fusion through Chinese thought of a strong tinge of Hindooism. In consequence of this, the notions of China and India on medicine, geomancy, lucky days, eclipses, astronomy and cosmography became to a large extent identical. This identity was very much promoted by the nearness of the southern provinces forming the west coast of the China sea to India, leading as it did to an extensive interfiltration of ideas.

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YAU-TIEN AND SHUN-TIEN. The earliest fragments of Chinese history.—The age of these ancient pieces of writing may be decided by a consideration of their contents and the style of their composition.

1. The Yau-tien contains a record of meridian stars which were observed at the solstices and equinoxes. The stars mentioned are Fang, Hü, Mau, Sing, that is to say, the Bird (Niao) Fire, Hü β in Aquarius, Mau (Pleiades). Calculating back by help of the known law of precession, several astronomers have found that the Chinese chronology of 2350 B.C. must be correct to within a possible error at most of three or four centuries. Professor Prichard of Oxford, and Professor Russell of Peking have examined this question afresh within the last few years and both claim validity for the argument. But to see this, does not need anything more in the way of calculation than some division and multiplication. The equinoxes and solstices move from their places backward 50 seconds and $\frac{25}{100}$ths per annum. Multiplying this by 4,000, we have 55° 83′ the displacement of the stars during 4,000 years. For example the Pleiades, instead of being in the south at the winter solstice, are now about 56 degrees to the east of the meridian at that time. So far then it is safe to say that the passages which record these observations of meridian stars are genuine relics of the time alluded to. This is supported by the fact that the Babylonians, who would communicate a knowledge of astronomy with the art of writing to the Chinese, had made good progress in the use of these arts quite as early as 4,000 years ago. At that time also the astronomy of the Babylonians was not so much distorted by astrological fictions as was the case 3,000 and 2,000 years ago. This is true also of the Chinese ancient astronomy. Hence we may very reasonably take the fragment which records the early observations of the stars above referred to, to be about four thousand years old.

This conclusion is very important in itself and should be supported by every auxiliary proof that can be adduced. We may refer to the observations of the stars in the Hia siau cheng, a calendar of the Hia dynasty, and in the Yue ling, a calendar of the 12th century B.C. Mr. Knobel has examined the first of these and Professor Russell the last. The places of stars agree with the times when these calendars appear to have been compiled. But if stars were observed by the Chinese in the Hia dynasty B.C. 2205 to B.C. 1766, there is no improbability in others having observed them in the period immediately preceding.

2. The tradition of the invention of writing found in the Book of Changes asserts that that art was possessed by the Chinese anterior to the date assigned to astronomical observations. The art of writing and the knowledge of astronomy should be both referred to Mesopotamia, as the region from which they were derived.

3. The opening sentence 若稽古帝堯 Jo ki ku ti yau has been adduced as proving that the history was not contemporary. It may be translated, 'if we examine the biography of the deceased emperor Yau.' But the word deceased also means ancient. The same sentence is used at the commencement of the next section the Shun tien, at the beginning of the account of the emperor Yü and also of that of Kau Yau. The word Ti, emperor, is omitted in the case of Yü and Kau Yau. Legge translates in each case 'examining into antiquity' and separates 帝 Ti from 古 ku with a comma.

The Shu king hwei tswan of Kang hi says, 'The historian of the days of Shun recorded the acts of Yau. The historian of the days of Yü recorded the acts of Shun. They should not use the term "ki ku" examine into antiquity. To judge by probability, the the record of Yau would be made by Shun's historian, but it would be finished and put in order by the historian of the Hia dynasty. When "ki ku" is used, it is the addition made by the Hia historian. It was Confucius that separated the Yau and Shun tien and styled them the 虞書 Yü Shu.' Such is the Kang hi judgment.

In addition it should be noticed that Wang ts'an,* in his poem 魯靈光殿賦 (century the second), wrote of a Han dynasty emperor 粤若稽古帝漢 'if we examine into antiquity in regard to a Han emperor.' This instance shows that it was proper for the historian of any dynasty, in writing of the preceding dynasty, to use the term 'ki ku,' for this is an example of a later Han writer using this phrase of the earlier Han. We may therefore accept the view of the compilers of the Hwei tswan and look on the phrase 'ki ku' as added by the official historian of the Hia dynasty.

Thus the phrase 'ki ku' is a support of the high antiquity of the document.

4. Among the names of divinities to whom sacrifices were offered may be noticed 六宗 Lu tsung, of which Legge says 'who they were it is not possible to ascertain.' This favours high antiquity. The phrase 'lu tsung' does not occur again till two milleniums later, when it was revived from love of ancient observances.

5. The title 四岳 Si yo, chief of the four lieutenants 牧 mun, is very archaic. Such titles lend a great air of antiquity to the document.

6. The practice of an imperial father giving two daughters at one time as wives to the same son-in-law, that son-in-law being his intended successor, shews that the Yau tien belongs to an age when such things were possible, and that age should surely be previous to the Hia dynasty.

7. The law of succession was extremely loose at the time pictured in the Yau and Shun tien. It was easy then to set aside the claims of a son to succeed a father as emperor. In the Hia dynasty the succession became decidedly hereditary and remained so ever after.

8. The words employed have a tinge of antiquity in them. The most curious feature is the exclusive use of even tone demonstratives. There is no instance of a rising tone or a departing tone demonstrative in those documents. This surely is a fact that should awaken attention on the part of the student. Of course the even tone demonstratives continued to be used later. But though 時 lingered to the time of the Odes and 茲 is still in use, they have both been long attached to the class of archaisms. The rising tone demonstratives 是 (now departing tone), 此 and 彼 took their place. This one feature of difference is sufficient to make a separating line between the oldest and the next oldest documents in the Book of History and it is an invaluable fact in the investigation of the development of the Chinese language.

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* See the poem in the collection Chau ming wen siuen.

EXAMPLES OF ETYMOLOGY.—章 and 昌, *chang* to enlighten and *ch'hang* bright, are regularly formed from the labial root with p or m for its initial. Of these 炳 has a surd initial, and is therefore later in time than ming 明, which is to be viewed as the oldest form of the root. 亮 liang, bright, is formed from *dong*. In the Classics it is used for 諒 liang real, faithful. But it came to mean 'bright' about the Han dynasty. The new word was in fact an old word in disguise. It may have been 朗 lang bright, in the rising tone, a word which occurs in the Odes. When the word took the departing tone, a special character was used and 朗 was kept for the old rising tone. By this mode of treating these