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.

JOSEPH EDKINS.

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

EXAMPLES OF ETYMOLOGY.—章 and 昌, chang to enlighten and c'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

words, we obtain an etymology for 明. It means light produced by piercing, for ming means a sting, sharp edge. The *difference of* 朗 *and* 亮 *is that lang* is clear, while liang means sudden brightness. In both the phrase 昧爽 and 黎明 for twilight, we have dark and light placed together in contrast. Hence 爽 may be etymologically connected with 亮 because sh and l are commonly interchangeable.

Evolution of words meaning ought.

The evolution of the idea of ought comes to view in the history of the word tang 當 and ying 應. These are but one word. The initial t has changed to y. That is t has been dropped by local variation and the vowel a or o, whichever it was, assumed the consonant form y by an effort to attain increased clearness. The point that has to be considered by the persons in consultation is 'who is to bear this burden?' The elements present are a certain man, a burden, and the hand to point. The speaker uses his hand to point to the man whom he directs to bear the burden. The word which accompanies the act of pointing comes to mean pointing. It is for example tik. This root is the pronoun of the demonstrative. It means to point. It is also the hand. It becomes in the modern language, 這 che, 指 chi and 手 sheu. The burden is the verb to bear which takes the form tam or tang. It is genus not species, for it may be a load of stones or a load of official responsibility, or a flag to carry before the king. The idea in the mind of the speaker may be imperative: let him bear; permissive: he may bear; potential: he can bear; indicative: he bears; or it may be the notion that he ought to bear. By the incessant effort of language to attain greater clearness and exactness, each of these variations in the form of the idea obtains a particular mode of expression. How this is done in the case last mentioned, may be thus explained. The question is asked, which of two men is the stronger. On being informed, the judge in this matter says, the stronger ought to bear the burden. Let him bear it. But this is a longer way of speaking than quick conversation permits. Primitive language would allow him to say only 'he bear,' a demonstrative and a verb. But what does this brief phrase imply? It implies that the speaker thinks he ought to bear it, because he is stronger or more in practice or fitter in some way. Hence this brief phrase might by repetition come to mean either 'he can bear it,' or 'he ought to bear it,' or 'he is bearing it.' But this uncertainty about the meaning, while it lies between the potential sense, the participial sense and the idea as to whether it should or should not be, would be intolerable. Hence language went on working, till the potential became crystallized into neng, the participial perhaps took a substantive after it. In t'a tang ping, he is bearing the responsibility of a soldier, the sense 'ought' remains with the word when a verb follows, as in t'a lang c'hü he ought to go. This last means he has the burden upon him to go. Thus tang is transformed in sense from 'burden' into the word 'ought.'

The origin of the word 宜 yi, nga, as a word meaning ought is not so plain. In the sacrificial Odes we have 殷受命咸宜 'When Yin received the decree to rule the empire, all was as it should be.' In the Li Ki the word is employed for the sounds of a song being just what they ought to be. It is used by Chow Kung in the Siau Ya in the same sense. But it is used with the sense 'produce' also very early. It may be compared with 荷 ho, to carry 合 hap, to agree. It is difficult to decide here on its ultimate origin, but as ho 'to carry' would be anciently ga, we may reasonably suppose that the sense 'ought' may have originated from this verb to carry, as was the case with 當. In the early stages of the language, before the invention of the characters, both 宜 and 當 may have been derived from one root having m and p for its finals. Then 當 would descend from the firm with m and 宜 from that with p.

But 宜 may have originated from 合 and [a Chinese friend supports this view. The idea of 合 is 'pressed together.' The moral idea of 'ought' is in the mind. It finds its symbol when the senses, the hand and a favourable conjuncture of circumstances, decide the mind to adopt a symbol. The symbol may be derived from a person carrying an object in some such way as above described, or it may be derived from other sources. Oblige comes from *ligo* to bind. Ought is from ewe and owe is from agan, an old verb to have, to possess. The moral idea may be derived from binding or from having in possession, or from carrying a burden. It is quite possible that some words meaning ought are beyond the reach of explanation, just as there are lost facts in the history of every country.

But in whatever way 宜 may have come to mean ought, this we may decide that, as in the case of 當 tang, the development of the moral idea was anterior to the formation of the characters and of the rising and departing tones. In these words we are entirely within the region of the even tone.

Kwan and chwen 貫 and 串 are precisely the same word. The ku wen of kwan is 毌. There has been a slipping of the initial from the teeth to the back of the tongue. The even tone original is 穿 ch'wen to pierce. It is a word named from cutting or piercing and is certainly related to ch'wang, ch'am to pierce. The change from final m to ng is quite common. The labial initial to this root is found in 鋒, 蜂, feng, sting, bee and 芒, 鋩 mang, also a sting, sharp point, edge of a sword. We may regard mang, in the form mam as probably the root of all these words. The verb comes first in time, because it has a sound accompanying it. The fact that the word 穿 chwen is even, indicates that it belongs to an age when neither the rising nor departing tones existed. On the other hand 串 and 貫, with the departing tone, belong to the age when that tone originated.

J. EDKINS.

NOTES BY E. H. PARKER.

COMMENCEMENT OF THE YEAR.—In comparing mediaeval and Chinese dates, it is important to remember that the legal year at Venice began on the 1st March. Thus 19th January '1323' means really '1324,' as pointed out by Colonel Yule.

WINDOW-GLASS.—Colonel Yule thinks the mention of window-glass by Polo a misunderstanding. Even before Christ, it is said of Han Wu ti that 'the Emperor constructed a fairy apartment in which there were glass windows [琉璃窓].'

SUGAR REFINING.—Yule says, Ramusis mentions the introduction of sugar-refining into China from Egypt. In the 北史 account of Cambodia, or Chênlah, it says: 'In their food they use a great deal of 酥酪 and sugar [沙糖].' *Sato* is still the Japanese word for sugar. Another Chinese account says: 'Sugar was originally unknown in China, but it was brought as tribute from abroad in the reign of T'ang T'ai-tsung. The envoy was asked what it was, and said it was the juice of the *chê* [sugar-cane] fried. Some was then fried in the way described, and with success. Previous to the T'ang dynasty all books which speak of 糖 really mean 糟.' Again, the History of Magadha says: 'In the 21st year of Chêng kwan [A.D. 647], Magadha first sent envoys direct to the Empire. T'ai-tsung sent envoys to get the art of sugar-making, and ordered all the sugar-cane factors of 楊州 to compound it in the same way. Its colour and taste was then far superior to that from the West [西域].' Again [Chênlah] 'had four qualities of wine; the first quality the Chinese [唐人] called 蜜糖酒; it was made with honey and water, and contained 藥麵.'

STORAX IN CHINA.—There is a story about the eccentric philosopher Chwang-tsz, stating that he preferred the dung-beetle's dung-roll [蛣蜣轉] to a piece of storax [蘇合].