in the following pages of this article. But Chu Hsi or Ch'eng Hao rendered it into the order of 2, 3, 1, 4, 5, 6.

¹¹ The *Lien Shan* and *Kuei Ts'ang* were mentioned together with the *Chou I* in the *Chou Li*, *Ch'un kuan.**y It is said that "The basic hexagrams of the three are eight in number and the differentiated hexagrams of the three are sixty-four in number respectively."

¹² According to the Han Shu, ju lin chuan, ^{ac} Chin Fang Chuan ^{ba} and Ssu K'u Ch'üan Shu Chien Ming Mu Lu^{bb}, the Chiao Shih I Lin consists of sixteen volumes. It shows how each hexagram can be transformed into any of the other sixty-three and that the possible transformations of sixty-four hexagrams amount to 4,096. Its annotations are different from those of the Chou I. They might have been intelligible to the book's users at Chiao K'an's time, but are rather obscure to present readers.

fluence on the Sung scholars.¹³ During the Northern and Southern Dynasties (420–581) another new oracle book, the *Huo Chu Lin*, alleged to be the work of Ma I, a Taoist, provided a simpler divinatory procedure by tossing three coins.¹⁴

In the present text of the I Ching we see not only that accretions to the original text occurred in the course of time, but also that the wording of the text often differed, as attested by quotations in the Tso Chuan and Kuo Yü. In addition to the quotations found by Hellmut Wilhelm in the Tso Chuan, 15 there are four further quotations (Chuang 22, Min 2, Hsi 4, Ai 9) which do not appear in the present text of the I Ching. Furthermore, the monogrammatic and hexagrammatic quoted in the MuTien Tzu Chuan^x (The Travelogues of King Mu of the Chou), the tenth year, do not appear in the I Ching, nor do their quotations in the Han Shu, Wen ti chiy and chiao ssu chihz. These make us suspect that its present text, except for the symbolism, was perhaps an accumulated record of a rather loosely worded and longexistent oral tradition.

Since we know that before and after the Chou I there were other oracle books, we must give an account how this happened. Let us examine the present text of the IChina, which no honest scholar in China since the Han could claim that he understood completely. Many of the Han and post-Han commentators used the Chou I simply as a vehicle to convey their own cosmological, numerological or political speculations. This happened not because its style or phraseology is different from that of other Classics but because its allegories (the so-called "meaningful coincidences"), similes, images and symbols, after many years, lost their freshness and significance to later generations. Its early divinatory procedures might have been carried on but its annotations under each hexagram and monogram had to be changed to make them meaningful to the later users.

As we have noticed above, Chu Hsi's version of

Chou divination was perhaps necessitated by the cos-

The mode of thought of the Sung scholars is far remote not only from that of the early authors of the *I* Ching—Fu Hsi, King Wen and Duke of Chou—but also from that of Confucius. If we consult the *I* Ching by following Chu Hsi's method, what we could learn would not be the "psychological phenomenology" of the ancient Chinese but of the Sung Chinese. In this case I am afraid that Dr. Jung might have misconstrued the text of the *I* Ching or construed it only in the frame of mind of a Sung scholar. How true was his self-knowledge when he asked the following questions: "May not the old text be corrupted? Is Wilhelm's translation accurate? Are we not self deluded in our explanation?" 18

Let us examine Conspectus A, Chapter IX, for procedures to be followed when consulting the *I Chinq*:¹⁹

- The number of the Great Elucidation (ta yen)^{ab} is fifty. Of these, forty-nine are used. They are divided into two portions, to represent heaven and earth. Hereupon one is set apart, to represent man. They are counted off by fours, to represent the intercalary month. There are two intercalations in five years and, therefore, there are two such operations; afterwards the whole process is repeated.
- 2. Heaven is one, earth is two; heaven is three, earth is four; heaven is five, earth is six; heaven is seven, earth is eight; heaven is nine, earth is ten.
- 3. There are five heavenly numbers. There are also five earthly numbers. One series of the five numbers corresponds to the other series of the five numbers and each number of one series is paired with a number of another series. The sum of the heavenly numbers is

mological speculations of the Sung scholars. Strictly speaking, it has nothing to do with the Chou I. James Legge noted in the preface to his translation that "the Sung philosophy did not grow out of the Yî (Chou I) proper, but from the Appendixes to it [the Ten Wings], and especially from the third of them [Conspectus A & B]. It is more Tâoistic than Confucian." In the same vein Richard Wilhelm remarked, "In the Sung Period, the I Ching was used for T'ai Chi T'uaa doctrine—which was probably not of Chinese origin." However both Legge's and Wilhelm's translations were based upon Chu Hsi's and other Sung scholars' commentaries.

¹⁸ The *Ts'an T'ung Ch'i*, whose authorship has been ascribed to Wei Po-yang, is not a commentary on the *Chou I*. It preserves cosmological and sociological speculations of Han scholars. In it Shao Yung's^{bc} (1011–1077 A.D.) *Diagrams of the Eight Hexagrams* was suggested.

¹⁴ The authorship of *Huo Chu Lin* is unknown. It was recorded in the bibliography of the *Sung Shih* and Ma Tuan-lin's^{bd} (circa 1325 A.D.) *Wen Hsien T'ung K'ao.*^{be} The Sung scholars ascribed its authorship to Ma I, a Taoist. Its present text may be a conflation of several different versions. The coin-tossing operations in it opened up a simpler way of forming a hexagram.

¹⁵ See Helmut Wilhelm, "I-Ching Oracles in the *Tso-chuan* and the *Kuo-yü*," *JAOS*, 79 (1959), 275–80.

¹⁶ The Yi King, Preface, p. xvi.

¹⁷ The I Ching, Introduction, p. xli.

¹⁸ Ibid., Foreword by C. G. Jung, p. xiv.

¹⁹ The order of the sections of Chapter IX, except section 2, which is transposed from Chapter X, appears in Wang Pi's ^{bf} (226–249 a.d.) Commentary on Chou I and in the text of the T'ang stone-script version.

- twenty-five, that of the earthly numbers is thirty. It is within this number (fifty-five) that the changes and transformations are effected and the spirit-like agencies function.
- The numbers that yield the creative total 216, while those which yield the receptive total 144, making in all 360. They correspond to the days of a year.
- 5. The numbers of the stalks used for the sixty-four hexagrams amount to 11,520, which corresponds to the ten thousand things.
- Therefore, by means of the four constituents (6, 7, 8, 9) the changes are made possible; eighteen operations yield a hexagram.

In Chapter IX in addition to the constants of the heavenly numbers (1, 3, 5, 7, 9) and the earthly numbers (2, 4, 6, 8, 10) there are two more constants, 50 and 55. The number of the Great Elucidation is 50, which deals with the operations in making a hexagram. The total sum of the heavenly numbers and the earthly numbers is 55, which provides the calculation by which its "related hexagram" is determined. They were assigned two different functions by the Chou Chinese. But unfortunately the Sung scholars, including Chu Hsi, identified the constant 55 with the sum of Ho T'uac (the Yellow River diagram) and thus the system of the eight hexagrams of the Chou was merged with the system of the five elements (or functions) of later years. It seemed that the I Ching was enriched. But because of the different interest of the Sung scholars its original significance, which Confucius expounded in the "Ten Wings," was gradually forgotten by them.

Following what is given in Conspectus A, Chapter IX, we find a more natural, consistent, and simpler way (in contrast with the arbitrary way of Chu Hsi), to form a hexagram and to determine its "related hexagram." We believe that it was the way by which the Chou Chinese consulted The *I Ching*.

Let the diviner take out the fifty yarrow stalks from his container and keep one stalk aside as the unused one. There are 49 stalks. This follows Conspectus A, Chapter IX where it states, "The number of the Great Elucidation is fifty. Of these, forty-nine are used."

The first operation:

Step 1. Divide the 49 stalks into two portions, A & B, at random (fen erh wei erh i hsiang liang*d).

Step 2. From portion A take one stalk out and put it between two fingers (kua i i hsiang san *e).

Step 3. Count off the rest of portion A in fours (tieh chih i ssu i hsiang ssu shihaf).

Step 4. Put the remainder of either 1 or 2 or 3 or 4

- between the two fingers (kuei ch'i yü le i hsiang jun^{ag}).
- Step 5. Count portion B in fours (tsai tieh chih i ssu i hsiang ssu shih). (This statement is demanded by the text but was omitted in the original.)
- Step 6. Put the remainder of either 1 or 2 or 3 or 4 between the two fingers. This is the repetition of step 4 because "there are two intercalations in five years and, therefore, there are two such operations" (tsai kuei ch'i yü le i hsiang jun). (This statement is demanded by the text but it was also omitted in the original.)
- Step 7. Take away the stalks from between the two fingers and put them aside (or hang them on a register) (tsai le erh hou kua^{ah}). (This statement was meant by its author to imply the 5th and the 6th steps, but unfortunately it is ambiguous and causes confusion to its readers.)

Then the first operation is ended. The remainder of both portions, A & B, must be 44 or 40.

The second operation:

Step 1. Use the remainder of the first operation and divide them into portion A and portion B.

Step 2 to step 7. They are the same as those conducted in the first operation.

At the end of the second operation the remainder must be 40, 36, or 32.

The third operation is the repetition of the second operation.

At the end of the third operation the remainder of both portion A and portion B must be either 36 or 32 or 28 or 24.

After the three operations (san p'ienai) we are able to determine whether the monogram is a yang or a yin. If it is a yang, we may determine whether it is a lao yang or a shao yang. If it is a yin, we may determine whether it is a lao yin or a shao yin. As a result of the third operation the remainder is either 36 or 32 or 28 or 24. We count off the remainder in fours (tieh chih i ssu i hsiang ssu shihai) and the result may be 9 or 8 or 7 or 6. If it is 9, it is a lao yang. If it is 6, it is a lao yin. If it is 8, it is a shao yin. If it is 7, it is a shao yang. Traditionally if a monogram is 9 (i.e., a lao yang), it undergoes change; if a monogram is 8 (i.e., a shao yin), it is unchangeable; if a monogram is 7 (i.e., a shao yang), it is also unchangeable. The reasons for this will be explained later.

At this junction we may refer to the defects of Chu Hsi's divinatory procedures, which he took from the coin oracle popular during the Sui and T'ang (581-905) and forced upon Conspectus A, Chapter IX, to justify

them. In Wilhelm's translation of the I Ching in Volume One, Book 11, pp. 334–336 and pp. 392–355 the yarrow-stalk oracle is discussed in detail. These two parts of his translation are based upon the Chou I Che Chung^d. However, they were copied from Chu Hsi's Chou I Pen I° by its editor. The following is Chu Hsi's version:

Fifty stalks are used for this purpose. One is put aside and plays no further part. The remaining 49 stalks are first divided into two heaps [at random]. Thereupon one stalk is taken from the right-hand heap and put between the ring finger and the little finger of the left hand. Then the left-hand heap is placed in the left hand, and the right hand takes from it bundles of 4, until there are four or fewer stalks remaining. This remainder is placed between the right finger and the middle finger of the left hand. Next the right-hand heap is counted off by fours, and the remainder is placed between the middle finger and the forefinger of the left hand. The sum of the stalks now between the fingers of the left hand is either 9 or 5. At the first counting off of the stalks, the first stalk—held between the little finger and the ring finger—is disregarded as supernumerary, hence one reckons as follows: 9 = 8, or 5 = 4. The number 4 is regarded as a complete unit, to which the numerical value 3 is assigned. The number 8, on the other hand, is regarded as a double unit and is reckoned as having only the numerical value 2. Therefore, if at the first count 9 stalks are left over, they count as 2; if 5 are left, they count as 3. These stalks are now laid aside for the time being.20

Chu Hsi's divinatory procedures are most arbitrary. Instead of following the indication in Conspectus A, Chapter IX of using 4 as the divisor all the way (tieh chih issui hsiang ssu shihat) he reckoned the stalks which were left between fingers. What were left between the fingers after the first operation are either 5 or 9. Chu Hsi gave no reason why 9 should be regarded as 8 and 5 as 4. Furthermore he gave no reason why 8 should have a numerical value of 2 or why 4 should have a numerical value of 3.21 In fact he took over this idea from the coin oracle in which three coins are used. The inscribed side of a coin counts as yin, with the value 2, and its reverse side counts as yang, with the value 3. If all three coins are yang, the monogram is a 9; if all three are yin, it is

6; if two are *yin* and one is *yang*; it is 7; if two are *yang* and one is *yin*, it is 8. As we mentioned before, this has nothing to do with the divinatory procedures of the *Chou I*. During Chu Hsi's time scholars argued that, since the number of stalks left between fingers after the second and third operations, either 8 or 4, included the one stalk held between fingers at the first step (*kua i i hsiang san*^{ae}), why should we "disregard it as supernumerary" at the first operation? Chu Hsi could not justify his position in regarding 9 as 8 and 5 as 4. He simply insisted that this could be done.²²

We must return to our discussion about the divinatory procedures, strictly following what is given in Conspectus A, Chapter IX. After we have acquired the first monogram of either 9 or 8 or 7 or 6, following the same steps we may have six monograms which form a hexagram. Since each monogram requires three operations, it will require 18 operations to form a hexagram. As indicated in Chapter IX, "It takes 18 changes to form a hexagram" (shih yu pa pien erh ch'eng kua^{aj}). But how do we know that the ancient Chinese selected the constant 9 as lao yang, 6 as lao yin?

We were told that 9 is one of the five numbers assigned to heaven (yang) and that 6 is one of the five numbers assigned to earth (yin) in Conspectus A, Chapter IX, 3. We were also told in the same chapter, 4, that the hexagram Ch'ien (1), has 216 stalks and that the hexagram K'un (2), has 144 stalks and that together they are 360, corresponding to the days of a year. The Ch'ien has six yang monograms and each yang monogram has a numerical value of 9, which is the result of dividing 36 by 4. Therefore $6 \times 9 \times 4 = 216$. Similarly, the total stalks of the K'un are 144. Thus it was indirectly given in Chapter IX that the numerical value of yang is 9 and that of yin is 6.

Furthermore, in addition to lao yang (9) and lao yin (6), we know that shao yang is 7 and that shao yin is 8. The 6, 7, 8 and 9 are the four constituents by which changes are made possible (ssu ying erh ch'eng iak) However, among 6, 7, 8 and 9, only 9 and 6 are available for changes, while 7 and 8 are not available even when they are called upon to change. Is there any reason given in Conspectus A & B for this changeability or unchangeability? The ancients analogized the four constituents, 6, 7, 8 and 9 to the four seasons (tieh chih i ssu i hsiang ssu shih). The lao yang (9) represents the summer; the lao yin (6) represents the winter; the shao yang (7) the spring; the shao yin (8) the autumn.

The ancients observed that in spring the yang

²⁰ The I Ching, Book II, Pt II, p. 392.

²¹ Chu Hsi explained to his students and friends the arbitrariness of his divinatory procedures, but the reasons he offered are beyond the text of Conspectus A and B and are illogical. See *Chu Tzu Ta Ch'ūan*, bg "Letter to Kuo Chung-huibh," wen 38, che 26, Chung-hua Shu Chü edition.

²² Ibid., "Letter to Ch'eng T'ai-chihbi" wen 37, che 26.

effluvium is gradually getting stronger and stronger until spring is changed into summer. From shao yang (the spring) to lao yang (the summer), they observed, the change is a matter of degree and not of its nature, so that shao yang does not undergo change. From autumn to winter the yin effluvium is getting stronger until autumn is changed into winter. From shao yin (the autumn) to lao yin (the winter), they observed, the change is a matter of degree and not of its nature, and therefore shao yin does not undergo change. On the other hand from summer to autumn the yang gradually decreases and finally changes into the yin. For the ancients this change is a change of its nature and not merely one of degree. Lao yang undergoes change. For a similar reason lao yin undergoes change. Although their observations are rather crude, they are not unreasonable.

About how the "related hexagram" is found or, in other words, how a hexagram is transformed into another no rule is given in Conspectus A & B or in the other part of the "Ten Wings." However, there are a few scattered hints. It is said in Conspectus A, Chapter IX, 3, that "The total sum of heavenly numbers and earthly numbers is fifty-five. It is within this number that the changes and transformations are effected and the spirit-like agencies function." These are very significant statements as far as divinatory procedures are concerned.

We know that the numerical value of a monogram is limited to four possibilities: 6, 7, 8 or 9. Therefore the smallest numerical value of a hexagram is 36 (6 \times 6) and the largest is 54 (6 \times 9). The hexagram Ch'ien (1) has the largest (54), which is one less than the total sum of heavenly and earthly numbers. The hexagram K'un (2) has the smallest (36), which is 19 less than 55.

In order to find the "related hexagram" we presume that the diviner has to take the following steps:

Step 1. Subtract the constituent number (the total of the numerical value of the six monograms) of a hexagram which he formed, from 55, the sum of the heavenly and earthly numbers.

Step 2. The remainder indicates which of the six monograms is to undergo change. If it is 1, the first monogram (the bottom one) is called upon to change from the yin to yang or vice versa. If it is 2, the second monogram (from the bottom) undergoes change. So also with the third, the fourth, the fifth or the sixth. If the remainder is larger than 6, the order of calling upon the changeable monogram is reversed from the top one (the sixth) to the bottom one (the 1st). If the remainder is larger than 13, the order is up from the bottom one to the top one again. For instance, if the remainder is 7, the top monogram

(the sixth) is called upon to change. If it is 8, the fifth monogram undergoes change, and so forth. If it is 13, the first monogram is called upon to change and if it is 14, the second monogram is required to change. The largest remainder is 19. In that case the sixth monogram is called upon to change.

However, we should be reminded that not all the monograms undergo change except when they are called upon to do so. And it should also be noted that not all the changes will necessarily take place even when they are called upon to do so, and this depends upon whether the change is available or not. When the monogram which is called upon to change is 9 or 6 the change is available. When it is 7 or 8 the change is unavailable.

Table 1 may help us to find out which monogram is called upon to change in order to acquire the "related hexagram." The calculations in the table show all the possibilities, but fewer possibilities than those listed have been verified by the cases recorded in the Tso Chuan and $Kuo Y\ddot{u}$.

The following cases recorded in the $Tso\ Chuan$ and $Kuo\ Y\ddot{u}$ would serve as examples of how the ancient diviners acquired the "related hexagrams" and consulted the $I\ Ching$.

Example 1

Chao Yang, the Minister of War of the Chin state, consulted scapulimancy in regard to relieving the Cheng state (under the attack of Sung) and got the indication of fire meeting with water Yang Hu (a refugee sub-Minister from the Lu state) consulted the yarrow stalks on the principle of the Chou I. He formed the hexagram T'ai (11), which transformed into the hexagram Hsü (5). Yang Hu quoted the 5th monogrammatic saying that in the past Sung married away one of its princesses to Cheng (referring to the fact that Wei Tzu Ch'i, the eldest son of Ti I of the Yin, married away one of his sisters to the Earl of the Cheng state) and that the marriage was beneficial for both. What benefit could we gain, he continued, by interfering with their business? Then Chao Yang gave up his plan. (Tso Chuan, Ai 9).

How does the hexagram T'ai transform into the hexagram Hsü?

The T'ai	The Hsü

Apparently the change takes place at the fifth mono-

TABLE 1

Total of num-		Total of the					Mono	gram	s		Monograms to	
bers of heaven and earth		constituents	Remainders	1	2	3	4	5	6	Monograms to be changed	Available if	
55		54	=	1	1						1st	9 or 6
55		53	=	2	1	2					2nd	9 or 6
55		52	=	3	1	2	3				3rd	9 or 6
55		51	=	4	1	2	3	4			4 h	9 or 6
55		50	=	5	1	2	3	4	5		$5\mathrm{th}$	9 or 6
55		49	=	6	1	2	3	4	5	6	$6 \mathrm{th}$	9 or 6
55		48	=	7	1	2	3	4	5	6 7	$6\mathrm{th}$	9 or 6
55		47	=	8	1	2	3	4	5	6	$5\mathrm{th}$	9 or 6
									8	7		
55		46	=	9	1	2	3	4	5	6	4 h	9 or 6
								9	8	7		
55		45	=	10	1	2	$\frac{3}{10}$	$\frac{4}{9}$	5 8	$\frac{6}{7}$	3rd	9 or 6
55		44	=	11	1	2	3	4	5	6	2nd	9 or 6
						11	10	9	8	7		
55		43	=	12	1	2	3	4	5	6	1st	9 or 6
					12	11	10	9	8	7		
55		42	=	13	1	2	3	4	5	6	1st	9 or 6
					12	11	10	9	8	7		
		41		14	13	0	9	4	_	0	0.1	0 0
55		41	=	14	1	2	3	4	5	6	$2\mathrm{nd}$	9 or 6
					12 13	11 14	10	9	8	7		
55		40	=	15	15	2	3	4	5	6	3rd	9 or 6
90		10		10	12	11	10	9	8	7	aru	9 01 0
					13	14	15	Э	8	•		
55	-	39	=	16	1	$\frac{1}{2}$	3	4	5	6	4 h	9 or 6
33		00		20	12	11	10	9	8	7	1011	J 01 0
					13	14	15	16	Ü	•		
55		38	_	17	1	2	3	4	5	6	$5\mathrm{th}$	9 or 6
					12	11	10	9	8	7	0011	0 01 0
					13	14	15	16	17	·		
55		37	=	18	1	$\overline{2}$	3	4	5	6	$6\mathrm{th}$	9 or 6
					12	11	10	9	8	7	v -—	0
					13	14	15	16	17	18		
55		36	=	19	1	2^{-}	3	4	5	6	$6\mathrm{th}$	9 or 6
					12	11	10	9	8	7	-	•
					13	14	15	16	17	18		
										19		

gram, which is 6, available to change. When the fifth monogram changed from *yin* to *yang* the hexagram Tai transformed into the hexagram Hsü.

Checking the table above, we see that there are only three chances for the fifth monogram to be changed, i.e., when the total of the constituents is 50 or 47 or 38. We know the fifth monogram must be 6 because the transformation did take place. Among the remaining five monograms the *yangs* must be either 7 or 9 and the

yins must be either 8 or 7. Therefore the only possible combination of the constituents of the Tai in this case is

 	8
 	6
 	8
 	9
 	9
 	7

by which the diviner acquired the Hsü as its "related hexagram." In this combination the order of numbers 9, 9 and 7 may not be exactly the same as the order which Yang Hu obtained about 2,400 years ago, but the total of the constituents must be 47 because the possibilities of being either 50 or 38 cannot occur in the case of the hexagram Tai.

Example 2:

Duke Shan-hsiang of the Chou said, "I heard that when the Chin state restored Ch'eng-shih as its ruler the diviner acquired the hexagram Ch'ien (1), which transformed into P'i (12). And the diviner remarked 'The matching is not permanent. Thrice the ruler has to leave the country'. I know he did it before and that this is his second time, but I don't know that will happen to him after this." (Kuo Yü, Chou yü, 1)

How does the hexagram Ch'ien transform into P'i?

The Ch'ien
The P'i

The P'i

The P'i

The P'i

The P'i

It takes three monograms (the lower ones) of the Ch'ien to change from the *yangs* to *yins* in order to transform it into P'i. Our reconstruction of the original Ch'ien hexagram in this case is as follows:

The total of the constituents is 48. According to the above table the 6th monogram should be changed, but it is 7, unavailable for change. The diviner then changed all the yangs into yins and in this case only the 1st, 2nd and 3rd monograms were available for change. There seems to be a general rule that when the monogram or monograms are 7 or 8, unavailable for change, all the yangs will change to yins or vice versa on the condition that the monograms available for change are three or more in number. We have more examples than this in the Tso Chuan and Kuo Yū.

Example 3:

Mu Chiang (the grandmother of Duke Hsiang of the Lu state) died in the Eastern Palace. Before this she consulted the yarrow stalks and got the second monogram of the hexagram Ken (52), which was an 8. The diviner said, "This means the hexagram Ken changed into Sui (17). The Sui is the symbol of getting out; Your Ladyship will soon get out from here." Lady Mu Chiang said, "No. Under the hexagram Sui the four cardinal virtues, yüan [the creative originality], heng [the concordance of all the good], li [fulfillment of justice] and chen [proper conduct], are given in the Chou I, and it is the hexagram of blamelessness. Now I, a woman, am associated with disorder and have done evils in my shameful position. To one who has these four virtues the hexagram Sui belongs; what have I to do with it, to whom none of them belongs? Having chosen evils, how can I be without blame? I shall die here and shall never get out of this." (Tso Chuan, Hsiang 9).

This is quite a story. Lady Mu Chiang did not believe what the diviner said about the hexagrammatic of Sui and, instead, she predicted that she would die for her evil deeds. She had an affair with her brother-in-law, Hsüan-po, and plotted to murder princes Yen and Ch'u. Here we have a case where, in general, consultation with the *Chou I* or other oracle books aims at strengthening one's conviction; however, when one has made up one's mind on certain things he may disregard what the consultation says.

By our reconstruction the hexagram Ken which the diviner acquired must be in the following fashion:

The total of its constituents is 44. According to the above table, the 2nd monogram is subject to change, but it is an 8, unavailable for change. The diviner called for changing the Ken to Sui. The Sui is in the following pattern:

So the changes were of five monograms, the 1st, 3rd, 4th, 5th and 6th. Instead of quoting the monogrammatics of any of the five monograms of the Ken as "the judgments," the diviner took the hexagrammatic of Sui as "the judgment." The statement of "Ken chih pa^{a1} " in the $Tso\ Chuan$ has been the most difficult to understand and has puzzled many commentators.

Chu Hsi blamed the corruption of the text after he had wrestled with it for a long time.²³ As a matter of fact the text of this portion of the *Tso Chuan* is not corrupted. The fault is that Chu Hsi and many others did not find the key to comprehend it. If we could not recover the ancient divinatory procedures for forming a hexagram and for determining which of six monograms should be changed when the called-upon monogram is unavailable for change, we would be in the dark, too.

Example 4:

In the tenth month Duke Hui (of Chin) died. In the twelfth month the Earl of Ch'in sent back the Prince of the Chin (later, Duke Wen). Tung Yin welcomed him. Before he crossed the river (the Sung River, the border between the Ch'in and Chin) he asked, "Should I go across the river?" Tung Yin said, "Yes, I used the yarrow stalks and obtained an 8 of the hexagram T'ai. It is said, "The T'ai is a combination of heaven and earth. It symbolizes the concordance of all the good'. The small (the inconvenience) is gone while the big (the bright future) is coming. This is it. Why don't you go across the river?" (Kuo Yü, Chin yü, 4)

Our reconstruction of the Tai is as follows:

 	8
 	8
 	ç
 	7
 	7

The total of the constituent value is 49. The monogram which is called upon to change is the 6th and it is an 8, unavailable to change. So the diviner quoted the hexagrammatic and symbolic of the Tai to encourage the Prince of Chin to return to his state.

We have found four patterns of changes conducted by the ancient diviners in the *Tso Chuan* and *Kuo Yü*:

I. Change of one line only

1. The obtained hexagram The K'un (2)	The "related hexagram" The P'i (8)
	
	

This was recorded in the *Tso Chuan* (Chao 12), and the 5th monogrammatic of the K'un was quoted.

2. The obtained hexagram Th	
The T'ai (11)	The Hsü (5)
	Waster St. Commission of the C
	-
This was recorded in the Tso	
5th monogrammatic of the Tai	was quoted.
3. The obtained hexagram Th	ne "related hexagram"
The Ta-yu (14)	The K'uei (38)
	
Processed to the control of the cont	-
This was recorded in the Ts	o Chuan, (Hsi 25), and
the 3rd monogrammatic of Ta-y	u was quoted.
4. The obtained hexagram T	
The Kuan (20)	The P'i (8)
	-
	
This was recorded in the T_s	o Chuan (Chuang, 22),
and the 4th monogrammatic of t	the Kuan was quoted.
5. The obtained hexagram Th	ne "related hexagram"
The Ming-i (36)	The Chien (15)
	——————————————————————————————————————
	
	
This was recorded in the Tso	Chuan (Chao, 5), and
the 1st monogrammatic of the I	Ming-i was quoted.
6. The obtained hexagram Th	a "related have gram"
The K'un (47)	The Ta-kuo (28)
·	
	
· · · · · · · · · · · · · · · · · · ·	***************************************
	

This was recorded in the Tso Chuan (Hsiang, 25), and the 3rd monogrammatic of the K'un was quoted.

²⁸ Ibid., "Letter to Ch'eng K'o-chiu^b;" wen 37, che 16.

7. The obtained hexagram The "related hexagram"	10. The obtained hexagram The "related hexagram"
The Kuei-mei (54) The K'uei (38)	The Chun (3) The Pi (8)
This was recorded in the <i>Tso Chuan</i> (Hsi, 15), and both the 6th monogrammatics of the Kuei-mei and K'uei were quoted. The diviner used the hexagrammatics to support his arguments against Duke Hsien of the Chin's marrying off his daughter to the Ch'in state. The hexagrammatics of the Kuei-mei and K'uei quoted by Shih Su, the diviner, differed somewhat from their present text. This was pointed out by Hellmut Wilhelm in his article. This is one of the unusual cases. 8. The obtained hexagram The "related hexagram" The Chun (3)	This was recorded in the <i>Tso Chuan</i> (Ming 1). The diviner, Hsing Liao, did not consult either the monogrammatics or the hexagrammatics of the Chun or Pi or both. Instead, he used the conventional meanings of the words 'chun'ao and 'pi'ap and the images implied in these two hexagrams to advise Pi Wan of the Chin state to take up his position as the minister. The above examples show that the ways of consulting the <i>Chou I</i> vary, and that explanations of the monogrammatics or hexagrammatics are rather flexible.
	II. Change of Three Monograms
This was recorded in the <i>Tso Chuan</i> (Chao, 7). The diviner quoted the hexagrammatic of the Chun, the 1st monogrammatic of same and the hexagrammatic of the Pi, the "related hexagram," to support the decision making the son of Duke Hsiang's consort succeed to the dukedom of the Wei. This is another unusual case where the consultation involved more than the monogrammatic of the monogram which is called upon to change. 9. The obtained hexagram The "related hexagram" The Ta-yu (14) The Ch'ien (1)	In addition to Example 2 from the Kuo Yü, Chou yü, mentioned above there is another example: The obtained hexagram The "related hexagram" The Chun (3) The Yü (16) The Yü (16) The consultation was made by the heir of the dukedom of Chin, Ch'ung Erh, when he lived as a refugee in Ch'in ('Ti'). Before returning to Chin he made a wish that he would restore the prestige of his native state when he became duke. He obtained the hexagram Chun (3). But the monogram which was called upon to change was an 8, unavailable to change. According to the procedure, the 1st, 4th and 5th monograms were changed from yang to yin or vice versa. As a result, he obtained the "related hexagram," Yü. Our reconstruc-
This was recorded in the <i>Tso Chuan</i> (Ming 2). The diviner did not use the 5th monogrammatic of Ta-yu nor the hexagrammatic of either the Ta-yu or Ch'ien for consultation. Instead he used the image of the trigram $=$ and that of the trigram $=$ to indicate "going to the father's place ($fu\ y\ddot{u}\ fu$)am" or "conducting one's self respectfully as if in front of the duke (<i>ching</i> ju	tion of the Chun is as follows:

 $ch'ung\ so^{an})$." This is another exception to the general

procedure that "Whichever monogram is called upon

to change, the monogrammatic of that monogram

should be consulted."

The total of the constituents is 48. Subtract 48 from 55 and the remainder is 7. According to the table above the 6th monogram should undergo change. But the 6th monogram is an 8, unavailable to change. So the diviner called this "the 8 of the Chun (Chun $chih\ pa^{aq}$)"

and yet he could not quote the 6th monogrammatic of the Chun for consultation. Following the procedure he changed all the monograms available for change from yang to yin and vice versa. In this particular case the 1st, 4th and 5th monograms are available for change so that he obtained the "related hexagram," Yü. He described this situation as "having an 8 in both the obtained and the related hexagrams (te chen chun hui yü chieh pa³r)." The hexagrammatics of both the Chun and Yü were used in his consultation.

III. Change of Five Monograms

Under this pattern only one case was recorded in the $Tso\ Chuan$, (Hsiang, 9). It has been discussed above under Example 3.

IV. All the Six Monograms Unavailable for Change

Under this pattern three cases were recorded in the $Tso\ Chuan$ and $Kuo\ Y\ddot{u}$. One of these recorded in the $Kuo\ Y\ddot{u}$, $Chin\ y\ddot{u}$, has been discussed previously under Example 4. The other two were recorded in the $Tso\ Chuan\ (Hsi,\ 15\ and\ Chieng,\ 16\ respectively).$

1. The earl of the Ch'in state waged war against the Chin. Pu T'u-fu consulted the Chou I and announced, "It favors us." The Ch'in army was defeated after it went across the river. The Earl questioned him. He replied, "It absolutely favors us. After three defeats of our army we shall capture the Duke of Chin. The hexagram we obtained is the Ku (18) and it (a kind of hexagrammatic different from that of the present text of the Chou I) says, 'A thousand chariots retreated thrice. As the result of the three retreats a male fox is captured'. The fox and the worm (the word ku^{as} means worm) must mean the leader of the enemy. The upper trigram of the Ku is the wind = ; the lower trigram is the mountain _____. Now it is autumn and we can collect the fruits and cut the woods. This means the defeat of the enemy." The Ch'in army fought on and retreated three times until they reached the territory of Han. The battle raged at the outskirts of Han. The Duke of Chin was finally captured. (Tso Chuan, Hsi, 15).

Our reconstruction of the Ku is as follows:

 	7
 	8
 	7

Since the six monograms are either 8 or 7, unavailable to change, there is no possibility of obtaining the "related hexagram." The annotation quoted in the *Tso*

Chuan does not appear in the present text of the I Ching. It may be the annotation of another oracle book whose divinatory procedures are the same kind as those of the Chou I.

2. The Ch'u army in the morning camped very close to the Chin's headquarters and was ready for combat. Miao Pi-huang spoke to the Marquis of Chin, saying, "The best trained soldiers are in the central column where the King of Ch'u and the King's kinfolk are. If we attack the left and right columns, the central column will be divided. Then our three armies can concentrate their attacks at the center. The Ch'u will be defeated." The Marquis of Chin operated the yarrow stalks and the shth read, "The hexagram is the Fu (24) and its annotation reads, 'The southern kingdom is routed; shoot at its king and hit one of his eyes'. Since Ch'u's army is routed and since its king is hurt, how can Ch'u not be defeated?" (Tso Chuan, Ch'eng, 16).

Our reconstruction of the Fu is as follows:

 	8
 	8
 	7

This is similar to the previous case. There is no possibility of obtaining the "related hexagram" since all the six monograms are either 8 or 7.

Following our investigation we may conclude that the ancient diviners followed strictly certain well-thought-out procedures (with their rationale) for forming hexagrams and determining which monogram or monograms submit to change and thus obtain the "related hexagrams." When they consulted the *I Ching* they followed the general rule that the monogrammatic of the monogram, when undergoing change, would be quoted as the judgment. However, there are a few exceptions (three in fifteen cases).

It would require lengthy articles to deal with the history and usefulness of the *I Ching*. Probably the *I Ching* has passed through several stages: from the stage of being the *diagrams of knots* of the legendary King Fu-hsi²⁴ to the stage of constituting divinatory hexagrams, and from being used as a guide to strengthen one's conviction in decision-making to becoming an

²⁴ In Conspectus B it is said, "In early times (King Fu-hsi) used knots of rope to rule the country (to communicate with the people) and in later years the sage changed them into written documents." Among the Miao people in Southern China they still use knots of rope to reckon and to communicate with each other.

inspirational source for Chinese cosmological and metaphysical speculations.

In terms of searching for "meaningful coincidences" in a world governed by chance, the idea of "synchronicity" may be more fruitful than the concept of a linear causal linkage (causality).25 However, behind "synchronicity" there is a deep conviction of the Chinese that no lines of demarcation exist between man and heaven and earth. The Principle of The Three Participants (san ts'ai chih taoat) is demonstrated in a trigram or a hexagram and is repeatedly referred to in the "Ten Wings." Because of this principle the ancient Chinese avoided becoming victims of the fallacy of the bifurcation of nature. The derivatives from the bifurcation, namely: the separation of the subjective and the objective, the distinction of the primary and secondary qualities, and the confrontation of the ego and non-ego, have not tortured the Chinese mind. According to the Principle of The Three Participants, the ancient Chinese viewed the world neither as phenomena nor as noumena but as reality. The cognitive, the perceptive, the conceptive or the appreciative is not regarded as an act of projection from the subject onto the object but as one of the manifestations in the universe. From the macrocosmic point of view the universe is ageless, well balanced and, itself, a Grand Equilibrium. From the microcosmic point of view, changes and transformations resulting from the mutual responses of the three participants take place everywhere and at all times. Basing themselves upon their deeprooted conviction, the ancient Chinese searched for a device (operations on a set of constants) to predict the possible consequences of their actions in this world governed by chance. Scapulimancy, the *Chou I* and other oracle books were devices which met their demand.

In a world governed by chance the ancient Chinese sought not only the "meaningful coincidences (most of them were the historical events since the immemorial past)" but the "significant symbols" of either the natural phenomena, or qualities of things or images to strengthen his psyche at the moment when a final decision was announced. We must realize that the mental process of decision-making is complex. No matter how much information and data are piped into the headquarters of the army, the Chief Commander has to make hasty decisions as situations develop. In our lifetime situations force us to make vital decisions in the nick of time. We can hardly exercise our "free choice" by assorting and evaluating the information and data. Rather, we make decisions based upon our convictions. "Synchronicity" provided a "chance hit" device for the ancient Chinese; but the conviction that whatever a man does will affect heaven and earth, and that how ever the heaven and earth behave will affect man induced them to consult the I Ching.

²⁵ See C. G. Jung, "Synchronicity: An Acausal Connecting Principle," in C. G. Jung and W. Pauli, *The Interpretation of Nature and The Psyche* (New York: Pantheon Books, 1955).

a. 盆儀

b. 易學啓蒙

c. 周易本羲

d. 周易折中

e. 高 亨

f. 繋解傳

8. 大贞

h. 之 外

1. 类解

j. 卦辭

k. 泉傳

1. 彖 傳

...連山 n. 歸藏

0. 框 譚

P·新論

9. 太平御覧

x. 焦氏苏林

8. 焦贄

t. 祭司契

4. 鲍伯陽

v. 火珠林

w·麻衣

x. 穆天子傳

y. 文帝紀

z. 郊祀志

aa.太极圃

ab·大衍

ac. 河 闐

ad.分為為二以象面 bd. 馬端貓 ae. 掛一以象三 be. 文獻道孝

ah.再扬布後卦 bh.郭仲晦

ai.三 戀

aj·十有入壓而成卦 bj·程可久

ak. 四營而成易

al. 艮之八

am. 復于父

an. 放如君所

ao. 屯

ap. tt.

aq. 屯之八

ar. 貞屯悔豫皆入

as.

at. 三才之道

au. 易學討論集

av. 从

aw. 表記

ax. 律曆志

ay. 春官

az. ি林傳

ba.京房傳

bb.四草全書簡明日錄 bc. 卲 雍

af·揲之以四以泉四時 bf·王 弼

ag. 歸新於扮以象閏 bg. 朱子大全

bi.程杰之